Search history

Search 1:	FT=coin and (hold* or identif* or differ*) and (blind or braille) and IC=G07 (Results 86)
Search 2:	FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and IC=(G07 or G09) (Results 5135)
Search 3:	FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and IC=(G07B or G09) (Results 2756)
Search 4:	FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and IC=(G07D) (Results 792)
Search 5:	FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and (wallet* or purse* or pocket* or card*) and IC=(G07D) (Results 183)
Search 6:	FT=coin* and (hold* or identif* or differ*) and (blind* or braille* or visual disab*) and hole* and (pocket* or wallet* or card) (Results 194)

- session log created:11 July 2017 23:41:51
- Update information:

PatBase Coverage at Update 2017 Week 27 (Year 2017 Week 27)

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Major countries

Publishing body	Document type	Bibliographic publication date		Full–Text publication date	
		Earliest	Latest	Earliest	Latest
CN China	Patent Applications	19850910	20170707	19850910	20170707
	Patents	19930106	20170707	19930106	20170707
	Utility Model Applications	19850409	19921230	19850409	19921230
	Utility Models	19930106	20170704	19930106	20170704
	Designs	19850910	20170707	19850910	20150819
DE Germany	Patent Applications	19211221	20170706	19650317	20170706
	Patents	18770101	20170706	19200113	20170706
	Utility Models	19280626	20170706	19610831	20170706
	EP/WO Patents	19871217	20140410		
EP European Patent Office	Patent Applications	19781220	20170705	19781220	20170705
	Patents	19800109	20170705	19800109	20170705
FR France	Patent Applications	19690307	20170707	19810102	20170616
	Patents	18550227	20170707	19600502	20170707
	Utility Model Applications	19720107	20170707	19800104	20170616

	Utility Models	19730112	20170707	19690802	20170623
GB United Kingdom	Unpublished Patent Applications	19830209	20170621		
	Patent Applications	19790104	20170705	19790104	20170621
	Patents	17820704	20170705	19020911	19811216
JP Japan	Patent Applications	19710116	20170706	19930108	20170629
	Patents	19281026	20170621	19960529	20170621
	Utility Model Applications	19710723	20060209	19990817	20031107
	Utility Models	19640805	19960329		
	Registered Utility Models	19940726	20170622	19940726	20101216
	Designs	20141110	20170703		
KR Republic of Korea	Patent Applications	19781209	20170707	19940103	20170706
	Patents	19700820	20170707	19970104	20170706
	Utility Model Applications	19781127	20170707	19940730	20170706
	Utility Models	19780110	20170707	19970104	20170706
US United States of America	Patent Applications	20010315	20170706	20010315	20170706
	Patents	18360101	20170704	18560617	20170704
	Designs	18650912	20170704	19770719	20170704
WO World Intellectual Property Organization (WIPO)	Patent Applications	19781019	20170706	19781019	20170706
	Designs	20151127	20170707	20151127	20170707

20170708 21:00

- Login to Patbase:11 July 2017 23:41:51
- **search:** SS1 FT=coin and (hold* or identif* or differ*) and (blind or braille) and IC=G07 (Results 86)
- List: SS1 1–50 (FT=coin and (hold* or identif* or differ*) and (blind or braille) and IC=G07) (Results 86)

0) GB366064A –

1) Family number: 19022129 (GB366064A) © PatBase

Family:

Publication number	Publication date	Application number	Application date
GB366064 A	00000000		00000000

International class (IPC 1–7): G07B5/04

Abstract:
Source: GB366064A 366,064. Totalizators. S I E M E N S BROS. and CO., Ltd., Caxton House, Tothill Street, BROOME, J. H., 64, Heathwood Gardens, Charlton, and CLARK, R. I. H., 148, Evering Road, Stoke Newington, all in London. Sept. 26. 1930, No. 28844. [Class 106 (i).] A totals indicator for use in totalizator systems or like apparatus comprises a moving band adapted to be coupled to a continuously rotating member to take up a setting corresponding to that of the highest or the two highest denominational parts of the total registered. A number of such bands, one for each runner, arranged side by side, give a thermometer type indication of the horse totals, and, in conjunction with moving bands which move in accordance with various proportions of the grand total enable the approximate odds on each competitor to be visually estimated. Fig. 4 shows operated bands 1, 2, 3.. 9, the corresponding horse totals being read off a suitably graduated scale. A band 13, moved according to the grand total, may be provided in the centre of the indicator. Bands moved in accordance with submultiples of the grand total as 2–1; 3–1; 4–1; 5–1; 10–1; 25–1; 50–1; 100–1 are provided at each side of the indicator and may be connected by tapes or bars 14, 16,.. against which the heights of the various runner bands may be compared, the odds on a runner being approximately that of the band corresponding to the top of the coloured runner column. Numerical indicator. A roller blind indicator as described in Specification 357,616 may be provided for each runner and for the grand total in addition to the thermometer indicators of the odds calculator. These indicators have a moving band for each denomination, adapted to be independently clutched to a common driving source when the corresponding denominational counter is operated. Normally these bands show blank surfaces, the units, tens, hundreds,.., banks, iu1, ix1, icl, im1, it1 of an indicator control switch then lining up with the corresponding counter banks uc, xc, cc, mc, tc, as in Fig. 1, the relays US, XS, CS, MS, TS being operated to maintain unoperated the corresponding denominational indicator clutch magnets UM, XM, CM, MM, TM. Should 400 bets, say, be registered now, wiper cc moves to its fifth contact. Relay CS de–energizes, and clutch magnet CM energizes. As the corresponding band moves to display a fresh indication contacts cm are momentarily closed, energizing a relay CR which at contacts cr1 energizes the driving magnet ICDM which thus steps its wipers ic1, ic2.. as the indicator band advances, until, when on its sixth contact relay CS is again energized, the indicator coming to rest at a display of four. When each denominational indicator band moves from its blank display a corresponding relay OU, OX, OC, OM, OT (units, tens,..,) is operated over contacts ur2, xr2, cr2, mr2, tr2. These relays lock up over contacts ou2, ox2.., and, at contacts oul, oxl.., prevent the indicator bands from coming to rest to again display a blank surface during operation of the indicator. Moreover, should a higher denominational counter be actuated first, ICDM, say, operating relay OC, the relays OX, OU operate in turn over contacts oc3, ox3, to change the indications of the lower denominations from blank to zero. Thermometer indicator. Each,runner indicator is controlled from a switch comprising banks c1, c2.. c8, the banks cl.. c4 being interconnected with banks iu2, ix2, ix3, ic2, ic3, im2, im3,.. the indicator band taking up a position corresponding to the two highest denominations only of the total registered. From the cross connections, Fig. 1, it will be seen that when the total registered comprises units only, the moving band will be stepped correspondingly, the switch CDM being revertively controlled as for the numerical indicator. Thus, normally a relay TIR, Fig. 2, is operated over contacts rs2, b1 and banks c1, iu2 deenergizing the clutch magnet T1. When a units bet is registered, wiper iu2 is stepped to its third contact, de–energizing relay TIR. Clutch magnet T1 is energized over contacts tir1; the thermometer indicating band commences to move, and in moving to display each new indication closes contacts ti, energizing relay I over contacts rs1, which, at contacts il energizes the driving magnet CDM, which thus steps its wipers c1 c2.. with the indicator until it reaches the marked contact, when relay TIR will be again operated to stop the indicator. As the ten operative contacts of the units bank iu2 are connected seriatim to the first ten of bank c1, the switch CDM, and the indicator will step once for each unit bet registered. When ten bets are registered relay OX operates and contacts ox4 disconnect bank iu2. The third to the eleventh contacts of the tens banks ix2, ix3 are connected to alternate contacts in the banks cl, c2 and the wipers ix2, ix3 being connected respectively to contacts of bank iu3 corresponding to bets zero to four, and five to nine, the switch CDM will only be stepped for each five bets registered. By similarly arranging hundreds banks ic2, ic3 with a tens bank ix4, and so on, the thermometer indicator may be caused to advance one division for every fifty bets in the range 100 to 1000 bets, for every 500 in range 1000 to 10000 and by utilizing alternate contacts only in the latter part of bank c3, and bank c4, at every 2500 bets in the range 10000 to 100,000. Alternatively, the indicator band may be stepped one division for every 10 bets in the range 10 to 100, and for 100, 1000, and 10000 in the succeeding ranges, or again a step may be taken for each 500 bets, say, throughout the range of betting by appropriate connections to the banks c1.. c4. After one revolution of the switch CDM, wipers c1, c2 have to be disconnected and wipers c3, c4 made effective. At the second step of the second half revolution of switch CDM, a relay A is operated over contacts rs3 and bank c6, and locks up over contact a1. On the first step of the second revolution a relay B operates over contacts rs3, wiper c5 and contact a2, and locks up over contacts b2, contacts b1, Fig. 1, changing over the circuit of relay TIR, Fig. 2, from wipers c1, c2 to wipers c3, c4. When the wiper c4 reaches its penultimate contact it is there held over + ve to maintain the indication thereat, namely 100,000 bets. Grand total thermometer indicator; submultiple indicators. The grand total indicator is set identically with that of a runner total. but associated with the control switch CDM

thereof, is a relay GT operated in synchronism with the driving magnet CDM over contacts i2, Fig. 1. The submultiple indicator bands have two control switches, a primary control switch stepped synchronously with the grand total control switch CDM, and a secondary switch which moves in accordance with a definite fraction of the primary switch indication. Fig. 3 shows the control switches of a 2−1 and a 4−1 indicator. The primary switches PDM (banks p1.. p8), PADM (pa1.. pa8) are operated over contacts gt1, gt2 of relay GT and are thus, together with further primary switches of other sub−multiple pool indicators, stepped in synchronism with the grand total control switch CDM, Fig. 1. The banks ca1.. ca4 of the secondary switch CADM are connected, so that any contact on the banks p1.. p4 is connected to the contact corresponding to the appropriate sub−multiple (here one−half) of the switch CADM. The secondary switch is then caused to be revertively stepped by the sub−multiple pool indicator as for the pool indicator. Thus, when the active wiper cal.. ca4 is on a contact marked by a wiper p1.. p4 a relay CB is operated and at contacts cb1 maintains the indicator clutch magnet OICM inoperative. When switch PDM advances, this clutch magnet energizes, the indicator advances, and contacts oidm thereof, operate a relay IA, which at contacts ia1, synchronously steps the indicator as for the pool indicator. The marking circuit is changed over from banks p1, p2, ca1, ca2 to p3, p4, ca3, ca4 by means of relays AA, BB, AC, BC at contacts bb1, bc1 in the same way as relays A, B, Fig. 1, function for wipers c1.. c4. Sequence of operations. At the commencement of betting key OS1, Fig. 2, is depressed, energizing a relay MS over key contacts OS1, FPKI. At contacts ms1 a circuit is made through the motor MO, MOF for driving the totals and odds thermometer indicators. The indicators are then set as above described according to the bet registrations. When bet. ting is to cease key FPK1, FPK2 is operated and OS1 restored. Relay MS de−energizes, opening the motor circuit at contacts ms1. A relay CO now energizes over contacts ms3, FPK2 and locks up over contacts co3, and n1 (operated as described later), contacts col, co2 reversing the motor field. After the dividends have been declared, and the thermometer indicators are to be set to normal, key RK1, RK2,.. is thrown and FPK1,.. released. At contacts RK1, Fig. 2, circuit is closed over contacts n2 (operated) and FPK1 for relay MS which at contacts ms1 causes the motor MO, MOF to run in reverse, and further locks up relay CO at contacts ms2. At contacts RK4 relay IR, Fig. 1, is operated releasing relays OU, OX.. OT and when the counters uc, xc.. to are zeroized the indicator control switches IUDM, IXDM.. are stepped until the numerical indicator displays blanks in its digit sections. At contacts RK2, Fig. 1, a relay RS is energized. At contacts rs3 relays A and B are released and at rs1 relay I is energized over the interrupter contacts cdm and homing wiper c7. Relay I interacts with magnet CDM to home the latter, the wiper c7 being arranged so as to perform a complete revolution to the position shown. At contacts rs2 relay TIR is de−energized. The total thermometer indicator therefore operates in the reverse direction until it reaches normal when contacts tion restore to energize relay TIR over contacts rs2, and stop

0) GB416386A – IMPROVED METHOD AND MEANS FOR TRANSMITTING MESS...

2) Family number: 20097378 (GB416386A) © PatBase

Title: Improved method and means for transmitting messages

Family:

Publication number	Publication date	Application number	Application date
GB416386 A	19340910	GB19330007350	19330310

Probable Assignee: ELSE TAENI

Assignee(s):(std)**:** ELSE TAENI

International class (IPC 8–9)**:** A47G29/122 G07F17/26 (Advanced/Invention); A47G29/00 G07F17/00 (Core/Invention)

CPC: A47G29/122 G07F17/26

European class: A47G29/122 G07F17/26

Classification Explorer

Forward Citations: WO11029962, GB2498590,

Abstract:
Source: GB416386A [Classes 3 (ii) and 27.] A cabinet a is provided with hooks b on which can be hung cards c. c bearing messages which are normally concealed from view by a blind, flap, door, or curtain d. Insertion of a coin at e automatically displaces the blind c. d to allow the message to be read, and after an interval automatically closes it again. A light may also be switched on by the coin mechanism during the period of display. The front of the cabinet is covered by a sheet of glass which may magnify the messages.

0) GB438422A – PICTORIAL POSTCARDS VENDING MACHINE

3) Family number: 18869241 (GB438422A) © PatBase

Title: Pictorial postcards vending machine

Priority: GB19340009635 19350327

Family:

Publication number	Publication date	Application number	Application date
GB438422 A	19351118	GB19340009635	19350327

Probable Assignee: THOMAS BROWN SCOTT

Assignee(s):(std): JAMES CHARLES HILL ; THOMAS BROWN SCOTT

International class (IPC 8–9): G07F11/04 (Advanced/Invention); G07F11/04 (Core/Invention)

International class (IPC 1–7): G07F11/18

CPC: G07F11/04

European class: G07F11/04

Classification Explorer

Abstract:
Source: GB438422A 9635/34. [Class 27] Coin–action weight and multiple coin; coindischarging mechanism.–The delivery drawer m of a coin–freed vending machine is normally locked by engagement with a slot l therein of a catch k, on a pivoted counterweighted lever d. An inserted coin passes into a pan c on the lever which is thereby tilted to release the drawer, full movement of the lever under the weight of the coin, however, being checked by a projection o on the back of the drawer. As the drawer moves outwardy, the projection o releases the lever d which then moves further to discharge the coin, but return movement of the lever is prevented by a gravity pawl q in order to permit the rear of the drawer to clear the catch k. When the drawer is thrust fully back, an arm p at its rear engages and rotates the pawl q which releases the lever into its locking postion. A nut f on a screwed extension e of the lever d enables the apparatus to be set for alternative coins of different weight. Coin slit closing devices.–When the last article of the pile has been delivered, a follower weight b <2> throws over a pivoted slot–closing shutter g <2> by means of a connecting chain d <2> . Fraud preventing.–A sliding plate x, operated by cams w on the sides of the drawer, drops behind the article being delivered to prevent a second article being abstracted without payment.

0) GB552202A – AMUSEMENT VENDING APPARATUS

4) Family number: 19056381 (GB552202A) © PatBase

Title: Amusement vending apparatus

Priority: GB19410012407 19410925

Family:

Publication number	Publication date	Application number	Application date
GB552202 A	19430326	GB19410012407	19410925

Probable Assignee: ALFRED LEONARD WALTON

Assignee(s):(std)**:** ALFRED LEONARD WALTON

International class (IPC 8–9)**:** G07F17/32 (Advanced/Invention)

International class (IPC 1–7)**:** G07F17/32

CPC: G07F17/32

European class: G07F17/32

Classification Explorer

Abstract:
Source: GB552202A 552,202. Amusement apparatus. WALTON, A. L. Sept. 25, 1941, No. 12407. [Class 132 (ii)] [Also in Group XVIII] In an amusement vending apparatus, preferably coin–freed, a dispensing device is so arranged that it can be manipulated by the operator so as to be passed beneath a selected article or articles and the surface on which it is or they are lying, so that the article or articles may be lifted and carried or thrown into a position for delivery to the operator. In the construction shown in Fig. 10 the dispensing device comprises a finger 1 carried by lazy–tongs 3 manipulated by handles 17 mounted on a ball–joint 18 on the casing 14 so that the finger 1 can be moved forwards and backwards and from side to side over the table 13 on which articles are resting. If the finger is correctly pushed under an article it can be lifted above a guard rim 16 by depressing the handles 17 and the article can then be moved to one side over a delivery shoot 15 into which it is discharged. Normally the finger 1 is kept raised clear of the table 13 by means of a lifter 24 raised by a lever 21 and spring 23, but when a coin slide 19 is pushed in, this slide rocks the lever until it is caught by a spring–loaded trip 37 and the lifter 24 falls to the position shown in which the finger 1 rests on the table. As the coin slide is pushed in a bar 33 is thrust forward and is then slowly retracted by a spring 35 at a rate determined by centrifugal governor 51; after a pre–determined time the bar 33 rocks the trip 37 and releases the lever 21 which is rocked by spring 22 to raise the finger 1 clear of the table so that no article can be lifted until another coin is inserted. The cross–section of the finger 1 may be triangular or formed with an upper concave or convex surface according to the kind of article to be lifted. In the construction shown in Figs. 15–18 and 20 arranged for four players, there are four dispensing devices 6 each operated by a handle 61 and movable over a rotating table 54 driven by a motor 56. Each dispensing device comprises a disc 6 pivoted to a vertical rod carried by parallel motion links 9 which are swivelled about a vertical shaft 67 by movement of the ball–mounted handle 61 in a horizontal plane and are moved up and down by vertical movements of the handle. The swivelling movements are transmitted by a link 65 and the vertical movements by a lever 69. As the articles on the revolving table come within reach of any particular disc 6 they may be picked up by that disc, lifted above a guard rim 58 round the table and discharged into a shot 60 for delivery to the player. Fixed deflectors 59 guide articles missed by the disc towards the centre of the table. When a coin has been inserted in a slot 62 a lever 92 lowers the shaft 67 until a friction disc 102 thereon engages a disc 66 controlled by the handle 61 through the rod 65 so that the dispensing disc 6 now rests on the table and can be manipulated by the handle. The discs 102, 66 are separated after a pre–determined time by means of a ratchet wheel 78 advanced tooth by tooth by a pawl 81 oscillated by the motor 56 through an eccentric 88 and linkwork 87, 86, 83, 82. A retaining pawl 90 prevents backward rotation of the wheel 78. When the time limit has expired a stud 91 on the ratchet wheel engages the lever 92 and raises the disc 102 and with it the dispensing disc 6 so that the player can no longer control the disc 6. At this stage the oscillating pawl 81 has reached a blind tooth 93 on the ratchet wheel and therefore does not rotate the wheel. When another coin 104 is inserted it lies in the position shown in Fig. 20 in which it blocks an opening in a holder 96 which is pivoted at 97 and carries a spring–loaded arm 94 having a pawl 95 engaging the wheel 78. The oscillating lever 82 which carries pawl 81 is pivoted to a finger 99 also pivoted at 97, and this finger being oscillated by the lever 82 presses on the coin and rocks the holder 96 and arm 94 so that the pawl 95 rotates the wheel 78 one tooth and the blind tooth 93 is carried past the pawl 81 thus starting a fresh time interval. A square stud 100 on the wheel 78 engages the end of the arm 94 for a time and holds it in a position which allows the coin to drop into the money box 101 when the finger 99 releases its pressure on the coin.

0) US2685406A –

5) Family number: 23771884 (US2685406A)

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Family:	Publication number	Publication date	Application number	Application date
	US2685406 A	19540803		00000000

International class (IPC 1–7): G07D1/00

CPC: G07B15/00 G07B15/02

US class: 235/32 453/14

Classification Explorer

Cited documents: US914821, US719459, US2474843, US2338576, US2338575, US1738997, US1372857, US1356947, US1344898, US1344841, US1306195,

Forward Citations: US3388238, US3199517, US3104367, US2848158,

Abstract:
Source: US2685406A The functio3., of the fixed and hinged baile as– se,_i–ib'_y is to preven'Ll –1_le removpl of unregisteiecl coins froin the fare box by inverting it. The lower edg–es of eL4,ch of the hinged bpffle rrembers i,, sa_v _',(,,othcd as shown q–t 86 in Figure 2. A pair o._ screws, only one of which is shown at B"g _ii F–).gure 2, i)ass through '_he annular plate 74 and are threaded into the coin receiving membe–c 83, to secu.,e a–_id el–amp meniber 83 to the tc–p of the ring , '7 and to the plate 74. li,i orcier to r–revent the entrance of sILigs, eks, o–, coins che too large in di–ameter to be handled by the fare box, a gauge disc 88 (Figare 2) ig secured to t_he bolutom surface of member 33 as by a pqir of scfews, only one of wh–ich is shown at 60. This d,'_se 88 has a rect_,ngular slot 92 in 35 al,ignr,ient with the slot 09 of member 83 anci. t'–k,le 'length of the slot is pr–determined by the diameter of the largest coin intended to be haiidled by fare box. For exarD–Dle if ti–,e fare box is not intended to ha–,idle quarters, a disc h,,ivii,g a _lot tco short to pass quarters ,i7ill be usecl. –_hu.– i–F a qiiprter, half doll–ar etc. is deposited in the rpeiliber 83 it will not be able to ge_ post the gauge disn, 88 and into the fai–c box to jam it. instead, it –vvill remain in member 6.5 82 from which it ecin be removed by hand. The ga,,ige d;sc 88 may be chan.–ed for any other disc, depe.,–ading u–oon the maximum d,.a–met.–r coin –.nteiid.–_d to be hand,ed by the fare box. The cyl–'knftica't wiiidovv fO is retairi–ed –in pos,'_tion ag,,),In,4t t,'_ie chantie'l 72 by a retaining ring S,3 9,–qd gask,,–t _i, se.,_ured the lower edge of _vinclov–i as by ccrews c_'5. The c–,in_ 1–,b.at pass inside the window 6E–. are retaine_–it the–_ei.,i for insdect–ton by the operatoi:, 5,5 P..,r,d fi)r dur–.kp;iig therefro–,n ir–l_–o the fai_e box for re–7,Ste,_–4–,lg and soi:ting, by a –_lechai _ now to be described. P,eft,rrin,., tc_ Figi).re 2,,q–n actuating i,o,,i er sha–ft 96 is',ioui_l;all,–d f–Dr 7ong–.'Ltidinal slidi–Tig moije.– 6U ment iD. ,i p2_ir Pf be__r–ings c_"i mounted –In ti–ie, slop,–iT–I,– top i–iaj.l o_' the –ab,'_net, and iT–i a fixed i,nembei, r,8 sui–tal3ly secured as by s–,i_e,,vs or the like to the ,pposite s–ide of the sloping cabinet klop 1,7ioli. The shgft 9C has a reduced sect,'OTi (;3 90 upon ivhich is r–qounted a compression coil IPg thsb resi_.i.,,:_–utly urges the sl–iaft Sr the I.e,'_t o_s vi,_wed in Tligure 2. A push knob or lian,,I'le, '_' – _:,3 is riaotinted on left end of the shafi– 96 ivhere i'__ protrudes beyot–id the top out ' _, ca,bij:iet vvall. Thus the shaft 96 can be pushed to '.he right, but Lns soon as the handle 103 is released. it –vv,.11 move back to the left end of its stroke under the influence of spring A shaft 104 (Figures 1 and 2) is mounted above the actuating shaft 96 for pivotal movement in a vertica! plane Pbout a pivot 105 carried by the f–ixed member 98. The norm–al position of shaf_ 104 is horizoiatal as seen in Figure 2, but as will be e.,,,–olained, pushiiig in on the handle 103 will raise the sha4_'t 104 in a vert–ical plane, wliile pivoting about 105, to a i:aised posi–tion indicated i_n dotted lines at I 66 in !,,igures 1 and 2. Two bell cranks 107, oiily one of N_Thich is shown in Figure 2, have their aijexes pivotally connected to the actu_tting shaft 96 by a through pin 108, thcie being one bell crank on each opposite side of fhe shaft 96. The longer le_ 109 of each bell crai,.tk 107 is p,'_vot_illy connected by a thro,,igh pin 112 to the _:haft !04. The arrpngement is such that when t_ie actuating sha,4.t 96 is pushed t__ the r;ght the shaft I_IP ivill p"_Vot clocl_:Nvise eb,,_i–it ;,ts uivot pin IC,–) 1 r) a r,,,ised position –ndicatc–d at I On_. The a_tuot–ing rod 9r) and the sha__t 104 coorer–ate to qctupte a coin dumping mechanism qs will now be explained. Re'erring to Figures 1, 2 and 23 a pair of seinil circular plates II,:; and II 4 are disposed as best sho–_,vn in Figures 1 al.Ld 2 i a plane ad4acent the –n bottoria of the cylindr4cal windoN_7 F9. They have mati iig edges aloiag a di a–neter indc._ted at 1 1 5 in Figure 23, disposed vertically above the shaft The d_ameter of t._ie vssembled plates 113 and 1, 1,_' is such that _uhey make a horizontal cl.osure ?_djacent the bo'Ltoin of the 68, for _u,–3port–l,.ig coiyis or tokens for inspectio–_i. A pa_lr of n_ng'–, e iiiembers I I 6 have their hori zontal legs aff–,ced, as by spotwelding, 'tlo the uiiccerqide of LI.ate 113 aa–jgcent its diar–netrical edge, _Lnd –heir vertical '_egs pivc)tally moi' , –nted upon shaft 104, so '_'f,,at the plate 113 –iF,' P,I–,/ot2.lly mounted for r.,–tation obout shoft 10_'. Si–.iiiia_,.–ly the other plate 114 hos 2.. pair of angle bT–P,–kets I _ 7 with their hol._,'_zort?.,I legs secured to i.ts bottom surf qpe and i Ls verti–.al legs p.–Voto,ily mo,,tnted iipon sha–rt 10,1. The arrongement i.s E–uch that, without further the outer or rou_–ided ed,_.,s of plates I! 3 and I I C– vvoiil d drop, witii sha–'t 10e, as the pivot, P–.ad there 1,Niould be a substanti–al_ gai) along the d;_ameter 115 of tile p–.ates. The plates are –rnointained in horizo–,ital position by a pair of elongated studs or sui)p–ortling arms !13 and 119 rigidly –zec,,ired to the s"lorter and upwardly exteiiding ar,_i–is I r_tj 2) of he pa–ir of be! I cranks 1 0 7, the ar.,cas I I 8 and I ID e,,.'_, endi–i–ig hor–'_zontal',y and outwp–rd–iy i_roii the pip–l'ies of the bell cranks I Cr7. V,_Then the kr_ob I C–3 is pushed in by the operltor, the shaft I t4 is r_lised to the pofition indicated in dot–dosh I nes at 106 in F;_gur_–s I and 2. The

pivot pin I I wi–11 be raised ,,_ith Yespect to the tv_To supportinf,, arms II 8 nnd I i 9 aiid the plat.–_3 113 and II 4 v;ill be i:aised so that their diameter I I 5 wi j.1 be parallel with the liew position of shaft I 0 _i at I 0 _. Th' s _,vi7,1 result in the piates i i r4 –,nd I!–$ pivot–'Ing about shaft iO4 as indicated by their dot–da–h Iiiae positions inclicated at 153a ai:id I _ia 'n –tigure 1 vvhile at the'saine tiriie they wi.11 slop–,'iTi o., direction corregponcling to the slope of shaft 104 v,,hen ra,– Ised to the position sho,_i7n e,,t 196. Thiiseachplate lisard I_4s,.opesintvvodi–i–ectioiis away frotn the hori.zontal, so that the coins which h_–,d be,,_ii re–oaiiae.–i –for inspec_bio,_i through the w'lrdow 69 ,,,re duziioed iiito the –_lare box singl'_,ig, register–.rig and sort–Ing mechanism, as will be described. Each of t!7 e tvio plates i and II 4 is recess,–d along iLs mating edge oii the diameter If as in– dicated at 123 and 124 in Fig. 23. An elongated plate 125 is secured as by spot welding to the top surface of plate i 14 and completely bridges the gap formed by the recesses _23 and 124 when the Plates 113 and 914 are in their normal or horizontal position. As best shown in Fi.–ure 1, this Plate 125 also assures that when the plates 113 and II 4 are in the4_r raised position the coi–ns will sli–de either to the ri,–ht or left, and ,vill not remain sui.3ported by the diametricol edges of –olates 113 and 114, or fall_ between them, into the mechanism that raises or loivers them. Wherl– the knob 103 is released, the spring 100 will return the actijatin_ rod 9–3 to the 1.–ft to i.,',s normal position, whereu;on shgft 104 will resiii–rie its horizontal position and the supporting arms I I 8 and I i 9 will again support the plates I 1 3 and 114 i–n ho2izonl_–al position. It will be i–I.–aderstood that even in the raised Dosition of shaft _OfA these supporting arrrs II 3 and II 9 limit the __ivotal moveme,_it of the plates II 3 and II 0, about shaft 104. As described in 'Llhe copending appl4_eation Serial No. 186,054 f–iled September 21, 1950 by Fount F. Do,tigherty for Fare Box with Grab F_andle the four equally spaced handles R6 provide P,_rips for passengers who are standing or for those viho r.lay be passing the fare box v7hen the 17ehi_Cle starts. A light bulb 129 mounted within a reflector 132 secured to the top portion of the cabinet 1.0 illutninate–q the tiltoble plates I IS apd 14 PT–ld a–(iy coins that are resting thereon. Figure 2 shoN_Ts three windows 133, 135 –_nd _35 in the side of the calinet 50, throlgh which are visible the numeral wheels of three coilnter assemblies indicated generally by the numerals 136, 137 and 138. These counter assemblies are actuated autoiratically by the fare box, as will be explained, to regi–,ter respectively the totals of small tokens, coins and large tokens. A plpte i39 carries legends i–qdicating the specific items registered by the coiinter assemblies. T–be front of the cabinet Ui'l has an elongatec' window 142 through which are visi–ble two counter assemblies 143 and 144 (see also Fig. 3) which are selecti–vely actuated by the manual depression of either of a pair of levers 145 and 146 protruding froin the front of the cabinet. These counters o.nd actuators are o'L any conventional type wherein the single depression of a !ever actuates its respective counter to add a single qunierol to the previous totlql. A plate 147 is secured to the frame of the rd–achine as by screws 140 (Fig. 4) a–iid masks all of the dl:scs and numbers of the counters –xceDt for one row number of each, which rovis are visible through the a__loresaid window 142. Protruding frorn the bottom uortion of the front wall of 'Lb–e cabinet' '–A is a change maker identified generally by the numeral 149. The particular construction of t–be chonge maker is unimportant as long as it has one vertical coi,n receiv–lng barrel for each diameter of coin or token that may be handled, registered and sorted by the fare box. The change maker receives the sorted coins from the fare box, and stores thern for the use of the vehicle operator or conduc(_or. Theparticular change maker illustrated in the drawings is similar to that shown in the U. S. Patent 2,338,576 issued January 4, 1944 to Fount P. Daugherty, and need not be further described here, except that in the present instance there are six coin receiving barrels 152–157 (Fig. 1) instead of four as shown in the Patent As best shown in Fig. 14, and also LTi Fig. I the upper ends of the barrels 152– _57 are received in an elong4ted casting _58. This casting has a pair of downwardly inclined surfaces _ 59 and 160 (F–i–g. 14) extendi–ng across the upper ends of the bgrrels 152–157 and serving to –uide coins to the open top ends of the barrels after they have bee–,–i discharged from the sorter mechanism. The msting 158 is secured to the machine frame as by screws lO 8 (Fig. 14) and has side walls 164 and "GU of the don–figuration shown in Fig. 14 with tra_–isverse recesses 166 along its upper edge. Be– twee–.q the side walls 164 and 165 are a seri–es of dividinwalls IST (Fig. 1) all having the same confguration as the side walls 160, and 165, and havirg the function of guiding the sorted coins to their proper barrel after they have been dropped fr,3in the _sorter, es will be underste.)od. The casting 159 has a forwardly and upwardly flaring fron'u wall 168 providing another series of chutes by vihi_–h coi– .qs r–iay be deposited into their oroper barrels by hand, as after the operator has made chel.–Yige or 'uhe like. A cover plate 169 is hinged at i–ts ends to the casting I 5 8 by screws _' 7 0 (Fig. 14), the recesses 166 in the top edges of the side and di–vi–din,– walls providing clearance for the upper edge of the cover plate _ 6 9 when it is raised. The –ove_– plate is provided Nvith a series of coin slots ITS directly over each of the barrels _ 52–157 so that the operator may deposit coins or tokens into th–,ir proper barrels, each of the slots 173 being of proper length to pass the prope.– coit–i. The cover 1)late also has an elongated NviT–idow 17,.q through which the operator may watch the coins sorted by the fare box pass dovvnixiardly to their proper barrels. 4:0 As will be explained, pushing in the knob 103, besides act_iating the mechanisra to dump the coins frorp the plates I IS and I i 4, tlso serves to initiate operation of the –rqotor that aetuates th6 fare box. A riia;.n sivitch 175 (Figs. 5, 7 ard 10) is seevred as by screws 176 to a vertico.1 leg I 'T inte– gral with and extending downwardly f,.–oill., an inverted pyrar–qidal coin hopper _478. The switch has an actliating pin 179 (F–ig. 7) that is normally urged olitwardly by an internal spring (not shown) to close the swi–tch. The switch is opened by pushing in the pi.n #79 again..,3t the action of the internal spring. A leaf spring 182 is suitably seciired at i_ts lower end to the body of the switch 97_ so that the soring 482 extends substantially vertically upwards, in cont–act with the outer end of the actuatng pin 179 and through a re_–tangular opening 183 in the wall of the coir hopper ITO, to a point above the upper erjge of tl–ie hopper where its free upper end bears ag–ainst a stud 9 84 (Fig. 2) carried by and extending downwardly from the actuating rod 96. The internal spring in the switch 175 is _,trong eqough to push the leaf sprinf,_ away from the swi,tch to (,–lose the switch vihen the rod 96 is raoved to the right in Fig. 2, consequently carrying the stu–_l 184 +.o the right. 1–_owever, the retur_–i spring 109 on rod 96 moves the rod 96 back to the left when the knob 1,33 is released, and the stud I BA, will ptish the leaf spring 182 back to overcome the internal spring in swi'uch 17 '_,, push the pin _ 7 9 in–, and open the switch. Care raust be taken, when placing the cab–inet L_0 i–ipon the fare box fran–ie, +_hat the k–n6b IGO is pushed in while lowering the cabinet, to assure that the stud 184 –,_7ill lie to the right of the leaf spring 182 as viewed in Figure 2. The top wall of the hopper is recessed as shown at 185 in

Figs. 3 and 6 to assure clearance for rod The aforesaid inverted pyramidal hopper is disposed directly beneath the coin reception and inspection receptacle formed by the cylin– _ical Nvindow 69 and the plates 113 and 114. The upper edge of the hopper v;ill lie closely adjacent the inner surface of the frusto–pyramidal tbp of the cabiiiet, aiid an endless g_Lsket (not shown) –s advantageously secured as by cement, to the i inner surface of the cabinet top Nall to seal the space between that wall and the top edge oll the hopper. On one si,de, the hopper has means foriiiing a fare passage or discharge chute formed partly by a bottom wall 186 (Figs. 3, 6 and 8) that is in effect a partial cortinuation of the oppositely disposed hopper wall 187. The chute has side walls 1 800 and i 99 sufficic–j–itly spaced so as to allow large co–ins, such as ciiiarters, to pass down the _hute to the coin singling aiid gaging device which will be described later. The chute side aiid bottom walls terminate ab their bottoms in an inte._ral membei, forming a platform 19 2 which when secured to the machine _L5 frame, holds the hopper in place by means of screws l__13, 194 and 195. These screws, besides passing through the platform 192, pass through spaced guide plates 196 and 197 (Fig. 13), through a coin plate I 90 (Figs. 5 and 13) and through spac4iig viashers 20,2, 203 and 204, and are thread.ed iiito a horizontal member 205 of the internal frame 51, the spacing washers serving to posi–tion the coin Dlate 198, the guide plates, and the 'Llopper 178 at the proper elevation with re– spect to the internal frame. The sloping walls of the hODper direct coins to theaforesaidehute,aswillbeunderstood. Means are provided to agitate the coins in the hor)pel, so that they will fall into the cliute, the same means serving to reject f–rom the chute those articles i_,hich exceed a prede'uermined thickness, such as a button, or a coin which is bent or deforr_ied to such a, degree that it rqight jani the coin singling and so,–ting apparatus. This agitating and 41–, rejecting means, in the illustrated – embodiment, is in the form of a rubber wheel 208 having a r,air of spaced toothed sections 206 and 207. The ,vheel is secured to a rotatin,_, shaft 209 by a set screw (riot shown). As best shown in Figs. and 8 the peripheries of the two toothed sections 20–3 and 2ui are but slightly sdaced from the bottom wall I 86 of the chute, and are driven at high speed in a counter–clockwise direction as ,,_iewed –in i_ ig. 6. The cl_earaiice between the sec– t4ons 206 and 207 and the bottom wall 186 is such that bent coins, buttons, slugs or other articles that are so thick as to jam the sorting mechanism, will iiot be able to pass the wheel 208, but instead w;lll be thrown back up into the hopper. Also, st,acked coins c,,tnnot pass i–n'uhe wheel because the thi,_kness of two of even the thinnest coins w–ill be too great for passage beneath the wheel, and the i:tp,cer one will be thrown back up il'ito the hopper. A i_hield 2 i 2 covers the udper end of the coin chii'Le above the r,,ibber wheel 208, to _Lorm a continuat–lor. of the hopper wall 213 (Fig. 3), The shield has a ti,,,,,er 214 thal p,2oiec's into '_he spa.–e betweer, _'he toothed sect–ions of the rubber wheel. –ht:ts the shield 2i2 with its finger 214 assure that co_ins will iiot drop into the coin chute without first falling into the hopper ar d then passing bcneath the rubber wheel_ 208. As each coin Dasses beneath the rubber wheel 208 it is arrested momentarily by a contact 215 (Fig. 6) that protrudes vertically thiough a hole 216 in the chute bottom wall 186. This contact is automat"_cally depressed with eve_–y coin singling stroke of the mechanism shown in Fig. '_3, thereby releasin., the coin that is arrested by the contact. The motor and drive shaft The fare box is powered by an electric motor 218 (Fig. 19) su,.tably secured to the bottom of the inter–nal frame r. 1. The motor has a reduction gear box which journals the lower end of a vertical output shaft 221 (Fi_,. 20) wh–ich passes through a housing 222 and carries adjacent its u,–)per et–id a triple tool_hed circular ratchet 223 (Fig. 20). A di–iven shaft 224 is mounted coaxially above the motor output sholft 221, being jolirnalled in a pair of horizontal ini.ernal frame r7jemL–ers 225 and 226. The driven shaft 224 is releasably connected to the motor shaft 221 by a clutch _nechanisiq now to be described. Secured to but rotatable upon the lower end of the driven shaft 224, where it adjoins the upper eiad of shaft 221 and the ratchc–t 223, is a plate 227, best shown in Figs. 20 and 21, havina a spiral periphery that includes one radial lip or notch 228 formin.– a stop. A sem,'_–eircularly curved P'late 229 (Fia_. 20) is secured to the bottori of the plate 227 1)y a pivot pin 232 so that the curved plat,., lie., against the under surface of plate 227 ar_d can zotate about pin 232. This rot,–itional –;.iovement is limited by a P;,n 233 fixed to the upper plate 221 ,iiid protruding throL,.,_h a short slot 234 in the Pi–voted plp–te 229. The free end of pivoted plate 229 is thereby lin–.ited to a, movement betw,–en its full line Position shown in Fig. 20 and the Cotted line position sho–_vn at 229a. The pivoted plate 229 has at i–ts free end a radial lip 235, which when the plate 229 is in its dotted line position 229a, is coplanar v%Tith the radial lip 2 2 8 of the plate 2 2 7. A bell–crank shaped pa_,vl hav–'.–ng le.–s 236 and 23–i is pivotally secured to the botton, of plate 227 by a pin 233. A tension spring 239, secured to the pin 233 and to a pin 242 on the pavil, il–rges the paNNil counl_er–clocknvise as viewed __n Figure 20 so that the outer end of its le_ 235 is in the path of the teeth on the ratchet 2_3. The spring 239 is suf–flciently strong to cause '_he leg 237 of 'Uhe pawl to exert a cammirg action on the free el)–d portion of plate 229 to normaily inaintain the plate 229 in its fulil lipe position 2hown in F–ig. 20. It will be apparent that under these conditions there is a positive drive coii–qection Let,_kreep– tl–ie motor shaft 221 and the plate 22T. This drive can be d–isconnected by rotating the plate 229 counter–clockwise as view,,d in Fig. 20 so that by a camming act–"on it overconies the aettion of the spring 239 ,lnd iota:,.es the pawl clockwise, thereby moving its leg 1"6 to the dotted line position 236a wherc– it is out of the path of the teeth on the ratchet 2 2 3. Referring to Fig. 19 a bell –,rank having legs 243 and 244 is pivotally _–ecured to a member 245 of the internal frame by a pivot 2r4C. A tension spring 247 ui,ges the bell crank clockwise as viewed in Fig. 19, egainst a stop member 248 secured to the frame as by a screw 249. As shown in Fig. 20, the end of the crank arm 243 lies in a vertical plane in the path of the radial lip 235 on curved plate 229 and the rat._ial L,p 228 or stop on the plate 227, when the cranl, arm 243 is in the fully raised position shown in Fig. 19. Tl–j–,.is, assuming that the ratchet and pa–,_,,l are in driving enaagement, in thei_– clockwise rota– tion as vie_ved in Fig. 20, first the lip 235 will hit the arm 243 to disengage the ratchet and pawl w.echp,nism and theil the lip or stop 228 on the plate 227 will hit the arm 223, thus stopping the plal'e and entirely discontinuing the transfer of power to the driven elements of the fare box, allowing 'Lhe motor to coast to a stop if it has been deenergized at the same time. 1 The motor shaft 221 has affixed thereto for rotation therewith a dis–. 252 (Fi_u. 19) having a series of three cams depending downwardly from its periphery. The bell crank arm 243 has a, pin 254 protruding therefrom, which when the arm 243 is in the raised position of Fig. 19, hes in the path of the eams 253. In Mg. 19 one of the cams is shown about to engage the pin 254. Upon energization of the motor 218 rotation of the ca.,n 253 will depress bell crank arm 243 ag–qinst the action of spring 247 and the arm 243 ,A7ill release the lips 235 and 228. Spring 239 will thereupon engage the pawl leg 236 with the ra–tchet 223 so that

the plate 227 will be positively dr,'Lven through one revolution, whereupon the bell crank arm 243 will again disengage the positive ratchet and panvl clutch mechanism. Figs. 21 and 22 show an overload release clutch ri).echanism which prevents damage to the machine in the event of a jam therein. In Fig. 21 is shown a pair of curved lever arms 255 and 256 pivotally secured to the top of the pla–te 227 by a pair of screws 257 and 258. A teiision spring 259 urges their free ends together. Counterclockwise rotation of lever 255 is limited by a stop screw 262 passing through a stud 263 fixed to the plate 227. The other lever 256 carries a roller 264 free to rotate on a, pin 265, The roller 264 bears against the periphery of a cam disc 266 above the mechanism shown in Flg. 21 and fixedly secured to the driven shaft 224, and norinally is seated in a depression 267 in the periphery, being resi–liently held therein by the spring 2o'B, with a force sufficient to transmit normal forces to the disc 266. In the event of a jam in the machine the roller will merely ride up out of the depression 267 thereby c–,asing to transr.–lit rotation. The roller can circle the plate 266, riding into and out of the depression 267 thereby ceasing to transmitrotation. The roller can circle the plate 266, riding into and out of the depression 267 until the motor 218 is deenergized. Above the cam disc 266 is –Qxedly secured to the shaft 224 a bevel gear 268 which drives the coin and token counter mechanism through a bevel pinion 270 (Fig. 29). This counter mechanism wiU be described later. Secured to the shaft 224 for rotation therewith, above the frame member 225, is an elongated cam 269 having a profile as shov,7n iti Figure 22a, and a funettion to be described later. Suitably afrxed to the top of the driven shaft 224 for rotation therewith is a gear 272 that has a stud 273 protruding from its upper surface which serves as a crank–pin for driving a connecting rod 274 that in turn is connected by a pin 275 (Figure 13) to a coin ram 276 that is guided for rectilinear motion by the guide pla'ues 196 and 197 (Figure 13). The coin ram is confine,l against vertical movement by the bottom surface of the platform 19 2 and the top surface of the coi–n plate 198 (14'igure 5), and the underside of the platform 192 has a central recess 277 (dotted in Figure 5) to provide clearance for the pin 275. The coin plate 198 is also recessed as shown at 278 (Figure 12) to provide clearance for the pin 275 and the rlght or forward eild of the connecting rod 274 when at the forward end of its stroke. Figure 12 shows the coin rarn 276 at the full end of i.ts working stroke, and in its normal zero or withdrawn position, which it occupies when the clutch mechanism is as shown in Fig–are 19, the stud or crank pin 273 is 180 degrees away from the position shown in Figure 12. Secured to the driven shaft 224 below the gear 2i2, but above the frame member 226 is a plate cam,270 having a profile best shown in Figures 12 and 16. A cam follower 282 is carried by a lever 2OU3 pivoted to the internal frame 51 by a pin 284 and urged clockwise by a tension spring 285. Thecam2l9hasafirstdepression286which by means of the cam follower 282 and spring 285 resiliently holds the shaft 224 in such position that the stud or crank pin 273 is in its zero or withdrawn position shown in Figure 16. The fol– lower 282 thus assists in holding the driven shaft 2'24 in the position that it occupies before a rotation cycle or series of Gycles. The cam 2'p 9 has a second depression 287 separated from depression 286 by a rise 288' (Figure 16). The action of the plate cam 2–gS is such that after rotation of shaft 224 is initiated by the motor, further rotation beyond the rise 288 is assisted by the slope of the cam profile toward the second depression 287. This occurs during a portion of the cycle where– in the load on the motor is relatively high, and theadditional torque provided by the action of the spring pressed cam follower 282 at this point smootbs out the motor load. A vertical bracket having two walls 289 and 290 (Figures 3 and 5) is secured to the top of the horizontal frame member 205 as by three screws 293 (Figure 3) passing through horizontal legs 294 and 295 at the bottom of the vertical bracket. A vertical shaft '296 (Figures 3 and 5) is jour–nalled for rotation in bearings in the frame raember 205 and in a horizontal lip 297 protruding inwardly from the bracket wall 290. Adi4acent its bottom the shaft 296 has a pinion gear 298 (Figure 3) that iiieshes with the gear 212, thereby driving shaft 296 at a much greater speed than the driven shaft 224. Adjacent the top of shaft 296 is a bevel gear 299 (Figure 5) that meshes with a mating bevel gear 300 fixed to a short shaft journalled in vertical wall 290. The same shaft has affixed to it a gear 303 that drives a gear 304 on shaft 209 through an idler gear 305 (Figure 3) inounted on stub shaft 306. Bevel gears 299, 300, gear 303, idler 305 and .–ear 304 thus provide the rotative power for shaft 209 that dr;.Ves the –rubber wheel 208 in the hopper discharge chute. Also secured to the shaft 296 but below the bevel gear 299 is a worm 307 (Figure 5) which rneshes with a worm wheel 303 (Figure 3) upon a shaft 309 fixedly secured to the bracket wall 289. Suitably keyed to worm wheel 208 is a hard rt_ober or Bakelite cam 30,0 havir_g a circular profile except for a singledepression 'Q II (Figure 3a. An electr–le swi–tch 3f,4 –is suitably se– cured to the bracket vertical wall 289. This switch has a plunger 315 that when pressed inwardly against the force of an internal spring, closes the circuit in which the sivitch is located. A lever 316 is pivotally secured to the switch 7o body at a pivot 317, and at its other end carries a cam follower roller 3 1 8 that rides on the periphery of the card– 3 1 0, being resiliently pressed thereagainst by the switch plunger .0.1 5. In the position shown in Figure 3a the plunger 315 is pushed in and the switch 3 14 is closed. The cam 310 rotates counter–clockwise once for every 13 revolli.tions of the large gear 272 that actuates the coinram 276 andthe function of the cam 310 a–rid sv7itch 311_' is to assure that the power circuit to the ir_otor, once closed, will operate the 5 coin ra:,–, 27G at least 13 t–imes, before the depressi ' on ol–'–ovvs the cam follower 3 1 8 and lever 61 _P, to r_elease pluiiger 315 a–nd oper– the switch Si 4. If afte,. these 13 operations of the coin ram the motor eirei:ii_ is still energized by another 'I 0 will be rotated again p,iraliel,– then cam _L–ad_ again open the switch 14 after 13 op–,ra_– tions,.of the c–ni–,i rai–ii. It iray be explained at this time that the raotor is initially energized by push_ng in the knob 103 15 to dump the coiiis i–qto the hopper, because this actio ' n closes the rnain switch 1.15 (Figure 7) as prev–Lously explained. Switch 314 is in parallel with the main switch 175 and thus maintains _I holding circuit to energize the motor while the 20 coin ram 276 makes 13 ope,:ations. If all of the coins dumped into the hopper have been disc_liarged from the hopper chute then the motor –,vill become deenergized at this time. Hoivever, i–s – etaincd in tne coin chute by the o; c_intoet 2 _ 5 of Figure 6 then the motor circuit will be again closed through contact of the coid – _,7it,h the chute bottom i86 and –_vith the contact 2 The holding eircui–t established by the sv_Titch 8 I _, aiid cam 3 1 0 will thus again cause "3 0 the –.,iiotor to dr,',Ve the coin ram through 13 opt4 era icins. C–peratiol–i of the protruding contaet 215 is as follov_,s, Feferrir_., to Figure 9, the contact 215 is inouiited ii–oon o,,ie leg of a bell crank 319 piv– ailtached to –qn elem–ent of the coin chute by nscrew 322. A tension spring 3__3 ur,,es the bell –,rqTh,, 319 counter–clockwise 'uo its norriial posi–tion where–in +he contact 215 prc)trudes above the –floor igg of the chute to prevent passa.–e of a coin there–oast. A bottom ver'uical lip or edge 324 o_–i the bell crank 319 engages one e–rld 325

of a horizontal lever pivotally ir_ouiated upon a pin 326 (Figure 7) for rotary reciprocati –ng movement witilin a slot 327 in the underside of the ' platform i22, so that the lever operates in a plane just above the top of the coin raiia 278 and w–ith the other end 328 of the lever i–n +he path of th,– pin 275 (Figures 12 aiid 13). The a–loresp–Id lever is urged clockwise, as vic–wed in ;_ligure 7, by the ac'uion of the spring 323 9,nd the bell cranl_ carryiyig the contact 2 1 5, so that its norr.–ial pos–i'_ion is as shown in Figure 7, with tli.e '–imit o_' the clockwise mover–yient of arm 320 ostablished _Dy the left v_all of the slot 327,. The lever is –o lo;–,ated along the path of the aforesaid pin 27.3 that the pin strikes the arm 328 j L,.st before the pi–i'i reaches the end of its st–,,oke (towa–rds the r3ght as viewed in Figure 12), and the pin 273 wi.11 thjs riove the lever arm 32k,, cou–iiter–clocl,–,_vi'se (!,'igure 7) to rotate the bell crei,nk 3 i 9 (Figure 9) clockwise a,–;ainst the tensioii ol_ s–critig 323, aiid thus pull –the contoet bellow the '–.loor of the coin cl–l–Lite to perr_,iit the next coiii tr, slide to the bottoiii o–f the chute. The contg.,–;t 2 i 5 i__ insula–ted from the bell crank S(O that car.__ies i–u, and a wire 329 leads fi:om the cotitact bo orie side of the motor circuit, the otl,er –side of the rrotor circuit beiiig grounded. 7o Co–_'n sing_'i7,.g and gaging mechanism .z ,ks each coin 'i–s ieleas–.d by the depression of contact 2_5, it sli–des the remaining way do–wn coin ran– 276, whi–ch i–s a_u this time at the full end of its working s'Lroke, as viewed i–n Figure 12. The bottom of the coin chute wall 18 9 (iligure 3) jlist clears the top of the mm 276, and during the ret,,irn stroke of the ra–m the coin will be ,T.7iped otT– the top of the ram by this wa–11 I S9, o_nd drop onto the elongated coin Dla–te 198 where it now lies in the path o–f the next working stroke of luhe ram 278. As showp– in Fi–.–ures and 13 the left or discharge end o_L 'uhe ccin plate 198 curves downwardly at 332 to perr;.iit the coins to drop vertically throti_h a slot 333 i–i the horizc–.ntal fra–,_–1–_ rfier_iber 205. During the worki,g of –Lhe rair 276 the coin restirg upon the coin plate ,Tiill th–us be pushed to the left iintil it drops into 'Uhe slot 333 and enteis the sortitig i–ne–hanis__n in a vertical plane. During this –noveli'lent the coin is pushed be_vveeri a Exed roller 33.1 mourited upot–i a stud 335 and a, iyiovable s'u–Ud 339, to be described, the roller for–.Tii_ng a fi_.ed ga.–i_ig elei–ient. On the other side of the path of the coii–is is a niovable gag;_ng elemenlu in the forl–D of –ri, bell crank 336 (Figure 12) pivotally mounted upon a _lixed stud 337 sc–cured to the fra,–r_ie rpeir.–ber 205. One arin 'QSC has the previo,,:tsly mentioned stud 339 dependiii.– therefoor, (,'_–igures 15 and 18) so that the stud is in the path of the coilis being pushed by 'lie coin ra–r–,i tc),j..,ard the slot 3_'3, a–_id it will be –a–opare,nt that the clockwise –noverilent of the aging element 336 v,,ill in each instonce be de?oendent ,lpon the dipimeter of the pai__icular coin being gaged be"–ween the fixed ro'iler 334 and the I' stud 339 on the b,,ll crank 336. It tal_es ec)psiderable force to push –) coin between the statioiia.– cy al'id ri–iovable gaging elements, ar–d althou–h –the pusl).ing end of the coi–a ram is fi,,it there is the possibility that a c__in would coel_,, out o4 il–s ho–,,izot–ltn–l position. Also, it must be assured that only a singlf– coin at a t–'lne is pushed through the ga–ing e7iersients by the rani 276. For that –,eason, a vertictlly movable gate 342 (F,;gi_,res 3, 5, 7 aild 11) is Tirovided. The gate 342 lie–,s transvelse of the pa_th of the coilis that are be"ng pushed through the co4n gaging –Iemei–its by the coin ro_ni tnd coiriprises a blo–k of Ine'bai havin., verti_,al slats SC,3 a_ld 344 (Figure 11) e,– tch of I . ivnich has protr,,_,ding tiiereinto a Pa–ir of studs 345 and 340 respectively. As best shown in Figure 11, these stuc–)s are adjustable through the wall.– 188 ar–ld '._q9 of 'he ch–Litc–, and are secured by loc?,uiuts afl_er the s_u.ds are adjlisted to provide a free vei:_,ical movemeiit for the gate 3,2. As I)est showii '_n Figure 7, the face '_D4–3 o–f t_he gate toward the i–am i–s in the foi'm of a of ',I cylinder, which at its lower ed,_e is iiiidercut i–il a si–).ooth cu–,–ve to–_Tiard the OT)TDosite vertical face of the –Pte 392 to ;)rovide a cairni;r–,–; surfac_3 t',–iat calises '_lie _ate to be liitc–d _vhen a coin Is forced against its curved –'cqce 343. adjacen_ the botton_ +_hereof. The gate 3L–_,2 iests upo–,,! the coi–n –olate I P3 and –is spring pres,,ed therea–ainst by a pa–r of co–'! springs 35i and I So'R (F–igure 11) seated in blind bo_–es in the –ate 342, and vjith thei,– upper end_, beal–,lng agailist a hor4 zontal leg " i 1 _53 o–f n_n L shaned hoild down bracket that –is secured by its vertical leg 3,q4 and a pair of screws 355 (Figure 5) to the fi–oiat I_ace.– 138 alid 180 of the coin chute. As shown in Figure 11 tl–iere is a clear–ance space bet,_,.–7een –the top of the ga–te L'42 and the leg of th,hold down braeket, to permit the gate to rise whel'i a coin paqses bereath it. Besides preventthe coin chute and falls upon the top of the 75 ing the cocking of a coin the gate 342 also pro– vides a singling device that prevents the rarnming of rnore than the lowermost coin if there be two or more coins resting upon the coin plate 198. In order to ass–ore that a coin passes the coin gate, the leadiiig edge of the ra–.m 276 in its ramming action, also passes b–,ne,,tth the coin gate, thus preventing the holding of a, coin bell–eath the gate as a result of the acti–on of the springs 351 and 352. Coin sorting mecha?iism Among the mecbanisrrs controlled by the clockwise movement oil the coin ,ag,:D.– elemel–it 336 is the coin sorting mechanisin which receives the coins or tokens passing vertically –through the slot 333, sorts them according to diameter, and delivers the–,D to the proper barrel 152–157 in the change rnaker 149. The mecha–yiism for controlling the sorter will first be described. Referring particularly to Figs. 16 and 17, a gear 356 is affixed to a horizontal sha–.Lt 357 journalled for rotation in spaced elements of the frame 51 below and supportin– the horizo–,ital frame rnember 205. This gear a56 does not rotate through a large angle, and adj–'acert its top it carries a st,,id 358 upon Vi,'_ch is rnounted o–iie end of a connecti.ng rod 359 that is adjustable Li length. The connecting rod 359 includes an elongated nut 362 _vhich threadedly receives one el–id of an eye bolt elei–Dent 363 the other end of v,7hiih is pivotal'y inounted upon stud 358. Another element 364 has one end threadedly received ir– the other end of the elongated nut 362, the other end havin.– an elongated slot 365 which passes a stud 366 whj'.ch is carried by the vertical leg of an angle brae7zet 367 that is rigidly secured t(_gt; the top of frar–ne –niei–qber 205 as by rivets 368. Thus the egnnecting rod.z59 has a pivotal mouii_uing upon gear 356 at one end a–Tid a sliding mountin,g upon stud 366 adjace–lit the other erd, –v,,h–ich said other end li–es 4_n the path of tt_e mover_ient of the other leg 369 of the bell crank oi– gaging element 336. Loelz nuts 372 upon the threaded secti–Ons of connect;_ng rod elements 363 a_lid 364 assure the niaintaining of the Droper adjusted length of the connect4ng rod, it being utiderstood that the internal tbxeacls –iii– the ep–ds of elonga'6ad nut 862 are of opposite haiid whereby the length o.f the conp–ecting rod can be adjusted by turning the nut 302 a–fter the locl,.iiuts 272 have :Prst been loosened. '_t w4ll be adparent that whenevej: the gaging element 33C ;_S rotated clockwise (F–ig. 16) di–iriiig the gaging of a coin, the gear 356 Nvill be ro'–Uated counter–clockwise (Fig. 17) through a comniensurate angle. Return mo_rement of these ele,,iients to their initial positions 1,5 spring in,–iuenced, as vii–11– be described. S.'Liowii in enlorged detail in Fdgs. 25 and 26 is an asseiibly that is moudted in the intei–

_ial fraine 5! ef _Lhe macljine for reciprocating vertical move−rnent under the infiuence of the gear 3BG and a return sprir_g 373 (Figs. 14 and 17). This asserqbly includes an elongated square rod 37−4 having rack tee−_h 375 oii the upper portion of its length, which teeth are in engagement with the teeth of gear 306. It is pointed out now that in order to show iiiore clearly the elements carried by rod 374, 'uhe posi.Itlions of the rod 374 and the elements carried thereby are viewed from an opposite diree−tiOn in F−igs. 25, 26 and 27 than in Figs. 14 and 17. Securely fastened to one side of the rod 374 and at the to,,o thereof as by rivets 377, is a cam plate 376 that is shoivn in still larger detail in Fig. 27. Along one edge the cam plate 376 has 9, series of notches of varying de−Dths and haviilo horizontal lands 370−383 iiliclusive, oiae fcr each size of coin or token to be handled by the fare box, as will be appare−,it later. At its lower end the rod 374 is round in section, and o,−uided by ,. holle ira horizontal flange 3 8,') at the bolutom end of a vertical flat plate 330 that is secured to a vertical meraber of the internal fi−ame 51 as by screws 386 and 387 (Figs. 14 and 17). 'n,,e up− per elid, of assembly 37P_ s_−nd 376 is guided by a se'b of tb−ree rollers 388, 339 and 390 (Figs. 14 and 17) that are carried by parallel sp,_xed frame nierilbers 393 and 39,'_' (F−ig. 16) secured to internal frame 51 and whi.−h also act as side guides for the top of the rod−plate assenibly 374, 376. The coiled coinpression spring 3'3 oia the round section of rod 374 bears agair−st t'he flange 384 and against the bottom of the square section of rod 374 to urge the rod upwardly. Thiis whe_,l t'−Qe coin gaging eieri−ient 'e.6 acts to ,,otate gear 356 counter−clockwise (F;z−. 17) and lo lower the rod 374 through the rac_ 375 thi−s m"ove,.iient is resisted by spring 373. Each coin or token of difereiit diar_ieter op−era+_es the gaging elenlent 336 lo lower the rod 374 by varying amourts that are_ dependent upon the coin or token diariieter. Sho_,vn best in Fig. 24 is a lever 395 pivoted for movement in the ho.−izontal plane about a pi−vot 398 carri.ed by the horizontal frame member 203. The lever SeB has a projecting arm 397 (see also !,−,ig. 27) that '6erminates in a chisc−I end 398 that is squared at its end to avoid a sharp and r−,lat−'.Ve−ly poi,nt. The undersi.de of the end 398 is horizontal. The lever 395 is urged clor−kwise (Fig. 24) into, engagemen' w'th the serra−Lled ed.−e o4− the cai−q plate 376 (see 'Flig. 27) by a tenS4 on spring Q'99 (Fi_,24), so that as the carn plate' 37C is dep−ressed by bbe action of the ga.,_g elemen− 320 the chisel 4o end 398 of the projection will e_ter the notches of the cam plate. As the dep,,− ession of the cam plate 37 6 depends upon the coin d_ameter the vert_,"c_al spacing of t−lie lands of the notches in the c−.t nlate is comme,_asurate with the coin cliai−qe−ter. −As shown in Fig. 27 +,'−'le notches have canisurfaces above each land 3',18−383, so that the s'pring urged projee−tion 39'1 v−7ill ride over the successive notches until the calm plate has r−lached the maximum depression according to t..b−e coin that has been gaged, vjhereupon tl−ie eiad 398 of the projection 397_ being spring pressed to, the 1−e.−'t (Fi,,P−. 27) will engage the part;cular land corresponding to the gaged coin, and hold tl−.e cam plate 376 and the rod 374 in that depressed coiidition until released for rel'urn to initial position under the id−qilence of si3ring The viithdxawal of the pro−jection _'oB'g' 'Lroin the n6tch, and the refurn of 'Lhe rod 374 to iii−'Ltial position is not accompl−ished unt−.',I the _ue6o ceeding ramming Gycle of the coin rarq 2'16, because after the rod 374 has been depressed according to the co−in diameter it is the flnction of the lever 395 and its spring 399 to hold the rod 374 depressed until the gaged coin has beep− sorted a−nd delivered to its proper coin barrel in the cl_iange i−nal,,er 149, an−' un' il the value of the coi−n or token has been entered in the register visible through t−he windo_vs IS3−135 of Fig. 2. T−_iis withdrawal of the − oroiect−lon 397 from the iiotches, and the conseauent return of rod 374 to initial position is accorriplished at the start of the next coin singling and gaging cycle by the action of a stud 409 (E−lig. 5) __hat is se,−i−ired to the gear 272 and protrudes downwardly there− 7,5 from so that it engages a cam surface 403 on the end of the lever 395. As seen in Fig. 12, when the ram 276 is in its initial position, beiore th'e beginning of a worl_cing s_roke, the stud 400 is but slightly −pace,,' from the cam surface , 403, so that as soon as tbe ge_−r 2T2 rotates o7−aly a few degrees the stud 400 Nvill'enga._e the cani surface 403 to r__,iease the proje,,_t−lon 397 from the nol.−cl−,e,_ and allow the foci 3 1. 11 t.− −,eturn to its uppermost positior,., after ivhich it −viill be depressed a._ai−ii as tb−e iiext coi.ii pu!shed by the rai−n 276 pass−s between the gagi−n.− elements 334 and 339. As each coin is gaged and is pushed to the elid of the coin plate 198 to enter fhe 333 _n vertical positi.on, it enters a space bet,,veen a pair of para'ilel spaced vertica−l walls kID4 and 405 5, 12, 14 etc.). As best sholvn ir_ Figs. 4, aiid 18, these walls 404 arl−d 405 have trans'verse parallel _loill ,ng slots 406 therethrough. A sorter leaf platePO7 (seeolsoFig.2−3) passestlarougnthese slots to forrd− a slopin_−3− floor 408 between tl−ie afo.resai.,,l vertical walls 404 and 405. This slop_ng fioor is reciprocable, by means to be described tlaroul,h P,. range of positions betwe . en Nvhich a st−ial_l tok_lii will− drop into barrel 157 to a posit_on where a qi:tarte−,, −_vill drop into the barrel 152. These posilions occur as the floor 408 Is:' s]7_ifted from its ,nitial posit−loli to tl−ie ri._ht (ir, −P',ig. 12) until it reacl−i.−s its maximum deflection whereupon a au,,,,rter will roll alo−ng tlie floor u−,iuil it drops ofL the end 409 thereof (F−ig. 28) iiito ihe quarter borrel 152. As perhaps best ohowri ,.n 15 9,p−d 28, the floor is stepped so '.hat a'ong its '−,ength it has various widths,,and at the lowermost end of each of the stepped ividths it is provi O'eJ, −_vith vertica,'−_ stops 4 i 1−4 i iiist, abova eac' i o−l_ tne div'ding walls 167 in the casting I 5 8, tile walls 404 and 41,".; being provided with spaced −ot,,−_ 41 6 (Fig. 15) so lbat the _.to '41 1 veltic,,Ll s'_ Ds 4! 8 cat−i move transverseiy 'chrough the wal_is 4.9 4 and 405. 'rhe actioii of the sorter leaf plate 407 is such ._bg,t, for example N_7hela a nickel has been gaged, the plate w−'−!! −rp−ove to t_ie (Fig−. 1,2) or doiinward (Fig. 28) until the stop 4.iB b'Locks the sloping passageway bet,_veen 'Lhe vertical.walls,40 4 and eG5 while the stepped ,'loor 40 0 is. discortinued just above the space leading to tl−ie nic'_el barrel 153. The move_−iients of the sorter leaf plate,4.07, which delivers each coi−n to the coin barr,els 152 15T in acco−,:dance with their dia,,−aeter.−, is controiled by the ga.− in_,− element 336, the adj−'ustable connect,ing rod 359, tb−e iilovemeiits of gear−.356, o,nd the earn plate 376 of the assembly, shown, in Figs. 25 and 26. As best shown in Figs. 25 and 27, one edge of the carn plate 376 has a working pro.tie which in tl,_e illustrated embodiment has three differently sl_oping sections 417, 1418 and 419. 'rhese slopilig −ections, wlil:ch constitute the wo−el−,ing profile, are continuously enga.− e,d by a protrusion 422 (Fig. 17) on a lever 423 that is pivoied for free rota−tion about the saine shaft,3,57 as _ tiae gear 3 5 6. A reciprocable rod 42 4 (Figs. 14 and 17) is journalled for horizontal sliding movement within an elenent 425 of the iliternal frame 51. At its rightmost end,in Figs.11,1.and −424 is threaded into 9, tbielieiied abut− 17 the rod ment 426 (Fig. 28) thet, is integral with the sorter leaf plate 407. A locknut, 427 (Figs. 17 and 28) secures the adii_sted position of the rod 424 with respect to the,abutment 426 and the sorter pla−te 407. At its other end _iie rod 424 has an.'e'nlarged head 428, (−Figs. IA4 and 17) that is received .Within,,a bifurcated

saddle 429. thats is pi–votally secured, as by a pin 432 to the lower end,of_–tlie lever 423. A coi–ic–d compression sr–r–iv–ig 433 (Figs. 14 and 17) on the .,od 0,24 iirges the rod '_–o the left, With its enlarged head A2'01 ir, engagei–ient –,viih tl–.e lo,_ier end of the le,,Ter f–,23. T'–rie sadj.'.e d 29 serves to gu–'– de the eild o–_' –"Od an_, to keep it from_ slipping sidev;oys frc)iy,– _,vic n _–he 16–_ver end of the le–ver a'AB. Thus by means of the spriiig 433 the rod k_2,4' t–,4–ia_ 4–_ r,"gj.dly conr,–ect,ed to the slortt–r plalu,– 40__ is res_l,"e–iitly urged 1(to t–lie lc–ft (Figg. 14 and 17) into at iLI s _nlarged head 428, with tlie lower end o–, t_ie 'levei: coi,.s–.o,,,iently i–irging the proLYusion 422 into erga–gement v_ith the work,',ng rjrofile sectiol–is 417–,llg of the cain pl_ate B_r tiiis coiistr_Lic_,u–io.,i the gag,ng elen–i–,nt :'_3S con(–,rols the roqit–lon of the catn sorter plate 407 in icco3.–donc–.– ivith _he –cin diameter, during –1– sortl__–.hbuldbeLir_derstoodthatwhen the qol–'ter plate is posit–tored in accordance w–it–_i the diameter of a coin measured b,y the gdgi hg elei–i,_–,it 336 – it rem ain in that gaged p6si tion by resson of the e,,igagei–aent of projecti6n 197 on lever 395 until the next cy3le of operation of the rilachine, Nvhereupon the proj'e_–.– tior_ 39T ,vi–ii be disengaged from the notches 378383 by the action of the stud 40_l, o_,i gear 272 and Sp–riiigs 373 and Po33 _,iill retu–.–_n earn plate 376 and sorter 1–ilate 407 to their initial or zero positions bef6re they are again po._itior–ed to sort the next _'C_ coin accordiiig to its diameter. Coin and token registering –niechanisi7i Se–ure,–l to the squere rod 374 as by rivets 434 (Fig. 26) is 9, brae'f_et mem– ber 435 'That includes –,.L verti–,ai e,emen . t 439 i_rc)riiv_hich protrude a pair ol L soaced parallel horizontal legs 437 ai–id 433 (Fil–gs. ',.7 and 25) trirbugh which Passes a vertical Pin _,39 that provides a pivot for a lever 4__2. Another lever hav;,ng legs 443 and 40,4 (F4_g. 22a) is pivoted about a –vertical shaft 445 and is also vert4caly slidable upon the shaft 445. The lever 442 ond bhe left 444 of the other lever are conr,–ected by a tension spring 4,.16 that resilielitly urges both said elerlents against the ca_–n 2G9, at poily6s spaced s–LiasI.antially 180 idegrees apart, as best shown in F4_g. 22a. The breeket iderr_ber 435, secured to 'u–he square rod 374, iiioves vertically –wlith the aforesaid rod in ac,–ordance with the diamelver o,–' the coin being gaged. The _lt;)ther –0 lever, s.Lidable on shaft 445 i–no–ves vertically with the sq_iare rod a!7cj by :eason of the fact that its leg 443 is engaged in a horizontal slot 447 'in the ve_–tical elernent 436 o–f the bracket meiliber The norr–yial position of th6 lever 442 and of the lever on shaft 445 is as sho–vvn in Fig. 22a, this position occui:ring before a cycle ol_ operation of thegear272andthecoinram2',G. ThecamA68, carried by the driven shaft 224 rotates counterclockwise as viewed in Figure 22a, and as a edn– (io secuence it first r,ot.a,tes lever 4P2 clockviis–, and then 'lever leg _.44 counterclockl,,7,se, against (,he force of spring 4 46, di–,ring one revolution of tb–e driven shaft 22i. This viill occur no matter vihat the vertical position of the square rod 374 be– cauze the cara 269 is elongated along the axis of the driven,shaft 224– as best sho– ,vii in Fig. 19. The outer end of lever 442, on the opposite edge from that engaging the earn 269, is narrowed to provide a lip I 40 that selectively engages and depresses one of six levers 451–4r,,'u (Fig. 3i,l o'L the register ,iiechan.is.–n to effect the totalizaltion of either coins, tokens or the like that are being gaged and sorted. Levers 451, 452 and 454 are pivoted upon an elongated pin 457. The lever 45,3_ effects the registration of: pennies into the r,entral or coin counter 458 (Fig. _9) visible through iT,7indow 13Z through the medium of an integral leg 459 (Fig. 32) at right angles to lever 45'0, and having a pivotal connection 602 (F–ig. 32) to a spring (P,83) pressed pawl Pi64 the free end of which engages the teeth of a circular ratchet 0,C5 that drives the uilits wheel 466 of the coin counter 458. Return to the right (Fig. 32) of the pavvl 464 is by a spring 4,' 7 connected by pin 468 to the lever leg 459. A convenbional carry–over n,iechanism rotates the tens wheel 469 one tenth of a revolution for every complete revolution of the units wheel 46'6. A spring (c_72 Fig. 3,_^,) pressed detent lever Pi73 having roller 474 engages serrations in a stop wheel 475 to hold the units wheel 466 irhile the pawl 464 rides backward over the teeth of the ratchet wheel 465, and also holds the said units wheel against rotatio–n except by the influence of pawl 464. The upper lever 451 when depressed, actuates the upper, or sniall token register S76 in the sa,,rne manner to register and add s_,nall tokens, the lever 451 being connected to a right ,tngled leg 477 by an integral_ tube 478 mounted upon the elongated pin _,57. In a similar manner, tube 4'1–3, on pin C57 is integral with leg 481 and when lever 454 is depressed by the lip f_40 on lever 442, the leg 48_ actuates the lower or large token reg4ister VIBO to total the large tokens that are gaged and sorted. The registration of din–ies, nickels and quarters into the coin counter 458 is accorr_p'_ished as follows by the selective depression of levers P,52, 455 _r 456, all pivoted upon a si,.igle pin 47E–,2, in combiiiatio–q w4_th the rotation of b–vel gear 2'_O, driven by the large bevel gear 268 on the driven sha'Lt 22–4. Since the 1–arge gear 268 will rotate througl–i one revolution for each rotation of the driven shaft 22,1, '_he snall gear 27_3 Will– rotate t greater number of revolutions. __he srnall gear 270 is on a shaft 48fj liournalled in the side walls 480 and 4OP4 of the register frame. Five spacer bars 485 (Fig. 39,) separate these side walls. ' A drive gear 46'1 i–S ir_ounted u–oon the sha–ft 636 adjacent the inside of side wall 483 (Fig. 29). It is in conti,–Liuous driving engagement wit'_l a freely rotating gear 488 (Fig. 34) upon a shaft 489, the gear 468 having an integral collar 490 that has an integral pair of diametrically spaced and axially extending clutch teeth C_91 either of –vvhich may engage and drive a single axial tooth 992 upon a sleeve journalled for rotating and sliding movement upon the shaft 489. Normally, the 'Lleeth 491 and 692 are disengaged by reason of a spring 41_ll (Fig. 34) surrounding the sliaft 489 between the collar 490 and the sleeve 493, but when sleeve 493 is moved to the le–ft by t–liedepression of levers 432, 455 or 450 the clutch teeth 491 and 492 are engaged so that sleeve 493 will be rotated until the proper sun–i, five cents, ten cents or twenILy cents isregistered into the coin counter 458, Nvhere,,ipon the te6th 491 and 492 will disengage. Each o–_' the levers 452, 455 and '_56 has a protuberan,–e 495, 498 or 497 (Fig. 31) on its eiid, which e.,Ligages respectively a sleeve 498, 493 or 500 to move the sleeve 493 to the left (Fig. 34) to engage the clutch teeth 491 and 492 to drive the sleeve 493 until the proper surn has been added into the coin counter 453. The details of construction Of the mechanis_–n by ivhich this is accomplished are wehl knoi7_n as exemplified for exar–riple in Fig. 6 of the aforesaid Daugherty Patelit 2,338,575 and for that reason the details need not be explained here, it being sufficient to explain coin is gaged and sorted its value is added to the total previ. ouslyregistered by the coin counter 01.8, just as in the aforesaid Pacent 2,338,575. It should be apparent that the complete deuression of the selected le–ver 451–456 by the cam 269 and the lever l_42 (Fig. 22a) occurs approxin_ ately during the i–irst _80 degree rotation of the driveii shaft 224. As the shaft 224 continues the rerriainder of its 360 degree rotati.on to return the com 209 to the position shown in –Pig. 22a, the carii 269 moves the lever 444 counfer–clockwise to the liinit of its rpover–qent and the–Ti re'_ease_– '_t to srpp back to its initio–I positio–n u?–ider the influence of spring 446. Th–is happens

irre– 1.5 spective of the height of the lever 444 at the time, as determined by the diameter of the coin or token that has just been gaged, sorted and registered. As shown in Fig. 14 there are four nested bells or gongs identified lay the reference iiumbers 503, 504, 505 nnd 5CS, that are sounded respective'ly by the clappers 507, 508, 509 and 'Ihese clappers are attached to similar legs of bell cranks 513, 515 and 5_6 (Fig. 19) that are connected by pins to the lower ends of vertical pull rods 517–520 (Fig. 19) secured at their –Lipper ends to bell cranks 1,;23–526 moving ill– vert;Acal planes about a common horizontal pivot shaft 534 (Fig. 19). As shown in Figs. 19 and 19a t"iiere are seven bell cranks 527–533 pivoted about a vertical shaft 535. As viewed in Fig. 19 the left legs of the bell cranks are all of the same length., and in the path of movement of a projeeting lip 536 (Fig. 22a) on 33 the leg 444 of the vertical shiftable bell crank on shaft 445. Depending upon the vertical position of (_he bell crank leg 444 resulting from coin gaging, ihe projecting lip 53G move one or more of the bell cranks 527–,N33 counterclockwise and –10 then release it, causing selected clappers 507–510 to strike the bells 503–506 under the irl–fluence of springs 537, one for each clapper. It is the function of the bells 503 to 506 to indicate by their sound, either siiagly or incombinatio–ti, as when two or rnore are simultaneously struck, the value of a coin or token that has just been gaged, sorted and registered. As viill be best apparent from Fig. 19a movement of the bell crank 532 by the lip 536, and the subsequent release of the crank, will cause the simultaneous striking of all four bells, which will produce a particular tone denoting the gaging and sorting of a quarter, which is the largest diameter coin or token normally handled by the illustrated fare box. The lower– most and seventh bell crank 533 would only ring the large bell 503, but sinc– the illustrated fare box handles only six different diameter coins, tokens or the like as. determined by the six lands 378–383 in the cam plate 376, the aforesaid bell crank 533 is supefluous in the illustrated embodiment and will normally be used only when the fare box is enlarged to handle coins, tokens or the like of seven different diamete_–s. Takin,another example, if a penny is gaged and sorted, it being the third from the smallest coin or toke–n handled, the bell crank element 444 v7ill be depressed three steps so that it engages and releases the bell crank 529 (Figs. 19 and 19a) to simultaneously ring the two srlaller bells 505 and 506. Thus, as will be apparent from the various lengths of the bell cranks 527–523 and 523–526 of Fig. 19a, the particular bell or combination of bells that is rung will depend upon the diameter of the coin or token that has been gaged and sorted. Prom the foregoing deserli_tion, it will be appo,rent to those skilled in the art that our gaging, registering and totalizing mechanism may be readily adapted for various other uses in gaging and sorting. Locking arrangement One of the features of the illustrated fare box is a key controlled arrangement by which the operator can turn a key to place the fare box in operating condition, to turn it off so that the motor will not operate, and to lock it so that neither the motor nor the change maker will operate, thereby locking the change maker so that no one can remove coins from it, as when the operator is absent from the vehicle. The lock is indicated in Fig. 1 at 540, with a key 541. In the illustrated position the lock is "on" so that the motor and change maker will operate normally. A cam plate 542 is mounted on the lock inside the casing, and rotates with the key 541 from the normal position shown at 542 (Fig. 1) to a second position 543 and to a thi–rd position. In the "on" position Pt 542 the cam plate raises the lever 545 (Fig. 15) of the switch arm of a main switch 546 to close the sv_itch and condition the fare box for motor operation upon actuation of the plunger 103. By rotating the key 541 (and thus the cam plate 542) counter–clockxvise the swi–tch 546 is opened, thus preventing energization of the fare box operating motor 218. During its counter–clockwise rotation through 180 degrees the cam plate 542 will pass through the "off" positiov–i at 543 and finally to the "lock" position at 544. During 'uhe last degrees portion of this movement it will depress a platform 547 (Fig. 15) that is integral with an upwardly extending member 548 (Fig. 35) and a downwardly extending element 549 that has a camming connection with a longitudinally movable locking plate 552 having vertical projections 553 that when pulled to the left as in Fig. 35 will positively secure or lock the keys 554 against depression, so that they cannot be operated to remove coins from the coin barrels. Thus the main motor switch 546 is open, and the change maker is locked when the key 541 is turned to make the cam 542 occupy the position shown at 544 in Fig. 1. When the key is turned to rotate the com plate back to the initial position at 542 the locking plate 552 may be returned to the right (Fig. 35) to its unlocked position by manually pushing on a knob 555 that is secured to said plate. For a description of the locking of the change maker by the locking plate 552 reference may be had to the Daughterty patent 2,338,576. The member 548 extending upwardly from the platform 547 has a pin 556 that passes between a pair of toggle levers mounted upon pins 560 and 561 (Fig. 15) that have legs 562 and 563, which whei–i the platform 547 is depressed as in Fig. 15, underlie the levers i45 and 146 and prevent their depression to actuate the counter assemblies 143 and 144 (Fig. 1). Raising of the platform and of the pin 556 rotates the toggle lovers so that their legs 562 and 563 clear the levers 145 and 146. In the appended claims the term "fare" is used to define coins, tokens or the like used in the payment of fares, and other objects which it may be desired to register or count and sort with our improved mechanism. The invention may be embodied in other spe– essential characteristics thereof. The preselit embodiment is therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein. What is claimed and desired to be secured by United States Letters Patent is: 1. In a mechanism of the class described a coin receiving hopper, a fare handling device; means forming a fare passage between said hopper and i,_) said handling device; rotary electric motor means operable to drive said handling device; and electric circuit for energizing said motor includin.a a first switch; means for closing said switch; a second switch in said circuit operable to be closed by a, fare in said passage including a movable contact mounted for reciprocating movement between a first position where it blocks said passage and engages a fare in the chute to close the circuit, and a second position removed from said passageway; a third switch in said circuit; means driven by said motor means to keep said third switch closed until a predeterriained number of hancuing cycles have been com–oleted following the closing of either said flrst–or second switches; and means driven by said motor during each handling cycle for reciprocating the movable contact of said second switch between its first qnd se_–ond positions. 2. In a fare box, a hopper; a fare singling and gaging device; means forming a fare passage between said hopper and said device; a motor drive for said fare si–ngling and gaging device; rejecting Means preventing the passage of mutilated fares and objects larger than fares through said fare passage; a connection between said motor drive and said rejecting means to

operate said rejecting means frorn said mol_or dr–1ve; and overload clutch between said motor drive and said coin singling and Paging device, operable to per– 4,–, mit operation of said motor drive –Ln the event of stoppage of the singling and gaging device. 3. In a fare box, a fare receiving hopper; a coin Singling and gaging mechanism including a reciprocable ram; a passageway between said hop– _,5 0 Per and singling and gaging mechanism terminating at a point in the path of the working face of the ram; a rotating motor; a connection between the motor and ram including a crank Pin and connecting rod for converting rotary mo– tion of the motor to reciprocating motion of the ram; an electric circuit including a motor starting switch and a holding switch in parallel, operative to energize the motor through at least one cycle of operation of the ram; clutch means in said connection between the motor and ram; a fixed stop operative to disengage said clutch at the end of one full revolution of said crank pin; and means effective in response to movement of said motor to engage said clutch means. 4. In a fare box, a fare singling and gaging mechanism including a reciprocable ram; a rotating motor; a connection between the motor and ram operative to convert rotary motion to reciprocating motion; and electric circuit in– eluding a motor starting switch and a holding switch in parallel, operative to energize said motor through at least one cycle of operation of the ram; clutch means in said connection between the motor and ram; means operative to disenei,–ic forms without departing from the spirit or 75 gage said clutch at the end of one full revolu. _t!On of said crank pin; and spring pressed detent means effective to hold the ram at the beginning of a working stroke upon disengagement of said clutch. 5. In a fare sorting and re._istering mecha– nism; a gaging element, a fare sorting device op– –erable to direct fares along different ppths according to their diameters; a gear driven in clie direction by saild ga.aing element; a rack driven .by said gear; a cam on said rack connected to control said sorting device; a plurality of registers for totaling coins of different diameters; a .second cam on said rack for selecting a register according to coin diameter; and means cooperating with said second cam to actuate the selected register. 6. In a fare box, coin and token singling and gaging means; a sorter mechanism responsive to said gaging means and operable to receive coins and tokens; a hopper for Teceiving coins and 2.0 tokens having a passage therefor leading to said singling means; a change maker positioned to re– .ceive coins from said sorter mechanisr–,i; an electric motor connected to drive said singling and gaging means; an electric circuit for e,_iergizing said motor and including a first switch for initiauy closing said circuit; a second switch in ,parallel with said first switch and driven by said motor to hold said circuit closed for a predetermined nuinber of operatiori–s of said singling ,means; a third switch in parallel in said circuit and responsive to engagement by a coin or token in said passage to close said circuit; a fourth switch in series with said circuit; and xneans for opening said fourth switch. 7. In a fare box, a fare singling mechanism; a hopper opening into sa,'_d singling mechanism; a rotating motor; a drive connection between the motor and singling mechanism; an electric circuit including a motor starting switch and a hold– ing switch in parallel, operative to energize the motor through a predetermined number of cycles of operation of the singling m–echanisrn; clutch means in said conilection between the motor and singling mechanism; a fixed stop operative to periodically disengage said electric motor –'Lrorn said singling mechanism and means responsive to .–Movernent of said rnotor to engage said clutch means to produce a periodic and momentary interruption in the drive to said singling mechanism. 8. In a fare box; a fare singl,_ng mechanism; a rotating inotor; a connection between the motor and singling mechanism operative to drive said singling mechanism; an electric circuit in,–luding a motor starting switch and holding switch in para7LIel, operative to energize said motor through a predetermined number of cycles of operation of said siii–gling mechanism; clutch means in said connection between the motor and singling mechanism; means operative to disengage said clutch at the end of one cycle of operatiori of said singling mechanism; and spring pressecl detent _–neans effective to hold the singling i–nechanism at the beginning of a cycle upon disengagement of said clutch. 9. In a fare box, a fare singling and gauging device; a hopper openiilp,_ into said singiing and gauging device; a motor drive for said fare singling and gauging device; rejecting means preventing the passage of niultilated fares to said gauging device; an overload clutch between said niotor drive and said coin singling device, operable to permit operation of said motor drive in the event of stoppage of the singling and gauging device.

0) FR1465666A – COLLECTEUR DE PIECES DE MONNAIE JETEES EN VRAC ...

6) Family number: 21976403 (FR1465666A) © PatBase

Title:	COLLECTEUR DE PIECES DE MONNAIE JETEES EN VRAC COLLECTOR COINS thrown BULK (Machine translation)
Priority:	FR19650040648 19651202

Family:

Publication number	Publication date	Application number	Application date
FR1465666 A	19670113	FR19650040648	19651202

Probable Assignee:	SIGNAUX ENTR ELECTRIQUES
Assignee(s):(std):	SIGNAUX ENTR ELECTRIQUES
Assignee(s):	COMPAGNIE DE SIGNAUX ET D ENTREPRISES ELECTRIQUES ; DE SIGNAUX ET D ENTREPRISES ELECTRIQUES COMP
International class (IPC 8–9):	G07D3/06 (Advanced/Invention); G07D3/00 (Core/Invention)
International class (IPC 1–7):	G07D3/06
CPC:	G07D3/06
European class:	G07D3/06

Classification Explorer

Abstract:
Source: FR1465666A [Source: Claim 1] RESLlliE La presente invention a pour objet un collecteur de pieces de monnaie jetees en vrac,– caracterise notamment par les principaux points suivants, consideres isolement ou suivant toutes combinaisons possibles 1 li comporte un trieur mecanique constitue par un disque dispose obliquement dans le fond d'une corbeille de reception, anime d'un mouvement de rotation continu autour de son axe et– presentant a sa peripherie des alveoles:anguiairement espace, conformes et dimensionnes de maniere a admettre chacun une piece et une seule, une platine fixe situee immediatement sous ce disque parallelement a lui et presentant a sa partie superieure, en regard des alveoles du disque, des ouvertures en arc de cercle de largeur graduellement crois– sante, chaque largeur correspondant au diametre d'une piece de monnaie differente, et une serie de canaux d'acheminement des pieces dont les entrees sont situees au–dessous de ladite platine en regard desdites ouvertures; 2 Lesdits alveoles ont la forme generale d'un secteur de 90; –_ 3 Les bords desdits alveoles sont biseautes; d Sur chaque canai d'echappement des pieces est placee une tete –de lecture d'un detecteur electronique de passage, permettant une selection des pieces de monnaie sur la base dune ou plusieurs caracteristiques telles que: epaisseur, poids, caracteristique – physique et magnetique de la matiere, absence de trou centrai, etc.; 5 Chaque canal,d'acheminement des pieces comporte un dispositif de visualisation des dernieres pieces introduites, constitue.par un couloir sensi– blement vertical partiellement ouvert ou transparent et situe de maniere que les pieces qui le traversent soient visibles de l'exterieur, la section dudit couloir etant partiellement obstruee par un organe de retenue eclipsable contre l'action d'un organe de rappel convenablement tare pour que ledit organe de retenue.ne s'eclipse que sous le poids d'un certain nombre de pieces, de sorte qu'un– meme nombre de pieces de monnaie Teste constamment visible dans ledit couloir; 6 Les canaux d'acheminement des pieces aboutissent a– un coffre–fort constitue par une caisse fixe dans laquelle est loge un tiroir muni d'un couvercle articule, une serrure de surete permettant de condamner le couvercle sur le tiroir et une autre serrure –de surete permettant de condamner le tiroir dans la caisse, ledit couvercle presentant des ouvertures en regard desquelles debouchent les canaux qui traversent la paroi correspondante de la caisse fixe, chacune de ces ouvertures etant obtu– rable par un volet obturateur mobile associe a un dispositif de verrouillage automatique a armement apte a ouvrir lesdits volets obturateurs lorsqu'on introduit le tiroir ferme dans la caisse et a les fermer en les verrouillant lorsqu'on retire le tiroir de la caisse, l'ouverture du couvercle du tiroir ayant pour effet de deverrouiller les volets obturateurs et la fermeture du couvercle ayant pour effet de rearmer le dispositif de verrouillage;? Le volet obturateur est solidaire d'un secteur qui pivote, contre l'action d'un organe de rappel du volet en position de fermeture, autour d'un axe porte par une platine montee a l'interieur du couvercle, ledit secteur portant un doigt de commande traversant une lumiere en arc de cercle du couvercle et cooperant avec une butee fixe de la caisse pour ouvrir le volet lors de l'introduction du tiroir dans la caisse, et le dispositif de verrouillage automatique a armement comprend un bras pivotant autour du meme axe contre l'action d'un organe de rappel agissant dans le meme sens et tendant a appliquer ledit bras contre un ergot d'entrainement porte par le secteur dans une position telle que, lors de la fermeture du couvercle, ce bras appuie sur l'extremite superieure d'une tige verticale de blocage traversant librement la platine et enfonce elastiquement ladite tige contre l'action d'un organe de rappel tendant a soulever celle–ci, l'amplitude des mouvements angulaires respectifs.du secteur et du bras pivotants etant telle que ladite tige echappe au bras pour venir porter sous le secteur lorsque ces deux organes pivotent ensemble dans le sens de l'ouverture sous l'action conjuguee.du doigt du secteur et de la butee fixe de la caisse lors de l'introduction du tiroir dans la caisse, puis echappe au secteur apres avoir arrete le bras lorsque ces deux organes pivotent dans le sens de la fermeture, lors du retrait du tiroir, de sorte que ladite tige

s'insere alors en se soulevant entre lesdits organes pour s'opposer a tout mouvement ulterieur du secteur dans le sens de l'ouverture du volet. [Source: Claim 1] RESLlliE The present invention relates to a coin pieces collector piers in bulk – particularly characterized by the following main points, regarded isolation or according to all possible combinations 1 li has a mechanical sorter is a disc obliquely arranged in the bottom of a reception basket, drives a continuous rotation around its axis presenting Labrador has its periphery of alveoli: anguiairement space compliant and sized to admit a room and each one, a fixed plate situated immediately under the disk parallel to him and presenting at its upper part, next to the alveoli of the disk, openings in an arc width gradually increasing health every width corresponding to the diameter of a different coin and a series of conveying channels of the rooms whose entrances are below said plate facing said openings; 2 said cells have the general form of a sector 90; –_ 3 are beveled edges of said alveoli; On each of the parts Exhaust canai is placed a head –to reading an electronic detector of passage, allowing a selection of the currency pieces on the dune base or more characteristics such as thickness, weight, characteristic – physical and magnetic of matter, no centrai hole, etc.; 5 Each channel, routing of parts comprises a display device introduced last parts, ably constitue.par a vertical corridor sensitive or partially open and transparent manner that is of parts that are visible through it from the outside, the said corridor section being partially obstructed by a retractable retaining body against the action of a suitably tare return member for said body retenue.ne eclipse is that under the weight of a number of parts, so that 'a– same number of Tests currency constantly visible pieces in the said channel; 6 parts of routing channels lead a– safes constitutes a fixed cash in which is housed a drawer with a lid hinges, lock a security interest to condemn the lid on the tray and another lock – of tart to condemn the drawer in the chest, said lid presenting openings against which open channels which cross the corresponding wall of the fixed drum, each of these openings being blind stopper ble by a mobile shutter associated to a device Automatic locking arms was able to open the flaps shutters when introducing the firm in the cash drawer and close by locking when removing the drawer of the cash register, open the drawer cover with the effect of the unlock flap valves and closing the lid has the effect of resetting the locking device;? The shutter is integral with a sector which is pivoted, against the action of a biasing member of the shutter in the closed position, about a pin carried by a plate mounted on the inside of the lid, said area having a control finger across a circular arc light cover and cooperating with a fixed butee of the box to open the door during the introduction of the drawer in the chest, and the automatic locking device has armament comprises a pivoting arm around same axis against the action of a restoring member acting in the same direction and tending to apply said arm against a drive stud carried by the sector in a position such that when the lid is closed, the arm presses The upper end of a vertical locking rod passing freely through the plate and presses elastically the said rod against the action of a return member tending to lift it, the amplitude of the angular movements of the arm and sector respectifs.du swivel being such that said stem escaped the arm for engaging in the sector when these two bodies rotate together in the direction of opening by the action of the finger conjuguee.du sector and fixed butee of the fund during the introduction of the cash drawer, and then escaped to the area after having stopped the arm when the two bodies rotate in the direction of closing, when removing the drawer, so that the rod is then inserted in between said lifting bodies oppose any subsequent movement of the sector in the direction of opening the shutter.

0) GB1140341A – IMPROVEMENTS IN OR RELATING TO VENDING MACHINES...

7) Family number: 21701246 (GB1140341A) © PatBase

Title: Improvements in or relating to vending machines

Priority: GB19650015995 19650414

Family:

Publication number	Publication date	Application number	Application date
GB1140341 A	19690115	GB19650015995	19650414

Probable Assignee: AUTONUMIS LTD

Assignee(s):(std)**:** AUTONUMIS LTD

Assignee(s): AUTONUMIS LIMITED

Inventor(s):(std)**:** PORTER CHARLES BENJAMIN ALBERT

International class (IPC 8–9): G07F11/58 (Advanced/Invention); G07F11/46 (Core/Invention)

CPC: G07F11/58

European class: G07F11/58

Classification Explorer

Forward Citations: WO8809977, US4993591, US3998358, GB2306953, GB2306953, EP0020804,

Abstract:
Source: GB1140341A 1,140,341. Vending machine. AUTONUMIS Ltd. 14 April, 1966 [14 April, 1965], No. 15995/65. Heading A4T. A vending machine which may be coin operated comprises a vertical stack of sloping shelves 2 which may have limited pivotal movement about their upper ends, each shelf supporting an article 1 retained by an endless blind 3 having an opening at edge 16 whereby as the edge moves past the shelves the articles successively fall out. The side 10 of the blind may indicate or operate a device when the machine is empty, while a handle 20 may actuate a device 19 to refuse acceptance of coins. The shelves may have a vertical partition and the edge 16 be stepped whereby successive movements of the edge by half the distance between shelves allows articles to fall first from one side of the partition and then from the other.

0) DE1474748A1 – AUSWAHL–SELBSTVERKAEUFER SELECT SELBSTVERKAEUF...

8) Family number: 254806 (DE1474748A1) © PatBase

Title: AUSWAHL–SELBSTVERKAEUFER SELECT SELBSTVERKAEUFER (Machine translation)

Priority: DE1966D049861 19660415

Family:

Publication number	Publication date	Application number	Application date
DE1474748 A1	19690529	DE19661474748	19660415

Probable Assignee: WAGGON U MASCHINENFABRIKEN GMB

Assignee(s):(std)**:** WAGGON U MASCHINENFABRIKEN GMB

Assignee(s): DEUTSCHE WAGGON U MASCHINENFABRIKEN GMBH

Inventor(s):(std)**:** SCHELLHORN WALTER

International class (IPC 8–9)**:** G07F5/18 (Advanced/Invention); G07F5/00 (Core/Invention)

International class (IPC 1–7)**:** G07F11/26

CPC: G07F5/18 G07F11/002

European class: G07F11/00B G07F5/18

Classification Explorer

Forward Citations: WO9858804, WO9858804, WO17025538, US6415950, US4738580, US4687119, FR2973789, EP2508450, DE3513734, DE3314189, BE1011225,

Abstract:
Source: DE1474748A1 (Claim 1) 1. Auswahl–Selbstverkaeufer, bei dem die.Waren in mehreren Etagen veraenderlicher Hoehe uebereinander angeordnet. sind und bei dem ein. Aufzug vorgesehen ist' um jeweils eine bestimmte Artikelzahl aus einer Etage zu entnehmen und, zur Ausgabestelle des Selbstverkaeufers zu ueberfuehren, dadurch g e k e n n z e i.c h n e t,. dass sich in min destens einer Etage (23) mehrere Bahnen fuer hintereinander angeordnete@parallele Warenreihen befinden, denen unabhaengig voneinander betaetigbare Transport– und/oder Zuteilorgane zugeordnet sind..

Machine translation: (claim 1) 1 Selection Selbstverkaeufer, wherein die.Waren in several floors veraenderlicher height over one another., and wherein a. Lift is provided 'to respectively remove a certain number of articles from one floor and to the issuing point lead over the Selbstverkaeufers, thereby gekennze ic HNEt. that in min least one floor (23) a plurality of tracks are arranged behind one another for @ parallel rows of goods, which are independently operable transport and assigned / or metering organs..

0) US3506102A – MANUAL PARKING METER

9) Family number: 268726 (US3506102A) © PatBase

Title: MANUAL PARKING METER

Priority: US19670691814 19671219

Family:

Publication number	Publication date	Application number	Application date
DE1815601 A1	19690724	DE19681815601	19681219
DE1815601 B2	19770804	DE19681815601	19681219
DE1815601 C3	19780406	DE19681815601	19681219
FR1599354 A	19700715		19681219
GB1237579 A	19710630	GB19680059919	19681217
SE354537 B	19730312	SE19680017254	19681217
US3506102 A	19700414	US19670691814	19671219

Probable Assignee: ROCKWELL MFG CO

Assignee(s):(std)**:** POM INC ; ROCKWELL MFG CO

Assignee(s): ROCKWELL MFG CO US ; POM INC RUSSELVILLE ARK V ST A ; ROCKWELL MANUFACTURING COMPANY

Inventor(s):(std)**:** HORN J ; HORN JOHN W VAN ; MATHISON C ; MATHISON CHARLES M ; PRICKETT J ; PRICKETT JACK A ; RUSSELLVILLE ARK

Inventor(s): PRICKETT J US ; MATHISON CHARLES M INDIANA LAKE ESTATES FLA ; MATHISON C US ; JACK A PRICKETT ; JOHN W VAN HORN ; HORN J US ; CHARLES M MATHISON

International class (IPC 8–9): G07F17/24 (Advanced/Invention); G07F17/00 (Core/Invention)

International class (IPC 1–7): B65D43/16 B65D51/18 G07F17/24 G07F5/00

CPC: G07F17/24

European class: G07F17/24

US class: 194/290 194/84 220/315

Classification Explorer

Cited documents: US3160256 A, US1455723 A,

Forward Citations: USD716157, USD705090, US9652921, US9494922, US9443236, US9406056, US8807317, US8770371, US8727207, US8636133, US5573099, US4807737, US3970182, US3738467, DE3404752,

Abstract:
Source: US3506102A ABSTRACT OF THE DISCLOSURE A manual wind up parking meter for handling multi–denomination coins and differentiating the purchasing jg value of each to effect a maximum time setting upon insertion of the highest value coin and pro–rata incremental time settings upon insertion of coins of lesser purchasing value.

0) DE2006683A1 –

10) Family number: 465027 (DE2006683A1) © PatBase

Priority: DE19702006683 19700213

Family:

Publication number	Publication date	Application number	Application date
DE2006683 A1	19710819	DE19702006683	19700213

Probable Assignee: HIRSCHMANN FEINMECHANIK JOSEF

Assignee(s):(std)**:** HIRSCHMANN FEINMECHANIK JOSEF

Assignee(s): JOSEF HIRSCHMANN FEINMECHANIK U APPARATEBAU

International class (IPC 1–7)**:** G07F3/02

CPC: G07F1/041 G07D5/02 G07D5/04

European class: G07D5/00

Classification Explorer

Forward Citations: WO9302432, WO9101028, US5449058, AU655742,

Abstract:
Source: DE2006683A1 (Claim 1) P a t e n t a ri s p r tt c h e : 1.

Machine translation: (Claim 1) P a t e n t a r i s c h e p r tt: 1

0) DE2128124B –

11) Family number: 532925 (DE2128124B) © PatBase

Priority: DE19712128124 19710602

Family:

Publication number	Publication date	Application number	Application date
DE2128124 B	19720525	DE19712128124	19710602
DE2128124 C2	19730308	DE19712128124	19710602

Probable Assignee: WULFF APPARATEBAU

Assignee(s):(std)**:** WULFF APPARATEBAU

Assignee(s): GUENTER WULFF APPARATEBAU

Inventor(s):(std)**:** KUBATSCH GUNTER

International class(IPC 8–9)**:** G07D1/00 G07F17/32 G07F5/24 (Advanced/Invention); G07D1/00 G07F17/32 G07F5/00 (Core/Invention)

International class(IPC 1–7)**:** G07F17/34 G07F5/24

CPC: G07D1/00 G07F5/24 G07F17/32

European class: G07D1/00 G07F17/32 G07F5/24

Classification Explorer

Abstract:
Source: DE2128124B (Claim1) Vorrichtung zur Ausgabe von 2,u0– DM–Muenzen fuer Muenzspielgeraete, bei der unterhalb einer diese Muenzen enthaltenden Muenzstapelroehre ein eine Muenze bei Rueckkehr in seine Ruhestellung auswerfender elektromagnetischer Auszahlschieber vorgesehen ist,dadurchge kennzeichnet, dass dem Auszahlschieber(8) eine zu ihm parallelliegende, an ihrem dem Auszahischieber – (8) benachbarten Ende um einen ortsfest angeordneten Stift (10) schwenkbare, durch eine Feder (11) in Richtung auf einen Ani schlag (12) beaufschlagte Kulisse (9) zugeordnet ist, dass der Auszahlschieber (8) einen in die lisse (9) eingreifenden Fuehrungsstift (14) traege und dass die Kulisse (9) mit einer in sich geschlossenen, den Fuehrungsstift (14) aufnehmenden Fuehrungsbahn (15) versehen ist, die bei Verschwenkung der Kulisse (9) durch die Feder (11) den Fuehrungsstift (14) nach einem ersten, dem Auszahlmagneten (5) erteilten Impuls in einer der zurueckgezogenen Stellung des Auszahlschiebers (8) benachbarten Stellung festhaelt und bei einem zweiten Impuls freigibt.

Machine translation: (Claim1) Device to the expenditure of 2, u0 DM coins for Muenzspielgeraete, with which below a Muenzstapelroehre containing these coins a coin is intended upon return into its resting position ejecting electromagnetic disbursing slidegate valve, dadurchge marks that to it parallel–lying end neighbouring at their the Auszahischieber – (8) is assigned to the disbursing slidegate valve (8) around a stationarily arranged pin (10) tiltable, window blind (9), subjected by a feather/spring (11) in the direction of a Ani impact (12) that the disbursing slidegate valve (8) would let one in (9) decisive guide pin (14) slowly–acting and that the window blind (9) with one in closed, the guide pin (14) taking up guide way (15) is provided, which holds and with a second impulse releases the guide pin (14) during turning of the window blind (9) by the feather/spring (11) after first, the disbursing magnet (5) given impulse in one the withdrawn position of the disbursing slidegate valve (8) neighbouring position.

0) GB1293281A – COIN HOLDER AND DISPENSER

12) Family number: 744909 (GB1293281A) © PatBase

Title: COIN HOLDER AND DISPENSER

Priority: GB19710011667 19710427

Family:

Publication number	Publication date	Application number	Application date
GB1293281 A	19721018	GB19710011667	19710427

Probable Assignee: WILLIAM WALTER JOHN PARK

Assignee(s):(std)**:** HOLT JOHN CLAUDE ; WILLIAM WALTER JOHN PARK

Assignee(s): JOHN CLAUDE HOLT

Inventor(s):(std)**:** HOLT JOHN CLAUDE

Inventor(s): JOHN CLAUDE HOLT

International class (IPC 8–9)**:** A45C1/02 G07D9/00 (Advanced/Invention); A45F3/00 (Advanced/Non–invention)

International class (IPC 1–7)**:** G07D9/06

CPC: A45C1/02 A45C2001/108 A45F2003/002 G07D9/002

European class: A45C1/02 G07D9/00C K45C1/10R6D K45F3/00B

Classification Explorer

Forward Citations: WO03063638, US5024629, US4836365, GB2159999, FR3027495, FR2840433, FR2835157, EP1283504, EP1097653, DE3121952, DE102004009718, DE102004009718,

Abstract:
Source: GB1293281A 1293281 Coin holders J C HOLT and W W J PARKER 27 April 1971 11667/71 Heading G4X A coin holder and dispenser comprises a body member 21 having through bores m, n, o, partially obturated at opposite ends by end plates formed (as shown) by members 25a–25g and 251 and each bore containing a spring 28 and discs 29. Coins within the bores are urged into contact with the end plates and are removable transversely of the bores via slots 27. Provision may be made for attaching a cord or strap, Figs. 1 and 3 (not shown). Preferably the body is made of transparent plastics and the end plate of plastics or metal. Either or both these members may have markings in Braille. The end plates may be formed integrally with the body member.

0) FR2269462A – NON–RECHARGEABLE TICKET DISTRIBUTOR – HAS GUIDE...

13) Family number: 3339290 (FR2269462A) © PatBase

Title: NON–RECHARGEABLE TICKET DISTRIBUTOR – HAS GUIDE PASSAGE, NON–RETURN MECHANISM AND FEED ROLLERS

Priority: FR19740015079 19740430

Family:

Publication number	Publication date	Application number	Application date
FR2269462 A1	19751128	FR19740015079	19740430
FR2269462 B1	19790216	FR19740015079	19740430

Probable Assignee: MALAVASI CLAUDE

Assignee(s):(std)**:** MALAVASI CLAUDE

Assignee(s): MALAVASI CLAUDE FR

International class (IPC 8–9): B65D83/12 G07B3/02 G07B5/02 (Advanced/Invention); B65D83/08 G07B3/00 G07B5/00 (Core/Invention)

International class (IPC 1–7): B65D83/12 G07B3/02

CPC: B65D83/12 G07B3/02 G07B5/02

European class: B65D83/12 G07B3/02 G07B5/02

Classification Explorer

Forward Citations: FR2592975,

Abstract:
Source: FR2269462A (Claim 1) 1. Distributeur portatif de tickets, caracterise par le fait qu'il est constitue par une cassette inviolable, non–rechargeable, a l'interieur de laquelle est amenage un magasin de stockage d'un ensemble continu de tickets et sont prevus au moins des moyens de guidage de ces tickets vers un orifice de sortie et, au dela de cet orifice, une zone de prehension des tickets, et par le fait que ledit ensemble de tickets se presente sous la forme d'une bande de materiau souple d'un seul tenant logee, sous un volume reduit, a l'interieur du magasin et dont l'une des extremites, guidee par lesdits moyens de guidage, traverse l'orifice de sortie et aboutit dans la zone de prehension des tickets1 lesquels, correspondant chacun a une longueur de bande determinee, sont preleves, en nombre voulu, par extraction et sectionnement d' une longueur correspondante de bande a l'issue de la zone de prehension. The plastic outer casign has a cover ultrasonically welded to after assembly. Inside is a circular cavity for the roll of tape which is plastic coated and printed with numbes and other information. The end of the tape passes over a ramp, under a peg and through an outer slit. A lever has a pawl dropping into a slot in each ticket withdrawn to prevent re–entry. Distribution can be manual by pulling the visible end, or automatic by driven rollers and a push button. Unauthorised reloading is prevented by the pawl, the peg, a blind recess and a sharp corner.

0) CH582495A – MONEY STORAGE BLOCK WITH HOLES FOR COIN COLUMNS...

14) Family number: 1450585 (CH582495A) © PatBase

Title: MONEY STORAGE BLOCK WITH HOLES FOR COIN COLUMNS – IS SOLID CYLINDER WITH AXIAL BLIND HOLES AND APERTURED ROTATING DISC COVER

Priority: CH19740013192 19741001

Family:

Publication number	Publication date	Application number	Application date
CH582495 A	19761215	CH19740013192	19741001

Probable Assignee: ROCHAT DANIEL

Assignee(s):(std)**:** ROCHAT DANIEL

International class (IPC 8–9): A45C1/02 G07D9/00 (Advanced/Invention); A45C1/00 G07D9/00 (Core/Invention)

International class (IPC 1–7): A45C1/02

CPC: A45C1/02 A45C2001/108 G07D9/002

European class: A45C1/02 G07D9/00C K45C1/10R6D

Classification Explorer

Abstract:
Source: CH582495A The money storage block (1) with holes (2) accepting coin columns (4), is a solid cylinder with blind holes parallel to the axis of revolution, and has an apertured rotating disc cover (8). Disc orientation either covers all or provides access to individual coin columns. The holes may be of differing dias. to suit coin types, and are equally distributed within the block. Partial projection of coin columns through vertical slots in the block wall may be incorporated by positioning the holes centres at a distance less than hole radius from the block edge.

0) CH607606A – TIME SWITCH TO BE RELEASED FOR ACTUATION BY COI...

15) Family number: 1565902 (CH607606A) © PatBase

Title: Time switch to be released for actuation by coin insertion

Priority: CH19750010459 19750812

Family:

Publication number	Publication date	Application number	Application date
CH607606 A3	19780929	CH19750010459	19750812
CH607606 B	00000000	CH19750010459	19750812

Probable Assignee: SCHULTE SCHLAGBAUM AG

Assignee(s):(std)**:** SCHULTE SCHLAGBAUM AG

Inventor(s):(std)**:** OBENLUENESCHLOSS KURT

Inventor(s): KURT OBENLUENESCHLOSS

International class (IPC 8–9): G04F3/02 G07F17/24 (Advanced/Invention); G04F3/00 G07F17/00 (Core/Invention)

International class (IPC 1–7): G04F3/02 G07F17/24

CPC: G04F3/02 G07F17/24

European class: G04F3/02 G07F17/24

Classification Explorer

Abstract:
Source: CH607606A This is equipped with an actuating handle serving for winding up the clock movement and with an elapsed–time setting disc, to which a take–up element shiftable into different positions is assigned in order to vary the time of use. The take–up element (79) forms the coupling between the elapsed–time setting disc (73) and the actuating handle (82). It can be shifted after the removal of the actuating handle (82). The setting disc (73) carries a drag pin (84) which loads a driver (75) seated on the clock–movement winding spindle. This setting disc (73) has a plurality of holes (28) for the selective insertion of the coupling pin (79). It is located at the rear of the housing wall (3) which carries the bearing journal (83) for the actuating handle (82) and which has an arcuate slot (80) for the passage of the coupling pin (79), the free end of which projects into an eccentric blind bore (81) of the operating handle (82). The coupling pin (79) carries a coupling tab (85), the other end of which is coupled to a coin–shift slide (89) which is assigned a blocking lever (100) which can be moved out by the coin (33). The blocking lever (100) has a holding arm (104) for retaining the coin (33) when the position of the coin–shift slide (89) is displaced.

0) US4335809A – ENTERTAINMENT MACHINES

16) Family number: 18057355 (US4335809A) © PatBase

Title: Entertainment machines

Priority: EP19800300286 19800131 GB19780007998 19780301 GB19790005068 19790213

Family:

Publication number	Publication date	Application number	Application date
AT35470 E	19880715	AT19800300286T	19800131
DE2907698 A1	19790913	DE19792907698	19790228
DE3072104 D1	19880804	DE19803072104	19800131
DE7905502 U1	19791206	DE19790005502U	19790228
EP0015081 A1	19800903	EP19800300286	19800131
EP0015081 B1	19880629	EP19800300286	19800131
ES488540 A1	19801216	ES19800488540	19800213
ES8101795 A1	19810316	ES19800488540	19800213
GB2019311 A1	19791031	GB19790005069	19790213
GB2019311 B2	19820317	GB19790005069	19790213
GB2042234 A1	19800917	GB19800003158	19800130
GB2042234 B2	19830309	GB19800003158	19800130
US4335809 A	19820622	US19800116627	19800129

Probable Assignee: BARCREST LIMITED

Assignee(s):(std)**:** BARCREST LTD ; EGGINTON R A ; EGGINTON ROGER ANTHONY ; BARCEST LTD

Assignee(s): BARCREST LIMITED ; NMB POSTBANK GROEP NV A NETHERLANDS BANK ; SCIENTIFIC GAMES INC ; NMB POSTBANK GROEP NV ; EGGINTON ROGER ANTHONY BRIERLEY HILL WEST MIDLANDS GROSSBRITANNIEN

Inventor(s):(std)**:** EGGINTON ROGER ANTHONY ; WAIN JOHN L ; WAIN JOHN LAURENCE

Inventor(s): ANTHONY EGGINTON ROGER

Designated states: AT BE CH DE FR IT LU NL SE

International class (IPC 8–9)**:** B27M1/02 G07F17/32 G07F17/34 (Advanced/Invention); B27M1/00 G07F17/32 (Core/Invention)

International class (IPC 1–7)**:** B27M1/08 B27M3/00 G07F17/34

CPC: G07F17/32 G07F17/323 G07F17/3234 B27M1/02

European class: B27M1/02 G07F17/32 G07F17/32E4 G07F17/32E6B

US class: 194/1R 463/20 463/41 463/42

Classification Explorer

Cited documents: US4072930 A, US3927800 A, US3688276 A, US3641536 A, US3269503 A, NL7704304 A, GB1545301 A, GB1466765 A, GB1414898 A, GB1268104 A, DE2717184 A1,

Forward Citations: WO9612262, WO9522811, WO9411696, WO9409338, WO9314462, WO9120150, WO9120082, WO9109369, WO07016439, WO05018764, WO05018764, WO04101087, WO04101087, WO03052668, WO03052668, WO03033093, WO0205229, WO0205229, USRE43727, USRE38812, USRE37885, USRE37414, US9685039, US9652934, US9646339, US9640035, US9640017, US9639709, US9633179, US9627442, US9608583, US9600968, US9600965, US9591340, US9569932, US9569930, US9564014, US9545578, US9542811, US9539515, US9536394, US9536257, US9533214, US9530284, US9521375, US9513774, US9472063, US9466170, US9451203, US9449468, US9443391, US9436356, US9430901, US9430797, US9411944, US9396606, US9355518, US9349949, US9349250, US9330529, US9324064, US9317994, US9317990, US9314698, US9313574, US9311772, US9306952, US9299220, US9292999, US9292166, US9288529, US9280874, US9280648, US9269228, US9269223, US9257001, US9251656, US9251655, US9251649, US9251647, US9235954, US9224266, US9218707, US9214065,

US9214058, US9214057, US9202338, US9202209, US9197914, US9183693, US9177442, US9171419, US9165322, US9164661, US9159196, US9152633, US9149727, US9148681, US9147307, US9142097, US9142096, US9135779, US9129328, US9117342, US9105148, US9105146, US9100676, US9092930, US9082261, US9082260, US9076281, US9076155, US9064375, US9053610, US9047733, US9047731, US9041784, US9039516, US9024283, US9015287, US9015286, US9005015, US9005014, US8998727, US8992326, US8992302, US8986122, US8986121, US8979646, US8974302, US8974281, US8968095, US8968079, US8968073, US8966468, US8961317, US8959154, US8956231, US8956220, US8944918, US8939359, US8932129, US8931020, US8930504, US8918485, US8904449, US8900053, US8900052, US8899477, US8876594, US8876591, US8876590, US8873772, US8870645, US8864575, US8863161, US8858323, US8843991, US8840479, US8840018, US8827798, US8821267, US8814652, US8814650, US8814648, US8801520, US8784197, US8784192, US8781926, US8777750, US8758106, US8753197, US8753196, US8753194, US8751611, US8747207, US8740065, US8739206, US8727871, US8726330, US8724436, US8721422, US8719873, US8708828, US8708826, US8708816, US8708805, US8708804, US8702488, US8696465, US8696443, US8696423, US8695876, US8690679, US8683541, US8678918, US8678902, US8678901, US8677424, US8668574, US8663010, US8663003, US8662998, US8662989, US8661477, US8660675, US8657664, US8655922, US8651956, US8651939, US8651928, US8647188, US8645709, US8636596, US8636574, US8632396, US8628413, US8628403, US8622842, US8622806, US8622801, US8621350, US8616967, US8616959, US8613658, US8608567, US8602882, US8597116, US8593925, US8591314, US8584175, US8581721, US8574062, US8568218, US8562415, US8556710, US8556709, US8556698, US8545308, US8540576, US8535158, US8529349, US8523665, US8523650, US8522303, US8522230, US8517819, US8512130, US8510567, US8506400, US8506384, US8506380, US8504617, US8500561, US8500542, US8495109, US8485901, US8480480, US8480466, US8479240, US8475255, US8474819, US8473416, US8469820, US8449380, US8444480, US8439746, US8438085, US8435105, US8430749, US8430747, US8430737, US8428273, US8425313, US8419549, US8419527, US8408993, US8403214, US8398472, US8397985, US8388448, US8376836, US8371942, US8371924, US8357041, US8337298, US8337295, US8332895, US8332887, US8328633, US8328631, US8328623, US8323111, US8323103, US8323092, US8319601, US8317616, US8308568, US8308545, US8292741, US8292712, US8287379, US8287354, US8285646, US8282475, US8282473, US8275807, US8275668, US8272963, US8272937, US8266212, US8262469, US8251824, US8251807, US8251791, US8249959, US8246472, US8246450, US8246048, US8240669, US8235808, US8231448, US8226474, US8225369, US8221226, US8221224, US8221218, US8221215, US8216062, US8216060, US8214874, US8210937, US8210930, US8206212, US8197321, US8189819, US8184508, US8172682, US8172665, US8167723, US8165318, US8162756, US8162743, US8152628, US8151304, US8145547, US8137188, US8128492, US8128491, US8128478, US8127324, US8123606, US8113956, US8113939, US8105149, US8103589, US8100748, US8099482, US8092303, US8092299, US8088009, US8087988, US8079909, US8079902, US8074253, US8070604, US8070597, US8070587, US8070578, US8062121, US8062119, US8057308, US8057298, US8057292, US8052522, US8052512, US8047913, US8037412, US8032879, US8029360, US8028318, US8021230, US8012009, US7997978, US7996916, US7996873, US7996438, US7993199, US7993197, US7992178, US7988554, US7987282, US7985133, US7972214, US7963847, US7963845, US7963843, US7955170, US7951002, US7946917, US7942737, US7931533, US7927211, US7918738, US7918735, US7918730, US7918728, US7909699, US7909692, US7905778, US7904063, US7901283, US7901282, US7896734, US7892093, US7883417, US7883413, US7882033, US7867092, US7862430, US7862427, US7857696, US7857693, US7854654, US7850528, US7841939, US7837556, US7837554, US7837547, US7837545, US7833093, US7831047, US7828649, US7822687, US7819746, US7819745, US7819734, US7815500, US7811172, US7811167, US7801736, US7798899, US7794322, US7793331, US7785189, US7785187, US7783774, US7780526, US7780523, US7780520, US7778879, US7771270, US7766749, US7757264, US7753784, US7753783, US7753782, US7753773, US7749083, US7749077, US7749074, US7740536, US7727071, US7727070, US7722464, US7722453, US7713124, US7699699, US7695363, US7695359, US7690977, US7674180, US7666093, US7666092, US7666081, US7658672, US7657910, US7654896, US7651392, US7644861, US7637810, US7628703, US7628702, US7625278, US7621809, US7618316, US7607977, US7607976, US7597621, US7585223, US7581256, US7574727, US7568973, US7553230, US7549919, US7549576, US7526736, US7524243, US7520809, US7519442, US7512632, US7500913, US7470186, US7455591, US7454363, US7452271, US7448949, US7448057, US7427236, US7424731, US7399229, US7399227, US7393276, US7390263, US7390258, US7387568, US7356831, US7338372, US7329187, US7329183, US7316611, US7311604,

US7311598, US7306519, US7297062, US7293277, US7291069, US7291067, US7275991, US7231656, US7217191, US7210141, US7206417, US7198571, US7195560, US7192348, US7188352, US7186181, US7182690, US7162036, US7131909, US7128652, US7124194, US7107109, US7081050, US7022017, US6991538, US6988946, US6970834, US6910964, US6905412, US6893348, US6846238, US6832958, US6800030, US6800027, US6755744, US6749510, US6746330, US6746327, US6736725, US6729958, US6729957, US6712697, US6699124, US6656048, US6656047, US6648757, US6645077, US6645074, US6607441, US6605003, US6605001, US6604997, US6592457, US6578051, US6565434, US6558256, US6547664, US6520855, US6508707, US6506117, US6498937, US6482089, US6471590, US6443837, US6431983, US6397189, US6375567, US6371852, US6358149, US6358147, US6347738, US6346951, US6336219, US6331143, US6322309, US6319125, US6315668, US6315660, US6308204, US6280328, US6280326, US6257981, US6254483, US6247643, US6244958, US6240550, US6234897, US6231445, US6217448, US6210275, US6190255, US6182126, US6162122, US6159098, US6159097, US6117013, US6089982, US6048269, US6019283, US5971397, US5959277, US5952640, US5902983, US5836817, US5820459, US5811772, US5800269, US5752882, US5743799, US5741183, US5702304, US5674128, US5655961, US5611730, US5593349, US5580309, US5575717, US5559312, US5551692, US5533727, US5451756, US5396225, US5373440, US5344144, US5332076, US5326104, US5257179, US5231568, US5222583, US5209476, US5197094, US5114155, US5083271, US5038022, US4935720, US4805907, US4760527, US4725977, US4722053, US4712799, US4695903, US4652998, US4636951, US4611808, US4597058, US4593376, US4582324, US4477069, US2015221169, US2015065223, US2013095905, US2012135801, US2012100909, US2011300932, US2011212764, US2011207533, US2011201429, US2011151965, US2011124394, US2011105216, US2010331069, US2010241259, US2010234095, US2010234093, US2010120496, US2010099491, US2009305765, US2009181743, US2009149245, US2009118014, US2009118013, US2009111574, US2009088257, US2009055205, US2008254894, US2008248880, US2008242388, US2008242387, US2008228517, US2008137849, US2008119257, US2008113763, US2008086379, US2008051193, US2008045346, US2008032801, US2008032763, US2008026844, US2008026823, US2008026813, US2008020826, US2007293323, US2007270212, US2007265062, US2007247979, US2007209053, US2007207857, US2007197298, US2007167229, US2007149292, US2007135207, US2007129131, US2007117623, US2007087834, US2007085274, US2007060387, US2007060302, US2007060249, US2007032288, US2007026938, US2007015573, US2007010309, US2006293773, US2006281538, US2006276244, US2006265513, US2006265093, US2006258428, US2006247064, US2006205511, US2006194633, US2006178186, US2006172804, US2006135242, US2006128457, US2006116207, US2006111179, US2006106676, US2006094509, US2006084493, US2006074750, US2006073888, US2006073887, US2006073869, US2006068895, US2006068880, US2006068873, US2006063593, US2006063578, US2006052148, US2006046842, US2006046823, US2006046821, US2006040734, US2006035707, US2006025199, US2005282638, US2005261058, US2005261055, US2005235309, US2005233811, US2005216348, US2005215317, US2005209005, US2005209001, US2005181867, US2005148386, US2005125920, US2005101383, US2005054439, US2005054415, US2005054409, US2005037834, US2005037832, US2005032573, US2005020353, US2004259629, US2004242306, US2004237118, US2004235559, US2004229698, US2004229693, US2004224770, US2004219974, US2004219967, US2004214625, US2004209686, US2004204231, US2004198482, US2004185930, US2004180722, US2004180721, US2004176167, US2004166923, US2004166922, US2004140617, US2004137987, US2004102243, US2004087358, US2004068654, US2004053677, US2004053668, US2004048671, US2004048667, US2004033831, US2004005925, US2004002385, US2004002379, US2004002378, US2003228904, US2003199320, US2003199309, US2003190958, US2003181238, US2003176218, US2003148807, US2003134681, US2003074666, US2003074219, US2003036425, US2003032474, US2003031096, US2002142825, US2002138594, US2002134357, US2002119824, US2001023403, US2001009038, JP61076182, JP2112753, GB2356279, GB2356279, GB2340979, GB2274009, GB2274009, GB2270787, GB2270787, GB2254469, GB2254469, GB2236423, GB2236423, GB2205214, GB2205214, GB2188588, GB2188588, GB2181590, GB2181590, GB2160342, GB2151054, GB2139390, GB2131214, GB2124418, FR2474723, EP1465127, EP1446205, EP1432486, EP1130555, EP1074955, EP1001391, EP1001391, EP0806023, EP0588625, EP0556840, EP0527211, EP0506873, EP0443420, EP0392658, EP0219306, EP0219306, EP0214290, EP0178278, DE4311561, DE4311561, DE4233945, DE4205098, DE4205098, DE3820868, DE3810075, DE3802186, DE3712475, DE3601157, DE3416229, DE19701300, DE102015117369, AU775081, AU755460, AU2005232204,

Abstract:
Source: US4335809A A coin−freed player−operable entertainment machine is connected via a transmission link, such as a telephone line, to a remote control device. The link may be used to tramsmit program information to a

control system of the machine so that the game to be played with the machine can be changed as desired from the remote control location. Alternatively or additionally, the transmission link may be used to transmit information concerning machine operation from the machine to the remote control location.

0) DE3032577A1 – MECHANISCH UND/ODER ELEKTRONISCH GESTEUERTE WER...

17) Family number: 2009588 (DE3032577A1) © PatBase

Title: MECHANISCH UND/ODER ELEKTRONISCH GESTEUERTE WERBE– UND INFORMATIONSVORRICHTUNG, WELCHE FUER INNENRAEUME SOWIE ZUR AUSSENANWENDUNG GEDACHT IST WALL–MOUNTED VENDING MACHINE FOR GOODS OR INFORMATION – IS MECHANICALLY OR ELECTRICALLY CONTROLLED, WITH MICRO–PROGRAMME CONTROLLED DATA DISPLAY AND CHAIN DRIVE UNIT TO GOODS SUPPLY

Priority: DE19803032577 19800829

Family:

Publication number	Publication date	Application number	Application date
DE3032577 A1	19820408	DE19803032577	19800829

Probable Assignee: GESA MOERS AND JUNGHANS OHG

Assignee(s):(std)**:** GESA MOERS AND JUNGHANS OHG

Inventor(s):(std)**:** JUNGHANS GUENTER ; MOERS WOLFGANG

International class (IPC 8–9)**:** G07F9/02 G09F11/14 G09F15/00 (Advanced/Invention); G07F9/02 G09F11/00 G09F15/00 (Core/Invention)

International class (IPC 1–7)**:** G09F13/34

CPC: G07F9/02 G09F11/14 G09F15/005

European class: G07F9/02 G09F11/14 G09F15/00B7

Classification Explorer

Forward Citations: NL1013841,

Abstract:
Source: DE3032577A1 Mechanisch und/oder elektronisch gesteuerte Werbe– und Informationsvorrichtung fuer Innenraeume sowie Aussenanwen dung dadurch gekennzeichnet, dass das kastenfoermige Gehaeuse (3) mindestens ein auf der Frontseite befindliches, dem Betrachter zugewandtes Sichtfenster (15) besitzt, hinter dem ein oder mehrere kontinuierlich und/oder intermittierend transportierbare Baender oder Platten (13) angebracht sind, welche – durch einen Elektromotor angetrieben – Halterungs moeglichkeiten fuer kleinere und/oder groessere, flaechige und/ oder geformte dreidimensionale Informationstraeger (12,13) aufweisen sowie eine Anschlussmoeglichkeit fuer eine vom hinter dem Sichtfenster (15) gelegenen Hauptinformationstraeger (12,13) abweichende undjoder zusaetzliche Informationen ver mittelnde elektronische Laufschrift (2) besitzt. The mechanically or electronically controlled information or advertising supply installation is suitable for the outer wall of a building, with access to the contents on the inside of the building. It incorporates a viewing window (15) and a few continuously or intermittently moving tapes (12,13). The display is protected by a sun blind (11), immediately beneath which is a free–programmably controlled light pen (2) for head code information. The front panel also includes a coin slot (19) for an automatic vending machine, and may also have a sound signal unit (6). The goods are conveyed to the vending point by an endless chain drive powered by an electric motor and detached by rotating the goods through a 90 deg. angle.

0) WO8500909A1 – COIN HANDLING SYSTEM

18) Family number: 29387297 (WO8500909A1) © PatBase

Title: COIN HANDLING SYSTEM

Priority: US19830522726 19830812 US19840522726 19840809 US19840638725 19840808 WO1984US01279 19840810

Family:

Publication number	Publication date	Application number	Application date
AU198433916 A1	19850312	AU19840033916	19840810
DE3429797 A1	19850509	DE19843429797	19840813
EP0137637 A2	19850417	EP19840305505	19840813
EP0137637 A3	19870603	EP19840305505	19840813
ES535104 A1	19860516	ES19840535104	19840810
ES8801456 A1	19880301	ES19840535104	19840810
FR2551572 A1	19850308	FR19840012744	19840813
GB2146472 A1	19850417	GB19840020551	19840813
GB8420551 A0	19840919	GB19840020551	19840813
JP60502027 T2	19851121	JP19840503226	19840810
PT79070 A	19840901	PT19840079070	19840813
WO8500909 A1	19850228	WO1984US01279	19840810

Probable Assignee: COMMERCIAL GUARDIAN INC

Assignee(s):(std)**:** COMMERCIAL GUARDIAN INC ; COMMERICAL GUARDIAN INC

Inventor(s):(std)**:** ARNS HAROLD E ; DUSHANE RAY ; FISCHER ROY ; FISCHER ROYE ; LUSK ARTHUR I ; RAY DUSHANE ; ROY FISCHER ; WALTHER ALAN T

Inventor(s): T WALTHER ALAN ; HAROLD E ARNS ; I LUSK ARTHUR ; E ARNS HAROLD ; ALAN T WALTHER ; ARTHUR I LUSK ; ARTHUR I LUSK ALAN T WALTHER HAROLD E ARNS RAY DUS ; ARTHUR I LUSK ALAN T WALTHER HAROLD E ARNS RAY...

Designated states: AT AU BE BR DK IT JP KR NL SE

International class (IPC 8–9)**:** G07D1/04 G07D1/06 G07D3/04 G07D5/02 G07D9/00 (Advanced/Invention); G07D1/02 G07D3/00 G07D5/00 G07D9/00 (Core/Invention); G07D (Subclass/Invention)

International class (IPC 1–7)**:** A47F9/04 G07D1/00 G07D1/04 G07D1/06 G07D3/00 G07D3/04 G07D3/14 G07D3/16 G07D5/00 G07D5/02 G07D9/00 G07F5/24

CPC: G07D1/04 G07D5/02

European class: G07D1/04 G07D5/02

Classification Explorer

Cited documents: US4361161 A, US4249552 A, US4082099 A, US4028099 A, US3175563 A, US3077243 A, GB2124814 A1, GB2124813 A1, GB1566202 A, GB1484858 A, GB1375390 A, GB1026883 A, FR742306 A, FR742306, FR601539 A, FR2515843 A1, DE1449482 A1,

Forward Citations: WO05119604, USRE44689, USRE44252, US9633500, US9508208, US9501885, US9437069, US9430893, US9330515, US9129271, US9092924, US8959029, US8950566, US8701860, US8701857, US8684160, US8684159, US8602200, US8559694, US8545295, US8523641, US8443958, US8393455, US8352322, US8346610, US8229821, US8042732, US8023715, US7980378, US7949582, US7946406, US7929749, US7778456, US6899214, US6843418, US6778693, US6637576, US6612921, US6318537, US6139418, US6042470, US6039644, US5277651, US5141443, JP2228791, GB2386734, GB2386734, EP1367544, EP0315611, EP0315611,

Abstract:
An automatic money handling machine (10) having a housing containing a coin receiver (16), a coin ramp (100) leading to a coin sorter (300), a coin storage device (800) for storing coins without regard to denomination, a coin dispenser (700, 5000) able to dispense more than one coin at a time, a coin elevator (20, 7000) for returning coins to a different level from that at which the coins are dispensed and computing devices (186) adapted to count coins

received and coins dispensed, the device also has a coin detector for identifying coins by denomination and for detecting coins which are not proper and a coin diverter (500) for directing improper coins to the coin storage (800) without regard to denomination, the computing device providing the logic control for all electromechanical functions.

0) WO8500905A1 – SELF–STORING AUTOMATIC MONEY HANDLER

19) Family number: 2113899 (WO8500905A1) © PatBase

Title: SELF–STORING AUTOMATIC MONEY HANDLER

Priority: US19830522724 19830812 US19840638042 19840806 WO1984US01281 19840810

Family:

Publication number	Publication date	Application number	Application date
AU198433156 A1	19850312	AU19840033156	19840810
DE3429779 A1	19850411	DE19843429779	19840813
EP0137638 A2	19850417	EP19840305506	19840813
ES535103 A1	19860416	ES19840535103	19840810
ES8606700 A1	19861001	ES19840535103	19840810
FR2557330 A1	19850628	FR19840012746	19840813
GB2146382 A1	19850417	GB19840020549	19840813
GB8420549 A0	19840919	GB19840020549	19840813
JP60086670 A2	19850516	JP19840167973	19840813
PT79058 A	19840901	PT19840079058	19840810
WO8500905 A1	19850228	WO1984US01281	19840810

Probable Assignee: COMMERCIAL GUARDIAN INC

Assignee(s):(std)**:** COMMERCIAL GUARDIAN INC

Assignee(s): KOMAASHIYARU GAADEIAN INC

Inventor(s):(std)**:** LUSK ARTHUR I ; WALTHER ALAN T ; BALFOUR DAVID N

Inventor(s): DAVID N BALFOUR ; DEIBITSUDO ENU BARUFUOAA ; AASAA AI RASUKU ; ALAN T WALTHER ; ARAN TEI WARUTAA ; ARTHUR I LUSK ; T WALTHER ALAN ; N BALFOUR DAVID ; I LUSK ARTHUR ; ARTHUR I LUSK ALAN T WALTHER ET DAVID N BALFOUR

Designated states: AT AU BE BR DK IT KR NL SE

International class (IPC 8–9)**:** A47F10/00 A47F9/00 A47F9/02 G06Q40/00 G07D11/00 G07D13/00 G07D9/00 (Advanced/Invention); G07D13/00 (Advanced/Non–invention); A47F10/00 A47F9/00 G06Q40/00 G07D11/00 G07D13/00 G07D9/00 (Core/Invention)

International class (IPC 1–7)**:** A47B81/00 A47F9/00 A47F9/04 E05G1/00 E05G1/02 E05G5/00 G06F15/30 G07D1/0 G07D1/00 G07D9/00 G07F7/0 G07F7/00

CPC: G07D11/0003

European class: G07D11/00D

Classification Explorer

Cited documents: WO8301479 A1, US3941977 A, US2284531 A, US1934272 A, GB963457 A, GB742071 A, GB723294 A, GB713691 A, GB687971 A, GB646863 A, GB483457 A, GB413216 A, GB2088611 A1, FR1460626 A, DE941116 A, DE3412424 C1,

Forward Citations: US8308055, US7775151, KR100823265, FR2871505, EP0765987, EP0307526, DE102007058658, CN102434058,

Abstract:
A bill, coin and script receiving and dispensing apparatus (10) which receives, stores and dispenses bills, coins and script has a phisically secure housing (130) in which the bill, coin and script mechanism are mounted on an elevator device (11) which elevator device can move into either of two positions, an operable position and a stored position in which in the operable position, the device is fully usable and in the stored position the device is physically secure and unusable; the elevator is operable by a mechanical source of stored energy (60) which is operator assisted or electical energy which is operator actuated (650).

0) US4759063A – BLIND SIGNATURE SYSTEMS

20) Family number: 29583332 (US4759063A) © PatBase

Title: BLIND SIGNATURE SYSTEMS

Priority:
EP19840201160 19840813 EP19860201730 19861006 EP19860201730 19861006
EP19860201730 19861006 US19880168802 19880316 US19870123703 19871123
EP19890913279 19890522 US19850784999 19851007 US19830524896 19830822
WO1989US02225 19890522 US19880198315 19880524

Family:

Publication number	Publication date	Application number	Application date
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AT164278 E	19980415	AT19880202620T	19881122
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WO8911762 A1	19891130	WO1989US02225	19890522

Probable Assignee: VAN DETSAN NETWORKS LIABILITY CO LTD

Assignee(s):(std)**:** CHAUM DAVID ; CHAUM DAVID L ; DIGICASH INC ; SECURITY TECHN CORP

Assignee(s): SECURITY TECHNOLOGY CORP ; ECASH TECHNOLOGIES INC A CORP OF DELAWARE ; SECURITY TECHNOLOGY CORP CARSON CITY NEV US ; TECHNOLOGIES FOR INFORMATION AND ENTERTAINMENT ; TRILLIUM CORP ; VAN DETSAN NETWORKS LTD ; VAN DETSAN NETWORKS LIABILITY CO LTD ; CHAUM DAVID PROF DR ; CHAUM DAVID SHERMAN OAKS CALIF ; CHAUM DAVID SHERMAN OAKS CALIF US ; DAVID CHAUM ; INFOSPACE INC ; DIGICASH ACQUISTION CORP ; ECASH TECHNOLOGIES INC ; RULOFF CAPITAL CORP ; IMP BANK ; EONE GLOBAL LP

Inventor(s):(std)	CHAUM DAVID ; CHAUM DAVID L ; CHAUM DAVID PROF DR ; DAVID CHAUM
Inventor(s):	CHAUM PROF DR DAVID NL 1009 AB AMSTERDAM NL ; CHAUM PROF DR ; 4079 ; CHAUM DAVID SHERMAN OAKS CALIF ; CHAUM DAVID SHERMAN OAKS CALIF US ; CHAUM DAVID SHERMAN OAKS CALIFORNIA 91403 US
Designated states:	AT AU BB BE BF BG BJ BR CF CG CH CM DE DK ES FI FR GA GB GR HU IT JP KP KR LI LK LU MC MG ML MR MW NL NO RO SD SE SN SU TD TG
International class (IPC 8–9):	G06K17/00 G06K7/00 G07F7/10 G09C1/00 H04L9/00 H04L9/10 H04L9/30 H04L9/32 (Advanced/Invention); G06K17/00 G06K7/00 G09C1/00 H04L9/10 (Advanced/Non–invention); G07F7/10 G09C1/00 H04L9/00 H04L9/32 (Core/Invention); G06K7/00 (Core/Non–invention)
International class (IPC 1–7):	G06K17/00 G07F7/10 G09C1/00 H04K1/00 H04L9/00 H04L9/28 H04L9/32 H04L9/32
CPC:	H04L9/3257 H04L9/3249 H04L9/302 H04L9/3218 H04L2209/56 G06K7/00 G06Q20/341 G06Q20/3678 G06Q20/383 G06Q20/40975 G07F7/1008 G07F7/1016 G06Q20/3825 H04L9/3271
European class:	G06Q20/341 G06Q20/3678 G06Q20/3825 G06Q20/383 G06Q20/40975 G07F7/10D G07F7/10E H04L9/30 H04L9/32R H04L9/32S H04L9/32S1 S06K7/00
US class:	235/379 235/380 235/382 380/23 380/24 380/25 380/28 380/30 380/44 380/9 705/69 705/74 713/180
Classification Explorer	
Cited documents:	US4782455 A, US4759064 A, US4759063 A, US4757185 A, US4748668 A, US4710613 A, US4697072 A, US4667087 A, US4656474 A, US4625076 A, US4612413 A, US4590470 A, US4529870 A, US4458109 A, US4424414 A, US4423287 A, US4405829 A, US4393269 A, US4351982 A, US4308536 A, US4264782 A, US4218582 A, US4200770 A, US4086634 A, EP0218305 A1, EP0139313 A2,
Forward Citations:	WO9949404, WO9931587, WO9913615, WO9913614, WO9913613, WO9852151, WO9748203, WO9709688, WO9709688, WO9701902, WO9625814, WO9612362, WO9612362, WO9504417, WO9410657, WO9004892, WO8911762, WO8911706, WO8908957, WO8903143, WO14195501, WO13104967, WO12123394, WO12122994, WO03102882, WO02093378, WO0201794, WO0036566, WO0019658, USRE42892, USRE42869, USRE42762, USRE39401, USRE39400, USRE39370, USRE39369, USRE39368, USRE36946, USRE36310, US9672515, US9634995, US9621552, US9485092, US9465929, US9451019, US9437071, US9419951, US9419790, US9401907, US9398020, US9385995, US9361121, US9348767, US9332066, US9245266, US9182943, US9177313, US9177157, US9165323, US9154480, US9087000, US9084218, US9017157, US9016584, US9009483, US8966278, US8959652, US8924728, US8919644, US8904181, US8879724, US8839416, US8831994, US8819252, US8799461, US8788818, US8775245, US8769636, US8763124, US8762723, US8751793, US8751752, US8732457, US8708828, US8707030, US8706635, US8706618, US8690055, US8671275, US8661256, US8645688, US8639915, US8635327, US8630933, US8630932, US8627097, US8625270, US8621593, US8608558, US8606900, US8600890, US8600889, US8600888, US8600887, US8600830, US8583522, US8572228, US8571952, US8566248, US8560451, US8554929, US8554677, US8543842, US8543815, US8543772, US8543507, US8533851, US8533777, US8527752, US8522044, US8504704, US8499334, US8452680, US8444423, US8407476, US8407473, US8396810, US8386788, US8381272, US8376222, US8370200, US8363835, US8352745, US8341036, US8341025, US8307212, US8307210, US8307208, US8296762, US8272060, US8271391, US8261978, US8261319, US8261088, US8260806, US8260716, US8255325, US8251807, US8245040, US8241047, US8225995, US8225094, US8204945, US8195914, US8185734, US8185476, US8185473, US8176547, US8171469, US8171032, US8166549, US8156343, US8146078, US8141240, US8132715, US8117649, US8116083, US8103881, US8086532, US8082575, US8060750, US8059814, US8056100, US8050969, US8037314, US8033902, US8015597, US8015592, US8014530, US7996916, US7996888, US7988559, US7988554, US7970678, US7966487, US7962747, US7958057, US7944702, US7941666, US7931533, US7925898, US7921293, US7917749, US7917436, US7900017, US7899712, US7890763, US7885899, US7882032, US7877612, US7877331, US7873837, US7869219, US7867084, US7861245, US7853600, US7850468, US7844835, US7840962, US7837556, US7837101, US7836275, US7835519, US7831047, US7828208, US7822989, US7818808, US7809957, US7802718, US7802085, US7794323, US7793830, US7793111, US7792705, US7788483, US7787620, US7783040, US7774482, US7761591, US7739521, US7734923, US7730312, US7730311, US7730310,

US7716486, US7716484, US7712658, US7708198, US7707408, US7707295, US7702984, US7702908, US7702831, US7699220, US7698567, US7689826, US7688982, US7669055, US7668310, US7660994, US7657751, US7636844, US7634083, US7631196, US7631193, US7630986, US7621444, US7620949, US7620605, US7618317, US7617973, US7613659, US7610611, US7606738, US7606401, US7600677, US7600129, US7597251, US7597248, US7591420, US7590846, US7587368, US7587044, US7584363, US7584358, US7581256, US7575158, US7574596, US7571850, US7565329, US7558407, US7546457, US7536352, US7535719, US7529928, US7524245, US7523495, US7520811, US7516886, US7516330, US7516325, US7506165, US7499875, US7490070, US7483871, US7480806, US7478239, US7470182, US7469339, US7466556, US7461261, US7454611, US7447037, US7430670, US7424709, US7415708, US7415617, US7401216, US7395405, US7392415, US7392395, US7389427, US7380138, US7379919, US7370196, US7366849, US7366702, US7366305, US7363499, US7359507, US7357312, US7356817, US7356735, US7353396, US7337326, US7337315, US7328276, US7318235, US7313669, US7308576, US7305592, US7302704, US7302511, US7299352, US7296267, US7290278, US7287197, US7281133, US7272831, US7272639, US7267612, US7260552, US7254561, US7248719, US7237051, US7225441, US7222364, US7215781, US7206763, US7205882, US7203841, US7195154, US7194634, US7191440, US7191333, US7181017, US7177967, US7165181, US7165174, US7162639, US7162037, US7162036, US7152045, US7143290, US7143066, US7143062, US7143062, US7142674, US7139890, US7133846, US7133845, US7127548, US7127548, US7124327, US7124302, US7120802, US7120800, US7117376, US7116782, US7111176, US7110983, US7107455, US7107447, US7103771, US7100199, US7096497, US7095854, US7092914, US7089418, US7085935, US7083089, US7082615, US7076802, US7076669, US7076652, US7073071, US7073042, US7069451, US7069442, US7063615, US7063615, US7062500, US7061372, US7058808, US7058807, US7051212, US7043641, US7035963, US7028187, US7028149, US7024555, US7020738, US7013484, US7013481, US7013295, US7003501, US7000110, US6996748, US6996710, US6990579, US6985608, US6978372, US6976162, US6959388, US6957332, US6950937, US6950810, US6948070, US6945457, US6941458, US6938021, US6935953, US6934817, US6933837, US6926204, US6926203, US6920435, US6907600, US6894608, US6879966, US6871276, US6868408, US6859795, US6856965, US6820177, US6816595, US6786398, US6769058, US6766456, US6761319, US6760441, US6754815, US6742715, US6742120, US6736325, US6695204, US6680924, US6662166, US6659354, US6642839, US6636969, US6620047, US6594376, US6591229, US6581042, US6575372, US6564995, US6547130, US6529884, US6488211, US6449599, US6446052, US6438691, US6434238, US6415271, US6411942, US6398115, US6397198, US6385723, US6381699, US6381344, US6366682, US6336095, US6328217, US6327661, US6324287, US6308270, US6304658, US6301659, US6298442, US6292897, US6286756, US6272632, US6269348, US6268803, US6246996, US6236975, US6230148, US6220510, US6212281, US6205550, US6205437, US6199051, US6195649, US6178509, US6175925, US6175921, US6164549, US6157966, US6154879, US6154841, US6149056, US6145739, US6145738, US6131090, US6122625, US6119227, US6108644, US6106396, US6097811, US6095412, US6091817, US6088797, US6087963, US6076078, US6075858, US6064751, US6049785, US6049609, US6047887, US6047067, US6045039, US6029150, US6021399, US5991406, US5987134, US5983207, US5963648, US5960083, US5956403, US5955961, US5953423, US5952638, US5935246, US5920629, US5917909, US5909492, US5901229, US5898154, US5894521, US5892899, US5878140, US5878139, US5861662, US5857023, US5839119, US5838812, US5835087, US5832460, US5826241, US5818955, US5799090, US5799087, US5796833, US5793868, US5781631, US5778068, US5777903, US5774545, US5774389, US5768385, US5764768, US5761311, US5757917, US5754939, US5754938, US5745886, US5745573, US5717759, US5717757, US5712913, US5703949, US5696827, US5696825, US5694472, US5692049, US5689564, US5682428, US5682027, US5671280, US5668878, US5666416, US5647017, US5643086, US5642419, US5638447, US5638445, US5633931, US5623547, US5621797, US5619574, US5613012, US5610982, US5610980, US5606617, US5604805, US5604804, US5585787, US5557765, US5557518, US5544255, US5521980, US5511121, US5493614, US5485520, US5481612, US5455407, US5453601, US5426700, US5406628, US5373558, US5371794, US5311595, US5297205, US5280527, US5276736, US5247578, US5245656, US5214702, US5214699, US5193114, US5191608, US5148479, US5131039, US5130519, US5121429, US5031214, US5018196, US5005200, US4996711, US4995082, US4991210, US4987593, US4977595, US4969190, US4969189, US4956863, US4949380, US4947430, US4932056, US4926480, US4914698, US4876716, US4868877, US4853961, US4841570, US2014244495, US2014106873, US2014074704, US2013218659, US2013010957, US2011131363, US2011119759, US2011099113, US2011082947, US2011059636, US2010329460, US2010325445, US2010306830,

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Abstract:
Source: US4759063A A cryptographic system allows, in one exemplary use, a supplier to cryptographically transform a plurality of messages responsive to secret keys; the transformed messages to be digitally signed by a signer; and the signed transformed messages returned to the supplier to be transformed by the supplier, responsive to the same secret keys, in such a way that a digital signature related to each original message is developed by the supplier. One important property of these systems is that the signer cannot determine which transformed message received for signing corresponds with which digital signature−even though the signer knows that such a correspondence must exist.

0) DE8505907U1 –

21) Family number: 16588745 (DE8505907U1) © PatBase

Priority: DE19850005907U 19850301

Family:

Publication number	Publication date	Application number	Application date
DE8505907 U1	19850530	DE19850005907U	19850301

Probable Assignee: DEUTSCHE WURLITZER GMBH 4971 HUELLHORST DE

Assignee(s): DEUTSCHE WURLITZER GMBH 4971 HUELLHORST DE

International class (IPC 8–9): G07F5/20 (Advanced/Invention); G07F5/20 (Core/Invention)

International class (IPC 1–7): G07F17/42 G07F5/20

CPC: G07F5/20

European class: G07F5/20

Classification Explorer

Abstract:
Source: DE8505907U1 (Claim 1) Verkaufsautomat mit mehreren Warenschaechten ANSPRUCHE 1. Verkaufsautomat mit mehreren Warenschaechtn, bei dem fuer die einzelnen Warenschaechte einzelne Drucktasten vorgesehen, zur Auswahl betaetigbar und nur dann in eine Ausgabestellung fuer die Waren bringbar sind, wenn zuvor eine durch ein Kreditwerk gesteuerte, fuer alle Warenschaechte gemeinsame Sperre freigegeben worden ist, dadurch gekennzeichnet, dass die einzelnen Warenschaechte mit Steuerorganen (6) zur Umschaltung des Kreditwerkes (12) versehen sind.

Machine translation: (Claim 1) vending machine with multiple goods Schaechter CLAIMS first Vending machines with multiple products damage Echtn, where for the individual goods Schaechter provide individual push buttons for selecting operable and only then to an output position for the goods can be brought, if earlier one by a loan work–driven, for all goods Schaechter shared lock is released, wherein that the individual goods Schaechter with control organs (6) credit for switching the plant (12) are provided.

0) DE8615563U1 –

22) Family number: 16699335 (DE8615563U1) © PatBase

Priority: DE19860015563U 19860610

Family:

Publication number	Publication date	Application number	Application date
DE8615563 U1	19860731	DE19860015563U	19860610

Probable Assignee: TESCHMA AUTOMATEN TECHNIK GMBH 4990 LUEBBECKE DE

Assignee(s): TESCHMA AUTOMATEN TECHNIK GMBH 4990 LUEBBECKE DE

International class (IPC 8–9): G07F17/32 G07F9/10 (Advanced/Invention)

International class (IPC 1–7): E05B41/00 G07F5/26 G07F9/10

CPC: G07F9/10 G07F17/32 G07F17/3216

European class: G07F17/32 G07F17/32C4 G07F9/10

Classification Explorer

Forward Citations: FR2808914,

Abstract:
Source: DE8615563U1 (Claim 1) 1. Muenzspielgeraet mit einem Gehaeuse, an dem eine die front– seitige Begrenzung des Geraetes bildende Tuer angeschlagen ist, g e k en n z eic h n e t u urc h eine zumindest die Tuer von aussen uebergreifende Sicherheitsein– richtung (2), die ein in eine oeffungs– und Schliessstellung bringbares Verschlussteil aufweist, welches in der Offen– stellung die Vorderseite der Tuer freigibt und in der Schliessstellung die Vorderseite der Tuer abdeckt.

Machine translation: (Claim 1) 1 Coin–operated games with a housing on the front side one limitation of the devices forming door is hinged, gek s nz eic hnetu urc h is at least the door from the outside over overall security device (2), the one that can be brought into an opening–and closing position closure part has, which in the open position the front of the door and are free in the closed position covering the front of the door.

0) BRPI8504556A – MODULO MARCADOR DE JOGO PARA MAQUINAS AUTOMATIC...

23) Family number: 680686 (BRPI8504556A) © PatBase

Title: MODULO MARCADOR DE JOGO PARA MAQUINAS AUTOMATICAS DE JOGO DE SALAO MARKER MODULE FOR AUTOMATIC MACHINES OF SALON GAME (Machine translation)

Priority: BR1985PI04556 19850913

Family:

Publication number	Publication date	Application number	Application date
BRPI8504556 A	19870422	BR1985PI04556	19850913

Probable Assignee: CIRSA COMP INVERSIONES SA

Assignee(s):(std)**:** CIRSA COMP INVERSIONES SA

Assignee(s): CIRSA COMPANIA DE INVERSIONES S A ; CIRSA COMPANIA DE INVERSIONES SA

Inventor(s):(std)**:** BOSCH RAMON PERICAS

Inventor(s): RAMON PERICAS BOSCH

International class (IPC 8–9): G07F17/32 (Advanced/Invention); G07F17/32 (Core/Invention)

International class (IPC 1–7): G07F17/32

Classification Explorer

Abstract:
Source: BRPI8504556A e • • • ##ss# • • • • • • • ••• ## • • ••• •••• • • •lss ••• • • • • ••• ••• RESUMO Patente de Invencao de "MODULO MARCADOR DE JOGO PARA– MAQUINAS AUTOMATICAS DE JOGO DE SAIAO", constituido – por um grupo de placas transparentes cuja superficie– 5 esta provida de alveolos ou ranhuras e que estao com todas as suas bordas, menos uma, cegas a passagem da luz, ao passo que a borda livre recebe, com interposi cao de um filtro colorido, um feixe de luz que e transmitido pela placa ate encontrar a parede ou pare 10 des dos alveolos ou das ranhuras, as quais delineiam– em cada placa uma figura distinta que se ilumina com– a coloracao do filtro quando a fonte de luz e ativada por um microprocessador atraves de orgaos de manobra– e comando convencionais. •• ••• E • • # And • • • # # ss # • • • • • • • • • • # • • • • • • • • • • • • ss • • • • • • • • • • • • • SUMMARY of Invention patent "GAME to MARKER MODULE–AUTOMATIC MACHINES of PROMENADE ROOM GAME", constituted by a group of transparent plates whose surface–5 this with coin holders self sealed or grooves and you're with all its edges, less a blind passage of light, while the free edge receives, with interposi of a colored filter, a beam of light and transmitted by the Board until find the wall or stop 10 des of coin holders self sealed or the slots, which outline–in each plate a distinct figure that lights up with–staining of the filter when the source of light and activated by a microprocessor through maneuvering organs–and conventional command. •• ••• E • • #

0) US5124535A – CONTROL STATION FOR DATA CARRIERS

24) Family number: 30419253 (US5124535A) © PatBase

Title: CONTROL STATION FOR DATA CARRIERS

Priority:

AT19860002818	19861023	AT19860002819	19861023	AT19860002820	19861023
AT19860002828	19861023	US19910623969	19910208	US19920911269	19920707
US19890392534	19890623	AT19880001987	19880808	AT19880002743	19881109
WO1989AT00068	19890802	US19940302229	19940908	US19920983975	19921201
US19920918881	19920723	WO1987AT00059	19871016	WO1987AT00060	19871016

Family:

Publication number	Publication date	Application number	Application date
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AT281886 A	19900315	AT19860002818	19861023
AT281986 A	19900315	AT19860002819	19861023
AT282086 A	19900315	AT19860002820	19861023
AT391373 B	19900925	AT19860002818	19861023
AT391374 B	19900925	AT19860002819	19861023
AT391375 B	19900925	AT19860002820	19861023
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AT67875 E	19911015	AT19870906556T	19871016
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DE3773392 D1	19911031	DE19873773392	19871016
DE58901713 D1	19920723	DE19895001713	19890802
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EP0327541 B1	19910925	EP19870906556	19871016
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WO8803296 A1	19880505	WO1987AT00060	19871016
WO9001731 A1	19900222	WO1989AT00068	19890802

Probable Assignee: SKIDATA AG

Assignee(s):(std)**:** SKIDATA COMPUTER GES MBH ; SKIDATA COMPUTER GMBH ; SKIDATA GMBH

Assignee(s): SKIDATA COMPUTERHANDELSGESELLSCHAFT MBH ; SKIDATA COMPUTERHANDELSGESELLSCHAFT MBH UNTERSBERG ; SKIDATA COMPUTERHANDELSGESELLSCHAFT M B H ; SKIDATA COMPUTERHANDELSGESELLSCHAFT MBH A CORP OF ; SKIDATA COMPUTERHANDELSGESELLSCHAFT MBH A CORP OF AUSTRIA ; SKIDATA COMPUTER GESELLSCHAFT M B H ; SKIDATA COMPUTER GESELLSCHAFT MBH ; SKIDATA AG ; SKIDATA COMPUTER GES ; SKIDATA COMPUTER GES M B H GARTENAU ST LEONHARD AT

Inventor(s):(std)**:** GRUBER ROBERT ; KOCZNAR WOLFRAM ; WALLERSTORFER KURT

Inventor(s): KOCZNAR WOLFRAM A 6020 INNSBRUCK AT ; GRUBER ROBERT A 5020 SALZBURG AT

Designated states: AT BE CH DE FI FR GB IT JP LI LU NL NO SE US

International class (IPC 8–9): G04B37/14 G06K17/00 G06K7/00 G06K7/08 G06K7/10 G07B11/00 G07B15/00 G07B15/02 G07B15/04 G07C9/00 G07C9/02 G07F7/08 G12B9/08 H04B7/26 (Advanced/Invention); G04B37/14 G12B9/00 (Core/Invention)

International class (IPC 1–7): A45F5/02 G04B37/14 G06K17/00 G06K5/00 G07B11/00 G07B15/00 G07B15/04 G07C9/00 G07C9/02 G07F7/08 G12B9/08 H04B7/26

CPC: G06K7/0008 G06K7/084 G06K7/1097 G06K19/07703 G06K19/07762 G06Q20/363 G07B15/04 G07C9/00111 G07C9/02 G07F7/0866 G04B37/1446

European class: G04B37/14C G06K19/077A2 G06K19/077T3D G06K7/00E G06K7/08C2D G06K7/10S9T G06Q20/363 G07B15/04 G07C9/00B10 G07C9/02 G07F7/08C

US class: 235/375 235/380 235/382 235/382.5 235/384 340/5.61 340/825.31

Classification Explorer

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Forward Citations: WO9938122, WO9740475, WO9601459, WO9516245, WO9425939, WO9422115, WO9415316, WO9415316, WO9409450, WO9003016, WO10044041, WO06091153, WO0227669, WO0033258, USRE35992, US9697650, US9686241, US9608929, US9558487, US9477820, US9248298, US9244434, US9218600, US9218498, US9202180, US9147170, US9094058, US8954344, US8825517, US8818312, US8781905, US8781904, US8732033, US8676615, US8538856, US8533011, US8463630, US8463627, US8447639, US8346857, US8346580, US8315918, US8294549, US8204770, US8176177, US8131572, US8081803, US8078483, US8073765, US7991479, US7979291, US7949595, US7945463, US7865379, US7778853, US7769673, US7747507, US7720746, US7702538, US7698210, US7647269, US7584123, US7045293, US7000827, US6929175, US6897016, US6837422, US6836843, US6646552, US6617960, US6507535, US6335906, US6310581, US6160788, US6145742, US6072402, US6019394, US5963149, US5890622, US5837982, US5661286, US5637848, US5570086, US5550361, US5504314, US5500515, US5498859, US5487459, US5473145, US5437901, US5382781, US5237164, US5181786, US5124535, US2013173357, US2011068165, US2009119213, US2009100728, US2007242569, US2007208666, US2006095344, US2005040226, US2005021450, US2005021365, US2005021364, US2004264638, US2004249714, US2004183907, US2004174614, US2003234287, US2003093387, US2002034978, SG95575, JP5122137, JP4000692, JP3252897, GR88100588, GR880100588, GB2434659, FR2754084, FR2702065, FR2697362, FR2642870, FR2642202, FR2640782, FR2636154, FR2620551, EP2781969, EP1845426, EP1734483, EP1575184, EP1236182, EP1191328, EP0919959, EP0833282, EP0788069, EP0733244, EP0621566, EP0613103, EP0589046, EP0496344, EP0428233, EP0380377, EP0330071, DE4336511, DE202014005230, DE19541634, BE1002724, AU755269, AT871, AT601, AT400775,

Abstract:
Source: US5124535A PCT No. PCT/AT87/00059 Sec. 371 Date Jun. 23, 1989 Sec. 102(e) Date Jun. 23, 1989 PCT Filed Oct. 16, 1987 PCT Pub. No. WO88/03295 PCT Pub. Date May 5, 1988.In order to control or identify an authorization of access, use is made of a control station which has two different read−write systems. The first unit is designed in particular for remote control of active date carriers comprising a microcomputer. The second read−write system is designed for the control of passive data carriers, on which the data are stored in a magnetic or optical form. Preferably both read−write systems are provided with parallel outputs, to which a switching system is connected, which passes to the peripheral systems the output signals produced by means of the desired data carrier.

0) US2001003099A – EVALUATION OF RESPONSES OF PARTICIPATORY BROADC...

25) Family number: 30080313 (US2001003099A) © PatBase

Title: EVALUATION OF RESPONSES OF PARTICIPATORY BROADCAST AUDIENCE WITH PREDICTION OF WINNING CONTESTANTS; MONITORING, CHECKING AND CONTROLLING OF WAGERING, AND AUTOMATIC CREDITING AND COUPONING

Priority:

US19860837827	19860310	US19880192248	19880510	US19880192355	19880510
US19890424089	19891019	US19910776180	19911015	US19940179589	19940110
US19960615472	19960308	US19940226073	19940411	US19910763672	19910919
US19900603882	19901025	US19930025397	19930225	US19900604787	19901025
US20020205832	20020725	US19970986850	19971208	WO1994US01535	19940214
WO1999US10850	19990517	US19980088148	19980601		

Family:

Publication number	Publication date	Application number	Application date
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AU199940822 A5	20000105	AU19990040822	19990517
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US5759101 A	19980602	US19940226073	19940411
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US6443840 BB	20020903	US19980088148	19980601
WO9419906 A1	19940901	WO1994US01535	19940214
WO9966707 A2	19991223	WO1999US10850	19990517
WO9966707 A3	20030206	WO1999US10850	19990517

Probable Assignee: QUEST NETTECH CORP

Assignee(s):(std)**:** KOHORN H VON ; HENRY VON KOHORN ; RESPONSE REWARD SYSTEMS L C ; VON KOHORN HENRY

Assignee(s): RESPONSE REWARD SYSTEMS LC ; RESPONSE REWARDS SYSTEMS LC ; INTERTECH HOLDINGS LLC ; PRAGMATIC PATENT MANAGEMENT CO ; QUEST NETTECH CORP ; RESPNSE REWARD SYSTEMS LC

Inventor(s):(std): KOHORN HENRY VON ; VON KOHORN HENRY

Inventor(s): HENRY VON KOHORN ; KOHORN HENRY V

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW

International class (IPC 8–9): A63F11/00 A63F13/12 A63F3/08 A63F9/00 A63F9/18 A63F9/24 G07F17/32 G09B7/06 H04H20/28 H04H20/31 H04H20/38 H04H20/61 H04H20/62 H04H60/33 H04H60/45 H04H60/64 H04H60/68 H04H60/94 H04H9/00 H04N7/08 H04N7/088 (Advanced/Invention); A63F11/00 A63F13/12 A63F3/08 A63F9/00 A63F9/18 A63F9/24 H04H20/28 H04H20/31 H04H20/61 H04H20/62 H04H60/14 H04H60/33 H04H60/45 H04H60/94 (Advanced/Non–invention); A63F13/12 G07F17/32 G09B7/00 H04H1/00 H04N7/08 H04N7/087 (Core/Invention)

International class (IPC 1–7): A63B71/00 A63F13/00 A63F9/18 A63F9/22 A63F9/24 G06F15/28 G06F17/60 G07C13/00 G09B7/00 H04H9/00 H04N7/00 H04N7/08 H04N7/10

CPC: G07F17/3225 A63F13/338 G06Q30/02 G06Q30/0201 G06Q30/0212 G06Q30/0218 G06Q30/0225 G06Q30/0241 H04H60/14 G06Q30/0203 H04H60/68 G07F17/32 A63F9/18 A63F13/12 A63F2003/083 A63F2011/0095 A63F2300/409 A63F2300/638 G07F17/3202 G07F17/3227 G07F17/3248 G07F17/3262 G07F17/3295 G09B7/00 G09B7/063 H04H20/28 H04H20/31 H04H20/38 H04H20/61 H04H20/62 H04H60/33 H04H60/375 H04H60/45 H04H60/64 H04H60/94 H04H60/98 H04N7/08 H04N7/0806 H04N7/088 H04N7/0884

European class: A63F13/12 G06Q30/0201 G06Q30/0203 G06Q30/0212 G06Q30/0218 G06Q30/0225 G06Q30/0241 G07F17/32 G07F17/32C G07F17/32E2 G07F17/32K4 G07F17/32M2 G07F17/32P8 G09B7/00 G09B7/06B H04H20/26 H04H20/28 H04H20/38 H04H220/28 H04H260/64 H04H260/68 H04H60/26 H04H60/33 H04H60/37B H04H60/54 H04H60/60 H04H60/64 H04H60/68 H04H60/802 H04H60/94 H04H60/98 H04N7/08 H04N7/088D H04N7/08C K63F11/00Y10T4 K63F3/08E2Q K63F300/40T K63F300/63T K63F9/18 T04H20/262 T04H20/31 T04H20/61 T04H20/62 T04H20/69 T04H60/14 T04H60/26 T04H60/33 T04H60/36 T04H60/45 T04H60/802 T04H60/94 T04N7/088

US class: 273/138A 348/1 348/12 348/13 348/E07.024 348/E07.034 348/E07.039 348/E7.024 348/E7.034 348/E7.039 348/E70.24 348/E70.24S 348/E70.34 348/E70.34S 348/E70.39 348/E70.39S 358/84 358/86 364/402 364/405 364/412 379/72 379/92 379/92.01 434/323 455/2 455/4 455/4.2 455/42 455/5 455/5.1 455/51 463/16 463/16S 463/17 463/25 463/25P 463/40 463/40P 463/41 463/42 463/9 705/10 705/14 705/14.14 705/14.2 705/14.26 705/14.4 705/7.29 705/7.32 725/105 725/116 725/13 725/131 725/133 725/134 725/135 725/138 725/139 725/141 725/144 725/151 725/23 725/24 725/5 725/60 725/9 902/23

Classification Explorer

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US2002055883, US2002054088, US2002054078, US2002052838, US2002052780, US2002052779, US2002052776, US2002052752, US2002049975, US2002049967, US2002049909, US2002046162, US2002046121, US2002046095, US2002046049, US2002044066, US2002042914, US2002042751, US2002042282, US2002038257, US2002034980, US2002033365, US2002026346, US2002023272, US2002016964, US2002016737, US2002013950, US2002013173, US2002007371, US2002004739, US2002002487, US2001056376, US2001054003, US2001053998, US2001053686, US2001051540, US2001049627, US2001048439, US2001047291, US2001047252, US2001041977, US2001041612, US2001037293, US2001037211, US2001036858, US2001036272, US2001034741, US2001034654, US2001032125, US2001029477, US2001027467, US2001025252, US2001021915, US2001013123, US2001001145, TWI558188, NL1011141, KR100949483, KR100743584, JP4192608, JP2004229223, GB2479333, GB2440284, GB2440284, GB2405807, GB2386565, GB2363583, GB2362835, GB2353667, GB2353667, GB2326004, GB2326004, GB2302247, GB2302247, FR2865289, FR2826224, FR2814085, FR2775820, FR2754189, FR2739993, FR2658375, FR2647619, EP2317768, EP2299713, EP2265019, EP1929439, EP1856682, EP1833011, EP1622380, EP1535259, EP1434183, EP1434183, EP1431943, EP1431943, EP1417614, EP1410350, EP1359757, EP1351748, EP1345662, EP1343319, EP1320942, EP1277659, EP1265386, EP1195183, EP1155391, EP1139592, EP1109406, EP1054713, EP1034822, EP1019160, EP1008948, EP0974921, EP0964542, EP0921696, EP0921696, EP0904140, EP0835564, EP0833469, EP0809899, EP0783229, EP0769749, EP0686334, EP0613600, EP0474923, EP0399897, DE4309504, DE19909130, DE19819920, DE19819920, DE19547902, DE19547902, DE19523515, DE19523515, CZ299063, AU770698, AU766566, AU758616, AU758614, AU758608, AU686795, AU636842, AU636583, AU2004216690, AU2003200901, AU2003200901, AU2001287073,

Abstract:
Source: US2001003099A A system and method for evaluating responses to broadcast programs, such as television programs, include an instructional signal modulated onto a signal transmitted concurrently with the television program, simulcast, or time−multiplexed with a television. At each of a plurality of remote receiving stations, one or more members of a remote audience has the opportunity to respond to a situation presented in the television program by entering a response on a keyboard. The system includes response evaluation circuitry which may be located at a central facility or partially at the central facility and partially at each remote receiving station, or completely within a response unit at each remote receiving station, in the latter case the response unit having a memory responsive to the instructional signal for storing acceptable responses, a comparison circuit for comparing responses entered at the keyboard with those stored in the memory, circuitry for scoring responses in accordance with commands from the instructional signal, and a recording device for providing a permanent record of the audience score at the remote station. For conducting a sweepstakes, numbers or other responses are entered at the remote stations and are stored at a central facility for verification. The program may be presented live conducted by a host at a central station, or by a prerecorded message accessible by telephone from a remote station with regulation from a central station, and members of the remote audience may predict or select winning contestants.

0) DE8804446U1 –

26) Family number: 17594648 (DE8804446U1) © PatBase

Priority: DE19880004446U 19880402

Family:

Publication number	Publication date	Application number	Application date
DE8804446 U1	19880818	DE19880004446U	19880402

Probable Assignee: NSM APPARATEBAU GMBH AND CO KG 6530 BINGEN DE

Assignee(s): NSM APPARATEBAU GMBH AND CO KG 6530 BINGEN DE

International class (IPC 8–9): G07F17/34 (Advanced/Invention); G07F17/32 (Core/Invention)

International class (IPC 1–7): G07F17/34

CPC: G07F17/34

European class: G07F17/34

Classification Explorer

Abstract:
Source: DE8804446U1 (Claim 1) Muenzbetaetigtes Spielgerae@ ANSPRUECHE 1. Muenzbetaetigtes Spielgeraet mit in zwei Reihen uebereinander angeord– neten Klappkarten–Karussellen, deren Klappkarten abwechselnd nur auf der Vorderseite oder auf der Rueckseite ein spielmitentscheidendes Symbol tragen und die nach ihrer Durchwirbelung in eic.

Machine translation: (Claim 1) coin–operated game Gera @ CLAIMS first Spielgeraet with coin–operated in two rows one above the other arranged Neten Greeting cards, carousels, folding their cards alternately bear only on the front or the back of one spielmitentscheidendes symbol and the turbulence of their eic.

0) DE8900222U1 –

27) Family number: 17611788 (DE8900222U1) © PatBase

Priority: DE19890000222U 19890111

Family:

Publication number	Publication date	Application number	Application date
DE8900222 U1	19890323	DE19890000222U	19890111

Probable Assignee: FUCHS PETER 7500 KARLSRUHE DE

Assignee(s): FUCHS PETER 7500 KARLSRUHE DE ; WIESMAYER HANS PETER DIPL ING 7513 STUTENSEE DE

International class (IPC 8–9): G07F7/06 (Advanced/Invention); G07F7/00 (Core/Invention)

International class (IPC 1–7): A47F10/04 G07F17/10

CPC: G07F7/0618

European class: G07F7/06C

Classification Explorer

Forward Citations: AT502517,

Abstract:
Source: DE8900222U1 (Claim 1) 1. Muenzeinwurf–und Ruckgabegerat fuer Pfandmuenzen – zur Verwendung bei einer Gruppe von Handwagen, – mit einem Gehaeuse, – in welchem eine Muenzkammer vorgesehen ist, – mit einer loesbaren Haltevorrichtung zum Festhalten der Pfandmuenze in der Muenzkammer und zu deren Freigabe, und – mit einer Stromversorgungseinrichtung, dadurch gekennzeichnet, – dass als Haltevorrichtung (4) ein Elektromagnet (15) dient, – der einen beweglichen Anker (17) aufweist, welcher das Festhalten und die Freigal–a bewirkt, – dass der Anker (17) unter der Einwirkung eines Federelemen– tes (18) steht, und – dass die Erregung des Elektromagneten (15) durch ein elektri– aches Schaltorgan (23) geschieht, das zwischen der Stromver– sorgungseinrichtung (5) und der Stromspule (16) des Elektro– magneten (17) angeordnet ist.

Machine translation: (Claim 1) 1 Coin slot and Ruckgabegerat for Pfandmuenzen – for use in a group of hand–cart, – having a housing – in which a treasury of it is provided – with a removable retainer for retaining the Pfandmuenze in the treasury of and for their release, and – with a power supply device, characterized in that: – a holding device (4) an electromagnet (15) serves – which has a movable armature (17), which causes the detention and the Freigal–a, – that the armature (17) under the action of a Federelemen – tes (18) is, and – that the excitation of the electromagnet (15) by an electric aches switching element (23) happens, between the electricity supply device (5) and the current coil (16) of the electromagnet (17) is located.

0) US4949380A – RETURNED–VALUE BLIND SIGNATURE SYSTEMS

28) Family number: 3225681 (US4949380A) © PatBase

Title: RETURNED–VALUE BLIND SIGNATURE SYSTEMS

Priority: US19880260053 19881020 WO1989US04662 19891018

Family:

Publication number	Publication date	Application number	Application date
AT133822 E	19960215	AT19890912051T	19891018
AU198944866 A1	19900514	AU19890044866	19891018
DE68925584 D1	19960314	DE19896025584	19891018
DE68925584 T2	19960919	DE19896025584T	19891018
EP0439512 A1	19910807	EP19890912051	19891018
EP0439512 A4	19930224	EP19890912051	19891018
EP0439512 B1	19960131	EP19890912051	19891018
JP4502989 T2	19920528	JP19890511301T	19891018
US4949380 A	19900814	US19880260053	19881020
WO9004892 A1	19900503	WO1989US04662	19891018

Probable Assignee: VAN DETSAN NETWORKS LIABILITY CO LTD

Assignee(s):(std)**:** SECURITY TECHN CORP ; CHAUM DAVID

Assignee(s): DAVID CHAUM ; DIGICASH ACQUISTION CORP ; DIGICASH INC ; ECASH TECHNOLOGIES INC ; ECASH TECHNOLOGIES INC A CORP OF DELAWARE ; SECURITY TECHNOLOGY CORP ; INFOSPACE INC ; TECHNOLOGIES FOR INFORMATION AND ENTERTAINMENT ; TRILLIUM CORP ; RULOFF CAPITAL CORP ; IMP BANK ; EONE GLOBAL LP ; VAN DETSAN NETWORKS LTD ; VAN DETSAN NETWORKS LIABILITY CO LTD ; SECURITY TECHNOLOGY CORP CARSON CITY NEV US

Inventor(s):(std)**:** CHAUM DAVID

Inventor(s): CHAUM DAVID SHERMAN OAKS CA 91403 US ; DAVID CHAUM

Designated states: AT AU BB BE BF BG BJ BR CF CG CH CM DE DK FI FR GA GB HU IT JP KP KR LI LK LU MC MG ML MR MW NL NO RO SD SE SN SU TD TG

International class (IPC 8–9)**:** G06Q20/00 G06Q20/06 G06Q20/22 G06Q40/00 G07F7/10 H04L9/32 (Advanced/Invention); G06Q40/00 (Advanced/Non–invention); G06Q20/00 G06Q40/00 G07F7/10 H04L9/32 (Core/Invention)

International class (IPC 1–7)**:** H04K1/00 H04L9/00 H04L9/10 H04L9/12 H04L9/30 H04L9/32

CPC: H04L9/302 H04L9/3257 H04L2209/56 G06Q20/06 G06Q20/29 G07F7/1016

European class: G06Q20/06 G06Q20/29 G07F19/00C G07F7/10E H04L9/32S1

US class: 380/28 380/30

Classification Explorer

Cited documents: US4759064 A, US4759063 A, US4458109 A,

Forward Citations: WO9949404, WO9709688, WO9709688, USRE42892, US9398020, US9245266, US9177313, US9084218, US8959652, US8706618, US8635327, US8606900, US8600890, US8600889, US8600888, US8600887, US8583522, US8571952, US8566248, US8560451, US8554677, US8543507, US8527752, US8504704, US8468100, US8341036, US8260806, US8255325, US8185476, US8132715, US8117649, US8086532, US7917436, US7899712, US7837101, US7802718, US7793830, US7792705, US7699220, US7621444, US7617973, US7600677, US7597251, US7597248, US7591420, US7584363, US7575158, US7571850, US7551737, US7499875, US7370196, US7299352, US7272639, US7206763, US7162639, US7143062, US7143062, US7058808, US6945457, US6871276, US6868408, US6859795, US6487660, US6449599, US6446052, US6434238, US6415271, US6246996, US6205437, US6199051, US6195649, US6122625, US6119227, US6108644, US6049785, US6047887, US6047067, US6029150, US6028913, US5983207, US5963648, US5956400, US5953423, US5920629,

US5909492, US5898154, US5878140, US5832460, US5826241, US5806045, US5799087, US5781631, US5768385, US5764768, US5757917, US5712913, US5696827, US5668878, US5638445, US5604805, US5572590, US5521980, US5455407, US5453601, US5434919, US5420926, US5224162, US2015339318, US2010306830, US2010257111, US2009175442, US2008093443, US2008093440, US2008093439, US2008067239, US2008067238, US2008067234, US2008061135, US2008061133, US2008061132, US2008010298, US2007192435, US2007106570, US2006200425, US2006005263, US2006005020, US2005283443, US2005278536, US2005211764, US2005066171, US2005066164, US2005018852, US2003195857, US2002198829, US2002198798, US2002128983, EP2806597, EP2128828, EP1205889,

Abstract:
Source: US4949380A A payer party obtains from a signer party by a blind signature system a first public key digital signature having a first value in a withdrawal transaction; the payer reduces the value of the first signature obtained from the first value to a second value and provides this reduced−value form of the signature to the signer in a payment transaction; the signer returns a second digital signature to the payer by a blind signature system in online consummation of the payment transaction; the paper derives from the first and the second signature a third signature having a value increased corresponding to the magnitude of the difference between the first and the second values. Furthermore, the following additional features are provided: payments are unlinkable to withdrawals; a shop between the payer and signer can be kept from obtaining more value than desired by the payer; the first value need not be revealed to the signer or intermediary in the payment transaction; the returned difference can be accumulated across multiple payment transactions; and the returned difference can be divided between a plurality of payment transactions.

29) Family number: 8399962 (US5036472A) © PatBase

Title: Computer controlled machine for vending personalized products or the like

Priority: CA19892004839 19891207 CA19892121228 19891207 GB19890027726 19891207 CA19912033966 19910110 CA19912041298 19910426 CA19922073098 19920703 NZ19910236694 19910104 US19910735985 19910725 US19920864418 19920406 US19930060094 19930510 US19900602439 19901022 US19880282013 19881208 US19900514670 19900425

Family:

Publication number	Publication date	Application number	Application date
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AU199175978 A1	19920430	AU19910075978	19910426
AU199219397 A1	19931028	AU19920019397	19920702
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CA2033966 AA	19911026	CA19912033966	19910110
CA2033966 C	19991221	CA19912033966	19910110
CA2041298 AA	19920423	CA19912041298	19910426
CA2041298 C	19990223	CA19912041298	19910426
CA2073098 AA	19931007	CA19922073098	19920703
CA2121228 AA	19900609	CA19892121228	19891207
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US5561604 A	19961001	US19900602439	19901022	
US5993048 A	19991130	US19900514670	19900425	

Probable Assignee: HALLMARK CARDS INC

Assignee(s):(std)**:** HALLMARK CARDS

Assignee(s): HALLMARK CARDS INC ; FIRST PACIFIC EQUITY INC ; HALLMARK CARDS INC A CORP OF MISSOURI ; HALLMARK CARDS INC A CORP OF ; DOERFLINGER ARTHUR E ; BUCKLEY STEPHEN PHILIP ; DOERFLINGER ARTHUR EUGENE ; HOORUMAAKU KAAZU INC ; VANDEMARK MICHAEL L ; PFAHL KURT A ; ROBINSON RICHARD A ; HURLBURT JOHN H ; HURLBURT JOHN HOYT ; PFAHL KURT ALBERT ; ROBINSON RICHARD ALBERT ; VANDEMARK MICHAEL LYNN ; SCHUPP MICHAEL RAY ; MULLIN DAVID ALLAN ; YESKIE WALLACE ALLEN ; BANKS THOMAS B ; BANKS THOMAS BENTON ; BRIDON PLC ; BUCKLEY STEPHEN P

Inventor(s):(std)**:** DEBITSUDO ARAN MUURIN ; DOERFLINGER ARTHUR ; DOERFLINGER ARTHUR E ; DOERFLINGER ARTHUR EUGENE ; HURLBURT JOHN H ; HURLBURT JOHN HOYT ; JIYON HOITO HAARUBAATO ; BANKS THOMAS B ; BANKS THOMAS BENTON ; BUCKLEY STEPHEN P ; BUCKLEY STEPHEN PHILIP ; AASAA YUUJIIN DOUURUFURINGAA ; KAATO ARUBAATO PUFUARU ; LAUGHLIN DANIEL B ; MAIKERU REI SHIYUTSUPU ; MAIKERU RIIN BANDOMAAKU ; MAIKERU RIN BANDEMAAKU ; MULLIN DAVID A ; MULLIN DAVID ALLAN ; MULLIN DAVID ALLEN ; RICHIYAADO ARUBAATO ROBINSON ; ROBINSON RICHARD A ; ROBINSON RICHARD ALBERT ; SCHUPP MICHAEL R ; SCHUPP MICHAEL RAY ; PFAHL KURT A ; PFAHL KURT ALBERT ; SUTEFUAN FUIRITSUPU BAAKUREE ; SUTEIIBUN FUIRITSUPU BATSUKURE ; SUTEIIBUN FUIRITSUPU BATSUKURI ; TOOMASU BENTON BANKUSU ; TOOMASU BII BANKUSU ; UOORASU AREN IESUKII ; VAN DEN MOORTELE GUIDO ; VANDEMARK LYNN ; VANDEMARK MICHAEL L ; YESKIE WALLACE A ; YESKIE WALLACE ALLAN ; YESKIE WALLACE ALLEN ; VANDEMARK MICHAEL LYNN

Inventor(s): WALLACE ALLEN YESKIE ; SUTEIIBUN FUIRITSUPU BATSUKURII ; THOMAS B BANKS ; THOMAS BENTON BANKS ; SUTEIIBUN FUIRITSUPU BATSUKUREI ; RICHARD ALBERT ROBINSON ; STEPHEN PHILIP BUCKLEY ; NAME NOT GIVEN ; MICHAEL LYNN VANDEMARK ; MICHAEL RAY SCHUPP ; KURT ALBERT PFAHL ; ARTHUR DOERFLINGER ; ARTHUR EUGENE DOERFLINGER ; DAVID ALLAN MULLIN ; JOHN HOYT HURLBURT

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MCCARTHY TETRAULT LLP

Designated states: BE DE FR GB NL

International class (IPC 8–9): B41B27/28 B41J13/00 B41J5/30 B42D15/02 G06F15/00 G06F3/12 G06K17/00 G06K19/077 G06Q30/00 G06Q30/02 G07F11/00 G07F11/16 G07F11/70 G07F17/00 G07F17/26 G07F5/22 G07F9/00 (Advanced/Invention);
B41J13/00 B41J5/30 G06F3/12 G06K17/00 G06K19/077 G07F11/16 G07F11/70 G07F9/00 (Advanced/Non–invention);
B41B27/00 B41J13/00 B41J5/30 G06Q30/00 G07F11/70 G07F17/00 (Core/Invention)

International class (IPC 1–7): B41B27/28 B41J13/00 B41J2/525 B41J5/30 B41L39/16 B42D15/02 G06F15/00 G06F15/20 G06F15/21 G06F17/00 G06F17/60 G06F3/12 G06K17/00 G06K19/077 G06T1/00 G07F11/00 G07F11/16 G07F11/70 G07F17/00 G07F17/26 G07F17/42 G07F5/22 G07F9/00

CPC: G06Q30/02 G07F17/26

European class: G06F17/60B2 G06Q30/02 G07F17/26

US class: 347/110 347/2 364/468.24 364/478.01 364/479 364/479.03 364/479.05 364/479.06 395/161 700/213 700/233 700/234 700/235 700/236 705/27

Classification Explorer

Cited documents: WO9202909 A1, WO9106913 A1, WO9007166 A1, WO8300461 A1, USRE33316 E, USRE32115 E, US5383111, US5377095, US5283865, US5237496, US5235519, US5187797, US5172245, US5153825, US5146548, US5128861, US5119475, US5117283, US5113351, US5088586, US5088056, US5088052, US5072253,

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Forward Citations: WO9935322, WO9930260, WO9848365, WO9834515, WO9834515, WO9820447, WO9815909, WO9729446, WO9722080, WO9632813, WO9632682, WO9607146, WO9606403, WO9530961, WO9502867, WO9308535, WO9217851, WO9109385, WO11155575, WO06124605, WO06017261, WO05097639, WO04072727, WO04072727, WO03023565, WO03023565, WO03009168, WO0241166, WO02080020, WO0195269, WO0195269, WO0188641, WO0188641, WO0077982, WO0068750, WO0048144, WO0048143, USRE44791, USRE43656, USRE41543, USRE38353, USRE37929, USD663359, USD650443, USD551300, USD483407, US9684916, US9679114, US9648644, US9646339, US9615134, US9608583, US9607249, US9600601, US9594982, US9591340, US9584681, US9582954, US9580932, US9569911, US9569724, US9560221, US9558316, US9545808, US9545578, US9544451, US9542661, US9539515, US9536257, US9524368, US9513774, US9508038, US9507854, US9506272, US9495481, US9495465, US9489691, US9487968, US9460373, US9454280, US9451203, US9446599, US9436356, US9432529, US9430797, US9412417, US9403394, US9390577, US9348893, US9348822, US9338312, US9333788, US9324101, US9324064, US9323831, US9317586, US9313574, US9292999, US9292166, US9288529, US9286617, US9286294, US9280863, US9268830, US9243426, US9237244, US9235945, US9230381, US9219832, US9202209, US9197914, US9197767, US9191530, US9191529, US9185247, US9185246, US9183687, US9179020, US9171419, US9171316, US9168761, US9167109, US9165322, US9164661, US9154648, US9154647, US9152633, US9149727, US9148681, US9148530, US9143636, US9143635, US9137398, US9137397, US9131083, US9129328, US9124737, US9124736, US9124735, US9120326, US9113010, US9113009, US9113008, US9113007, US9110944, US9108430, US9106775, US9105142, US9104990, US9104699, US9100676, US9100516, US9088675, US9087164, US9083830, US9083829, US9076155, US9070075, US9060128, US9060081, US9055550, US9055221, US9049318, US9049132, US9047542, US9044965, US9041784, US9037580, US9036890, US9036626, US9036162, US9022841, US9015287, US9015286, US9013717, US8996162, US8988418, US8967361, US8959028, US8953178, US8953061, US8953060, US8948912, US8947679, US8947592, US8943051, US8937727, US8936196, US8934053, US8934027, US8928897, US8922791, US8922670, US8914147, US8913182, US8913151, US8913137, US8910876,

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Abstract:
Source: US5036472A A machine for vending greeting cards or other personalized or customized products includes audio and video presentations of available products and options available to a customer, provisions for payment and apparatus for automatic delivery of products. Base products such as preprinted forms are stored for selective transfer by a robot device to modifying apparatus such as a printer, modified products being delivered to a delivery receptacle, all operations being under computer control and being changeable as desired for adding or substituting new forms of products.

0) DE3900538A1 – COIN INSERTION AND RETURN ARRANGEMENT FOR DEPOS...

30) Family number: 7827193 (DE3900538A1) © PatBase

Title: Coin insertion and return arrangement for deposit coins

Priority: DE19893900538 19890111

Family:

Publication number	Publication date	Application number	Application date
DE3900538 A1	19900712	DE19893900538	19890111

Probable Assignee: WIESMAYR HANS PETER

Assignee(s):(std)**:** FUCHS PETER ; WIESMAYR HANS PETER

Assignee(s): WIESMAYR HANS PETER DIPL ING ; WIESMAYR HANS PETER DIPL ING 7513 STUTENSEE DE ; FUCHS PETER 7500 KARLSRUHE DE

Inventor(s):(std)**:** FUCHS PETER ; WIESMAYR HANS PETER DIPL ING

Inventor(s): FUCHS PETER 7500 KARLSRUHE DE

International class (IPC 8–9): G07F7/06 (Advanced/Invention)

International class (IPC 1–7): A47F10/04 G07F17/10

CPC: G07F7/0636

European class: G07F7/06C3

Classification Explorer

Forward Citations: WO9507518, WO9416414, WO9402916, WO04055743, US5655395, US5540316, US5328013, US5121823, FR3032299, FR2848323, FR2694111, EP2439704, EP1918889, EP1834858, EP0643372, EP0598142, EP0536611, EP0518094, EP0513661, DE202009015317, DE19917216,

Abstract:
Source: DE3900538A1 Trolleys available in supermarkets for goods transport or on stations for suitcases are usually left standing at the unloading point by the customers or travellers and no longer returned to the collecting station. The continual recovery of these trolleys necessitates additional labour. Such trolleys are therefore often lined up interlocked with one another at the collecting station and released only in return for the insertion of a deposit coin. A disadvantage of this is that customers or travellers cannot do their shopping or transport their luggage if they do not have a suitable coin to hand. So that trolleys can initially be used even without a deposit coin and, nevertheless, in order to guarantee their return by the customers or travellers, there are provided on the trolleys coin insertion and return arrangements for deposit coins which have a releasable holding device 4 for the deposit coin 3 in a coin chamber 2. This holding device 4 is an electromagnet 15 which is provided with a longitudinally displaceable armature 17 and the excitation of which takes place by means of an electrical switching member 23 in the form of an infrared receiver device by an external infrared transmitter 25 which is arranged at the collecting station. The deposit coin 3 subsequently inserted at a later time is returned only when the trolley enters the local transmission range. The coin insertion and return arrangement is particularly suitable for shopping trolleys and for suitcase carts... Original abstract incomplete.

0) DE8906493U1 –

31) Family number: 17649890 (DE8906493U1) © PatBase

Priority: DE19890006493U 19890526

Family:

Publication number	Publication date	Application number	Application date
DE8906493 U1	19900920	DE19890006493U	19890526

Probable Assignee: FUCHS PETER 7500 KARLSRUHE DE

Assignee(s): FUCHS PETER 7500 KARLSRUHE DE ; WIESMAYR HANS PETER DIPL ING 7513 STUTENSEE DE

International class (IPC 8–9): G07F7/06 (Advanced/Invention); G07F7/00 (Core/Invention)

International class (IPC 1–7): B62B5/00 G07F17/10

CPC: G07F7/0618

European class: G07F7/06C

Classification Explorer

Forward Citations: DE19541258,

Abstract:
Source: DE8906493U1 (Claim 1) Peter F u c h s Hans–Peter W i e s m a y r Vorrichtung zum Rueckfuehren @on Handwagen Ansprueche 1. Vorrichtung zum Rueckfuehren von auf einer Verkehrsflaeche verwendbaren Handwagen nach ihrer Benutzung zu wenigstens einer Sammelstation, – welche gleich ausgebildet und in eine platzsparende Stapel– position ineinander schiebbar sind, – mit einem an jeden Handwagen angebauten Muenzeingabe– und –rueckgabegeraet fuer Pfandmuenzen, – das ein Gehaeuse besitzt, – in dem eine Aufnahme zum Einfuehren eines an einem anderen Handwagen oder an einer Sammelstation befestigten Steckers vorgesehen ist, dadurch g e k e n n z e i c h n e t, dass – mit einem in die Aufnahme (11) eingefuehrten Stecker (6) die Rueckgabe der Pfandmuenze (19) bewerkstelligt wird, – das Muenzeingabe– und –rueckgabegeraet (3) ein bewegliches Rueckhalteorgan (18) aufweist, – ein Riegel mit dem Rueckhalteorgang (18) zusammenarbeitet, – auf der Verkehrsflaeche (20) wenigstens eine Fangvorrich– tung (4) fuer die Handwagen (1) angeordnet ist, – die Fangvorrichtung (4) mit dem Rueckhalteorgan (18) in Wirkverbindung tritt, wenn vor Annaeherung des Hand– wagens (1) an die Fangvorrichtung (4) keine Pfandmuenze (19) i@ das Muenzeingabe– und –rueckgabegeraet (3) eingegeben ist.

Machine translation: (Claim 1) Peter F UCHs Hans–Peter W iesmayr device for repatriation @ on handcarts claims 1 Device for the repatriation of Verkehrsflaeche to a usable trolleys after use at least one collecting station – which the same design and in a space–saving stack position are slid into each other – with a built–in every hand cars Muenzeingabe–and–rueckgabegeraet for Pfandmuenzen, – the one housing has, – in which a receptacle is provided for introducing a fixed to a different cart or at a collection station connector, characterized in that – with one in the recording (11) is led connector (6) to return the Pfandmuenze (19) achieved is – the Muenzeingabe–and–rueckgabegeraet (3) having a movable Rueckhalteorgan (18), – a tie with the Rueckhalteorgang (18) works, – on the Verkehrsflaeche (20) at least one Fangvorrich processing (4) for the hand car (arranged 1), – the safety gear (4) with the Rueckhalteorgan (18) operatively connected to occur if before the approach of the hand–car (1) of the catching device (4) no Pfandmuenze (19) i @ the Muenzeingabe–and–rueckgabegeraet (3) is entered.

32) Family number: 29422788 (US4977595A) © PatBase

Title: METHOD AND APPARATUS FOR IMPLEMENTING ELECTRONIC CASH

Priority: CA19902013368 19900329 JP19890081571 19890403 US19900500555 19900328 JP19900088838 19900403 JP19890122944 19890518 JP19890122945 19890518

Family:

Publication number	Publication date	Application number	Application date
CA2013368 AA	19901003	CA19902013368	19900329
CA2013368 C	19950110	CA19902013368	19900329
DE69009274 D1	19940707	DE19906009274	19900329
DE69009274 T2	19950112	DE19906009274T	19900329
EP0391261 A2	19901010	EP19900106071	19900329
EP0391261 A3	19911009	EP19900106071	19900329
EP0391261 B1	19940601	EP19900106071	19900329
JP2027713 C3	19960226	JP19900088838	19900403
JP3073065 A2	19910328	JP19900088838	19900403
JP7052460 B4	19950605	JP19900088838	19900403
US4977595 A	19901211	US19900500555	19900328

Probable Assignee: NIPPON TELEGRAPH AND TELEPHONE

Assignee(s):(std)**:** NIPPON TELEGRAPH AND TELEPHONE ; NIPPON TELEGRAPH AND TELEPHONE CORP

Assignee(s): NIPPON TELEGRAPH AND TELEPHONE CORP TOKIO TOKYO ; NIPPON TELEGRAPH AND TELEPHONE CORP TOKIO TOKYO JP ; OHTA KAZUO ; OKAMOTO TATSUAKI ; NIPPON TELEGRAPH AND TELEPHONE 1 6 UCHISAIWAI CHO ; NIPPON TELEGRAPH AND TELEPHONE 1 6 UCHISAIWAI CHO 1 CHOME CHIYODA KU TOKYO JAPAN A CORP OF JAPAN CORP ; NIPPON TELEGRAPH AND TELEPHONE CO ; NIPPON TELEGR AND TELEPH CORP ; NIPPON TELEGR AND TELEPH CORP NTT

Inventor(s):(std)**:** OHTA KAZUO ; OKAMOTO TATSUAKI ; OTA KAZUO

Inventor(s): OKAMOTO TATSUAKI YOKOSUKA SHI KANAGAWA JP ; OKAMOTO TATSUAKI YOKOSUKA SHI KANAGAWA ; OHTA KAZUO ZUSHI SHI KANAGAWA JP ; OHTA KAZUO ZUSHI SHI KANAGAWA

Agent(s): KIRBY EADES GALE BAKER

Designated states: DE FR GB

International class (IPC 8–9)**:** G06F19/00 G06Q20/00 G06Q20/40 G06Q40/00 G06Q40/02 G07D9/00 G07F7/00 G07F7/10 G09C1/00 H04L9/32 (Advanced/Invention); G06F19/00 G06Q40/00 G07D9/00 G07F7/00 G09C1/00 (Core/Invention)

International class (IPC 1–7)**:** G06F15/30 G06F19/00 G07D9/00 G07F7/00 G07F7/10 G09C1/00 H04L9/30

CPC: H04L9/302 H04L9/321 H04L9/3257 H04L2209/56 G06Q20/06 G06Q20/0855 G06Q20/29 G06Q20/3678 G06Q20/3825 G07F7/1016

European class: G06Q20/06 G06Q20/0855 G06Q20/29 G06Q20/3678 G06Q20/3825 G07F19/00C G07F7/10E H04L9/32S1

US class: 235/379 235/381 340/5.41 340/825.31 340/825.34 380/24 380/30 705/69 705/78 713/173 713/180

Classification Explorer

Cited documents: US4926480 A, US4914698 A, US4759064 A, US4759063 A, EP0348812 A2,

Forward Citations: WO9813795, WO9602890, WO9210901, WO04049273, USRE43599, USRE42892, USRE42163, USRE41657, USD760256, USD759690, USD759689, US9697568, US9684905, US9665854, US9654541, US9635177, US9633322, US9607336, US9565186, US9542682, US9542553, US9536263, US9489694, US9477737,

US9443268, US9419951, US9406085, US9400589, US9256904, US9245270, US9245260, US9235841, US9230283, US9147042, US9053479, US8971519, US8931058, US8904181, US8898086, US8856894, US8831205, US8775284, US8744956, US8725607, US8635327, US8630942, US8612342, US8608059, US8606900, US8600890, US8600889, US8600888, US8600887, US8600830, US8595502, US8583522, US8582753, US8571952, US8566247, US8560451, US8554684, US8554677, US8543507, US8494963, US8490871, US8489483, US8448254, US8418915, US8407782, US8407145, US8392306, US8392273, US8381969, US8355956, US8352373, US8352328, US8341036, US8341028, US8332279, US8332278, US8300798, US8244629, US8229844, US8204826, US8190513, US8160988, US8145567, US8132715, US8073773, US8060426, US8024810, US8024269, US8019678, US8010451, US8005777, US7986785, US7979354, US7979348, US7970722, US7970701, US7970652, US7916858, US7894595, US7865427, US7837101, US7831477, US7827109, US7814009, US7802718, US7801817, US7793830, US7792749, US7792705, US7778901, US7752084, US7739168, US7734923, US7730324, US7730323, US7730314, US7730312, US7730311, US7730310, US7729996, US7707408, US7702908, US7702540, US7699220, US7689826, US7676432, US7676034, US7669055, US7657484, US7647243, US7621444, US7617973, US7613633, US7600677, US7597251, US7597248, US7591420, US7587368, US7584358, US7575158, US7571850, US7567909, US7526448, US7523495, US7478239, US7469339, US7447914, US7403922, US7395243, US7383447, US7376629, US7376621, US7333953, US7328189, US7325132, US7302415, US7272639, US7269253, US7254557, US7249099, US7249060, US7222097, US7206763, US7181017, US7177838, US7143062, US7143062, US7096192, US7096003, US7058808, US7028187, US7024560, US7023979, US7010512, US6945457, US6868408, US6859795, US6834796, US6805289, US6795919, US6761319, US6742715, US6742120, US6741991, US6736325, US6678664, US6659354, US6615348, US6575372, US6560581, US6539364, US6488211, US6449717, US6449599, US6415271, US6411942, US6385723, US6356935, US6336095, US6328217, US6324525, US6299062, US6260027, US6220510, US6205437, US6199051, US6195649, US6175921, US6164549, US6144988, US6122625, US6088797, US6085321, US6078902, US6076078, US6058381, US6049785, US6047887, US6047067, US6042002, US6029887, US6029154, US6016484, US6014646, US6003765, US5996076, US5983207, US5974148, US5969967, US5963648, US5953423, US5936541, US5926548, US5920629, US5909492, US5898154, US5889862, US5884277, US5878138, US5872844, US5845256, US5832089, US5799087, US5793302, US5724424, US5715314, US5671285, US5646998, US5623547, US5621797, US5619570, US5555303, US5524073, US5511121, US5455407, US5453601, US5436971, US5267314, US5245657, US5224162, US5175682, US5163098, US2010299257, US2010217691, US2010211503, US2009287606, US2008282331, US2008281743, US2008222046, US2008195551, US2008147506, US2008093443, US2008093440, US2008093439, US2008067239, US2008067238, US2008067234, US2008061135, US2008061133, US2008061132, US2007233599, US2007121840, US2007118317, US2007106570, US2006195397, US2006195396, US2006116960, US2006085328, US2006064377, US2005211764, US2005209965, US2005119971, US2005010483, US2004225573, US2004186996, US2004139011, US2004139009, US2004139005, US2004139004, US2004133515, US2004133513, US2004133509, US2004104097, US2004088255, US2004088235, US2004039919, US2004030615, US2003120936, US2002190123, US2002111907, US2002107790, US2002101984, US2002097715, US2002087468, US2002082962, US2002025797, US2002004779, US2002002538, US2001049655, JP9319808, JP9305683, JP9153103, JP9006880, JP6162059, JP5020344, JP4510392, JP4367070, JP4367070, JP3435677, JP3388566, JP3329438, JP3329432, JP3329431, JP2879792, JP2631781, JP2631776, JP2006121687, JP2003338816, JP10124597, JP10083426, GB2317790, GB2317790, FR2735261, EP1396824, EP0887776, EP0772165, EP0747867, EP0746923, EP0704785, EP0678836, EP0518365,

Abstract:
Source: US4977595A In an electronic cash implementing method, a user makes a bank apply a blind signature to user information Vi produced, by a one−way function, from secret information Si containing identification information, thereby obtaining signed user information. Further, the user makes the bank apply a blind signature to information containing authentication information Xi produced, by a one−way function, from random information Ri, thereby obtaining signed authentication information. The user uses an information group containing the signed user information, the signed authentication information, the user information and the authentication information, as electronic cash for payment to a shop. The shop verifies the validity of the signed user information and the signed authentication information, and produces and sends to the user an inquiry. In response to the inquiry the user produces a response Yi by using secret information and random information and sends it to the shop. Having verified the validity of the response the shop accepts the electronic cash.

0) DE3917172A1 – HAND TROLLEY RETURN SYSTEM USING COIN DEPOSIT–R...

33) Family number: 7927975 (DE3917172A1) © PatBase

Title: Hand trolley return system using coin deposit–return devices – has trapping devices at collection points preventing removal of trolleys without insertion of coin

Priority: DE19893917172 19890526

Family:

Publication number	Publication date	Application number	Application date
DE3917172 A1	19901129	DE19893917172	19890526

Probable Assignee: WIESMAYR HANS PETER

Assignee(s):(std)**:** FUCHS PETER ; WIESMAYR HANS PETER ; WIESMAYR HANS PETER DIPL ING

Assignee(s): WIESMAYR HANS PETER DIPL ING 7513 STUTENSEE DE ; FUCHS PETER 7500 KARLSRUHE DE

Inventor(s):(std)**:** FUCHS PETER ; WIESMAYR HANS PETER DIPL ING

Inventor(s): WIESMAYR HANS PETER DIPL ING 7513 STUTENSEE DE ; FUCHS PETER 7500 KARLSRUHE DE

International class (IPC 8–9): G07F7/06 (Advanced/Invention); G07F7/00 (Core/Invention)

International class (IPC 1–7): A47F10/04 B62B5/00 G07F17/10

CPC: G07F7/0618

European class: G07F7/06C

Classification Explorer

Forward Citations: WO9416414, US5425438, EP0610586, EP0536611, EP0518094,

Abstract:
Source: DE3917172A1 The trolley return system has coin entry and return devices for deposit coins on all trolleys. A housing has an aperture (11) which accepts a plug–in device (6) on another trolley or on the collection station. Insertion of the plug–in device into the aperture causes the coin to be released. A movable retention element (18) operates in conjunction with a latch. An trapping device fixed to the ground interacts with the retention element if no coin has been inserted before the trolley reaches it. USE/ADVANTAGE – Shopping and luggage trolleys. Reliable, simple operation.

0) US5045656A – SWITCH PROVIDED WITH INDICATOR

34) Family number: 16412063 (US5045656A) © PatBase

Title: Switch provided with indicator

Priority: JP19890079750U 19890705 JP19890080676U 19890707 JP19890267633 19891013

Family:

Publication number	Publication date	Application number	Application date
DE68927888 D1	19970424	DE19896027888	19891109
DE68927888 T2	19970814	DE19896027888T	19891109
EP0406496 A2	19910109	EP19890311580	19891109
EP0406496 A3	19911121	EP19890311580	19891109
EP0406496 B1	19970319	EP19890311580	19891109
JP2063528 C3	19960624	JP19890267633	19891013
JP2105031 Y	19970224	JP19890079750U	19890705
JP2109076 Y	19970321	JP19890080676U	19890707
JP3019224 U1	19910226	JP19890079750U	19890705
JP3020837 U1	19910228	JP19890080676U	19890707
JP3127296 A2	19910530	JP19890267633	19891013
JP7024754 Y2	19950605	JP19890079750U	19890705
JP7029534 Y2	19950705	JP19890080676U	19890707
JP7086942 B4	19950920	JP19890267633	19891013
US5045656 A	19910903	US19890433943	19891109

Probable Assignee: IDEC IZUMI CORP

Assignee(s):(std)**:** IDEC IZUMI CORP

Assignee(s): IDEC IZUMI CORP OSAKA JP

Inventor(s):(std)**:** KOJIMA HISANAO

Inventor(s): KOJIMA HISANAO AMAGASAKI SHI JP

Designated states: DE FR GB

International class (IPC 8–9)**:** B41J29/00 B41J29/42 G07F9/00 H01H13/20 H01H21/00 H01H21/24 H01H9/18 (Advanced/Invention); H01H1/58 H05K1/18 (Advanced/Non–invention); B41J29/00 B41J29/42 G07F9/00 H01H21/00 (Core/Invention)

International class (IPC 1–7)**:** B41J29/00 B41J29/42 G07F9/00 H01H13/20 H01H21/00 H01H21/02 H01H21/24 H01H9/16 H01H9/18

CPC: H01H1/5805 H01H9/181 H01H13/20 H01H21/24 H01H2001/5816 H05K1/18

European class: H01H13/20 H01H21/24 H01H9/18B T01H1/58B T01H1/58B2 T05K1/18

US class: 200/314 200/332.1

Classification Explorer

Cited documents: WO8807754 A1, WO8606872 A1, US3796452 A, JP64082421 A2, JP5036888 A2, GB2168850 A1, EP0283052 A2, DE3706681 A1, DE3435609 A1,

Forward Citations: WO9959176, WO06058021, WO0115186, USD562779, US8494663, US8152547, US8146227, US8109776, US8056226, US8038457, US7963782, US7958631, US7950940, US7950939, US7937169, US7909635, US7905735, US7901227, US7893645, US7887008, US7883356, US7878849, US7862354, US7854620, US7827810, US7811113, US7762737, US7723935, US7695291, US7670162, US7666012, US7661979, US7633741, US7632120, US7601004, US7578682, US7572133, US7568927, US7494355, US7414216, US7182647, US7041922, US6765159, US6075214, US6010742, US5950808, US5892192, US5844362, US5647478, US5398783, US5146057, US2010213800, US2010187080, US2008078871, US2008078870, US2008078869, US2008078868, US2008071398, US2008055836, US2007018043, US2006152481, US2006110983, US2006021359, US2005109592,

JP2002279500, GB2319895, GB2319895, FR2918499, EP1168395, EP1091376, EP0762449, EP0762449, EP0587056, AU2005309656,

Abstract:
Source: US5045656A A built−in indicator switch unit include an indicator and a switch within a casing so that the switch is operated by a pushing operation applied to a light−transmissible operation cover provided in the front side of the indicator. The switch is actuated by an operation mechanism which inverts the pushing force exerted on the operation cover to an opposite direction in response to the pushing operation applied to the operation cover. The indicator and switch are attached to a printed circuit board arranged in the casing, substantially in parallel to the front surface of the casing and projecting out at one end from the casing.

0) ZA9010211A – APPARATUS FOR CLASSIFYING BANKNOTES AND THE LIK...

35) Family number: 2832681 (ZA9010211A) © PatBase

Title: APPARATUS FOR CLASSIFYING BANKNOTES AND THE LIKE

Priority: AT19890002895 19891220 WO1990AT00123 19901214 YU19900002382 19901218

Family:

Publication number	Publication date	Application number	Application date
AT289589 A	19920815	AT19890002895	19891220
AT395916 B	19930426	AT19890002895	19891220
AU199169181 A1	19910718	AU19910069181	19901214
AU648530 B2	19940428	AU19910069181	19901214
CN1028459 C	19950517	CN19901010076	19901220
CN1052741 A	19910703	CN19901010076	19901220
CS9006485 A3	19920415	CS19900006485	19901220
CZ281862 B6	19970312	CS19900006485	19901220
DE59004567 D1	19940324	DE19905004567	19901214
EP0506713 A1	19921007	EP19910900664	19910712
EP0506713 A1	19921007	EP19910900664	19901214
EP0506713 B1	19940209	EP19910900664	19910712
EP0506713 B1	19940209	EP19910900664	19901214
IE904539 A1	19910703	IE19900004539	19901217
PL288330 A1	19910812	PL19900288330	19901219
PT96260 A	19930129	PT19900096260	19901219
PT96260 B	19980731	PT19900096260	19901219
RU2072559 C1	19970127	SU19905052402	19901214
SI9012382 A	19980228	SI19900012382	19901218
SI9012382 B	19981031	SI19900012382	19901218
SK278841 B6	19980304	SK19900006485	19901220
WO9109380 A1	19910627	WO1990AT00123	19901214
YU238290 A	19941115	YU19900002382	19901218
ZA9010211 A	19911030	ZA19900010211	19901219

Probable Assignee: CARE TEC GMBH

Assignee(s):(std)**:** CARE TEC GESMBH ; CARE TEC GMBH

Assignee(s): KARE TEK GMBKH ; LITSCHEL DIETMAR ; CARETEC GES M B H ; CARETEC GES M B H WIEN AT ; CARETEC GESMBH ; CARE TEC G M B H ; CARE TEC GES M B H ; CARE TEC GES MBH ; CARE TEC GESELLSCHAFT M B H

Inventor(s):(std)**:** DIETMAR LITSCHEL ; LITSCHEL DIETMAR ; LITSCHEL DIETMAR DR

Inventor(s): LITSCHEL DIETMAR A 3400 KLOSTERNEUBURG AT ; DITMAR LICHEL'[AT] ; DITMAR LICHEL

Agent(s): FB RICE; FB RICE PTY LTD

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CM DE DK ES FI FR GA GB GR HU IT JP KP KR LI LK LU MC MG ML MR MW NL NO RO SD SE SN SU TD TG US

International class (IPC 8–9): G06K9/22 G07D7/00 G07D7/18 G07D7/20 G09B21/00 G09B21/02 (Advanced/Invention); G06K9/22 G07D7/00 (Advanced/Non–invention); G06K9/22 G07D7/00 G09B21/00 (Core/Invention)

International class (IPC 1–7): B07C5/04 G06K9/22 G07D7/00 G09B21/00

CPC: G09B21/003 G07D7/162

European class: G07D7/16B G09B21/00B3

Classification Explorer

Cited documents: US4563771 A, US4355300 A, US4187463 A, US3906449 A, US3725667 A, GB2147725 A1, FR2410855 A1,

Forward Citations: WO0034924, FR2824410, FR2822031, FR2817988, EP1255232, EP1138027,

Abstract:
A device for classifying bank notes and other sheets made of paper, plastic, metal or the like with at least two parallel edges comprises a limit stop for one of the two edges of the sheet to be classified and display and measurement elements fo determining the distance from the opposite parallel edge. To ensure reliable classification, the device comprises at least one foliar body (1) with a bending edge (4) parallel to the limit stop around which the sheet to be checked can be wrapped.

0) TW169105Y – RETENTION OF THE COIN AND CHOOSES A MINUTE EQUI...

36) Family number: 45136610 (TW169105Y) © PatBase

Title: Retention of the coin and chooses a minute equipment (Machine translation)

Family:

Publication number	Publication date	Application number	Application date
TW169105 Y	19910911	TW19910200867U	19890515

International class (IPC 8–9): G07D3/00 (Advanced/Invention); G07D3/00 (Core/Non–invention)

International class (IPC 1–7): G07D3/00

Classification Explorer

Abstract:
Source: TW169105Y

Machine translation: This creation is related is trading machine or the amusement machine automatically and so on, will invest the coin abeyance in the coin retention room, will decide coin of when the number by the investment will send out it to accept the signal, the opening path coin accepts the circuit to pass the mouth to open the blind flange, will let retain the hard alkene to accept the box through the coin; On the other hand by will also return the signal to lead to the coin to draw back talks back, take will carry on elects to divide holds moves and elects a minute equipment retention of as the possible coin. And, this creation about is also electing to be divided the equipment and other coin circuit passes the mouth, the general establishment passes the mouth to open the blind flange. Goal of the this creation is eliminating: Will have passes the mouth to open the blind flange to fish the dowel pin to fish is in harmony with ? stops the ditch, from this will pass the mouth to open the blind flange by to shut stops the displacement in position to when will open the position, must have the dismantle ? dowel pin with ? to stop the ditch ? to gather and so on to hold moves formerly question of the installment; Outside but will provide does not have ? the dowel pin by ? to stop the ditch to perform to unload and so on the movements, then will pass the mouth to open the blind flange by to shut stops the position to open the position immediately, smoothly does moves equipments and so on structure. Characteristic of the this creation is passes the mouth to open the blind flange ? the dowel pin links by way of the crank and the connecting rod in the electricity rasching ring the movable ferrite core, solves the above problem; And like the 2nd counter–3rd chart shows, will have the crank pin 25 crank 26 rotation axes 27, will become revolving in the side bar 1 supporting freely, and will be located shuts stops the position to pass the mouth to operate the blind flange 3 on ? dowel pins 12, position in process crank 26 rotation axes 27 and above crank pin 25 line a; 25 and ? the dowel pin 12 24 links the crank pin by the connecting rod. Goes a step further, 20 is maintained by the spring electricity of rasching ring 14 movable ferrite cores in the prominent position 16, links sells 28 to link in the circle plate–type crank 26 tenths is located by its rotation axis 27 leaves the position, again 16 shrinks into the movement by the movable ferrite core to cause crank 26 constitutions at the rotation axis 27 periphery reverse.

0) DE9400167U1 – PFANDMARKE UND PFANDMARKEN–HALTER INSBESONDERE ...

37) Family number: 17684852 (DE9400167U1) © PatBase

Title: PFANDMARKE UND PFANDMARKEN–HALTER INSBESONDERE ALS AUSLOESER FUER EINKAUFSWAGEN O.DGL. PAWN BRAND AND BRANDS OF PLEDGE HOLDER SPECIFICALLY as a trigger for CART or the like. (Machine translation)

Priority: DE19940000167U 19940107

Family:

Publication number	Publication date	Application number	Application date
DE9400167 U1	19940303	DE19940000167U	19940107

Probable Assignee: HUBER FERDINAND DIPL ING

Assignee(s):(std): HUBER FERDINAND DIPL ING

Assignee(s): HUBER FERDINAND DIPL ING 85435 ERDING DE

International class (IPC 8–9): A44C21/00 G07F1/06 (Advanced/Invention); A44C21/00 G07F1/00 (Core/Invention)

International class (IPC 1–7): G07F1/06 G07F17/00 G07F7/10

CPC: G07F7/0672 G07F1/06 A44C21/00

European class: A44C21/00 G07F1/06 S07F7/06C

Classification Explorer

Forward Citations: WO9526657, WO0008964, US6450538, US5589677, FR2781991, EP1024724, EP0733316, EP0627715, EP0627715,

Abstract:
Source: DE9400167U1 (Claim 1) 1. Pfandmarke und Pfandmarken–Halter insbesondere als Ausloeser fuer Einkaufswa– gen oder dergleichen, dadurch gekennzeichnet, dass die Pfandmarke und/oder der Pfandmarken–Halter aus mindestens zwei Materialien besteht.

Machine translation: (Claim 1) 1 Deposit token and pledge trademark holders in particular as a trigger for gene shopping trolley or the like, wherein the deposit mark and / or trademark holder of the deposit of at least two materials there.

0) US5409106A – COIN HOLDING TOOL

38) Family number: 17022955 (US5409106A) © PatBase

Title: Coin holding tool

Priority: JP19940000962U 19940222

Family:

Publication number	Publication date	Application number	Application date
JP3001283 U	19940823	JP19940000962U	19940222
KR0117583 Y1	19980601	KR19940005606U	19940319
US5409106 A	19950425	US19940289311	19940811

Probable Assignee: OKUDA MASAMICHI

Assignee(s):(std)**:** OKUDA MASAMICHI

Assignee(s): OKUDA NORIMICHI

Inventor(s):(std)**:** OKUDA MASAMICHI ; OKUDA NORIMICHI

International class (IPC 8–9)**:** A47G1/12 G07D9/00 G09F5/04 (Advanced/Invention); A47G1/00 G07D9/00 G09F5/00 (Core/Invention)

International class (IPC 1–7)**:** A45C1/00 G07D9/00

CPC: A47G1/12 G07D9/004 G09F5/04

European class: A47G1/12 G07D9/00C2 G09F5/04

US class: 206/08 206/081 206/8 206/81

Classification Explorer

Cited documents: US5353924 A, US4592465 A, US4309111 A, US4043477 A, US3964829 A, US3957157 A, US3837475 A, US3554625 A, US3333680 A, US2998126 A, US2556806 A, US1833037 A, US1719962 A,

Forward Citations: WO0216001, US5975393, US2008168626, US2006230202, JP4193498, JP2004225778, CN102298188, CN102298188,

Abstract:
Source: US5409106A A coin holding tool includes a rectangular frame with a slidable magnifier–loading platform, orthogonally disposed to and attachedly mounted thereon. The coin holding tool enables one to identify, arrange and preserve collected coins. Additionally, the means for loading a magnifier permits one to compare rare coins and distinguish and appreciate subtle differences in their respective appearances. A stand is also taught which enables the frame to be propped at an oblique angle.

39) Family number: 30249580 (US5521980A) © PatBase

Title: PRIVACY–PROTECTED TRANSFER OF ELECTRONIC INFORMATION

Priority: NL19930001348 19930802 NL19930002103 19931203 NL19939301348 19930802 NL19939302103 19931203 US19960598871 19960209 US19940203231 19940228 US19950521768 19950831 US19970792817 19970130 WO1994NL00179 19940801 WO1996NL00338 19960827

Family:

Publication number	Publication date	Application number	Application date
AU199477093 A1	19950228	AU19940077093	19940801
AU199667575 A1	19970319	AU19960067575	19960827
AU698271 B2	19981029	AU19940077093	19940801
CA2168658 AA	19960201	CA19942168658	19940801
EP0740872 A1	19961106	EP19940927852	19940801
JP9500977 T2	19970128	JP19950505757T	19940801
NL9301348 A	19950301	NL19930001348	19930802
NL9301348 A1	19950301	NL19930001348	19930802
NL9302103 A	19950703	NL19930002103	19931203
NL9302103 A1	19950703	NL19930002103	19931203
SG49828 A1	19980615	SG19960007030	19940801
US5521980 A	19960528	US19940203231	19940228
US5604805 A	19970218	US19960598871	19960209
US5668878 A	19970916	US19950521768	19950831
US5696827 A	19971209	US19970792817	19970130
WO9504417 A1	19950209	WO1994NL00179	19940801
WO9708870 A2	19970306	WO1996NL00338	19960827
WO9708870 A3	19970501	WO1996NL00338	19960827

Probable Assignee: MICROSOFT TECHNOLOGY LICENSING LLC

Assignee(s):(std)**:** BRANDS STEFANUS ALFONSUS ; STEFANUS ALFONSUS BRANDS ; STEFANUS ALFONSUS BRANDS INA BOUDIER BAKKERLAAN 14

Assignee(s): SOFIUS GREENHOUSE FUND LP ; ZERO KNOWLEDGE SYSTEMS INT INC ; STEFANUS ALFONSUS BRANDS INA BOUDIER BAKKERLAAN 143 III ; BRANDS STEFAN DR ; BRANDS STEFANUS A ; STE N BRANDS MILY TRUST FA ; ZERO KNOWLEDGE SYSTEMS INT ; REUTERS GREENHOUSE FUND LP ; STEFAN BRANDS FAMILY TRUST ; MICROSOFT CORP ; MICROSOFT TECHNOLOGY LICENSING LLC ; RADIALPOINT INC

Inventor(s):(std)**:** BRANDS STEFANUS A ; BRANDS STEFANUS ALFONSUS ; STEFANUS ALFONSUS BRANDS

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; NA

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TT UA UG US UZ VN

International class (IPC 8–9)**:** G06F7/72 G06Q10/00 G06Q20/00 G06Q20/06 G06Q20/36 G06Q20/38 G06Q40/00 G07F7/10 G09C1/00 H04L9/28 H04L9/30 H04L9/32 (Advanced/Invention); G06F7/72 G06Q10/00 G06Q40/00 G09C1/00 (Advanced/Non–invention); G06Q20/00 G07F7/10 H04L9/32 (Core/Invention); G06F7/60 (Core/Non–invention)

International class (IPC 1–7)**:** E01D18/00 E02B17/00 E04C3/12 G07F19/00 G09C1/00 H04L9/08 H04L9/28 H04L9/30 H04L9/32

CPC: H04L9/302 H04L9/3066 H04L9/3257 H04L2209/26 H04L2209/42 H04L2209/56 H04L9/3218 H04L9/3013 H04L9/3252 H04L9/3263 G06Q20/105 G06Q20/3672 G06Q20/06 G06F7/725 G06Q20/3678 G06Q20/381 G07F7/1016

European class: G06Q20/06 G06Q20/105 G06Q20/3672 G06Q20/3678 G06Q20/381 G07F19/00C G07F7/10E H04L9/30 H04L9/32 H04L9/32S1 S06F7/72F1

US class: 380/21 380/24 380/25 380/277 380/28 380/30 705/41 705/66 705/69 713/164 713/173 713/180

Classification Explorer

Cited documents: WO9525391 A1, WO8911762 A1, WO8908957 A1, USRE34954 E, US5606617 A, US5604801 A, US5521980 A, US5483597 A, US5475753 A, US5442707 A, US5434919 A, US5422953 A, US5418854 A, US5337360 A, US5276736 A, US5251258 A, US5241598 A, US5214702 A, US5164988 A, US5150411 A, US5046094 A, US5029208 A, US5005200 A, US4996711 A, US4949380 A, US4926480 A, US4914698 A, US4876716 A, US4868877 A, US4759064 A, US4759063 A, US4529870 A, US4458109 A, EP0381523 A2,

Forward Citations: WO9914880, WO9914880, WO9812828, WO9716903, WO9702679, WO9631034, WO14106781, WO14040717, WO09137927, WO06070682, WO05109141, WO05109141, WO05038635, WO05038635, WO05038634, WO05038634, WO04051923, WO02077754, WO02077754, WO0201794, WO0077642, USRE42762, US9684889, US9633210, US9590968, US9419951, US9419790, US9407434, US9361121, US9348767, US9282095, US9264232, US9183407, US9177313, US9165135, US9112732, US9087000, US9021572, US9009483, US8966278, US8924728, US8904181, US8892475, US8879724, US8855690, US8838502, US8832047, US8819437, US8818903, US8793487, US8788828, US8751752, US8671275, US8645688, US8639915, US8627489, US8627097, US8627077, US8600890, US8600889, US8600888, US8600887, US8600830, US8595143, US8595142, US8583522, US8571952, US8560451, US8554677, US8554607, US8549589, US8543772, US8543507, US8533777, US8526916, US8522044, US8515874, US8479301, US8472989, US8464313, US8463305, US8419533, US8407476, US8402276, US8396809, US8392716, US8386788, US8327147, US8286256, US8285647, US8226473, US8224893, US8219495, US8195914, US8185734, US8156343, US8150763, US8146078, US8132715, US8132714, US8122482, US8121871, US8108672, US8079034, US8037314, US8032466, US8014530, US8010451, US7995758, US7986779, US7984172, US7975002, US7958057, US7953636, US7941666, US7930757, US7925898, US7921293, US7904707, US7900017, US7882359, US7877605, US7877331, US7874916, US7861245, US7861097, US7844831, US7840962, US7837101, US7836275, US7828653, US7822689, US7822688, US7818808, US7814009, US7809957, US7805607, US7802718, US7802098, US7802085, US7801826, US7793830, US7793111, US7787620, US7784684, US7765163, US7765161, US7761916, US7743246, US7739521, US7734924, US7734553, US7730319, US7730314, US7729991, US7716128, US7699220, US7672662, US7668310, US7636844, US7634083, US7631196, US7624143, US7621444, US7620949, US7617973, US7610611, US7606560, US7600677, US7600108, US7597251, US7597248, US7591420, US7589726, US7587368, US7587044, US7584363, US7575158, US7571850, US7555287, US7546457, US7516330, US7506809, US7506165, US7492894, US7491122, US7490070, US7480806, US7454611, US7451305, US7424709, US7395435, US7395405, US7392415, US7389427, US7389250, US7370196, US7367889, US7366305, US7360094, US7360080, US7356817, US7356735, US7350227, US7340214, US7320642, US7318235, US7313669, US7311246, US7305592, US7302511, US7299352, US7296755, US7296267, US7290278, US7287197, US7272831, US7268773, US7266197, US7251633, US7237116, US7237051, US7225441, US7222362, US7222108, US7215781, US7207060, US7206803, US7206763, US7194760, US7194759, US7191440, US7181017, US7178041, US7177967, US7174368, US7151764, US7143062, US7143062, US7142674, US7139890, US7137140, US7127548, US7127548, US7124327, US7117376, US7111176, US7107447, US7103771, US7103313, US7102640, US7099471, US7096497, US7096365, US7089418, US7089417, US7082615, US7076802, US7076669, US7073042, US7072886, US7069443, US7069442, US7062043, US7062043, US7058808, US7058807, US7035963, US7028340, US7028149, US7024559, US7024555, US7020738, US7014106, US7013484, US6996748, US6996710, US6990579, US6976162, US6968334, US6957332, US6950948, US6945457, US6941458, US6938022, US6934817, US6934664, US6910132, US6907600, US6907476, US6859795, US6850996, US6796491, US6771597, US6745259, US6694387, US6684269, US6668375, US6609200, US6539364, US6415271, US6411942, US6366967, US6338140, US6324525, US6320966, US6298137, US6275587, US6243467, US6236981, US6209100, US6209095, US6175626, US6148084, US6131090, US6058483, US6055518, US6052467, US6032257, US6026163, US6016476, US6003765, US5983207, US5966445, US5946397, US5930362, US5901229, US5889862, US5878144, US5878140, US5864829, US5861662, US5835595, US5832089, US5812670, US5793753, US5712914, US5696827, US5682430, US5668878, US5615269, US5604805, US5581616, US2013276084, US2011131422, US2011131363, US2011022837,

US2010325445, US2010122315, US2010116880, US2010058076, US2010058075, US2010011049, US2009319434, US2009313474, US2009259845, US2009217042, US2009217041, US2009193506, US2009182673, US2009113529, US2009049300, US2009037727, US2009013190, US2009006805, US2009003596, US2008266264, US2008243703, US2008147563, US2008077531, US2008061134, US2008034214, US2008033884, US2008031461, US2008031457, US2007299920, US2007288764, US2007244833, US2007189519, US2007180108, US2007113077, US2007106892, US2007029376, US2007022375, US2007022058, US2006288407, US2006277607, US2006277146, US2006245590, US2006242408, US2006236371, US2006235703, US2006206709, US2006179320, US2006117181, US2006116968, US2006101288, US2006085647, US2006085359, US2006083370, US2006080528, US2006075402, US2006073788, US2006056621, US2006036857, US2006036791, US2006005084, US2006000890, US2005288056, US2005283660, US2005278536, US2005269406, US2005240700, US2005216920, US2005204132, US2005203966, US2005188198, US2005187873, US2005182940, US2005160273, US2005152539, US2005137898, US2005136837, US2005133582, US2005114610, US2005108534, US2005108532, US2005108171, US2005097441, US2005097061, US2005094805, US2005086508, US2005084098, US2005080970, US2005080965, US2005080934, US2005071840, US2005069135, US2005066171, US2005066164, US2005060702, US2005049082, US2005044292, US2005028009, US2005006457, US2004239649, US2004215798, US2004210770, US2004202132, US2004181756, US2004181540, US2004181517, US2004133782, US2004128549, US2004128528, US2004128469, US2004128345, US2004128171, US2004117625, US2004117593, US2004117532, US2004117436, US2004117318, US2004107170, US2004104097, US2004101139, US2004098350, US2004083182, US2004078590, US2004078576, US2004064813, US2004059925, US2004059677, US2004010788, US2004006657, US2004003324, US2004003323, US2004003321, US2004003273, US2003233550, US2003229794, US2003228842, US2003221105, US2003217250, US2003204693, US2003196100, US2003196096, US2003196088, US2003196083, US2003191943, US2003188165, US2003188113, US2003177051, US2003163723, US2003163711, US2003163699, US2003161472, US2003126454, US2003126453, US2003126442, US2003115453, US2003084346, US2003079122, US2003028423, US2003004937, US2002188589, US2002188574, US2002174364, US2002172358, US2002144140, US2002144121, US2002143885, US2002143842, US2002138341, US2002133396, US2002128980, US2002128978, US2002123970, US2002116229, US2002112156, US2002103999, US2002095608, US2002087877, US2002083332, US2002083110, US2002078358, US2002049681, US2002026419, US2002010864, US2002007457, US2001029496, KR100951094, KR100915768, GB2317790, GB2317790, FR2731534, EP2012248, EP1882330, EP1627319, EP0938790, EP0926637, EP0920752, EP0818095, EP0731580, DE10311634, AU724414,

Abstract:
Source: US5521980A Cryptographic apparatus and means are disclosed for each of three types of participants in an electronic system for privacy–protected transfer of certified information. This invention reveals protocols that improve efficiency and security in such systems, and allows a variety of useful extensions in functionality without difficulty. This is achieved by a restrictive blind signature protocol in combination with a testing protocol. The restrictive blind signature protocol allows the certifying party to encode data into certified information that it provides to a receiving party, such that it cannot be altered or modified by the receiving party. The testing protocol enables parties to prove a variety of characteristics about the encoded data in their certified information.

0) US5429507A – BRAILLE SLOT MACHINE

40) Family number: 12011692 (US5429507A) © PatBase

Title: BRAILLE SLOT MACHINE

Priority: US19940308858 19940919 US19950408241 19950322

Family:

Publication number	Publication date	Application number	Application date
US5429507 A	19950704	US19940308858	19940919
US5522728 A	19960604	US19950408241	19950322

Probable Assignee: LOT 48A ACQUISITION FOUNDATION LLC

Assignee(s):(std)**:** KAPLAN EDWARD B

Assignee(s): LOT 48A ACQUISITION FOUNDATION LLC

Inventor(s):(std)**:** KAPLAN EDWARD B

International class (IPC 8–9)**:** G07F17/34 G09B21/00 (Advanced/Invention); A63F9/00 (Advanced/Non–invention); G07F17/32 G09B21/00 (Core/Invention); A63F9/00 (Core/Non–invention)

International class (IPC 1–7)**:** A63F3/00 G09B21/02

CPC: Y10S273/27 G09B21/003 A63F2009/0004 G07F17/34

European class: G07F17/34 G09B21/00B3 K63F9/00A1B

US class: 273/138R 273/141R 273/142R 273/143R 273/DIG.27 434/112 434/113 434/114 434/117 463/20 463/30

Classification Explorer

Cited documents: US4974857 A, US4911449 A, US4758165 A, US4752772 A, US4664632 A, US4633121 A, US4222571 A, US3659354 A,

Forward Citations: WO9730768, WO14019802, WO14019801, WO09072993, US9633506, US9607469, US9600956, US9552686, US9530287, US9530284, US9514270, US9472063, US9466169, US9460583, US9293014, US9245407, US9192857, US9147310, US9135785, US9098973, US9098847, US9076306, US9070250, US9005001, US8998709, US8944909, US8911287, US8894495, US8888579, US8771051, US8740710, US8740689, US8727866, US8647194, US8641507, US8591308, US8574054, US8460094, US8460090, US8419524, US8408996, US8408990, US8371944, US8328623, US8277307, US8221218, US8137179, US8133055, US8075384, US8062119, US8043155, US8029358, US8016674, US7901291, US7892091, US7789756, US7789748, US7785191, US7744458, US7744372, US7708642, US7699699, US7695363, US7690983, US7666098, US7666083, US7604539, US7585219, US7578741, US7559837, US7526736, US7494412, US7476151, US7355112, US7341512, US7331868, US7258613, US7252591, US7105736, US7097457, US6991538, US6935955, US6902403, US6769985, US6547244, US6547242, US6159013, US6109922, US5934672, US5766014, US5695188, US2015371747, US2015317915, US2015287344, US2013011816, US2012071225, US2011117525, US2009005170, US2008300039, US2008268931, US2008227551, US2008227525, US2008176625, US2008119257, US2007006708, US2006287111, US2006189364, US2006163293, US2006068883, US2005054441, US2005054409, US2005051021, US2005037834, US2005032568, US2005003879, US2004242307, US2004235558, US2004229690, US2004209685, US2004110562, US2003106933, US2003079309, US2003073490, DE102012107132, DE102012107132, CN104508716, CN104508715, CN102479443, AU694584,

Abstract:
Source: US5429507A The present invention will utilize refreshing braille pins to form the symbols displayed on a slot machine. The braille pins will move vertically and independent of each other. A read only memory (ROM) will send the information to the braille pin cluster that will form the braille symbol. At this time of conception of the invention, the play of the slot machine will utilize one coin per play.

0) ES2078869A – AUTOMATIC SYSTEM FOR PROCESSING PAYMENT COLLECT...

41) Family number: 18802395 (ES2078869A) © PatBase

Title: Automatic system for processing payment collections and documents of value.

Priority: ES19930002000 19930922

Family:

Publication number	Publication date	Application number	Application date
CL1994001179 A1	19950808	CL19940001179	19940817
ES2078869 AB	19951216	ES19930002000	19930922
ES2078869 AC	19970216	ES19930002000	19930922
ES2078869 BA	19971016	ES19930002000	19930922

Probable Assignee: HART INFORMATICA S A

Assignee(s):(std)**:** HART INFORMATICA S A

Assignee(s): HART INFORMATICA SA

Inventor(s):(std)**:** LOPEZ JIMENEZ MIGUEL

Agent(s): HARNECKER

International class(IPC 8–9)**:** G06K9/00 G07D11/00 G07D13/00 G07D9/00 G07F17/42 G07F19/00 (Advanced/Invention); G06K9/00 G07D11/00 G07D9/00 G07F17/00 G07F19/00 (Core/Invention)

International class(IPC 1–7)**:** G06K9/00 G07D11/0 G07D9/00 G07F17/42 G07F19/00 G10L5/00

Classification Explorer

Cited documents: US4979211 A, ES2017360 AF, ES2017360 A2,

Forward Citations: ES2080683,

Abstract:
Automatic system for processing payment collections and documents of value. The purpose of this is to enable the payment of bills and the contracting of various services enabling payment by means of cheque, card or by personal identification using a fingerprint detector 22; capable of being used by a blind person through a microphone 24 and loudspeaker 25 connected to an electrical signal analysis circuit 23 included in a microcomputer 1. It also functions as an automatic cash dispenser. The microprocessor 1 is connected to a bar code reader 7, which may be an optical character or magnetic strip reader for reading bills or documents of value. This is connected to a banknote reader 8, to a banknote dispenser 10, to a coin reader 9, to a coin dispenser 11, and to an ISO card dispenser 13 for selling documents of value and enabling payment and effective collection.

0) US5511121A – EFFICIENT ELECTRONIC MONEY

42) Family number: 10705013 (US5511121A) © PatBase

Title: EFFICIENT ELECTRONIC MONEY

Priority: US19940201106 19940223 US19940303048 19940908 WO1995US02007 19950217

Family:

Publication number	Publication date	Application number	Application date
CA2182173 AA	19960726	CA19952182173	19950217
CA2182173 C	20010123	CA19952182173	19950217
EP0746923 A1	19961211	EP19950911025	19950217
EP0746923 A4	20001129	EP19950911025	19950217
JP9505169 T2	19970520	JP19950522392T	19950217
US5511121 A	19960423	US19940303048	19940908
WO9523465 A1	19950831	WO1995US02007	19950217

Probable Assignee: TELCORDIA TECHNOLOGIES INC

Assignee(s):(std)**:** BELL COMMUNICATIONS RES ; TELCORDIA TECH INC

Assignee(s): WILMINGTON TRUST CO ; TTI INVENTIONS C LLC ; WILMINGTON TRUST CO COLLATERAL AGENT AS ; YACOBI YACOV ; BELL COMMUNICATIONS RESEARCH INC ; JPMORGAN CHASE BANK NA ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; TELCORDIA LICENSING CO ; TELCORDIA LICENSING CO LLC ; TELCORDIA TECHNOLOGIES INC

Inventor(s):(std)**:** YACOBI YACOV

Agent(s): KIRBY EADES GALE BAKER

Designated states: AT BE CA CH DE DK ES FR GB GR IE IT JP LU MC NL PT SE

International class(IPC 8–9)**:** G06Q10/00 G06Q20/00 G06Q20/02 G06Q20/06 G06Q20/36 G06Q20/38 G06Q50/00 G07F19/00 G07F7/08 G09C1/00 H04L9/30 H04L9/32 (Advanced/Invention)

International class(IPC 1–7)**:** G06F19/00 G07F19/00 G09C1/00 H04K1/00 H04L9/30 H04L9/32

CPC: H04L9/3252 H04L9/3257 H04L9/3263 H04L2209/56 G06Q20/02 G06Q20/06 G06Q20/3678 G06Q20/3825 G06Q20/3829 G06Q20/383

European class: G06Q20/02 G06Q20/06 G06Q20/3678 G06Q20/3825 G06Q20/3829 G06Q20/383 G07F19/00C H04L9/32S1

US class: 380/23 380/24 380/30 705/69 705/74 713/156 713/180

Classification Explorer

Cited documents: US5299263 A, US5224162 A, US5222140 A, US5199070 A, US4977595 A, EP0391261 B1, EP0348812 A2, EP0139313 A2,

Forward Citations: WO9926207, WO9831120, WO9831120, WO9826385, WO9826385, WO9813795, WO9737461, WO09095747, WO07067350, WO03077473, WO02075679, WO02075679, USRE43599, USRE42163, USRE41657, USRE38070, US9684889, US9635177, US9621341, US9607292, US9530129, US9419951, US9245270, US9245260, US9235841, US9071445, US9009483, US8971519, US8904181, US8892475, US8831205, US8818903, US8793487, US8600889, US8600888, US8600887, US8600830, US8595502, US8583522, US8582753, US8571952, US8566247, US8560451, US8554684, US8554677, US8543507, US8522012, US8468100, US8457307, US8448254, US8407782, US8352373, US8321348, US8300798, US8275714, US8219474, US8132715, US8132714, US8121949, US8117125, US8069347, US8037314, US8032743, US8024810, US8019690, US8010451, US7986785, US7979354, US7916858, US7894595, US7837101, US7827109, US7802718, US7801817, US7793830, US7774609, US7765161, US7739191, US7734924, US7734923, US7730324, US7730323, US7730312, US7730311, US7730310, US7715542, US7707408, US7702908, US7699220, US7689826, US7676034, US7669055, US7621444, US7617973, US7600677, US7597248, US7591420, US7587368, US7584358, US7575158, US7571850, US7567909, US7523495, US7516330, US7480795, US7478239, US7469339, US7447914, US7424616, US7386727, US7383447, US7343346, US7328181, US7302415,

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Abstract:
Source: US5511121A A unique electronic cash system protects the privacy of users in legitimate transactions while at the same time enabling the detection of a double spender of the same electronic coin. The electronic cash system takes advantage of a unique property of El Gamal signatures to achieve these results.

43) Family number: 15948628 (US2001035610A) © PatBase

Title: Method and apparatus for playing Blackjack with a three card poker wager ("21+3")

Priority:

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Inventor(s): CHARRON DANIEL ; TERRY O HALLORAN ; YOSELOFF MARK ; SNOW ROGER ; SMITH PHILIP ; DUNN R ; DEREK J WEBB ; DUNN RUSSELL BROOKE ; PHILIP STEPHEN SMITH ; SAVAGE DAYMON ; DUNN RUSSELL ; DEREK JOHN WEBB

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; FRANKE HYLAND; MARK A LITMAN AND ASSOCIATES PA; NIXON AND VANDERHYE PC; MARK A LITMAN AND ASSOCIATES PA SUITE 205; RICHARD H NEWMAN; SHUFFLE MASTER INC; MARK A LITMAN AND ASSOCIATES PA YORK BUSINESS CENTER; MARK A AND GT LITMAN AND ASSOCIATES PA YORK BUSINESS CENTER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): A63B53/00 A63F1/00 A63F1/20 A63F13/00 A63F3/00 A63F3/08 A63F9/24 G06F17/00 G06F19/00 G07F17/32 (Advanced/Invention); A63F1/00 A63F3/00 (Advanced/Non–invention); A63F1/00 A63F13/00 A63F3/00 A63F9/24 G06F19/00 G07F17/32 (Core/Invention); A63F1/00 A63F3/00 (Core/Non–invention)

International class (IPC 1–7): A63B53/00 A63F1/00 A63F1/02 A63F13/00 A63F3/00 A63F9/22 G06F17/00

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US2007114723, US2007111786, US2007108703, US2007108702, US2007102882, US2007099686, US2007096394, US2007090600, US2007090594, US2007080497, US2007080496, US2007075494, US2007069470, US2007069467, US2007066376, US2007063442, US2007063438, US2007061412, US2007060387, US2007060333, US2007060292, US2007060260, US2007060247, US2007060240, US2007057462, US2007057454, US2007057453, US2007054729, US2007054721, US2007052175, US2007049372, US2007045957, US2007040333, US2007029726, US2007026920, US2007024005, US2007018405, US2007018404, US2007018402, US2007018401, US2007018400, US2007013133, US2007007728, US2007004500, US2006287104, US2006287103, US2006287102, US2006287101, US2006287067, US2006287066, US2006284378, US2006284376, US2006279045, US2006276242, US2006270477, US2006267285, US2006258425, US2006255540, US2006252481, US2006246983, US2006246978, US2006244216, US2006240885, US2006237908, US2006237906, US2006237905, US2006223620, US2006223619, US2006223618, US2006217174, US2006214374, US2006211484, US2006211481, US2006211467, US2006205484, US2006205467, US2006205466, US2006199630, US2006192339, US2006192335, US2006189384, US2006186600, US2006186599, US2006183525, US2006183522, US2006178184, US2006175751, US2006157936, US2006157934, US2006154714, US2006139855, US2006135238, US2006131810, US2006125182, US2006121975, US2006119042, US2006116200, US2006116199, US2006108740, US2006091607, US2006089850, US2006089191, US2006087082, US2006084506, US2006084499, US2006082064, US2006082062, US2006079331, US2006071427, US2006068899, US2006068879, US2006068871, US2006068870, US2006068869, US2006068868, US2006068866, US2006068864, US2006068863, US2006068498, US2006066052, US2006066051, US2006066050, US2006063587, US2006058093, US2006058091, US2006058089, US2006058088, US2006058087, US2006058086, US2006058085, US2006058084, US2006058083, US2006052148, US2006049581, US2006046828, US2006046815, US2006045953, US2006030395, US2006027968, US2006025199, US2006025198, US2006025193, US2006025191, US2006025189, US2006014577, US2006009272, US2006001214, US2005285343, US2005285342, US2005282605, US2005277467, US2005277458, US2005269783, US2005269782, US2005269781, US2005269777, US2005269775, US2005269774, US2005269773, US2005266918, US2005261045, US2005253338, US2005250578, US2005242506, US2005242505, US2005233803, US2005230917, US2005230916, US2005218596, US2005215326, US2005212214, US2005212213, US2005206078, US2005202863, US2005170875, US2005167924, US2005148378, US2005146094, US2005142074, US2005137005, US2005130737, US2005130731, US2005127606, US2005121854, US2005119052, US2005110210, US2005107148, US2005104293, US2005104292, US2005101387, US2005101367, US2005090304, US2005085286, US2005082760, US2005082758, US2005082755, US2005077679, US2005073100, US2005059469, US2005051963, US2005051960, US2005051958, US2005049025, US2005043079, US2005040601, US2005040600, US2005040599, US2005035548, US2005032564, US2005029744, US2005029743, US2005029742, US2005029741, US2005026667, US2005026665, US2005012273, US2004262843, US2004259621, US2004259619, US2004259618, US2004248636, US2004248635, US2004242313, US2004239033, US2004227294, US2004219968, US2004217548, US2004214634, US2004207157, US2004176155, US2004176154, US2004160010, US2004160006, US2004157656, US2004150163, US2004147327, US2004132519, US2004121839, US2004121831, US2004113363, US2004090008, US2004090003, US2004084843, US2004080110, US2004075216, US2004075215, US2004070146, US2004066000, US2004063485, US2004061288, US2004043807, US2004041346, US2004033309, US2004023712, US2003216169, US2003207713, US2003207707, US2003199313, US2003178776, US2003176209, US2003176208, US2003162424, US2003119574, US2003119571, US2003114209, US2003104851, US2003094761, US2003057648, US2003045358, US2003027614, US2003013510, US2003008697, US2002198052, US2002187821, US2002169015, US2002132658, US2002087753, US2002063388, US2002024178, US2001046890, TWI533910, TWI458528, ITMI20081840, GB2397536, GB2376189, FR2938772, EP2475439, EP2475439, EP2300114, EP2136889, EP1796798, EP1743679, EP1541204, CN102407018, CN102407018, AU2008201304, AU2007234592, AU2003203981, AU2003203981,

Abstract:
Source: US2001035610A Card games that combine the play of Blackjack ("21") with a 3−card Poker wager or side bet ("21+3"). Each player places a basic Blackjack wager and an optional 3−card Poker wager before the cards are dealt. Each player is then dealt a card with the dealer receiving a face−up card. Each player is dealt a second card. At this point, the outcome of each 3−card Poker hand is determined, where a 3−card Poker hand consists of the 2−card hand dealt to that player and the dealer's face−up card. After settling the Poker wagers, the game of Blackjack continues in a typical fashion. The invention advantageously retains all the features and advantages of Blackjack as well as provides the dynamics of 3−card Poker, without interfering with the card sequence, for enhanced player anticipation and enjoyment.

0) US5616074A – APPARATUS FOR COUNTING COINS

44) Family number: 12999559 (US5616074A) © PatBase

Title: Apparatus for counting coins

Priority: US19960638798 19960429

Family:

Publication number	Publication date	Application number	Application date
US5616074 A	19970401	US19960638798	19960429

Probable Assignee: CHEN CHIN NAN

Assignee(s):(std)**:** CHEN CHIN NAN

Inventor(s):(std)**:** CHEN CHIN NAN

International class (IPC 8–9): G07D9/00 (Advanced/Invention); G07D9/00 (Core/Invention)

International class (IPC 1–7): G07D1/00

CPC: G07D9/008

European class: G07D9/00F

US class: 453/30 453/49

Classification Explorer

Cited documents: US5254032 A, US5098340 A, US5092817 A, US4589433 A, US4148331 A, US4036242 A, GB2185341 A1,

Forward Citations: US9594982, US9443367, US9036890, US9022841, US8967361, US7798304, US7568972, US7520374, US7213697, US7152727, US6786814, US6766892, US6569006, US2009166151, US2008102742, US2007170036, US2005016815, US2004102149, US2003057054,

Abstract:
Source: US5616074A An apparatus mounted within a game machine for counting coins comprising a housing, a holder obliquely mounted on the housing, a turntable disposed within a channel defined on the holder, a rotor mounted to the center of the turntable, a plate mounted to an extension from the sidewall of the holder, a spout for containing the coins threadedly mounted to a plurality of mounting holes of the holder, and an actuating motor behind the housing to drive the turntable to rotate. In a preferred embodiment, the holder has a shift lever mounted on an upper position and connected with a counter. The turntable includes a drive boss at a center, a ring flange with a smaller diameter defined in concentric circles form with the table on the surface thereof and a plurality of studs nonlinearly arranged in a radial form over the surface between the ring flange and the table's periphery for retaining the coins. The turntable further defines a plurality of blind holes on the undersurface thereof so that rolling elements can be disposed therein in order to assure smooth rotation of the turntable. The rotor has a plurality of bars integrally formed therearound for shifting the coins. The plate has a pair of fingers integrally formed and extending outwardly in order to attach to the ring flange of the turntable and guide the coins. The spout has a movable baffle plate crossing thereover at an upper portion and a planar portion provided over the baffle plate in order to decrease the load on the turn turntable.

0) DE19612647A1 – AUTOMATIC PROVISION OF RECEIPT EQUIPPED NIGHT P...

45) Family number: 17993886 (DE19612647A1) © PatBase

Title: Automatic provision of receipt equipped night postboxes

Priority: DE19961012647 19960330

Family:

Publication number	Publication date	Application number	Application date
DE19612647 A1	19971002	DE19961012647	19960330

Probable Assignee: SCHWEINITZ PETRA

Assignee(s):(std)**:** SCHWEINITZ PETRA ; ZANDER GERD

Assignee(s): ZANDER GERD 46045 OBERHAUSEN DE ; SCHWEINITZ PETRA 46045 OBERHAUSEN DE

Inventor(s):(std)**:** SCHWEINITZ PETRA ; ZANDER GERD

Inventor(s): ZANDER GERD 46045 OBERHAUSEN DE ; SCHWEINITZ PETRA 46045 OBERHAUSEN DE

International class (IPC 8–9): A47G29/12 G07F17/40 (Advanced/Invention); A47G29/00 G07F17/00 (Core/Invention)

International class (IPC 1–7): B65D91/00

CPC: A47G29/1207 G07F17/40

European class: A47G29/12P G07F17/40

Classification Explorer

Forward Citations: US7436536, JP2007519063, EP1687143, DE19950801,

Abstract:
Source: DE19612647A1 The postbox used in central Europe, customarily provides 'night postboxes' for inhabitants of any authority to 'post' an objection against some law or action becoming obsolete. If there are no objections after certain time, the law becomes obsolete. The object was to keep the peace of the German state. In addition it is proposed in this innovation to use modem copiers to provide replicas of the 'objection' document, valid in court, with data stamp of posting. It is possible to print out documents and receipts for use in court, with recording in memory of posting.

0) EP0813174A1 – PROCESS AND APPARATUS FOR THE AUTOMATIC DISTRIB...

46) Family number: 11115674 (EP0813174A1) © PatBase

Title: PROCESS AND APPARATUS FOR THE AUTOMATIC DISTRIBUTION OF ELONGATED OBJECTS, SPECIFICALLY UMBRELLAS, AND CORRESPONDING UMBRELLA

Priority: FR19960007469 19960612

Family:

Publication number	Publication date	Application number	Application date
EP0813174 A1	19971217	EP19970440050	19970611
FR2749959 A1	19971219	FR19960007469	19960612
FR2749959 B1	19980911	FR19960007469	19960612

Probable Assignee: GROUPE MEZE

Assignee(s):(std)**:** GROUPE MEZE ; GROUPE MEZE S A R L

Assignee(s): GROUPE MEZE SARL

Inventor(s):(std)**:** MERTZ BETTINA ; ZEDER PHILIPPE

Designated states: AT BE CH DE GB IE LI LU NL

International class (IPC 8–9): G07F11/44 (Advanced/Invention); G07F11/02 (Core/Invention)

International class (IPC 1–7): G07F11/44

CPC: G07F11/44

European class: G07F11/44

Classification Explorer

Cited documents: GB984771 A, GB2120547 A1, EP0319492 A2,

Forward Citations: FR2837601,

Abstract:
The umbrellas are stacked on their sides in a tapering hopper (4) which has an opening at the bottom that allows one umbrella to pass at a time. Each of the umbrellas has at one end a ring (2) whose external dimensions are greater than the diameter of any point on the rolled umbrella. This ring makes contact with the surfaces of the storage hopper. This ring may form the handle for the umbrella. The ring at the end of the umbrella allows it to roll down the walls of the storage hopper and along the delivery chute after insertion of payment to the vending mechanism allows release of the umbrella from the bottom of the stack.

0) US6474501B – AUTOMATIC DISPENSER OF FRESH CUT FLOWERS MAKING...

47) Family number: 13110732 (US6474501B) © PatBase

Title: Automatic dispenser of fresh cut flowers making bouquets on request

Priority: FR19960007578 19960613 WO1997FR01904 19971024

Family:

Publication number	Publication date	Application number	Application date
AT262202 E	20040415	AT19970912245T	19971024
DE69728175 D1	20040422	DE19976028175	19971024
DE69728175 T2	20041111	DE19976028175T	19971024
EP0968486 A1	20000105	EP19970912245	19971024
EP0968486 B1	20040317	EP19970912245	19971024
ES2217400 T3	20041101	ES19970912245T	19971024
FR2749960 A1	19971219	FR19960007578	19960613
FR2749960 B1	19990723	FR19960007578	19960613
US6474501 BA	20021105	US19990381471	19990921
WO9922347 A1	19990506	WO1997FR01904	19971024

Probable Assignee: VOLPATTI MIREILLE

Assignee(s):(std)**:** VOLPATTI MIREILLE

Assignee(s): MIREILLE VOLPATTI

Inventor(s):(std)**:** VOLPATTI MIREILLE

Inventor(s): MIREILLE VOLPATTI

Agent(s): ROMAN

Designated states: AT BE CH DE DK ES FI FR GB GR IE IT JP LI LU MC NL PT SE US

International class (IPC 8–9): G07F11/00 G07F11/42 G07F11/70 (Advanced/Invention); G07F11/00 G07F11/02 G07F11/70 (Core/Invention)

International class (IPC 1–7): G07F11/00 G07F11/42 G07F11/52 G07F11/70

CPC: G07F11/00 G07F11/42 G07F11/70

European class: G07F11/00 G07F11/42 G07F11/70

US class: 221/135 221/150R 221/155 221/75

Classification Explorer

Cited documents: WO9534225 A1, WO9413540 A1, WO9200577 A1, US6123223 A, US6015224 A, US5718099 A, US5666975 A, US5564257 A, US5440479 A, US5415319 A, US4954697 A, US3773217 A, US3653540 A, US3344953 A, US3336773 A, JP5182074 A2, JP5182074, JP5076244, FR2749960 A1, FR2588107 A1, FR2253349 A5, FR1151210 A, EP0710936 A1,

Forward Citations: WO9922347, WO10055518, WO05043474, WO04093020, WO0186602, WO0041144, US9478092, US8763852, US8100291, US7762181, US7447563, US7086198, US7086198, US6474501, US2016026164, US2009166371, US2007113469, US2006219729, US2006081653, NL1012299, FR2839177, EP1378871, EP0924580, CN105455276,

Abstract:
Source: US6474501B Automatic dispenser of natural flowers which is adapted to making bouquets on request by a user comprising a structure for storing and preserving several series of natural flowers. The structure comprises a transparent part which allows the user to view and select the natural flowers, from outside the structure, when the natural flowers are disposed inside the structure. An external control panel is provided. A coin operated meter is provided which is adapted to receive coins from the user. An internal selection mechanism is provided and is controlled by the external control panel. The internal selection mechanism is adapted to enable the user to individually select each of the natural flowers. A unit for packaging and wrapping the flowers into a bouquet is also provided. The unit is adapted to form the bouquet from the natural flowers selected by the user.

0) US2005171903A – SYSTEM AND METHOD FOR FLEXIBLE MICROPAYMENT OF ...

48) Family number: 21364700 (US2005171903A) © PatBase

Title: SYSTEM AND METHOD FOR FLEXIBLE MICROPAYMENT OF LOW VALUE ELECTRONIC ASSETS

Priority: US19960751311 19961118 US19990251229 19990216 US20050087206 20050323 US20050087922 20050323 US19990451254 19991129 US19990451254 19991129 WO2000US42314 20001128

Family:

Publication number	Publication date	Application number	Application date
AU200145080 A5	20010618	AU20010045080	20001128
US2005171903 AA	20050804	US20050087206	20050323
US2005171904 AA	20050804	US20050087922	20050323
US5872844 A	19990216	US19960751311	19961118
US7020638 BA	20060328	US19990451254	19991129
WO0143094 A2	20010614	WO2000US42314	20001128
WO0143094 A3	20020207	WO2000US42314	20001128

Probable Assignee: MICROSOFT TECHNOLOGY LICENSING LLC

Assignee(s):(std)**:** MICROSOFT CORP

Assignee(s): MICROSOFT TECHNOLOGY LICENSING LLC

Inventor(s):(std)**:** ENGLAND PAUL ; YACOBI YACOV

Inventor(s): YACOV YACOBI ; PAUL ENGLAND

Agent(s): LEE AND HAYES PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): G06F17/60 G06Q20/00 G06Q20/02 G06Q20/06 G06Q20/10 G06Q20/12 G06Q20/22 G06Q20/34 G06Q20/36 G06Q20/38 G06Q20/40 G07F19/00 G07F7/08 G07F7/10 (Advanced/Invention); G06Q20/00 G06Q99/00 G07F7/08 G07F7/10 (Core/Invention)

International class (IPC 1–7): G06F17/60 G07F19/00 G07F7/10 H04K1/00 H04L9/00

CPC: G06Q20/06 G06Q20/02 G06Q20/102 G06Q20/108 G06Q20/12 G06Q20/29 G06Q20/3825 G06Q20/10 G06Q20/341 G06Q20/403 G07F7/082 G07F7/1008 G06Q20/105 G06Q20/3678 G06Q20/383 G06Q20/3821

European class: G06Q20/02 G06Q20/06 G06Q20/10 G06Q20/102 G06Q20/105 G06Q20/108 G06Q20/12 G06Q20/29 G06Q20/341 G06Q20/3678 G06Q20/3821 G06Q20/3825 G06Q20/383 G06Q20/403 G07F19/00C G07F7/08A2B G07F7/10D

US class: 380/225 380/23 380/24 380/25 380/30 705/39 705/40 705/40P 705/40P 705/41 705/42 705/42S 705/69 705/74 705/76

Classification Explorer

Cited documents: WO9843211 A1, WO0144968 A2, US7249099 BB, US6341273 BA, US6317729 BA, US6076075 A, US6029150 A, US6021399 A, US6018724 A, US5999914 A, US5952638 A, US5905976 A, US5903721 A, US5878140 A, US5878138 A, US5872844 A, US5857023 A, US5781438 A, US5623547 A, US5590197 A, US5511121 A, US5455407 A, US5453601 A, US5231666 A, US5224162 A, US4987593 A, US4977595 A, US4914698 A, EP0865010 A1,

Forward Citations: WO14063937, WO09017408, WO05065134, WO05065134, WO04097606, WO0223497, WO0169955, WO0143094, WO0143094, WO0115100, US9575903, US9558034, US9471373, US9465657, US9460290, US9443085, US9419954, US9311506, US9298918, US9225695, US9170843, US9141793, US9098608, US9087196, US9076174, US9009483, US8983874, US8955111, US8943313, US8930714,

US8813085, US8799458, US8793777, US8712918, US8688967, US8655772, US8560820, US8560423, US8539070, US8521650, US8468100, US8443204, US8396762, US8364567, US8346668, US8327453, US8296231, US8272060, US8271380, US8239677, US8204945, US8166549, US8150968, US8037314, US7991995, US7882021, US7778896, US7769682, US7747873, US7721954, US7713116, US7689487, US7685067, US7676432, US7590602, US7587607, US7580892, US7562032, US7555460, US7517282, US7516330, US7505931, US7406593, US7360080, US7353383, US7349885, US7328189, US7308576, US7287159, US7249099, US7249060, US7234156, US7194437, US7177838, US7165047, US7134018, US7134018, US7076445, US7058808, US7020638, US6950933, US6859795, US6857562, US6857073, US6834795, US6820064, US6725240, US6601014, US6499019, US6496936, US6467685, US6442690, US6402027, US6341273, US6254000, US6212280, US6155484, US6119946, US6108644, US2016080156, US2014337206, US2014122205, US2013311348, US2013166455, US2013054461, US2013036314, US2012296829, US2012131317, US2011307704, US2011218877, US2011218860, US2011218856, US2010241569, US2010217710, US2010212019, US2010205671, US2010205265, US2010169202, US2010138312, US2010131760, US2009288012, US2009254483, US2009172268, US2009132421, US2009112702, US2009031374, US2008232590, US2008209462, US2008167888, US2008147506, US2008133420, US2008113189, US2008086759, US2007244812, US2007143608, US2007106412, US2007027802, US2006080528, US2005228989, US2005216760, US2005198536, US2005182708, US2005177495, US2005171904, US2005171903, US2005138384, US2005138365, US2005137898, US2005131816, US2005049967, US2005010483, US2004266505, US2004250073, US2004225573, US2004153398, US2004107156, US2004083185, US2004073617, US2004030615, US2003225678, US2003220882, US2003177351, US2003149628, US2003126442, US2003014315, US2002111907, US2002103999, US2002066016, US2001045454, US2001032173, US2001029496, FR2837295, FR2814261, EP3061053, EP2026267, EP1727102, CN103975352,

Abstract:
Source: US2005171903A An electronic asset system mints a stick of electronic assets that can be spent by the user with multiple vendors. Assets sticks are issued anonymously or non−anonymously in a way without requiring dedication to a particular vendor, hence allowing the user to spend one or more assets from the stick with different vendors. The auditor randomly audit samples of the spent assets to detect whether the assets have been fraudulently used. The electronic asset system employs tamper−resistant electronic wallets constructed as dedicated hardware devices, or as devices with secure−processor architecture. The electronic asset system also facilitates handling of electronic coupons in a manner that enforces compliance between the user and the vendor. The user and vendor each maintain a stick of corresponding coupons with pointers to the most recent and oldest coupons available for expenditure. When a coupon is used or granted, the user and vendor both update the appropriate pointer to their respective sticks and then exchange signed data describing placement of the pointer to verify a correspondence between the referenced coupons.

0) US6446052B – DIGITAL COIN TRACING USING TRUSTEE TOKENS

49) Family number: 23699735 (US6446052B) © PatBase

Title: Digital coin tracing using trustee tokens

Priority: US19970066137P 19971119 US19980195527 19981118 WO1998US24597 19981118

Family:

Publication number	Publication date	Application number	Application date
AU199920851 A1	19990607	AU19990020851	19981118
US6446052 BA	20020903	US19980195527	19981118
WO9926207 A1	19990527	WO1998US24597	19981118

Probable Assignee: EMC IP HOLDING CO LLC

Assignee(s):(std): SECURITY DYNAMICS TECHN ; RSA SECURITY INC

Assignee(s): SECURITY DYNAMICS TECHNOLOGIES INC ; RSA SECURITY LLC ; BANK OF NEW YORK MELLON TRUST CO NA NOTES COLLATERAL AGENT AS ; CREDIT SUISSE CAYMAN ISLANDS BRANCH COLLATERAL AGENT AG AS ; RSA SECURITY HOLDING INC ; EMC CORP ; EMC IP HOLDING CO LLC

Inventor(s):(std): JUELS ARI

Inventor(s): ARI JUELS

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW

International class (IPC 8–9): G06Q20/00 G07F7/08 (Advanced/Invention)

International class (IPC 1–7): G06F17/60 G07F19/00 G07F7/08 H04L9/32

CPC: G06Q20/02 G06Q20/06 G06Q20/10 G06Q20/29 G06Q20/3825 G06Q20/3678 G06Q20/383

European class: G06Q20/02 G06Q20/06 G06Q20/10 G06Q20/29 G06Q20/3678 G06Q20/3825 G06Q20/383 G07F19/00C

US class: 705/69 705/74

Classification Explorer

Cited documents: WO9522215 A2, US6014646 A, US5832089 A, US5790677 A, US5712913 A, US5511121 A, US5493614 A, US5485520 A, US5434919 A, US5373558 A, US5276736 A, US5131039 A, US4996711 A, US4991210 A, US4987593 A, US4949380 A, US4947430 A, US4926480 A, US4914698 A, US4759064 A, US4759063 A, US4529870 A, EP0772165 A2, EP0755136 A2,

Forward Citations: WO04051529, USD777252, USD767024, USD765174, USD765173, USD764584, USD751640, USD751639, USD750168, USD750167, USD750166, USD737373, USD730439, USD730438, USD729871, USD729870, USD729869, USD695636, USD694322, USD692053, USD688744, USD687887, USD687490, USD687489, USD687488, USD687487, USD687095, USD687094, USD676904, USD676487, USD675256, USD674013, USD673606, USD672389, USD670759, USD670332, USD670331, USD670330, USD670329, USD666241, USD665447, USD665022, USD653288, USD652867, USD652450, USD652449, USD652448, USD652076, USD652075, USD651644, USD651238, USD651237, USD643063, US9697454, US9684861, US9659246, US9652436, US9646750, US9646240, US9639796, US9619741, US9547816, US9384438, US9373069, US9361569, US9349089, US9329619, US9306666, US9292843, US9171324, US9165297, US9129284, US9064255, US9064195, US9053399, US9053398, US9047473, US9043890, US9033218, US9010647, US9010644, US9010630, US9004368, US8973824, US8960545, US8944333, US8931703, US8888009, US8881989, US8875999, US8827153, US8814050, US8757499, US8757483, US8746579, US8733638, US8727219, US8684267, US8668143, US8628022, US8622309, US8608083, US8602312, US8590796, US8590029, US8579203, US8573503, US8567679, US8561894, US8540165, US8533791, US8528078, US8523059, US8517276, US8511574, US8500019, US8485446, US8485437, US8480002, US8468359,

US8468100, US8459548, US8424773, US8413892, US8393546, US8393545, US8382000, US8360332, US8348172, US8336763, US8322623, US8317103, US8315952, US8302872, US8302871, US8296562, US8286889, US8286876, US8282007, US8234696, US8231063, US8226001, US8219822, US8172148, US8090953, US8079070, US8074877, US8066191, US8037193, US8020775, US8011577, US7958032, US7954705, US7931195, US7828220, US7810147, US7805607, US7793851, US7784687, US7698560, US7689547, US7680712, US7676834, US7640432, US7478434, US7360080, US7325132, US7325065, US6820814, US2014074720, US2013311348, US2011137801, US2011099113, US2010312708, US2010306081, US2010274683, US2010257111, US2010175119, US2010146288, US2010100967, US2010019045, US2010010916, US2009308921, US2009259848, US2009222362, US2009070271, US2009070269, US2008302876, US2008302869, US2008230599, US2008059414, US2008028447, US2008016003, US2008005573, US2007266257, US2007265947, US2007265946, US2007265945, US2007265807, US2007256123, US2007215689, US2007007330, US2007007329, US2006195700, US2006168663, US2006069921, US2006015743, US2006015742, US2005278188, US2005204132, US2004133782, US2003163787, US2002103999, US2002073318, TWI372345, JP4810611, GB2428126, GB2428126, EP1903489, EP1396824, DE102006017911,

Abstract:
Source: US6446052B A system and method for obtaining traceable anonymous digital cash from a bank using a trustee as a trusted third–party. A user establishes her identity with the trustee using a secret known by the user. The user transmits to the trustee information describing a blinded traceable digital coin. The user receives from the trustee a trustee token including a signature by the trustee on the blinded coin. The user transmits the blinded coin and the trustee token to a bank. The user receives a signature from the bank certifying the blinded coin. The user can then unblind the coin, and spend the coin at a merchant. The system and method support both tracing of the identity of a user from a coin, referred to as coin tracing, and generation of a list of all coins belonging to a given user, referred to as owner tracing. Both of these operations require very little computation and database access. To determine the identity of the user, the trustee can generate the list of coins associated with a user. Alternatively, if presented with a coin, the trustee can determine the identity of the user who submitted the coin to the trustee for signature. This simple and highly efficient trustee–based tracing system and method can be added on top of anonymous cash schemes based on blind RSA signatures.

0) US6859795B – METHOD FOR CARRYING OUT TRANSACTIONS AND DEVICE...

50) Family number: 20738247 (US6859795B) © PatBase

Title: Method for carrying out transactions and device for realizing the same

Priority: RU19980120922 19981125 WO1999RU00264 19990729

Family:

Publication number	Publication date	Application number	Application date
AU199953108 A1	20000613	AU19990053108	19990729
AU199953108 A5	20000613	AU19990053108	19990729
AU770762 B2	20040304	AU19990053108	19990729
BRPI9914401 A	20010626	BR1999PI14401	19990729
CA2351588 AA	20010509	CA19992351588	19990729
CA2351588 C	20080715	CA19992351588	19990729
CN1328675 A	20011226	CN19998013754	19990729
EA002887 B1	20021031	EA20000001234	19990729
EA200001234 A1	20010827	EA20000001234	19990729
EP1134708 A1	20010919	EP19990938677	19990729
IL142052 A0	20020310	IL19990142052	19990729
IL142052 A1	20041124	IL19990142052	19990729
IN00465MN2004 A	20050624	IN2004MN00465	20040824
IN203647 B	20070511	IN2001MN00256	20010308
JP2002530723 T2	20020917	JP20000584442T	19990729
RU2157001 C2	20000927	RU19980120922	19981125
RU98120922 A	20001020	RU19980120922	19981125
US6859795 BA	20050222	US19990445386	19991206
WO0031700 A1	20000602	WO1999RU00264	19990729
ZA200104257 A	20020517	ZA20010004257	20010524

Probable Assignee: CYPHERMINT INC

Assignee(s):(std)**:** KHAMITOV ILDAR MAGAFUROVICH ; GENNADIEVICH MOSHONKIN ANDREI ; CYPHERMINT INC ; KHAMITOV ILDAR MAGAFURUVICH ; ZOLOTAREV OLEG ANATOLIEVICH ; ZOLOTOREV OLEG ANATOLIEVICH ; KUZNETSOV IVAN VLADIMIROVICH ; MOSHONKIN ANDREI GENNADIEVICH ; SMIRNOV ALEXANDR LEONIDOVICH ; VLADIMIROVICH KUZNETSOV IVAN ; LEONIDOVICH SMIRNOV ALEXANDR ; MAGAFUROVICH KHAMITOV ILDAR ; OLEG ANATOLIEVICH ZOLOTOREV ; ZAKRYTOE AKTSIONERNOE OBSHCHESTVO ALKORSOFT ; ALKORSOFT AOZT ; ANATOLIEVICH ZOLOTAREV OLEG

Assignee(s): ANDREI GENNADIEVICH MOSHONKIN ; ALEXANDR LEONIDOVICH SMIRNOV ; SEITRAN INC INC ; ZAKRYTOE AKTSIONERNOE OBSHCHESTVO "ALKORSOFT" ; ZOLTAREV OLEG ANATOLIEVICH KUZNETSOV IVAN VLADIMIROVICH MOSHONKIN ANDREI GENNADIEVICH SMIRNOV ALEXANDR LEONIDOVICH KHAMITOV ILDAR MAGAFUROVICH ; ZOLOTAREV OLEG ANATOLIEVICH UL KOSTROMSKOJ PR AND OTHERS ; SEITRAN INC ; OLEG ANATOLIEVICH ZOLOTAREV ; HARBINGER MEDICAL INC ; ILDAR MAGAFUROVICH KHAMITOV ; IVAN VLADIMIROVICH KUZNETSOV

Inventor(s):(std)**:** IVAN ILADIMIROVICH KUZNETSOV ; IVAN VLADIMIROVICH KUZNETSOV ; KHAMITOV ILDAR MAGAFUROVICH ; KHAMITOV ILDAR MAGAFURUVICH ; KHAMITOV IM ; KUZNETSOV IV ; KUZNETSOV IVAN ILADIMIROVICH ; KUZNETSOV IVAN VLADIMIROVICH ; KUZNETSOV VAN VLADIMIROVICH ; LEONIDOVICH SMIRNOV ALEXANDR ; MAGAFUROVICH KHAMITOV ILDAR ; MOSHOKIN ANDREY GENNADIEVICH ; MOSHONKIN AG ; MOSHONKIN ANDREI GENNADIEVICH ; OLEG ANATOLIEVICH ZOLOTAREV ; OLEG ANATOLIEVICH ZOLOTOREV ; SMIRNOV AL ; SMIRNOV ALEXANDR LEONIDOVICH ; ALEXANDR LEONIDOVICH SMIRNOV ; ANATOLIEVICH ZOLOTAREV OLEG ; ANDREI GENNADIEVICH MOSHONKIN ; GENNADIEVICH MOSHONKIN ANDREI ; ILDAR MAGAFUROVICH KHAMITOV ; VLADIMIROVICH KUZNETSOV IVAN ; ZOLOTAREV OA ; ZOLOTOREV OLEG ANATOLIEVICH ; ZOLOTOREV OLEG ANATOLIVICH ; ZOLOTAREV OLEG

ANATOLIEVICH ; ZOLOTAREV O A ; SMIRNOV A L ; MOSHONKIN A G ; KUZNETSOV I V ; KHAMITOV I M

Inventor(s): ZOLTAREV OLEG ANATOLIEVICH ; ZOLOTAREV OLEG ANATOLIEVICH UL AND OTHERS ; ILDAR MAGAFURUVICH KHAMITOV ; VAN VLADIMIROVICH KUZNETSOV

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; BORDEN LADNER GERVAIS LLP; REINHOLD COHN AND PARTNERS

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): G06F17/60 G06Q20/00 G06Q20/16 G06Q30/06 G07D7/00 G07F19/00 G07F7/10 G07F9/00 G09C1/00 H04L9/00 H04W12/00 (Advanced/Invention); G06Q10/00 G06Q30/00 G09C1/00 (Advanced/Non−invention)

International class (IPC 1–7): G06F17/60 G07D7/00 G07F19/00 G07F7/10 G09C1/00 H04L9/00

CPC: G06Q20/02 G06Q20/04 G06Q20/3825 G06Q20/3829 G07F7/1016 G06Q20/085 G06Q20/3674 G06Q20/382 G06Q20/3821

European class: G06Q20/02 G06Q20/04 G06Q20/085 G06Q20/3674 G06Q20/382 G06Q20/3821 G06Q20/3825 G06Q20/3829 G07F19/00B G07F7/10E

US class: 380/28 705/64 705/67 705/76 705/77

Classification Explorer

Cited documents: US6072870 A, US6003028, US5999625, US5983207, US5982506, US5926548, US5920629, US5915022, US5910989, US5909492, US5905976, US5903895, US5903880, US5901229, US5898154, US5897663, US5889863, US5889862, US5884272, US5884270, US5878143, US5878141, US5878140, US5878138, US5874954, US5872844, US5870476, US5870473, US5867578, US5867494, US5862325, US5862223, US5848161, US5832090, US5832089 A, US5825884 A, US5825880 A, US5812670 A, US5806063 A, US5805702 A, US5799087 A, US5799086 A, US5790677 A, US5790675 A, US5790667 A, US5781631 A, US5768388 A, US5768385 A, US5764768 A, US5761311 A, US5754654 A, US5748782 A, US5740246 A, US5734901 A, US5719940 A, US5715314 A, US5712913 A, US5708714 A, US5696827 A, US5689567 A, US5677955 A, US5671285 A, US5668878 A, US5666420 A, US5659616 A, US5642419 A, US5638447 A, US5638445 A, US5633929 A, US5629982 A, US5627893 A, US5625695 A, US5625692 A, US5615269 A, US5610982 A, US5606617 A, US5604805 A, US5590197 A, US5588061 A, US5581615 A, US5577124 A, US5564106 A, US5553145 A, US5537475 A, US5521980 A, US5511121 A, US5502764 A, US5493614 A, US5485520 A, US5475763 A, US5453601 A, US5448639 A, US5446796 A, US5442707 A, US5434919 A, US5420926 A, US5373558 A, US5315658 A, US5299262 A, US5297206 A, US5297202 A, US5295188 A, US5276736 A, US5245657 A, US5231666 A, US5226079 A, US5224162 A, US5214702 A, US5140634 A, US5131039 A, US5020105 A, US5016274 A, US5005200 A, US4996711 A, US4995082 A, US4991210 A, US4987593 A, US4977595 A, US4969189 A, US4949380 A, US4947430 A, US4944007 A, US4933970 A, US4926480 A, US4926479 A, US4914698 A, US4893338 A, US4881264 A, US4759064 A, US4759063 A, US4625076 A, US4405829 A, US4393269 A, US4386233 A, US4309569 A, US4264782 A, US4206315 A, JP407302288, JP40730228 B4,

Forward Citations: WO14038985, WO03107583, WO03009195, US8806214, US8751381, US8458477, US2016044034, US2011185170, US2011016048, US2009288012, US2007005491, US2002128983, US2001037311, SG97913, JP2008512060,

Abstract:
Source: US6859795B A method for effecting payments is suggested which allows protecting the financial interests of each participant of a payment during payments via open telecommunication nets from other participants' cheating, provides protection of the payers' and payees' privacy, admits payments ranging from micro−payments to business−to−business payments, ensures that the time taken to effecting a payment depends only on the speed of action of the net connections and not on the payment amount, makes it possible to serve of serving a number of clients which grows proportionally to the payment system operators resources, is easy to build into an arbitrary trade system, enables each client both to pay and to receive payments, and makes possible payments between clients of different banks. The method of effecting payments is realized with the help of programming means.

0) US6383070B – COIN–SENDING DEVICE

51) Family number: 11624844 (US6383070B) © PatBase

Title: Coin–sending device

Priority: JP19990115568 19990422

Family:

Publication number	Publication date	Application number	Application date
AU200027807 A5	20001026	AU20000027807D	20000417
AU758518 B2	20030320	AU20000027807	20000417
EP1047027 A2	20001025	EP20000107325	20000404
EP1047027 A3	20040714	EP20000107325	20000404
JP2000306134 A2	20001102	JP19990115568	19990422
JP4136179 B2	20080820	JP19990115568	19990422
US6383070 BA	20020507	US20000542856	20000404
ZA200001872 A	20001030	ZA20000001872	20000413

Probable Assignee: UNIVERSAL ENTERTAINMENT CORP

Assignee(s):(std)**:** ARUZE CO LTD ; ARUZE CORP

Assignee(s): UNIVERSAL ENTERTAINMENT CORP ; ARUZE CO

Inventor(s):(std)**:** TAMAKI MASAMI

Inventor(s): MASAMI TAMAKI ; TAMAKI MASAM

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; COSMOS PATENT OFFICE; YAMANAKA IKUO

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9): A63F5/04 G07D1/00 G07D9/00 G07F17/32 (Advanced/Invention); A63F5/04 G07D1/00 (Advanced/Non–invention); A63F5/04 G07D1/00 G07D9/00 G07F17/32 (Core/Invention)

International class (IPC 1–7): A63F5/04 G07D1/00 G07D3/06 G07D5/00 G07D9/00

CPC: G07D9/008 G07F17/32

European class: G07D9/00F G07F17/32

US class: 194/352 453/57

Classification Explorer

Cited documents: US6261170 BA, US6220954 BA, US6210264 BA, US6193598 BA, US6168001 BA, US5232399 A, US4561457 A, US4275751 A, US3098584 A, US2886045 A, US2848158 A, US2348936 A, US2110014 A, US1850148 A, US1849318 A, US1749421 A, US1741033 A, US1526762 A, JP6180492, JP61080492, JP58117562 U, JP1304595, JP01304595, EP0910051 A2, EP0910051, EP0731427 A2, EP00910051, CH650871,

Forward Citations: USD526359, US7204749, US7048623, US2004219873, US2002111130, JP4005869, JP2004065329,

Abstract:
Source: US6383070B A coin–sending device. The device includes a rotary disc (C3) that is set in a posture extending forwards and downwards with a first–side reservoir (C1) facing a coins–lump insertion part. An outlet of a second–side passage (C2) is open at a part extending backwards and upwards. Coins inserted from the coins–lump insertion part are finely received into the first–side reservoir (C1) facing the lump insertion part and then sequentially sent by the rotary disc (C3) extending forwards and downwards to be taken out through the outlet (C202) of the second–side passage (C2) opening on a part extending backwards and upwards. The outlet of coins can be set at a high position, thereby eliminating the necessity of holding a large drop between an inlet side and an outlet side of the coin–sending device.

0) US6655581B – AUTOMATIC TELLER MACHINE

52) Family number: 30003564 (US6655581B) © PatBase

Title: Automatic teller machine

Priority: CA20002311005 20000608 JP19990165413 19990611

Family:

Publication number	Publication date	Application number	Application date
CA2311005 AA	20001211	CA20002311005	20000608
CA2311005 C	20031111	CA20002311005	20000608
CN1178180 C	20041201	CN20001008035	20000609
CN1277415 A	20001220	CN20001008035	20000609
JP2000353269 A2	20001219	JP19990165413	19990611
JP3680919 B2	20050810	JP19990165413	19990611
KR100352558 B1	20020912	KR20000031891	20000610
KR20010007328 A	20010126	KR20000031891	20000610
TW432339 B	20010501	TW20000110560	20000531
US6655581 BA	20031202	US20000590368	20000609

Probable Assignee: NEC CORP

Assignee(s):(std)**:** N II C DESIGN KK ; NEC CORP ; NEC KOFU LTD ; NIPPON ELECTRIC CO

Assignee(s): TAKISHIMA KAZUHIKO ; OSADA KAZUYA ; AKIYAMA KAZUYA ; HARADA KOUICHI ; MATSUDA TAKASHI ; MIYASHITA KAZUO ; MIZUMOTO KENJIROU

Inventor(s):(std)**:** HARADA KOICHI ; MIZUMOTO KENJIRO ; TAKISHIMA KAZUHIKO ; OSADA KAZUYA ; MIZUMOTO KENJIROU ; MIZUMOTO KENJIRO AND ; MIYASHITA KAZUO ; MATSUDA TAKASHI ; KENJIRO MIZUMOTO ; KAZUO MIYASHITA ; KAZUHIKO TAKISHIMA ; HARADA KOUICHI ; AKIYAMA KAZUYA ; NAGATA KAZUYA

Agent(s): SMART AND BIGGAR

International class (IPC 8–9)**:** G05G1/00 G07D1/00 G07D13/00 G07D9/00 G07F19/00 G07G1/14 G09B21/00 H01H3/00 (Advanced/Invention);
G07F19/00 (Advanced/Non–invention);
G07D13/00 G07D9/00 G07F19/00 G07G1/14 G09B21/00 (Core/Invention)

International class (IPC 1–7)**:** G05G1/00 G06F17/60 G07D1/00 G07D13/00 G07D9/00 G07F19/00 H01H3/00

CPC: G07F19/20 G07F19/201 G09B21/003 G07F19/00

European class: G07F19/00F G07F19/20 G07F19/201 G09B21/00B3

US class: 235/379

Classification Explorer

Cited documents: US6061666 A, US5589855 A, US5412189 A, US5302049 A, US5185515 A, US4620816 A, US4608485 A, US4488146 A, US2632266 A, JP8194856 A2, JP2000194502 A2, JP11095654 A2,

Forward Citations: WO14162699, WO14087577, WO12022281, WO11141391, US9607790, US8730179, US7644039, US7413115, US2013135238, US2013087442, US2010079387, US2004090448, US2003071859, TWI423173, JP5928397, JP2015158693, JP2014203206, JP2012093612, FR2960087, DE102010024345, CN105121228, CN102939625,

Abstract:
Source: US6655581B An ATM having a guide capability in which even a visually handicapped person who can not read braille type can positively operate a customer operating touch panel. An automatic teller machine includes a customer operating touch panel 2 having a plurality of operating keys which are touched for actuation. Guide icons 3 which are embossed to represent the icons of the operating keys are provided in the periphery of the customer operating touch panel at positions corresponding to said plurality of operating keys.

0) ES1047467Y – MAQUINA SUMINISTRADORA DE PRODUCTOS.

53) Family number: 34664761 (ES1047467Y) © PatBase

Title: MAQUINA SUMINISTRADORA DE PRODUCTOS.

Priority: ES20000000689U 20000306

Family:

Publication number	Publication date	Application number	Application date
ES1047467 UA	20010416	ES20000000689U	20000306
ES1047467 Y1	20011016	ES20000000689U	20000306
ES1047467 YA	20011016	ES20000000689U	20000306

Probable Assignee: PK SYSTEMS S L

Assignee(s):(std)**:** PK SYSTEMS S L

Assignee(s): PK SYSTEMS SL

Inventor(s):(std)**:** BAYO PINOL JORDI ; BAYO PINOL FRANCESC

International class (IPC 8–9)**:** G07F11/70 (Advanced/Invention); G07F11/70 (Core/Invention)

International class (IPC 1–7)**:** G07F11/70

Classification Explorer

Abstract:
Source: ES1047467U 1. Maquina suministradora de productos, dis– puestos en bandejas espaciadas y que funciona con monedas y similares, caracterizada porque comprende una pluralidad de bandejas que estan jadas en el bastidor, las cuales son regulables en altura en correspondencia con el tama~ no del producto/productos a suministrar, y medios de cierre de la abertura de acceso a las bandejas que consisten en un a modo de persiana de la– mas transparentes articuladas y guiada, la cual es desplazada alternativamente por medios motores que proporcionan acceso a una bandeja con pro– ducto/productos en cada colocacion de moneda y/o similar, para que el usuario pueda acceder previo pago al producto/productos contenido en la bandeja con acceso libre. 1. Supplying machine products, arranged in spaced trays and coin–operated and the like, characterized in that it comprises a plurality of trays are you Jadas on the frame, which are adjustable in height corresponding to the size of the product / products supplying, and means for closing the access opening to the trays consisting of a as a jalousie, more transparent articulated and guided, which is alternately moved by motor means which provide access to a tray with product / product placement in each currency and / or the like, so that the user can access prepaid product / products contained in the tray with free access.

0) WO0225610A1 – MP 3 JUKEBOX JUKE–BOX MP 3

54) Family number: 20761471 (WO0225610A1) © PatBase

Title: MP 3 JUKEBOX

Priority: HR20000000624 20000920 WO2001HR00018 20010413

Family:

Publication number	Publication date	Application number	Application date
AU200150554 A5	20020402	AU20010050554D	20010413
HR20000624 A2	20010430	HR20000000624	20000920
SI21011 C2	20030228	SI20010020005	20010413
WO0225610 A1	20020328	WO2001HR00018	20010413

Probable Assignee: CRO DART D O O

Assignee(s):(std)**:** CRO DART D O O ; CRO DART DOO ; GORAN ORDULJ ANI I ; GRABAR IVAN ; JALUSIC KRUNOSLAV ; ORDULJ ANICIC GORAN ; IVAN GRABAR ; KRUNOSLAV JALUUEI ; KRUNOSLAV JALUUEIC

Assignee(s): KRUNOSLAV JALUSIC ; KRUNOSLAV JALUUEIMu ; GORAN ORDULJ ANICIC ; GORAN ORDULJ ANITHI ; GORAN ORDULJ ANITHIMu

Inventor(s):(std)**:** GORAN ORDULJ ANI I ; GRABAR IVAN ; IVAN GRABAR ; JALUSIC KRUNOSLAV ; JALUUEI KRUNOSLAV ; KRUNOSLAV JALUUEIC ; ORDULJ ANICIC GORAN

Inventor(s): KRUNOSLAV JALUUEIMu ; KRUNOSLAV JALUSIC ; KRUNOSLAV JALUUEI ; GORAN ORDULJ ANICIC ; GORAN ORDULJ ANITHI ; GORAN ORDULJ ANITHIMu

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): G07F17/16 G07F17/30 G07F5/18 G11B27/031 G11B27/10 (Advanced/Invention); G11B27/034 (Advanced/Non–invention); G07F17/00 G07F17/32 G07F5/00 G11B27/031 G11B27/10 (Core/Invention)

International class (IPC 1–7): G07F17/16 G07F17/30 G07F17/32 G07F5/18 G11B20/10

CPC: G07F5/18 G07F11/002 G07F17/16 G07F17/305 G11B27/031 G11B27/034 G11B27/105 G11B2220/20 G11B2220/218 G11B2220/2545

European class: G07F11/00B G07F17/16 G07F17/30B G07F5/18 G11B27/031 G11B27/10A1 S11B220/20 S11B220/21C2 S11B220/25D2 S11B27/034

Classification Explorer

Cited documents: WO9964969 A2, WO0054187 A1, US4258838 A, GB2254469 A1, DE19844433 A1,

Forward Citations: WO09004190, WO09004190, USD544042, US9697822, US9697820, US9668121, US9668024, US9646614, US9646609, US9633674, US9633660, US9633004, US9626955, US9620105, US9620104, US9602929, US9582608, US9576574, US9548050, US9535906, US9502031, US9495129, US9483461, US9448683, US9430463, US9412417, US9405766, US9380112, US9368114, US9338493, US9330720, US9318108, US9300784, US9299329, US9262612, US9241022, US9160818, US9154554, US9137309, US9117447, US9084089, US9063697, US8993866, US8966470, US8942986, US8930191, US8903716, US8892446, US8850140, US8694024, US8688928, US8683009, US8654993, US8631088, US8626952, US8615089, US8601243, US8554888, US8522150, US8495246, US8473082, US8463868, US8443038, US8396948, US8386581, US8358273, US8341524, US8321601, US8300841, US8291134, US8261246, US8259444, US8255640, US8200629, US8188357, US8181233, US8151259, US8151063, US8150937, US8122163, US8112592, US8108572, US8103793, US8099258, US8090130, US8073984, US8060229, US8046369, US8044795, US7958441, US7956272, US7913297, US7889497, US7881564, US7865745, US7860830, US7856564, US7848527, US7831199, US7827259, US7813715, US7797456, US7797446, US7769903, US7765326, US7729791, US7720929, US7706637, US7698101, US7680849, US7673238, US7667124, US7643895, US7623740, US7617537, US7593782, US7590772, US7589629, US7565036, US7560637,

US7536565, US7521625, US7433546, US7314412, US7166791, US7130251, US6744701, US2013179980, GB2431028, FR2917883, FR2859036, EP1624446, EP1239480, EP1239480,

Abstract:
The MP 3 jukebox can be realised as an autonomous apparatus in the wall−mountable, desk or self−supportable version, but it can also be combined with a dart−apparatus, computer based cash register, video or computer games.Its operatin is based on the utilisation of one single standard PC or notebook as a controlling, monitoring and memory unit. A combination of especially developed and astandard software packages, makes starting, usage and servicing of the apparatus, easy to a maximum extent. Complete communication between the apparatus and user is carried out ba means of keys (iiii) (1−4) and a separate OK key (5) on the front board of the apparatus. Data concerning the type of music, the performers and the titles of te songs are sorted according to the hierarchical principle "type of music−performer−title of song". The data shown on the screen have visual appearance similar to two pages of a book, so that moving from one screen to another feels like paging an pen book, in order to enable easier and quicker, both the orientation and the selection among a large amount of data. Al variants of the apparatus can be adjusted for completely autonomous usage by blind or sight−impaired persons, which is accomplished by recording the performer's name and the song title during the preparation of music, and by announcing the name of each selected performer and the song title at moving through the menu.

0) US6318547B – POCKET–SIZE CONTAINER FOR METAL COINS

55) Family number: 13304926 (US6318547B) © PatBase

Title: Pocket–size container for metal coins

Priority: CA20002324711 20001030 IT1999VI00221 19991105

Family:

Publication number	Publication date	Application number	Application date
CA2324711 AA	20010505	CA20002324711	20001030
EP1097653 A2	20010509	EP20000123606	20001028
EP1097653 A3	20010822	EP20000123606	20001028
ITVI990221 A1	20010507	IT1999VI00221	19991105
US6318547 BA	20011120	US20000688472	20001016

Probable Assignee: PIANEZZOLA PIERINO

Assignee(s):(std)**:** PIANEZZOLA PIERINO

Inventor(s):(std)**:** PIANEZZOLA PIERINO

Agent(s): MACRAE AND CO

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9)**:** A45C1/00 A45C1/02 B65D85/58 G07D9/00 (Advanced/Invention)

International class (IPC 1–7)**:** A45C1/00 A45C1/02 B65D73/00 B65D85/58 G07D9/00

CPC: A45C1/02 A45C2001/104 G07D9/002

European class: A45C1/02 G07D9/00C K45C1/10R2

US class: 206/0.81 206/0.84 206/38

Classification Explorer

Cited documents: WO0000936 A1, US6202835 BA, US6121544 A, US4946030 A, US4781290 A, US4776797 A, US3047144 A, US2985284 A, US2139150 A, GB2148039 A1, GB1426715 A, GB1293281 A, EP0854455 A1,

Forward Citations: US8469236, US8376133, US7418987, US2016316870, US2016133080, US2013126367, US2008135421, US2008023371, US2008023351, US2006060274, US2002148740, FR2844081, FR2838030, FR2836027, EP1454554, EP1454554, EP1376485, EP1376485, EP1338215, EP1338215, EP1304055, DE10229212, DE102005040435,

Abstract:
Source: US6318547B A pocket–size container for metal coins has a structure in the form and dimensions of a normal credit card, debit card and similar documents and has a plurality of recesses (2). A coin is inserted into each of the recesses according to measure.

0) EP1248241A1 – HOLDER FOR CHIP, THE CHIP BEING USED FOR UNLOCK...

56) Family number: 17027683 (EP1248241A1) © PatBase

Title: HOLDER FOR CHIP, THE CHIP BEING USED FOR UNLOCKING SHOPPING CARTS

Priority: DE20012006120U 20010406

Family:

Publication number	Publication date	Application number	Application date
DE20106120 U1	20010613	DE20012006120U	20010406
EP1248241 A1	20021009	EP20020006040	20020316

Probable Assignee: SPERBER GERHARD ELASTO FORM

Assignee(s):(std)**:** SPERBER GERHARD ELASTO FORM

Assignee(s): ELASTO FORM GERHARD SPERBER

Inventor(s):(std)**:** SPERBER GERHARD

Designated states: AT CH DE LI

International class (IPC 8–9)**:** G07F1/06 G07F7/06 (Advanced/Invention); G07F1/00 G07F7/00 (Core/Invention)

International class (IPC 1–7)**:** A44B15/00 G07D9/00 G07F1/06 G07F5/00 G07F7/06

CPC: G07F7/0672 G07F1/06

European class: G07F1/06 G07F7/06C G07F7/06C9

Classification Explorer

Cited documents: EP0854455 A1, DE4303391 A1, DE29609122 U1, DE29602241 U1, DE19532446 A1, DE19519837 A1,

Abstract:
The chip or token has a circular shape (2) and is fixed into a holder (1) when not in use. The holder is produced typically in plastic and has a recess with a spigot (18) that the token fits onto. The holder also has a hole for attaching to a key ring.

0) US2001031658A – PATTERN DISPLAY DEVICE AND GAME MACHINE INCLUDI...

57) Family number: 28094760 (US2001031658A) © PatBase

Title: PATTERN DISPLAY DEVICE AND GAME MACHINE INCLUDING THE SAME

Priority: JP20000051314 20000228 JP20000065097 20000309 JP20000068925 20000313 US20010793720 20010227 US20030635541 20030807 US20070882123 20070731 US20090637024 20091214 US20100868916 20100826 US20120401974 20120222 US20120726686 20121226

Family:

Publication number	Publication date	Application number	Application date
JP2001238995 A2	20010904	JP20000051314	20000228
JP2001252393 A2	20010918	JP20000065097	20000309
JP2001252394 A2	20010918	JP20000068925	20000313
JP3713414 B2	20051109	JP20000065097	20000309
JP3810244 B2	20060816	JP20000051314	20000228
JP3936513 B2	20070627	JP20000068925	20000313
US2001031658 AA	20011018	US20010793720	20010227
US2006079323 AA	20060413	US20030635541	20030807
US2007281779 AA	20071206	US20070882123	20070731
US2010093426 AA	20100415	US20090637024	20091214
US2010317427 AA	20101216	US20100868916	20100826
US2012149466 AA	20120614	US20120401974	20120222
US2013109461 AA	20130502	US20120726686	20121226
US7204753 BB	20070417	US20010793720	20010227
US7255643 BB	20070814	US20030635541	20030807
US7677572 BB	20100316	US20070882123	20070731
US7806407 BB	20101005	US20090637024	20091214
US8162317 BB	20120424	US20100868916	20100826
US8360853 BB	20130129	US20120401974	20120222
US8708799 BB	20140429	US20120726686	20121226

Probable Assignee: KONAMI DIGITAL ENTERTAINMENT

Assignee(s):(std)**:** AOKI YOSHIO ; DENSO CORP ; KANEKO TAKAHISA ; KAWAKAMI HIROSHI ; OZAKI MASAAKI ; NISHIOKA KEN ; UCHIDA TSUNEO ; YAMAGUCHI TAKASHI ; YAMASA KK ; YAMASA CO LTD ; KONAMI DIGITAL ENTERTAINMENT

Assignee(s): KONAMI DIGITAL ENTERTAINMENT CO ; YAMASA CO ; KONAMI DIGITAL ENTERTAINMENT CO LTD

Inventor(s):(std)**:** AOKI YOSHIO ; KANEKO TAKAHISA ; KAWAKAMI HIROSHI ; NISHIOKA KEN ; NISHIOKA TAKESHI ; OZAKI MASAAKI ; UCHIDA TSUNEO ; YAMAGUCHI TAKASHI ; YAMAGUCHI TAKU

Agent(s): POSZ AND BETHARDS PLC; POSZ LAW GROUP PLC

International class (IPC 8–9): A63F13/00 A63F13/08 A63F3/00 A63F5/04 A63F9/24 G06F17/00 G07F17/32 (Advanced/Invention); A63F5/04 (Core/Invention)

International class (IPC 1–7): A63F13/00 A63F5/04

CPC: G07F17/3202 G07F17/3225 G07F17/3288 G07F17/3206 G07F17/3211

European class: G07F17/32C G07F17/32C2B G07F17/32C2F

US class: 273/138.1 273/274 463/16 463/16P 463/20 463/20P 463/20S 463/30 463/30P 463/30S 463/31 463/31P 463/31S

Classification Explorer

Cited documents: US7204753 BB, US6428415 BA, US6181301 BA, US6181301 B1, US6027115 A, US5890962 A, US5810665 A, US5752881 A, US5395111 A, US5152529 A, US4718672 A, US4568928 A, US4306768 A, JPY22531253, JPU6061079, JPS61279272, JPS6061079, JPH1190017, JPH1190017, JPH0716340, JPH0716340, JP99240, JP9207625 A2, JP91076, JP90017, JP8103541 A2, JP7124290 A2, JP7016340 A2, JP639085, JP61279272 A2, JP6061079, JP6039085 A2, JP60061079 U1, JP60061079 U, JP60061079 A2, JP531253, JP5177043 A2, JP4341288 A2, JP4114676 A2, JP4109977 A2, JP39085, JP341288, JP328398, JP305130, JP279272, JP2531253 Y2, JP2531253 Y, JP244451, JP22531253, JP22531253, JP219182, JP207625, JP2019182 A2, JP2000271324 A2, JP19182, JP177043, JP16340, JP153970, JP152970, JP137774, JP124290, JP1199240, JP114676, JP11244451 A2, JP11153970 A2, JP11152970 A2, JP11137774 A2, JP11099240 A2, JP11090017 A2, JP109977, JP1091076, JP103541, JP10328398 A2, JP10305130 A2, JP10091076 A2,

Forward Citations: WO14090834, WO09054838, WO08148163, WO08143845, WO08063968, WO08063968, WO08063952, WO08063952, WO06124976, WO05071632, WO05058443, WO04084147, US9685034, US9666024, US9659433, US9646458, US9640019, US9626839, US9613491, US9595159, US9595157, US9573069, US9569921, US9566500, US9564004, US9501906, US9483916, US9466173, US9460582, US9449454, US9437084, US9401065, US9342955, US9311774, US9292996, US9262895, US9251653, US9202339, US9183704, US9180380, US9165434, US9165433, US9129488, US9129469, US9076307, US9064372, US9028329, US8998702, US8992304, US8968077, US8961308, US8870642, US8864567, US8851977, US8814654, US8784200, US8784196, US8777737, US8758144, US8749582, US8727864, US8727855, US8715058, US8708799, US8684808, US8662986, US8616969, US8616953, US8608545, US8605114, US8602870, US8585499, US8585487, US8574059, US8556699, US8545326, US8545305, US8512139, US8460098, US8444473, US8425316, US8408998, US8403743, US8388433, US8388432, US8360853, US8360847, US8357033, US8353766, US8348746, US8342938, US8337286, US8323091, US8308561, US8303407, US8298081, US8262457, US8251796, US8251795, US8241121, US8235798, US8231464, US8226468, US8216068, US8210944, US8210922, US8199068, US8192281, US8172666, US8162317, US8142273, US8133108, US8128477, US8123609, US8118674, US8118670, US8115700, US8096878, US8096877, US8096867, US8016670, US8016669, US8012010, US8002624, US7972206, US7971879, US7951001, US7927207, US7914378, US7892094, US7887408, US7883421, US7878910, US7857700, US7841944, US7811170, US7806407, US7775881, US7708640, US7695364, US7682249, US7670224, US7654899, US7628701, US7591723, US7585220, US7520812, US7510476, US7510475, US7494415, US7465228, US7458890, US7390259, US7374488, US7355660, US7329181, US7322884, US7309284, US7281980, US7220181, US7219893, US7207883, US7169048, US7159865, US7140963, US7140963, US7097560, US7097560, US6937298, US2015317871, US2013084942, US2012184364, US2011319152, US2011287826, US2011201404, US2011183758, US2011124411, US2011117990, US2010317427, US2010262489, US2010255445, US2010248809, US2010120501, US2010105454, US2010093426, US2010081493, US2010062830, US2010041460, US2009312085, US2009275390, US2009254965, US2009247276, US2009191940, US2009181758, US2009181755, US2009156303, US2009131148, US2009131145, US2009124383, US2009124347, US2009118004, US2009117977, US2009111578, US2009111577, US2009104989, US2009104969, US2009104954, US2009098943, US2009082083, US2009079667, US2009075721, US2009061984, US2009036195, US2009005168, US2009005143, US2008311977, US2008287178, US2008280671, US2008261674, US2008188293, US2008176653, US2008125219, US2008113775, US2008113756, US2008113749, US2008113745, US2008096655, US2008064497, US2008020841, US2008020840, US2008020839, US2008020827, US2008020820, US2008020816, US2008004104, US2007263426, US2007243934, US2007228651, US2007207851, US2007202948, US2007184893, US2007158904, US2007155469, US2007111788, US2007093290, US2007077986, US2007054730, US2007004513, US2007004510, US2006128467, US2006089192, US2006025204, US2005282617, US2005282616, US2005272500, US2005255908, US2005192090, US2005192085, US2005192084, US2005192083, US2005187003, US2005176493, US2005153776, US2005153775, US2005153772, US2005137019, US2005113163, US2005059458, US2005049046, US2005049032, US2005032571, US2005014548, US2004266521, US2004254015, US2004248642, US2004229686, US2004229680, US2004229678, US2004227866, US2004224758, US2004224747, US2004219965, US2004214637, US2004214635, US2004209692, US2004209683, US2004209681, US2004209678, US2004209670, US2004209668, US2004209667, US2004209666, US2004207154, US2004198485, US2004192430, US2004177001, US2004171423, US2004171418, US2004166925, US2004152502, US2004152501, US2004150162, US2004147316, US2004147303, US2004116178, US2004063490, US2004038721, US2004029636, US2004014520, US2003236118, US2003234489, US2003220134, US2003190949, US2003176214, US2003060269, US2002173354, KR101273072, JP5989633, JP5404896, JP4381720, JP4128168, JP4110091, JP4043468, JP4004729, JP3710805,

JP2014138825, JP2010046526, JP2008514300, JP2008136692, JP2008136691, JP2008136690, JP2008136689, JP2008136688, JP2008000158, JP2007325611, JP2007319296, JP2007054494, JP2007020716, JP2006116204, JP2006087909, JP2006000367, JP2005342344, JP2005342343, JP2005342342, JP2005296261, JP2005185624, JP2005152582, JP2005046644, JP2005013766, JP2005007156, JP2005007155, JP2004344528, JP2004089707, JP2002165918, EP2620922, EP2416297, EP1843270, EP1843270, EP1719548, EP1719548, EP1657686, EP1650720, EP1603092, EP1603092, EP1603091, EP1603091, EP1603090, EP1603090, EP1577849, EP1575008, EP1571626, EP1571623, EP1571622, EP1571620, EP1571619, EP1571617, EP1571615, EP1571612, EP1569180, EP1531435, EP1531435, EP1526487, EP1526486, EP1501056, EP1498857, EP1492064, EP1492064, EP1477946, EP1472657, EP1469433, EP1469433, EP1455315, EP1455315, EP1453020, EP1430938, EP1424663, EP1424663, EP1424662, EP1415690, EP1391856, EP1391856, EP1376497, EP1376497, EP1376496, EP1376496, EP1376495, EP1376494, AU2012200437, AU2011253875, AU2010200664, AU2010200664, AU2008258274, AU2007289050, AU2005207309, AU2005202373, AU2005200917, AU2005200914, AU2004205206, AU2004202318, AU2004200901, AU2004200900, AU2004200896, AU2004200891, AU2004200823, AU2004200819, AU2004200817, AU2003262369, AU2003262345, AU2003257931, AU2003211221, AU2003204914, AU2002323704,

Abstract:
Source: US2001031658A A game machines has a back side display unit composed of reels for displaying back patterns, and a front side display unit composed of transparent EL panels for displaying overlapping patterns overlapping with the back patterns. The back side display unit and the front side display unit are disposed not to produce blind spot regions of the back patterns. The game machine can provide various overlapping patterns with good visibility and a high game selection capability to a player.

0) US2005054410A – OCCLUSION DEVICE FOR GAMBING MACHINE DISPLAY EL...

58) Family number: 34668778 (US2005054410A) © PatBase

Title: OCCLUSION DEVICE FOR GAMBING MACHINE DISPLAY ELEMENTS

Priority: ES20010001829U 20010716 ES20010002639U 20011029 ES20020000434U 20020222 WO2002ES00256 20020529

Family:

Publication number	Publication date	Application number	Application date
AT297582 E	20050615	AT20020735434T	20020529
BRPI0211036 A	20040622	BR2002PI11036	20020529
DE60204574 D1	20050714	DE20026004574	20020529
EP1408463 A1	20040414	EP20020735434	20020529
EP1408463 B1	20050608	EP20020735434	20020529
ES1049621 UA	20011216	ES20010001829U	20010716
ES1049621 Y1	20020416	ES20010001829U	20010716
ES1049621 YA	20020416	ES20010001829U	20010716
ES1050474 UA	20020416	ES20010002639U	20011029
ES1050474 Y1	20020801	ES20010002639U	20011029
ES1050474 YA	20020801	ES20010002639U	20011029
ES1051497 UA	20020816	ES20020000434U	20020222
ES1051497 Y1	20021201	ES20020000434U	20020222
ES1051497 YA	20021201	ES20020000434U	20020222
ES2243731 T3	20051201	ES20020735434T	20020529
MXPA03011265 A1	20041028	MX2003PA11265	20020529
US2005054410 AA	20050310	US20040484099	20040116
WO03010726 A1	20030206	WO2002ES00256	20020529

Probable Assignee: PROINDUMAR SL

Assignee(s):(std)**:** FRANCO MUNOZ JESUS ; FRANCO MUNOZ JOAQUIN ; PROINDUMAR S L ; PROINDUMAR SL

Assignee(s): PROINDUMAR S L MADRID ; MUNOZ JESUS FRANCO

Inventor(s):(std)**:** OZ JOAQUIM FRANCO MU ; OZ JESUS FRANCO MU ; FRANCO MUNOZ JOAQUIN ; FRANCO MUNOZ JESUS ; MUNOZ JESUS FRANCO ; JESUS FRANCO MUNOZ

Inventor(s): JESUS FRANCO MU plus or minus OZ ; JOAQUIM FRANCO MU plus or minus OZ

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): G07F17/32 G07F17/34 (Advanced/Invention); G07F17/32 (Core/Invention)

International class (IPC 1–7): A63F13/00 A63F13/08 G07F17/32 G07F17/34 G07F5/10

CPC: G07F17/3211 G07F17/3213

European class: G07F17/32C2F G07F17/32C2F2

US class: 463/16 463/16P

Classification Explorer

Cited documents: US6540227 BB, US6102396 A, US5584763 A, US5395111 A, US5364100 A, US5152529 A, US5102136 A, US4711452 A, US3733075 A, US3642287 A, US2812182 A, US2093813 A, EP0887775 A1, EP0484103 A2,

Forward Citations:

WO05034055, US9564021, US8287370, US7413512, US7410420, US2010184510, US2006025204, EP1351203, AU2004279016,

Abstract:
Source: US2005054410A It consists of an opaque blind (4) susceptible to covering part of the display (1) carrying the images (2) that are visible through the screen of the machine at the end of each play, for the purpose of temporarily hiding said images (2) to substitute them with others existing on the outer face of the blind (4). This blind (4) is associated to an arm (5) finished off with a ring (6) assembled with rotational freedom on a support (10), said disc ring (6) having a gearing (7) through which it receives the movement from a micromotor (9) which makes the blind (4) rock between the operating and non−operating limit positions, duly defined by a pair of end stops (11−11') or by the electronic control of a "stepper" type drive motor (9).

0) AT5733U – MUENZBOX MUENZBOX (MACHINE TRANSLATION)

59) Family number: 23927743 (AT5733U) © PatBase

Title: MUENZBOX MUENZBOX (Machine translation)

Priority: AT20020000136U 20020304

Family:

Publication number	Publication date	Application number	Application date
AT5733 U1	20021025	AT20020000136U	20020304

Probable Assignee: CARE TEC GMBH

Assignee(s):(std)**:** CARE TEC GMBH

Assignee(s): CARETEC GMBH

Inventor(s):(std)**:** LITSCHEL DIETMAR DR

International class (IPC 8–9)**:** G07D1/08 G07D3/02 G07D5/02 G07D9/00 (Advanced/Invention); G07D1/02 G07D3/00 G07D5/00 G07D9/00 (Core/Invention)

International class (IPC 1–7)**:** G07D1/08 G07D9/06

CPC: G07D5/02 G07D9/002

European class: G07D1/08 G07D3/02 G07D5/02 G07D9/00 G07D9/00C

Classification Explorer

Forward Citations: DE102004009718,

Abstract:
Source: AT5733U Die Erfindung betrifft eine Muenzbox (1) mit einem flachen Grundkoerper (2), welcher mehrere zylindrische Vertiefungen (3) unterschiedlicher Durchmesser zur Aufnahme jeweils zumindest einer Muenze aufweist. Um es sehbehinderten oder blinden Menschen zu ermoeglichen, aus einer Muenzbox rasch und ohne grossen Manipulationsaufwand die gewuenschte Muenze zu entnehmen, ist vorgesehen, dass der Grundkoerper (2) trapezfoermig oder nierenfoermig ausgebildet ist, oder eine asymmetrische Aussenkontur (5) aufweist.

Machine translation: The invention concerns a Muenzbox (1) with a flat base (2), which exhibits several cylindrical recesses (3) different diameter for the admission at least in each case a coin. In order or blind humans sehbehinderten to make possible to take out of a Muenzbox rapidly and without large manipulation expenditure the desired coin are intended that the base (2) trapezoidally or kidney–shaped is trained, or an asymmetrical outer contour (5) exhibits.

0) FR2826764A – EURO COIN IDENTIFYING TOOL FOR PARTIALLY SIGHTE...

60) Family number: 26815978 (FR2826764A) © PatBase

Title: Euro coin identifying tool for partially sighted or blind persons, has slots for various diameter coins

Priority: FR20010008715 20010629

Family:

Publication number	Publication date	Application number	Application date
FR2826764 A1	20030103	FR20010008715	20010629

Probable Assignee: BETTON RENE JOSEPH

Assignee(s):(std)**:** BETTON RENE JOSEPH

Inventor(s):(std)**:** BETTON RENE JOSEPH

International class (IPC 8–9)**:** G07D5/02 G07D9/00 G09B21/00 (Advanced/Invention); G07D5/00 G07D9/00 G09B21/00 (Core/Invention)

International class (IPC 1–7)**:** G07D3/02

CPC: G07D5/02 G09B21/003

European class: G07D5/02 G07D9/00 G09B21/00B3

Classification Explorer

Forward Citations: US8984761,

Abstract:
Tool is composed of several varying height slots in a flat bottom plastic sleeve. The coin is placed into a sleeve slot. Coin identification is made when the top of the coin is level with the top side of the sleeve. The sleeve side can contain Braille and/or large coin identification characters..

0) US2003094345A – CONTAINER–DISPENSER FOR COINS

61) Family number: 28521687 (US2003094345A) © PatBase

Title: CONTAINER–DISPENSER FOR COINS

Priority: IT2001UD00183 20011116

Family:

Publication number	Publication date	Application number	Application date
EP1313070 A1	20030521	EP20020025177	20021111
ITUD20010183 A1	20030516	IT2001UD00183	20011116
US2003094345 AA	20030522	US20020293279	20021114
US6843715 BB	20050118	US20020293279	20021114

Probable Assignee: MICROSTAMP SRL

Assignee(s):(std)**:** MICROSTAMP SRL

Assignee(s): MICROSTAMP SRL VIA G MARCONI ; MUNINI DINO

Inventor(s):(std)**:** MUNINI DINO

Agent(s): STEVENS DAVIS MILLER AND MOSHER LLP

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

International class (IPC 8–9)**:** A45C1/02 B65D83/04 G07D9/00 (Advanced/Invention); A45C1/00 B65D83/04 G07D9/00 (Core/Invention)

International class (IPC 1–7)**:** A45C1/02 B65D83/04 G07D1/08 G07D5/02 G07D9/00

CPC: A45C1/02 A45C2001/108 B65D83/0454 B65D2583/0413 B65D2583/0418 B65D2583/0431 B65D2583/0459 B65D2583/0495 G07D9/002

European class: A45C1/02 B65D83/04C1 G07D9/00C K45C1/10R6D L65D583/04M2 L65D583/04M3 L65D583/04N L65D583/04S3 L65D583/04T2D1

US class: 194/338 453/47

Classification Explorer

Cited documents: WO0009419 A2, US6062420 A, US5492504 A, US519765 A, US4540008 A, US3731695 A, US1823227 A, US1435834 A, EP1283504 A2, DE3922763 A1, AT111675 B, AT111675, AT111675,

Forward Citations: WO07050044, EP1346659, EP1346659,

Abstract:
Source: US2003094345A Container–dispenser (10) for coins (20) comprising housing seatings (19) able to accommodate coins (20) of a defined value, the base (11) being associated with expulsion means (26) able to be selectively positioned in correspondence with one of the housing seatings (19) at a time to push and expel a relative coin (20). The housing seatings (19) are defined by dividing walls (15) including elastic appendixes (16) cooperating with the perimeter of the coins (20), to hold them in the housing seatings (19), which temporarily deform when the coins (20) are pushed by the expulsion means (26), to allow them to exit from the relative housing seating (19).

0) WO03063638A1 – POCKET CONTAINER/SORTER FOR COINS CONTENEUR–CLA...

62) Family number: 28885076 (WO03063638A1) © PatBase

Title: POCKET CONTAINER/SORTER FOR COINS

Priority: FR20020000970 20020128 WO2003FR00171 20030120

Family:

Publication number	Publication date	Application number	Application date
AU2003216745 AA	20030902	AU20030216745	20030120
FR2835157 A1	20030801	FR20020000970	20020128
WO03063638 A1	20030807	WO2003FR00171	20030120

Probable Assignee: CHAUTEMPS CAROLINE

Assignee(s):(std)**:** CHAUTEMPS CAROLINE ; SELVA CAROLINE CHAUTEMPS

Inventor(s):(std)**:** CHAUTEMPS CAROLINE ; SELVA CAROLINE CHAUTEMPS

Designated states: AT AU BE BG CA CH CN CY CZ DE DK EE ES FI FR GB GR HU ID IE IL IT JP KR LU MC NL NZ PL PT RO RU SE SG SI SK TR US YU

International class (IPC 8–9)**:** A45C1/10 A45C1/12 (Advanced/Invention); A45C1/00 (Core/Invention)

International class (IPC 1–7)**:** A45C1/02 A45C1/10 A45C1/12 G07D3/02

CPC: A45C1/10 A45C1/12

European class: A45C1/10 A45C1/12

Classification Explorer

Cited documents: US1838689, US1814064, US1700988, US1447534, GB1293281,

Forward Citations: FR2956509,

Abstract:
The invention relates to a pocket container/sorter for metal pieces, such as coins. The inventive device comprises at least eight different containers for the coins which are arranged in a flat manner. Each container (13) can only receive coins having the same value, such that there is one container (13) for each coin value. Moreover, each container (13) is provided with a device for inserting the coins and a device for the rapid removal of same. In addition, the device also comprises a container that is used to store coins of any value before they are sorted and said all–coin container can be quickly filled with coins without being opened. All the aforementioned containers (13) are interconnected by means of an articulation (25). The device thus assembled also receives a pouch for notes and a closing system. According to the invention, the device is particularly suitable for the sorting of coins and the rapid removal of same with minimum handling.

0) EP1338215A1 – PURSE FOR THE SELECTIVE DISTRIBUTION OF COINS ...

63) Family number: 28899642 (EP1338215A1) © PatBase

Title: Purse for the selective distribution of coins

Priority: FR20020002125 20020220

Family:

Publication number	Publication date	Application number	Application date
AT393581 E	20080515	AT20030290395T	20030218
DE60320602 D1	20080612	DE20036020602	20030218
EP1338215 A1	20030827	EP20030290395	20030218
EP1338215 B1	20080430	EP20030290395	20030218
FR2836027 A1	20030822	FR20020002125	20020220
FR2836027 B1	20040423	FR20020002125	20020220
HK1059543 A1	20090911	HK20040101438	20040227
HK1059543 A3	20040709	HK20040101438	20040227

Probable Assignee: JOYAU JEAN CLAUDE

Assignee(s):(std)**:** JOYAU JEAN CLAUDE ; REGOTTAZ GUY

Assignee(s): GUY REGOTTAZ ; JEAN CLAUDE JOYAU

Inventor(s):(std)**:** JOYAU JEAN CLAUDE ; REGOTTAZ GUY

Inventor(s): GUY REGOTTAZ ; JEAN CLAUDE JOYAU

Agent(s): FOSSE DANIELE; BREMA LOYER

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

International class (IPC 8–9)**:** A45C1/02 A45C1/10 (Advanced/Invention); A45C1/00 (Core/Invention); A45C (Subclass/Invention)

International class (IPC 1–7)**:** A45C1/02 G07D3/02

CPC: A45C1/10 A45C2001/108

European class: A45C1/10 K45C1/10R6D

Classification Explorer

Cited documents: US3731695 A, US3592204 A, US3361142 A, US2334016 A, US1435834 A, FR1030263 A, EP1097653 A2, DE1532874 A1, CH582495,

Abstract:
The purse has a cylindrical coin support (3) which is capped by a coin retaining plate with cut–outs (5) for the coins and peripheral flanges (7). Each cut–out contains coins of the same size and coins of differing sizes are contained in different cut–outs. A lower plate (8) has springs (9) to retain the coins until use. The purse is held together and manipulated by a central bolt and washer fixing (6A)

0) US2006151989A – EMBOSSED OPTICALLY VARIABLE DEVICES

64) Family number: 30468476 (US2006151989A) © PatBase

Title: EMBOSSED OPTICALLY VARIABLE DEVICES

Priority: AU20020951870 20021007 AU20030266829 20031007 AU20030903687 20030716 WO2003AU01316 20031007

Family:

Publication number	Publication date	Application number	Application date
AU2002951870 A0	20021024	AU20020951870	20021007
AU2003266829 AA	20040423	AU20030266829	20031007
AU2003266829 BB	20090205	AU20030266829	20031007
AU2003903687 A0	20030731	AU20030903687	20030716
CA2501478 AA	20050408	CA20032501478	20031007
EP1549505 A1	20050706	EP20030747713	20031007
EP1549505 A4	20060419	EP20030747713	20031007
NZ539221 A	20070629	NZ20030539221	20031007
US2006151989 AA	20060713	US20030530665	20031007
WO04030928 A1	20040415	WO2003AU01316	20031007

Probable Assignee: NOTE PRINTING AUSTRALIA LTD

Assignee(s):(std)**:** JACKSON WAYNE K ; JACKSON WAYNE KEVIN ; MUKE SANI ; NOTE PRINTING AU LTD ; NOTE PRINTING AUSTRALIA LTD

Assignee(s): NOTE PRINTING AUSTRALIA LIMITED

Inventor(s):(std)**:** JACKSON WAYNE K ; JACKSON WAYNE KEVIN ; MUKE SANI ; SANI MUKE ; WAYNE KEVIN JACKSON

Inventor(s): JACKSON WAYNE

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; ANDRUS SCEALES STARKE AND SAWALL LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B41M1/24 B41M3/14 B42D15/00 B42D15/10 B42D25/328 B42D25/351 B42D25/425 B44F1/12 G07D7/12 (Advanced/Invention); B41M1/24 (Advanced/Non–invention)

International class (IPC 1–7): B41M3/14 B42D15/10 B44F1/12 G07D7/12

CPC: B42D25/00 B42D25/324 B41M3/14 B41M3/144 B42D25/465 B41M1/24 B41M3/148 B42D25/29 B42D2033/24

European class: B41M1/24 B41M3/14T B42D15/00C B42D15/10 L41M3/14 L41M3/14F L42D33/24 L42D35/28

US class: 283/67 283/67P

Classification Explorer

Cited documents: WO0204234 A1, WO0100426 A1, US6294241 BA, US6283509 BA, US6183018 BA, US5915731 A, US5437897 A, US5199744 A, US4715623 A, US4536016, US4420515 A, US4250217 A, US2002030360 AA, US2002027361 AA, US1996539 A, EP0984043, AU558476 B2,

Forward Citations: WO15092727, WO14184559, WO13020687, WO12010286, WO11000878, WO10075979, WO09062229, WO09013000, WO09013000, WO08053130, WO08053130, WO08003949, WO07042865, US9512570, US9323042, US9216552, US9016726, US8983117, US8923550, US8889249, US8875628, US8842876, US8815337, US8696032, US8684415, US8672361, US8516724, US8336361, US8126203, US8113434,

US8100436, US8077905, US7949148, US7354072, US2014245911, US2014225362, US2014049034, US2013114122, US2012270020, US2012228860, US2011076395, US2010295291, US2010294015, US2010253062, US2010231846, US2010090455, US2010002303, US2008250954, US2008024292, US2008000976, US2007187505, US2004195823, RU2527184, KR101399482, JP2013220582, FR3015357, FR2907808, EP2953796, EP2913197, EP2554397, EP2522529, EP2293222, EP2205443, EP1990211, EP1990210, EP1990210, EP1878584, EP1674287, EP1602508, EA014322, DE202012007473, CN102666121, CN102666121, AU2015100575, AU2011101684, AU2010268081, AU2007306918,

Abstract:
Source: US2006151989A A security device (3) and a method of forming a security device (3) is provided in which a sheet (1) has a substantially transparent or translucent layer (10) and a reflective layer (11) with at least part of the reflective layer (11) being visible through the transparent or translucent layer (10) from a first side of the sheet (1). The sheet (1) is blind embossed from the first side through the transparent or translucent layer (10) and onto the reflective layer (11) to form a transitory embossed image (3). The transitory embossed image (3) may be provided in a window or half−window (2) formed by applying one or more opacifying layers (14) to the substrate (10) except in the area containing the reflective layer (11) and transitory embossed image (3) on one or both sides of the substrate (10). In one embodiment, the reflective layer is a highly reflective metallic ink (11). In another embodiment, the reflective layer is an optically variable pigment (11 a) which provides a colour shift between two distinct colours with the colour shift dependent upon viewing angle. In further embodiments, the transitory embossed image (41, 42, 43) comprises macro−embossings (52, 53) with micro−embossings (54, 55) formed on the sides of the macro−embossings (52, 53). Each of the embodiments of transitory embossed images produces unusual visual switching effects which cannot be reproduced by photocopying and which are difficult to counterfeit.

0) US2004133782A – ANONYMOUS ELECTRONIC TRANSACTIONS USING AUDITAB...

65) Family number: 30716485 (US2004133782A) © PatBase

Title: ANONYMOUS ELECTRONIC TRANSACTIONS USING AUDITABLE MEMBERSHIP PROOFS

Priority: US19990148467P 19990811 US20000637475 20000811 US20030642390 20030815

Family:

Publication number	Publication date	Application number	Application date
US2004133782 AA	20040708	US20030642390	20030815

Probable Assignee: INT COMP SCIENCE INST A C

Assignee(s):(std)**:** INT COMP SCIENCE INST A C

Assignee(s): INT COMPUTER SCIENCE INST A CALIFOR ; INT COMPUTER SCIENCE INST A CALIFORNIA CORP

Inventor(s):(std)**:** SANDER TOMAS ; TA SHMA AMON

International class (IPC 8–9)**:** G06Q20/00 G06Q20/06 G06Q20/22 G06Q20/38 G06Q20/40 G07C9/00 H04L9/32 (Advanced/Invention); G06Q20/00 G07C9/00 H04L9/32 (Core/Invention)

International class (IPC 1–7)**:** H04L9/00

CPC: G06Q20/06 G06Q20/29 G06Q20/38215 G06Q20/4014 G07C9/00031 H04L9/3213 H04L9/3218 H04L9/3236 H04L2209/38 H04L2209/42 H04L2209/56

European class: G06Q20/06 G06Q20/29 G06Q20/38215 G06Q20/4014 G07C9/00B6 G07F19/00C H04L9/32C H04L9/32D2 H04L9/32G H04L9/32L T04L209/38 T04L209/42 T04L209/56

US class: 713/170 713/170P

Classification Explorer

Cited documents: US6446052 BA, US5832089 A, US5724424 A, US5717757 A, US5715314 A, US5708780 A, US5682430 A, US5604805 A, US5521980 A, US4995082 A, US4759063 A,

Forward Citations: WO16105265, US9420340, US9094721, US9088831, US8566893, US8224754, US8160064, US8051455, US7490069, US2014067663, US2006129501, US2005010535, FR3018370,

Abstract:
Source: US2004133782A Systems and methods for executing electronic transactions on an anonymous basis using blind auditable membership proofs. By making use of a new cryptographic primitive, electronic transactions such as payment, voting, investment, redemption of tax coupon, and international currency transfer may be made both anonymous and auditable. In an electronic payment system according to the present invention, a user submits information identifying a coin to a bank which in turn validates the coin and adds it to a public list of valid coins. To make a payment using the coin, the user presents an efficient auditable membership proof to a merchant in the form of a zero knowledge argument which proves that the user knows the authenticating information for an unspecified coin in the public list of valid coins. The merchant verifies the zero knowledge argument, accepts the coin as payment, and presents certain authenticating information to the bank. After verifying the merchant's identity and the validity of the coin referenced in the authenticating information, the bank credits the merchant's account and removes the coin from the public list of valid coins. Thereby the user makes payment with complete anonymity while authorities are given the necessary opportunity to monitor and audit the transactions to help deter and prevent bank robbery, blackmail, money laundering and other illegality.

0) US2005059464A – WORD BASED LOTTERY GAME

66) Family number: 31762051 (US2005059464A) © PatBase

Title: WORD BASED LOTTERY GAME

Priority: US20030662736 20030915 US20030681447 20031008 US20040007535 20041208 US20040604444P 20040825

Family:

Publication number	Publication date	Application number	Application date
US2005059464 AA	20050317	US20030662736	20030915
US2005059465 AA	20050317	US20030681447	20031008
US2005085289 AA	20050421	US20040007535	20041208
US7404764 BB	20080729	US20030681447	20031008
US7407437 BB	20080805	US20030662736	20030915
US7497778 BB	20090303	US20040007535	20041208
WO05041132 A2	20050506	WO2004US26532	20040816
WO05041132 A3	20051222	WO2004US26532	20040816

Probable Assignee: SCIENTIFIC GAMES CORP

Assignee(s):(std)**:** SCIENT GAMES INT INC ; SCIENT GAMES ROYALTY CORP

Assignee(s): SCIENTIFIC GAMES INT INC ; SCIENTIFIC GAMES INT ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; SCIENTIFIC GAMES CORP ; BANK OF AMERICA NA COLLATERAL AGENT AS ; BOZEMAN ALAN K ; BOZEMAN ALAN KYLE ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT AS ; JP MORGAN CHASE BANK NA ; JPMORGAN CHASE BANK NA ; SCIENTIFIC GAMES ROYALTY CORP

Inventor(s):(std)**:** BOZEMAN ALAN K ; BOZEMAN ALAN KYLE

Inventor(s): BOZEMAN ALAN

Agent(s): ARNALL GOLDEN GREGORY LLP; CARLTON FIELDS PA; DORITY AND MANNING PA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A63F13/00 A63F9/24 G06F17/00 G06F19/00 G07F17/32 (Advanced/Invention); G07C15/00 (Advanced/Non–invention); A63F13/00 A63F9/24 G06F17/00 G06F19/00 G07F17/32 (Core/Invention); G07C15/00 (Core/Non–invention); G07C (Subclass/Invention)

International class (IPC 1–7): A63F13/00 A63F9/24 G06F17/00 G06F19/00 G07C

CPC: G07C15/006 Y10S283/903 G07F17/32 G07F17/329

European class: G07F17/32 G07F17/32P4 S07C15/00E

US class: 273/269 283/49 283/903 379/93.13 463/17 463/17P 463/18 463/18P 463/25 463/40 463/9

Classification Explorer

Cited documents: US6773345 BB, US6602133 BB, US6497408 BA, US6428412 BA, US6241246 BA, US6168521 BA, US6168521 B1, US6080062 A, US6024641 A, US6017032 A, US5921864 A, US5855514 A, US5788573 A, US5772510 A, US5613679 A, US5269523 A, US5207435 A, US5118109 A, US5112050 A, US4856787 A, US4494197 A, US4157829 A,

Forward Citations: WO16161008, WO12074992, WO09032007, WO07134109, WO07134109, WO07073528, WO07073528, WO06002352, US9669291, US9640018, US9626837, US9561428, US9508225, US9443397, US9251663, US9240105, US9224271, US9220974, US8808080, US8795071, US8794630, US8740688, US8597101, US8460080, US8398484, US8287351, US8262461, US8221208, US8216045, US8197325,

US8197324, US8118659, US7850518, US7766739, US7601059, US2016232815, US2015011287, US2012135794, US2011281637, US2011230246, US2011206810, US2011143833, US2011009178, US2010301554, US2010203950, US2010093420, US2010093419, US2010009736, US2009191938, US2009093292, US2009061992, US2008254853, US2008254852, US2008254851, US2007210514, US2007021185, US2006287056, US2006281523, US2006281522, US2006258433, US2006178192, US2006160597, US2006100008, EP1846124,

Abstract:
Source: US2005059464A A lottery terminal apparatus and method of playing a word based lottery includes a value input device, a display unit and a lottery input unit for receiving alphabetical game play information wherein the display unit is adapted to visually display the received alphabetical game play information. The lottery terminal unit further includes a controller having a memory and a processor, wherein the controller is operatively coupled to the display unit and is programmed to receive wager data in response to a wager made by a person. The controller and method may assign a prize value to the alphabetical game play information received from the lottery input unit and randomly select an alphabetic sample based on a distribution of choices. The controller may further determine a correlation between the alphabetic sample and the alphanumeric game play information to determine a payout value based on a comparison of the alphabetic sample and the alphanumeric game play information to determine the prize value.

0) DE102004009718B4 – MUENZMAGAZIN

67) Family number: 32253552 (DE102004009718B4) © PatBase

Title: Muenzmagazin

Priority: DE200410009718 20040227

Family:

Publication number	Publication date	Application number	Application date
DE102004009718 A1	20050922	DE200410009718	20040227
DE102004009718 B4	20070104	DE200410009718	20040227

Probable Assignee: OSTERMANN JOERN HINRICH

Assignee(s):(std)**:** OSTERMANN JOERN HINRICH

Inventor(s):(std)**:** OSTERMANN JOERN HINRICH

International class (IPC 8–9): A45C1/02 G07D9/00 (Advanced/Invention); A45C1/00 G07D9/00 (Core/Invention)

International class (IPC 1–7): A45C1/02 G07D9/00

CPC: G07D9/002

European class: G07D9/00C

Classification Explorer

Cited documents: WO03047383, WO03011712, US3398688, GB1293281, DE20107413 U, AT5733 U, AT5733,

Abstract:
The storage has a base body (1) connected with a cover unit (6). Through holes are arranged in the base body as cells (2) for taking coins inside. A base plate is arranged in each cell as a piston that is adjusted with fingers. An external opening (9) is provided between the base body and unit to laterally push out the coins. The opening is partly closed by rotating the unit.

0) US2005245309A – WAGERING GAME HAVING A BLIND SELECTION FEATURE ...

68) Family number: 32384714 (US2005245309A) © PatBase

Title: WAGERING GAME HAVING A BLIND SELECTION FEATURE

Priority: US20040838633 20040503

Family:

Publication number	Publication date	Application number	Application date
AU2005201721 AA	20051117	AU20050201721	20050422
AU2005201721 BB	20110526	AU20050201721	20050422
US2005245309 AA	20051103	US20040838633	20040503
US7390260 BB	20080624	US20040838633	20040503

Probable Assignee: BALLY GAMING INC

Assignee(s):(std)**:** ENGLMAN ALLON G ; WMS GAMING INC

Assignee(s): BALLY GAMING INC ; BANK OF AMERICA NA COLLATERAL AGENT AS ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT AS

Inventor(s):(std)**:** ENGLMAN ALLON G

Inventor(s): ALLON G ENGLMAN ; ENGLMAN ALLON

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; JENKENS AND GILCHRIST PC; NIXON PEABODY LLP

International class (IPC 8–9): A63F13/00 A63F9/24 G06F17/00 G06F19/00 G07F17/32 G07F17/34 (Advanced/Invention); A63F13/00 A63F9/24 G07F17/32 (Core/Invention)

International class (IPC 1–7): A63F13/00 A63F9/24 G06F161/00 G07F17/34

CPC: G07F17/32 G07F17/3244 G07F17/3262 G07F17/3267 G07F17/34

European class: G07F17/32 G07F17/32K G07F17/32M2 G07F17/32M4 G07F17/34

US class: 273/143R 273/236 273/269 273/292 463/12 463/13 463/20 463/20P 463/25 463/40 700/91 700/93

Classification Explorer

Cited documents: US6890257 BB, US6811483 BA, US6796905 BB, US6796900 BB, US6739971 BB, US6729618 BA, US6726563 BA, US6663489 BB, US6659864 BB, US6648758 BB, US6634943 BA, US6602137 BB, US6575830 BB, US6561904 BB, US6533273 BB, US6514141 BA, US6511375 BA, US6471208 BB, US6443452 BA, US6347996 BA, US6309300 BA, US6190255 BA, US6089976 A, US6015346 A, US2005245309 AA, US2004219967 AA, US2004063493 AA, US2004053672 AA, US2004038731 AA, US2004023707 AA, US2004018873 AA, US2003211879 AA, US2003162585 AA, US2003162583 AA, US2003069056 AA, US2003054872 AA, US2002025846 AA, US2001046893 AA,

Forward Citations: WO09058256, US9697694, US9589423, US9196132, US9135782, US9135781, US9129480, US9105162, US9064377, US8864571, US8747207, US8657665, US8651944, US8632399, US8480480, US8371938, US8317587, US8231456, US8231451, US7727068, US7713122, US7390260, US7381133, US2016196714, US2015161850, US2014235324, US2014135100, US2013244754, US2013130775, US2013130773, US2013130772, US2012077569, US2011124394, US2011118001, US2010285862, US2010261517, US2010093425, US2010056263, US2009209316, US2009176552, US2008311975, US2008064472, US2008032769, US2007232389, US2006189379, US2006189378, US2005101368,

Abstract:
Source: US2005245309A A gaming terminal for playing a wagering game includes a basic game and a bonus game. The basic game has a plurality of symbols that indicate a randomly selected outcome from a plurality of outcomes in response to a wager input by a player. The bonus game is triggered by a predetermined event such as by selecting a start–bonus outcome from the plurality of outcomes. The bonus game includes a plurality of free spins and a plurality of blind selections, at least one of the blind selections being selected before playing each of the free spins. The selected blind selection reveals a bonus enhancement that is provided to the player after the bonus enhancement has been revealed.

0) US2007270216A – GAMING DEVICE WITH ATTACHED AUDIO–CAPABLE CHAIR...

69) Family number: 32482338 (US2007270216A) © PatBase

Title: GAMING DEVICE WITH ATTACHED AUDIO–CAPABLE CHAIR

Priority:
US20040575153P 20040528 US20040575604P 20040528 US20040575605P 20040528
US20050569730 20050526 US20050569689 20050526 US20050569732 20050526
US20050569687 20050526 US20070569730 20070611 US20040640350P 20041230
WO2005US18392 20050526 WO2005US18595 20050526 WO2005US18475 20050526
US20080569687 20080128 US20120494521 20120612 WO2005US18681 20050526

Family:

Publication number	Publication date	Application number	Application date
US2007270216 AA	20071122	US20050569730	20050526
US2008039215 AA	20080214	US20050569689	20050526
US2008211276 AA	20080904	US20050569732	20050526
US2008246321 AA	20081009	US20050569687	20050526
US2012258791 AA	20121011	US20120494521	20120612
US8000484 BB	20110816	US20050569732	20050526
US8029369 BB	20111004	US20050569689	20050526
US8262478 BB	20120911	US20050569730	20050526
US8454087 BB	20130604	US20050569687	20050526
US8672757 BB	20140318	US20120494521	20120612
WO05117647 A1	20051215	WO2005US18392	20050526
WO05117648 A1	20051215	WO2005US18475	20050526
WO05117649 A1	20051215	WO2005US18681	20050526
WO05120127 A1	20051215	WO2005US18595	20050526
WO05120127 C2	20060330	WO2005US18595	20050526

Probable Assignee: BALLY GAMING INC

Assignee(s):(std)**:** CANTERBURY STEPHEN A ; HAHN BRIAN ; PRYZBY ERIC M ; WMS GAMING INC ; RASMUSSEN JAMES M

Assignee(s): DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT AS ; BALLY GAMING INC ; BANK OF AMERICA NA COLLATERAL AGENT AS

Inventor(s):(std)**:** CANTERBURY STEPHEN A ; HAHN BRIAN ; PRYZBY ERIC M ; RASMUSSEN JAMES M

Inventor(s): PRYZBY ERIC

Agent(s): SCHWEGMAN LUNDBERG AND WOESSNER/WMS GAMING; SCHWEGMAN LUNDBERG AND WOESSNER WMS GAMING; SCHWEGMAN LUNDBERG AND WOESSNER PA; SCHWEGMAN LUNDBERG AND WOESSNER P A; NIXON PEABODY LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A47B83/00 A47B97/00 A47C31/00 A47C7/62 A47C7/72 A47C9/02 A63F11/00 A63F13/02 A63F13/08 A63F13/12 A63F9/24 B23P6/00 G06F19/00 G07F17/32 H04R1/02 H04R5/02 (Advanced/Invention);
A63F9/24 (Advanced/Non–invention);
A47B97/00 A47C31/00 A47C9/00 A63F11/00 A63F13/08 B23P6/00 H04R5/02 (Core/Invention)

International class (IPC 1–7): A47B97/00 A63F13/02 A63F13/08 H04R5/02

CPC: G07F17/3216 A63F2009/247 A63F13/08 A63F13/12 A63F2300/6063 A47C9/022 Y10T29/49723 A47C7/72 A63F13/28

European class: A47C9/02B A63F13/08 A63F13/12 K63F300/60S

US class: 29/402.04 29/402.040S 297/172 297/217.3 297/217.300P 297/217.4 297/217.400P 297/463.1 381/119 381/301 381/333 381/351 381/388 439/489 463/25 463/35 463/35P 463/46 463/47 463/47P 463/47S

Classification Explorer

Cited documents: WO05120127 A1, WO05117649 A1, WO05117648 A1, WO05117647 A1, US8262478 BB, US8029369 BB, US8000484 BB, US7867085 BB, US7867085 B1, US7832799 BB, US7826628 BB, US7826627 BB, US7826627 B1, US7819750 BB, US7766747 BB, US7766747 B1, US7704147 BB, US7688992 BB, US7688992 B1, US7658445 BB, US7522740 BB, US7479063 BB, US7479063 B1, US7389153 BB, US7367886 BB, US7367886 B1, US7364508 BB, US7364508 B1, US7290072 BB, US7240093 BA, US7206426 BA, US7136498 BA, US7114171 BB, US7112139 BB, US7112139 B1, US7090582 BB, US6935959 BB, US6928329 BA, US6899627 BB, US6885899 BA, US6824419 BA, US6752445 BA, US6694034 BB, US6656041 BA, US6572187 BB, US6572187 B1, US6544200 BA, US6530842 BA, US6503147 BA, US6443839 BB, US6430297 BA, US6422941 BA, US6422670 BA, US6422041 BA, US6368216 BA, US6354660 BA, US6314330 BA, US6290536 BA, US6227614 BA, US6206335 BA, US6191892 BA, US6161892 A, US6135562 A, US6089663 A, US6075868 A, US6012755 A, US5953429 A, US5910991 A, US5908354 A, US5807177 A, US5791731 A, US5768724 A, US5762617 A, US5678886 A, US5669818 A, US5622511 A, US5618178 A, US5617331 A, US5596647 A, US5542748 A, US5522641 A, US5437453 A, US5409296 A, US5398992 A, US5344331 A, US5290034 A, US5232191 A, US5114112 A, US5102192 A, US5083738 A, US5052685 A, US4887298 A, US4875546 A, US4840343 A, US4805952 A, US4705274 A, US4664456 A, US4660833 A, US4549631 A, US4413198 A, US2689016 A, US2012258791 AA, US2010317437 AA, US2010298051 AA, US2010248815 AA, US2010099487 AA, US2010075750 AA, US2010029385 AA, US2009298579 AA, US2009170597 AA, US2009041257 AA, US2008299819 AA, US2008246321 AA, US2008234026 AA, US2008214289 AA, US2008211276 AA, US2008194319 AA, US2008188291 AA, US2008176654 AA, US2008161108 AA, US2008139284 AA, US2008111408 AA, US2008096666 AA, US2008070685 AA, US2008064486 AA, US2008054561 AA, US2008039215 AA, US2008009347 AA, US2007293304 AA, US2007270216 AA, US2007015570 AA, US2006269088 AA, US2006116073 AA, US2006100015 AA, US2006073881 AA, US2006073681 AA, US2006072765 AA, US2006068909 AA, US2006068908 AA, US2006064187 AA, US2005239434 AA, US2005164788 AA, US2005159219 AA, US2005054442 AA, US2005053252 AA, US2004258270 AA, US2004254020 AA, US2004254006 AA, US2004162144 AA, US2004161115 AA, US2004142747 AA, US2004018867 AA, US2004014514 AA, US2004007907 AA, US2003217363 AA, US2003185400 AA, US2003152243 AA, US2003122973 AA, US2003100359 AA, US2003054880 AA, US2003044033 AA, US2003044003 AA, US2003012297 AA, US2002155887 AA, US2002041069 AA, US2002041068 AA, JP5031254 A2,

Forward Citations: WO16120464, US9547952, US9532655, US9530287, US9520018, US9514599, US9449456, US9367987, US9245407, US9142083, US9135785, US9087429, US9058719, US9058714, US9011247, US8968088, US8913777, US8912727, US8894487, US8858343, US8840464, US8827805, US8814673, US8747225, US8740701, US8740689, US8678936, US8678923, US8672757, US8663019, US8636570, US8622830, US8591308, US8454087, US8414373, US8408996, US8376844, US8262478, US8221218, US8197340, US8113517, US8029369, US8016674, US8000484, US7901291, US7892091, US7832799, US7789748, US7708642, US7699699, US7695363, US7666098, US7658445, US7526736, US7494412, US7355112, US7341512, US7258613, US7105736, US2015289662, US2015287274, US2015287272, US2015087401, US2015025688, US2012315985, US2012282997, US2012115589, US2011111847, US2011111839, US2011109134, US2011003631, US2010081500, US2009280896, US2009197673, US2009179479, US2009146484, US2008246321, US2008211276, US2008054561, US2008039215, US2007270216, TWI366631, AT516773,

Abstract:
Source: US2007270216A A gaming system includes a chair communicably coupled to a gaming device. The chair includes an audio playback device operable to receive audio playback commands. The audio playback commands may be received from a gaming device physically attached to the chair, a remote gaming device, or from a network interface communicably coupling the chair to a gaming establishment audio system, a player tracking system, or other gaming establishment system. Additionally, the chair may include an audio data storage device. Audio data from the storage device may be played through speakers on the chair, audio output devices on a gaming device, or audio output devices on a peripheral attached to the gaming device such as a top box or signage peripheral.

0) US2006058082A – SYSTEM AND METHOD FOR PROVIDING A CARD TOURNAME...

70) Family number: 43234313 (US2006058082A) © PatBase

Title: SYSTEM AND METHOD FOR PROVIDING A CARD TOURNAMENT USING ONE OR MORE ELECTRONIC CARD TABLE

Priority: US20040610262P 20040916 US20040939772 20040913 US20050052391 20050207 WO2005US30901 20050830

Family:

Publication number	Publication date	Application number	Application date
AU2005285317 AA	20060323	AU20050285317	20050830
CA2580187 AA	20070312	CA20052580187	20050830
EP1794721 A1	20070613	EP20050792637	20050830
JP2008512189 T2	20080424	JP20070531219T	20050830
US2006058082 AA	20060316	US20050052391	20050207
WO06031439 A1	20060323	WO2005US30901	20050830

Probable Assignee: POKERTEK INC

Assignee(s):(std)**:** CRAWFORD JAMES T III ; POKERTEK INC ; WHITE GEHRIG HENDERSON

Assignee(s): CRAWFORD JAMES T

Inventor(s):(std)**:** WHITE GEHRIG HENDERSON ; WHITE GEHRIG H ; CRAWFORD JAMES T III

Inventor(s): CRAWFORD JAMES T ; CRAWFORD JAMES ; WHITE GEHRIG ; JAMES T III CRAWFORD ; GEHRIG HENDERSON WHITE ; CRAWFORD JAMES TIII

Agent(s): GRIFFITH HACK; GOWLING LAFLEUR HENDERSON LLP; HOWARD AND HOWARD ATTORNEYS PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A63F1/02 A63F1/06 A63F13/00 A63F13/12 G06F17/00 G06F19/00 G07F17/32 (Advanced/Invention); G06F17/00 G06F19/00 G07F17/32 (Core/Invention)

CPC: G07F17/3276 G07F17/3293

European class: G07F17/32M8D G07F17/32P6

US class: 463/7 463/7P

Classification Explorer

Cited documents: WO0016863 A1, US7306516 BB, US6800026 BB, US6722974 BB, US6659866 BB, US6368216 BA, US6165069 A, US5882260 A, US5702304 A, US5669817 A, US5159549 A, US4926327 A, US4760527 A, US4614342 A, US2005215300 AA, US2005090304 AA, US2004082372 AA, US2003176214 AA, US2003176211 AA, US2003070178 AA,

Forward Citations: WO15032330, US9659440, US9600968, US9595166, US9592450, US9508224, US9406193, US9311773, US9269235, US9230398, US9011225, US8920229, US8905834, US8814648, US8808077, US8795061, US8734256, US8727851, US8616959, US8449364, US8353751, US8262469, US8251791, US8206212, US8172660, US8157631, US8152615, US8137174, US8123604, US8118669, US8021230, US8012009, US7993199, US7963847, US7762887, US7704144, US7690996, US7419162, US2016225220, US2013237301, US2011143835, US2011003642, US2009298585, US2009124379, US2009124319, US2009121431, US2009104962, US2009093306, US2009069090, US2008252011, US2008113772, US2008076500, US2008070674, US2008020815, US2008015030, US2007225067, US2007173318, US2007072682, US2007045957, US2006287066, US2006131809, US2005119052, JP5515291, JP4865856, JP2009540423, AU2014317575,

Abstract:
Source: US2006058082A A system and method provides a card tournament on one or more electronic card

tables. The card tables have a table top with a playing surface and a plurality of electronic player interaction areas located around a periphery of the table top. Each electronic player interaction area provides a player interface for interaction with one of a plurality of players. A tournament computer is coupled to the electronic player interaction areas of the electronic card table for administering the card tournament. The card tournament includes a series of card hands of a card game played at the electronic card table using electronic cards and electronic chips.

71) Family number: 43234317 (WO06127795A2) © PatBase

Title: A HOSPITALITY FEATURE OF AN ELECTRONIC GAMING SYSTEM AND METHOD OF OPERATION

Priority: US20050683810P 20050523 US20060802079P 20060519 WO2006US20063 20060523 WO2006US20062 20060523 WO2006US20061 20060523 WO2006US20069 20060523 WO2006US20075 20060523 WO2006US20067 20060523 WO2006US20068 20060523

Family:

Publication number	Publication date	Application number	Application date
AU2006249989 AA	20061130	AU20060249989	20060523
AU2006249990 AA	20061130	AU20060249990	20060523
AU2006249991 AA	20061130	AU20060249991	20060523
AU2006249994 AA	20061130	AU20060249994	20060523
AU2006249995 AA	20061130	AU20060249995	20060523
AU2006249996 AA	20061130	AU20060249996	20060523
AU2006250000 AA	20061130	AU20060250000	20060523
CA2601881 AA	20070921	CA20062601881	20060523
CA2604059 AA	20071004	CA20062604059	20060523
CA2604063 AA	20071004	CA20062604063	20060523
CA2604065 AA	20071004	CA20062604065	20060523
CA2604122 AA	20071009	CA20062604122	20060523
CA2604197 AA	20071009	CA20062604197	20060523
CA2604200 AA	20071009	CA20062604200	20060523
EP1883460 A2	20080206	EP20060771053	20060523
EP1883461 A2	20080206	EP20060771058	20060523
EP1883462 A2	20080206	EP20060771054	20060523
EP1883463 A2	20080206	EP20060771059	20060523
EP1899028 A2	20080319	EP20060760340	20060523
EP1899030 A2	20080319	EP20060771052	20060523
EP1899031 A2	20080319	EP20060771060	20060523
JP2008541869 T2	20081127	JP20080513659T	20060523
JP2008541870 T2	20081127	JP20080513660T	20060523
JP2008541871 T2	20081127	JP20080513663T	20060523
JP2008545472 T2	20081218	JP20080513661T	20060523
JP2008545473 T2	20081218	JP20080513664T	20060523
JP2008545474 T2	20081218	JP20080513667T	20060523
JP2009505684 T2	20090212	JP20080513665T	20060523
WO06127795 A2	20061130	WO2006US20061	20060523
WO06127795 A3	20070315	WO2006US20061	20060523
WO06127796 A2	20061130	WO2006US20062	20060523
WO06127796 A3	20070927	WO2006US20062	20060523
WO06127797 A2	20061130	WO2006US20063	20060523
WO06127797 A3	20090522	WO2006US20063	20060523
WO06127800 A2	20061130	WO2006US20067	20060523
WO06127800 A3	20071115	WO2006US20067	20060523
WO06127801 A2	20061130	WO2006US20068	20060523
WO06127801 A3	20090522	WO2006US20068	20060523
WO06127802 A2	20061130	WO2006US20069	20060523
WO06127802 A3	20081113	WO2006US20069	20060523

WO06127806 A2	20061130	WO2006US20075	20060523	
WO06127806 A3	20090423	WO2006US20075	20060523	

Probable Assignee: POKERTEK INC

Assignee(s):(std)**:** CRAWFORD JAMES T ; CRAWFORD JAMES T III ; LESTER JON ; POKERTEK INC ; WHITE GEHRIG HENDERSON ; WHITE GEHRING HENDERSON

Inventor(s):(std)**:** CRAWFORD JAMES T ; CRAWFORD JAMES T III ; CRAWFORD JAMES T LLL ; LESTER JON ; WHITE GEHRIG HENDERSON ; WHITE GEHRING HENDERSON

Inventor(s): CRAWFORD JAMES TLLL ; GEHRIG HENDERSON WHITE ; GEHRING HENDERSON WHITE ; JAMES T CRAWFORD ; JAMES T III CRAWFORD ; JAMES T LLL CRAWFORD ; JON LESTER

Agent(s): GRIFFITH HACK; GOWLING LAFLEUR HENDERSON LLP; RICHARDSON MARK JONATHAN ET AL; YEE JIM R ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A63F1/00 A63F13/00 A63F13/06 A63F13/10 A63F13/12 A63F13/45 A63F13/75 A63F13/79 A63F13/80 A63F13/85 A63F9/00 A63F9/24 G06F13/00 G06F17/00 G07F17/32 (Advanced/Invention); A63F1/00 (Advanced/Non–invention); A63F13/00 (Core/Invention)

CPC: G07F17/32 G07F17/3239 G07F17/3255 G07F17/3262

European class: G07F17/32 G07F17/32E6D2 G07F17/32K10 G07F17/32M2

Classification Explorer

Cited documents: WO0016863 A1, US6800029 BB, US6695695 BB, US6659866 BB, US6626757 BB, US6319125 BA, US6183362 BA, US6165059 A, US6045129 A, US5586257 A, US5505461 A, US5035744 A, US4760527 A, US2005215326 AA, US2005090304 AA, US2004251630 AA, US2004092301 AA, US2003070178 AA,

Forward Citations: WO13148113, WO08084334, WO08084334, US9489805, US9202340, US8753198, US8616966, US2010113140, JP5515291, JP2015061599, JP2014529416, AU2011211455,

Abstract:
An electronic gaming system has a plurality of tables each having a plurality of electronic player interaction areas (EPIA's) spaced preferably about a table periphery so that a gaming player locates oneself in front of a respective EPIA to play a game. A computer–based controller of the system assigns any one of preferably a variety of games to any one table. The player is then free to choose what game he/she desires to play by picking a particular table. The gaming system has a host console that communicates with each EPIA via the controller for managerial control of the plurality of tables. A software–based hospitality feature is integrated into the electronic gaming system for logging players in and out of a game, monitoring and recording of game play, enabling efficient waiter service, assisting security personal and preferably establishing confidential communications with the floor manager or host.

0) US2007072682A – HEAD TO HEAD ELECTRONIC POKER GAME ASSEMBLY AND...

72) Family number: 34350718 (US2007072682A) © PatBase

Title: HEAD TO HEAD ELECTRONIC POKER GAME ASSEMBLY AND METHOD OF OPERATION

Priority: US20050722019P 20050929 US20060534492 20060922 US20060743436P 20060308 US20060822428P 20060815 US20060558694 20061110

Family:

Publication number	Publication date	Application number	Application date
US2007072682 AA	20070329	US20060534492	20060922
US2007213116 AA	20070913	US20060558694	20061110
WO07041163 A2	20070412	WO2006US37689	20060927
WO07041163 A3	20090507	WO2006US37689	20060927
WO07103351 A2	20070913	WO2007US05650	20070305
WO07103351 A3	20071025	WO2007US05650	20070305

Probable Assignee: POKERTEK INC

Assignee(s):(std)**:** CRAWFORD JAMES T ; POKERTEK INC ; STANFORD MICHAEL SCOTT ; LESTER JONATHAN TALMADGE ; WHITE GEHRIG HENDERSON ; CRAWFORD JAMES T III ; STANFORD MICHAEL S ; WHITE GEHRIG H ; LESTER JONATHAN T ; SHINN HAL JEROME III ; FERNER KENDAL BOYD ; SHINN HAL JEROME ; BERMAN LYLE A ; BERMAN LYLE ARNOLD ; BYRD DANIEL V ; BYRD DANIEL VINCENT

Inventor(s):(std)**:** BERMAN LYLE A ; BERMAN LYLE ARNOLD ; BYRD DANIEL V ; BYRD DANIEL VINCENT ; CRAWFORD JAMES T ; CRAWFORD JAMES T III ; FERNER KENDAL BOYD ; LESTER JONATHAN T ; LESTER JONATHAN TALMADGE ; SHINN HAL JEROME ; SHINN HAL JEROME III ; STANFORD MICHAEL S ; STANFORD MICHAEL SCOTT ; WHITE GEHRIG H ; WHITE GEHRIG HENDERSON

Inventor(s): WHITE GEHRIG ; STANFORD MICHAEL ; LESTER JONATHAN ; CRAWFORD JAMES TIII ; CRAWFORD JAMES ; BYRD DANIEL ; BERMAN LYLE

Agent(s): HOWARD AND HOWARD ATTORNEYS PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F9/24 G07F17/32 (Advanced/Invention); A63F9/24 G07F17/32 (Core/Invention)

CPC: G07F17/322 G07F17/3223 G07F17/3276 G07F17/3293 G07F17/32

European class: G07F17/32 G07F17/32C4D G07F17/32C6 G07F17/32M8D G07F17/32P6

US class: 463/16 463/16P 463/46 463/46P

Classification Explorer

Cited documents: US7306516 BB, US6739970 BB, US6734878 BA, US6729956 BB, US6729621 BB, US6729620 BB, US6722985 BB, US6722974 BB, US6712694 BA, US6708975 BA, US6705943 BB, US6702667 BB, US6672959 BB, US6569014 BB, US6569013 BA, US6568680 BA, US6565432 BB, US6565088 BB, US6561898 BB, US6561897 BA, US6558253 BA, US6544121 BB, US6544120 BB, US6537150 BA, US6536768 BB, US6530842 BA, US6517437 BA, US6517074 BA, US6511068 BA, US6386979 BA, US6386973 BA, US6382628 BB, US6379245 BB, US6371851 BA, US6368216 BA, US6368214 BA, US6358144 BA, US6343989 BA, US6343988 BA, US6342007 BA, US6334613 BA, US6237916 BA, US6234897 BA, US6227969 BA, US6220960 BA, US6220959 BA, US6206780 BA, US6203430 BA, US6203429 BA, US6196547 BA, US6190254 BA, US6179711 BA, US6165069 A, US6068552 A, US6056641 A, US6050568 A, US6045129 A, US6039648 A, US6036601 A, US6018677 A, US6012719 A, US5902983 A, US5902184 A, US5882260 A, US5882259 A, US5876334 A, US5876283 A, US5868619 A, US5868618 A, US5755621 A, US5707285 A, US5669817 A, US5609525 A, US5511781 A, US5505461 A, US5415404 A, US5411257 A, US5407199 A, US5401023 A, US5393057 A, US5377997 A, US5377973 A, US5308065

A, US5294120 A, US5277424 A, US5275400 A, US5188363 A, US5159549 A, US5100137 A, US5022653 A, US5019973 A, US5014991 A, US4926327 A, US4760527 A, US4743022 A, US4614342 A, US4516777 A, US2006068899 AA, US2006068871 AA, US2006068870 AA, US2006068869 AA, US2006068868 AA, US2006068867 AA, US2006068866 AA, US2006068865 AA, US2006068864 AA, US2006068498 AA, US2006066052 AA, US2006058093 AA, US2006058092 AA, US2006058091 AA, US2006058090 AA, US2006058089 AA, US2006058088 AA, US2006058087 AA, US2006058086 AA, US2006058085 AA, US2006058084 AA, US2006058083 AA, US2006058082 AA, US2005090304 AA, US2005050175 AA, US2005032563 AA, US2004082372 AA, US2004036219 AA, US2003176214 AA, US2003176211 AA, US2003087685 AA, US2003083119 AA, US2003070178 AA, US2003064767 AA, US2003032469 AA,

Forward Citations: WO08154048, USD595783, US9697687, US9682314, US9669316, US9669315, US9669313, US9659461, US9656174, US9649549, US9626475, US9619970, US9613179, US9610503, US9607016, US9569933, US9569924, US9530278, US9517413, US9517405, US9501897, US9468851, US9463376, US9339723, US9257002, US9183705, US9165428, US9162138, US9159185, US9142094, US9129487, US9126102, US9120007, US9101821, US9007189, US8986091, US8974305, US8926423, US8831758, US8734235, US8616966, US8604042, US8602865, US8597114, US8591305, US8517826, US8511684, US8490973, US8481536, US8435111, US8372971, US8360873, US8342954, US8342529, US8314781, US8287347, US8262475, US8251802, US8251801, US8138199, US8133900, US8125578, US8087999, US8033904, US8012028, US7997979, US7825246, US7528143, US7456176, US7371173, US2017069167, US2016155296, US2015379825, US2015356811, US2015031431, US2014357335, US2014179406, US2013344945, US2013029760, US2012115607, US2011269531, US2011212077, US2011210925, US2011118011, US2010330030, US2010311491, US2010113120, US2010062845, US2010019454, US2009298584, US2009286789, US2009286590, US2009275582, US2009275569, US2009124337, US2009088253, US2009042644, US2008239172, US2008153586, US2008153578, US2007259904, US2007161424, US2007024005, US2006292203, US2005245524, EP2315184,

Abstract:
Source: US2007072682A An electronic poker game assembly preferably provides a head−to−head poker game for two players. The assembly has a housing that is preferably a table and contains at least a portion of a computer system that generates and shuffles a virtual poker card deck, deals the cards and performs other tasks typically associated with a dealer. The housing supports an electronic player interaction area (EPIA) for each player and a common display area. Dealt virtual hole cards are displayed on screens of each EPIA and virtual common cards are preferably displayed on a screen of the common display area. Mechanical actuators for each EPIA are operated by the players when playing poker, sending electric signals to the computer system for play of the game.

0) EP2042053A1 – MANUAL DEVICE FOR CARRYING COINS OR OTHER PERSO...

73) Family number: 43073170 (EP2042053A1) © PatBase

Title: Manual device for carrying coins or other personal elements of the user

Priority: ES20070002271U 20071029

Family:

Publication number	Publication date	Application number	Application date
EP2042053 A1	20090401	EP20080075804	20080929
ES1069901 UA	20090521	ES20070002271U	20071029
ES1069901 Y1	20090921	ES20070002271U	20071029

Probable Assignee: GUAUS PERELLO RAMON

Assignee(s):(std)**:** GUAUS PERELLO RAMON

Inventor(s):(std)**:** GUAUS PERELLO RAMON

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

International class (IPC 8–9)**:** A45C1/02 A45C1/10 G07D9/00 (Advanced/Invention)

CPC: A45C1/02 A45C1/10 A45C2001/102 A45C2001/104 A45C2001/107 G07D9/002

European class: A45C1/02 A45C1/10 G07D9/00C K45C1/10R K45C1/10R2 K45C1/10R6

Classification Explorer

Cited documents: US3297069 A, FR2836342 A1, FR1120192 A, DE462551 A, DE29606902 U1,

Abstract:
Source: EP2042053A1 Manual device (1) for carrying coins or other personal items by the user, characterised by its composition of two independent parts; a receiver part (2) and a covering part (3), united and joined together by means of a joint (4). The receiver part (2) is equipped with a number or slits (5) specifically habilitated to accommodate various coins (6) of different sizes, and the covering part (3) is designed to cover the receiver part (2). The two parts may vary their relative positions by means of the joint (4), and may thereby adopt two different positions, one uncovered or open, the other covered or closed. It may display a raised pattern (8) for tactile comprehension by blind users, in the style of "Braille" or other such systems, either together with the slits (5) in order to identify the coins (6) within, or on any other point on the device (1) for the comprehension of any other type of message.

0) US2009115133A – GAME RELATED SYSTEMS, METHODS, AND ARTICLES THA...

74) Family number: 43216389 (US2009115133A) © PatBase

Title: GAME RELATED SYSTEMS, METHODS, AND ARTICLES THAT COMBINE VIRTUAL AND PHYSICAL ELEMENTS

Priority:

US20070938203 20071109	US20070938204 20071109	US20070985178P 20071102
US20070938206 20071109	US20070938207 20071109	US20070938209 20071109
US20090619635 20091116	US20110207265 20110810	US20110285823 20111031
US20130842045 20130315	US20140253703 20140415	US20130812636P 20130416
US20140285315 20140522	US20140538495 20141111	WO2010US53326 20101020

Family:

Publication number	Publication date	Application number	Application date
AU2010318585 AA	20110519	AU20100318585	20101020
AU2010318585 BB	20151126	AU20100318585	20101020
CA2778422 AA	20120420	CA20102778422	20101020
CN102905765 A	20130130	CN201080054250	20101020
CN102905765 B	20150617	CN201080054250	20101020
EP2501447 A1	20120926	EP20100830403	20101020
EP2501447 A4	20150513	EP20100830403	20101020
GB201208382 A0	20120627	GB20120008382	20101020
GB2488463 A1	20120829	GB20120008382	20101020
GB2488463 B2	20141126	GB20120008382	20101020
MX2012005523 A1	20120614	MX20120005523	20101020
US2009115133 AA	20090507	US20070938206	20071109
US2009117994 AA	20090507	US20070938204	20071109
US2009118001 AA	20090507	US20070938207	20071109
US2009118005 AA	20090507	US20070938203	20071109
US2009118006 AA	20090507	US20070938209	20071109
US2010113140 AA	20100506	US20090619635	20091116
US2011306416 AA	20111215	US20110207265	20110810
US2012108337 AA	20120503	US20110285823	20111031
US2013217491 AA	20130822	US20130842045	20130315
US2014235320 AA	20140821	US20140253703	20140415
US2014274344 AA	20140918	US20140285315	20140522
US2015065250 AA	20150305	US20140538495	20141111
US8272945 BB	20120925	US20070938204	20071109
US8734245 BB	20140527	US20070938206	20071109
US8888596 BB	20141118	US20110207265	20110810
US8920236 BB	20141230	US20070938203	20071109
US8992323 BB	20150331	US20110285823	20111031
US9415307 BB	20160816	US20140538495	20141111
US9589414 BB	20170307	US20140253703	20140415
US9613487 BB	20170404	US20070938207	20071109
WO11059647 A1	20110519	WO2010US53326	20101020

Probable Assignee: BALLY GAMING INC

Assignee(s):(std)**:** CHILDS JULIA ; KELLY BRYAN M ; CHILDS JULIA MARKHAM ; MITCHELL MICHAEL J ; COHN KIMBERLY ; LYONS MARTIN STEPHEN ; MARTIN SEAN CHRISTOPHER ; KELLY BRYAN ; MARTIN SEAN ; LYONS MARTIN ; LYONS MARTIN S ; EICHMANN KENNETH J ; FERRARA PAUL J ; PATTON STEPHEN ; SCHULTZ DAVID R ; MUSICK JOANNA ; WADLEIGH WILLIAM R ; VALLEJO JOHN R ; BALLY GAMING INC ; SAVAGE DAN ; PATTON STEPHEN E ; SAVAGE DANIEL

Assignee(s):

SHFL ENTERTAINMENT INC ; SIERRA DESIGN GROUP ; BALLY GAMING INT INC ; BALLY TECHNOLOGIES INC ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; ARCADE PLANET INC ; SCHULTZ DAVID B

Inventor(s):(std)**:** CHILDS JULIA ; CHILDS JULIA M ; CHILDS JULIA MARKHAM ; AUSTIN DOUGAL ; COHN KIMBERLY ; COHN KIMBERLY J ; EICHMANN KENNETH J ; FERRARA PAUL J ; HEDRICK JOSEPH R ; HILBERT SCOTT T ; HILBERT SCOTT THOMAS ; LYONS MARTIN ; LYONS MARTIN S ; LYONS MARTIN STEPHEN ; MARTIN CHRISTOPHER SEAN ; MARTIN SEAN ; MARTIN SEAN C ; MARTIN SEAN CHRISTOPHER ; MITCHELL MICHAEL J ; MONETTE AMY LYNN ; MUSICK JOANNA ; PATTON STEPHEN ; PATTON STEPHEN E ; SAVAGE DAN ; SAVAGE DANIEL ; SCHULTZ DAVID B ; SCHULTZ DAVID R ; VALLEJO JOHN R ; VETTER KAY D ; WADLEIGH WILLIAM R ; KELLY BRYAN ; KELLY BRYAN M

Inventor(s): KIMBERLY COHN ; WILLIAM R WADLEIGH ; SEAN CHRISTOPHER MARTIN ; STEPHEN PATTON ; MARTIN STEPHEN LYONS ; MICHAEL J MITCHELL ; JOANNA MUSICK ; JOHN R VALLEJO ; JULIA MARKHAM CHILDS ; DAVID R SCHULTZ ; BRYAN M KELLY ; CHRISTOPHER SEAN MARTIN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; RIDOUT AND MAYBEE LLP; CARTER STEPHEN JOHN; SEED INTELLECTUAL PROPERTY LAW GROUP PLLC; STEPTOE AND JOHNSON LLP; SEED IP LAW GROUP PLLC; MARVIN; FEARON; FRANK; BROOKE; MARVIN A; PHILIP J; BROOKE W; SEED IP LAW GROUP LLP; QUIST BROOKE W ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F13/00 A63F13/08 A63F13/235 A63F13/24 A63F3/00 A63F3/08 A63F9/24 G06F3/041 G06F3/0488 G07F13/00 G07F17/00 G07F17/32 (Advanced/Invention);
A63F3/00 A63F3/04 (Advanced/Non–invention);
A63F13/00 A63F3/08 A63F9/24 (Core/Invention)

CPC: A63F13/00 A63F3/00072 A63F3/00643 A63F3/0423 G07F17/32 G07F17/3286 A63F13/24 A63F13/235 G07F17/3211 G07F17/3209 A63F13/28 A63F13/52 G07F17/3206 G07F17/322 A63F13/2145

European class: G07F17/32 G07F17/32C2D G07F17/32C2F G07F17/32C4D

US class: 1/1 273/274 273/274P 463/20 463/25 463/25P 463/29 463/29P 463/29S 463/30 463/30S 463/31 463/31P 463/36 463/37 463/37P 463/37S 463/42

Classification Explorer

Cited documents: WO9943403 A1, WO9736658 A1, WO9713227 A1, WO9636253 A1, WO9614115 A1, WO9603188 A1, WO09071526 A1, WO08045464 A2, WO08033493 A2, WO07033207 A2, WO06127802 A2, WO06039308 A2, WO05035084 A1, WO04001709 A2, WO03060846 A2, WO03023751 A1, WO03006928 A1, WO03004116 A1, WO02101630 A1, WO02059868 A1, WO0205914 A1, WO02051512 A2, WO0187438 A2, WO0022585 A2, USRE39644 E, USD301592 S1, US8951121 BB, US8619035 BB, US8587548 BB, US8587541 BB, US8570295 BB, US8553005 BB, US8547339 BB, US8512150 BB, US8456438 BB, US8366550 BB, US8360870 BB, US8348759 BB, US8333658 BB, US8308554 BB, US8303414 BB, US8285740 BB, US8285034 BB, US8280777 BB, US8277324 BB, US8272945 BB, US8267797 BB, US8267773 BB, US8266971 BA, US8266213 BB, US8246466 BB, US8243038 BB, US8241111 BB, US8235825 BB, US8207950 BB, US8201229 BB, US8199124 BB, US8197344 BB, US8197340 BB, US8195826 BB, US8195825 BB, US8192289 BB, US8192283 BB, US8187101 BB, US8187087 BB, US8185423 BB, US8182346 BB, US8179377 BB, US8179375 BB, US8177634 BB, US8172674 BB, US8171155 BB, US8154527 BB, US8147334 BB, US8135793 BB, US8117461 BB, US8103083 BB, US8100753 BB, US8075403 BB, US8075396 BB, US8074987 BB, US8073657 BB, US8070597 BB, US8070583 BB, US8062121 BB, US8062120 BB, US8057297 BB, US8051180 BB, US8033913 BB, US8028046 BB, US8025574 BB, US7993199 BB, US7980954 BB, US7976389 BB, US7963847 BB, US7946917 BB, US7937464 BB, US7931533 BB, US7921405 BB, US7921026 BB, US7918738 BB, US7918735 BB, US7918730 BB, US7908486 BB, US7905784 BB, US7905780 BB, US7901294 BB, US7898679 BB, US7892093 BB, US7886288 BB, US7874921 BB, US7874920 BB, US7867081 BB, US7862425 BB, US7857702 BB, US7854654 BB, US7850528 BB, US7846020 BB, US7844944 BB, US7841946 BB, US7828661 BA, US7828649 BB, US7824267 BB, US7819745 BB, US7819742 BB, US7805719 BB, US7788503 BB, US7787972 BB, US7785204 BB, US7785199 BB, US7785193 BB, US7783881 BB, US7780529 BB, US7780526 BB,

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US7510474 BB, US7510194 BB, US7510186 BB, US7500915 BB, US7494413 BB, US7485043 BB, US7484207 BB, US7483394 BB, US7481430 BA, US7473178 BB, US7465231 BB, US7460863 BB, US7458890 BB, US7455591 BB, US7448626 BB, US7438643 BB, US7438221 BB, US7435179 BA, US7434805 BB, US7431297 BB, US7427236 BB, US7427234 BB, US7427233 BB, US7422522 BB, US7419428 BB, US7410422 BB, US7407438 BB, US7404765 BB, US7404763 BB, US7399226 BB, US7398327 BB, US7390256 BB, US7384339 BB, US7384044 BB, US7382910 BB, US7370282 BB, US7367885 BB, US7364510 BB, US7363342 BA, US7356770 BA, US7353183 BA, US7351147 BB, US7351145 BA, US7349920 BA, US7346682 BB, US7341254 BB, US7337330 BB, US7331859 BB, US7331579 BB, US7331520 BB, US7330822 BA, US7329185 BB, US7322576 BB, US7316615 BB, US7311605 BB, US7311598 BB, US7309065 BB, US7303475 BB, US7300352 BB, US7297062 BB, US7291068 BB, US7278923 BB, US7278917 BB, US7275988 BB, US7271727 BB, US7264241 BB, US7260834 BA, US7255344 BB, US7246799 BB, US7234698 BB, US7222852 BB, US7213812 BB, US7201656 BB, US7198571 BB, US7187289 BB, US7186181 BB, US7175522 BB, US7172197 BB, US7168089 BB, US7156735 BB, US7147558 BB, US7137627 BB, US7120879 BB, US7119685 BB, US7114718 BB, US7112138 BB, US7103438 BB, US7100184 BA, US7099035 BB, US7086947 BB, US7077332 BB, US7075440 BB, US7073791 BB, US7063617 BB, US7063615 BB, US7062470 BB, US7055823 BB, US7051101 BA, US7050056 BB, US7048630 BB, US7040139 BB, US7037195 BB, US7036818 BB, US7035626 BA, US7029009 BB, US7028910 BB, US7027996 BB, US7025674 BB, US7013469 BB, US7011309 BB, US7009496 BB, US7008316 BA, US7005985 BA, US7000921 BB, US6997803 BB, US6993587 BA, US6991544 BB, US6991540 BB, US6987261 BB, US6986514 BB, US6982415 BB, US6972682 BB, US6971956 BB, US6970141 BB, US6969319 BB, US6964612 BB, US6960134 BB, US6955599 BB, US6947513 BB, US6942571 BA, US6938900 BB, US6925701 BB, US6923719 BB, US6923446 BB, US6918834 BB, US6908387 BB, US6905411 BB, US6902481 BB, US6901440 BA, US6899627 BB, US6896618 BB, US6893347 BA, 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Abstract:
Source: US2009115133A Physical objects may be employed with a virtual game layout to enhance wager and non−wagered based gaming. Displays subsystems may provide a changeable or selectable virtual game layout with demarcations appropriate to a selected game. A sensor subsystem may detect physical aspects of game related pieces (e.g., playing cards, chips, markers, dice, spinners, tokens, tiles) as well as media (e.g., identity media, financial media). All gaming functions may occur through interaction with a playing surface, as well as functions such as order food, beverages and services. Automated tracking of players, dealers and games may be realized along with bonusing and promotions.

0) US2011070948A – MODULAR WAGERING GAME MACHINE SIGNAGE

75) Family number: 43488094 (US2011070948A) © PatBase

Title: MODULAR WAGERING GAME MACHINE SIGNAGE

Priority: US20070015097P 20071219 US20080043120P 20080407 WO2008US87782 20081219 US20080809578 20081219

Family:

Publication number	Publication date	Application number	Application date
US2011070948 AA	20110324	US20080809578	20081219
US9659434 BB	20170523	US20080809578	20081219
WO09086169 A2	20090709	WO2008US87782	20081219
WO09086169 A3	20091230	WO2008US87782	20081219

Probable Assignee: BALLY GAMING INC

Assignee(s):(std)**:** BARKER PAUL C ; MANCILLA ARTURO E ; MINCH SCOTT M ; WMS GAMING INC ; BAINBRIDGE SCOTT C ; BALLY GAMING INC

Assignee(s): BANK OF AMERICA NA COLLATERAL AGENT AS

Inventor(s):(std)**:** BAINBRIDGE SCOTT C ; BARKER PAUL C ; MANCILLA ARTURO E ; MINCH SCOTT M

Agent(s): DELIZIO LAW PLLC; DELIZIO ANDREW ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F1/00 A63F13/00 A63F13/02 G06F19/00 G07F17/32 (Advanced/Invention); A63F1/00 A63F13/02 (Core/Invention)

CPC: G07F17/3218

European class: G07F17/32C4B

US class: 463/30 463/30P 463/46 463/46S

Classification Explorer

Cited documents: WO09086169 A2, US8808094 BB, US8454444 BB, US8303420 BB, US8226488 BB, US8079655 BB, US8002637 BA, US7900922 BA, US7459002 BB, US7108606 BA, US6820875 BA, US6719337 BA, US6086174 A, US5951131 A, US5897167 A, US5813914 A, US5720480 A, US5647648 A, US5584549 A, US5180201 A, US5176435 A, US4798424 A, US4784550 A, US4440457 A, US4428155 A, US4411480 A, US4191236 A, US3883196 A, US3854374 A, US3650584 A, US3588212 A, US3378320 A, US2912294 A, US2801868 A, US2008188304 AA, US2008182642 AA, US2008119288 AA, US2008113821 AA, US2008113820 AA, US2008113818 AA, US2008113741 AA, US2008113740 AA, US2008046953 AA, US2008039213 AA, US2007293301 AA, US2007287544 AA, US2007225078 AA, US2007167202 AA, US2007149281 AA, US2007111776 AA, US2007076405 AA, US2007054742 AA, US2006287112 AA, US2006281558 AA, US2006199647 AA, US2006186622 AA, US2006183553 AA, US2006172805 AA, US2006148577 AA, US2006128477 AA, US2006073900 AA, US2005288104 AA, US2005277468 AA, US2005255924 AA, US2005215325 AA, US2005192101 AA, US2005183143 AA, US2005159209 AA, US2005096137 AA, US2005064942 AA, US2005064941 AA, US2005054449 AA, US2004214645 AA, US2004192433 AA, US2004162146 AA, US2004142753 AA, US2004102245 AA, US2004090151 AA, US2004045200 AA, US2004018870 AA, US2003124027 AA, US2003081399 AA, US2002195827 AA, US2002006828 AA,

Forward Citations: US9659434, US9652929, US9558635, US9558615, US9547952, US9520018, US9367987, US9087429, US9011247, US8968088, US8912727, US8905842, US8840464, US8814673, US8740701, US2015269808, US2014309029, US2012283012, US2012146893, US2010317437,

Abstract:
Source: US2011070948A Modular wagering game machine signage is described herein. In some embodiments, a modular wagering game machine sign can include a center module including a plurality of support members, at

least one outer panel covering the frame, and a lighted faceplate including lighting units. The lighting units can include light emitting diodes (LEDs) and globes. The sign can also includes at least one side module connected to the center module via hand−spinning latches configured to press against one or more of the center module s support members.

76) Family number: 44905751 (US2014098758A) © PatBase

Title: EFFICIENT TRANSACTIONAL MESSAGING BETWEEN LOOSELY COUPLED CLIENT AND SERVER OVER MULTIPLE INTERMITTENT NETWORKS WITH POLICY BASED ROUTING

Priority:

US20020415546P	20021001	US20030677098	20030930	US20100749412	20100329
US20110287279	20111102	US20110185491	20110718	US20120343044	20120104
US20130034509	20130923	US20120620775	20120915	US20120661207	20121026
US20130760214	20130206	US20120646706	20121007	US20120623944	20120921
US20130753855	20130130	US20130776852	20130226	US20150817341	20150804
US20150815988	20150801	US20150695256	20150424	US20130875311	20130502
US20130973146	20130822	US20140165826	20140128	US20140458791	20140813
US20140334992	20140718	US20140154446	20140114	US20150957644	20151203
US20130857308	20130405	US20150979613	20151228	US20150940379	20151113
US20140285659	20140523	US20150547912F	20151209	US20140555628	20141127
WO2013IB58164	20130830	US20160040466	20160210	US20160061982	20160304
US20160081600	20160325	US20160169022	20160531	US20160168212	20160530
US20160172673	20160603	US20160564817F	20160516	US20160331866	20161023
US20160345349	20161107	US20160350458	20161114	US20160572722F	20160729
US20160567712F	20160610	US20160362118	20161128	US20160365840	20161130
US20160345308	20161107	US20160345003	20161107	US20160343227	20161104
US20160368187	20161202	US20160390638	20161226	US20160587752F	20161215
US20160587581F	20161214	US20160587388F	20161213	US20170397162	20170103
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US20170439276	20170222				

Family:

Publication number	Publication date	Application number	Application date
CN105164707 A	20151216	CN201380059335	20130830
US2014098758 AA	20140410	US20130034509	20130923
US2015339696 AA	20151126	US20150817341	20150804
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US2016086161 AA	20160324	US20150957644	20151203
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US2016162873 AA	20160609	US20160040466	20160210
US2016189137 AA	20160630	US20160061982	20160304
US2016225019 AA	20160804	US20160081600	20160325
US2016275482 AA	20160922	US20160168212	20160530
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US2016286128 AA	20160929	US20160172673	20160603
US2017048774 AA	20170216	US20160331866	20161023
US2017053260 AA	20170223	US20160345349	20161107
US2017072755 AA	20170316	US20160350458	20161114
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US2017076272 AA	20170316	US20160343227	20161104
US2017076273 AA	20170316	US20160368187	20161202
US2017076277 AA	20170316	US20160345003	20161107
US2017103440 AA	20170413	US20160390638	20161226
US2017115742 AA	20170427	US20170397162	20170103
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US7702739 BA	20100420	US20030677098	20030930

US9208505 BA	20151208	US20150817341	20150804	
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US9361616 BB	20160607	US20150979613	20151228	
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US9489671 BB	20161108	US20150957644	20151203	
US9493235 BB	20161115	US20150940379	20151113	
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US9563890 BB	20170207	US20160168212	20160530	
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US9600832 BB	20170321	US20160081600	20160325	
US9619794 BB	20170411	US20160061982	20160304	
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US9704154 BB	20170711	US20170439276	20170222	
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WO17093954 A1	20170608	WO2016IB57293	20161202	
WO17115198 A1	20170706	WO2016IB57597	20161214	

Probable Assignee: AMOBILEPAY INC

Assignee(s):(std)**:** AMOBILEPAY INC ; CHENG WESLEY ; GRONBERG MARTIN ; WORLD AWARD ACAD ; ZHOU ANDREW H B ; ZHOU ANDREW ; XING ZHOU TIAN ; WORLD AWARD ACAD WORLD AWARD FOUND AMOBILEPAY INC ; WORLD AWARD FOUND ; ZHOU DYLAN T X ; ZHOU TIGER T G ; ZHOU DYLAN ; ZHOU TIGER ; ZHOU TIANXING ; ZHOU HAIBIN ; ZHOU TIANGE ; ZHOU DYLAN TX

Assignee(s): WORLD AWARD ACADEMY ; WORLD AWARD ACADEMY WORLD AWARD FOUNDATION AMOBILEPAY INC ; WORLD AWARD FOUNDATION ; VENTURE LENDING AND LEASING IV INC ; TRAN BAO

Inventor(s):(std)**:** CHENG WESLEY ; GRONBERG MARTIN ; ZHOU ANDREW H B ; ZHOU ANDREW ; XING ZHOU TIAN ; XI MARY M Z ; ZHOU DYLAN T X ; ZHOU TIGER T G ; ZHOU DYLAN ; ZHOU TIGER ; ZHOU TIANXING ; ZHOU HAIBIN ; ZHOU TIANGE ; ZHOU DYLAN TX

Agent(s): TRAN AND ASSOCIATES; GEORGIY L; WWWNIELSENPATENTSCOM; STEVEN A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61B10/00 A61B5/00 A61B5/02 A61B5/0205 A61B5/0402 A61B5/0476 A61B5/11 A61B5/1172 A61B5/145 B60F3/00 B60F5/02 B60K16/00 B60R11/04 B63G8/00 B63G8/14 B63G8/16 B64C29/00 B64C3/56 B64C35/00 B64C37/00 B64C39/02 B64D47/08 B64D7/00 G01S19/39 G02B27/00 G02B27/01 G05D1/00 G05D1/04 G05D1/08 G06F15/16 G06F21/32 G06F21/62 G06F3/01 G06F3/041 G06F3/0488 G06F3/16 G06K15/00 G06K19/06 G06K7/10 G06K7/14 G06K9/00 G06Q20/00 G06Q20/06 G06Q20/08 G06Q20/10 G06Q20/12 G06Q20/16 G06Q20/20 G06Q20/22 G06Q20/32 G06Q20/34 G06Q20/36 G06Q20/38 G06Q20/40 G06Q30/02 G06Q30/06 G06Q40/02 G06T19/00 G07F17/32 G08B21/04 G08G3/02 G08G5/04 G10L13/02 G10L15/18 G10L15/20 G10L15/22 G10L21/0208 H04B1/3827 H04L12/58 H04L12/801 H04L12/813 H04L12/893 H04L29/06 H04L29/08 H04L9/32 H04M1/72 H04M1/725 H04M15/00 H04M3/42 H04M7/00 H04N5/232 H04N5/265 H04N5/38 H04N7/00 H04N7/18 H04W12/06

H04W36/16 H04W4/00 H04W4/02 H04W4/04 H04W4/12 H04W4/22 H04W4/24 H04W48/18 H04W76/02 (Advanced/Invention);
A61B5/01 A61B5/021 A61B5/024 A61B5/08 G06F3/048 G06F3/0481 G06F3/0482 G06F3/0484 G06F3/0488 G06K7/10 G06K7/14 G06K9/00 G06Q20/12 G06Q20/40 H04L1/00 H04L12/24 H04L29/08 H04W4/00 (Advanced/Non–invention);
G06F15/16 (Core/Invention)

CPC: G06Q30/0222 G06Q20/387 G06Q20/405 G06Q20/34 G06Q30/0208 G06Q30/0226 G06Q30/0227 G06Q30/0236 G06Q30/0239 G06Q20/20 G06Q20/425 G06F3/0488 G06Q20/16 H04L12/146 H04M1/2755 H04M1/72519 H04M1/72555 H04M17/02 H04M17/301 H04M17/304 H04W12/06 G06Q20/3278 G06Q20/3224 G06Q20/105 G06Q20/065 G06Q20/4014 B60F3/0061 G05D1/0088 B60F3/0007 G05D1/042 G05D1/048 H04N7/181 H04N5/23238 H04N5/265 B64C2201/141 B63G2008/004 G06Q20/382 G06Q20/356 G06Q20/388 B60F5/02 G06Q20/3227 G06Q20/223 G06Q20/3827 G06Q20/204 G06Q20/3674 G06Q20/4012 G06F3/04883 G06F3/04886 G06Q20/123 G06Q20/325 G06Q20/363 G06Q30/0234 G06Q20/385 G06Q20/3223 H04L1/0057 H04L41/0816 H04L47/10 H04L47/14 H04L47/20 H04L47/40 H04L67/327 H04L69/14 G06Q20/367 G06Q30/0251 H04W4/008 H04B1/385 H04L9/3231 H04W4/003 H04M1/72547 H04M1/72583 H04L67/10 H04W76/023 H04N5/23248 H04N5/38 H04N7/00 B64C2201/027 B64C2201/146 B64C2201/185 B64D2211/00 G06Q20/32 G06Q30/0267 G06Q30/06 G06Q30/0601 G06Q30/0641 G06Q2220/00 G10L13/02 G10L15/20 H04L65/1006 H04N5/2252 H04N5/23206 H04N5/2328 H04N5/23296 G05D1/102 G06Q20/322 G06Q20/40145 H04W36/16 H04W4/24 H04M15/60 H04W84/042 H04W84/12 H04W48/18 G06Q20/3274 G06Q20/3276 G06Q20/401 B64C37/00 B64C3/56 G05D1/0816 G05D1/0858 G08G5/04 B60R11/04 B60K16/00 B60K2016/003 B64D47/08 B64D7/00 B64C2203/00 B64C2201/12 G06Q20/36 G06K7/1413 G06K7/1417 G06Q20/3221 G06Q20/102 G06Q20/3821 H04W4/04 G06Q20/351 G06K19/06037 G06Q20/3829 G06Q20/206 G06K19/06028 H04L51/10 G06K15/00 G06Q20/00 H04M1/725 G06Q20/22 G06Q20/3255 G06Q20/327 G07F7/0833 H04M15/00 G06Q30/0625 G06F3/017 G06F3/015 G06F3/167 G06F3/012 G06F3/013 H04W4/02 H04W4/22 H04L67/22 G06Q30/0277 G06Q30/0633 G08B21/0453 A61B5/0476 G07F17/3209 G07F17/3227 G02B2027/0178 G02B2027/0138 G02B2027/014 G02B2027/0141 H04B2001/3866 B64C29/0066 B64C29/0075 G06K7/1095 G06K19/06112 G02B27/0093 B64C39/024 B64C2201/042 B64C2201/108 B64C2201/127 B64C2201/128 G06Q30/0209 G06Q20/0855 G06Q40/025 H04N7/183 H04W4/12 G06F3/0482 G06F3/04842 G06Q20/02 B64C35/008 B64C29/0033 B64C2201/021 B64C2201/102 B64C2201/162 G06F2203/04806 A61B5/1114 A61B5/1121 A61B5/1128 A61B5/1172 A61B5/1176 A61B5/6803 H04L63/083 H04L63/0861 G06F3/016 H04L51/046 H04M3/42382 H04M7/006 G08B21/06 G02B27/0176 G02B2027/0156 G02B2027/0187 G02B27/0172 G06K9/00671 G06F21/6245 G10L15/22 G10L15/18 G10L21/0208 G06F3/0414 A61B5/0024 A61B5/02055 A61B5/0402 A61B5/1117 A61B5/1118 A61B5/14546 A61B5/4818 A61B5/681 A61B5/7455 A61B5/746 A61B5/7425 A61B5/112 A61B5/4866 A61B5/14507 A61B10/0051 A61B5/4848 A61B5/14532 A61B5/02007 A61B5/7405 A61B5/1112 A61B5/6804 A61B5/7495 G10L2015/223 G06K9/00087 G06Q30/0207 A61B5/015 A61B5/021 A61B5/02433 A61B5/0816 A61B2560/0252 A61B2562/0219 A61B2562/028 G06K7/1404 G06K9/00892 G06K2007/10534 G06K2009/00939 G06K2209/01 H04M1/72522 B64C39/02 G06Q30/02 G06Q30/0273 H04L65/1069 H04L65/602 H04L65/80 G01S19/39 G06F3/04817 G06F3/0485 G06F3/0487 G06K7/10712

European class: H04L29/06H H04L29/08N31Y H04L47/10 H04L47/14 H04L47/20 H04L47/40

US class: 1/1 244/7A 345/156 348/148 370/329 370/331 701/11 701/3 701/8 705/14.12 705/14.23 705/14.34 705/14.73 705/27.1 705/40 705/44 705/64 705/65 705/67 705/71 705/75 709/203 709/206 709/207 709/224

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Forward Citations: WO17081668, WO16109277, WO16032548, WO12172384, WO12135270, US9704154, US9704151, US9703546, US9703288, US9699159, US9694906, US9674261, US9672570, US9672568, US9665865, US9654921, US9652770, US9652758, US9646300, US9619794, US9619508, US9615204, US9615197, US9600832, US9599985, US9584960, US9576285, US9563890, US9552056, US9548961, US9525585, US9522732, US9520053, US9489671, US9473429, US9467832, US9446845, US9385975, US9331968, US9318016, US9258169, US9253616, US9253125, US9210057, US9203766, US9191237, US9185522, US9167558, US9148437, US9143516, US9106980, US9031581, US8949344, US8903951, US8886674, US8856807, US8831635, US8798647, US8798645, US8798593, US8779919, US8763071, US8756217, US8751593, US8750898, US8712441, US8656028, US8612598, US8538458, US8505038, US8473603, US8464335, US8443347, US8422466, US8385964, US8321876, US8310923, US8306996, US8296464, US8281026, US8279083, US8209748, US8205199, US8161168, US8127021, US8107978, US8056119, US8042171, US8015301, US2017180921, US2017177322, US2017163340, US2017161720, US2017161717, US2017140367, US2017140366, US2017136840, US2017076272, US2017072755, US2017053260, US2017053152, US2017013107, US2016301880, US2016286128, US2016275483, US2016275482, US2016272310, US2016259937, US2016225019, US2016192115,

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Abstract:
Source: US2014098758A A system includes a server; a plurality of wireless networks coupled to the server; and one or more mobile devices coupled to the wireless networks with intermittent access to the wireless networks, the plurality of wireless networks providing data communication between client and server applications over multiple intermittent connections.

0) CN202217336U – BLIND MAN MONEY IDENTIFIER

77) Family number: 51091143 (CN202217336U) © PatBase

Title: BLIND MAN MONEY IDENTIFIER

Priority: CN201120193467U 20110529

Family:

Publication number	Publication date	Application number	Application date
CN202217336 U	20120509	CN201120193467U	20110529

Probable Assignee: CHUNXIAO WU

Assignee(s):(std)**:** CHUNXIAO WU

Assignee(s): WU CHUNXIAO

Inventor(s):(std)**:** CHUNXIAO WU

Inventor(s): WU CHUNXIAO

International class (IPC 8–9)**:** G07D5/02 G07D7/16 G07D7/162 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN202217336U The utility model discloses a blindman money identifier which is used for blindman to discriminate true money from the false. The blindman money identifier comprises a money identifier main body; a plurality of coin slots with different diameters and a plurality of paper money slots with different length are arranged on the money identifier main body; the coin slots are arranged at the lower part of the money identifier main body and the sizes of the coin slots are identical with those of the coins needed to be identified; and the paper money slots are arranged above the coin slots, and the length of the paper money slots are identical with those of the paper moneys to be identified. The blindman money identifier can help blindman to efficiently discriminate true money from the false, and has the advantages of simple manufacture, capability of identifying both coins and paper money, low cost, simplicity in operation, easiness in carrying, easiness to be mastered for use, and portability since the money identifier can be made into a retractable type, a foldable type, and the like.

0) BRMU8901377U – DISPOSICAO CONSTRUTIVA INTRODUZIDA EM PORTA–MOE...

78) Family number: 51233096 (BRMU8901377U) © PatBase

Title:	disposicao construtiva introduzida em porta–moeda com conjunto de alveolos escalonados Constructive disposition introduced in door–coin set of staggered alveoli (Machine translation)
Priority:	BR2009MU01377U 20090729

Family:

Publication number	Publication date	Application number	Application date
BRMU8901377 U2	20120522	BR2009MU01377U	20090729

Probable Assignee:	DE MELLO ELTON LUIZ
Assignee(s):(std)**:**	DE MELLO ELTON LUIZ ; GUEDES JOSE RUBENS
Assignee(s):	JOSE RUBENS GUEDES ; ELTON LUIZ DE MELLO
Inventor(s):(std)**:**	GUEDES JOSE RUBENS ; DE MELLO ELTON LUIZ
Inventor(s):	JOSE RUBENS GUEDES ; ELTON LUIZ DE MELLO
International class (IPC 8–9):	G07D3/04 G07D9/00 (Advanced/Invention)

Classification Explorer

Abstract:
Source: BRMU8901377U 1 RESUMO "DISPOSICAO CONSTRUTIVA INTRODUZIDA EM PORTA–MOEDA COM CONJUNTO DE ALVEOLOS ESCALONADOS", mais precisamente trata–se de um porta–moeda (1), notadamente desenvolvido para facilitar a manipulacao e a indicacao visual da quantidade de moedas acondicionadas e, consequentemente, contagem imediata do valor total contido na embalagem; dita porta–moeda (1) apresenta–se no formato de um receptaculo (2), alongado no sentido longitudinal e de formato preferencialmente cilindrico, sendo configurado por um compartimento principal (2a) de secao semicircular de cujas bordas laterais longitudinais (2b) se desenvolvem abas laterais (2c), onde sao praticados vincos longitudinais (V) conformando lingueetas de fechamento (2d); na superficie plana de cada aba lateral (2c) se desenvolvem duplas deformacoes alongadas (2e) de formato retangular conformando degraus estruturais (2f) e area longitudinal (AL) para a aplicacao de adesivos (I) ou impressoes graficas de publicidade; cada lingueeta de fechamento (2d) contempla porcao abaulada (2g) onde sao previstas multiplas deformacoes oblongas (2h) de forma a configurar travas do tipo macho e femea conformando o meio de fechamento duplo (MD); ao longo do compartimento principal (2) e distribuida uma pluralidade de alveolos escalonados (3), equeidistantes entre si, conformado multiplos degraus (3a) ligeiramente angulares (a), degraus estes que sao praticados no setor de parede semicircular (21) do referido compartimento principal (2). 1 SUMMARY "hand CONSTRUCTIVE INTRODUCED IN PORT–CURRENCY WITH alveoli STAGED SET", more precisely it is a door–currency (1), especially developed for easy manipulation and visual indication of the amount of wrapped coins and consequently, immediate count of the total value inside the packaging; said coin holder (1) is presented in the form of a receptacle (2), elongated in the longitudinal direction and preferably cylindrical shape, being configured by a main compartment (2a) of semicircular section whose longitudinal side edges (2b) develop side flaps (2c), which are practiced longitudinal creases (V) conforming closing lingueetas (2d); on the flat surface of each side flap (2c) develop elongated deformations double (2e) of rectangular shape conforming structural steps (2f) and longitudinal area (AL) for the application of adhesives (I) or impressions graphical advertising; each closing lingueeta (2d) comprises bulged porcao (2g) which are provided oblong multiple deformations (2h) to set male type and female latches shaping the double lock means (MD); along the main compartment (2) and distributed a plurality of alveoli staggered (3), equeidistantes each other, conformed multiple steps (3a) slightly angled (a), steps these which are practiced in the semicircular wall section (21) of said main compartment (2).

0) US2013344934A – ELECTRONIC GAMING DEVICE WITH DOMINO SYMBOLS

79) Family number: 55407995 (US2013344934A) © PatBase

Title: ELECTRONIC GAMING DEVICE WITH DOMINO SYMBOLS

Priority: US20120532421 20120625

Family:

Publication number	Publication date	Application number	Application date
US2013344934 AA	20131226	US20120532421	20120625
US9492736 BB	20161115	US20120532421	20120625

Probable Assignee: CADILLAC JACK INC

Assignee(s):(std)**:** ROLLO III DONALD JAMES ; CADILLAC JACK ; CADILLAC JACK INC

Assignee(s): CITICORP NORTH AMERICA INC COLLATERAL AGENT AS ; AGS LLC ; MACQUARIE US TRADING LLC ; WILMINGTON TRUST NATIONAL ASSOCIATION ; JEFFERIES FINANCE LLC COLLATERAL AGENT AS

Inventor(s):(std)**:** ROLLO III DONALD JAMES

Agent(s): WEIDE AND MILLER LTD

International class (IPC 8–9)**:** A63F13/00 A63F9/20 A63F9/24 G06F17/00 G06F19/00 G07F17/32 (Advanced/Invention); A63F1/04 A63F3/00 G07F17/34 (Advanced/Non–invention)

CPC: A63F9/20 A63F2001/0433 A63F2003/00996 G07F17/326 G07F17/3262 G07F17/34

US class: 463/20

Classification Explorer

Cited documents: US7380792 BB, US7354344 BB, US6676512 BB, US5791652 A, US2011230251 AA, US2010124977 AA, US2008318653 AA, US2007021218 AA,

Abstract:
Source: US2013344934A Examples disclosed herein relate to systems and methods, which allow a player, the gaming device, and/or the gaming system to utilize domino symbols and/or domino gaming structures. The electronic gaming device may include a plurality of reels, a memory, and a processor. The plurality of reels may include one or more areas. The processor may generate one or more symbols to be located in the one or more areas. The one or more symbols may include one or more domino symbols. The processor may determine a payout based on a domino game structure.

0) WO14083319A1 – PREVENTING FRAUD PREVENTION DE FRAUDE

80) Family number: 56589329 (WO14083319A1) © PatBase

Title: PREVENTING FRAUD

Priority: GB20120021504 20121129 WO2013GB53080 20131122

Family:

Publication number	Publication date	Application number	Application date
AU2013350949 AA	20140605	AU20130350949	20131122
CN104838427 A	20150812	CN201380062395	20131122
EP2926322 A1	20151007	EP20130796144	20131122
GB2508377 A1	20140604	GB20120021504	20121129
JP2016502197 T2	20160121	JP20150544528T	20131122
WO14083319 A1	20140605	WO2013GB53080	20131122

Probable Assignee: CRANE PAYMENT SOLUTIONS LTD

Assignee(s):(std)**:** CRANE PAYMENT SOLUTIONS LTD

Inventor(s):(std)**:** HADLEY ALEX

Inventor(s): ALEX HADLEY

Agent(s): SPRUSON AND FERGUSON; CHETTLE JOHN EDWARD; NOGAWA SHINTARO; CHETTLE JOHN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G07D1/00 G07D1/02 G07D5/00 G07D7/00 G07D7/06 G07D9/00 G07F5/24 (Advanced/Invention)

CPC: G07F5/24 G07D1/02 G07D9/00 G07D5/00 G07D9/04 G07F1/044 G07F9/04

Classification Explorer

Cited documents: US5568854 A, US5531309 A, US4579217 A, US2003217905 AA, GB2023902 A1, EP1191488 A2, CN1498392 A, CN102842014 A, CN102209978 A, CN100534560 C,

Abstract:
A fraud prevention apparatus for a coin payout unit comprises a sensor comprising an electrical oscillator for detecting coins in a coin outlet path; and one or more controllers configured to cause an expected change in the oscillating frequency of the sensor and to verify that the oscillating frequency has changed as expected.

0) US2014194199A – COLLUSION DETECTION

81) Family number: 56884657 (US2014194199A) © PatBase

Title: COLLUSION DETECTION

Priority: US20110110519 20110518 US20120642812P 20120504 US20140149192 20140107 US20130749525P 20130107 WO2014US10471 20140107 US20120680168P 20120806

Family:

Publication number	Publication date	Application number	Application date
AU2014203857 AA	20140710	AU20140203857	20140107
CA2897394 AA	20150706	CA20142897394	20140107
TW201447823 A	20141216	TW20140100488	20140107
US2014194199 AA	20140710	US20140149192	20140107
US9652931 BB	20170516	US20140149192	20140107
WO14107715 A1	20140710	WO2014US10471	20140107

Probable Assignee: CFPH LLC

Assignee(s):(std)**:** CFPH LLC

Assignee(s): DIGIOVANNI JOE

Inventor(s):(std)**:** DIGIOVANNI JOE

Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; DICKINSON WRIGHT LLP; MARK; MILLER MARK A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F1/00 A63F13/00 G06Q50/34 G07F17/32 (Advanced/Invention); A63F1/00 (Advanced/Non–invention)

CPC: G07F17/3239 G07F17/3241

US class: 463/29

Classification Explorer

Cited documents: US8152619 BB, US7699702 BB, US2013178270 AA, US2009069011 AA, US2007281767 AA, US2007232398 AA, US2006287068 AA, US2005164793 AA, US2002155884 AA,

Forward Citations: US9697682, US9613498, US9589417,

Abstract:
Source: US2014194199A Various embodiments that may generally relate to collusion are described. Collusion detection may be used to prevent players in a wagering environment from violating the integrity of a game. Player actions may be tracked to develop a wagering profile that is specific to various game situations. A player acting in a manner that would be against their interest and against their defined profile may be considered a colluding action. Information about collusion actions may be presented for evaluation and/or anti–collusion actions may be automatically taken in response to such collusion actions being determined.

0) CA2809094A – COIN COUNTER 50 40 25 COMPTEUR DE PIECES DE MO...

82) Family number: 57550973 (CA2809094A) © PatBase

Title: COIN COUNTER 50 40 25

Priority: CA20132809094 20130306

Family:

Publication number	Publication date	Application number	Application date
CA2809094 AA	20140906	CA20132809094	20130306

Probable Assignee: ZWARN ELIZABETH

Assignee(s):(std)**:** ZWARN ELIZABETH

Assignee(s): ZWARN ELIZABETH1760 11 AVENUEPRINCE GEORGEB1V2L 3S8CA

Inventor(s):(std)**:** ZWARN ELIZABETH

Inventor(s): ZWARN ELIZABETH1760 11 AVENUEPRINCE GEORGEB1V2L 3S8CA

International class (IPC 8–9): G07D3/16 (Advanced/Invention)

CPC: G07D9/04

Classification Explorer

Abstract:
Source: CA2809094A A coin counting device comprising of a gated flat surface with holes and corresponding numbers and nautical directions. An assembly of a flat surface under the flat surface with holes is a flat surface with no holes. Both the top hole surface and bottom flat surface are joined on one side or both sides in particular joined along the edge closest to the operator of the device to prevent coins from sliding toward the operator of the device. The two flat surfaces can be joined closest and also furthest to the opposite of the device from the operator. The two flat surfaces are further accomodated by a sheet of material that can be inserted between the top flat surface with holes and the bottom flat sheet to provide for a numbering system to show through the holes of the top flat surface of the counting device. The optional insert is not attached to the top hole surface and bottom flat surface and can be removed at the discretion of the operator. This device provides for quiet bio–economical operation and exact numeric gathering of coins of one denomination at a time prior to wrapping and presentation to a financial institution. THIS DEVICE CAN BE MADE OF NEW MATERIAL or MADE FROM EXISTING MATERIAL AS A PRESERVATION FROM BEING DIRECTED TO LOCAL LANDFILL ENVIRONMENTAL IMPACT.

0) US2015141105A – APPARATUS AND METHOD FOR PROVIDING CASINO CARD ...

83) Family number: 59285318 (US2015141105A) © PatBase

Title: APPARATUS AND METHOD FOR PROVIDING CASINO CARD GAME

Priority: US20130905089P 20131115 US20140531939 20141103

Family:

Publication number	Publication date	Application number	Application date
US2015141105 AA	20150521	US20140531939	20141103
WO15073248 A1	20150521	WO2014US63751	20141103

Probable Assignee: DIVERSIFIED CASINO SERVICES LLC

Assignee(s):(std)**:** DIVERSIFIED CASINO SERVICES LLC

Inventor(s):(std)**:** QUISQUIS JAMES ; QUISQUIS TELLYPUU

Agent(s): BECKER JORDAN M ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F1/00 G07F17/32 (Advanced/Invention)

CPC: A63F1/00 G07F17/3244 A63F2001/008 G07F17/3276 G07F17/3293

US class: 273/292 463/11

Classification Explorer

Cited documents: US6027118 A, US5413353 A, US2014274256 AA, US2013324204 AA, US2006255540 AA, US2006119042 AA, US2005269777 AA, US2005023758 AA, US2004157656 AA, US2002036382 AA,

Forward Citations: US9600963,

Abstract:
Source: US2015141105A Methods and systems are disclosed for a casino card game in which players place blind bets and are dealt an initial hand of at least two cards. If a player is dealt a predetermined hand, such as a natural 21, they are declared an instant winner. If there are no instant winners, each player is given the option to hit or stand. Players can hit up to the point where there hand reaches or exceeds a threshold value, such as 21. Once the round has completed, the dealer reviews the hand of each player and declares a winner.

84) Family number: 62528851 (WO16087157A1) © PatBase

Title: USER INTERFACE AND METHOD FOR THE PROTECTED INPUT OF SYMBOLS

Priority: DE201410224676 20141202 WO2015EP75896 20151106

Family:

Publication number	Publication date	Application number	Application date
AU2015357603 AA	20160609	AU20150357603	20151106
DE102014224676 A1	20160602	DE201410224676	20141202
WO16087157 A1	20160609	WO2015EP75896	20151106

Probable Assignee: SIEMENS AG

Assignee(s):(std)**:** SIEMENS AG ; WINCOR NIXDORF INT GMBH

Inventor(s):(std)**:** GOERLICH JUERGEN ; LINDEMANN MATTHIAS ; NOLTE MICHAEL ; WEGGE KLAUS PETER

Inventor(s): GORLICH JURGEN

Agent(s): GRIFFITH HACK; SIEMENS AG

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G06F21/31 G06F21/83 G06F3/0488 G07C9/00 G07F7/10 G09B21/00 (Advanced/Invention)

CPC: G06F3/04883 G06F21/31 G06F21/83 G07F7/1033 G09B21/001 G07C9/00142 G06F2221/031

Classification Explorer

Cited documents: WO0242891 A2, US2012050179 AA, US2011148774 AA, US2010222095 AA, US2007298785 AA,

Abstract:
The invention relates to a simple gesture control system that permits accurate, simple, and secure input of personal identification numbers (PIN) by visually impaired or blind persons at a payment terminal or automatic teller machine. By means of the user interface, invisible keys can be selected by means of simple wiping gestures. Here, any necessity for visual or spoken feedback or localization of operating elements is rendered unnecessary. As a result, blind or visually impaired users can input a secret number by means of touch operation automatically and without outside help. In this way, account is also taken of the statutory requirements in different countries. According to one embodiment of the invention, the selection of the invisible key is separated from the actuation thereof in that, in order to actuate the selected invisible key, an individual touch input, here a typing gesture, is required. This has the advantage that the user can explore the user interface first before he carries out an actual symbol input. The method can be implemented on conventional, already existing hardware. The user interface has been conceived in accordance with reliable and user–centric guidelines.

0) ES1175708Y – ELEMENTO DE IDENTIFICACION CUANTITATIVA DE MONE...

85) Family number: 64887960 (ES1175708Y) © PatBase

Title: ELEMENTO DE IDENTIFICACION CUANTITATIVA DE MONEDAS Y BILLETES PARA DISCAPACITADOS VISUALES.

Priority: ES20170030062U 20170123

Family:

Publication number	Publication date	Application number	Application date
ES1175708 UA	20170207	ES20170030062U	20170123
ES1175708 Y1	20170619	ES20170030062U	20170123

Probable Assignee: RODRIGUEZ CORTES PRAXEDES

Assignee(s):(std)**:** RODRIGUEZ CORTES PRAXEDES

Assignee(s): PRAXEDES RODRIGUEZ CORTES

Inventor(s):(std)**:** RODRIGUEZ CORTES PRAXEDES

Inventor(s): PRAXEDES RODRIGUEZ CORTES

International class (IPC 8–9): A61F9/08 G07D5/00 G07D7/00 G09B21/00 G09F3/10 (Advanced/Invention)

Classification Explorer

Abstract:
Source: ES1175708U 1. Elemento de identificacion cuantitativa de monedas y billetes para discapacitados visuales, concebido especificamente para una persona invidente o con otra discapacidad visual puede identificar, de forma segura, el valor monetario de una moneda (2) o un billete (5), caracterizado porque consiste en un elemento laminar (1) de espesor reducido, de forma general circular y menor tamano que el de la moneda en la que se incorpora, con diametro adaptado especificamente a la dimension diametral delimitada por el reborde (3) perimetral que circunda a una moneda (2), obtenido mediante troquelado, y con diversos puntos (4) en relieve sobre la superficie del elemento laminar (1) de posicionamiento variable conforme al codigo Braille, indicativos del valor de la moneda (2) o billete (5) en los que se incorpore. 1. element of quantitative identification of coins and banknotes for visually impaired, designed specifically for a blind person or other visually impaired can identify, securely, the monetary value of a currency (2) or (5) ticket, characterized because it consists of an element laminar (1) reduced thickness, general circular and smaller than the currency in which it is incorporated with diameter adapted specifically to the Diametric dimension bounded by the flange (3) edge which surrounds the coin (2), obtained by stamping, and (4) points in relief on the surface of the element laminar (1) variable positioning according to the code Braille, indicative of the value of the currency (2) or (5) ticket in which incorporated.

0) CN206058352U – BLIND PERSON'S MACHINE COIN IDENTIFICATION STRU...

86) Family number: 65310547 (CN206058352U) © PatBase

Title:	BLIND PERSON'S MACHINE COIN IDENTIFICATION STRUCTURE
Priority:	CN201621058353U 20160914

Family:

Publication number	Publication date	Application number	Application date
CN206058352 U	20170329	CN201621058353U	20160914

Probable Assignee:	SHANGHAI YINHU COMMUNICATION TECH CO LTD
Assignee(s):(std)**:**	SHANGHAI YINHU COMMUNICATION TECH CO LTD
Assignee(s):	SHANGHAI YINHU COMMUNICATION TECHNOLOGY CO ; SHANGHAI SHANGHAI COMMUNICATION TECHNOLOGY LTD
Inventor(s):(std)**:**	SHI YULIN ; SUN WEIQING
International class (IPC 8–9):	G07D3/02 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN206058352U The utility model discloses a blind person's machine coin identification structure, including blind person's machine body, blind person's machine body back sets up the second coin identification area who is located the first coin identification area of upside and is located the downside, first coin identification area have by last down set up be used for discerning the first recess of monobasic face value coin, the third recess that is used for discerning the second recess of pentagon face value coin and is used for discerning one corner face value coin, second coin identification area have by last down set up be used for discerning the fourth recess of five fens face value coins, the 6th recess that is used for discerning the 5th recess of bipartition face value coin and is used for discerning one fen face value coin. The utility model relates to a blind person's machine can help the blind person to discern the coin denomination, and the function is comparatively complete, and user experience is better.

- **search:** SS2 FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and IC=(G07 or G09) (Results 5135)
- **search:** SS3 FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and IC=(G07B or G09) (Results 2756)
- **search:** SS4 FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and IC=(G07D) (Results 792)
- List: SS4 1–50 (FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and IC=(G07D)) (Results 792)

0) GB191014031A – APPARATUS FOR COUNTING BODIES OF EQUAL OR ALMOS...

1) Family number: 26053061 (GB191014031A) © PatBase

Title: Apparatus for Counting Bodies of Equal or almost Equal Thickness and Size and for Packing the same.

Family:

Publication number	Publication date	Application number	Application date
FR417946 A	19101125		19100606
GB191014031 A	19110609		19100609

Probable Assignee: FREDERIK ONLAND VAN DE KASTEEL

Assignee(s):(std): FREDERIK ONLAND VAN DE KASTEEL ; KASTEELE FREDERICK ONLAND V D

Assignee(s): FREDERICK ONLAND V D KASTEELE ; FREDERIK ONLAND VAN DE KASTEELE

Inventor(s):(std): KASTEELE FREDERICK ONLAND V D ; KASTEELE FREDERIK ONLAND VAN DE

Inventor(s): FREDERICK ONLAND V D KASTEELE

International class (IPC 1–7): G07D9/04

CPC: G07D9/065

European class: G07D9/06B

Classification Explorer

Abstract:
Source: GB191014031A 14,031. Kasteele, F. O. van de. June 9. Counters for coins. – In an apparatus for counting and packing coins and c., the coins are fed through a shoot to a rotating disk provided with holes for the reception of the coins, and thence pass down a channel to one of a number of packing–cylinders mounted on a disk rotated automati–. cally to bring succeeding cylinders into position beneath the c h a n n e l. Interchangeable gear–wheels are provided to allow different numbers of coins to be counted into the packing–cylinders. A sectional elevation of the apparatus is shown in Fig. 2. The coins are placed in a trough 1, and pass down an incline 3 under a guard 5 to a shoot 4, the movement being facilitated by the manual reciprocation of a plate 6 provided with a handle 7. The coins fall through holes in a disk 16, slightly thinner than the coins, on to a table 18, which is hollowed and spring – mounted to allow downwardly–bent coins to pass. To enable upwardlybent coins to be counted, the bottom end of the shoot 4 is held in ball bearings by means of two half–circular rings 27, 28 the ring 27 is secured by a screw 30 to a flange on the tube 4, and is pressed down by a spring 32. The screw 30 can be adjusted according to the thickness of the coints to be counted, and a plate may be inserted into the hollow of the table 18 to enable small coins to be counted. The disk 16 is rotated by the handle 43 through a changespeed gearing and bevel–wheels 42, whereby the coins are caused to pass down a channel 33 to packing–cylinders 38 mounted on a disk 39 provided with ratchet teeth 40. As the disk 16 revolves, a pin 48 upon a gear–wheel 47 driven therefrom releases a retaining pawl 50 at each revolution, and thus allows the disk 39 to be rotated automatically through the coiled spring 51 and regulator 52. If it is desired to count a different number of coins into the cylinders 38, the gear–wheel 47 and bridgepiece 53 may be removed and replaced by other gear–wheels provided with pins adapted to release the pawl 50 at a different frequency. A pin 65 may be projected into the path of the regulator 52 to hold the disk 39 so that the channel 33 may be rotated through an angle to allow the coins to pass into a sack. An index hand 66 attached to the spindle of the disk 16 indicates the units number of coins counted the tens, hundreds, and c. are shown on drums through the opening 14. A hand 25 indicates the number of the packing–cylinder 38 being filled. When the supply of coins has run out, a rod 9 makes contact with a pillar 10 to complete an electric circuit and ring a bell.

0) GB224666A – IMPROVEMENTS IN WAGE PAYING MACHINES

2) Family number: 18484427 (GB224666A) © PatBase

Title: Improvements in wage paying machines

Priority: GB19230024340 19231001

Family:

Publication number	Publication date	Application number	Application date
GB224666 A	19241120	GB19230024340	19231001

Probable Assignee: CHARLES LAURENCE BURDICK

Assignee(s):(std)**:** CHARLES LAURENCE BURDICK

International class (IPC 8–9): G07D11/00 (Advanced/Invention); G07D11/00 (Core/Invention)

International class (IPC 1–7): G07D1/00

CPC: G07D11/0003

European class: G07D11/00D

Classification Explorer

Abstract:
Source: GB224666A 224,666. Burdick, C. L. Oct. 1, 1923. Money – delivering apparatus–Coins and notes are delivered in recorded definite quantities by ejectors operated by keys. Means are provided to indicate when the money tubes and bars are nearly empty. Bars 4 with springs clips 4a for paper money and coin tubes 3 are held in a casing 1 by spring– latched gates 2. The coins are pressed upwards against the gates by a spring 16 carrying a platform 17 mounted on a tubular piece 18 which telescopes with a piece 19 on the framework. A signalling arm 20 carried on a piece 18 projects over the casing when the tube is nearly empty of coins and a hinged piece 21 on the gate drops and intercepts the ejector when the tube contains no coin. The paper money ejectors are operated by arms 6a secured to vertical spindles 6 which advance the bars 4 upwards after each ejection. A spiral spring 22 rotates the shaft 23 of a toothed wheel 24 which engages openings in the bars 4. A ratchet wheel 25 with a spring–actuated pawl 26 is rotated through a lug 26a which is tripped, on the return movement of the ejectors, by a stud 27, the recoil of the spring 22 lifting the bar 2. Pieces 21 on the gates 2 are fitted to operate in the same way as the pieces 21 on the coin tubes. In a modification the coil spring is eliminated, the return movement of the ejector lifting the bar 4 by means of a pivoted arm which receives a thrust from a peg on the ejector. The ejectors are operated by a lever 40 and shaft 40. The requisite keys are depressed and lock the shafts 41 with the levers 42 connected to rods 43, the levers 42 being locked to the shafts 41 by spring–controlled hinged locking pieces 50. To secure the keys when depressed and release them after each operation, spring catches 55 mounted in the pieces 7, 7 bear against the interior of the shafts 41 and are locked in a circular groove 56. On the movement of the crank 40 the catch 55 falls into a vertical groove 57 and releases the keys. The typing mechanism comprises consecutive number printing elements 10 operated bv a spring push button 10, the return of the printing elements to normal advancing the type–bar roller 11 over the paper 9 carried from a supply roller 9. The forward feed of the paper is effected by a ratchet wheel 12 on the roller shaft, a pawl 13 on the printing element advancing the wheel 12. The paper can be advanced half the normal distance by a spring–actuated rod 14 without operating the numbering element.

0) US1713715A – COIN CABINET

3) Family number: 19969355 (US1713715A) © PatBase

Title:	COIN CABINET
Priority:	US19280284153 19280609

Family:

Publication number	Publication date	Application number	Application date
US1713715 A	19290521	US19280284153	19280609

Probable Assignee:	BILLUPS TIMOTHY C
Assignee(s):(std)	BILLUPS TIMOTHY C ; ROSS JR JOHN F
Inventor(s):(std)	BILLUPS TIMOTHY C ; ROSS JR JOHN F
Inventor(s):	JR JOHN F ROSS
International class (IPC 8–9)	A47B81/00 (Advanced/Invention); A47B81/00 (Core/Invention)
International class (IPC 1–7)	G07D9/00
CPC:	A47B81/00
European class:	A47B81/00
US class:	206/0.84 312/216 312/334.47
Classification Explorer	
Forward Citations:	US2730423,

Abstract:
Source: US1713715A 1. In comibincition, :L cabinet, a plurality ot drawers slidable in the cabinet, a panel hingedly mounted in the side ofthe ualiiiiet, and means on the panel to limit llie sliding inoreinent of the drawers when the panel is closed and to be free thereiiroin when opened. Q. ln conibiination, fi cabinet formed with plurality of ili.`€l,W9l' receivable conlpnrtments, drawers slidable in the colnpartrnents, one– side ol' the cabinet having a slot, a panel hifnged to the said side of the cabinet to siving' it to the slot, the sides oi' the drawer adjacent the panel being provided with longitudinal ,;§rooves=, and lugs on the panel to extend intothe grooves when the panel is closed, so as to limit the– nuwenient of the drawers, and whereby the panel may he swung to an open position to ailloiv the drawers to be totally reznoved from the cabinet, . p 3; ln combination, si ealoinet formed with a plurality of drawer receivable, compartments, drawers slidable in the coinpartinents, one side of the cabinet having; a slot, EL panel hinged to the said side of the cabinet toisiving into the slot, the sides of the drawer" adjacent the panel being provided with longitudiniil grooves, and lugs on the panel to extend into the– grooves when the panel. is closed, so as to limit the movement of _the drawers, find whereby the panel be swung to an open' position to allow the drawers to be– to; tally removed from the cabinet, each drawer having a grate like frnnie therein provided with openings to.for1n compartments so as to hold groups of coins therein, in stacks of pred.etern1ined amounts. In testimony whereof we aiix our– signatures. ,

0) US1751615A – COIN HANDLER

4) Family number: 19582450 (US1751615A) © PatBase

Title: COIN HANDLER

Priority: US19280249460 19280125

Family:

Publication number	Publication date	Application number	Application date
US1751615 A	19300325	US19280249460	19280125

Probable Assignee: BOWER WILLIAM C

Assignee(s):(std)**:** BOWER WILLIAM C

Inventor(s):(std)**:** BOWER WILLIAM C

International class (IPC 8–9)**:** G07D9/06 (Advanced/Invention); G07D9/06 (Core/Invention)

International class (IPC 1–7)**:** G07D9/00

CPC: G07D9/06

European class: G07D9/06

US class: 206/0.83 53/254

Classification Explorer

Forward Citations: US5441448, US3982633, US3882659, US3265077, US3081470, US2864386, US2836019, US2745232, US2736478, US2683526, EP0132097,

Abstract:
Source: US1751615A 1. In n coin handler, a pair of sections movably associated with each other; each of said sections being provided with a set of coin holding grooves, the grooves of one section being adapted to mate so that a set of coins may be stacked therein, and means associated with the grooves of one of said sections Whereby not less than the required number of coins may be stacked in each groove.

0) US1773348A – CHANGE–MAKING MACHINE

5) Family number: 20034104 (US1773348A) © PatBase

Title: CHANGE–MAKING MACHINE

Priority: US19240753083 19241201

Family:

Publication number	Publication date	Application number	Application date
US1773348 A	19300819	US19240753083	19241201

Probable Assignee: HEDMAN MFG CO

Assignee(s):(std)**:** HEDMAN MFG CO ; HEDMAN MFG COMPANY

Assignee(s): HEDMAN MANUFACTURING COMPANY

Inventor(s):(std)**:** EDWIN DAUER LOUIS ; SHIPMAN WILLIAM HERBERT N

Inventor(s): DAUER LOUIS EDWIN

International class (IPC 8–9): G07D1/00 (Advanced/Invention); G07D1/00 (Core/Invention)

International class (IPC 1–7): G07D1/00

CPC: G07D1/00

European class: 43A15 G07D1/00

US class: 453/22

Classification Explorer

Forward Citations: US3125104,

Abstract:
Source: US1773348A invention, We claim : _ 1.~ A machine of the class described coinprising, in combination, uniforin draw bars having uniformly spaced and staggered shoulders; rocker shafts disposed transversely of said draw bars at intervals corresponding tothe, spacing of said shoulders; said 1‘ocker'sliafts_ having uniformly spaced rocker arm seats, and arranged with theseats of alternate shafts staggered in relation to the seats of theother alternate shafts; the said draw bars being arranged at intervals corresponding to the spacing of said seats; and arms affixed to selected seats to provide for a desired selective operation of said shafts by said 'dravv bars. f _ A inachine;t_gt;f the class described comprising, in combination, uifornlly spaced draw bars co'n;prising'sheet nietal strips havinguifornily spaced shoulders bent alternately atnpposite sides thereof ; rocker shafts arranged transversely of said draw bars and spaced at intervals corresponding to the spacing of said shoulders; said rocker shafts consisting of ,ciamneir shaped sheet metal stainpings having uifornily spaced seats, and 'arrangedwith the seats of alternating shafts staggered in relation to those of the other shafts; and arms aiiixed to selected seats. 8. A machine of the class described Comprising, incornbination, a gang of uniform rocker shafts having uniformly spaced seats, the terminal seats of each shaft being unequally spaced from the respective ends of the shaft; and said shafts arranged side by side With their ends transversely aligned but with alternate shafts turned end for end, so that the seats of alternate shafts will he in staggered relation to those of the other shafts; arins aifixed to selected seats; and a set of dravv bars having devices for engaging said arms. 4. In a machine of the class described, sheet– metal rocker shafts having end Walls provided With bearing holes; supports between which the rocker shafts are mounted; headed hearing studs inserted through openings in said supports and into said holes in the ends of the rocker shafts; and holding plates affixed to said supports over the heads of said studs to prevent their removal. 5. The combination with the key levers and draw bars, of the levers 35 connected to S0 S5 UU G.: lUU ll O the rear ends of the draw bars, a shaft on which said levers are fulcrumed, said levers consisting offlat sheet metal pieces having bushings htted in and svvaged thereto, the said bushings extending beyond the side edges of said levers 35 and mounted in abutting relation on said shaft– whereby the levers will be properly spaced apart; and collars amxed on said shaft adjacent the bushings of the terminal levers of the series for maintaining them in place. _ 6. In a machine of the class described, a plurality– of identically formed sheet metal draw bars, each of said draw bars having similarly for,–med and spaced rocker arm engaging members bent alternately in opposite direetions, a plurality of identically formed sheet metal rocker shafts each having spaced slots for the reception of rocker arms, the terminal slots in each shaft being unequally spaced from the respective ends of the shaft whereby, by reversal of alternate bars in assembling, the slots in any rocker shaft Will assume a staggered relation with those in adjacent rocker shafts, each of said rocker shafts having an end provided With a hole for the reception of a pintle, spaced plates for said rocker shafts having holes therein for registration with those in said shafts, headed pintles mounted in said aligned holes, and plates overlying thc heads of said 'pintles along each side of the assembly for preventing accidental removal of the pintles. In testimony whereof, we have signed our names to this specification

0) US1850258A – MONEY HANDLING MACHINE

6) Family number: 20039879 (US1850258A) © PatBase

Title: MONEY HANDLING MACHINE

Priority: US19300429365 19300218

Family:

Publication number	Publication date	Application number	Application date
US1850258 A	19320322	US19300429365	19300218

Probable Assignee: BRANDT AUTOMATIC CASHIER CO

Assignee(s):(std)**:** BRANDT AUTOMATIC CASHIER CO ; BRANDT AUTOMATIC CASHIER COMPA

Assignee(s): BRANDT AUTOMATIC CASHIER COMPANY

Inventor(s):(std)**:** BRANDT EDWARD J

International class (IPC 8–9): G07D1/00 (Advanced/Invention); G07D1/00 (Core/Invention)

International class (IPC 1–7): G07D1/00

CPC: Y10S193/01 G07D1/00

European class: 43A15 G07D1/00

US class: 193/22 193/31A 193/31R 193/DIG.1

Classification Explorer

Forward Citations: US2547102,

Abstract:
Source: US1850258A I claim as new and clesire to secure by Letters Patent– is :– ' l. The combination with ir coin holding machine having an outlet for liberated coins, of a. delivery spout for receiving the coins, and ax spring latch engageshle with the spout for cletaclialily connecting! the same to the machine, the latch permitting' adjustment of the spout relative to the machine While maintaining the connection between the spout and machine. , f 2. The combination with a coin holding machine having –an outlet for liberated coins, oi' a delivery spout for receiving the coins, said spout having a groove formed therein, and means engageable in the groove for detaehably connecting thc spout to the machine, said means permitting adjustment of the spout relative to the machine while maintaining engagement of the means in– the groove. _ The combination with a coin holding inucliine having an outletss for liberated coins, of a delivery spout for receiving the coins, said spout having a groove formed therein, and at spring latch engageable in the groove “For detschublv connect–ing the spout_lt;t0,the machine, said latch permitting adjustment of the spout relative to the machine While maintsi ning engageinent of thelatch in the groove. 4. The combination with it coin holding machine having an outlet for liberated coins, of a. delivery spout for receiving the coins and adjustable to di iferent points of delivery, and a pivoted member engagcable with the spout for connecting the same to the machine or disconnecting the same therefrom' while in any position' of adjustment. . 5. Thevcoinbinationf With' a, coin' holding machine having an outlet for liberated coins; of a. delivery spout for receiving the coins and adjustable tofdiiferent points ofdelivery, at pivoted member engzrgeable .witlr–the spout foreonnecting the same to the machine or for disconnecting the same therefrom while in any position ot adjustxnent, and means engageable withl the spout forholding the same in its vzllrious positions of adjustment. 6. The combination with a coin holding machine having an: outlet for liberated coins, of a delivery spout for receiving the coins and adjustable to–different points of delivery, a piwoted member engageshle with the spout for connecting the same to the machine or for disconnecting the same therefrom While in any position of adjustinent,.and means frictionally engageable with the spout for holding the same in its various positions of adjustment. – 7. The combination with a coin holding machine having an outlet for liberated coins, of a bracket connected to the machine, a, delivery spout for receiving the coins discharged/ through the outlet, and at spring controlled latch carried by the bracket and' engageablc withthe spout for detachably connecting the spout to the bracket and to permit liorizontal adjustment of the spout relative to the housing in any direction–_ ~ 8; The combination with a coin holding machine havingan outlet for liberated coins, of 21 bracket connected to the inzichine, a delivery spout for receiving the liberated coins through the outlet, ar latch member adapted to engage the spout and permitting adjustment thereof to various positions relative to the machine, and means carried by the bracket and engagcable with the spout for holding the same in its adjusted positions. 1 9. The combination with a, coin holding machine having an outlet for liberated coins, ot a bracket connected' to the machine, a. delivery spout for receiving the liberated coins through the outlet, a‘ latch member adapted toengage the spout and permitting adjustment thereof to various positions relative to the machine, and means carried by the bracket and frictionally engageable with the spout for holding the same in its adjustedpositions. 10. The combination with a– coin holding machine–l1avi_ng an outlet for liberated coins, of a' bracket connectedv to the machine, a delivery spout for receiving the coins discharged through theoutlct, said spout having at ring–like portion adapted to be received– in the bracket, and a spring' latch engageable with the

ring–like portion for connecting the spout to the bracket but allowing adjustment thereof into various positions relative to the machine; 11. The combination With' a coin' holding machine –having an outlet for liberated coins, of a, bracket' connected to the machine, »a delivery spout for receiving 'the coins disoharged through the outlet, said spout– having a ring–like portion adapted to be received in the bracket, a spring latch cngageable with the ring–like portion for connecting the spout to the bracket but allowing adjustment thereof into various positions relative to the machine, and means carried by the bracket and engagcable with the rin g–like portion of the spout for holding the spout in its various positions of adjustment. 12. The combination with a coin holding machine having an outlet for liberated coins, of a bracket connected to the machine, a. delivery spout for receiving the coins discharged through the outlet, said spout having a ring–like portion adapted to be received in the bracket, a spring latch engageable with the ring–like portion for connecting the spout to the bracket but allowing adjustment thereof into various positions relative to the machine, and adjustable means carried by the bracket and engageable with the ring–like portion of the spout for holding the spout in its various positions of adjustment. 13. The combination with a coin holding machine having an outlet for liberatedcoins, of a bracket. connected to the machine, a spout adapted to receive the coins discharged through the outlet, said spout having a ringlike portion adapted to be received within the bracket and provided with a circumferentiallv extending groove, and means carried by the bracket and engageable in the groove for connecting the spout to the bracket and allowing adjustment thereof into various positions relative to the machine. 14. The combination with a coin holding machine having an outlet for liberated coins, of a bracket connected to the machine, a spout adapted to receive the coins discharged through the outlet, said spout having a ringlike portion adapted to be received within the bracket and provided with ax circumferen» tially extending groove, and a spring latch carried by the bracket and engageable in the groove for connecting the spout to the bracket and allowing adjustment thereof into various positions relative to the machine. 15. The combination with a coin holding machine having an outlet for liberated coins, of a bracket connected to the machine, a delivery spout for receiving the coins dis~ charged through the outlet, said spout having a ring–like portion adapted to be positioned relative to the bracket and having circumferentially extending groove ‘formed therein, a member carried by the bracket and engageable in the groove of the ring–like por~ tion of the spout for connecting the spout to the bracket but allowing adjustment thereof to Various positions relative to the machine, and a member carried by the bracket and engageablevvith the ring»like portion for holding the spout in its adjusted positions. , ` 16. The combination with 9, coin ‘holding machine having an outlet for liberated coins, of a bracket connected to the machine, a delivery spout for receiving the coins dis» charged through the outlet opening, said spout having a ringlike portion adapted to be positioned relative to the bracket, means for detachably connecting the spout to the bracket and allowing adjustment thereof, and a member carried by the bracket and adapted to be envaged with the ring–like por– ss tion of the spout for holding the same in its 'J.(l] usted positions, the engaging face of said member being shaped to conform to the curvature ot the ring~like portion of the spout. 17; The combination with a coin holding machine having an outlet for liberated coins, of a bracket connected to the machine, a delivery spout for receiving coins discharged through the outlet, means for adjustublv connecting the spout to the bracket, a member carried by the bracket for frictional engage ment with the spout to hold the same in adjusted position, and means for adjusting said ineinber towards or away from the spout. 18. The combination with a. coin holding; niacliine having an outlet for liberated coins, of a bracket connected to the machine, a. dclivery spout for receiving the liberated coins discharged through the outlet, means for adjustably connecting the spout to the bracket, and a screw operated member carried by the bracket and engagcable with the spout for holdingtlie same in adjusted positions. 19. The eoinbination with a coin holding machine having an outlet for liberated coins, of a bracket connected to the machine and having a bottom opening, a delivery spoutadapted to receive the coins discharged through the outlet, and means permit–ting an end of the spout to be connected to the bracket by a facewise movement relative thereto while at any position of adjustment relative to the machine to position the end of thc spout to be received in the bottom opening of the bracket. 20. The combination with a coin holding machine having an outlet for liberated coins, of su, bracket connected to the machine and having an opening in the bottom thereof, a delivery spout adapted to receive the coins discharged through the outlet, said delivery spout having a ring–like portion at the top adapted to be received within tho opening of the bracket, and means carried by the bracket and adapted to be engaged with the ring–like portion of the spout to connect the spout to the bracket, when the spout is moved vertically to position the ring–like portion Within the opening of the bracket while at any position of adjustment relative to the machine. 21. The combination with a– coin handling machine having an outlet 'tor liberated coins, of a bracket connected to the machine, a spout for receiving the coins discharged through the outlet, and means carried by the bracket and engageable with the spout for detaehably connecting the same thereto, said means permitting the spout to be connected to the bracket by a faoewise movement relative thereto and permitting free horizon~ tal adjustment of the spoilt relative to the bracket while still connected thereto. 22. The combination with a coin handling machine having an outlet for liberated coins, of a bracket connected to the machine, ri spout for receiving the coins discharged through the outlet, means carried by the bracket and engageable with the spout for detachably connecting the same thereto, said means permitting the spout to be connected to the bracket by a facewise movement relative thereto and permitting free horizontal adjustment of the spout relative to the bra/eket while still connected thereto, and means carried by the bracket and adapted to be engaged with the spout for holding the same in any position of adjustment. In testimony whereof I hereunto aflix my signature

0) US1882502A – FRAUD PREVENTING MEANS FOR COIN CONTROLLED MECH...

7) Family number: 20850657 (US1882502A) © PatBase

Title:	FRAUD PREVENTING MEANS FOR COIN CONTROLLED MECHANISM
Priority:	US19290351566 19290401

Family:

Publication number	Publication date	Application number	Application date
US1882502 A	19321011	US19290351566	19290401

Probable Assignee:	VANAK CORP
Assignee(s):(std):	VANAK CORP
Inventor(s):(std):	KNEE AARON A
International class (IPC 8–9):	G07D5/04 (Advanced/Invention); G07D5/00 (Core/Invention)
International class (IPC 1–7):	G07F3/02
CPC:	G07D5/04
European class:	G07D5/04
US class:	194/340
Classification Explorer	
Forward Citations:	US3430746,

Abstract:
Source: US1882502A I claim : 1.'In a fraud preventivodcvice for Vonding 111Zl(_ThiIl€S, 21 balancing 1T1_Ch_11iS1T1, stabilizing xneans for said balancing mechanism u gmssageway leading to the balancing 1nesh~ anism from the exterior of the machine, two ffl li? 1 if _gt;_6 éu EEO T25 lb 'Bb as .sm passageways leading from the balancing ruechuniam, one of the lasttwo pnssageways leading to the exterior of the machine, and the other passageway lemliiig to an ini;erio1‘ point on the machine, inovable means cont1‘o1le_ by ihe bzilzuiciiig nieclifuiisui for deflecting si coin into the macliiiie when of prayer Weiglif, and for refmrning the coin io the exterior of the machine when the coin is below or above the weight of a genuine coin, said stabilizing nieans` having zz support tlierefor imlepezidexit of the balancing mechanism and means in the balancing mechanism normally out of Contact with the Slf»11bl_gt; lizing means and being adapted to engage anal move said stabilizing niezuis when said b£1l€L11Ci.1lg mechanism is moved a pi'e_lt;]eter~ mined :iinouiit by a check deposited, therein 2. ln EL fraud preventive device for checkControlled appzu'ai_gt;i1s,a balancing incchaiiisiii and stabilizing means thereilor, means in said balancing mechanism for receiving a coin, movable means controlled by said balancing mechanism for diverting the coin into one channel if the same is genuine and to divert the coin into aiiotlier channel if theisarne is below or above the Weight of a genuine coin, said stabilizing means having 21, support, therefor independent of the balancing meelianism and Iriesnns in the balancing niech~ anism normally out of Contact with the stabilizing means: and being adapted to engage and move said stabilizing means when said lvalaiicing mechanism is moverl SL predetermined amount by ax check deposited therein. 3. In a coin selector adapted to deliver coins to a vending apparatus, a balancing lever, stabilizing means for the balancing lever, movable means associated with and controlled by said balancing lever for diverting the coin into one channel if the same is of proper Weight, and to divert the coin into another channel if it is below or above the weight of a, genuine coin, said stabilizing ineams having E1 Support therefor iurlepenclemi ol the balancing meclmnisni and means in the balancing meclianism normally out of Contact with the stabilizing iiieans and being adapted to engage and move said stabilizing means when said balancing mecliuuisrn is moved a predetermined amount by a check deposited therein. 4. In 21 coin selector and fraud preventive device for check–controlled apparatus, a bal~ arming lever, stabilizing niezms for said balancing lever, means for guiding il' coin from the exterior of the Inacliine downwardly to the balancing lever, said device having a groove leading from below the balancing lever to one portion of the machine 2L11(l'€LISCl having u– groove leading from below the ballever to the exterior of the inachine, micing and movable means controlled by said bulancing lever for diverting the Coin into one groove if the coin is of a, given Weight, and for returning the coin to the exterior of the machine if it is under or above ai given weight, said stabilizing means having a sup_gt; port; therefor independent of thevbalancing mechanism and means in the balancing mechanism normally out of contact with the sta,– lwilizing means and being siclapted to engage and move said stabilizing means when said balancing mechanism is moved a–,predetermilled amount by :L check deposited therein. lu a coin selefzwr im' coin controlled iuechsmism, 2 balanced member pivoted inreiniefiiate iis ends to assume ev swinging position, meaug for ciirecting a coin to said bal~ Smncccl niembcr, means for holding the coin in 'said balanced 1'€i€H`lbC1`, iucaus eepamied from but controlled by said balanced member to deflect coins of a, given Weight in one direction and to deflect coins below or above El given weight; in uiiobher direction. ' 6. In ai coin controlled mechanism, 2. fraud preventive device, said friuld preventive flevice coiuprising a balancing member pivoted intermediate its ends and being adapted to re» ceive ai coin, stabilizing means for said balancing lHQ1!1i)SI’, means for' conveying the coin to the balancing

member, and nieaus coutrolleil by the balancing member for clireefing the coin into one clikmncl if oi' a given weight, and for directing the Coin– into another channel if not of 11 given Weight, means for supporiiug at least a portionnf said stabilizing means independently of the balancing mem; ber, means on the balancing member for holding said stabilizing means off its support when an coin above fs, giyeu weight is received into said balancing rnechainiszzi. 7. In a fraud preventive device, a block member, having ll coin receiving channel adapted to convey a coin through the block member, a balancing iucchanism mounted in association with said chu–unel, means on the balancing rnecliunism penetrating the block member, means on the other side of the block member aclaptecl to be controlled by the balancing mechanism tu regulate the position of si fleliectilig]'{`lE1`[ll7_I', said defiectiug member being; aclapterl to]ie11etra':e :L slot in the block inemuei' to divert coins into 11 proper chauiiel, and means associated with the said parts adapted to allow the diverting member to fall into clivertiiig position when the coin is of proper wciglii, and niezms for preventing the divertiiig member, from assuming the clell–eeliiig position when the coin is not of proper Weight. S. 111 an coin coiitrollei mech anisni, a fraud preveniive device, said fraud pljeveiitive device mmprising a blnel; member lizwiiig El circuiimis groove leading along; one sicle tl1ca'ec'i', il cover for El block member, a. balancing niechzmism associated with said groove, said. block member having FL hole therein, zz pin in one end of said balancing 1l1ccl1zuii:=m, said pin penetrating said hole, said block member lieving a slot therein, a pivoted member on the opposite side of the block nlember from the bzilaiicing mechanism, said pivoted member liiuiiig ai slot therein, a denectlng pcrtion on said pivoteal member arluptcd to penetrate said slot, said beilencing mechanism and the pin ilicreon being uclapted to hold the pivoted ineznber in elevated position when the _lt;:ui_u is noi, of proper weight, andbeiiig adapted to allow the pivoted member te fall to defleci ilie coin into a. vending ineciianism when the coin is of pro ief weight. 9; In a. coin controlled zillpaiutlis, ri ifrsuifl preventive device, said fraud preventive device comprising zz bahmeing ineehsziiszn, a channel adapted to convey coins to the bnl~ :incing mechanism, 21 deiiectei' inumber adapted to operate in COl1j1.ll"\l_fbi_lt;Jl] With said cliennel, means co–operating between the deflecting member and the balzuiciiig meclianisln to cause the vleiiecfing position when the coin is oi' ii given weight and to assume smaitiier position if 21 coin is below 01' above n Qven weight, a stabilizer for said balancing ineclifor the sliabilizei' means meehsmism for raising said zinisxn, EL siipport in the balanciiig M siebilizer oif its sizpport when a coin above 11, given Weight is inserted in the balancing niecliaiiism. l0.' In ai coin conlvellerl mecliunism, a fraiicl preventive device having aforked passage\va,y .for zz coin, ai deflecting member adapted io 0p~ erzite in one of said passagewaiys, e lvsleneing nieelienisin, end means on the balancing nieclianism and the deducting means eclzqiiefl to cooperate to divert a Coin ironi the beleneing mechanism into one portion of the forked passngewziyif of she proper weight and being adapted to delieet the coin into anoilier channel if not oiss the proper weight. 11. In ii fraud preventive device, moans for Conveying :L coin through the device, a balancing ineislianisin adapted to receive the coin and weigh the same, stabilizing means for said lualanciiig mechanism, means. associated with said balancing mcclisnism and controlled thereby aclzipteai to ussinne 21 position to allow the coin to enter a vending muthaiiism and to opei'ai»e the same if of the proper weiglit, said means being adapted to return the coin to the €Xt€1`iOF of the device if be low or above the proper weight, witlioiit operating the vending machine, a support for supporting at least s major portion of ilic Weight of said stabilizer' independent of' ilie balancing nieclizmismyrmd means in said balancing meclianissn for raising said stabilizer off its support when a coin above QL given Weight is inserted into the bzilzinciiig mechanism. 12. In si fraud preventive device adapted to select coins and deliver genuine coins only to e, Vendin,;' nppaintiis, a, balancing niecwlmnisni, stabilizing means for said balancing mecl;a~ nism, means coiitrollzzd by said balancing mechanism for determining the path zz. coin shall trevei ilH`O11gl] the fraud preventive dcvice, said means being adapted to deliver genuine coins of a given denomination to the vending mziclihie and being adapted to ret|.u'n all coins not conforming tn the given weight to the exterior oi' the fraud preventive device, means independently of the balancing mechanism for supporting at least fx, part of said stabilizing means, and means on the balancing lTlCCl)ilI1lSll| means to raise when :L coin is mechanism. 13. In a, fraud preventive device, a balancing ineoliaiiisin, said device lieving a, coin Cl1Lll2€ adapted to deliver coins to said bala,nc~ ing mechanism, stabilizing means for said balancing mechanism adapted to cause said balancing inechanisin fo quickly assume a position of rest after' receiving the coin, means associated with said balancing inecliaiiisxn for for engaging said stabilizing the stabilizer off its support received into said balancing qs BF deteriiiining ,the path of the Quin after it 'oo leaves the balancing mechanism, additional means for releasing the coin [rein the balancing nieehanisin, nieans for supporting at least ei major portion of the Weight of said stabilizing means independently of the balancing mechanism and means (ill the balancing mechanism for engaging the stabilizer' and relnoving it; from its support when a,_ coin in the balancing mechanism is above a given Weight. 14. In a fraud preventive device, za, coin selecting means, 2, stabilizing device adapted to stabilize the coin selecting means, il, coin Chute leading tluougli said coin selecting means, means in the coin Gl1Hf€ adapted to deliver one coin at il, time to the coin selecting means, said last means being adapted to be operate d by the operation of the coin selecting means. 15. In a fraud preventive device, a 'pivoted member, a. coin receiving portion in said pivoted member, ai stabilizer in said pivoted member aclepted to stabilize the said pivoted member after it receives the coin, means for adjusting said pivoted member to receive coins of zl given value, means controlled by said pivoted member for determining the pzifli to be traveled by the– Coin after being released from the–pivot–ed member, and means for releasing the– coin from the pivoted member. 16. In a fraud preventive device :uid coin selecting mechanism, gi pivoted member, means for c0ndLL0ti1i,g 21 coin through said pivoted menilier, stabilizing means associated with said pivcited member, in pin Jnmmted on one end of said pivoted member, a second pivoted inember,–21. slot in– saidpivoted member, :L coin defleetor on said second pivoined member, said slot and said pin–being adapted to register to allow the coin deflecteir to as– U5 'IBD sumo a given position when a coin of a given weight is dropped into the pivoted member, and being adapted to prevent– the coin clefleetor from assuming the given position when the coin is not of a given weight. 17. In u coin selecting mechanism adapted to be operated with a vending machine, a coin selecting device, said coin selecting device comprising a balancing mechanism and stabilizing means therefor, means for operating a vending machine associated with said coin selecting device, said vending means being adapted to bo automatically connected to the coin selecting mechanism when the coin dropped therein is of a given weight, and being adapted to fail to connect the vending mechanism when the coin is above or below a given weight. 18. In a coin selecting

mechanism for a vending apparatus, means for determining the Weight of a coin, means for connecting the coin selecting mechanism with the vending mechanism when the coin is of a– given Weight, said coin selecting means being adapted to be disconnected from the vending means before the parts reach a normal position after being operated. 19. In a fraud preventive device, a mombcr pivoted intermediate its ends and being adapted to receive coins at one end, a coin chute for delivering the coins to said mochanism, means associated with the other ,end of sa–id member adapted to quickly stabilize said member when a coin is dropped therein, pivoted means for deflecting the coin into one portion of the machine when it is genuine, said pivoted means being controlled by the pivoted member, said means being adapted to ret–urn the coin to the exterior of the machine When it is not genuine. 20. In a check controlled apparatus, a check entrance, a passageway leading from said check entrance, a device in said passageway adapted to permit– one cheek to pass at a time, a balancing mechanism at the other end of said passageway and having means in one end thereof to receive and hold a check, a forked passageway below said balancing mechanism into which the check is adapted to be passed after leaving the balancing mechanism, a defiecting member adapted to be normally held in raised position, means for releasing said deiiecting member for engagement with said balancing mechanism, said balancing mechanism being adapted to permit– said defleeting member to move to direct the check into the proper channel if genuine, said dellecting means being adapted to remain inoperative if the check is not genuine, and a stabilizing device associated with the other end of said balancing mechanism adapted to become operative when a check is dropped into the other end of the balancing mechanism. 21. In a fraud' preventive device for cheek controlled apparatus, a balancing mechanism having means in one end thereof for receiving and holding a check, stabilizing means in the other end of the balancing mechanism, a detlecting member associated with said balancing member and being adapted to be controlled by said balancing mechanism todefleet the check in one of the two directions after the same is released from the balancing mechanism. 22. In a fraud preventive device for cheek controlled apparatus, a balancing mechanism, means in one end of the balancing mechanism for receiving and holding a check, stabilizing means in the other end of said balancing mechanism, a denecting member associated with the other end of said balancing mechanism and being adapted to be controlled thereby to deflect genuine checks into the check controlled ap~ paratus, said defiecting member being adapted to remain inoperative when the check is not of a given weight. ‘ , 23. In a fraud preventive device for check controlled apparatus, a balancing mecha~ nism, means in one portion of the balancing mechanism for receiving and holding a check, stabilizing means in another portion of said balancing mechanism, a deiiecting member associated with said balancing mechanism and bein g adapted to be controlled thereby to deflect checks into the check controlled apparatus if genuine and to remain inoperative when the cheek is not genuine, means apart from the balancing mechanism for supporting the stabilizing means, and from which support the stabilizing mechanism is lifted when a check above a given weight is inserted into the balancing mechanism. 24. In a fraud preventive device for check controlled apparatus, a balancing beam pivoted intermediate its ends and having means in one end thereof for receiving and holding a. check, a. stabilizer associated with said bal–, ancing beam and means apart from the beam for normally supporting the stabilizer, means in the beam for raising and holding the stabilizer off its support when a cheek is contained in the beam of a Weight above that for which the machine is constructed, a defiector for the check, means tor automatically releasing the check from the beam, and means operable by the position of the beam for controlling the deflector. 25. In a fraud preventive device for check controlled apparatus, a balancing mechanism pivoted intermediate its ends, means for guiding a. check into one end of said balancing mechanism, a stabilizer operatively associated with the other end of said balancing mechanism, means independent of the balancing mechanism for supporting at least a major portion of the Weight of the stabi– I05 lltl lizer normally free from the balancing mechanism and means in the balancing mechanism for engaging and moving the stabilizer when said balancing mechanism is moved by the reception of a. check therointo. In testimony whereof I adix my signature

0) US1908565A – COIN COUNTING MACHINE

8) Family number: 29611190 (US1908565A) © PatBase

Title:	COIN COUNTING MACHINE
Priority:	US19310554299 19310731

Family:

Publication number	Publication date	Application number	Application date
US1908565 A	19330509	US19310554299	19310731

Probable Assignee:	SMITH PERCY C
Assignee(s):(std)**:**	SMITH PERCY C
Inventor(s):(std)**:**	SMITH PERCY C
International class (IPC 8–9)**:**	G07D9/04 (Advanced/Invention); G07D9/04 (Core/Invention)
International class (IPC 1–7)**:**	G07D9/04
CPC:	G07D9/04
European class:	G07D9/04
US class:	235/100 235/132E 453/31 453/49

Classification Explorer

Forward Citations: US6733380, US6626752, US2750106,

Abstract:
Source: US1908565A 1. In a. coin counting machine, it support for n stack ot coins, means to feed the coins one at :L time from the bottom of the stack, a. counter mounted on the support, operating mechanism for the counter having a movable element projecting into tlue path of Coins fed from the stack to cause tlic counter to be actuated by the coins, and means centi–ollerl by the counter to engage the feeding means and lock it Whenever il predetermined runnber of coins have been ssled from the stack.

0) US2153160A – PREDETERMINING MECHANISM FOR COIN COUNTING MACH...

9) Family number: 29697989 (US2153160A) © PatBase

Title: PREDETERMINING MECHANISM FOR COIN COUNTING MACHINES

Priority: US19350013590 19350329

Family:

Publication number	Publication date	Application number	Application date
US2153160 A	19390404	US19350013590	19350329

Probable Assignee: AUTOMATIC COINWRAPPING MACHINE

Assignee(s):(std)**:** AUTOMATIC COINWRAPPING MACHINE

Assignee(s): AUTOMATIC COINWRAPPING MACHINE CORP

Inventor(s):(std)**:** SEEMEL BRUNO E

International class (IPC 8–9): G07D9/04 (Advanced/Invention); G07D9/04 (Core/Invention)

International class (IPC 1–7): G07D9/04

CPC: G07D9/04

European class: G07D9/04

US class: 235/132R 453/35

Classification Explorer

Forward Citations: US2998189, US2889075, US2679849,

Abstract:
Source: US2153160A 1, In a coin counting machine having coin counting mechanism, means to direct the coins over the counting mechanism to count the same, and means actuatable to control the counting of the coins into successive lots of a predetermined number of_='coi.ns per lot, the combination of B, member driven –with said counting mechanism and having movements coincident with the movement of said counting mechanism including 53.

0) GB533589A – IMPROVEMENTS RELATING TO CHANGE ISSUING MACHINE...

10) Family number: 20365688 (GB533589A) © PatBase

Title: Improvements relating to change issuing machines

Priority: GB19390023704 19390817

Family:

Publication number	Publication date	Application number	Application date
GB533589 A	19410217	GB19390023704	19390817

Probable Assignee: SYDNEY RICHARD PHILLIPS

Assignee(s):(std)**:** SYDNEY RICHARD PHILLIPS

International class (IPC 8–9)**:** G07D1/02 (Advanced/Invention)

International class (IPC 1–7)**:** G07D1/02

CPC: G07D1/02

European class: 43A15 G07D1/02

Classification Explorer

Abstract:
Source: GB533589A 533,589. Change–giving apparatus. PHILLIPS, S. R. Aug. 17. 1939, Nos. 5801 and 23704. [Class 27] A machine for issuing change for paper money comprises a blade 3 the forward edge 9 of which folds and carries a note placed on a table 41 downwards through a slot in the table when a lever 5 or 6 is operated. An abutment 28 on the lever 5, 6 engages a projection 27 on a lever 25 and through it moves a lever 21 with a pusher 20 to move a tray 17 containing the change out through an opening 18. In the path of the blade 3 are feeler fingers 13, 14, Fig. 10, the blade being slotted or grooved at 15a, 15b so that it does not move the fingers unless the slots or grooves are obturated by the folded note. A narrow note, say 10/– value, covers only one slot while a wider note, say of u1 value, covers both slots. If one slot only is covered the finger 13 is depressed moving a stop 34 out of the path of the lever 5 which when operated delivers a tray 17 at the left hand side of the machine, the trays on that side being each charged with change for a 10 shilling note. If both slots are covered both fingers 13, 14 are depressed, the finger 14 bringing a stop 33 into the path of the lever 5 and stops on the opposite end of the spindles 11, 12 being moved out of the path of the lever 6 so that it can be operated to deliver a tray 17 on the right hand side of the machine, each tray on that side being charged with change for u1 note. When the last tray from either side has been delivered, a finger 47 moves forward closing contacts 50, 51 to give an audible or visible signal and to lift a detent 56 into the path of the corresponding lever 5, 6. The operation of either lever closes contacts 58, 59 to give a signal and moves a deadcentre rocking lever to indicate which of the lever 5, 6 has been operated.

0) US2604743A – COIN WRAPPING AND COUNTING MACHINE

11) Family number: 22152402 (US2604743A) © PatBase

Title:	COIN WRAPPING AND COUNTING MACHINE
Priority:	US19480055189 19481018

Family:

Publication number	Publication date	Application number	Application date
US2604743 A	19520729	US19480055189	19481018

Probable Assignee:	IVERSON SAM K
Assignee(s):(std)**:**	IVERSON SAM K
Inventor(s):(std)**:**	IVERSON SAM K
International class (IPC 8–9)**:**	G07D9/06 (Advanced/Invention); G07D9/06 (Core/Invention)
International class (IPC 1–7)**:**	G07D9/04
CPC:	G07D9/065
European class:	G07D9/06B
US class:	53/213 53/508

Classification Explorer

Cited documents:	US852574 A, US672324 A, US1628576 A, US1628240 A, US1450111 A, US1210104 A, DE85065 A,
Forward Citations:	JP48011979, DE4213920,

Abstract:
Source: US2604743A (Claim 1) Vlfhat is claimed is: In a coin wrapping and counting machine a base having an elongated shallow groove opening through the upper side thereof, elongated aligned tubular casings carried by the base adjacent opposite ends of the groove, said casings aligning longitudinally with the groove and having elongated longitudinal– slots opening therethrough adjacent the ends 'thereof remote from the groove, said tubular casings also having longitudinally spaced parallel peripheral notehes extending therethrough and communicating with the longitudinal slots, elongated tubular sleeves mounted in the 'tubular casings for longitudinal sliding movement therein, an inwardly extending annular stop shoulder carried by each sleeve adjacent the end thereof adjacent the groove, a plug carried by and closing the end of each sleeve remote from its stop shoulder, a detent carried by each sleeve intermediate the ends thereof and extending radially therefrom through an adjacent longitudinal slot, said detents being adapted to–engage the walls of selected peripheral slots to hold the sleeves against longitudinal movement in their respective tubular caslngs, bolts mountedin thesleeves for 'longitudinal movement relative thereto, compression 'coiled springs within the sleeves and engaging the plugs and bolts to yieldingly advance the bolts –toward one another, outwardly extending annular–stop collars carried by the Sbolts adjacent the ends thereof remote from the groove for engagingadjacent stop shoulders and limiting the advance of the bolts under' the influence of the springs, and signalling means carried.

0) US2685406A –

12) Family number: 23771884 (US2685406A) © PatBase

Family:	Publication number	Publication date	Application number	Application date
	US2685406 A	19540803		00000000

International class (IPC 1–7): G07D1/00

CPC: G07B15/00 G07B15/02

US class: 235/32 453/14

Classification Explorer

Cited documents: US914821, US719459, US2474843, US2338576, US2338575, US1738997, US1372857, US1356947, US1344898, US1344841, US1306195,

Forward Citations: US3388238, US3199517, US3104367, US2848158,

Abstract:
Source: US2685406A The functio3., of the fixed and hinged baile as– se,_i–ib'_y is to preven'Ll –1_le removpl of unregisteiecl coins froin the fare box by inverting it. The lower edg–es of eL4,ch of the hinged bpffle rrembers i,, sa_v _',(,,othcd as shown q–t 86 in Figure 2. A pair o._ screws, only one of which is shown at B"g _ii F–).gure 2, i)ass through '_he annular plate 74 and are threaded into the coin receiving membe–c 83, to secu.,e a–_id el–amp meniber 83 to the tc–p of the ring , '7 and to the plate 74. li,i orcier to r–revent the entrance of sILigs, eks, o–, coins che too large in di–ameter to be handled by the fare box, a gauge disc 88 (Figare 2) ig secured to t_he bolutom surface of member 33 as by a pqir of scfews, only one of wh–ich is shown at 60. This d,'_se 88 has a rect_,ngular slot 92 in 35 al,ignr,ient with the slot 09 of member 83 anci. t'–k,le 'length of the slot is pr–determined by the diameter of the largest coin intended to be haiidled by fare box. For exarD–Dle if ti–,e fare box is not intended to ha–,idle quarters, a disc h,,ivii,g a _lot tco short to pass quarters ,i7ill be usecl. –_hu.– i–F a qiiprter, half doll–ar etc. is deposited in the rpeiliber 83 it will not be able to ge_ post the gauge disn, 88 and into the fai–c box to jam it. instead, it –vvill remain in member 6.5 82 from which it ecin be removed by hand. The ga,,ige d;sc 88 may be chan.–ed for any other disc, depe.,–ading u–oon the maximum d,.a–met.–r coin –.nteiid.–_d to be hand,ed by the fare box. The cyl–'knftica't wiiidovv fO is retairi–ed –in pos,'_tion ag,,),In,4t t,'_ie chantie'l 72 by a retaining ring S,3 9,–qd gask,,–t _i, se.,_ured the lower edge of _vinclov–i as by ccrews c_'5. The c–,in_ 1–,b.at pass inside the window 6E–. are retaine_–it the–_ei.,i for insdect–ton by the operatoi:, 5,5 P..,r,d fi)r dur–.kp;iig therefro–,n ir–l_–o the fai_e box for re–7,Ste,_–4–,lg and soi:ting, by a –_lechai _ now to be described. P,eft,rrin,., tc_ Figi).re 2,,q–n actuating i,o,,i er sha–ft 96 is',ioui_l;all,–d f–Dr 7ong–.'Ltidinal slidi–Tig moije.– 6U ment iD. ,i p2_ir Pf be__r–ings c_"i mounted –In ti–ie, slop,–iT–I,– top i–iaj.l o_' the –ab,'_net, and iT–i a fixed i,nembei, r,8 sui–tal3ly secured as by s–,i_e,,vs or the like to the ,pposite s–ide of the sloping cabinet klop 1,7ioli. The shgft 9C has a reduced sect,'OTi (;3 90 upon ivhich is r–qounted a compression coil IPg thsb resi_.i.,,:_–utly urges the sl–iaft Sr the I.e,'_t o_s vi,_wed in Tligure 2. A push knob or lian,,I'le, '_' – _:,3 is riaotinted on left end of the shafi– 96 ivhere i'__ protrudes beyot–id the top out ' _, ca,bij:iet vvall. Thus the shaft 96 can be pushed to '.he right, but Lns soon as the handle 103 is released. it –vv,.11 move back to the left end of its stroke under the influence of spring A shaft 104 (Figures 1 and 2) is mounted above the actuating shaft 96 for pivotal movement in a vertica! plane Pbout a pivot 105 carried by the f–ixed member 98. The norm–al position of shaf_ 104 is horizoiatal as seen in Figure 2, but as will be e.,,,–olained, pushiiig in on the handle 103 will raise the sha4_'t 104 in a vert–ical plane, wliile pivoting about 105, to a i:aised posi–tion indicated i_n dotted lines at I 66 in !,,igures 1 and 2. Two bell cranks 107, oiily one of N_Thich is shown in Figure 2, have their aijexes pivotally connected to the actu_tting shaft 96 by a through pin 108, thcie being one bell crank on each opposite side of fhe shaft 96. The longer le_ 109 of each bell crai,.tk 107 is p,'_vot_illy connected by a thro,,igh pin 112 to the _:haft !04. The arrpngement is such that when t_ie actuating sha,4.t 96 is pushed t__ the r;ght the shaft I_IP ivill p"_Vot clocl_:Nvise eb,,_i–it ;,ts uivot pin IC,–) 1 r) a r,,,ised position –ndicatc–d at I On_. The a_tuot–ing rod 9r) and the sha__t 104 coorer–ate to qctupte a coin dumping mechanism qs will now be explained. Re'erring to Figures 1, 2 and 23 a pair of seinil circular plates II,:; and II 4 are disposed as best sho–_,vn in Figures 1 al.Ld 2 i a plane ad4acent the –n bottoria of the cylindr4cal windoN_7 F9. They have mati iig edges aloiag a di a–neter indc._ted at 1 1 5 in Figure 23, disposed vertically above the shaft The d_ameter of t._ie vssembled plates 113 and 1, 1,_' is such that _uhey make a horizontal cl.osure ?_djacent the bo'Ltoin of the 68, for _u,–3port–l,.ig coiyis or tokens for inspectio–_i. A pa_lr of n_ng'–, e iiiembers I I 6 have their hori zontal legs aff–,ced, as by spotwelding, 'tlo the uiiccerqide of LI.ate 113 aa–jgcent its diar–netrical edge, _Lnd –heir vertical '_egs pivc)tally moi' , –nted upon shaft 104, so '_'f,,at the plate 113 –iF,' P,I–,/ot2.lly mounted for r.,–tation obout shoft 10_'. Si–.iiiia_,.–ly the other plate 114 hos 2.. pair of angle bT–P,–kets I _ 7 with their hol._,'_zort?.,I legs secured to i.ts bottom surf qpe and i Ls verti–.al legs p.–Voto,ily mo,,tnted iipon sha–rt 10,1. The arrongement i.s E–uch that, without further the outer or rou_–ided ed,_.,s of plates I! 3 and I I C– vvoiil d drop, witii sha–'t 10e, as the pivot, P–.ad there 1,Niould be a substanti–al_ gai) along the d;_ameter 115 of tile p–.ates. The plates are –rnointained in horizo–,ital position by a pair of elongated studs or sui)p–ortling arms !13 and 119 rigidly –zec,,ired to the s"lorter and upwardly exteiiding ar,_i–is I r_tj 2) of he pa–ir of be! I cranks 1 0 7, the ar.,cas I I 8 and I ID e,,.'_, endi–i–ig hor–'_zontal',y and outwp–rd–iy i_roii the pip–l'ies of the bell cranks I Cr7. V,_Then the kr_ob I C–3 is pushed in by the operltor, the shaft I t4 is r_lised to the pofition indicated in dot–dosh I nes at 106 in F;_gur_–s I and 2. The

pivot pin I I wi–11 be raised ,,_ith Yespect to the tv_To supportinf,, arms II 8 nnd I i 9 aiid the plat.–_3 113 and II 4 v;ill be i:aised so that their diameter I I 5 wi j.1 be parallel with the liew position of shaft I 0 _i at I 0 _. Th' s _,vi7,1 result in the piates i i r4 –,nd I!–$ pivot–'Ing about shaft iO4 as indicated by their dot–da–h Iiiae positions inclicated at 153a ai:id I _ia 'n –tigure 1 vvhile at the'saine tiriie they wi.11 slop–,'iTi o., direction corregponcling to the slope of shaft 104 v,,hen ra,– Ised to the position sho,_i7n e,,t 196. Thiiseachplate lisard I_4s,.opesintvvodi–i–ectioiis away frotn the hori.zontal, so that the coins which h_–,d be,,_ii re–oaiiae.–i –for inspec_bio,_i through the w'lrdow 69 ,,,re duziioed iiito the –_lare box singl'_,ig, register–.rig and sort–Ing mechanism, as will be described. Each of t!7 e tvio plates i and II 4 is recess,–d along iLs mating edge oii the diameter If as in– dicated at 123 and 124 in Fig. 23. An elongated plate 125 is secured as by spot welding to the top surface of plate i 14 and completely bridges the gap formed by the recesses _23 and 124 when the Plates 113 and 914 are in their normal or horizontal position. As best shown in Fi.–ure 1, this Plate 125 also assures that when the plates 113 and II 4 are in the4_r raised position the coi–ns will sli–de either to the ri,–ht or left, and ,vill not remain sui.3ported by the diametricol edges of –olates 113 and 114, or fall_ between them, into the mechanism that raises or loivers them. Wherl– the knob 103 is released, the spring 100 will return the actijatin_ rod 9–3 to the 1.–ft to i.,',s normal position, whereu;on shgft 104 will resiii–rie its horizontal position and the supporting arms I I 8 and I i 9 will again support the plates I 1 3 and 114 i–n ho2izonl_–al position. It will be i–I.–aderstood that even in the raised Dosition of shaft _OfA these supporting arrrs II 3 and II 9 limit the __ivotal moveme,_it of the plates II 3 and II 0, about shaft 104. As described in 'Llhe copending appl4_eation Serial No. 186,054 f–iled September 21, 1950 by Fount F. Do,tigherty for Fare Box with Grab F_andle the four equally spaced handles R6 provide P,_rips for passengers who are standing or for those viho r.lay be passing the fare box v7hen the 17ehi_Cle starts. A light bulb 129 mounted within a reflector 132 secured to the top portion of the cabinet 1.0 illutninate–q the tiltoble plates I IS apd 14 PT–ld a–(iy coins that are resting thereon. Figure 2 shoN_Ts three windows 133, 135 –_nd _35 in the side of the calinet 50, throlgh which are visible the numeral wheels of three coilnter assemblies indicated generally by the numerals 136, 137 and 138. These counter assemblies are actuated autoiratically by the fare box, as will be explained, to regi–,ter respectively the totals of small tokens, coins and large tokens. A plpte i39 carries legends i–qdicating the specific items registered by the coiinter assemblies. T–be front of the cabinet Ui'l has an elongatec' window 142 through which are visi–ble two counter assemblies 143 and 144 (see also Fig. 3) which are selecti–vely actuated by the manual depression of either of a pair of levers 145 and 146 protruding froin the front of the cabinet. These counters o.nd actuators are o'L any conventional type wherein the single depression of a !ever actuates its respective counter to add a single qunierol to the previous totlql. A plate 147 is secured to the frame of the rd–achine as by screws 140 (Fig. 4) a–iid masks all of the dl:scs and numbers of the counters –xceDt for one row number of each, which rovis are visible through the a__loresaid window 142. Protruding frorn the bottom uortion of the front wall of 'Lb–e cabinet' '–A is a change maker identified generally by the numeral 149. The particular construction of t–be chonge maker is unimportant as long as it has one vertical coi,n receiv–lng barrel for each diameter of coin or token that may be handled, registered and sorted by the fare box. The change maker receives the sorted coins from the fare box, and stores thern for the use of the vehicle operator or conduc(_or. Theparticular change maker illustrated in the drawings is similar to that shown in the U. S. Patent 2,338,576 issued January 4, 1944 to Fount P. Daugherty, and need not be further described here, except that in the present instance there are six coin receiving barrels 152–157 (Fig. 1) instead of four as shown in the Patent As best shown in Fig. 14, and also LTi Fig. I the upper ends of the barrels 152– _57 are received in an elong4ted casting _58. This casting has a pair of downwardly inclined surfaces _ 59 and 160 (F–i–g. 14) extendi–ng across the upper ends of the bgrrels 152–157 and serving to –uide coins to the open top ends of the barrels after they have bee–,–i discharged from the sorter mechanism. The msting 158 is secured to the machine frame as by screws lO 8 (Fig. 14) and has side walls 164 and "GU of the don–figuration shown in Fig. 14 with tra_–isverse recesses 166 along its upper edge. Be– twee–.q the side walls 164 and 165 are a seri–es of dividinwalls IST (Fig. 1) all having the same confguration as the side walls 160, and 165, and havirg the function of guiding the sorted coins to their proper barrel after they have been dropped fr,3in the _sorter, es will be underste.)od. The casting 159 has a forwardly and upwardly flaring fron'u wall 168 providing another series of chutes by vihi_–h coi– .qs r–iay be deposited into their oroper barrels by hand, as after the operator has made chel.–Yige or 'uhe like. A cover plate 169 is hinged at i–ts ends to the casting I 5 8 by screws _' 7 0 (Fig. 14), the recesses 166 in the top edges of the side and di–vi–din,– walls providing clearance for the upper edge of the cover plate _ 6 9 when it is raised. The –ove_– plate is provided Nvith a series of coin slots ITS directly over each of the barrels _ 52–157 so that the operator may deposit coins or tokens into th–,ir proper barrels, each of the slots 173 being of proper length to pass the prope.– coit–i. The cover 1)late also has an elongated NviT–idow 17,.q through which the operator may watch the coins sorted by the fare box pass dovvnixiardly to their proper barrels. 4:0 As will be explained, pushing in the knob 103, besides act_iating the mechanisra to dump the coins frorp the plates I IS and I i 4, tlso serves to initiate operation of the –rqotor that aetuates th6 fare box. A riia;.n sivitch 175 (Figs. 5, 7 ard 10) is seevred as by screws 176 to a vertico.1 leg I 'T inte– gral with and extending downwardly f,.–oill., an inverted pyrar–qidal coin hopper _478. The switch has an actliating pin 179 (F–ig. 7) that is normally urged olitwardly by an internal spring (not shown) to close the swi–tch. The switch is opened by pushing in the pi.n #79 again..,3t the action of the internal spring. A leaf spring 182 is suitably seciired at i_ts lower end to the body of the switch 97_ so that the soring 482 extends substantially vertically upwards, in cont–act with the outer end of the actuatng pin 179 and through a re_–tangular opening 183 in the wall of the coir hopper ITO, to a point above the upper erjge of tl–ie hopper where its free upper end bears ag–ainst a stud 9 84 (Fig. 2) carried by and extending downwardly from the actuating rod 96. The internal spring in the switch 175 is _,trong eqough to push the leaf sprinf,_ away from the swi,tch to (,–lose the switch vihen the rod 96 is raoved to the right in Fig. 2, consequently carrying the stu–_l 184 +.o the right. 1–_owever, the retur_–i spring 109 on rod 96 moves the rod 96 back to the left when the knob 1,33 is released, and the stud I BA, will ptish the leaf spring 182 back to overcome the internal spring in swi'uch 17 '_,, push the pin _ 7 9 in–, and open the switch. Care raust be taken, when placing the cab–inet L_0 i–ipon the fare box fran–ie, +_hat the k–n6b IGO is pushed in while lowering the cabinet, to assure that the stud 184 –,_7ill lie to the right of the leaf spring 182 as viewed in Figure 2. The top wall of the hopper is recessed as shown at 185 in

Figs. 3 and 6 to assure clearance for rod The aforesaid inverted pyramidal hopper is disposed directly beneath the coin reception and inspection receptacle formed by the cylin– _ical Nvindow 69 and the plates 113 and 114. The upper edge of the hopper v;ill lie closely adjacent the inner surface of the frusto–pyramidal tbp of the cabiiiet, aiid an endless g_Lsket (not shown) –s advantageously secured as by cement, to the i inner surface of the cabinet top Nall to seal the space between that wall and the top edge oll the hopper. On one si,de, the hopper has means foriiiing a fare passage or discharge chute formed partly by a bottom wall 186 (Figs. 3, 6 and 8) that is in effect a partial cortinuation of the oppositely disposed hopper wall 187. The chute has side walls 1 800 and i 99 sufficic–j–itly spaced so as to allow large co–ins, such as ciiiarters, to pass down the _hute to the coin singling aiid gaging device which will be described later. The chute side aiid bottom walls terminate ab their bottoms in an inte._ral membei, forming a platform 19 2 which when secured to the machine _L5 frame, holds the hopper in place by means of screws l__13, 194 and 195. These screws, besides passing through the platform 192, pass through spaced guide plates 196 and 197 (Fig. 13), through a coin plate I 90 (Figs. 5 and 13) and through spac4iig viashers 20,2, 203 and 204, and are thread.ed iiito a horizontal member 205 of the internal frame 51, the spacing washers serving to posi–tion the coin Dlate 198, the guide plates, and the 'Llopper 178 at the proper elevation with re– spect to the internal frame. The sloping walls of the hODper direct coins to theaforesaidehute,aswillbeunderstood. Means are provided to agitate the coins in the hor)pel, so that they will fall into the cliute, the same means serving to reject f–rom the chute those articles i_,hich exceed a prede'uermined thickness, such as a button, or a coin which is bent or deforr_ied to such a, degree that it rqight jani the coin singling and so,–ting apparatus. This agitating and 41–, rejecting means, in the illustrated – embodiment, is in the form of a rubber wheel 208 having a r,air of spaced toothed sections 206 and 207. The ,vheel is secured to a rotatin,_, shaft 209 by a set screw (riot shown). As best shown in Figs. and 8 the peripheries of the two toothed sections 20–3 and 2ui are but slightly sdaced from the bottom wall I 86 of the chute, and are driven at high speed in a counter–clockwise direction as ,,_iewed –in i_ ig. 6. The cl_earaiice between the sec– t4ons 206 and 207 and the bottom wall 186 is such that bent coins, buttons, slugs or other articles that are so thick as to jam the sorting mechanism, will iiot be able to pass the wheel 208, but instead w;lll be thrown back up into the hopper. Also, st,acked coins c,,tnnot pass i–n'uhe wheel because the thi,_kness of two of even the thinnest coins w–ill be too great for passage beneath the wheel, and the i:tp,cer one will be thrown back up il'ito the hopper. A i_hield 2 i 2 covers the udper end of the coin chii'Le above the r,,ibber wheel 208, to _Lorm a continuat–lor. of the hopper wall 213 (Fig. 3), The shield has a ti,,,,,er 214 thal p,2oiec's into '_he spa.–e betweer, _'he toothed sect–ions of the rubber wheel. –ht:ts the shield 2i2 with its finger 214 assure that co_ins will iiot drop into the coin chute without first falling into the hopper ar d then passing bcneath the rubber wheel_ 208. As each coin Dasses beneath the rubber wheel 208 it is arrested momentarily by a contact 215 (Fig. 6) that protrudes vertically thiough a hole 216 in the chute bottom wall 186. This contact is automat"_cally depressed with eve_–y coin singling stroke of the mechanism shown in Fig. '_3, thereby releasin., the coin that is arrested by the contact. The motor and drive shaft The fare box is powered by an electric motor 218 (Fig. 19) su,.tably secured to the bottom of the inter–nal frame r. 1. The motor has a reduction gear box which journals the lower end of a vertical output shaft 221 (Fi_,. 20) wh–ich passes through a housing 222 and carries adjacent its u,–)per et–id a triple tool_hed circular ratchet 223 (Fig. 20). A di–iven shaft 224 is mounted coaxially above the motor output sholft 221, being jolirnalled in a pair of horizontal ini.ernal frame r7jemL–ers 225 and 226. The driven shaft 224 is releasably connected to the motor shaft 221 by a clutch _nechanisiq now to be described. Secured to but rotatable upon the lower end of the driven shaft 224, where it adjoins the upper eiad of shaft 221 and the ratchc–t 223, is a plate 227, best shown in Figs. 20 and 21, havina a spiral periphery that includes one radial lip or notch 228 formin.– a stop. A sem,'_–eircularly curved P'late 229 (Fia_. 20) is secured to the bottori of the plate 227 1)y a pivot pin 232 so that the curved plat,., lie., against the under surface of plate 227 ar_d can zotate about pin 232. This rot,–itional –;.iovement is limited by a P;,n 233 fixed to the upper plate 221 ,iiid protruding throL,.,_h a short slot 234 in the Pi–voted plp–te 229. The free end of pivoted plate 229 is thereby lin–.ited to a, movement betw,–en its full line Position shown in Fig. 20 and the Cotted line position sho–_vn at 229a. The pivoted plate 229 has at i–ts free end a radial lip 235, which when the plate 229 is in its dotted line position 229a, is coplanar v%Tith the radial lip 2 2 8 of the plate 2 2 7. A bell–crank shaped pa_,vl hav–'.–ng le.–s 236 and 23–i is pivotally secured to the botton, of plate 227 by a pin 233. A tension spring 239, secured to the pin 233 and to a pin 242 on the pavil, il–rges the paNNil counl_er–clocknvise as viewed __n Figure 20 so that the outer end of its le_ 235 is in the path of the teeth on the ratchet 2_3. The spring 239 is suf–flciently strong to cause '_he leg 237 of 'Uhe pawl to exert a cammirg action on the free el)–d portion of plate 229 to normaily inaintain the plate 229 in its fulil lipe position 2hown in F–ig. 20. It will be apparent that under these conditions there is a positive drive coii–qection Let,_kreep– tl–ie motor shaft 221 and the plate 22T. This drive can be d–isconnected by rotating the plate 229 counter–clockwise as view,,d in Fig. 20 so that by a camming act–"on it overconies the aettion of the spring 239 ,lnd iota:,.es the pawl clockwise, thereby moving its leg 1"6 to the dotted line position 236a wherc– it is out of the path of the teeth on the ratchet 2 2 3. Referring to Fig. 19 a bell –,rank having legs 243 and 244 is pivotally _–ecured to a member 245 of the internal frame by a pivot 2r4C. A tension spring 247 ui,ges the bell crank clockwise as viewed in Fig. 19, egainst a stop member 248 secured to the frame as by a screw 249. As shown in Fig. 20, the end of the crank arm 243 lies in a vertical plane in the path of the radial lip 235 on curved plate 229 and the rat._ial L,p 228 or stop on the plate 227, when the cranl, arm 243 is in the fully raised position shown in Fig. 19. Tl–j–,.is, assuming that the ratchet and pa–,_,,l are in driving enaagement, in thei_– clockwise rota– tion as vie_ved in Fig. 20, first the lip 235 will hit the arm 243 to disengage the ratchet and pawl w.echp,nism and theil the lip or stop 228 on the plate 227 will hit the arm 223, thus stopping the plal'e and entirely discontinuing the transfer of power to the driven elements of the fare box, allowing 'Lhe motor to coast to a stop if it has been deenergized at the same time. 1 The motor shaft 221 has affixed thereto for rotation therewith a dis–. 252 (Fi_u. 19) having a series of three cams depending downwardly from its periphery. The bell crank arm 243 has a, pin 254 protruding therefrom, which when the arm 243 is in the raised position of Fig. 19, hes in the path of the eams 253. In Mg. 19 one of the cams is shown about to engage the pin 254. Upon energization of the motor 218 rotation of the ca.,n 253 will depress bell crank arm 243 ag–qinst the action of spring 247 and the arm 243 ,A7ill release the lips 235 and 228. Spring 239 will thereupon engage the pawl leg 236 with the ra–tchet 223 so that

the plate 227 will be positively dr,'Lven through one revolution, whereupon the bell crank arm 243 will again disengage the positive ratchet and panvl clutch mechanism. Figs. 21 and 22 show an overload release clutch ri).echanism which prevents damage to the machine in the event of a jam therein. In Fig. 21 is shown a pair of curved lever arms 255 and 256 pivotally secured to the top of the pla–te 227 by a pair of screws 257 and 258. A teiision spring 259 urges their free ends together. Counterclockwise rotation of lever 255 is limited by a stop screw 262 passing through a stud 263 fixed to the plate 227. The other lever 256 carries a roller 264 free to rotate on a, pin 265, The roller 264 bears against the periphery of a cam disc 266 above the mechanism shown in Flg. 21 and fixedly secured to the driven shaft 224, and norinally is seated in a depression 267 in the periphery, being resi–liently held therein by the spring 2o'B, with a force sufficient to transmit normal forces to the disc 266. In the event of a jam in the machine the roller will merely ride up out of the depression 267 thereby c–,asing to transr.–lit rotation. The roller can circle the plate 266, riding into and out of the depression 267 thereby ceasing to transmitrotation. The roller can circle the plate 266, riding into and out of the depression 267 until the motor 218 is deenergized. Above the cam disc 266 is –Qxedly secured to the shaft 224 a bevel gear 268 which drives the coin and token counter mechanism through a bevel pinion 270 (Fig. 29). This counter mechanism wiU be described later. Secured to the shaft 224 for rotation therewith, above the frame member 225, is an elongated cam 269 having a profile as shov,7n iti Figure 22a, and a funettion to be described later. Suitably afrxed to the top of the driven shaft 224 for rotation therewith is a gear 272 that has a stud 273 protruding from its upper surface which serves as a crank–pin for driving a connecting rod 274 that in turn is connected by a pin 275 (Figure 13) to a coin ram 276 that is guided for rectilinear motion by the guide pla'ues 196 and 197 (Figure 13). The coin ram is confine,l against vertical movement by the bottom surface of the platform 19 2 and the top surface of the coi–n plate 198 (14'igure 5), and the underside of the platform 192 has a central recess 277 (dotted in Figure 5) to provide clearance for the pin 275. The coin plate 198 is also recessed as shown at 278 (Figure 12) to provide clearance for the pin 275 and the rlght or forward eild of the connecting rod 274 when at the forward end of its stroke. Figure 12 shows the coin rarn 276 at the full end of i.ts working stroke, and in its normal zero or withdrawn position, which it occupies when the clutch mechanism is as shown in Fig–are 19, the stud or crank pin 273 is 180 degrees away from the position shown in Figure 12. Secured to the driven shaft 224 below the gear 2i2, but above the frame member 226 is a plate cam,270 having a profile best shown in Figures 12 and 16. A cam follower 282 is carried by a lever 2OU3 pivoted to the internal frame 51 by a pin 284 and urged clockwise by a tension spring 285. Thecam2l9hasafirstdepression286which by means of the cam follower 282 and spring 285 resiliently holds the shaft 224 in such position that the stud or crank pin 273 is in its zero or withdrawn position shown in Figure 16. The fol– lower 282 thus assists in holding the driven shaft 2'24 in the position that it occupies before a rotation cycle or series of Gycles. The cam 2'p 9 has a second depression 287 separated from depression 286 by a rise 288' (Figure 16). The action of the plate cam 2–gS is such that after rotation of shaft 224 is initiated by the motor, further rotation beyond the rise 288 is assisted by the slope of the cam profile toward the second depression 287. This occurs during a portion of the cycle where– in the load on the motor is relatively high, and theadditional torque provided by the action of the spring pressed cam follower 282 at this point smootbs out the motor load. A vertical bracket having two walls 289 and 290 (Figures 3 and 5) is secured to the top of the horizontal frame member 205 as by three screws 293 (Figure 3) passing through horizontal legs 294 and 295 at the bottom of the vertical bracket. A vertical shaft '296 (Figures 3 and 5) is jour–nalled for rotation in bearings in the frame raember 205 and in a horizontal lip 297 protruding inwardly from the bracket wall 290. Adi4acent its bottom the shaft 296 has a pinion gear 298 (Figure 3) that iiieshes with the gear 212, thereby driving shaft 296 at a much greater speed than the driven shaft 224. Adjacent the top of shaft 296 is a bevel gear 299 (Figure 5) that meshes with a mating bevel gear 300 fixed to a short shaft journalled in vertical wall 290. The same shaft has affixed to it a gear 303 that drives a gear 304 on shaft 209 through an idler gear 305 (Figure 3) inounted on stub shaft 306. Bevel gears 299, 300, gear 303, idler 305 and .–ear 304 thus provide the rotative power for shaft 209 that dr;.Ves the –rubber wheel 208 in the hopper discharge chute. Also secured to the shaft 296 but below the bevel gear 299 is a worm 307 (Figure 5) which rneshes with a worm wheel 303 (Figure 3) upon a shaft 309 fixedly secured to the bracket wall 289. Suitably keyed to worm wheel 208 is a hard rt_ober or Bakelite cam 30,0 havir_g a circular profile except for a singledepression 'Q II (Figure 3a. An electr–le swi–tch 3f,4 –is suitably se– cured to the bracket vertical wall 289. This switch has a plunger 315 that when pressed inwardly against the force of an internal spring, closes the circuit in which the sivitch is located. A lever 316 is pivotally secured to the switch 7o body at a pivot 317, and at its other end carries a cam follower roller 3 1 8 that rides on the periphery of the card– 3 1 0, being resiliently pressed thereagainst by the switch plunger .0.1 5. In the position shown in Figure 3a the plunger 315 is pushed in and the switch 3 14 is closed. The cam 310 rotates counter–clockwise once for every 13 revolli.tions of the large gear 272 that actuates the coinram 276 andthe function of the cam 310 a–rid sv7itch 311_' is to assure that the power circuit to the ir_otor, once closed, will operate the 5 coin ra:,–, 27G at least 13 t–imes, before the depressi ' on ol–'–ovvs the cam follower 3 1 8 and lever 61 _P, to r_elease pluiiger 315 a–nd oper– the switch Si 4. If afte,. these 13 operations of the coin ram the motor eirei:ii_ is still energized by another 'I 0 will be rotated again p,iraliel,– then cam _L–ad_ again open the switch 14 after 13 op–,ra_– tions,.of the c–ni–,i rai–ii. It iray be explained at this time that the raotor is initially energized by push_ng in the knob 103 15 to dump the coiiis i–qto the hopper, because this actio ' n closes the rnain switch 1.15 (Figure 7) as prev–Lously explained. Switch 314 is in parallel with the main switch 175 and thus maintains _l holding circuit to energize the motor while the 20 coin ram 276 makes 13 ope,:ations. If all of the coins dumped into the hopper have been disc_liarged from the hopper chute then the motor –,vill become deenergized at this time. Hoivever, i–s – etaincd in tne coin chute by the o; c_intoet 2 _ 5 of Figure 6 then the motor circuit will be again closed through contact of the coid – _,7it,h the chute bottom i86 and –_vith the contact 2 The holding eircui–t established by the sv_Titch 8 I _, aiid cam 3 1 0 will thus again cause "3 0 the –.,iiotor to dr,',Ve the coin ram through 13 opt4 era icins. C–peratiol–i of the protruding contaet 215 is as follov_,s, Feferrir_., to Figure 9, the contact 215 is inouiited ii–oon o,,ie leg of a bell crank 319 piv– ailtached to –qn elem–ent of the coin chute by nscrew 322. A tension spring 3__3 ur,,es the bell –,rqTh,, 319 counter–clockwise 'uo its norriial posi–tion where–in +he contact 215 prc)trudes above the –floor igg of the chute to prevent passa.–e of a coin there–oast. A bottom ver'uical lip or edge 324 o_–i the bell crank 319 engages one e–rld 325

of a horizontal lever pivotally ir_ouiated upon a pin 326 (Figure 7) for rotary reciprocati –ng movement witilin a slot 327 in the underside of the ' platform i22, so that the lever operates in a plane just above the top of the coin raiia 278 and w–ith the other end 328 of the lever i–n +he path of th,– pin 275 (Figures 12 aiid 13). The a–loresp–Id lever is urged clockwise, as vic–wed in ;_ligure 7, by the ac'uion of the spring 323 9,nd the bell cranl_ carryiyig the contact 2 1 5, so that its norr.–ial pos–i'_ion is as shown in Figure 7, with tli.e '–imit o_' the clockwise mover–yient of arm 320 ostablished _Dy the left v_all of the slot 327,. The lever is –o lo;–,ated along the path of the aforesaid pin 27.3 that the pin strikes the arm 328 j L,.st before the pi–i'i reaches the end of its st–,,oke (towa–rds the r3ght as viewed in Figure 12), and the pin 273 wi.11 thjs riove the lever arm 32k,, cou–iiter–clocl,–,_vi'se (!,'igure 7) to rotate the bell crei,nk 3 i 9 (Figure 9) clockwise a,–;ainst the tensioii ol_ s–critig 323, aiid thus pull –the contoet bellow the '–.loor of the coin cl–l–Lite to perr_,iit the next coiii tr, slide to the bottoiii o–f the chute. The contg.,–;t 2 i 5 i__ insula–ted from the bell crank S(O that car.__ies i–u, and a wire 329 leads fi:om the cotitact bo orie side of the motor circuit, the otl,er –side of the rrotor circuit beiiig grounded. 7o Co–_'n sing_'i7,.g and gaging mechanism .z ,ks each coin 'i–s ieleas–.d by the depression of contact 2_5, it sli–des the remaining way do–wn coin ran– 276, whi–ch i–s a_u this time at the full end of its working s'Lroke, as viewed i–n Figure 12. The bottom of the coin chute wall 18 9 (iligure 3) jlist clears the top of the mm 276, and during the ret,,irn stroke of the ra–m the coin will be ,T.7iped otT– the top of the ram by this wa–11 I S9, o_nd drop onto the elongated coin Dla–te 198 where it now lies in the path o–f the next working stroke of luhe ram 278. As showp– in Fi–.–ures and 13 the left or discharge end o_L 'uhe ccin plate 198 curves downwardly at 332 to perr;.iit the coins to drop vertically throti_h a slot 333 i–i the horizc–.ntal fra–,_–1–_ rfier_iber 205. During the worki,g of –Lhe rair 276 the coin restirg upon the coin plate ,Tiill th–us be pushed to the left iintil it drops into 'Uhe slot 333 and enteis the sortitig i–ne–hanis__n in a vertical plane. During this –noveli'lent the coin is pushed be_vveeri a Exed roller 33.1 mourited upot–i a stud 335 and a, iyiovable s'u–Ud 339, to be described, the roller for–.Tii_ng a fi_.ed ga.–i_ig elei–ient. On the other side of the path of the coii–is is a niovable gag;_ng elemenlu in the forl–D of –ri, bell crank 336 (Figure 12) pivotally mounted upon a _lixed stud 337 sc–cured to the fra,–r_ie rpeir.–ber 205. One arin 'QSC has the previo,,:tsly mentioned stud 339 dependiii.– therefoor, (,'_–igures 15 and 18) so that the stud is in the path of the coilis being pushed by 'lie coin ra–r–,i tc),j..,ard the slot 3_'3, a–_id it will be –a–opare,nt that the clockwise –noverilent of the aging element 336 v,,ill in each instonce be de?oendent ,lpon the dipimeter of the pai__icular coin being gaged be"–ween the fixed ro'iler 334 and the I' stud 339 on the b,,ll crank 336. It tal_es ec)psiderable force to push –) coin between the statioiia.– cy al'id ri–iovable gaging elements, ar–d althou–h –the pusl).ing end of the coi–a ram is fi,,it there is the possibility that a c__in would coel_,, out o4 il–s ho–,,izot–ltn–l position. Also, it must be assured that only a singlf– coin at a t–'lne is pushed through the ga–ing e7iersients by the rani 276. For that –,eason, a vertictlly movable gate 342 (F,;gi_,res 3, 5, 7 aild 11) is Tirovided. The gate 342 lie–,s transvelse of the pa_th of the coilis that are be"ng pushed through the co4n gaging –Iemei–its by the coin ro_ni tnd coiriprises a blo–k of Ine'bai havin., verti_,al slats SC,3 a_ld 344 (Figure 11) e,– tch of I . ivnich has protr,,_,ding tiiereinto a Pa–ir of studs 345 and 340 respectively. As best shown in Figure 11, these stuc–)s are adjustable through the wall.– 188 ar–ld '._q9 of 'he ch–Litc–, and are secured by loc?,uiuts afl_er the s_u.ds are adjlisted to provide a free vei:_,ical movemeiit for the gate 3,2. As I)est showii '_n Figure 7, the face '_D4–3 o–f t_he gate toward the i–am i–s in the foi'm of a of ',I cylinder, which at its lower ed,_e is iiiidercut i–il a si–).ooth cu–,–ve to–_Tiard the OT)TDosite vertical face of the –Pte 392 to ;)rovide a cairni;r–,–; surfac_3 t',–iat calises '_lie _ate to be liitc–d _vhen a coin Is forced against its curved –'cqce 343. adjacen_ the botton_ +_hereof. The gate 3L–_,2 iests upo–,,! the coi–n –olate I P3 and –is spring pres,,ed therea–ainst by a pa–r of co–'! springs 35i and I So'R (F–igure 11) seated in blind bo_–es in the –ate 342, and vjith thei,– upper end_, beal–,lng agailist a hor4 zontal leg " i 1 _53 o–f n_n L shaned hoild down bracket that –is secured by its vertical leg 3,q4 and a pair of screws 355 (Figure 5) to the fi–oiat I_ace.– 138 alid 180 of the coin chute. As shown in Figure 11 tl–iere is a clear–ance space bet,_,.–7een –the top of the ga–te L'42 and the leg of th,hold down braeket, to permit the gate to rise whel'i a coin paqses bereath it. Besides preventthe coin chute and falls upon the top of the 75 ing the cocking of a coin the gate 342 also pro– vides a singling device that prevents the rarnming of rnore than the lowermost coin if there be two or more coins resting upon the coin plate 198. In order to ass–ore that a coin passes the coin gate, the leadiiig edge of the ra–.m 276 in its ramming action, also passes b–,ne,,tth the coin gate, thus preventing the holding of a, coin bell–eath the gate as a result of the acti–on of the springs 351 and 352. Coin sorting mecha?iism Among the mecbanisrrs controlled by the clockwise movement oil the coin ,ag,:D.– elemel–it 336 is the coin sorting mechanisin which receives the coins or tokens passing vertically –through the slot 333, sorts them according to diameter, and delivers the–,D to the proper barrel 152–157 in the change rnaker 149. The mecha–yiism for controlling the sorter will first be described. Referring particularly to Figs. 16 and 17, a gear 356 is affixed to a horizontal sha–.Lt 357 journalled for rotation in spaced elements of the frame 51 below and supportin– the horizo–,ital frame rnember 205. This gear a56 does not rotate through a large angle, and adj–'acert its top it carries a st,,id 358 upon Vi,'_ch is rnounted o–iie end of a connecti.ng rod 359 that is adjustable Li length. The connecting rod 359 includes an elongated nut 362 _vhich threadedly receives one el–id of an eye bolt elei–Dent 363 the other end of v,7hiih is pivotal'y inounted upon stud 358. Another element 364 has one end threadedly received ir– the other end of the elongated nut 362, the other end havin.– an elongated slot 365 which passes a stud 366 whj'.ch is carried by the vertical leg of an angle brae7zet 367 that is rigidly secured t(_gt; the top of frar–ne –niei–qber 205 as by rivets 368. Thus the egnnecting rod.z59 has a pivotal mouii_uing upon gear 356 at one end a–Tid a sliding mountin,g upon stud 366 adjace–lit the other erd, –v,,h–ich said other end li–es 4_n the path of tt_e mover_ient of the other leg 369 of the bell crank oi– gaging element 336. Loelz nuts 372 upon the threaded secti–Ons of connect;_ng rod elements 363 a_lid 364 assure the niaintaining of the Droper adjusted length of the connect4ng rod, it being utiderstood that the internal tbxeacls –iii– the ep–ds of elonga'6ad nut 862 are of opposite haiid whereby the length o.f the conp–ecting rod can be adjusted by turning the nut 302 a–fter the locl,.iiuts 272 have :Prst been loosened. '_t w4ll be adparent that whenevej: the gaging element 33C ;_S rotated clockwise (F–ig. 16) di–iriiig the gaging of a coin, the gear 356 Nvill be ro'–Uated counter–clockwise (Fig. 17) through a comniensurate angle. Return mo_rement of these ele,,iients to their initial positions 1,5 spring in,–iuenced, as vii–11– be described. S.'Liowii in enlorged detail in Fdgs. 25 and 26 is an asseiibly that is moudted in the intei–

_ial fraine 5! ef _Lhe macljine for reciprocating vertical move−rnent under the infiuence of the gear 3BG and a return sprir_g 373 (Figs. 14 and 17). This asserqbly includes an elongated square rod 37−4 having rack tee−_h 375 oii the upper portion of its length, which teeth are in engagement with the teeth of gear 306. It is pointed out now that in order to show iiiore clearly the elements carried by rod 374, 'uhe posi.Itlions of the rod 374 and the elements carried thereby are viewed from an opposite diree−tiOn in F−igs. 25, 26 and 27 than in Figs. 14 and 17. Securely fastened to one side of the rod 374 and at the to,,o thereof as by rivets 377, is a cam plate 376 that is shoivn in still larger detail in Fig. 27. Along one edge the cam plate 376 has 9, series of notches of varying de−Dths and haviilo horizontal lands 370−383 iiliclusive, oiae fcr each size of coin or token to be handled by the fare box, as will be appare−,it later. At its lower end the rod 374 is round in section, and o,−uided by ,. holle ira horizontal flange 3 8,') at the bolutom end of a vertical flat plate 330 that is secured to a vertical meraber of the internal fi−ame 51 as by screws 386 and 387 (Figs. 14 and 17). 'n,,e up− per elid, of assembly 37P_ s_−nd 376 is guided by a se'b of tb−ree rollers 388, 339 and 390 (Figs. 14 and 17) that are carried by parallel sp,_xed frame nierilbers 393 and 39,'_' (F−ig. 16) secured to internal frame 51 and whi.−h also act as side guides for the top of the rod−plate assenibly 374, 376. The coiled coinpression spring 3'3 oia the round section of rod 374 bears agair−st t'he flange 384 and against the bottom of the square section of rod 374 to urge the rod upwardly. Thiis whe_,l t'−Qe coin gaging eieri−ient 'e.6 acts to ,,otate gear 356 counter−clockwise (F;z−. 17) and lo lower the rod 374 through the rac_ 375 thi−s m"ove,.iient is resisted by spring 373. Each coin or token of difereiit diar_ieter op−era+_es the gaging elenlent 336 lo lower the rod 374 by varying amourts that are_ dependent upon the coin or token diariieter. Sho_,vn best in Fig. 24 is a lever 395 pivoted for movement in the ho.−izontal plane about a pi−vot 398 carri.ed by the horizontal frame member 203. The lever SeB has a projecting arm 397 (see also !,−,ig. 27) that '6erminates in a chisc−I end 398 that is squared at its end to avoid a sharp and r−,lat−'.Ve−ly poi,nt. The undersi.de of the end 398 is horizontal. The lever 395 is urged clor−kwise (Fig. 24) into, engagemen' w'th the serra−Lled ed.−e o4− the cai−q plate 376 (see 'Flig. 27) by a tenS4 on spring Q'99 (Fi_,24), so that as the carn plate' 37C is dep−ressed by bbe action of the ga.,_g elemen− 320 the chisel 4o end 398 of the projection will e_ter the notches of the cam plate. As the dep,,− ession of the cam plate 37 6 depends upon the coin d_ameter the vert_,"c_al spacing of t−lie lands of the notches in the c−.t nlate is comme,_asurate with the coin cliai−qe−ter. −As shown in Fig. 27 +,'−'le notches have canisurfaces above each land 3',18−383, so that the s'pring urged projee−tion 39'1 v−7ill ride over the successive notches until the calm plate has r−lached the maximum depression according to t..b−e coin that has been gaged, vjhereupon tl−ie eiad 398 of the projection 397_ being spring pressed to, the 1−e.−'t (Fi,,P−. 27) will engage the part;cular land corresponding to the gaged coin, and hold tl−.e cam plate 376 and the rod 374 in that depressed coiidition until released for rel'urn to initial position under the id−qilence of si3ring The viithdxawal of the pro−jection _'oB'g' 'Lroin the n6tch, and the refurn of 'Lhe rod 374 to iii−'Ltial position is not accompl−ished unt−.',I the _ue6o ceeding ramming Gycle of the coin rarq 2'16, because after the rod 374 has been depressed according to the co−in diameter it is the flnction of the lever 395 and its spring 399 to hold the rod 374 depressed until the gaged coin has beep− sorted a−nd delivered to its proper coin barrel in the cl_iange i−nal,,er 149, an−' un' il the value of the coi−n or token has been entered in the register visible through t−he windo_vs IS3−135 of Fig. 2. T−_iis withdrawal of the − oroiect−lon 397 from the iiotches, and the conseauent return of rod 374 to initial position is accorriplished at the start of the next coin singling and gaging cycle by the action of a stud 409 (E−lig. 5) __hat is se,−i−ired to the gear 272 and protrudes downwardly there− 7,5 from so that it engages a cam surface 403 on the end of the lever 395. As seen in Fig. 12, when the ram 276 is in its initial position, beiore th'e beginning of a worl_cing s_roke, the stud 400 is but slightly −pace,,' from the cam surface , 403, so that as soon as tbe ge_−r 2T2 rotates o7−aly a few degrees the stud 400 Nvill'enga._e the cani surface 403 to r__,iease the proje,,_t−lon 397 from the nol.−cl−,e,_ and allow the foci 3 1. 11 t.− −,eturn to its uppermost positior,., after ivhich it −viill be depressed a._ai−ii as tb−e iiext coi.ii pu!shed by the rai−n 276 pass−s between the gagi−n.− elements 334 and 339. As each coin is gaged and is pushed to the elid of the coin plate 198 to enter fhe 333 _n vertical positi.on, it enters a space bet,,veen a pair of para'ilel spaced vertica−l walls kID4 and 405 5, 12, 14 etc.). As best sholvn ir_ Figs. 4, aiid 18, these walls 404 arl−d 405 have trans'verse parallel _loill ,ng slots 406 therethrough. A sorter leaf platePO7 (seeolsoFig.2−3) passestlarougnthese slots to forrd− a slopin_−3− floor 408 between tl−ie afo.resai.,,l vertical walls 404 and 405. This slop_ng fioor is reciprocable, by means to be described tlaroul,h P,. range of positions betwe . en Nvhich a st−ial_l tok_lii will− drop into barrel 157 to a posit_on where a qi:tarte−,, −_vill drop into the barrel 152. These posilions occur as the floor 408 Is:' s]7_ifted from its ,nitial posit−loli to tl−ie ri._ht (ir, −P',ig. 12) until it reacl−i.−s its maximum deflection whereupon a au,,,,rter will roll alo−ng tlie floor u−,iuil it drops ofL the end 409 thereof (F−ig. 28) iiito ihe quarter borrel 152. As perhaps best ohowri ,.n 15 9,p−d 28, the floor is stepped so '.hat a'ong its '−,ength it has various widths,,and at the lowermost end of each of the stepped ividths it is provi O'eJ, −_vith vertica,'−_ stops 4 i 1−4 i iiist, abova eac' i o−l_ tne div'ding walls 167 in the casting I 5 8, tile walls 404 and 41,".; being provided with spaced −ot,,−_ 41 6 (Fig. 15) so lbat the _.to '41 1 veltic,,Ll s'_ Ds 4! 8 cat−i move transverseiy 'chrough the wal_is 4.9 4 and 405. 'rhe actioii of the sorter leaf plate 407 is such ._bg,t, for example N_7hela a nickel has been gaged, the plate w−'−!! −rp−ove to t_ie (Fig−. 1,2) or doiinward (Fig. 28) until the stop 4.iB b'Locks the sloping passageway bet,_veen 'Lhe vertical.walls,40 4 and eG5 while the stepped ,'loor 40 0 is. discortinued just above the space leading to tl−ie nic'_el barrel 153. The move_−iients of the sorter leaf plate,4.07, which delivers each coi−n to the coin barr,els 152 15T in acco−,:dance with their dia,,−aeter.−, is controiled by the ga.− in_,− element 336, the adj−'ustable connect,ing rod 359, tb−e iilovemeiits of gear−.356, o,nd the earn plate 376 of the assembly, shown, in Figs. 25 and 26. As best shown in Figs. 25 and 27, one edge of the carn plate 376 has a working pro.tie which in tl,_e illustrated embodiment has three differently sl_oping sections 417, 1418 and 419. 'rhese slopilig −ections, wlil:ch constitute the wo−el−,ing profile, are continuously enga.− e,d by a protrusion 422 (Fig. 17) on a lever 423 that is pivoied for free rota−tion about the saine shaft,3,57 as _ tiae gear 3 5 6. A reciprocable rod 42 4 (Figs. 14 and 17) is journalled for horizontal sliding movement within an elenent 425 of the iliternal frame 51. At its rightmost end,in Figs.11,1.and −424 is threaded into 9, tbielieiied abut− 17 the rod ment 426 (Fig. 28) thet, is integral with the sorter leaf plate 407. A locknut, 427 (Figs. 17 and 28) secures the adii_sted position of the rod 424 with respect to the,abutment 426 and the sorter pla−te 407. At its other end _iie rod 424 has an.'e'nlarged head 428, (−Figs. IA4 and 17) that is received .Within,,a bifurcated

saddle 429. thats is pi–votally secured, as by a pin 432 to the lower end,of_–tlie lever 423. A coi–ic–d compression sr–r–iv–ig 433 (Figs. 14 and 17) on the .,od 0,24 iirges the rod '_–o the left, With its enlarged head A2'01 ir, engagei–ient –,viih tl–.e lo,_ier end of the le,,Ter f–,23. T'–rie sadj.'.e d 29 serves to gu–'– de the eild o–_' –"Od an_, to keep it from_ slipping sidev;oys frc)iy,– _,vic n _–he 16–_ver end of the le–ver a'AB. Thus by means of the spriiig 433 the rod k_2,4' t–,4–ia_ 4–_ r,"gj.dly conr,–ect,ed to the slortt–r plalu,– 40__ is res_l,"e–iitly urged 1(to t–lie lc–ft (Figg. 14 and 17) into at iLI s _nlarged head 428, with tlie lower end o–, t_ie 'levei: coi,.s–.o,,,iently i–irging the proLYusion 422 into erga–gement v_ith the work,',ng rjrofile sectiol–is 417–,llg of the cain pl_ate B_r tiiis coiistr_Lic_,u–io.,i the gag,ng elen–i–,nt :'_3S con(–,rols the roqit–lon of the catn sorter plate 407 in icco3.–donc–.– ivith _he –cin diameter, during –1– sortl__–.hbuldbeLir_derstoodthatwhen the qol–'ter plate is posit–tored in accordance w–it–_i the diameter of a coin measured b,y the gdgi hg elei–i,_–,it 336 – it rem ain in that gaged p6si tion by resson of the e,,igagei–aent of projecti6n 197 on lever 395 until the next cy3le of operation of the rilachine, Nvhereupon the proj'e_–.– tior_ 39T ,vi–ii be disengaged from the notches 378383 by the action of the stud 40_l, o_,i gear 272 and Sp–riiigs 373 and Po33 _,iill retu–.–_n earn plate 376 and sorter 1–ilate 407 to their initial or zero positions bef6re they are again po._itior–ed to sort the next _'C_ coin accordiiig to its diameter. Coin and token registering –niechanisi7i Se–ure,–l to the squere rod 374 as by rivets 434 (Fig. 26) is 9, brae'f_et mem– ber 435 'That includes –,.L verti–,ai e,emen . t 439 i_rc)riiv_hich protrude a pair ol L soaced parallel horizontal legs 437 ai–id 433 (Fil–gs. ',.7 and 25) trirbugh which Passes a vertical Pin _,39 that provides a pivot for a lever 4__2. Another lever hav;,ng legs 443 and 40,4 (F4_g. 22a) is pivoted about a –vertical shaft 445 and is also vert4caly slidable upon the shaft 445. The lever 442 ond bhe left 444 of the other lever are conr,–ected by a tension spring 4,.16 that resilielitly urges both said elerlents against the ca_–n 2G9, at poily6s spaced s–LiasI.antially 180 idegrees apart, as best shown in F4_g. 22a. The breeket iderr_ber 435, secured to 'u–he square rod 374, iiioves vertically –wlith the aforesaid rod in ac,–ordance with the diamelver o,–' the coin being gaged. The _lt;)ther –0 lever, s.Lidable on shaft 445 i–no–ves vertically with the sq_iare rod a!7cj by :eason of the fact that its leg 443 is engaged in a horizontal slot 447 'in the ve_–tical elernent 436 o–f the bracket meiliber The norr–yial position of th6 lever 442 and of the lever on shaft 445 is as sho–vvn in Fig. 22a, this position occui:ring before a cycle ol_ operation of thegear272andthecoinram2',G. ThecamA68, carried by the driven shaft 224 rotates counterclockwise as viewed in Figure 22a, and as a edn– (io secuence it first r,ot.a,tes lever 4P2 clockviis–, and then 'lever leg _.44 counterclockl,,7,se, against (,he force of spring 4 46, di–,ring one revolution of tb–e driven shaft 22i. This viill occur no matter vihat the vertical position of the square rod 374 be– cauze the cara 269 is elongated along the axis of the driven,shaft 224– as best sho– ,vii in Fig. 19. The outer end of lever 442, on the opposite edge from that engaging the earn 269, is narrowed to provide a lip I 40 that selectively engages and depresses one of six levers 451–4r,,'u (Fig. 3i,l o'L the register ,iiechan.is.–n to effect the totalizaltion of either coins, tokens or the like that are being gaged and sorted. Levers 451, 452 and 454 are pivoted upon an elongated pin 457. The lever 45,3_ effects the registration of: pennies into the r,entral or coin counter 458 (Fig. _9) visible through iT,7indow 13Z through the medium of an integral leg 459 (Fig. 32) at right angles to lever 45'0, and having a pivotal connection 602 (F–ig. 32) to a spring (P,83) pressed pawl Pi64 the free end of which engages the teeth of a circular ratchet 0,C5 that drives the uilits wheel 466 of the coin counter 458. Return to the right (Fig. 32) of the pavvl 464 is by a spring 4,' 7 connected by pin 468 to the lever leg 459. A convenbional carry–over n,iechanism rotates the tens wheel 469 one tenth of a revolution for every complete revolution of the units wheel 46'6. A spring (c_72 Fig. 3,_^,) pressed detent lever Pi73 having roller 474 engages serrations in a stop wheel 475 to hold the units wheel 466 irhile the pawl 464 rides backward over the teeth of the ratchet wheel 465, and also holds the said units wheel against rotatio–n except by the influence of pawl 464. The upper lever 451 when depressed, actuates the upper, or sniall token register S76 in the sa,,rne manner to register and add s_,nall tokens, the lever 451 being connected to a right ,tngled leg 477 by an integral_ tube 478 mounted upon the elongated pin _,57. In a similar manner, tube 4'1–3, on pin C57 is integral with leg 481 and when lever 454 is depressed by the lip f_40 on lever 442, the leg 48_ actuates the lower or large token reg4ister VIBO to total the large tokens that are gaged and sorted. The registration of din–ies, nickels and quarters into the coin counter 458 is accorr_p'_ished as follows by the selective depression of levers P,52, 455 _r 456, all pivoted upon a si,.igle pin 47E–,2, in combiiiatio–q w4_th the rotation of b–vel gear 2'_O, driven by the large bevel gear 268 on the driven sha'Lt 22–4. Since the 1–arge gear 268 will rotate througl–i one revolution for each rotation of the driven shaft 22,1, '_he snall gear 27_3 Will– rotate t greater number of revolutions. __he srnall gear 270 is on a shaft 48fj liournalled in the side walls 480 and 4OP4 of the register frame. Five spacer bars 485 (Fig. 39,) separate these side walls. ' A drive gear 46'1 i–S ir_ounted u–oon the sha–ft 636 adjacent the inside of side wall 483 (Fig. 29). It is in conti,–Liuous driving engagement wit'_l a freely rotating gear 488 (Fig. 34) upon a shaft 489, the gear 468 having an integral collar 490 that has an integral pair of diametrically spaced and axially extending clutch teeth C_91 either of –vvhich may engage and drive a single axial tooth 992 upon a sleeve journalled for rotating and sliding movement upon the shaft 489. Normally, the 'Lleeth 491 and 692 are disengaged by reason of a spring 41_ll (Fig. 34) surrounding the sliaft 489 between the collar 490 and the sleeve 493, but when sleeve 493 is moved to the le–ft by t–liedepression of levers 432, 455 or 450 the clutch teeth 491 and 492 are engaged so that sleeve 493 will be rotated until the proper sun–i, five cents, ten cents or twenILy cents isregistered into the coin counter 458, Nvhere,,ipon the te6th 491 and 492 will disengage. Each o–_' the levers 452, 455 and '_56 has a protuberan,–e 495, 498 or 497 (Fig. 31) on its eiid, which e.,Ligages respectively a sleeve 498, 493 or 500 to move the sleeve 493 to the left (Fig. 34) to engage the clutch teeth 491 and 492 to drive the sleeve 493 until the proper surn has been added into the coin counter 453. The details of construction Of the mechanis_–n by ivhich this is accomplished are wehl knoi7_n as exemplified for exar–riple in Fig. 6 of the aforesaid Daugherty Patelit 2,338,575 and for that reason the details need not be explained here, it being sufficient to explain coin is gaged and sorted its value is added to the total previ. ouslyregistered by the coin counter 01.8, just as in the aforesaid Pacent 2,338,575. It should be apparent that the complete deuression of the selected le–ver 451–456 by the cam 269 and the lever l_42 (Fig. 22a) occurs approxin_ ately during the i–irst _80 degree rotation of the driveii shaft 224. As the shaft 224 continues the rerriainder of its 360 degree rotati.on to return the com 209 to the position shown in –Pig. 22a, the carii 269 moves the lever 444 counfer–clockwise to the liinit of its rpover–qent and the–Ti re'_ease_– '_t to srpp back to its initio–I positio–n u?–ider the influence of spring 446. Th–is happens

irre– 1.5 spective of the height of the lever 444 at the time, as determined by the diameter of the coin or token that has just been gaged, sorted and registered. As shown in Fig. 14 there are four nested bells or gongs identified lay the reference iiumbers 503, 504, 505 nnd 5CS, that are sounded respective'ly by the clappers 507, 508, 509 and 'Ihese clappers are attached to similar legs of bell cranks 513, 515 and 5_6 (Fig. 19) that are connected by pins to the lower ends of vertical pull rods 517–520 (Fig. 19) secured at their –Lipper ends to bell cranks 1,;23–526 moving ill– vert;Acal planes about a common horizontal pivot shaft 534 (Fig. 19). As shown in Figs. 19 and 19a t"iiere are seven bell cranks 527–533 pivoted about a vertical shaft 535. As viewed in Fig. 19 the left legs of the bell cranks are all of the same length., and in the path of movement of a projeeting lip 536 (Fig. 22a) on 33 the leg 444 of the vertical shiftable bell crank on shaft 445. Depending upon the vertical position of (_he bell crank leg 444 resulting from coin gaging, ihe projecting lip 53G move one or more of the bell cranks 527–,N33 counterclockwise and –10 then release it, causing selected clappers 507–510 to strike the bells 503–506 under the irl–fluence of springs 537, one for each clapper. It is the function of the bells 503 to 506 to indicate by their sound, either siiagly or incombinatio–ti, as when two or rnore are simultaneously struck, the value of a coin or token that has just been gaged, sorted and registered. As viill be best apparent from Fig. 19a movement of the bell crank 532 by the lip 536, and the subsequent release of the crank, will cause the simultaneous striking of all four bells, which will produce a particular tone denoting the gaging and sorting of a quarter, which is the largest diameter coin or token normally handled by the illustrated fare box. The lower– most and seventh bell crank 533 would only ring the large bell 503, but sinc– the illustrated fare box handles only six different diameter coins, tokens or the like as. determined by the six lands 378–383 in the cam plate 376, the aforesaid bell crank 533 is supefluous in the illustrated embodiment and will normally be used only when the fare box is enlarged to handle coins, tokens or the like of seven different diamete_–s. Takin,another example, if a penny is gaged and sorted, it being the third from the smallest coin or toke–n handled, the bell crank element 444 v7ill be depressed three steps so that it engages and releases the bell crank 529 (Figs. 19 and 19a) to simultaneously ring the two srlaller bells 505 and 506. Thus, as will be apparent from the various lengths of the bell cranks 527–523 and 523–526 of Fig. 19a, the particular bell or combination of bells that is rung will depend upon the diameter of the coin or token that has been gaged and sorted. Prom the foregoing deserli_tion, it will be appo,rent to those skilled in the art that our gaging, registering and totalizing mechanism may be readily adapted for various other uses in gaging and sorting. Locking arrangement One of the features of the illustrated fare box is a key controlled arrangement by which the operator can turn a key to place the fare box in operating condition, to turn it off so that the motor will not operate, and to lock it so that neither the motor nor the change maker will operate, thereby locking the change maker so that no one can remove coins from it, as when the operator is absent from the vehicle. The lock is indicated in Fig. 1 at 540, with a key 541. In the illustrated position the lock is "on" so that the motor and change maker will operate normally. A cam plate 542 is mounted on the lock inside the casing, and rotates with the key 541 from the normal position shown at 542 (Fig. 1) to a second position 543 and to a thi–rd position. In the "on" position Pt 542 the cam plate raises the lever 545 (Fig. 15) of the switch arm of a main switch 546 to close the sv_itch and condition the fare box for motor operation upon actuation of the plunger 103. By rotating the key 541 (and thus the cam plate 542) counter–clockxvise the swi–tch 546 is opened, thus preventing energization of the fare box operating motor 218. During its counter–clockwise rotation through 180 degrees the cam plate 542 will pass through the "off" positiov–i at 543 and finally to the "lock" position at 544. During 'uhe last degrees portion of this movement it will depress a platform 547 (Fig. 15) that is integral with an upwardly extending member 548 (Fig. 35) and a downwardly extending element 549 that has a camming connection with a longitudinally movable locking plate 552 having vertical projections 553 that when pulled to the left as in Fig. 35 will positively secure or lock the keys 554 against depression, so that they cannot be operated to remove coins from the coin barrels. Thus the main motor switch 546 is open, and the change maker is locked when the key 541 is turned to make the cam 542 occupy the position shown at 544 in Fig. 1. When the key is turned to rotate the com plate back to the initial position at 542 the locking plate 552 may be returned to the right (Fig. 35) to its unlocked position by manually pushing on a knob 555 that is secured to said plate. For a description of the locking of the change maker by the locking plate 552 reference may be had to the Daughterty patent 2,338,576. The member 548 extending upwardly from the platform 547 has a pin 556 that passes between a pair of toggle levers mounted upon pins 560 and 561 (Fig. 15) that have legs 562 and 563, which whei–i the platform 547 is depressed as in Fig. 15, underlie the levers i45 and 146 and prevent their depression to actuate the counter assemblies 143 and 144 (Fig. 1). Raising of the platform and of the pin 556 rotates the toggle lovers so that their legs 562 and 563 clear the levers 145 and 146. In the appended claims the term "fare" is used to define coins, tokens or the like used in the payment of fares, and other objects which it may be desired to register or count and sort with our improved mechanism. The invention may be embodied in other spe– essential characteristics thereof. The preselit embodiment is therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein. What is claimed and desired to be secured by United States Letters Patent is: 1. In a mechanism of the class described a coin receiving hopper, a fare handling device; means forming a fare passage between said hopper and i,_) said handling device; rotary electric motor means operable to drive said handling device; and electric circuit for energizing said motor includin.a a first switch; means for closing said switch; a second switch in said circuit operable to be closed by a, fare in said passage including a movable contact mounted for reciprocating movement between a first position where it blocks said passage and engages a fare in the chute to close the circuit, and a second position removed from said passageway; a third switch in said circuit; means driven by said motor means to keep said third switch closed until a predeterriained number of hancuing cycles have been com–oleted following the closing of either said flrst–or second switches; and means driven by said motor during each handling cycle for reciprocating the movable contact of said second switch between its first qnd se_–ond positions. 2. In a fare box, a hopper; a fare singling and gaging device; means forming a fare passage between said hopper and said device; a motor drive for said fare si–ngling and gaging device; rejecting Means preventing the passage of mutilated fares and objects larger than fares through said fare passage; a connection between said motor drive and said rejecting means to

operate said rejecting means frorn said mol_or dr–1ve; and overload clutch between said motor drive and said coin singling and Paging device, operable to per– 4,–, mit operation of said motor drive –Ln the event of stoppage of the singling and gaging device. 3. In a fare box, a fare receiving hopper; a coin Singling and gaging mechanism including a reciprocable ram; a passageway between said hop– _,5 0 Per and singling and gaging mechanism terminating at a point in the path of the working face of the ram; a rotating motor; a connection between the motor and ram including a crank Pin and connecting rod for converting rotary mo– tion of the motor to reciprocating motion of the ram; an electric circuit including a motor starting switch and a holding switch in parallel, operative to energize the motor through at least one cycle of operation of the ram; clutch means in said connection between the motor and ram; a fixed stop operative to disengage said clutch at the end of one full revolution of said crank pin; and means effective in response to movement of said motor to engage said clutch means. 4. In a fare box, a fare singling and gaging mechanism including a reciprocable ram; a rotating motor; a connection between the motor and ram operative to convert rotary motion to reciprocating motion; and electric circuit in– eluding a motor starting switch and a holding switch in parallel, operative to energize said motor through at least one cycle of operation of the ram; clutch means in said connection between the motor and ram; means operative to disenei,–ic forms without departing from the spirit or 75 gage said clutch at the end of one full revolu. _t!On of said crank pin; and spring pressed detent means effective to hold the ram at the beginning of a working stroke upon disengagement of said clutch. 5. In a fare sorting and re._istering mecha– nism; a gaging element, a fare sorting device op– –erable to direct fares along different ppths according to their diameters; a gear driven in clie direction by saild ga.aing element; a rack driven .by said gear; a cam on said rack connected to control said sorting device; a plurality of registers for totaling coins of different diameters; a .second cam on said rack for selecting a register according to coin diameter; and means cooperating with said second cam to actuate the selected register. 6. In a fare box, coin and token singling and gaging means; a sorter mechanism responsive to said gaging means and operable to receive coins and tokens; a hopper for Teceiving coins and 2.0 tokens having a passage therefor leading to said singling means; a change maker positioned to re– .ceive coins from said sorter mechanisr–,i; an electric motor connected to drive said singling and gaging means; an electric circuit for e,_iergizing said motor and including a first switch for initiauy closing said circuit; a second switch in ,parallel with said first switch and driven by said motor to hold said circuit closed for a predetermined nuinber of operatiori–s of said singling ,means; a third switch in parallel in said circuit and responsive to engagement by a coin or token in said passage to close said circuit; a fourth switch in series with said circuit; and xneans for opening said fourth switch. 7. In a fare box, a fare singling mechanism; a hopper opening into sa,'_d singling mechanism; a rotating motor; a drive connection between the motor and singling mechanism; an electric circuit including a motor starting switch and a hold– ing switch in parallel, operative to energize the motor through a predetermined number of cycles of operation of the singling m–echanisrn; clutch means in said conilection between the motor and singling mechanism; a fixed stop operative to periodically disengage said electric motor –'Lrorn said singling mechanism and means responsive to .–Movernent of said rnotor to engage said clutch means to produce a periodic and momentary interruption in the drive to said singling mechanism. 8. In a fare box; a fare singl,_ng mechanism; a rotating inotor; a connection between the motor and singling mechanism operative to drive said singling mechanism; an electric circuit in,–luding a motor starting switch and holding switch in para7LIel, operative to energize said motor through a predetermined number of cycles of operation of said siii–gling mechanism; clutch means in said connection between the motor and singling mechanism; means operative to disengage said clutch at the end of one cycle of operatiori of said singling mechanism; and spring pressecl detent _–neans effective to hold the singling i–nechanism at the beginning of a cycle upon disengagement of said clutch. 9. In a fare box, a fare singling and gauging device; a hopper openiilp,_ into said singiing and gauging device; a motor drive for said fare singling and gauging device; rejecting means preventing the passage of niultilated fares to said gauging device; an overload clutch between said niotor drive and said coin singling device, operable to permit operation of said motor drive in the event of stoppage of the singling and gauging device.

0) US4314352A – BANKING MACHINE

13) Family number: 30170761 (US4314352A) © PatBase

Title: Banking machine

Priority: 19530814 DE1954S040426 19540814 DK19730001831 19730404 US19720243339 19720412

Family:

Publication number	Publication date	Application number	Application date
AU197353829 A1	19741003	AU19730053829	19730328
BE797698 A1	19731003	BE19730129578	19730403
CA1023051 A1	19771220	CA19730166376	19730319
CH317317 A	19561115		19530814
DE2315110 A1	19731018	DE19732315110	19730327
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DK192477 A	19770503	DK19770001924	19770503
FR1082421 A	19541229		19530826
FR2179785 A1	19731123	FR19730011773	19730402
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NL189883 B	19930316	NL19730005147	19730412
NL189883 C	19930816	NL19730005147	19730412
NL7305147 A	19731016	NL19730005147	19730412
NL7305147 A1	19731016		00000000
NL94797 C	00000000		00000000
US4314352 A	19820202	US19720243339	19720412

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DOCUTEL CO ; DOCUTEL CORP ; DOCUTEL CORP 2625 EAST GRAUWYLER ROAD IRVING DALL ; SODECO ; SODECO COMPTEURS DE GENEVE

Assignee(s): DOCUTEL TE IRVING TEXAS VER ST V AM CORP ; FOUGHT HAROLD D ; SODECO SOC DES COMPTEURS DE GENEVE ; BANKERS TRUST CO ; DIEBOLD INC ; DOCUTEL CORP 2625 EAST GRAUWYLER ROAD IRVING DALLA ; DOCUTEL CORP 2625 EAST GRAUWYLER ROAD IRVING DALLAS COUNTY TEXAS E U A ; DOCUTEL CORP IRVING TEX V ST A ; DOCUTEL CORP US ; OLSY NORTH AMERICA INC

Inventor(s):(std)**:** FOUGHT HAROLD DON ; FOUGHT HAROLD D ; MELONI MARIO ; FOUGHT H D ; MARIO MELONI ; HD FOUGHT

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International class (IPC 8–9): G06F15/00 G07F19/00 G07G1/12 H04M15/28 H04M17/02 (Advanced/Invention); G07F19/00 G07G1/12 H04M15/28 H04M17/00 (Core/Invention); G06F (Subclass/Invention)

International class (IPC 1–7): G06F15/30 G07D7/00 G07F19/00 G07F7/02 G07F7/04 G07F7/10 H04M1/31 H04M15/28 H04M17/00 H04M9/00

CPC: G07F19/20 G07F19/207 G07F19/211 H04M15/28 H04M17/023

European class: G07F19/00F G07F19/20 G07F19/207 G07F19/211 H04M15/28 H04M17/02B

US class: 235/379 364/900 902/15 902/18 902/20 902/4 902/5 902/9

Classification Explorer

Cited documents: US3719927 A, US3652795 A, US3648020 A, US3641497 A, US3641315 A, US3611293 A, US3588449 A, US3566365 A, US3544769 A, US3516068 A, US3407387 A, US3335407 A, US3308439 A, JP45002157 A2, FR2092282 A5, DE2058906 A1,

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Abstract:
Source: US4314352A A high speed, computer controlled banking machine provides fully automatic teller stations for completing banking functions in response to a coded credit card presented thereto. After the credit card presented to the machine has been initially checked to determine if the card has the proper format, coded information thereon is evaluated to check the user's identity prior to authorizing him to complete a selected banking function. When each of several standard checks of the credit card code have been completed, a check is made of a bank interchange file to determine if the presented card will be honored at a particular station. Upon a satisfactory response at the interchange check, a bad account verification is made to determine if the accounts encoded on the card are delinquent in any respect. For cards showing a good account, the computer advances the system operation to a transaction selection procedure wherein one of four separate banking function selections are made by a push button interface between a user and the system. Following the selection of a correct banking function for the presented card, operation of the system continues to a transaction processing procedure wherein the selected transaction is completed. In the transaction processing procedure, either currency is dispensed, funds deposited to one of several accounts or funds transferred between accounts of the user. Upon completion of any one of these three functions, the system advances to a receipt printing procedure wherein a record of the completed banking function is made. This receipt and the currency, where applicable, are delivered to the user along with his credit card for future use.

0) US3246932A – COIN CONVEYOR

14) Family number: 22781923 (US3246932A) © PatBase

Title: Coin conveyor

Priority: FR19600837448 19600831 GB19600027771 19600810 US19640384275 19640610 US19640384277 19640610 US19640384276 19640610 US19590798264 19590309

Family:

Publication number	Publication date	Application number	Application date
FR1266344 A	19610707	FR19600837448	19600831
GB914017 A	19621228	GB19600027771	19600810
US3147839 A	19640908	US19590798264	19590309
US3191739 A	19650629	US19640384276	19640610
US3196887 A	19650727	US19640384275	19640610
US3246932 A	19660419	US19640384277	19640610

Probable Assignee: ELECTRONIC COIN PROC CORP

Assignee(s):(std)**:** ELECTRONIC COIL PROC CORP ; ELECTRONIC COIN PROC CORP ; WHITE JR ROBY B

Assignee(s): ELECTRONIC COIN PROCESSING CORP ; ELECTRONIC COIL PROCESSING CORP

Inventor(s):(std)**:** WHITE ROBY BYRON ; WHITE JR ROBY B

Inventor(s): JR ROBY B WHITE

International class (IPC 8–9): G07D3/10 G07D5/00 G07D5/10 G07D9/00 (Advanced/Invention); G07D3/00 G07D5/00 G07D9/00 (Core/Invention)

International class (IPC 1–7): G07D3/00 G07D3/10 G07D5/00 G07F3/02 G07F9/06

CPC: G07D5/005 G07D5/10 G07D3/10 G07D9/00 G07D5/00

European class: G07D3/10 G07D5/00 G07D5/00P G07D5/10 G07D9/00

US class: 194/317 194/333 194/335 232/1R 406/151 406/196 453/3 453/7 453/8

Classification Explorer

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Forward Citations: WO9733257, WO9630877, USRE32799, US9594982, US9235945, US9230381, US9183687, US9036890, US9022841, US8967361, US8535125, US8157162, US8109379, US7967125, US7819308, US7721897, US7666076, US7635295, US7527193, US7520374, US7464802, US7290645, US7017729, US6863168, US6666318, US6484884, US6179703, US6174230, US6071187, US6039643, US5842916, US5469951, US5439089, US5293980, US5226520, US4901503, US4815579, US4537300, US4437478, US4379466, US4287900, US4161251, US4096933, US3797307, US3738469, US3726291, US3419209, US2012231721, US2010230234, US2009120760, US2009118860, US2009047887, US2009044642, US2009029638, US2008171508, US2008090508, US2008082207, US2007151827, US2006286915, US2006217052, US2006025062, US2005205389, US2005145463, ITCH20090029, GB2215505, GB2200778, GB2200778, ES2542553, ES2515590, EP2800071, EP1862977, EP0956543, EP0818029, EP0287049, EP0245805, EP0219574, EP0219574, EP0125359, EP0091731, DE2742317, AU710554,

Abstract:
Source: GB914017A 914,017. Sorting and testing coins. ELECTRONIC COIN PROCESSING CORPORATION. Aug. 10, 1960, No. 27771/60. Class 27. Coin–handling apparatus comprises means for sorting coins into batches according to their sizes and feeding these batches to respective testers which cause a coin to ring at its natural frequency in air and have means responsive to a predetermined frequency band for directing authentic coins to collecting means. The apparatus is described as either set up at a central station to which coins collected from

parking meters, vending machines, telephone boxes, c. are brought or disposed on a vehicle for making the collection. As shown in Fig. 1, the apparatus is mounted on a vehicle and comprises a sorter 6 arranged to distribute the coins according to size to testers 9... 13 leading to compartments 19, 20, 21, 23, 24, for authentic coins and a compartment 22 for rejected or counterfeit coins. The coins may be delivered to a hopper 7 which feeds them by a conveyer 8 to the sorter 6 or they may be pumped directly from the coin box of a parking meter through a hose 40, Fig. 4, having a coin–receiving head 41 attachable to the meter. The hose 40 is connected to a box 42 housing an impeller 43 for inducing a downward flow of air through a perforated pipe 45 connected to the hose so that coins are drawn through the hose and drop down the pipe 45; at the outlet end of the pipe 45, a vaned valve 49 is rotated slowly by a motor 51 to discharge the coins through a shoot to the sorter. A closure device fitted within a casing 56 between the hose and head 41 allows free passage of the coins as long as the hose is fitted to the meter but closes to prevent coins from being extracted from that end of the hose should the latter be inverted after it has been detached. The sorter to which the coins are then fed comprises an assembly of concentric and perforated drums 70, 71, 72, 73, Fig. 7, which are arranged at a slight downward inclination and, together with an enclosing imperforate drum 74, are secured at one end for rotation by a motor 77. Coins fed through a shoot 79 into the upper end of the innermost drum are sorted by the various drums and discharged through shoots 82, 86, 87, 88, 89 at their lower ends, the perforations in the various drums being of such sizes that the innermost drum retains all but the large size coins for which it is effective and passes the rest to the next drum which similarly retains the coins of the next size and passes the remainder to the next drum, and so on; small perforations may be provided in the outer drum 74 for the passage of small inwanted coins. The drums may be cylindrical or of polygonal cross–section with the perforations disposed at the corners, or, as shown in Fig. 16, of saw–tooth cross–section and provided, if desired, with transverse braking ribs 101. On a vehicle, the drums are mounted in a pivoted and weighted cage to ensure that they always adopt a slight downward inclination. Each of the shoots from the sorter leads to a separate tester comprising a hopper 120, Fig. 18, the base 123 of which is rotated about its axis by a motor 125 so that the coins are flung radially outward and directed out of the hopper one at a time through a guide passage 129, Fig. 20. Should two coins stacked one on the other attempt to enter the passage together, the upper coin is deflected past the entrance by its engagement with the rim of a second disc 128 –which projects into the passage in spaced relation above the base 123 and is rotated by the motor 125 at a much greater speed than is the base. As it leaves the passage 129, the coin is picked up between an upper pair of driven belts 148 passing over pulleys 142 and a lower pair of pulleys 150 and fed thereby to the upper end of a vertical shoot 161 where it is centred between a fast–moving belt 153 and a driven roller 164 and projected down the shoot at considerable speed; to enable the belt 148 to cope with both thick and thin coins, the beltengaging surfaces of the pulleys 142 are irregularly formed so that the spacing of the belt from the base 123 constantly varies and, should two coins overlap each other on the pulleys 150, the fast–moving belt 153 ensures that the leading coin will be accelerated down the shoot well in advance of the other coin. When the coin leaves the shoot 161, its edge is arranged to strike against an anvil 171; as shown in Figs. 19b... 19d, the coin 173 successively hits a flexible insert 172 embedded in the anvil, flips over to cause its edge to strike the anvil and so ring at its natural resonant frequency while suspended in free air, and then spins back in reverse direction. The ringing sound so produced is received by a microphone 177, Fig. 20, and fed to a valve circuit which is designed to respond only to sounds falling within a predetermined frequency range (i.e. the range corresponding to the particular coins for which the tester is employed). An authentic coin causes the circuit briefly to operate a relay resulting in the energization of a solenoid 179, Fig. 18, the plunger of which then advances to hit the coin as it spins back from the anvil and direct it into a shoot 178; a coin which fails to energize the solenoid merely bounces off the anvil into a reject shoot 186. The operation of the relay also actuates counters to register the number of authentic coins collected from each source and the total number collected from all sources and may control apparatus for registering these amounts on punched cards. The outlet from each compartment receiving authenticated and rejected coins from the testers is fitted with a cylindrical valve block which has a diametric opening and is rotatable to register the opening with the outlet through gearing from a manually–operable shaft. Separate opening shafts may be provided for the different compartments or one shaft common to all the compartments, and the operating handle of the shaft projects into a locked compartment. Coins collected by a vehicle may be discharged at a central station through an opening in the floor of the latter after a telescoping shoot has been raised hydraulically or otherwise through the floor into contact with the valve. Either disposed on the vehicle or permanently installed at a fixed location is a further device for detecting abnormalities in the diameter and thickness of coins which have been previously authenticated. In this device, coins are fed one at a time from a stack in a cylinder to openings 254, Fig. 35, in the upper run of an endless belt 251 moving over a support 250. Variations in diameter detected by the tip of a spring–pressed finger 258 result in the opposite end of the finger closing one of two contacts 266, 267. Similarly, variations in thickness detected by the tips 273 of a number of spring– urged fingers 271 result in the opposite ends of the fingers closing one of two contacts 277, 278. Closing of any of the contacts 266, 267, 277, 278 energizes relays in a control circuit and the activation of a solenoid 288 to slide an ejector plate 285 transversely below the belt so that the defective coin drops from its opening 254 into an opening 287 in the plate 285 and is withdrawn with the latter when the solenoid is de–energized. The control circuit also automatically registers the number of coins rejected. For use in a bank, the apparatus may be arranged to test and count only one denomination of coin which has been sorted from a batch fed to the sorter.

0) GB876626A – IMPROVEMENTS IN OR RELATING TO APPARATUS FOR AC...

15) Family number: 23066778 (GB876626A) © PatBase

Title: Improvements in or relating to apparatus for acting in turn on documents in a pile thereof

Priority: GB19570003335 19570130 GB19590032547 19580127 FR19580757119 19580130

Family:

Publication number	Publication date	Application number	Application date
DE1291548 B	19690327	DE1958A034834	19580130
FR1274374 A	19611027	FR19580757119	19580130
GB876626 A	19610906	GB19570003335	19570130
NL28075 C	19630525		00000000

Probable Assignee: HENRY LOVERIDGE CHADDER

Assignee(s):(std)**:** GEOFFREY BUCKLE ; DEBDEN LOUGHTON ; PETER RALPH PRICE ; GEORGE EDMOND BRACKENBURY ABEL ; HENRY LOVERIDGE CHADDER ; FORTIN GORDON CHALMERS ; PRICE P R ; PRICE PETER RALPH ; TILLEY D W ; ABELL G E B ; BAILEY JAMES VINCENT ; BUCKLE G ; BUCKLE GEOFFREY

Assignee(s): GEORGE EDMOND BRACKENBURY ABELL

Inventor(s):(std)**:** BUCKLE GEOFFREY ; GEOFFREY BUCKLE ; LOUGHTON DEBDEN ; PRICE PETER RALPH ; RALPH PRICE PETER ; TILLEY DONALD WILLIAM ; ABELL GEORGE EDMOND BRACKENBUR

Inventor(s): ABELL GEORGE EDMOND BRACKENBURY

International class (IPC 8–9): G01R27/26 G06M9/02 G07D7/00 (Advanced/Invention); G01R27/26 G06M9/00 G07D7/00 (Core/Invention)

International class (IPC 1–7): G06C25/00 G06M9/02

CPC: G01R27/2647 G06M9/02 G07D7/00

European class: G01R27/26D4C G06M9/02 G07D7/00

Classification Explorer

Forward Citations: FR2422210, FR2179270, FR2048072,

Abstract:
Source: GB876626A 876,626. Countng–apparatus. ABELL, G. E. B., CHADDER, H. L., PRICE, P. R., and BUCKLE, G. Jan. 27, 1958 [Jan. 30, 1957], No. 3335/57. Class 106 (1). Apparatus for acting in turn on documents in a pack or pile comprises means for initiating separation of the documents individually in turn, means for increasing separation of each document and sensing means for sensing a property of the separated part of each document. The embodiments of Figs. 1–57 constitute improvements in the counting apparatus described in Specification 784,209. First embodiment.–As shown in Fig. 1, a tubular nozzle 1 is surrounded by a rotatable slide valve 2 having openings 4 adapted once in each revolution of the valve 2 to be connected by an opening in the tubular nozzle to a vacuum source. A release member 7 rotates eccentrically of the axis of the nozzle 1 and is adapted to increase the separation of banknotes 5 successively detached from a pile 6 by the action of the vacuum and transfer the separated portion of the note from the pile 6 to the pile 10, the remote portions of the note being clamped together. The member 7 carries brushes 13 adapted to contact the valve 2 during part of the revolution of the member 7, if no note is present. A cam 17 rotating with the member 7, Fig. 4, is arranged to open contacts 18 for part of the period during which the brushes 13 are adapted to contact the valve 2 so that, should a note be present, the circuit through an electromechanical counter 21 is temporarily interrupted to increase by one the number registered by the counter. Second embodiment, Figs. 6–9 (only Fig. 6 shown).–The brushes 13 are replaced by contacts 27 between which the member 7 provides an electrical circuit when no note is present. The function of the cam 17 of the first embodiment in providing a circuit between the counter 21 and earth is performed by a transparent rotatable disc 32 having an opaque sector adapted to form an electrical pulse when it interrupts the beam of light between a lamp 34 and photo–cell 35. Alternatively, the pulse may be provided by means of the current generated in a stationary coil by the motion of a permanent magnet moving with the member 7 (Figs. 10, 11, not shown). Third embodiment, Figs. 12–17 (only Figs. 12 and 17 shown).–The contacts 27 of the second embodiment are replaced by two sets of spring–urged ball contacts 47, 48 mounted in a member 49. When no document is present, the contacts 47 are first bridged to energize a relay RL1, Fig. 17, which holds over contacts RL1–1 but is de–energized by the closure of contacts 48. Fourth embodiment, Figs. 18–21 (only Fig. 18 shown). The presence of a note is detected by a photo–cell 64 and lamp 63 which are mounted in a member 65, a lens 66 focusing light through an opening 67 in the member 65. When a document passes the opening 67, light is reflected therefrom on to the photo–cell 64. The photo–cell and lamp may be duplicated. The photo–cell or photo–cells are arranged in the energizing circuit of a relay which has a set of contacts in the circuit of an

electromechanical counter. Electronic pulse forming circuits.–The above embodiments may employ electronic counting circuits in place of the electromechanical counters. The second embodiment may employ the pulse–forming circuit of Fig. 24 (not shown) together with a multi–cathode electronic counting circuit (Figs. 51, 52, not shown) but preferably the pulse forming circuit of Fig. 25 is employed. The construction of Figs. 6–9 is modified (Fig. 22, not shown) by the provision of two photo–cells 82, 83 and associated lamps to provide two spaced pulses. When no note 5 is present, a point 97 is earthed over the contacts 27, but when a note is present, the point 97 is only earthed while the photo–cell 83 conducts, and when the photo–cell 83 is interrupted, a thyratron V1 fires thus causing the side V2A of an amplifier and pulse former stage V2 to conduct which causes a bi–stable multivibrator to change its state thereby providing an output which is differentiated by a capacitor C3 to give an output pulse at the terminal 76. The multivibrator is reset by a pulse from the photo–cell 82 which fires a thyratron V4. The multivibrator is initially set to a particular one of its stable states by a switch 103 which is operated when the clamping plate 11 is moved for insertion of a pile of banknotes (Fig. 23, not shown). Pulse–forming circuits for the third embodiment (Figs. 28, 29, not shown), and the fourth embodiment (Figs. 31, 32, not shown) are described. Fifth embodiment–sensing banknote numbers, Figs. 34–38 (only Figs. 34, 38 shown).– The presence of numbers printed in magnetizable ink is sensed by one of four reading heads, one for each of four possible positions of the numbers, the heads comprising permanent magnets 147 adapted to magnetize the ink which is then sensed by a pick–up head 149. The magnetic elements are supported in an insulating block 154. Assuming that the banknotes have seven digit serial numbers, then a circuit is adapted to provide a pulse to be counted for each seven pulses provided by the pick–up head 149. Pulses from one of the heads 149 are amplified by a valve V13 and shaped at V14. The shaped pulses pass to a Miller integrator valve V15 which when a predetermined voltage level is reached applies a pulse to an amplifier V16 and inverter V17A the output of which is fed back via a delay 162 to reset the integrator V15. The delay determines the length of the output pulse at 76. An alternative circuit employing a multi–cathode counting tube instead of a Miller integrator is described (Fig. 40, not shown). Sixth embodiment–sensing metal threads, Figs. 41–47 (only Figs. 44, 45 shown).–Metal threads are detected by four conducting plates 181–184 mounted in an insulating body 185, which plates are connected in pairs by conductors 186, 187, the conductor 186 being connected to an oscillator 188, Fig. 45, so that when a metal or metallized thread capacitively connects the plates 181, 183 with 182, 184, a pulse is obtained in the conductor 187 to set a bistable circuit 194 which is reset by a pulse obtained from a magnetic pulse generator 196 which may be mounted on the shaft 23, driving the member 7. A pulse to be counted is thus obtained at the terminal 76 for each banknote 5. A detailed circuit is described (Figs. 46, 47). Seventh embodiment (Figs. 48–50, not shown). –Both magnetic reading heads for sensing magnetizable numbers and plates for detecting capacitively metal threads are provided. Electronic counting circuit, Fig. 52.–The circuit shown is adapted for checking the number of banknotes in packets each of which should contain 100 notes. The pulses from any of the pulse–forming circuits described above are fed to an input terminal 212 and pass to a cold–cathode tetrode V28 feeding a ten–cathode units counting tube V29. A twelve–cathode counting tube V31 counts the tens. The outputs from the " 10 " cathode of the tube V31 and the "0" cathode of the tube V29 are taken to a gate comprising rectifiers D5, D6, D7, which is also supplied with an input from a thyratron V32 which is fired by an "end of count pulse" from the switch 103 operated by the clamping plate 11 when the counted bundle of notes is removed, so that a thyratron V33 is fired if the correct count of 100 has been attained. A " correct " relay RL6 and "correct" electromechanical counter CM2 are then operated. Should the thyratron V32 fail to fire, due to an incorrect count, the thyratron V33, the relay RL4 in its anode circuit operates to cause an " incorrect " relay RL7 and " incorrect " counter CM1 to operate. The counting tubes V29, V31 are reset by contacts RL4–1 of the relay RL4. Reading coded information, Fig. 53.–Reading heads 146 are positioned to read timing marks 223 and coded marks as shown in the lower row, and the signals produced may be arranged to fire thyratrons indicating the number represented by the code. The number of marks in each row may be counted and a thyratron arranged to fire only when each number is correct. In the embodiment shown in Fig. 58 which is a modification of that described in Specifications 769,065 and 775,419, a disc 231 provided with five sucker heads 233–237 rotates anticlockwise, the heads rotating clockwise. Initial separation of a note 5 from the pile 6 is by the nearest sucker head, e.g. the head 234, the separation being increased by the following head. Contacts carried by an insulating member 49a are actuated as described in the third embodiment, the successive sucker heads replacing the member 7. A table of values of the components used in the various electronic circuits is given in the Specification. Specifications 557,086, 685,288, and 876,627 are also referred to.

0) US3253709A – CURRENCY DETECTORS

16) Family number: 26055973 (US3253709A) © PatBase

Title: CURRENCY DETECTORS

Priority: FR19610863020 19610526 US19600087472 19601020

Family:

Publication number	Publication date	Application number	Application date
AT241171 B	19650712	AT19610004190	19610529
BE604343 A1	19611129	BE19610604343	19610529
CH411417 A	19660415	CH19610006236	19610529
DK105893 C	19661121	DK19610002196	19610529
FR1403610 A	19650625	FR19610863020	19610526
GB993142 A	19650526	GB19610019258	19610529
US3253709 A	19660531	US19600087472	19601020

Probable Assignee: NAT REJECTORS GMBH

Assignee(s):(std)**:** NAT REJECTORS ; NAT REJECTORS GMBH

Assignee(s): NATIONAL REJECTORS INC

Inventor(s):(std)**:** MERRILL JENKINS ; JENKINS M

Inventor(s): M JENKINS ; JENKINS MERRILL

International class(IPC 8–9)**:** G07D7/00 (Advanced/Invention); G07D7/00 (Core/Invention)

International class(IPC 1–7)**:** G05G G07C G07D7/00 G07F7/04

CPC: G07D7/00

European class: G07D7/00

US class: 209/534 209/567

Classification Explorer

Cited documents: US3132737 A, US2995976 A, US2967452 A, US2961649 A, US2960377 A, US2957387 A, US2951164 A, US2932392 A, US2827822 A, US2802905 A, US2731621 A, US2597675 A, US2314027 A, US2081280 A, US2076493 A, US2071139 A, US1436543 A,

Forward Citations: US7613298, US5761089,

Abstract:
Source: GB993142A 993,142. Checking cash. NATIONAL REJECTORS Inc. May 26, 1961 [Oct. 20, 1960], No. 19258/61. Heading G4T. Apparatus for identifying authentic currency bills comprises members for gripping a bill and feeding it to a sensing system including a sensing head with an airgap, means for moving the bill intimately against the sensing head, said means being operated by the bill, and means under the control of the sensing head for causing an unacceptable bill to be fed in a direction opposite to that in which it entered the apparatus. The apparatus may be associated with a vending or a change–giving machine. A spurious bill is returned, as is also a genuine bill if a withdrawing card c. is attached to it. The bills are printed in magnetic ink in known manner, and they pass under a magnetic head which controls the feed of the bills. The conveying means comprises two pairs of opposed timing belts 270, 272 which are spaced apart to engage the two sides of a bill, and the bill is fed along a horizontal path defined by two spaced–apart platens 50, 94 provided with edge guide plates to prevent skewing of the bill. The top belts 270 are supported on toothed pulleys 204, 164, the front pulleys 204 being vertically movable against spring action by a solenoid 230 which acts through levers 224, 214, and 207, so that a bill placed on a support 336 can be placed between the belts. The lower belts 272 are mounted on toothed pulleys 180, 194, the pulleys 180 being driven by a reversible motor 188 through worm gearing: the shaft of the pulleys 180 is geared to the shaft 162 of the pulleys 164, so that both sets of belts are driven in synchronism and without slip. Each belt is supported opposed wear–resisting guides 260 which also engage the sides of the belts, and the arrangement is such that there is alternate downward and upward bowing of the belts causing them to undulate as they travel, causing undulations in the currency bill gripped between them, and thus stiffening the bill and eliminating any wrinkles c. therein. The bills are inserted through a slot in the front plate 36, and pass through a slot in a gate 370 which is lowered, when a bill has been fully fed into the apparatus, by a solenoid 344 acting through levers 350, 352. Each bill is adapted to depress a number of curved switch arms, such as 276, 288, to operate switches, such as 274, 286, arranged between the feed belts. The bills are delivered to a cash box c. by

opposed pairs of sift faced rollers 314, 321, the shafts of the rollers 314 being driven by a belt and pulley arrangement and a spring clutch 168, 170, 176 from the shaft 162, whereby the rollers travel faster than the speed of the belts. When the rollers 314, 321 first engage a bill, they cannot rotate at their normal rate, the torsion spring 176 of the clutch drive is thus wound tighter, thereby storming energy within itself. When the trailing edge of the bill leaves the feed belts 270, 272, the spring 176 will restore itself to normal condition, the rollers 314, 321 will be rapidly rotated, and the bill will be ejected at high speed. The magnetic head 244 of the currency detector is slidably mounted on the limbs of a U−shaped frame 238, and is biassed downwardly by a spring 246 on an adjustment screw device 248. A soft−faced roller 326 co−operating with the head 244 is carried by a bell−crank lever 323 which is connected by a link 334 to a solenoid 330. Operation:− When the leading edge of a bill is inserted between the timing belts 270, 272 and a start button 340 is depressed, the solenoid 230 is energized to allow springs 208 to force downwardly the belt pulleys 204 so that the bell is gripped by the belts, and the motor 188 is then energized by a switch 232 operated by the solenoidoperated lever 214 to cause the bill to be fed. The circuit connections established by the button 340 are maintained and further connections are made, by the bill depressing switch arms, such as 276 and 286, so that as the bill is fed the solenoid 330 is energized to cause the soft−faced roller 326 to press the bill against the convex face of the magnetic head 244 and force the latter upwardly against its spring 246. The voltage variations set up in the head 244 by the magnetic ink of a genuine bill are amplified to produce two validating signals, the second of which can cause a connection to be made to a vending, change making, or other machine to be controlled by the currency detector. The solenoid 344 is now energized to release the front gate 370 which falls to close the bill slot, and operates a holding switch 362. The bill moves forward, operating switches in its path to condition the circuit and that of the associated vending c. machine, and is finally ejected by the rapidly rotating rollers 314, 321. When a spurious bill is inserted, the two validating signals are not generated in the magnetic head 244, so that the front gate 370 is not moved down to close the billt slot in plate 36, the connections to the motor 188 are reversed, the belts 270, 272 are driven in the opposite direction to return the bill, and the roller 326 is moved away from the head 244. If a genuine bill with an attached withdrawing string c. is inserted, the gate 370 cannot fall completely to close the switch 362, and the connections to the motor 188 are again reversed to cause the bill to be returned. Whenever the motor 188 reverses, the clutch in the drive to the shaft 162 slips, and the rollers 314, 321 are not driven reversely. In a modification (Figs. 21−24, not shown), an accepted bill is discharged by forcing it downwardly through slots in the platens 94, 50 by a sharp−edge plate which is oscillated vertically by a solenoid.

0) FR1363888A – MACHINE POUR EFFECTUER DES DEPOTS DE FONDS OU D...

17) Family number: 23100931 (FR1363888A) © PatBase

Title: MACHINE POUR EFFECTUER DES DEPOTS DE FONDS OU DE DOCUMENTS COMBINEE A DES DISPOSITIFS D'ANALYSE ET D'ENREGISTREMENT D'IMAGES MACHINE FOR MAKING DEPOSITS OF FUNDS OR DOCUMENTS TO COMBINED DEVICES OF ANALYSIS AND IMAGE RECORDING (Machine translation)

Priority: FR19620915393 19621114

Family:

Publication number	Publication date	Application number	Application date
FR1363888 A	19640619	FR19620915393	19621114

Probable Assignee: UNIVERSAL MATCH CORP

Assignee(s):(std)**:** UNIVERSAL MATCH CORP

International class (IPC 8–9): G07D11/00 (Advanced/Invention); G07D11/00 (Core/Invention)

International class (IPC 1–7): G06C25/00

CPC: G07D11/0096

European class: G07D11/00M4

Classification Explorer

Forward Citations: FR2430639,

Abstract:
Source: FR1363888A [Source: Claim 1] RESUME La presente invention a pour objet le produit industriel nouveau que constitue une machine destinee a effectuer des depots de documents, comme des cheques ou des billets de banque, ladite machine presentant les caracteristiques suivantes, prises isolement ou en combinaison 10 Elle comporte un carter ferme, une ouverture menagee dans ledit carter pour recevoir d'un deposant un depot comportant des articles comme une fiche de depot et du papier–monnaie, des dispositifs d'application de marques disposes a l'interieur du carter precite, un dispositif transporteur dispose de facon a recevoir les articles precites dans le dispositif d'ouverture et de facon a transporter chacun d'eux en succession au–dela du dispositif precite d'application de marques, un dispositif de commande agence de facon a commander le dispositif d'application de marques precite et produisant l'actionne– ment de ce dispositif en reponse au passage d'une fiche de depot au–dela dudit dispositif d'application de marques afin d'apposer des marques d'identification sur la fiche precitee, tout en empechant l'application de marques lorsqu'un billet de banque passe au–dela du dispositif d'application de marques; 20 La machine comprend un dispositif analyseur agence de facon a analyser le genre des articles recus dans l'ouverture precitee, un dispositif recepteur d'une fiche de depot supplementaire, un dispositif d'application de marques relie au dispositif analyseur precite et cooperant avec la fiche de depot supplementaire, pour y apposer des marques selon le genre de chaque article passant dans le dispositif analyseur; un dispositif deplacant la fiche de depot precitee et les articles, apres leur passage dans le dispositif analyseur, jusqu'a des dispositifs d'emmagasinage disposes de facon que le deposant ne puisse y avoir acces; enfin, un dispositif mettant a la disposition du deposant la fiche de depot supplementaire sur laquelle des marques ont ete apposees par le dispositif precite d'apposition de marques; 30 Un dispositif d'enregistrement d'images est dispose de facon que chaque article qui a ete recu dans l'ouverture precitee se trouve dans le champ en meme temps que les marques apposees par le dispositif analyseur, et un dispositif fait fonctionner le dispositif precite d'enregistrement d'images apres que le dispositif analyseur a fonctionne, grace a quoi on produit en relation associee identifiable une image enregistree de chacun des articles ainsi que des marques afferentes auxdits articles qui ont ete produites par le dispositif analyseur precite; 40 Un dispositif imprimeur est relie au dispositif d'analyse, ce dispositif imprimeur etant agence de facon a saisir une formule recue sur laquelle ce dispositif imprimeur appose des marques en fonction des indications apposees par le dispositif analyseur, grace a quoi ladite formule constitue un recu detaille du depot effectue; S La formule de recu precitee est amenee au dispositif d'impression par le deposant lui–meme; 60 Un dispositif de guidage est agence de facon a guider la premiere fiche de depot ainsi que les articles qui y ont ete deposes, depuis ladite ouverture jusqu'a un recipient de garde; un dispositif analyseur de documents et un premier dispositif d'application de marques sont disposes le long du trajet du dispositif de guidage precite; un second dispositif d'application de marques est agence de facon a apposer des marques sur la seconde fiche de depot precitee; un troisieme dispositif d'application de marques est dispose a l'interieur de la machine et coopere avec d'autres dispositifs d'enregistrement; le premier et le troisieme des dispositifs precites d'application de marques sont actionnes lors de la reception de la premiere fiche de depot et munissent la premiere fiche de depot, ainsi que l'autre dispositif d'enregistrement, de donnees predeterminees; le dispositif precite d'analyse de document est actionne lorsque des articles sont disposes sur le dispositif de guidage et fournit des signaux selon le genre de chaque article qui a ete depose; le second et le troisieme dispositif d'apposition de marques sont branches de facon a recevoir les signaux precites emis par le dispositif analyseur et apposent respectivement des marques correspondantes sur la seconde fiche de depot ainsi que sur

ledit autre dispositif d'enregistrement; enfin, un dispositif permet a un deposant utilisant la machine d'entrer en possession de la seconde fiche de depot sur laquelle ont ete apposees des marques correspondant aux signaux provenant du dispositif analyseur; 70 Le dispositif analyseur precite emet des signaux caracterisant la valeur d'un billet de banque depose; le second et le troisieme dispositif d'apposition de marques comportent un dispositif totalisateur destine a munir la seconde fiche de depot ainsi que ledit autre dispositif d'enregistrement precite de marques indiquant le total de la valeur des billets de banque precites; 8 Un dispositif d'enregistrement d'images est dispose de facon a avoir dans son champ des articles deposes ainsi que les marques apposees par le troisieme dispositif d'apposition de marques, ledit dispositif d'enregistrement d'images etant actionne de facon que l'image de l'article precite ainsi que celle des marques qui ont ete apposees selon le genre de l'article puissent etre en relation d'identification les unes avec les autres. [Source: Claim 1] SUMMARY The present invention relates to the new industrial product is a destiny machine perform document repositories, such as checks or bank notes, said machine presenting the following characteristics, taken singly or in combination 10 She has a housing farm, an opening provided in said housing for receiving a depositor a deposit which includes items like a deposit card and paper money, willing to tag application devices in the interior of the case cited above, has a conveyor device of way to receive the aforementioned articles in the opener and way to transport all of them–beyond the succession of the device mark application cited above, a way of agency control device controlling the application device cited above of brands and producing ment of this device actuation in response to the passage of a deposit sheet beyond said tag application device to affix identification marks on the record cited above, while preventing application brands when banknote goes beyond the tag application device; 20 The machine has a way of agency analyzer device to analyze the type of items in the above cited Receipts opening, a receiver device of an additional deposit slip, a trademark application device connects to the previously cited analyzer device and cooperating with the Record additional deposit, to affix marks gender of each item passing through the analyzer device; a device moving depot cited above of the plug and the articles after they pass through the analyzer device, until the willing manner of storage devices that the applicant can not have access; finally putting a device available to the applicant an additional deposit of card on which were tagged by the device for affixing marks cited above; 30 An image recording device has way that each article was received in the above cited opening is in the same time range as apposed marks by the analyzer device, and a device operating the device cited above images after recording the analyzer device works, thanks to what is produced in associated identifiable relationship registered a picture of each item as well as afferent brands in those articles which were produced by the analyzer device cited above; 40 A printer device is connected to the analysis device, this printer device being way agency recue enter a formula on which the printer device affixes depending on the indication marks affixed by the analyzer device, thanks to what constitutes a receipt said formula detailed the deposit made; S received formula cited above is people brought to the printing device by the applicant himself; 60 A guide device is a guide agency way the first deposit sheet and sections which were deposited there, from said opening up a guard vessel; a document scanner device and a first tag application device are arranged along the path of said guide device; a second tag application system is a way of agency affix marks the second depot Record cited above; a third tag application system is available on the inside of the machine and cooperates with other recording devices; the first and third brands of applying the aforementioned devices are sets in action when receiving the first deposit sheet and provide with the first deposit slip, and the other recording device, predetermined data; the device document analysis cited above is activated when articles are arranged on the guide and provides signals depending on the type of each item that has been filed; the second and third device marks are affixed branches of way to receive the signals emitted by the ABOVE analyzer device and affix corresponding marks respectively on the second deposit sheet and on said other recording device; Finally, a device allows an applicant using the machine to come into possession of the second depot sheet on which were affixed marks corresponding to signals from the analyzer device; The analyzer device 70 cited above emits signals characterizing the value of the deposited banknote; the second and third brands apply means comprise a counter device intended to equip the second depot sheet and said another recording device cited above marks indicating the total value of banknotes ABOVE; 8 An image recording device is disposed A way of having his field articles deposited as apposed marks the third brand affixing device, said image recording device being actuates way that the image of the article cited above as well as the brands that were affixed by type of item can be related with each other identification.

0) GB1072576A – DEVICE FOR CONTROLLING THE PAYMENT OF COINS IN ...

18) Family number: 247878 (GB1072576A) © PatBase

Title: DEVICE FOR CONTROLLING THE PAYMENT OF COINS IN AN AUTOMATIC MACHINE

Priority: CH19630006928 19630604

Family:

Publication number	Publication date	Application number	Application date
AT241870 B	19650810	AT19640004713	19640601
CH407617 A	19660215	CH19630006928	19630604
DE1449277 A1	19690430	DE19641449277	19640602
DE1449277 B2	19701029	DE19641449277	19640602
DK110212 C	19710104	DK19640002636	19640527
ES299733 A1	19640816	ES19640299733	19640512
GB1072576 A	19670621	GB19640022720	19640602
NL131067 C	00000000		00000000
NL6405921 A	19641207	NL19640005921	19640527
SE308333 B	19690210	SE19640006574	19640529

Probable Assignee: SODECO COMPTEURS DE GENEVE

Assignee(s):(std)**:** SODECO COMPTEURS DE GENEVE ; SODECO DES COMPTEURS DE GENEVE

Assignee(s): SODECO DES COMPTEURS DE GENEVE SOC ; SODECO SOC DES COMPTEURS DE GENCVE ; SODECO SOC DES COMPTEURS DE GENEVE ; SODECO SOCIETE DES COMPTEURS DE GENCVE ; SODECO SOCIETE DES COMPTEURS DE GENEVE

Inventor(s):(std)**:** KEIM ERNEST ; KEIM ERNEST MEYRIN ; KEIM E ; DAENDLIKER GOTTLIEB ; DAENDLIKER G ; GOTTLIEB DANDLIKER ; ERNEST KEIM

Inventor(s): DANDLIKER GOTTLIEB ; GOTTLIEB DAENDLIKER

International class (IPC 8–9): G07D5/02 G07D5/08 G07F1/00 G07F9/08 H04M17/02 (Advanced/Invention); G07D5/00 G07F1/00 G07F9/08 H04M17/00 (Core/Invention)

International class (IPC 1–7): G07F1/00 G07F3/00 G07F3/02 G07F3/04 G07F5/16 G07F9/08 H04M17/02

CPC: G07D5/08 H04M17/023 G07D5/02 G07F1/00 H04M17/02

European class: G07D5/00 G07D5/02 G07F1/00 H04M17/02 H04M17/02B

Classification Explorer

Forward Citations: WO8700662, US4108296, FR2541799, FR2115942, FR2042780, DE3026880, DE3012414, DE2713844, DE2243941, DE2240145,

Abstract:
Source: GB1072576A 1,072,576. Coin freed apparatus. SODECO, SOC. DES COMPTEURS DE GENEVE. June 2, 1964 [June 4, 1963], No. 22720/64. Heading G4V. A device for controlling the payment of coins I, II, III, IV through a single slot in, for example, a telephone call box comprises detectors 3, 4, 5, 6 which are disposed in the path followed by the coins in such a way that each can detect the presence of a coin of certain diameter as well as that of any coin of greater diameter, and an electronic circuit for transforming the indication of the detectors into a signal, there being as many detectors as there are different sizes of coins and the signal produced having a characteristic of the number of detectors which are simultaneously affected by a coin and, as a consequence a characteristic of the monetary value of this coin. In Figs. 2 and 3 (not shown), each detector is magnetic and has concentric primary and secondary inductive windings l 1, l 2 connected to an amplifier 12 in a resonant circuit; the leak flux from the detector is formed parallel to the axis of the windings and produces eddy currents in a coin if one is present. When no coin is present, an alternating signal is produced and this is transformed into a continuous signal of –ve polarity at a terminal E. The terminals E of each circuit are connected to respective terminals A, B, C, D of a computing circuit, Fig. 6 (not shown). When a coin of size I is present in front of the detectors, the circuit of detector 3 will cease to oscillate causing a terminal a to become +ve; similarly a coin of size II would effect detectors 3 and 4 causing only its associated terminal b to become + ve and the rest of the terminals n, a, c, d –ve. These signals of +ve polarity can be used for crediting the value of all coins inserted. Such detectors may also be used to check the material, weight and thickness of coins to permit the rejection of faulty coins. In another embodiment, the detectors are constituted by photo–electric cells.

0) FR1370449A – SACHET POUR NUMERAIRE BAG FOR CASH (MACHINE ...

19) Family number: 21001318 (FR1370449A) © PatBase

Title: SACHET POUR NUMERAIRE BAG FOR CASH (Machine translation)

Priority: FR19630949440 19631003

Family:

Publication number	Publication date	Application number	Application date
FR1370449 A	19640821	FR19630949440	19631003

Inventor(s):(std)**:** PEEBER KARL

International class (IPC 8–9)**:** B65D75/58 (Advanced/Invention); B65D75/52 (Core/Invention)

International class (IPC 1–7)**:** G07D9/00

CPC: B65D75/5805

European class: B65D75/58B

Classification Explorer

Forward Citations: EP0068567,

Abstract:
Source: FR1370449A (Claim 1) **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. Ceci evite que les pieces de monnaie glissent toutes ensemble hors du sachet et permet de les en sortir une a une.

Machine translation: (Claim 1) CAUTION ** ** start of CLMS field may contain end of DESC **. This avoids that the coins slipped out of the bag all together and lets them out one by one.

0) US3173542A – DOCUMENT HANDLING DEVICE

20) Family number: 22338018 (US3173542A) © PatBase

Title: DOCUMENT HANDLING DEVICE

Priority: US19620210017 19620716

Family:

Publication number	Publication date	Application number	Application date
US3173542 A	19650316	US19620210017	19620716

Probable Assignee: UNIVERSAL MATCH CORP

Assignee(s):(std)**:** UNIVERSAL MATCH CORP

Inventor(s):(std)**:** SIMJIAN LUTHER G

International class (IPC 8–9)**:** G07D7/00 (Advanced/Invention); G07D7/00 (Core/Invention)

International class (IPC 1–7)**:** G07F7/04

CPC: G07D7/00

European class: G07D7/00

US class: 209/534 312/212 902/7

Classification Explorer

Cited documents: US616441 A, US3064785 A, US2967452 A, US2957387 A, US2950799 A, US1581867 A,

Forward Citations: FR2424213,

Abstract:
Source: US3173542A (Claim 1) 1. A document handling device comprising in combination: statior_ary platform for receiving and , supporting thereon a currency document; slide for overlying said platform disposed for motion from a retracted position at which the pla'Lform is exposed to an extended position at which a currency document deposited on the platform is disposed between said platform and slide; authenticatin.– means disposed for communication with the document deposited on said platform and said means adapted to provide an authenticity signal when the, document is of a predetermined character; a rake connected to said slide for motion therewith and normally maintained to move freely relative to said platform; and means for moving said rake toward the platform in respoilse to an authenticity signal from said authenticating means whereby to cause said rake to remove the document from the platform when the slide moves from its extended position to its retracted position.

21) Family number: 22963662 (US3456155A) © PatBase

Title: PHOTOSENSITIVE CIRCUIT FOR CONTROLLING THE INTENSITY OF A LAMP

Priority: FR19660058332 19660420 US19650452065 19650430 US19650452324 19650430

Family:

Publication number	Publication date	Application number	Application date
BE679659 A	19661018		19660418
DK115669 B	19691027	DK19670000803	19670214
FR1476965 A	19670414	FR19660058332	19660420
GB1113928 A	19680515	GB19660019085	19660429
GB1113929 A	19680515	GB19670027328	19660429
GB1113930 A	19680515	GB19670027329	19660429
NO117510 B	19690818	NO19660162798	19660429
SE326858 B	19700803	SE19660005848	19660429
US3340978 A	19670912	US19650452065	19650430
US3456155 A	19690715	US19650452324	19650430

Probable Assignee: ADVANCE DATA SYSTEMS CORP

Assignee(s):(std)**:** ADVANCE DATA SYSTEMS CORP ; LITTON IND INC

Inventor(s):(std)**:** BUCHANAN JAMES MEEK ; HAVILLE GEORGE D ; HAVILLE G ; BUCHANAN J

Inventor(s): GEORGE DOUGLAS HAVILLE ; JAMES MEEK BUCHANAN

International class (IPC 8–9): G06K9/74 G07D7/00 G07F7/04 (Advanced/Invention); G06K9/74 G07D7/00 G07F7/00 (Core/Invention)

International class (IPC 1–7): G06K9/18 G07D7/00 G07F7/04 H05B37/02 H05B39/04

CPC: G07D7/00 G06K9/74 G07F7/04

European class: 43A19 G06K9/74 G07D7/00 G07F7/04

US class: 194/207 250/205 315/151 315/158 323/303 327/514 340/5.86

Classification Explorer

Cited documents: US3293656 A, US3258098 A, US3246297 A, US3108693 A, US2680990 A, US2477646 A, US2411672 A, US2356195 A, GB1014104 A,

Forward Citations: USRE42161, USRE30571, US9052287, US8487272, US8395122, US8076643, US6994201, US5847389, US5607040, US4959755, US4437148, US4423478, US4101808, US4096991, US4024428, US3968355, US3805049, US3780340, US3723989, US3670202, US3631250, US3558892, US3553459, US2009152468, US2004256196, US2004240208, US2004080932, JP53145383, JP48076782, EP0095948, EP0095948,

Abstract:
Source: GB1113928A 1,113,928. Comparing documents; checking cash. ADVANCE DATA SYSTEMS CORPORATION. 29 April, 1966 [30 April, 1965 (2)], No. 19085/66. Headings G4R and G4T. In apparatus for effectively comparing one printed sheet with another, standard sheet, the first sheet is sensed optically at separate, differently–shaped areas thereof, an electrical circuit comparing the sensed light intensities with the light intensities which would be sensed with the standard sheet. The apparatus is described for verifying the authenticity of a bank note in a device adapted to deliver merchandise and/or change in response to a genuine banknote of the right denomination. Mechanical details.–The customer slides the banknote into a horizontal slot and then moves a vertical slide downwards. The lower rear edge of the slide is bevelled to push the banknote in against a stop if not already fully in. When the slide reaches its lowest point it closes a switch to begin the verification procedure, and a solenoid plunger slips into a hole in the slide to hold it down. After the verification procedure, the solenoid is energized to withdraw the plunger and a spring draws the slide upwards. If the banknote is found to be genuine it is passed to a money container by a drive roller and an idler roller (the latter carried by the slide), before the slide is released upwards. If the banknote is not genuine, it is not moved and on release of the slide, the customer can withdraw it. Verification circuitry.–Referring to Fig. 10, four photo–cells 78, 78a–78c, which receive light transmitted through the banknote and respectively shaped apertures in the sensing head, are each connected as one arm of a respective D.C. bridge network. A second arm of each bridge network

comprises a fixed resistance, e.g. 142, and an adjustable potentiometer, e.g. 140. Resistors 104, 105 form the other two arms for each bridge in common. The potentiometers 140, 140a–140c are preset so that if the banknote is genuine each bridge gives an error voltage of zero. The diode –network shown 170, 170a–170c, 168, 168a–168c obtains minus the sum of the moduli (magnitudes) of the error voltages (to prevent error voltages cancelling each other) from the four bridges and passes it via a transistor 176 to a Schmitt trigger 180, 182 which controls an accept–reject relay 107. As a modification, shaped pieces of photo–cell material may be used in place of the standard photo–cells and shaped apertures. Compensating arrangements.–The intensity of the light source is controlled by a photocell (122, Fig. 11, not shown), sensing light from a particular area of the banknote, to compensate for any aging or dirtiness of the:banknote. A Zener diode (135) limits the extent of the compensation possible. 'The circuit also compensates for variations in line voltage. A thermistor is provided at the Schmitt trigger input for (temperature compensation. The disclosures are repeated in Specifications 1,113,929 and 1,113,930. Reference has been directed by the Comptroller to Specification 1,024,357.

0) FR1465666A – COLLECTEUR DE PIECES DE MONNAIE JETEES EN VRAC ...

22) Family number: 21976403 (FR1465666A) © PatBase

Title:	COLLECTEUR DE PIECES DE MONNAIE JETEES EN VRAC COLLECTOR COINS thrown BULK (Machine translation)
Priority:	FR19650040648 19651202

Family:

Publication number	Publication date	Application number	Application date
FR1465666 A	19670113	FR19650040648	19651202

Probable Assignee:	SIGNAUX ENTR ELECTRIQUES
Assignee(s):(std):	SIGNAUX ENTR ELECTRIQUES
Assignee(s):	COMPAGNIE DE SIGNAUX ET D ENTREPRISES ELECTRIQUES ; DE SIGNAUX ET D ENTREPRISES ELECTRIQUES COMP
International class (IPC 8–9):	G07D3/06 (Advanced/Invention); G07D3/00 (Core/Invention)
International class (IPC 1–7):	G07D3/06
CPC:	G07D3/06
European class:	G07D3/06

Classification Explorer

Abstract:
Source: FR1465666A [Source: Claim 1] RESLlliE La presente invention a pour objet un collecteur de pieces de monnaie jetees en vrac,– caracterise notamment par les principaux points suivants, consideres isolement ou suivant toutes combinaisons possibles 1 Ii comporte un trieur mecanique constitue par un disque dispose obliquement dans le fond d'une corbeille de reception, anime d'un mouvement de rotation continu autour de son axe et– presentant a sa peripherie des alveoles:anguiairement espace, conformes et dimensionnes de maniere a admettre chacun une piece et une seule, une platine fixe situee immediatement sous ce disque parallelement a lui et presentant a sa partie superieure, en regard des alveoles du disque, des ouvertures en arc de cercle de largeur graduellement crois– sante, chaque largeur correspondant au diametre d'une piece de monnaie differente, et une serie de canaux d'acheminement des pieces dont les entrees sont situees au–dessous de ladite platine en regard desdites ouvertures; 2 Lesdits alveoles ont la forme generale d'un secteur de 90; –_ 3 Les bords desdits alveoles sont biseautes; d Sur chaque canai d'echappement des pieces est placee une tete –de lecture d'un detecteur electronique de passage, permettant une selection des pieces de monnaie sur la base dune ou plusieurs caracteristiques telles que: epaisseur, poids, caracteristique – physique et magnetique de la matiere, absence de trou centrai, etc.; 5 Chaque canal,d'acheminement des pieces comporte un dispositif de visualisation des dernieres pieces introduites, constitue.par un couloir sensi– blement vertical partiellement ouvert ou transparent et situe de maniere que les pieces qui le traversent soient visibles de l'exterieur, la section dudit couloir etant partiellement obstruee par un organe de retenue eclipsable contre l'action d'un organe de rappel convenablement tare pour que ledit organe de retenue.ne s'eclipse que sous le poids d'un certain nombre de pieces, de sorte qu'un– meme nombre de pieces de monnaie Teste constamment visible dans ledit couloir; 6 Les canaux d'acheminement des pieces aboutissent a– un coffre–fort constitue par une caisse fixe dans laquelle est loge un tiroir muni d'un couvercle articule, une serrure de surete permettant de condamner le couvercle sur le tiroir et une autre serrure –de surete permettant de condamner le tiroir dans la caisse, ledit couvercle presentant des ouvertures en regard desquelles debouchent les canaux qui traversent la paroi correspondante de la caisse fixe, chacune de ces ouvertures etant obtu– rable par un volet obturateur mobile associe a un dispositif de verrouillage automatique a armement apte a ouvrir lesdits volets obturateurs lorsqu'on introduit le tiroir ferme dans la caisse et a les fermer en les verrouillant lorsqu'on retire le tiroir de la caisse, l'ouverture du couvercle du tiroir ayant pour effet de deverrouiller les volets obturateurs et la fermeture du couvercle ayant pour effet de rearmer le dispositif de verrouillage;? Le volet obturateur est solidaire d'un secteur qui pivote, contre l'action d'un organe de rappel du volet en position de fermeture, autour d'un axe porte par une platine montee a l'interieur du couvercle, ledit secteur portant un doigt de commande traversant une lumiere en arc de cercle du couvercle et cooperant avec une butee fixe de la caisse pour ouvrir le volet lors de l'introduction du tiroir dans la caisse, et le dispositif de verrouillage automatique a armement comprend un bras pivotant autour du meme axe contre l'action d'un organe de rappel agissant dans le meme sens et tendant a appliquer ledit bras contre un ergot d'entrainement porte par le secteur dans une position telle que, lors de la fermeture du couvercle, ce bras appuie sur l'extremite superieure d'une tige verticale de blocage traversant librement la platine et enfonce elastiquement ladite tige contre l'action d'un organe de rappel tendant a soulever celle–ci, l'amplitude des mouvements angulaires respectifs.du secteur et du bras pivotants etant telle que ladite tige echappe au bras pour venir porter sous le secteur lorsque ces deux organes pivotent ensemble dans le sens de l'ouverture sous l'action conjuguee.du doigt du secteur et de la butee fixe de la caisse lors de l'introduction du tiroir dans la caisse, puis echappe au secteur apres avoir arrete le bras lorsque ces deux organes pivotent dans le sens de la fermeture, lors du retrait du tiroir, de sorte que ladite tige

s'insere alors en se soulevant entre lesdits organes pour s'opposer a tout mouvement ulterieur du secteur dans le sens de l'ouverture du volet. [Source: Claim 1] RESLlliE The present invention relates to a coin pieces collector piers in bulk – particularly characterized by the following main points, regarded isolation or according to all possible combinations 1 li has a mechanical sorter is a disc obliquely arranged in the bottom of a reception basket, drives a continuous rotation around its axis presenting Labrador has its periphery of alveoli: anguiairement space compliant and sized to admit a room and each one, a fixed plate situated immediately under the disk parallel to him and presenting at its upper part, next to the alveoli of the disk, openings in an arc width gradually increasing health every width corresponding to the diameter of a different coin and a series of conveying channels of the rooms whose entrances are below said plate facing said openings; 2 said cells have the general form of a sector 90; –_ 3 are beveled edges of said alveoli; On each of the parts Exhaust canai is placed a head –to reading an electronic detector of passage, allowing a selection of the currency pieces on the dune base or more characteristics such as thickness, weight, characteristic – physical and magnetic of matter, no centrai hole, etc.; 5 Each channel, routing of parts comprises a display device introduced last parts, ably constitue.par a vertical corridor sensitive or partially open and transparent manner that is of parts that are visible through it from the outside, the said corridor section being partially obstructed by a retractable retaining body against the action of a suitably tare return member for said body retenue.ne eclipse is that under the weight of a number of parts, so that 'a– same number of Tests currency constantly visible pieces in the said channel; 6 parts of routing channels lead a– safes constitutes a fixed cash in which is housed a drawer with a lid hinges, lock a security interest to condemn the lid on the tray and another lock – of tart to condemn the drawer in the chest, said lid presenting openings against which open channels which cross the corresponding wall of the fixed drum, each of these openings being blind stopper ble by a mobile shutter associated to a device Automatic locking arms was able to open the flaps shutters when introducing the firm in the cash drawer and close by locking when removing the drawer of the cash register, open the drawer cover with the effect of the unlock flap valves and closing the lid has the effect of resetting the locking device;? The shutter is integral with a sector which is pivoted, against the action of a biasing member of the shutter in the closed position, about a pin carried by a plate mounted on the inside of the lid, said area having a control finger across a circular arc light cover and cooperating with a fixed butee of the box to open the door during the introduction of the drawer in the chest, and the automatic locking device has armament comprises a pivoting arm around same axis against the action of a restoring member acting in the same direction and tending to apply said arm against a drive stud carried by the sector in a position such that when the lid is closed, the arm presses The upper end of a vertical locking rod passing freely through the plate and presses elastically the said rod against the action of a return member tending to lift it, the amplitude of the angular movements of the arm and sector respectifs.du swivel being such that said stem escaped the arm for engaging in the sector when these two bodies rotate together in the direction of opening by the action of the finger conjuguee.du sector and fixed butee of the fund during the introduction of the cash drawer, and then escaped to the area after having stopped the arm when the two bodies rotate in the direction of closing, when removing the drawer, so that the rod is then inserted in between said lifting bodies oppose any subsequent movement of the sector in the direction of opening the shutter.

0) US3401780A – ELECTRICAL COIN TESTER

23) Family number: 44941163 (US3401780A) © PatBase

Title: ELECTRICAL COIN TESTER

Priority: FR19652600715 19651231 FR19650000715 19651231

Family:

Publication number	Publication date	Application number	Application date
DE1474736 A1	19690703	DE19661474736	19661229
DE1474736 B2	19730208	DE19661474736	19661229
DE1474736 C3	19730830	DE1966C041092	19661229
FR1472142 A	19670310	FR19652600715	19651231
GB1170417 A	19691112	GB19660056430	19661216
US3401780 A	19680917	US19660602992	19661219

Probable Assignee: CROUZET SA

Assignee(s):(std)**:** CROUZET SA

Assignee(s): FA CROUZET ; FA CROUZET PARIS ; CROUZET ; CROUZET FA

Inventor(s):(std)**:** JEAN JULLIEN DAVIN

Inventor(s): JULLIEN DAVIN JEAN

International class (IPC 8–9)**:** G07D5/00 G07D5/08 (Advanced/Invention); G07D5/00 (Core/Invention)

International class (IPC 1–7)**:** G07F3/02

CPC: G07D5/08 G07D5/02

European class: G07D5/00

US class: 194/100 194/319 194/346

Classification Explorer

Cited documents: US3152677 A, US3059749 A, US1910963 A, GB455362 A, BE499465 A,

Forward Citations: WO9001753, US5579887, US5496212, US5390776, US4984670, US4936435, US4635832, US4574936, US4460080, US4441602, US4432447, US4275806, US4257512, US4226323, US3741363, GB2308004, FR2473198, FR2464525, FR2448752, FR2042780, DE2350991, DE2350989, DE2015058, DE1774999,

Abstract:
Source: US3401780A ABSTRACT OF THE DISCLOSURE A coin selector having coin–switching means for conveying the coins in either of two directions, two coin–exit channels disposed downstream of said coin–switching means, and test means disposed upstream of said coinswitching means for actuating the latter and comprising means responsive to a variation of impedance produced by a coin to be tested and control means responsive to the motion of each coin to be tested as said coin passes through a test location, so as to actuate said impedance variation responsive means.

0) GB1163137A – TESTING THE AUTHENTICITY OF BANKNOTES.

24) Family number: 56087 (GB1163137A) © PatBase

Title: Testing the Authenticity of Banknotes.

Priority: DE1965T030005 19651211 DE1966T032183 19661001

Family:

Publication number	Publication date	Application number	Application date
BE690919 A	19670516		19661208
CH471426 A	19690415	CH19660017619	19661209
DE1474903 A1	19690904	DE19651474903	19651211
DE1474903 B2	19720907	DE19651474903	19651211
DE1524694 A1	19710121	DE19661524694	19661001
FR1504951 A	19671208	FR19660086900	19661209
GB1163137 A	19690904	GB19660054718	19661207
NL6616042 A	19670612	NL19660016042	19661114
SE361372 B	19731029	SE19660016676	19661206

Probable Assignee: REGA GMBH AND CO KG

Assignee(s):(std)**:** REGA GMBH AND CO KG ; THURNBERGER P ; THURNBERGER PAUL

Assignee(s): PAUL THURNBERGER ; THURNBERGER P OE ; REGA REGELUNGS U STEUERUNGSTECHNIK GMBH AND CO KG ; REGA REGELUNGS UND STEUERUNGSTECHNIK GMBH AND CO KG ; REGA REGELUNGS UND STEUERUNGSTECHNIK GMBH AND CO KG SELIGENTHAL MUENCHSHECKE

Inventor(s):(std)**:** PETER VETTER DIPL ING KLAUS ; THURNBERGER PAUL ; VETTER K P ; KLAUS PETER VETTER DIPL ING ; VETTER KLAUS PETER ; VETTER KLAUS PETER DIPL ING

Inventor(s): PAUL THURNBERGER ; VETTER K P OE

International class (IPC 8–9): G01N21/86 G01N21/956 G01N22/00 G07D7/02 G07D7/12 G07D7/16 G07D7/20 (Advanced/Invention) ; G01N21/86 G01N21/88 G01N22/00 G07D7/00 (Core/Invention)

International class (IPC 1–7): G07D7/00 G07F7/00 G07F7/04

CPC: G01N21/86 G01N21/956 G01N22/00 G07D7/026 G07D7/12 G07D7/164 G07D7/20

European class: 90QB5G 90QB5N G01N21/86 G01N21/956 G01N22/00 G07D7/02C G07D7/12 G07D7/16C G07D7/20

Classification Explorer

Forward Citations: WO9909528, WO9909527, WO9849657, WO9849655, FR2179270, EP1004097, EP1002300, EP0978107, EP0708420, EP0073133, DE2947958, DE2423094, DE2350991, DE102013009700, DE102013009700, DE102008024811, CN103971446,

Abstract:
Source: GB1163137A 1,163,137. Authenticating bank notes. P. THURNBERGER. Dec.7, 1966 [Dec.11, 1965; Oct.1, 1966], No.54718/66. Heading G1A. Apparatus for determining whether bank notes have been produced by simultaneous printing and include steel gravure printed areas, comprises an arrangement for checking the registration of the printing on both sides, and a means for measuring variations in thickness arising from the steel gravure printing. Both sides of the note are scanned in synchronism by a photoelectric system and the resulting signals are compared, and the thickness is subsequently measured by a feeler attached to a pressure sensitive transducer such as a Piezo–electric crystal or a strip extensometer. The thickness may be gauged by a pair of feeler capacitor electrodes connected in a high–frequency resonant circuit, and the boundary dimensions may be verified by a plurality of contacts mounted on an insulator on one side of a note and a conductive plate on the other additional contacts across the note may be used to reveal torn or holed notes. The surface may additionally be photo–electrically inspected for reflectance and colour. Reference signals may be on a magnetic tape.

0) US3495066A – ELECTRIC–ARC WELDING WITH A PROTECTIVE GAS FLUX...

25) Family number: 30993399 (US3495066A) © PatBase

Title: ELECTRIC–ARC WELDING WITH A PROTECTIVE GAS FLUX

Priority: CA19750225805 19750423 CA19780317962 19781214 FR19657525514 19650721 FR19667546080 19660117 US19740482860 19740625 FR19667569565 19660715

Family:

Publication number	Publication date	Application number	Application date
BR7503987 A	19760706	BR19750005128D	19750625
CA1064621 A1	19791016	CA19780317962	19781214
CA1064621 A2	19791016	CA19780317962	19781214
CA1066416 A1	19791113	CA19750225805	19750423
DE1565426 A1	19700305	DE1966B088118	19660721
DE2525484 A1	19760115	DE19752525484	19750607
DE2525484 C2	19870813	DE19752525484	19750607
FR1488981 A	19670721	FR19650025514	19650721
FR2276638 A1	19760123	FR19750015095	19750506
FR2276638 B1	19771209	FR19750015095	19750506
FR90376 E	19680214	FR19667546080	19660117
FR90492 E	19671222	FR19667569565	19660715
GB1161011 A	19690813	GB19660032105	19660718
GB1496089 A	19771221	GB19750022916	19750523
IT1039309 A	19791210	IT19750024648	19750623
JP1239900 C3	19841113	JP19750072782	19750617
JP51014239 A2	19760204	JP19750072782	19750617
JP59011144 B4	19840313	JP19750072782	19750617
US3495066 A	19700210	US19660566676	19660720
US3937925 A	19760210	US19740482860	19740625

Probable Assignee: IBM

Assignee(s):(std): BROYARD YVON ; GUETET ROBERT ; IBM ; RENE NAUTRE ; YVON BROYARD ; NAUTRE RENE ; ROBERT GUETET

Assignee(s): INTAANASHONARU BIJINESU MASHIINZU CORP ; INT BUSINESS MACHINES CORP ARMONK N Y US ; IBM CORP ; INT BUSINESS MACHINES CORP ; INTERBOLD A NY GENERAL PARTNERSHIP ; BOOTHROYD WILLIAM A

Inventor(s):(std): BOOTHROYD W ; BOOTHROYD WILLIAM A ; BOOTHROYD WILLIAM ARNOLD ; BROYARD YVON ; GUETET ROBERT ; NAUTRE RENE ; UIRIAMU EI BUUSUROIDO ; WILLIAM A BOOTHROYD

Inventor(s): YVON BROYARD ; ARNOLD BOOTHROYD WILLIAM ; RENE NAUTRE ; ROBERT GUETET ; BOOTHROYD WILLIAM ARNOLD SAN JOSE CALIF

International class (IPC 8–9): B23K10/02 B23K9/173 B23K9/29 G06F15/00 G06F15/02 G06F7/00 G06K7/08 G06Q20/00 G06Q20/18 G06Q40/00 G07F19/00 G07F7/08 (Advanced/Invention); B23K10/02 G06F15/00 G06F7/00 G06K7/08 G06Q20/00 G06Q40/00 G07F19/00 G07F7/08 (Core/Invention)

International class (IPC 1–7): B23K28/00 B23K35/38 B23K9/00 B23K9/16 G06F13/00 G06F15/02 G06F15/20 G06F15/30 G06F3/04 G06F7/00 G06F9/00 G06F9/06 G06K17/00 G06K5/00 G06K7/08 G07D1/00 G07D1/04 G07F7/08 G07F7/10

CPC: B23K9/291 B65H31/3027 B23K9/173 G06Q40/02 B23K10/02 G06Q20/18 G07F19/20 G07F19/201 G07F19/209

European class: B23K10/02 B23K9/173 B23K9/29G G06F17/60D2 G06Q20/18 G06Q40/02 G07F19/00F G07F19/20 G07F19/201 G07F19/209

US class: 219/137R 219/74 235/379 346/22 902/16 902/17 902/20 902/40

Classification Explorer

Cited documents: US3852571 A, US3845277 A, US3818187 A, US3710324 A, US3705384 A, US3648020 A, US3629834 A, US3082314 A, US3053967 A, US3027446 A, JP44005787 A2, FR2179785 A1, FR2128848 A1, DE2127815 A1,

Forward Citations: WO8603289, WO8101477, WO7901055, US9676049, US9437050, US9026578, US8959637, US8864028, US8809723, US8653402, US8630942, US8600890, US8600889, US8600888, US8600887, US8583522, US8571952, US8554677, US8543507, US8229844, US8190513, US8156448, US8132715, US8132714, US8065600, US7890604, US7837101, US7802718, US7793830, US7699220, US7621444, US7617973, US7600677, US7597251, US7597248, US7596782, US7594001, US7591420, US7581112, US7575158, US7574653, US7571850, US7568205, US7530058, US7518084, US7493397, US7464386, US7451352, US7428725, US7415524, US7380250, US7291802, US7216294, US7163144, US7162723, US7152045, US7110512, US7092501, US7076786, US7013340, US6945457, US6944797, US6915454, US6868408, US6856965, US6786398, US6785372, US6695204, US6660958, US6286756, US6149056, US6145738, US6122625, US6060690, US6047887, US6047067, US5963648, US5953423, US5920629, US5898154, US5799087, US5719383, US5623547, US5455407, US5453601, US5183999, US5105069, US5007083, US4980543, US4951245, US4788420, US4754126, US4729681, US4639889, US4616111, US4611277, US4597330, US4570223, US4554444, US4527038, US4517412, US4493962, US4468750, US4454405, US4439636, US4437158, US4395614, US4355369, US4320854, US4319336, US4319132, US4306137, US4305059, US4282424, US4262333, US4225779, US4221376, US4187498, US4186871, US4179031, US4166945, US4166940, US4163215, US4148012, US4141078, US4114027, US4109238, US4091448, US4090057, US4075460, US4025905, US3975712, US3811029, US2013126501, US2009307775, US2009277878, US2009199044, US2009055315, US2009049529, US2009048975, US2008093443, US2008093440, US2008093439, US2008067239, US2008067238, US2008067237, US2008067234, US2008065540, US2008061135, US2008061134, US2008061133, US2008061132, US2008061130, US2008061129, US2007251923, US2007121851, US2006156389, US2006151442, US2006020883, US2005278351, US2005268292, US2005256933, US2005256924, US2005256834, US2005251380, US2005211764, US2005193097, US2005091230, US2004073873, US2004037634, US2003233477, US2003105725, US2003097639, US2003018827, US2002061092, US2002059321, JP6232062, JP61061479, JP61048070, JP60070782, JP59045580, JP53017860, JP52058036, GB2268605, FR2526601, FR2514279, FR2508680, FR2471941, FR2471940, FR2417803, FR2416762, EP2085936, EP0391059, EP0077705, EP0036266, EP0033210, EP0031736, EP0025181, EP0005630, EP0005576, EP0003702, DE8814238, DE3519384, DE3411373, DE3220949, DE3118687, DE3034542, DE2833264, DE2815591, CN102324136,

Abstract:
Source: US3495066A ABSTRACT OF THE DISCLOSURE Welding process and torch using a consumable electrode and an inert gas flow forming a protective sheath around said electrode and the arc issued therefrom, wherein said flow is formed as a free spiral vortex coaxial with said electrode and arc and rotating in a direction such that the electron deviation by the electromagnetic field created by said vortex ionised by the arc will be axipetal.

0) GB1079981A – IMPROVED COIN HANDLING DEVICE

26) Family number: 23057469 (GB1079981A) © PatBase

Title: Improved coin handling device

Priority: GB19650027451 19650629

Family:

Publication number	Publication date	Application number	Application date
GB1079981 A	19670816	GB19650027451	19650629

Probable Assignee: JOHNSON FARE BOX COMPANY

Assignee(s):(std)**:** JOHNSON FARE BOX COMPANY

Assignee(s): JOHNSON FARE BOX CO

Inventor(s):(std)**:** GOLLAND WESLEY ARTHUR ; GRIESEMER RAYMOND HARRY

International class (IPC 8–9)**:** G07D3/10 (Advanced/Invention); G07D3/00 (Core/Invention)

International class (IPC 1–7)**:** G07D9/04

CPC: G07D3/10

European class: G07D3/10

Classification Explorer

Forward Citations: WO04029886, GB2214683, EP1903511,

Abstract:
Source: GB1079981A 1,079,981. Coin counting and sorting. JOHNSON FARE BOX CO. June 29, 1965, No. 27451/65. Heading G4X. A coin counter and sorter comprises a hopper 25 from which loose coins are conveyed intermittently to a second hopper and thence to sorting and counting mechanism from which they are discharged to appropriate coin compartments, the counting mechanism being connected with a totalizer and printer. In operation a card is inserted through slot 31 to rest on a stop 197 and arm 43 is raised, closing switch 205 to prepare the energizing circuit for the sorting and counting mechanism. Arm 37 is moved to the right thereby printing on the card the initial total and closing switch 237 to complete the circuit and thus energize conveyer and counter motors (61, 117) respectively (Figs. 15, 14, not shown). An interlock 131 permits movement of lever 37 to the right or left only when arm 43 is in its upper or lower position respectively. Coins are conveyed from hopper 25 to counter hopper (101) (Fig. 3, not shown), the conveyer motor (61) being stopped by coins closing a switch (401) when hopper (101) contains a predetermined level of coins. A four–minute tone cycle ensures that the apparatus will not be stopped in its entirety while it still contains unsorted coins. Coins pass from the counter, which is substantially as disclosed in U.S.A. Specification 1,295,900, down shoot 271 to the sorter. The counter motor (117) shakes a downwardly inclined sorter plate (246) (Fig. 13, not shown) having apertures allowing dimes and nickels to fall respectively down shoots 255, 257 into compartments 47, 49, quarters falling off the end of the plate into compartment 51. When all the coins have been counted and sorted arm 43 is moved to its closed, lower position thereby raising the card stop 197 so that a closing reading may be printed above the initial total as the arm 37 is moved to the left.

0) US3373856A – METHOD AND APPARATUS FOR COIN SELECTION

27) Family number: 276101 (US3373856A) © PatBase

Title: METHOD AND APPARATUS FOR COIN SELECTION

Priority: CA19660950098 19660118

Family:

Publication number	Publication date	Application number	Application date
DE1474735 A1	19690828	DE19661474735	19661212
GB1154219 A	19690604	GB19660055830	19661213
US3373856 A	19680319	US19660551992	19660523

Probable Assignee: CANADIAN PATENTS DEV

Assignee(s):(std)**:** CANADIAN PATENTS DEV

Assignee(s): CANADIAN PATENTS AND DEVELOPMENT LIMITED ; CANADIAN PATENTS AND DEVELOPMENT LTD

Inventor(s):(std)**:** KUSTERS NORBERT L ; LEO KUSTERS NORBERT ; MACMARTIN MALCOLM P ; PEARSON MACMARTIN MALCOLM

International class (IPC 8–9)**:** G07D5/08 (Advanced/Invention) ; G07D5/00 (Core/Invention)

International class (IPC 1–7)**:** G07D5/00 G07F3/02

CPC: G07D5/08

European class: G07D5/00

US class: 194/100 194/318

Classification Explorer

Cited documents: US3059749 A, US3020472 A, US2642974 A, US2329810 A,

Forward Citations: USD716157, USD705090, US9652921, US9494922, US9443236, US9406056, US8807317, US8770371, US8727207, US8636133, US6556090, US6382386, US6325197, US6227343, US5579887, US5573099, US5475373, US5379875, US5360095, US5273151, US5244070, US5222076, US5139128, US5119916, US5103957, US5067604, US5060777, US4967895, US4936435, US4895238, US4880097, US4870360, US4827206, US4823928, US4371073, US4356903, US4353452, US3933232, US3869663, US3788440, US3741363, US3738469, US3682286, US3599771, US3596744, JP50030597, FR2513413, EP0119712, EP0072655, DE2627034, DE2350991, DE2350990,

Abstract:
Source: GB1154219A 1,154,219. Testing coins. CANADIAN PATENTS and DEVELOPMENT Ltd. 13 Dec., 1966 [18 Jan., 1966], No. 55830/66. Headings G4V and G4X. A method of testing coins and selecting those coins of a predetermined denomination irrespective of whether the coins contain magnetic or non–magnetic material comprises passing an alternating magnetic field through the coin to be tested, detecting the variation in field strength due to the coin and applying the detected signal to discriminating means so that coins causing a variation within predetermined limits are accepted and all others rejected, the frequency of the magnetic field being chosen so that the variation in field strength will be substantially the same for both types of coin of said predetermined denomination. The coin 19 passes between an energizing circuit 22 generating an alternating magnetic field and a detection winding 25. An additional winding 27 encircling the coin may be connected in series with the detection winding. The alternating voltage induced in the winding 25 is rectified and applied to peak detectors 30, 31. If the value of the induced voltage lies between the limits set by peak detectors 30, 31 logic circuit 32 is operated to energize relay 34 controlling a deflector in the path of the coin.

0) US3587809A – COIN TESTER WITH SLOTTED COIN GUIDE DUCT

28) Family number: 26051876 (US3587809A) © PatBase

Title: COIN TESTER WITH SLOTTED COIN GUIDE DUCT

Priority: CH19680001676 19680205

Family:

Publication number	Publication date	Application number	Application date
AT287367 B	19710125	AT19690000548	19690120
BE727664 A	19690701		19690130
CH459629 A	19680715	CH19680001676	19680205
DE1902807 A1	19690911	DE19691902807	19690121
ES362938 A1	19701116	ES19690362938	19690125
FR2001311 A1	19690926	FR19690001901	19690130
GB1261963 A	19720202	GB19690005038	19690129
NL6901509 A	19690807	NL19690001509	19690130
SE360765 B	19731001	SE19690000601	19690117
US3587809 A	19710628	US19690795609	19690131

Probable Assignee: AUTELCA AG

Assignee(s):(std)**:** AUTELCA AG

Assignee(s): AUTELCA AG CH ; AUTELCA CH AG ; AUTELCA A G

Inventor(s):(std)**:** MELONI M ; MELONI M CH ; MELONI MARIO DIPL ING ; MELONI MARIO ; MELONI DIPL ING MARIO

Inventor(s): MELONI DIPL INGMARIO ; MARIO MELONI

International class (IPC 8–9)**:** G07D5/00 G07D5/08 H01L23/31 (Advanced/Invention); G07D5/00 H01L23/28 (Core/Invention); G07D G07F (Subclass/Invention)

International class (IPC 1–7)**:** G07D5/00 G07F3/00 G07F3/02

CPC: G07D5/08

European class: G07D5/00 G07D5/08

US class: 194/100 194/319

Classification Explorer

Forward Citations: US6920972, US6227343, US6026946, US5273151, US5244070, US4936435, US4705154, US4359148, US4354587, US4334604, US3977508, US3952851, US3920149, US2003217905, GB2313693, GB2221332, GB2221332, GB2184279, GB2184279, DE2158025,

Abstract:
Source: GB1261963A 1,261,963. Coin testing. AUTELCA A.G. 29 Jan., 1969 [5 Feb., 1968], No. 5038/69. Heading G4V. A coin tester comprises a longitudinallyslotted coin shoot 1 surrounded by an induction coil 3 of an oscillator circuit 5 whose signal is temporarily changed by the passage of a coin, such that the acceptance of the coin depends on the change of signal. The tester identifies two different coin denominations, using two coils 3 and 4, connected to oscillators 5 and 6, and monostable multivibrators 9 and 10, respectively. Passage of a correct coin causes the corresponding oscillator to stop oscillating, whereupon its multivibrator supplies an extended pulse. The pulse from multivibrator 9 continues until the coin has passed coil 4, and the pulse from multivibrator 10 has at least twice that length. The former pulse blocks an inhibit gate 12, and is also differentiated at 14 and inverted at 15 so that the peak occurring at the end of the pulse reaches an inhibit gate 17 after the coin has passed coil 4. If gate 17 has not been blocked by the coin having stopped the oscillator 6 oscillating as well as the oscillator 5 the peak passes the gate to signal coin acceptance. When oscillator 6 is stopped oscillating it sends an accept signal through gate 12, unless it has been blocked by the coin stopping the oscillations of oscillator 5. The longitudinal slot (not shown) of the shoot extends from above coil 3 to below coil 4, and may be filled with insulating material.

0) US3496370A – BILL VALIDATION DEVICE WITH TRANSMISSION AND CO...

29) Family number: 703898 (US3496370A) © PatBase

Title: BILL VALIDATION DEVICE WITH TRANSMISSION AND COLOR TESTS

Priority: US19660550481 19660516

Family:

Publication number	Publication date	Application number	Application date
GB1164527 A	19690917	GB19670021567	19670509
US3496370 A	19700217	US19660550481	19660516

Probable Assignee: ADVANCE DATA SYSTEMS CORP

Assignee(s):(std)**:** ADVANCE DATA SYSTEMS CORP ; LITTON INDUSTRIES INC

Inventor(s):(std)**:** BAYNE ROBERT T ; HAVILLE GEORGE D

Inventor(s): ROBERT T BAYNE ; GEORGE D HAVILLE

International class (IPC 8–9): G07D7/00 (Advanced/Invention) ; G07D7/00 (Core/Invention)

International class (IPC 1–7): G01N21/32 G07D7/00

CPC: G07D7/00

European class: G07D7/00

US class: 209/534 250/219 250/556

Classification Explorer

Cited documents: US3360653 A, US3248549 A, US3109100 A, US3045364 A, US3020793 A, US2950799 A, US2941187 A,

Forward Citations: WO9941695, WO9909511, WO9103031, USRE44252, US9558418, US9495808, US9477896, US9390574, US9355295, US9195889, US9189780, US9142075, US9141876, US9129271, US8958626, US8950566, US8948490, US8944234, US8929640, US8787652, US8781206, US8714336, US8701857, US8655046, US8655045, US8644585, US8644584, US8644583, US8639015, US8627939, US8625875, US8594414, US8559695, US8542904, US8538123, US8514379, US8478020, US8478019, US8467591, US8459436, US8442296, US8437532, US8437531, US8437530, US8437529, US8437528, US8433123, US8428332, US8417017, US8401268, US8396278, US8391583, US8380573, US8339589, US8331643, US8204293, US8169602, US8162125, US8126793, US8125624, US8103084, US8041098, US7980378, US7946406, US7938245, US7929749, US7903863, US7882000, US7881519, US7817842, US7778456, US7735621, US7672499, US7650980, US7647275, US7619721, US7590274, US7584883, US7559460, US7551764, US7542598, US7536046, US7513417, US7391897, US7366338, US7362891, US7349566, US7269279, US7248731, US7232024, US7200255, US7187795, US7158662, US7149336, US7016767, US7000828, US6996263, US6994200, US6980684, US6959800, US6957733, US6955253, US6929109, US6915893, US6913130, US6880692, US6866134, US6860375, US6843418, US6810137, US6778693, US6774986, US6766045, US6748101, US6731786, US6724927, US6724926, US6721442, US6678402, US6678401, US6665431, US6661910, US6654486, US6650767, US6647136, US6637576, US6636624, US6628816, US6621919, US6603872, US6601687, US6588569, US6573983, US6493461, US6459806, US6398000, US6381354, US6378683, US6363164, US6351551, US6337921, US6318537, US6311819, US6278795, US6256407, US6241069, US6237739, US6220419, US6101266, US6072896, US6039645, US6026175, US5992601, US5982918, US5966456, US5960103, US5940623, US5912982, US5909503, US5905810, US5875259, US5870487, US5867589, US5832104, US5822448, US5815592, US5790697, US5790693, US5724438, US5652802, US5633949, US5498879, US5367577, US4990790, US4618257, US4547896, US4371071, US4288781, US4255057, US4222064, US4179685, US4025420, US4016980, US3778628, US3734286, US3679314, US3670169, US2011206267, US2011087599, US2010163366, US2010092065, US2010063916, US2010057617, US2010051687, US2010034454, US2009320106, US2009313159, US2009310188, US2009022390, US2008220707, US2008123932, US2008033829, US2007269097, US2007258633, US2007119681, US2007112674, US2007102863, US2007071302, US2006274929, US2006182330, US2006140468,

US2006086784, US2006038005, US2005213803, US2005108165, US2005060061, US2005035034, US2004251110, US2004182675, US2004028266, US2004016797, US2004016621, US2003210386, US2003182217, US2003174874, US2003121752, US2003081824, US2003059098, US2003015396, US2003015395, US2002126885, US2002085745, US2002020603, JP52047788, JP51003694, JP49074083, JP49009260, GB2393059, GB2119506, EP1903513, EP1490828, EP1480177, EP1107167, EP1073986, EP1008096, EP0875866, EP0069893,

Abstract:
Source: US3496370A ABSTRACT OF THE DISCLOSURE A currency verifier wherein, in addition to measuring light transmitted through a plurality of shaped areas, the color balance and reflectance of the bill are checked. Color balance is checked by illuminating a selected spot on the bill, the reflected light is measured by a pair of photocells, each through a different colored filter. Reflectance is measured by comparing the light reflected from a standard reflectance surface with the light reflected from a selected spot on the bill. Both the spot and standard reflector are illuminated by a common lamp. Comparing circuits are provided to pass the bill if the color balance and reflectance fall within predetermined limits.

30) Family number: 483061 (US3469365A) © PatBase

Title: COIN HANDLING APPARATUS AND MEANS TO DETECT IRREGULARITIES IN THE OPERATION THEREOF

Priority: JP19660070962 19661027

Family:

Publication number	Publication date	Application number	Application date
DE1574163 A1	19711104	DE1967T035119	19671026
DE1574163 B2	19780608	DE1967T035119	19671026
DE1574163 C3	19790208	DE1967T035119	19671026
GB1177669 A	19700114	GB19670048818	19671026
US3469365 A	19690930	US19670008082	19671025

Probable Assignee: TENSHIN MFG MACHINE CO

Assignee(s):(std): TENSHIN KAHEI KEISANKI KABUSHI ; TENSHIN KAHEI KEISANKI KK ; TENSHIN MFG MACHINE CO

Assignee(s): TENSHIN KAHEI KEISANKI K K ; TENSHIN MANICOUNTING MACHINE CO ; TENSHIN KAHEI KEISANKI KABUSHIKI KAISHA

Inventor(s):(std): KOKUBO EIICHI ; MIYAYAMA SHIGERU ; MIYAYAMA SHIGORU ; OOSAKO KYOICHI ; UCHIDA ISAMU ; WATANABE KENKICHI ; WATANABE KONKICHI ; OSAKO KYOICHI

Inventor(s): SHIGERU MIYAYAMA ; WATANABE KONKICHI KAWASHAKI KANAGAWA ; OOSAKO KYOICHI TOKIO ; KOKUBO EIICHI URAWA SAITAMA ; KYOICHI OSAKO ; EIICHI KOKUBO ; ISAMU UCHIDA ; KENKICHI WATANABE

International class (IPC 8–9): G07D9/06 (Advanced/Invention); G07D9/06 (Core/Invention)

International class (IPC 1–7): B65B57/10 B65B57/18 G07D9/00

CPC: G07D9/065

European class: G07D9/06B

US class: 53/494 53/500 53/507 53/532 53/54 53/540

Classification Explorer

Cited documents: US751246 A, US3416291 A,

Forward Citations: US4979357, US4835938, US4729211, US4409773, US4307556, US4235061, US4058954, US3530638, JP52008754, JP51127892, GB2135911, DE3013640, DE2644753, DE2401339, DE2362069,

Abstract:
Source: US3469365A ABSTRACT OF THE DISCLOSURE A coin handling machine with a centrifugal coin supply feeding a coin selector which passes selected coins through a counting means to a coin stacking device wherein the stacks of coins are measured and if of proper size are transported to a wrapping device whereat the stacks are wrapped. Two sources of power are provided one of which drives the coin supply, the other source of power driving the wrapping and transport means. A monitoring device is provided responding to irregularities in the operation of the machine to perform certain control functions. According to one aspect of the monitoring device, it responds to the monitoring device to detect a short stack of coins after a predetermined number of coins has been counted. According to another aspect, a supply of wrapping material used in the wrapping operation is used to control a switch in order to detect when the supply of wrapping material is not being properly effected. In addition, at least one of the sources of power includes a shaft on which are mounted cams which control electrical switches in turn controlling the electrical circuit of the device, this electrical circuit including interdependent relays which control the operation of the machine. Drawing Figure 1 is a perspective view of the entire structure of a coin counting and wrapping machine in which the present invention is embodied; Figure 2 is a fragmentary plan view showing the arrangement of a coin selecting mechanism, coin feed mechanism and coin counting mechanism; Figure 3 is a fragmentary side elevation, partly in section, of a coin stacking section; Figure 4 is a front elevation of the coin stacking section; Figure 5 is a plan view of the coin stacking section shown in Fig. 4; Figure 6 is a side elevation of switch means provided for detecting an incomplete coin stack; Figure 7 is a plan view of a coin wrapping mechanism; Figure 8 is a plan view of a drive gear train; Figure 9 is a horizontal cross sectional view through a plane below the drive gear train shown in Fig. 8; and Figure 10 is a wiring diagram of an electric control circuit. Detailed description

0) GB1255492A – COIN TESTING AND ACCEPTING OR REJECTING DEVICES...

31) Family number: 295650 (GB1255492A) © PatBase

Title: COIN TESTING AND ACCEPTING OR REJECTING DEVICES

Priority: GB19680009777 19680229

Family:

Publication number	Publication date	Application number	Application date
AU206951011 A1	19701022	AU19690051011	19690226
DE1908671 A1	19691120	DE19691908671	19690221
FR2002889 A1	19691031	FR19690005091	19690227
GB1255492 A	19711201	GB19680009777	19680229

Probable Assignee: BRECKNELL DOLMAN AND ROGERS LT

Assignee(s):(std)**:** BRECKNELL DOLMAN AND ROGERS LT ; BRECKNELL DOLMAN AND ROGERS LTD ; BRECKNELL DOLMAN ROGERS

Assignee(s): BRICKNELL DOLMAN AND ROGERS LTD ; BRECKNELL DOLMAN AND ROGERS LIMITED

Inventor(s):(std)**:** DOLMAN HENRY JAMES ; JAMES DOLMAN HENRY

Inventor(s): HENRY JAMES DOLMAN

International class (IPC 8–9): G07D3/14 G07D5/00 G07D5/02 G07F3/02 (Advanced/Invention) ; G07D3/00 G07D5/00 (Core/Invention)

International class (IPC 1–7): G07D5/00 G07F3/00 G07F3/02

CPC: G07D3/14 G07D5/00

European class: G07D3/14 G07D5/00

Classification Explorer

Forward Citations: US9594982, US9589407, US9536367, US9384616, US9330516, US9235945, US9230381, US9183687, US9036890, US9022841, US8967361, US8757349, US8678164, US8393942, US8336699, US8298052, US8006847, US7992720, US6168001, US4601380, GB2226678, GB2226678, FR2542475, EP1624976, EP1624976,

Abstract:
Source: GB1255492A 1,255,492. Coin testing and accepting/rejecting devices. BRECKNELL, DOLMAN and ROGERS Ltd. 4 Feb., 1969 [29 Feb., 1968], No. 9777/68. Headings G4V and G4X. A coin testing and accepting/rejecting device tests a plurality of physical characteristics (diameter, thickness, milled edge, electromagnetic characteristics and apertures) of each of a number of coins 18 of mixed denominations as they pass along a common path through the device, the coin being accepted only if all the tests are passed. The coins are subsequently sorted into denominations. If the coin is acceptable, each test produces an electrical signal which is fed to AND gates 170, 171, 172 (one corresponding to each coin denomination) which control the solenoid 116 of an accept/ reject means and a coin totalizer 182 controlling the solenoid 191 of a change giver (not shown) and the solenoid 187 of a ticket issuing or vending device (not shown). Coins 18 of mixed denominations (e.g. sixpence, shilling and two shillings) are fed via a shoot 26 on to the inclined face of a rotated disc 10 having lands 12 and a central boss 16 together defining coin holding areas 14, the disc 10 being enclosed by a housing 17 and a solenoidoperated cover 22 hinged at 21, 21 thereto. An electromagnet (not shown) picks ferromagnetic coins from the disc 10. Aperture testing.–A hole 8 is provided in the disc 10 at each coin holding area 14 and is arranged to pass between a lamp 7 and a photo transistor 15 which gives an output signal whenever it is not illuminated, i.e. a coin with a hole in it (or no coin at all) produces no signal. Diameter testing.–A bifurcated feeler plate 46, 47 is moved by contact with a coin 18 and is pivoted to a crank 50 provided with an arcuate toothed rack 53 engaging a pinion 54 fixed to a mask 55, so that movement of the feeler plate 46, 47 moves a reference aperture 56 in the mask 55 between three illuminated apertures and three photo transistors 57, 58, 59 in pre–set positions corresponding to the diameters of the three denominations of coins. The transistor 57, 58 or 59 which is illuminated passes an electrical pulse to the corresponding AND gate 170, 171 or 172. Polygonal coins are tested by providing two illuminated apertures for each coin denomination. Milled edge testing.–A knife–edge feeler 60 is urged by a spring 61 to project from the feeler 46, 47 by an amount limited by a pivoted arm 62 and slot 65. A projection 64 on the feeler 60 is disposed near a magnet 71 forming the core of a coil 70, so that a passing milled edge coin (which is prevented from rotating by a finger 13 on the land 12) will vibrate the feeler 60 and hence provide an electrical pulse fed to each of the AND gates 170, 171 and 172. Thickness testing.–A cam plate 81 carried by a tube 78 is lifted by a passing coin and rotates a pivoted lever 76 which rotates the pivoted mask 85 so that a reference aperture 86 therein moves between three illuminated holes

87, 88, 89 and three photo−diodes 91, 92, 93 in pre−set positions. The photo−diode which is illuminated passes an electrical pulse to the corresponding AND gate 170, 171 or 172. Electromagnetic testing.−A detector coil 100 is disposed within the tube 78 and is connected to a bridge circuit 102 comprising two resistors and another similar coil and a further resistor across the similar coil, such that the bridge is only balanced when a coin of acceptable electromagnetic characteristics is adjacent the coil 100 increasing the losses in the coil 100. The bridge is fed from an oscillator and the output fed to an amplifier and discriminator circuit 104 to provide an output signal only when the bridge is balanced, the signal passing to each of the AND gates 170, 171 and 172. Synchronizing testing circuits.−To prevent spurious signals from triggering the AND gates before the true signals have been passed to them, the milling detector 60 delays its output signal until the various testing circuits are giving their true signals (e.g. the diameter testing circuit will produce three signals in succession for a 2s. coin since the reference aperture 56 passes over the three illuminated apertures). If unmilled coins are used, an additional timer is used comprising a lamp 24 and photo transistor 38 arranged on opposite sides of the disc 10 aligned with holes 25 therein, and supplying a signal to each of the AND gates 170, 171 and 172. Coin accept/reject mechanism.−The solenoid 116 is energized by a signal from one of the AND gates 170−172 to lift a cam 112 which normally rests on the disc 10 in the coin reject position, so that the accepted coin passes to a coin shoot 110. A detector coil 123 has a metal core connected to the cam 112 so that a signal indicating that a coin has been accepted is passed to AND gates 177, 178 and 179 controlling the totalizer 182 c. Coin sorting.−The inclined back plate 130 of the coin shoot 110 has apertures 131 and 132 so that 6d. coins fall through aperture 131 into hopper 125, 1s. coins through aperture 132 into hopper 126, and 2s. coins continue into hopper 127. Coin totalizing and change giving.−Counters 183, 184 and 185 add the individual outputs from the AND gates 177, 178 and 179 and their outputs pass to the totalizer 182 which maintains a running total of coin value. When a pre−set coin value is reached, signals are passed to the solenoid 187 of the ticket (or goods) issuing device and to the solenoid 140 which via linkage moves the floors 135, 136 and 137 of the hoppers 125, 126 and 127 to one side on their common shaft 138 to discharge the accumulated accepted coins of the transaction to a collection area of the machine. The accumulated accepted coins are instead discharged to a reject tray (not shown), by movement of the floors 135, 136 and 137 in the other direction if insufficient coins are inserted within a time controlled by an overall timer (153), Fig. IV (not shown). Operation.−Initially the disc 10 is stationary and the cover 22 is raised about hinge axis 20 from the disc housing 17, the hopper floors 135, 136 and 137 are deflected to communicate the hoppers with the reject tray, and no coins are present. When a coin is inserted through the shoot 26, coils 27 around the shoot are affected and cause oscillations in an oscillator which operates the timer 153 to energize all the circuits, to switch on the motor rotating the disc 10, to actuate the solenoid of the cover 22 to close it, and to move the hopper floors 135, 136 and 137 to a central coin−supporting position. The coin is then subjected to the electromagnet, tested, accepted or rejected, and then discharged into the machine or rejected. Preventing jamming.−Coins jammed together in the areas 14 are dislodged from the disc 10. by a biased arm disposed in the path of the outermost coin.

0) US3487905A – DOCUMENT VERIFICATION AND BANKING MACHINE

32) Family number: 987895 (US3487905A) © PatBase

Title: DOCUMENT VERIFICATION AND BANKING MACHINE

Priority: US19670619642 19670301 US19690808634 19690319

Family:

Publication number	Publication date	Application number	Application date
US3487905 A	19700106		19670301
US3635321 A	19720118	US19690808634	19690319

Probable Assignee: ALLIED AUTOMATION INC

Assignee(s):(std)**:** ALLIED AUTOMATION INC

Inventor(s):(std)**:** FRAZIER JAMES N SR ; JAMES FRAZIER N SR

Inventor(s): FRAZIER N JAMES SR ; JAMES N FRAZIER SR

International class (IPC 8–9)**:** G07D7/00 G07F17/42 G07F19/00 G07G5/00 (Advanced/Invention); G07D7/00 G07F17/00 G07F19/00 G07G5/00 (Core/Invention)

International class (IPC 1–7)**:** G07D1/00 G07D7/00 G07F1/06 G07F3/02 G07F7/00

CPC: G07F19/20 G06Q20/108 G07D7/00 G07F17/42 G07F19/202 G07G5/00 Y10T74/19879

European class: G06Q20/108 G07D7/00 G07F17/42 G07F19/00F G07F19/20 G07F19/202 G07G5/00

US class: 194/207 194/210 194/4 194/4C 209/111.8 209/534 235/433 346/22 356/72 700/213 705/42 708/541 708/682 74/436 902/11 902/18 902/36 902/7

Classification Explorer

Cited documents: US3485358 A, US3410384 A, US3275138 A, US3265205 A, US3180491 A, US3133641 A, US3108680 A, US3090485 A, US3072237 A, US3020994 A, US2950799 A, US2941187 A, US2922893 A, US2598448 A,

Forward Citations: US8851374, US7735621, US7551764, US7454363, US7431205, US7428983, US7275991, US7269279, US7232024, US7158662, US7016767, US6968997, US6959800, US6957733, US6955253, US6929109, US6880692, US6866134, US6860375, US6746330, US6736725, US6729958, US6729957, US6682156, US5310036, US5213425, US5113990, US4810866, US4734859, US4541057, US4340150, US4325277, US4322612, US4025420, US4023011, US3998155, US3990558, US3957173, US3925619, US3880320, US3873443, US3851744, US3778596, US3778595, US3768615, US3734261, US3624360, US3589514, US2011155805, US2008026823, US2007269097, US2007187486, US2006182330, US2006032913, US2005148386, US2005060061, US2005035034, US2005020353, US2004219974, US2004210453, US2004182675, US2004155105, US2003182217, US2003121752, US2003015395, JP58038835, JP53036358, JP50001239, FR2171969, FR2171969,

Abstract:
Source: US3487905A ABSTRACT OF THE DISCLOSURE This invention, relates to a document verifying machine and, in examples, relates specifically to such a machine adapted for use with a banking depository 15 machine, wherein tokens such as coins of various dénominations and documents, such as paper currency of various dénominations, may be inserted into the banking machine in any order desired. These are tested for their genuineness. In the case of currency, the sensings of currencies of various dénominations are sensed in one area, and the monetary values of the currencies deposited in the machine are incrementally shown on an indicator and are set up on printing wheels. If it is desired that the currencies be returned to the Operator, a switch is operated, as a resuit of which the indicator and the printing wheels are automatically re−stored to zero, and an escrow device in the machine is actuated to refund the deposit of currency. It it be desired that the currencies are to be accepted by the machine, then another switch is operated. As a resuit the escrow device transfers the deposited currency to a deposit receptacle. ; 3g Following this, duplicate receipt tickets are preferably imprinted with the amount accepted by the machine and are issued to the depositar, and the indicator and printing wheels are zeroized. Should the machine refuse to accept currency or other 40 documents deposited therein by reason of failure to be genuine, or otherwise, the currencies are not deposited in the escrow device but are refunded directly, and no charge occurs in the indicator or printing wheels. B

0) US3519802A – CARDS EMPLOYING CAPACITOR SENSING OF ENCODED DA...

33) Family number: 3747878 (US3519802A) © PatBase

Title: CARDS EMPLOYING CAPACITOR SENSING OF ENCODED DATA

Priority: FR19700020415 19700603 GB19700029220 19700616 US19680779447 19681127

Family:

Publication number	Publication date	Application number	Application date
FR2093151 A5	19720128	FR19700020415	19700603
GB1317959 A	19730523	GB19700029220	19700616
US3519802 A	19700707	US19680779447	19681127

Probable Assignee: SECURADYNE LTD

Assignee(s):(std)**:** SECURADYNE LTD

Inventor(s):(std)**:** CINQUE ALPHONSE ; SCHWEIZER MAX NORMAN

Inventor(s): ALPHONSE CINQUE ; MAX NORMAN SCHWEIZER

International class (IPC 8–9)**:** G06K19/067 G06K19/10 G07F7/00 G07F7/08 (Advanced/Invention); G06K19/067 G06K19/10 G07F7/00 G07F7/08 (Core/Invention)

International class (IPC 1–7)**:** B42D15/00 B42D15/02 G06K7/08 G07D1/00 G07D7/00

CPC: G06K19/067 G06K19/10 G07F7/00 G07F7/086

European class: 43A90 G06K19/067 G06K19/10 G07F7/00 G07F7/08B

US class: 235/451 235/488 235/492

Classification Explorer

Cited documents: US3387265 A, US2848163 A, US2774060 A, US2478274 A, US2294681 A,

Forward Citations: US8400426, US8098240, US6834251, US6202929, US6168080, US5453602, US5159181, US4501960, US4181251, US3872438, US3842194, US3699311, GB2185440,

Abstract:
Source: US3519802A ABSTRACT OF THE DISCLOSURE An improved credit card and the like which includes internally coded data by which it is possible to uniquely identify the proper holder of the card. The encoded data 15 takes the form of a plurality of conductive members hav–ing portions thereof in différent planes whereby, with the aid of external sensing means, it is possible to generate preselected areas of maximum and minimum capacitance within the card.

0) US3605970A – COIN RECEIVING AND REIMBURSING APPARATUS

34) Family number: 164731 (US3605970A) © PatBase

Title: COIN RECEIVING AND REIMBURSING APPARATUS

Priority: FR19690004035 19690218

Family:

Publication number	Publication date	Application number	Application date
CH502656 A	19710131	CH19700001231	19700128
DE2007006 A1	19700903	DE19702007006	19700216
DK128135 B	19740304	DK19700000763	19700217
ES376779 A1	19720501	ES19700376779	19700212
FR2032084 A5	19701120	FR19690004035	19690218
GB1238997 A	19710714		19700213
US3605970 A	19710920	US19700012014	19700217

Probable Assignee: TAXIMETRE TAXIPHONE

Assignee(s):(std)**:** APP AUTOMATIQUES TAXIMETRE TAX ; FR DES APP AUTOMATIQUES TAXIME ; SAFAA ; TAXIMETRE TAXIPHONE

Assignee(s): SOCIETE ANONYME FRANCAISE DES APPAREILS AUTOMATIQUES TAXIMETRE TAXIPHONE ; S A FRANCAISE DES APPAREILS AUTOMATIQUES ; SA FRANCAISE DES APPAREILS AUTOMATIQUES TAXIMETRE ; SA FRANCAISE DES APPAREILS AUTOMATIQUES TAXIMETRE TAXIPHONE

Inventor(s):(std)**:** CREPY EDOUARD DE ; DE CREPY E ; DE CREPY EDOUARD

Inventor(s): EDOUARD DE CREPY

International class (IPC 8–9)**:** G07F1/04 (Advanced/Invention); G07F1/00 (Core/Invention)

International class (IPC 1–7)**:** G07D1/00 G07D1/02 G07F1/00 G07F5/24 G07F9/00 G07F9/04

CPC: G07F1/047

European class: G07F1/04H

US class: 194/1 194/221 194/230 194/239 194/346 453/17

Classification Explorer

Forward Citations: US6712688, US5755618, US5735379, US3768615, GB2138192,

Abstract:
Source: US3605970A ABSTRACT OF THE DISCLOSURE An apparatus for receiving and paying back coins, 15 characterized in that it comprises at least one vertical plate having formed on its front face a Storage Channel of arcuate configuration, so that the coins inserted by the user into the apparatus can fall into the lower portion of this Channel and accumulate therein, a movable mem– 20 ber associated with said Channel and adapted to push the coins accumulated in said Storage Channel towards a hole formed in said piate at the upper end of said Channel, said hole being lined with a diverting member adapted to direct the coins towards a position overlying 25 the upper orifice of an inclined tube disposed in close proximity of the rear face of said piate and wherein the coins to be delivered for reimbursement purpose are accumulated. –30 B

35) Family number: 21971 (GB1316653A) © PatBase

Title: MECHANISM FOR FEEDING PAPER CURRENCY INTO A TESTER

Priority: BE19700749874 19700430 DE19691928248 19690603 DE19702062154 19701217

Family:

Publication number	Publication date	Application number	Application date
AT299589 B	19720626	AT19700003926	19700429
AT309859 B	19730910	AT19710007952	19710913
BE749874 A1	19701001	BE19700749874	19700430
BE773212 A4	19720117	BE19710773212	19710928
CH506145 A	19710415	CH19700007640	19700522
CH531224 A	19721130	CH19710013911	19710923
DE1928248 A1	19701217	DE19691928248	19690603
DE1928248 B2	19730412	DE19691928248	19690603
DE1928248 C3	19731031	DE19691928248	19690603
DE2062154 A1	19720713	DE19702062154	19701217
DE2062154 B2	19730809	DE19702062154	19701217
DE2062154 C3	19740328	DE19702062154	19701217
FR2056152 A5	19710514	FR19700011147	19700327
FR2118428 A6	19720728	FR19710019032	19710526
GB1316653 A	19730509	GB19700026769	19700603
GB1365161 A	19740829	GB19710055430	19711130
IT972054 A	19740520	IT19710031601	19711125
SE362157 B	19731126	SE19700006572	19700513
SE371905 B	19741202	SE19710012346	19710929
SE371905 C	19750313	SE19710012346	19710929

Probable Assignee: SCHEIDT AND BACHMANN GMBH

Assignee(s):(std)**:** SCHEIDT AND BACHMANN G M B H ; SCHEIDT AND BACHMANN GMBH ; SCHEIDT AND BACHMAN G M B H ; SCHEIDT AND BACHMAN GMBH ; SCHEIDT U BACHMANN GMBH

Assignee(s): SCHEIDT AND BACHMANN G M B H BREITE STRASSE 132 RHEYDT ALLEMAGNE ; SCHEIDT AND BACHMANN ; SCHEIDT AND BACHMAN G M B H BREITE STRASSE 132 R ; SCHEIDT AND BACHMAN G M B H BREITE STRASSE 132 RHEYDT ALLEMAGNE ; SCHEIDT ET BACHMANN GMBH ; SCHEIDT MACHMANN GMBH ; SCHEIDT BACHMANN GMBH ; SCHEIDT AND BACHMANN GMBH 4070 RHEYDT ; SCHEIDT AND BACHMANN GMBH DT ; SCHEIDT AND BACHMANN G M B H BREITE STRASSE 132

Inventor(s):(std)**:** BRANDTS K ; BRANDTS KLAUS ; DIERS F ; DIERS FRANZ ; FRANZ DIERS ; HEINZ WINZEN ; KLAUS BRANDTS ; RUDOLF SCHNURMANN ; SCHNURMANN R ; SCHNURMANN RUDOLF ; WINZEN H ; WINZEN HEINZ

Inventor(s): WINZEN H DT ; SCHNURMANN R DT ; DIERS F DT ; BRANDTS K DT

International class (IPC 8–9): G07D7/00 G07F7/04 (Advanced/Invention) ; G07D7/00 G07F7/00 (Core/Invention)

International class (IPC 1–7): B65H43/04 B65H5/04 B65H7/00 F16H21/40 G07B15/00 G07D7/00

CPC: G07D7/00 G07F7/04

European class: G07D7/00 G07F7/04

Classification Explorer

Forward Citations: EP2865626, EP0348140,

Abstract:
Source: GB1316653A 1316653 Feeding and delivering sheets SCHEIDT and BACHMANN GmbH 3 June 1970 [3 June 1969] 26769/70 Heading B8R [Also in Division F2] Paper currency is placed singly on a carrier 3, Figs. 1 and 2, having locating members 3b and a closure flap 2b is moved down, causing a cover−plate 3a to move down on to the bank note and actuating a micro−switch, whereupon the carrier is reciprocated along guides 1 by a motor−driven crank 7, first bringing the banknote into a sensing position with its right edge between spaced apart rotating rollers 12, 13, and where it is sensed for genuineness. Rejected banknotes are returned to the loading position. When a banknote is genuine, a solenoid 18 is energized to release a latch 16, and the roller 12 is raised into contact with the roller 13 to deliver the banknote to rollers 19a, 19b, and thence to a collector. The carrier 3 may be transparent and marked with an image of a banknote to be tested, with a light source underneath.

0) FR2065657A – PROCEDE ET DISPOSITIF OPTIQUE D'IDENTIFICATION ...

36) Family number: 110108 (FR2065657A) © PatBase

Title: PROCEDE ET DISPOSITIF OPTIQUE D'IDENTIFICATION DE CARTES CODEES

Priority: US19690818711 19690423

Family:

Publication number	Publication date	Application number	Application date
BE749280 A1	19701021	BE19700749280	19700421
DE2018909 A1	19701119	DE19702018909	19700420
FR2065657 A1	19710806	FR19700014541	19700422
NL7004281 A	19701027	NL19700004281	19700325

Probable Assignee: ICV INC

Assignee(s):(std)**:** ICV INC

Assignee(s): ICV INC 230 PARK AVENUE SUITE 1924 A NEW YORK NEW ; ICV INC 230 PARK AVENUE SUITE 1924 A NEW YORK NEW YORK 10017 E U A

Inventor(s):(std)**:** EPSTEIN L C ; BAUS R JR ; CHRISTY E ; SUTHERLIN K K

Inventor(s): E CHRISTY ; K K SUTHERLIN ; L C EPSTEIN ; R BAUS JR

International class (IPC 8–9): G03H1/00 G06K9/74 (Advanced/Invention); G03H1/00 G06K9/74 (Core/Invention)

International class (IPC 1–7): G02B27/00 G03H1/00 G06K13/00 G06K21/00 G06K9/00 G07C9/02 G07D1/00 G07D7/00 G09F9/00 G11C13/04

CPC: G03H1/00 G06K9/74

European class: G03H1/00 G06K9/74

Classification Explorer

Abstract:
Source: FR2065657A 1. Procede d'identification optique determinant la non validite eventuelle d'un titre donne, utilisant un banc optique a 3 plans paralleles fixes, caracterise en ce qu'il realise, entre les deux premiers plans,– un faisceau module par un signal optique representant le titre non valable et concentrant au 3e plan une image dont les informations concernent, a la fois, la non validite du titre examine et la subdivision a laquelle il appartient; l'identification de cette subdivision par ledit faisceau optique etant obtenue par la correspondance entre le code et la division en regions spatiales, division appliquee a la liste de reference ainsi quJA tout autre accessoire, places respectivement au 2e et au 3e plan dudit banc, ou chaque'region est attribuee a une subdivision de l'ensemble, indiquee par l'un des digits du code, l'autre digit, attribue en propre au titre examine, etant represente par ledit signal optique porte par la region de la liste de reference, de sorte que l'image formee au 3e plan, est transmise a ltensem– ble de l'observation visuelle ou au dispositif optoelectronique indiquant la non validite. 1. Process for optical identification determinant non validity of an eventual title gives, using an optical bench 3 stills parallel, in that it characterizes realized between the first two planes – a modulated beam by an optical signal representing the as invalid and focusing on the 3rd map an image whose information relates, at the same time, the non validity of the subdivision under consideration and to which it belongs; the identification of this subdivision by said optical beam being obtained by the correspondence between the code and the regions Space division, division applied to the list of reference and quJA any accessory places respectively 2nd and 3rd plane of the bench, or chaque'region is attributed to a subdivision of the set, indicated by one of the digits of the code, one digit, assigns own under review, being represented by said optical signal carries through the region of the reference list so that FORMED third image plane is transmitted to ltensem– ble visual observation or optoelectronics device indicating the non validity.

0) US3682286A – METHOD FOR ELECTRONICALLY CHECKING COINS

37) Family number: 473155 (US3682286A) © PatBase

Title: METHOD FOR ELECTRONICALLY CHECKING COINS

Priority: DE19691936898 19690719 DE19691945018 19690905 DE19691955333 19691104 DE19702009622 19700302

Family:

Publication number	Publication date	Application number	Application date
DE1936898 A1	19710204	DE19691936898	19690719
DE1945018 A1	19710311	DE19691945018	19690905
DE1955333 A1	19710527	DE19691955333	19691104
DE2009622 A1	19710923	DE19702009622	19700302
FR2055369 A5	19710507	FR19700026725	19700720
US3682286 A	19720808	US19700055752	19700717

Probable Assignee: PRUEMM GEORG

Assignee(s):(std)**:** GEORG PRUMM ; PRUEMM G ; PRUMM GEORG ; PRUEMM GEORG

Inventor(s):(std)**:** PRUMM GEORG

Inventor(s): GEORG PRUMM

International class (IPC 8–9)**:** G07D5/00 G07D5/08 (Advanced/Invention); G07D5/00 (Core/Invention)

International class (IPC 1–7)**:** G07D5/00 G07F3/00 G07F3/02

CPC: G07D5/08 G07D5/02 G07D5/00

European class: 43A19 G07D5/00

US class: 194/100A 194/317 194/334

Classification Explorer

Cited documents: US3561580 A, US3373856 A,

Forward Citations: US6425471, US6293385, US6227343, US5439089, US5293980, US5273151, US5263566, US5244070, US5240099, US5226520, US5078251, US5033602, US4936435, US4848556, US4567325, US4462513, US4436196, US4385684, US4353453, US4124111, US3933232, US3929213, US3869663, US3738468, EP1107193, EP1107193, EP1107193, EP0308997, EP0059511, EP0059511, DK153606, DE8701555, DE3520131, DE2455112, DE2350991,

Abstract:
Source: US3682286A A method of electronically checking coins which comprises the steps of performing an indirect measuring operation upon the coins to be checked, obtaining electrical signals by virtue of the measuring operation characteristic of the coins undergoing checking. The thus obtained electrical signals are at least partially stored, the measuring operation is completed and the thus checked coins are evaluated to determine whether the coins have generated a signal characteristic of the specific type of coin desired to be checked.

0) US3701405A – COIN SELECTOR UTILIZING A COIN IMPELLER

38) Family number: 43109565 (US3701405A) © PatBase

Title: COIN SELECTOR UTILIZING A COIN IMPELLER

Priority: US19690858351 19690916 US19710120652 19710303 US19750583192 19750602 US19730423220 19731210 US19730423214 19731210 US19720269129 19720705

Family:

Publication number	Publication date	Application number	Application date
AU197239578 A1	19730906	AU19720039578	19720302
BE756118 A1	19710215		00000000
BE780117 A4	19720703	BE19720780117	19720302
BE801705 A4	19731015	BE19730132945	19730629
CA1007320 A1	19770322	CA19730174455	19730619
CA944838 A1	19740402	CA19700092886	19700911
CA996219 A1	19760831	CA19720135679	19720228
CH524205 A	19720615	CH19700013822	19700916
CH544356 A	19731115	CH19720003136	19720303
DE2045241 A1	19710318	DE19702045241	19700912
DE2209826 A1	19720921	DE19722209826	19720301
DE2334076 A1	19740124	DE19732334076	19730704
FR2061380 A5	19710618	FR19700033234	19700914
FR2128510 A2	19721020	FR19720007178	19720302
FR2128510 A6	19721020	FR19720007178	19720302
FR2128510 B2	19770304	FR19720007178	19720302
FR2191174 A2	19740201	FR19730023908	19730629
FR2191174 B2	19780106	FR19730023908	19730629
GB1319126 A	19730606	GB19700043014	19700908
GB1375601 A	19741127	GB19720008894	19720225
GB1397649 A	19750611	GB19730030088	19730625
IT1012020 A	19770310	IT19720021368	19720303
IT1054133 A	19811110	IT19730026240	19730705
JP1144938 C3	19830512	JP19730075331	19730705
JP49045800 A2	19740501	JP19730075331	19730705
JP56050313 B4	19811127	JP19720021593	19720303
JP57034547 B4	19820723	JP19730075331	19730705
LU67922 A	19731003		00000000
NL166143 B	19810115	NL19700013009	19700902
NL166143 C	19810615	NL19700013009	19700902
NL7013009 A	19710318	NL19700013009	19700902
NL7202752 A	19720905	NL19720002752	19720302
NL7309444 A	19740108	NL19730009444	19730705
SE361761 B	19731112	SE19700012575	19700915
US3701405 A	19721031	US19710120652	19710303
US3757918 A	19730911	US19720269129	19720705
USRE28827 E	19760525	US19730423214	19731210
USRE29090 E	19761228	US19750583192	19750602
ZA7006232 A	19710527	ZA19700006232	19700911
ZA7201396 A	19721129	ZA19720001396	19720301
ZA7304159 A	19740529	ZA19730004159	19730620

Probable Assignee:	MARS INC
Assignee(s):(std)**:**	MARS INC ; GUY L FOUGERE ; LLOYD FOUGERE G
Assignee(s):	LLOYD FOUGERE G US ; MARS ; MARS ENCORP ; FOUGERE GUY L ; MARS ENCORP US ; MARS INC US ; MARS INC MC LEAN VIRGINIA VER ST V AM ; MARS INCORP ; MARS INC 1155 15TH STREET N W WASHINGTON D C E U A ; MARS INC WESTGATE PARK 1651 OLD MEADOW ROAD MCLEAN VIRGINIA 22101 E U A ; MARS INC WESTGATE PARK 1651 OLD MEADOW ROAD MACLEAN VIRGINIA 22101 E U A
Inventor(s):(std)**:**	FOUGERE G ; FOUGERE G L ; FOUGERE GUY L ; FOUGERE GUY LLOYD ; GAI ROIDO FUUGAA ; GUY LLOYD FOUGERE ; LLOYD FOUGERE G ; LLOYD FOUGERE GUY
Inventor(s):	LLOYD FOUGERE G US ; GL FOUGERE ; GUY L FOUGERE ; G L FOUGERE ; FOUGERE G L US
International class (IPC 8–9)**:**	C08K7/12 G07D1/00 G07D3/00 G07D5/00 G07D5/08 G07D9/00 (Advanced/Invention); C08K7/00 G07D1/00 G07D3/00 G07D5/00 G07D9/00 (Core/Invention); G07D (Subclass/Invention)
International class (IPC 1–7)**:**	G07D5/00 G07D5/08 G07F3/00 G07F3/02 G07F3/04
CPC:	G07D3/14 G07D5/04 G07D5/06 C08K7/12 G07D5/08 G07D3/00 G07D9/00
European class:	43A19 C08K7/12 G07D3/00 G07D3/14 G07D5/00 G07D5/08 G07D9/00
US class:	133/1 194/10.1 194/101 194/324 194/325 453/3 453/32 453/49
Classification Explorer	
Cited documents:	US695080 A, US463305 A, US3599771 A, US3575273 A, US2860778 A, US2349214 A, US2160751 A, US1953414 A, US1684863 A, SU151897 T, JP42022891 Y1, JP42022891 B4, GB995583 A, GB419862 A, FR2113453 A5, FR2061380 A5, DE1448186 A1, DE139554 A,
Forward Citations:	WO0008609, WO0008609, USRE34934, US9691210, US9595150, US9514590, US7635059, US6975057, US6891299, US5439089, US5392892, US5293980, US5226520, US5176238, US5055086, US3980168, US3797628, US3797307, US2016314636, US2015371473, US2015206368, US2002171305, US2002163278, US2002047425, JP1132823, GB2266175, GB2266175, FR2191174, EP2897104, EP2336983, EP1903511, DE3130027, DE2547575, DE102013114569, CN104969266, CN104794799,

Abstract:
Source: US3701405A A coin selector which utilizes a coin impeller is disclosed, the impeller comprising magnetic field means for accelerating the coin. Coin velocity sensing means located downstream from the coin impeller and associated circuitry serve to compare the coin's acceptance ratio with predetermined values for acceptable coins.

39) Family number: 165464 (CH504064A) © PatBase

Title: MUENZPRUEFER Coin acceptor (Machine translation)

Priority: CH19680002665 19680224

Family:

Publication number	Publication date	Application number	Application date
CH504064 A	19710228	CH19680002665	19680224

Probable Assignee: AUTELCA AG

Assignee(s):(std)**:** AUTELCA AG

Inventor(s):(std)**:** MELONI MARIO DIPL ING

International class (IPC 8–9)**:** G07D5/00 G07D5/08 (Advanced/Invention); G07D5/00 (Core/Invention)

International class (IPC 1–7)**:** G07D5/00 G07F3/02

CPC: G07D5/08 G07D5/02

European class: G07D5/00

Classification Explorer

Forward Citations: DE19548233, DE19548233,

Abstract:
Source: CH504064A (Claim 1) 1. Muenzpruefer nach Patentanspruch, dadurch gekennzeichnet, dass die Einwurfoeffnung (2) des Muenzkanals (1) so bemessen ist, dass muenzfoermige Koerper, deren Abmessungen die groessten Abmessungen der annehmbaren Muenzen ueberschreiten, durch diese Off– nung nicht hindurch gehen. (Claim 1) 1. Muenzpruefer after patent claim, by the fact characterized that the a throw opening (2) of the Muenzkanals (1) is so limited that muenzfoermige bodies, whose dimensions exceed the largest dimensions of the acceptable coins do not go through these off nung through.

0) GB1272505A – AUTOMATIC CARD SYSTEM

40) Family number: 426125 (GB1272505A) © PatBase

Title: AUTOMATIC CARD SYSTEM

Priority: JP19690072137 19690911

Family:

Publication number	Publication date	Application number	Application date
DE2044413 A1	19710401	DE19702044413	19700908
FR2061252 A5	19710618	FR19700032915	19700910
GB1272505 A	19720503	GB19700043186	19700909
JP50001611 B4	19750120	JP19690072137	19690911

Probable Assignee: OMRON TATEISI ELECTRONICS CO

Assignee(s):(std)**:** OMRON TATEISI ELECTRONICS CO

Assignee(s): OMRON TATEISI ELECTRONICS COMPANY ; OMRON TATEISI ELECTRONIC

Inventor(s):(std)**:** MORITA TADAO ; NAGATA MASANORI

Inventor(s): TADAO MORITA ; MASANORI NAGATA

International class (IPC 8–9)**:** G06Q20/40 G06Q40/00 G06Q40/02 G07B15/00 G07F7/08 G07F7/12 (Advanced/Invention); G06Q40/00 G07B15/00 G07F7/08 G07F7/12 (Core/Invention)

International class (IPC 1–7)**:** G06F15/30 G06K13/00 G07B11/00 G07B15/02 G07C11/00 G07D1/00 G07D1/04 G07D7/00 G07F9/00

CPC: G07F7/08 G07F7/12

European class: G07F7/08 G07F7/12

Classification Explorer

Abstract:
Source: GB1272505A 1,272,505. Checking credit cards; cash dispensers. OMRON TATEISI ELECTRONICS CO. 9 Sept., 1970 [11 Sept., 1969], No. 43186/70. Heading G4X. A credit card or the like 10 which controls the operation of an automatic card system such as a cash dispenser has recorded on it a term of availability which is read by card reader 11 and stored in register 12. A term setting circuit 15 of the system sets a second term of availability, including the time at which the card is presented to the system, and the two terms are compared by collating circuit 16. If a predetermined relationship exists between the two terms dispensation by cash dispenser 17 is permitted and a new unit term of availability determined by a second setting circuit 20 and succeeding that set by the first setting circuit 15 is written on the card by writing head 19. An identification number read from the card and the amount dispensed may also be permanently recorded by register 13. In the embodiment described the unit term of availability is one month. To allow for the use of a card in say October which has not been used in September, the effective term set by the system may include at least one preceding month as well as the month in which the card is presented, or alternatively the effective term of the card is considered as the month read from the card and at least one of the succeeding months.

0) US3738469A – TESTER FOR DIFFERENT TYPES OF COINS

41) Family number: 672240 (US3738469A) © PatBase

Title: TESTER FOR DIFFERENT TYPES OF COINS

Priority: DE19691942822 19690822 DE19691947238 19690918

Family:

Publication number	Publication date	Application number	Application date
DE1947238 A1	19710408	DE19691947238	19690918
FR2059093 A5	19710528	FR19700030756	19700821
GB1327820 A	19730822	GB19700040614	19700824
US3738469 A	19730612	US19700064157	19700817

Probable Assignee: PRUEMM GEORG

Assignee(s):(std)**:** PRUEMM G ; PRUEMM GEORG ; PRUMM G ; PRUMM GEORG

Assignee(s): PRUMM G DT

Inventor(s):(std)**:** PRUMM G

Inventor(s): PRUMM G DT

International class (IPC 8–9)**:** G07D5/00 (Advanced/Invention); G07D5/00 (Core/Invention)

International class (IPC 1–7)**:** G07D5/00 G07F3/00 G07F3/02

CPC: G07D5/08 G07D5/02

European class: 43A19 G07D5/00

US class: 194/10.1 194/318 194/334

Classification Explorer

Cited documents: US3506103 A, US3373856 A, US3289802 A, US3169626 A, US3147839 A, US3144112 A, US3086536 A, US2773579 A,

Forward Citations: WO8700662, WO8202786, US6467604, US6227343, US6053300, US5273151, US5244070, US4936435, US4870360, US4815579, US4705154, US4601380, US4556140, US4488116, US4474281, US4462513, US4371073, US4089400, US3939954, GB2176038, GB2176038, FR2466055, FR2461987, EP0304535, EP0058094, EP0023965, DK152660,

Abstract:
Source: US3738469A A method and apparatus for checking coins during their travel along at least one coin channel of a coin checking device is disclosed which contemplates subjecting each coin to a damping measurement to obtain a first type of information about the coin, and also subjecting the coin to at least a second measuring operation to obtain a second type of information about the coin being checked. The invention further teaches the possibility of performing a still further damping measurement to obtain additional information about the coin different from said first type of information.

0) GB1333821A – MEANS FOR TESTING DOCUMENTS

42) Family number: 456330 (GB1333821A) © PatBase

Title: MEANS FOR TESTING DOCUMENTS

Priority: SE19700000093 19700105

Family:

Publication number	Publication date	Application number	Application date
CH546986 A	19740315	CH19710000056	19710105
DE2100229 A1	19710715	DE19712100229	19710105
FR2099042 A5	19720310	FR19710000160	19710105
GB1333821 A	19731017	GB19710000362	19710104
NL7100068 A	19710707	NL19710000068	19710105
SE355428 B	19730416	SE19700000093	19700105

Probable Assignee: INST FOR MIKROVAGSTEKNIK

Assignee(s):(std)**:** INST FOER MIKROVAAGSTEKNIK ; INST FOER MIKROVAGSTEKNIK ; INST FOR MIKROVAGSTEKNIK ; INST MIKROVAGSTEKNIK ; ANDERMO I

Assignee(s): ANDERMO I SW ; INSTITUTED FOR MIKROVAGSTEKNIK ; INSTITUT MIKROVAGSTEKNIK ; INSTITUTET FOER MIKROVAGSTEKNIK

Inventor(s):(std)**:** ANDERMO I

Inventor(s): ANDERMO I SW

International class (IPC 8–9): G07D7/00 (Advanced/Invention); G07D7/00 (Core/Invention)

International class (IPC 1–7): G07D1/00 G07D7/00 G07F11/00

CPC: G07D7/00

European class: G07D7/00

Classification Explorer

Forward Citations: WO8908898, FR2538850, FR2528970, EP0097570, CN103971445,

Abstract:
Source: GB1333821A 1333821 Bank note validators INSTITUTET FOR MIKROVAGSTEKNIK 4 Jan 1971 [5 Jan 1970] 362/71 Heading G1A [Also in Division G4] The genuineness of documents, which term includes bank notes, is tested by a device which defines and measures the thickness of a document over an area which has substantially the same shape as a predetermined area of thickness different from that of all adjoining areas of a valid document, the device being non–contacting and non– optical and arranged to effect a test when a document is moved past it. In the embodiment described, the detecting means is an air capacitor having plates 10, 12, 13 and 26, plate 13 being shaped to conform, say, to the watermark of the note 11 being tested and plate 12 acting as a guard plate. A note 11 inserted into the device is driven forward at constant speed by rolls 27, 28 after energization of motor 29 by breaking of contact S1. Immediately prior to the watermark coming into exact vertical alignment with plate 13, contact S2 is broken by the leading edge of the note to maintain a voltage corresponding to the average thickness of the note in that position on the output side of integrator 24, Fig. 4. Subsequent variations of capacitance which represent variations of the thickness of the note under plate 13 are analyzed by unit 25 which receives signals from the output of a low–pass filter 22. Because plate 13 is shaped, the signal curve is highly dependent on the shape and thickness of the watermark and limits can thus easily be set concerning the height and width of the signal from filter 22 to produce a YES or NO signal from analyzer 25. This analyzer may comprise a Schmidt–trigger (72), Fig. 7 (not shown), which is triggered if a non– genuine note passes through the capacitor, but not otherwise, or alternatively pulses are counted by a counter (85), Fig. 8 (not shown), with a certain range of values read by a decoder (86) signifying a genuine note. In this modification, counter (85) may be set to zero when contact S2 is opened. If the watermark has areas which are thicker and areas which are thinner than the average thickness of the note, two capacitative detectors may be arranged in series with YES–signals being required from both for acceptance. In the verification of printing patterns and less well–defined watermarks a movement of the note or document in two directions may be necessary. In other embodiments the air capacitor may be replaced by a radiation transmission and detection device, e.g., using a radio–active preparation as source, or an acoustic transmitter and receiver. In modifications, contact S1 and S2 may be replaced by photo–electric elements and relays R1, R2 may be replaced by electronic logic elements.

0) DE2150254A1 – VERFAHREN ZUR ELEKTRONISCHEN PRUEFUNG MEHRERER ...

43) Family number: 18294536 (DE2150254A1) © PatBase

Title: VERFAHREN ZUR ELEKTRONISCHEN PRUEFUNG MEHRERER MUENZSORTEN

Priority: DE19702053704 19701102 DE19702053704U 19701102 DE19712150254 19711008 DE19710038181U 19711008

Family:

Publication number	Publication date	Application number	Application date
AU197135275 A1	19730510	AU19710035275	19711102
BE774761 A1	19720214	BE19710774761	19711029
DE2053704 A1	19720510	DE19702053704	19701102
DE2150254 A1	19730412	DE19712150254	19711008
FR2113453 A5	19720623	FR19710039192	19711102
NL7115002 A	19720504	NL19710015002	19711101
ZA7107238 A	19720726	ZA19710007238	19711029

Probable Assignee: PRUEMM GEORG

Assignee(s):(std)**:** PRUEMM G ; PRUEMM GEORG ; PRUMM G J ; PRUMM GEORG ; PRUMM GEORG J

Assignee(s): PRUMM GEORG J KOLNER STRASSE 235 D 5283 BERGNEUSTA ; PRUMM GEORG J KOLNER STRASSE 235 D 5283 BERGNEUSTADT ALLEMAGNE

Inventor(s):(std)**:** PRUEMM G ; PRUMM GEORG

Inventor(s): GEORG PRUMM

International class (IPC 8–9)**:** G07D3/00 G07D5/00 G07D5/02 G07D7/00 (Advanced/Invention); G07D3/00 G07D5/00 G07D7/00 (Core/Invention); G07D G07F (Subclass/Invention)

International class (IPC 1–7)**:** G07D3/00 G07D5/00 G07D7/00 G07F3/02

CPC: G07D5/08 G07D5/02

European class: 43A19 G07D5/00 G07D5/02

Classification Explorer

Forward Citations: WO9905653, WO9106074, WO8303154, US5984074, US5404987, US4108296, FR2191174, EP0496754, DE3543534, DE3542112, DE3038988, DE2715403,

Abstract:
Source: DE2150254A1 (Claim1) Patentansprueche /,Verfahren nach einem oder mehreren der Ansprueche 1 – 37,dadurchgekennzeichne t, dass die Ein stellanordnung aus mehreren in Laufrichtung der Muenzen ge parallele streckten Kontaktstreifen besteht, die unterschiedliche Ab– stunde zum Boden des Laufkanales und zu einem weiteren, allen Kontaktstreifen gemeinsam zugeordnoten 'tground"–Kon– taktstreifen haben,falls der Boden des Laufkanales nicht aus einem leitenden Material besteht und nicht direkt als "ground"–Leitung herangezogen wird.

Machine translation: (Claim1) Patent claims/, after procedure or several of the requirements 1 – 37, by–identified–draw t that placing arrangement the parallel ge from several in direction of travel of the coins stretched for contact strip exist, which granted different off to the soil of the run channel and to a further, to all contact strip together zugeordnoten 'tground " – Kon clock–touch have, if the soil of the run channel consists not of a leading material and is not consulted not directly as “ground” – line.

0) GB1338184A – COIN BOX TELEPHONE

44) Family number: 30218861 (GB1338184A) © PatBase

Title: COIN BOX TELEPHONE

Priority: DE19712116235 19710402 DE19712116237 19710402 DE19712165969 19710402

Family:

Publication number	Publication date	Application number	Application date
CH538162 A	19730615	CH19720004766	19720330
CH538163 A	19730615	CH19720004767	19720330
DD101047 C	19731012	DD19720160674	19720203
DD97078 C	19730412	DD19720160625	19720201
DD98388 C	19730612	DD19720160624	19720201
DE2116235 A1	19721026	DE19712116235	19710402
DE2116235 B2	19731220	DE19712116235	19710402
DE2116237 A1	19721026	DE19712116237	19710402
DE2116237 B2	19730620	DE19712116237	19710402
DE2116237 C3	19750911	DE19712116237	19710402
DE2165969 A1	19721019	DE19712165969	19710402
DE2165969 B2	19730913	DE19712165969	19710402
DE2165969 C3	19740418	DE19712165969	19710402
DK136927 B	19771212	DK19720001482	19720328
DK136927 C	19780529	DK19720001482	19720328
DK137098 B	19780116	DK19720001483	19720328
DK137098 C	19780619	DK19720001483	19720328
FR2132239 A1	19721117	FR19720011242	19720330
FR2132239 B1	19760116	FR19720011242	19720330
FR2132240 A1	19721117	FR19720011243	19720330
FR2132240 B1	19760116	FR19720011243	19720330
GB1338184 A	19731121	GB19720015075	19720330
GB1338185 A	19731121	GB19720015076	19720330
IT950892 A	19730620	IT19720022581	19720330
IT950893 A	19730620	IT19720022582	19720330
JP55022839 B4	19800619	JP19720031216	19720330
NL7204302 A	19721004	NL19720004302	19720330
NL7204303 A	19721004	NL19720004303	19720330
SE377212 B	19750623	SE19720004262	19720404
SE377212 C	19751009	SE19720004262	19720404
SE390075 B	19761129	SE19720004263	19720404
SE390075 C	19770310	SE19720004263	19720404

Probable Assignee: INT STANDARD ELECTRIC CORP

Assignee(s):(std)**:** INT STANDARD ELECTRIC ; INT STANDARD ELECTRIC CORP ; INT STANDARD ELECTRIC CORP US ; STANDARD ELEKTRIK LORENZ AG ; SEL ; 3INTERNATIONAL STANDARD ELECTRIC CORP

Assignee(s): AXEL BIRCK ; STANDARD ELEKTRIC LORENZ 7000 STUTTGART AG ; STANDARD ELEKTRIK LORENZ 7000 STUTTGART AG ; STANDARD ELECTRIC CORP US INT ; ISEC ; INTERNAITONAL STANDARD ELECTRIC CORP ; INTER STANDARD ELECTRIC

Inventor(s):(std)**:** BERNUTZ J ; BERNUTZ JOHANNES ; RADY SZABOLCS DIPL ING ; RADY SZABOLES DIPL ING ; RADY S ; RADY SZABOLCS ; SZABOLCS RADY

Inventor(s):

RADY SZABOLCS 7000 STUTTGART ; S RADY ; SZABLOCS RADY ; BERNUTZ JOHANNES 7140 LUDWIGSBURG ; J BERNUTZ ; JOHANNES BERNUTZ ; RADY DIPL ING SZABOLCS

International class (IPC 8–9): G07F1/04 G07F9/04 H04M17/02 (Advanced/Invention); G07F1/00 G07F9/04 H04M17/00 (Core/Invention)

International class (IPC 1–7): G07D5/00 G07F1/00 G07F1/04 G07F3/00 G07F5/00 G07F9/04 H04M17/00 H04M17/02

CPC: G07F1/047 G07F9/04 H04M17/026 G07F1/04

European class: G07F1/04 G07F1/04H G07F9/04 H04M17/02C

Classification Explorer

Cited documents: US3372783 A, JP45019282 Y1, JP39022390 A2, JP39013559 A2, FR687959 A,

Forward Citations: GB2332079, GB2332079, EP0394600, EP0394600, DE4201674, DE3034808,

Abstract:
Source: GB1338184A 1338184 Coin–freed apparatus INTERNATIONAL STANDARD ELECTRIC CORP 30 March 1972 [2 April 1971(2)] 15075/72 Heading G4V A coin–storing and cashing device for use in self–cashing apparatus, such as coin–box telephones, comprises a plurality of subassemblies, for respective coin denominations, each consisting of a coin–channel section 10, a coinstopping magnet, a coin–guiding device, an electrical connector portion 12 and a support board 9, the subassemblies being attached to a common plate 100 by being plugged therein. The boards 9 and plate 100 may be printed circuit boards. Each subassembly may be as described in Specification 1,338,185.

0) DE2164149A1 – MAGAZIN FUER MUENZABGABEAUTOMATEN

45) Family number: 135608 (DE2164149A1) © PatBase

Title: MAGAZIN FUER MUENZABGABEAUTOMATEN

Priority: DE19712132856 19710629 DE19712137528 19710727 DE19712164148 19711220 DE19712164149 19711220

Family:

Publication number	Publication date	Application number	Application date
AU197244084 A1	19740103	AU19720044084	19720629
BE785581 A1	19721016	BE19720785581	19720629
DE2132856 A1	19730125	DE19712132856	19710629
DE2137528 A1	19730215	DE19712137528	19710727
DE2164149 A1	19730705	DE19712164149	19711220
FR2143808 A1	19730209	FR19720023301	19720628
NL7209046 A	19730103	NL19720009046	19720629

Probable Assignee: NEUE GELDZAEHLMASCHINEN FABRIK

Assignee(s):(std)**:** NGZ GELDZAEHLMASCH GMBH ; NGZ GELDZAHLMASCHINEN GES M B ; NEUE GELDZAEHLMASCHINEN FABRIK

Assignee(s): NEUE GELDZAEHLMASCHINEN FABRIK BERLIN GMBH AND CO ; NEUE GELDZAEHLMASCHINEN FABRIK BERLIN GMBH AND CO KG ; NGZ GELDZAHLMASCHINEN GES M B H AND CO FERTIGUNG ; NGZ GELDZAHLMASCHINEN GES M B H AND CO FERTIGUNGS K G COLDITZSTRASSE 27 1 BERLIN 42 ALLEMAGNE ; NGZ NEUE GELDZAEHLMASCHINEN FABRIK BERLIN GMBH AND CO KG 1000 BERLIN ; NGZ GELDZAHLMASCHINEN GMBH AND CO FERTIGUNGS KG ; NGZ GELDZAEHLMASCHINEN GESELLSCHAFT MBH AND CO FERTIGUNGS KG 1000 BERLIN ; NGZ GELDZAHLMASCHINEN ; NGZ GELDZAHLMASCHINEN G M B H AND CO FERTIGUNGS KG

Inventor(s):(std)**:** FRAHM GERD ; MEISEL ULRICH

Inventor(s): MEISEL ULRICH 1000 BERLIN ; FRAHM GERD 1000 BERLIN ; GERD FRAHM

International class (IPC 8–9)**:** G07D1/00 (Advanced/Invention); G07D1/00 (Core/Invention); G07D (Subclass/Invention)

International class (IPC 1–7)**:** G07D1/00

CPC: G07D1/00 G07G1/12

European class: 43A15 G07D1/00 G07G1/12

Classification Explorer

Forward Citations: DE2848419,

Abstract:
Source: DE2164149A1 (Claim 1) 1. Magazin fuer Muenzabgabeautomaten, dadurch gekennzeichnet, dass das Magazin aus einer Ansahl hohlzylinderfoermiger, im Innendurchmesser dem Aussendurchmesser der jeweiligen Muenzsorte entsprechenden Muenzrohre (5) o.dgl. besteht, die dem MEnzabgabeautomaten zugeordnet sind.

Machine translation: (Claim 1) 1. Magazine for Muenzabgabeautomaten, by the fact characterized that the magazine exists of a Ansahl of hollowcylindric, in the inside diameter the outside diameter of the respective specie of money appropriate Muenzrohre (5) o.dgl., which are assigned to the MEnzabgabeautomaten.

0) US3828166A – CASH REGISTER INTENDED FOR SAFE AND FAST OPERAT...

46) Family number: 1422887 (US3828166A) © PatBase

Title: CASH REGISTER INTENDED FOR SAFE AND FAST OPERATION DURING RECEIPTION AND ISSUE OF BANKNOTES AND COMPARABLE DOCUMENTS

Priority: CH19720013333 19720912 SE19710011613 19710914

Family:

Publication number	Publication date	Application number	Application date
AR199999 A1	19741015	AR19720244085	19720914
AT323449 B	19750710	AT19720007856	19720913
AU197246713 A1	19740321	AU19720046713	19720913
AU467687 B2	19751211	AU19720046713	19720913
BE788820 A1	19730314	BE19720122016	19720914
BR7206392 A0	19741022	BR19720006392	19720914
CA965758 A1	19750408	CA19720151314	19720908
CH555569 A	19741031	CH19720013333	19720912
DE2244678 A1	19730322	DE19722244678	19720912
ES406884 A1	19751001	ES19720406884	19720914
FR2153977 A5	19730504	FR19720032325	19720912
GB1370972 A	19741023	GB19720041561	19720907
IE37093 B	19770511	IE19720001257	19720914
IE37093 L	19740314	IE19720001257	19720914
IT965291 A	19740131	IT19720052655	19720909
JP48038798 A2	19730607	JP19720092793	19720914
NL7212328 A	19730316	NL19720012328	19720911
SE367264 B	19740520	SE19710011613	19710914
SU510169 D	19760405	SU19721831308	19720913
US3828166 A	19740806	US19720287685	19720911

Probable Assignee: NOROB SYSTEM AB

Assignee(s):(std): NOFOB SYSTEM AB ; NOROB SYSTEM AB

Assignee(s): NOROB SYSTEM AB STOCKHOLM ; NOROB SYSTEM A B ; NOROB SYSTEM A B FLOTTBROVAGEN 23 112 64 STOCKHOLM SUEDE ; NOROB SYST AB ; NOROB SYST AB SW ; JOHANSSON SVEN L ; LUNDBLAD LEIF

Inventor(s):(std): JOHANSSON SVEN L ; JOHANSSON SVEN LISSOL ; LUNDBLAD L ; LUNDBLAD LEIF ; JOHANSSON S ; JOHANSSON S L

Inventor(s): JOHANSSON S SW ; S L JOHANSSON ; SVEN LISSOL JOHANSSON ; LEIF LUNDBLAD ; JOHANSSON SVEN LISSOL STOCKHOLM ; LUNDBLAD L SW

International class (IPC 8–9): B65H13/00 B65H29/00 B65H33/08 G06C27/00 G07D1/00 G07D11/00 G07D9/00 G07G1/12 (Advanced/Invention);
B65H13/00 B65H29/00 B65H33/00 G06C27/00 G07D1/00 G07D11/00 G07D9/00 G07G1/12 (Core/Invention);
G07D (Subclass/Invention)

International class (IPC 1–7): B65H13/00 B65H29/00 B65H33/08 E05G1/00 G06C29/00 G06K13/00 G07C1/00 G07D1/00 G07D9/00 G07D9/06 G07G1/00 G07G3/00 G07G5/00

CPC: G06C27/00 G07D11/0003 G07G1/12

European class: G06C27/00 G07D11/00D G07G1/12

US class: 221/7 235/128 235/7A

Classification Explorer

Cited documents: US3077299 A, US2975789 A, US2805675 A,

Forward Citations:

WO9425940, WO8000887, US8157162, US8109379, US8100250, US7992768, US7896148, US7819308, US7810628, US7699155, US7681707, US7116226, US5764133, US5615759, US4980543, US4554444, US4542287, US4479049, US4473157, US4471441, US4321671, US4262817, US4185646, US4070564, US2009236431, US2009120760, US2009118860, US2009051103, US2009050440, US2008149455, US2008082207, US2007240966, US2007210149, US2007151827, US2007108267, GB2283354, GB2283354, GB2130778, FR2507360, EP0100962, DE3325182, DE3302628, DE2501348, BE1013628,

Abstract:
Source: US3828166A A cash register for safe and fast handling of exact amounts of banknotes. Motive operated conveyors feed documents into and one at a time from a banknote bundle storing compartment for each banknote denomination. A keyboard control effects the discrete delivery as well as provides safety controls for alarm conditions.

0) GB1362628A – COIN–TESTING DEVICE

47) Family number: 1700240 (GB1362628A) © PatBase

Title: COIN–TESTING DEVICE

Priority: DE19712146184 19710915

Family:

Publication number	Publication date	Application number	Application date
DE2146184 A1	19730322	DE19712146184	19710915
GB1362628 A	19740807	GB19720041544	19720907

Probable Assignee: STANDARD ELEKTRIK LORENZ AG

Assignee(s):(std)**:** INT STANDARD ELECTRIC CORP ; STANDARD ELEKTRIK LORENZ AG

Assignee(s): STANDARD ELEKTRIK LORENZ 7000 STUTTGART AG

Inventor(s):(std)**:** DETTMER HEINZ ; VOGT WALTER DIPL ING

Inventor(s): DETTMER HEINZ 7257 DITZINGEN

International class (IPC 8–9): G07D5/00 G07D5/08 (Advanced/Invention); G07D5/00 (Core/Invention)

International class (IPC 1–7): G07D5/00 G07F3/02

CPC: G07D5/08

European class: G07D5/00

Classification Explorer

Forward Citations: WO9302431, US6056105, GB2350465, GB2151062, FR2464525, EP0881606, EP0213283, DE2916123,

Abstract:
Source: GB1362628A 1362628 Coin testers INTERNATIONAL STANDARD ELECTRIC CORP 7 Sept 1972 [15 Sept 1971] 41544/72 Heading G4V A coin testing device comprises a coin channel, first and second inductive sensors 2, 3 orientated so that the field of one extends axially through a coin in the channel and the field of the other extends through the coin parallel to the coin surface, and circuit means to indicate under control of the sensors whether a coin is acceptable or not. In the embodiment shown the sensors are spaced apart along the coin channel and are selectively coupled to an oscillator 9 and evaluating unit 10 by a changeover switch 8. Initially sensor 2 is so connected and if the coin is found acceptable at this position unit 10 produces an output to set monostable 12 via changeover switch 11. Switches 8, 11 are then changed over either by means of contacts in the coin channel or the output of the monostable 12, and if the coin is again found acceptable the output of unit 10 applied to AND gate together with the output of monostable 12 produce a signal 14 indicating the acceptability of the coin. The evaluating unit 10 may examine the change in frequency or reduction in amplitude of the oscillations. The sensors 2, 3 may be arranged to test a coin simultaneously, in which case they may be connected to respective oscillators, evaluating units and a common AND gate (Fig. 3, not shown).

- **search:** SS5 FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and (wallet* or purse* or pocket* or card*) and IC=(G07D) (Results 183)
- List: SS5 1–50 (FT=(coin* or token* or currenc*) and (hold* or identif* or differ*) and (blind or braille or sign*) and (hole* or well* or cavit* or groove*) and (wallet* or purse* or pocket* or card*) and IC=(G07D)) (Results 183)

0) US2685406A –

1) Family number: 23771884 (US2685406A)

© PatBase

Family:	Publication number	Publication date	Application number	Application date
	US2685406 A	19540803		00000000

International class (IPC 1–7): G07D1/00

CPC: G07B15/00 G07B15/02

US class: 235/32 453/14

Classification Explorer

Cited documents: US914821, US719459, US2474843, US2338576, US2338575, US1738997, US1372857, US1356947, US1344898, US1344841, US1306195,

Forward Citations: US3388238, US3199517, US3104367, US2848158,

Abstract:
Source: US2685406A The functio3., of the fixed and hinged baile as– se,_i–ib'_y is to preven'Ll –1_le removpl of unregisteiecl coins froin the fare box by inverting it. The lower edg–es of eL4,ch of the hinged bpffle rrembers i,, sa_v _',(,,othcd as shown q–t 86 in Figure 2. A pair o._ screws, only one of which is shown at B"g _ii F–).gure 2, i)ass through '_he annular plate 74 and are threaded into the coin receiving membe–c 83, to secu.,e a–_id el–amp meniber 83 to the tc–p of the ring , '7 and to the plate 74. li,i orcier to r–revent the entrance of sILigs, eks, o–, coins che too large in di–ameter to be handled by the fare box, a gauge disc 88 (Figare 2) ig secured to t_he bolutom surface of member 33 as by a pqir of scfews, only one of wh–ich is shown at 60. This d,'_se 88 has a rect_,ngular slot 92 in 35 al,ignr,ient with the slot 09 of member 83 anci. t'–k,le 'length of the slot is pr–determined by the diameter of the largest coin intended to be haiidled by fare box. For exarD–Dle if ti–,e fare box is not intended to ha–,idle quarters, a disc h,,ivii,g a _lot tco short to pass quarters ,i7ill be usecl. –_hu.– i–F a qiiprter, half doll–ar etc. is deposited in the rpeiliber 83 it will not be able to ge_ post the gauge disn, 88 and into the fai–c box to jam it. instead, it –vvill remain in member 6.5 82 from which it ecin be removed by hand. The ga,,ige d;sc 88 may be chan.–ed for any other disc, depe.,–ading u–oon the maximum d,.a–met.–r coin –.nteiid.–_d to be hand,ed by the fare box. The cyl–'knftica't wiiidovv fO is retairi–ed –in pos,'_tion ag,,),In,4t t,'_ie chantie'l 72 by a retaining ring S,3 9,–qd gask,,–t _i, se.,_ured the lower edge of _vinclov–i as by ccrews c_'5. The c–,in_ 1–,b.at pass inside the window 6E–. are retaine_–it the–_ei.,i for insdect–ton by the operatoi:, 5,5 P..,r,d fi)r dur–.kp;iig therefro–,n ir–l_–o the fai_e box for re–7,Ste,_–4–,lg and soi:ting, by a –_lechai _ now to be described. P,eft,rrin,., tc_ Figi).re 2,,q–n actuating i,o,,i er sha–ft 96 is',ioui_l;all,–d f–Dr 7ong–.'Ltidinal slidi–Tig moije.– 6U ment iD. ,i p2_ir Pf be__r–ings c_"i mounted –In ti–ie, slop,–iT–I,– top i–iaj.l o_' the –ab,'_net, and iT–i a fixed i,nembei, r,8 sui–tal3ly secured as by s–,i_e,,vs or the like to the ,pposite s–ide of the sloping cabinet klop 1,7ioli. The shgft 9C has a reduced sect,'OTi (;3 90 upon ivhich is r–qounted a compression coil IPg thsb resi_.i.,,:_–utly urges the sl–iaft Sr the I.e,'_t o_s vi,_wed in Tligure 2. A push knob or lian,,I'le, '_' – _:,3 is riaotinted on left end of the shafi– 96 ivhere i'__ protrudes beyot–id the top out ' _, ca,bij:iet vvall. Thus the shaft 96 can be pushed to '.he right, but Lns soon as the handle 103 is released. it –vv,.11 move back to the left end of its stroke under the influence of spring A shaft 104 (Figures 1 and 2) is mounted above the actuating shaft 96 for pivotal movement in a vertica! plane Pbout a pivot 105 carried by the f–ixed member 98. The norm–al position of shaf_ 104 is horizoiatal as seen in Figure 2, but as will be e.,,,–olained, pushiiig in on the handle 103 will raise the sha4_'t 104 in a vert–ical plane, wliile pivoting about 105, to a i:aised posi–tion indicated i_n dotted lines at I 66 in !,,igures 1 and 2. Two bell cranks 107, oiily one of N_Thich is shown in Figure 2, have their aijexes pivotally connected to the actu_tting shaft 96 by a through pin 108, thcie being one bell crank on each opposite side of fhe shaft 96. The longer le_ 109 of each bell crai,.tk 107 is p,'_vot_illy connected by a thro,,igh pin 112 to the _:haft !04. The arrpngement is such that when t_ie actuating sha,4.t 96 is pushed t__ the r;ght the shaft I_IP ivill p"_Vot clocl_:Nvise eb,,_i–it ;,ts uivot pin IC,–) 1 r) a r,,,ised position –ndicatc–d at I On_. The a_tuot–ing rod 9r) and the sha__t 104 coorer–ate to qctupte a coin dumping mechanism qs will now be explained. Re'erring to Figures 1, 2 and 23 a pair of seinil circular plates II,:; and II 4 are disposed as best sho–_,vn in Figures 1 al.Ld 2 i a plane ad4acent the –n bottoria of the cylindr4cal windoN_7 F9. They have mati iig edges aloiag a di a–neter indc._ted at 1 1 5 in Figure 23, disposed vertically above the shaft The d_ameter of t._ie vssembled plates 113 and 1, 1,_' is such that _uhey make a horizontal cl.osure ?_djacent the bo'Ltoin of the 68, for _u,–3port–l,.ig coiyis or tokens for inspectio–_i. A pa_lr of n_ng'–, e iiiembers I I 6 have their hori zontal legs aff–,ced, as by spotwelding, 'tlo the uiiccerqide of LI.ate 113 aa–jgcent its diar–netrical edge, _Lnd –heir vertical '_egs pivc)tally moi' , –nted upon shaft 104, so '_'f,,at the plate 113 –iF,' P,I–,/ot2.lly mounted for r.,–tation obout shoft 10_'. Si–.iiiia_,.–ly the other plate 114 hos 2.. pair of angle bT–P,–kets I _ 7 with their hol._,'_zort?.,I legs secured to i.ts bottom surf qpe and i Ls verti–.al legs p.–Voto,ily mo,,tnted iipon sha–rt 10,1. The arrongement i.s E–uch that, without further the outer or rou_–ided ed,_.,s of plates I! 3 and I I C– vvoiil d drop, witii sha–'t 10e, as the pivot, P–.ad there 1,Niould be a substanti–al_ gai) along the d;_ameter 115 of tile p–.ates. The plates are –rnointained in horizo–,ital position by a pair of elongated studs or sui)p–ortling arms !13 and 119 rigidly –zec,,ired to the s"lorter and upwardly exteiiding ar,_i–is I r_tj 2) of he pa–ir of be! I cranks 1 0 7, the ar.,cas I I 8 and I ID e,,.'_, endi–i–ig hor–'_zontal',y and outwp–rd–iy i_roii the pip–l'ies of the bell cranks I Cr7. V,_Then the kr_ob I C–3 is pushed in by the operltor, the shaft I t4 is r_lised to the pofition indicated in dot–dosh I nes at 106 in F;_gur_–s I and 2. The

pivot pin I I wi–11 be raised ,,_ith Yespect to the tv_To supportinf,, arms II 8 nnd I i 9 aiid the plat.–_3 113 and II 4 v;ill be i:aised so that their diameter I I 5 wi j.1 be parallel with the liew position of shaft I 0 _i at I 0 _. Th' s _,vi7,1 result in the piates i i r4 –,nd I!–$ pivot–'Ing about shaft iO4 as indicated by their dot–da–h Iiiae positions inclicated at 153a ai:id I _ia 'n –tigure 1 vvhile at the'saine tiriie they wi.11 slop–,'iTi o., direction corregponcling to the slope of shaft 104 v,,hen ra,– Ised to the position sho,_i7n e,,t 196. Thiiseachplate lisard I_4s,.opesintvvodi–i–ectioiis away frotn the hori.zontal, so that the coins which h_–,d be,,_ii re–oaiiae.–i –for inspec_bio,_i through the w'lrdow 69 ,,,re duziioed iiito the –_lare box singl'_,ig, register–.rig and sort–Ing mechanism, as will be described. Each of t!7 e tvio plates i and II 4 is recess,–d along iLs mating edge oii the diameter If as in– dicated at 123 and 124 in Fig. 23. An elongated plate 125 is secured as by spot welding to the top surface of plate i 14 and completely bridges the gap formed by the recesses _23 and 124 when the Plates 113 and 914 are in their normal or horizontal position. As best shown in Fi.–ure 1, this Plate 125 also assures that when the plates 113 and II 4 are in the4_r raised position the coi–ns will sli–de either to the ri,–ht or left, and ,vill not remain sui.3ported by the diametricol edges of –olates 113 and 114, or fall_ between them, into the mechanism that raises or loivers them. Wherl– the knob 103 is released, the spring 100 will return the actijatin_ rod 9–3 to the 1.–ft to i.,',s normal position, whereu;on shgft 104 will resiii–rie its horizontal position and the supporting arms I I 8 and I i 9 will again support the plates I 1 3 and 114 i–n ho2izonl_–al position. It will be i–I.–aderstood that even in the raised Dosition of shaft _OfA these supporting arrrs II 3 and II 9 limit the __ivotal moveme,_it of the plates II 3 and II 0, about shaft 104. As described in 'Llhe copending appl4_eation Serial No. 186,054 f–iled September 21, 1950 by Fount F. Do,tigherty for Fare Box with Grab F_andle the four equally spaced handles R6 provide P,_rips for passengers who are standing or for those viho r.lay be passing the fare box v7hen the 17ehi_Cle starts. A light bulb 129 mounted within a reflector 132 secured to the top portion of the cabinet 1.0 illutninate–q the tiltoble plates I IS apd 14 PT–ld a–(iy coins that are resting thereon. Figure 2 shoN_Ts three windows 133, 135 –_nd _35 in the side of the calinet 50, throlgh which are visible the numeral wheels of three coilnter assemblies indicated generally by the numerals 136, 137 and 138. These counter assemblies are actuated autoiratically by the fare box, as will be explained, to regi–,ter respectively the totals of small tokens, coins and large tokens. A plpte i39 carries legends i–qdicating the specific items registered by the coiinter assemblies. T–be front of the cabinet Ui'l has an elongatec' window 142 through which are visi–ble two counter assemblies 143 and 144 (see also Fig. 3) which are selecti–vely actuated by the manual depression of either of a pair of levers 145 and 146 protruding froin the front of the cabinet. These counters o.nd actuators are o'L any conventional type wherein the single depression of a !ever actuates its respective counter to add a single qunierol to the previous totlql. A plate 147 is secured to the frame of the rd–achine as by screws 140 (Fig. 4) a–iid masks all of the dl:scs and numbers of the counters –xceDt for one row number of each, which rovis are visible through the a__loresaid window 142. Protruding frorn the bottom uortion of the front wall of 'Lb–e cabinet' '–A is a change maker identified generally by the numeral 149. The particular construction of t–be chonge maker is unimportant as long as it has one vertical coi,n receiv–lng barrel for each diameter of coin or token that may be handled, registered and sorted by the fare box. The change maker receives the sorted coins from the fare box, and stores thern for the use of the vehicle operator or conduc(_or. Theparticular change maker illustrated in the drawings is similar to that shown in the U. S. Patent 2,338,576 issued January 4, 1944 to Fount P. Daugherty, and need not be further described here, except that in the present instance there are six coin receiving barrels 152–157 (Fig. 1) instead of four as shown in the Patent As best shown in Fig. 14, and also LTi Fig. I the upper ends of the barrels 152– _57 are received in an elong4ted casting _58. This casting has a pair of downwardly inclined surfaces _ 59 and 160 (F–i–g. 14) extendi–ng across the upper ends of the bgrrels 152–157 and serving to –uide coins to the open top ends of the barrels after they have bee–,–i discharged from the sorter mechanism. The msting 158 is secured to the machine frame as by screws lO 8 (Fig. 14) and has side walls 164 and "GU of the don–figuration shown in Fig. 14 with tra_–isverse recesses 166 along its upper edge. Be– twee–.q the side walls 164 and 165 are a seri–es of dividinwalls IST (Fig. 1) all having the same confguration as the side walls 160, and 165, and havirg the function of guiding the sorted coins to their proper barrel after they have been dropped fr,3in the _sorter, es will be underste.)od. The casting 159 has a forwardly and upwardly flaring fron'u wall 168 providing another series of chutes by vihi_–h coi– .qs r–iay be deposited into their oroper barrels by hand, as after the operator has made chel.–Yige or 'uhe like. A cover plate 169 is hinged at i–ts ends to the casting I 5 8 by screws _' 7 0 (Fig. 14), the recesses 166 in the top edges of the side and di–vi–din,– walls providing clearance for the upper edge of the cover plate _ 6 9 when it is raised. The –ove_– plate is provided Nvith a series of coin slots ITS directly over each of the barrels _ 52–157 so that the operator may deposit coins or tokens into th–,ir proper barrels, each of the slots 173 being of proper length to pass the prope.– coit–i. The cover 1)late also has an elongated NviT–idow 17,.q through which the operator may watch the coins sorted by the fare box pass dovvnixiardly to their proper barrels. 4:0 As will be explained, pushing in the knob 103, besides act_iating the mechanisra to dump the coins frorp the plates I IS and I i 4, tlso serves to initiate operation of the –rqotor that aetuates th6 fare box. A riia;.n sivitch 175 (Figs. 5, 7 ard 10) is seevred as by screws 176 to a vertico.1 leg I 'T inte– gral with and extending downwardly f,.–oill., an inverted pyrar–qidal coin hopper _478. The switch has an actliating pin 179 (F–ig. 7) that is normally urged olitwardly by an internal spring (not shown) to close the swi–tch. The switch is opened by pushing in the pi.n #79 again..,3t the action of the internal spring. A leaf spring 182 is suitably seciired at i_ts lower end to the body of the switch 97_ so that the soring 482 extends substantially vertically upwards, in cont–act with the outer end of the actuatng pin 179 and through a re_–tangular opening 183 in the wall of the coir hopper ITO, to a point above the upper erjge of tl–ie hopper where its free upper end bears ag–ainst a stud 9 84 (Fig. 2) carried by and extending downwardly from the actuating rod 96. The internal spring in the switch 175 is _,trong eqough to push the leaf sprinf,_ away from the swi,tch to (,–lose the switch vihen the rod 96 is raoved to the right in Fig. 2, consequently carrying the stu–_l 184 +.o the right. 1–_owever, the retur_–i spring 109 on rod 96 moves the rod 96 back to the left when the knob 1,33 is released, and the stud I BA, will ptish the leaf spring 182 back to overcome the internal spring in swi'uch 17 '_,, push the pin _ 7 9 in–, and open the switch. Care raust be taken, when placing the cab–inet L_0 i–ipon the fare box fran–ie, +_hat the k–n6b IGO is pushed in while lowering the cabinet, to assure that the stud 184 –,_7ill lie to the right of the leaf spring 182 as viewed in Figure 2. The top wall of the hopper is recessed as shown at 185 in

Figs. 3 and 6 to assure clearance for rod The aforesaid inverted pyramidal hopper is disposed directly beneath the coin reception and inspection receptacle formed by the cylin– _ical Nvindow 69 and the plates 113 and 114. The upper edge of the hopper v;ill lie closely adjacent the inner surface of the frusto–pyramidal tbp of the cabiiiet, aiid an endless g_Lsket (not shown) –s advantageously secured as by cement, to the i inner surface of the cabinet top Nall to seal the space between that wall and the top edge oll the hopper. On one si,de, the hopper has means foriiiing a fare passage or discharge chute formed partly by a bottom wall 186 (Figs. 3, 6 and 8) that is in effect a partial cortinuation of the oppositely disposed hopper wall 187. The chute has side walls 1 800 and i 99 sufficic–j–itly spaced so as to allow large co–ins, such as ciiiarters, to pass down the _hute to the coin singling aiid gaging device which will be described later. The chute side aiid bottom walls terminate ab their bottoms in an inte._ral membei, forming a platform 19 2 which when secured to the machine _L5 frame, holds the hopper in place by means of screws l__13, 194 and 195. These screws, besides passing through the platform 192, pass through spaced guide plates 196 and 197 (Fig. 13), through a coin plate I 90 (Figs. 5 and 13) and through spac4iig viashers 20,2, 203 and 204, and are thread.ed iiito a horizontal member 205 of the internal frame 51, the spacing washers serving to posi–tion the coin Dlate 198, the guide plates, and the 'Llopper 178 at the proper elevation with re– spect to the internal frame. The sloping walls of the hODper direct coins to theaforesaidehute,aswillbeunderstood. Means are provided to agitate the coins in the hor)pel, so that they will fall into the cliute, the same means serving to reject f–rom the chute those articles i_,hich exceed a prede'uermined thickness, such as a button, or a coin which is bent or deforr_ied to such a, degree that it rqight jani the coin singling and so,–ting apparatus. This agitating and 41–, rejecting means, in the illustrated – embodiment, is in the form of a rubber wheel 208 having a r,air of spaced toothed sections 206 and 207. The ,vheel is secured to a rotatin,_, shaft 209 by a set screw (riot shown). As best shown in Figs. and 8 the peripheries of the two toothed sections 20–3 and 2ui are but slightly sdaced from the bottom wall I 86 of the chute, and are driven at high speed in a counter–clockwise direction as ,,_iewed –in i_ ig. 6. The cl_earaiice between the sec– t4ons 206 and 207 and the bottom wall 186 is such that bent coins, buttons, slugs or other articles that are so thick as to jam the sorting mechanism, will iiot be able to pass the wheel 208, but instead w;lll be thrown back up into the hopper. Also, st,acked coins c,,tnnot pass i–n'uhe wheel because the thi,_kness of two of even the thinnest coins w–ill be too great for passage beneath the wheel, and the i:tp,cer one will be thrown back up il'ito the hopper. A i_hield 2 i 2 covers the udper end of the coin chii'Le above the r,,ibber wheel 208, to _Lorm a continuat–lor. of the hopper wall 213 (Fig. 3), The shield has a ti,,,,,er 214 thal p,2oiec's into '_he spa.–e betweer, _'he toothed sect–ions of the rubber wheel. –ht:ts the shield 2i2 with its finger 214 assure that co_ins will iiot drop into the coin chute without first falling into the hopper ar d then passing bcneath the rubber wheel_ 208. As each coin Dasses beneath the rubber wheel 208 it is arrested momentarily by a contact 215 (Fig. 6) that protrudes vertically thiough a hole 216 in the chute bottom wall 186. This contact is automat"_cally depressed with eve_–y coin singling stroke of the mechanism shown in Fig. '_3, thereby releasin., the coin that is arrested by the contact. The motor and drive shaft The fare box is powered by an electric motor 218 (Fig. 19) su,.tably secured to the bottom of the inter–nal frame r. 1. The motor has a reduction gear box which journals the lower end of a vertical output shaft 221 (Fi_,. 20) wh–ich passes through a housing 222 and carries adjacent its u,–)per et–id a triple tool_hed circular ratchet 223 (Fig. 20). A di–iven shaft 224 is mounted coaxially above the motor output sholft 221, being jolirnalled in a pair of horizontal ini.ernal frame r7jemL–ers 225 and 226. The driven shaft 224 is releasably connected to the motor shaft 221 by a clutch _nechanisiq now to be described. Secured to but rotatable upon the lower end of the driven shaft 224, where it adjoins the upper eiad of shaft 221 and the ratchc–t 223, is a plate 227, best shown in Figs. 20 and 21, havina a spiral periphery that includes one radial lip or notch 228 formin.– a stop. A sem,'_–eircularly curved P'late 229 (Fia_. 20) is secured to the bottori of the plate 227 1)y a pivot pin 232 so that the curved plat,., lie., against the under surface of plate 227 ar_d can zotate about pin 232. This rot,–itional –;.iovement is limited by a P;,n 233 fixed to the upper plate 221 ,iiid protruding throL,.,_h a short slot 234 in the Pi–voted plp–te 229. The free end of pivoted plate 229 is thereby lin–.ited to a, movement betw,–en its full line Position shown in Fig. 20 and the Cotted line position sho–_vn at 229a. The pivoted plate 229 has at i–ts free end a radial lip 235, which when the plate 229 is in its dotted line position 229a, is coplanar v%Tith the radial lip 2 2 8 of the plate 2 2 7. A bell–crank shaped pa_,vl hav–'.–ng le.–s 236 and 23–i is pivotally secured to the botton, of plate 227 by a pin 233. A tension spring 239, secured to the pin 233 and to a pin 242 on the pavil, il–rges the paNNil counl_er–clocknvise as viewed __n Figure 20 so that the outer end of its le_ 235 is in the path of the teeth on the ratchet 2_3. The spring 239 is suf–flciently strong to cause '_he leg 237 of 'Uhe pawl to exert a cammirg action on the free el)–d portion of plate 229 to normaily inaintain the plate 229 in its fulil lipe position 2hown in F–ig. 20. It will be apparent that under these conditions there is a positive drive coii–qection Let,_kreep– tl–ie motor shaft 221 and the plate 22T. This drive can be d–isconnected by rotating the plate 229 counter–clockwise as view,,d in Fig. 20 so that by a camming act–"on it overconies the aettion of the spring 239 ,lnd iota:,.es the pawl clockwise, thereby moving its leg 1"6 to the dotted line position 236a wherc– it is out of the path of the teeth on the ratchet 2 2 3. Referring to Fig. 19 a bell –,rank having legs 243 and 244 is pivotally _–ecured to a member 245 of the internal frame by a pivot 2r4C. A tension spring 247 ui,ges the bell crank clockwise as viewed in Fig. 19, egainst a stop member 248 secured to the frame as by a screw 249. As shown in Fig. 20, the end of the crank arm 243 lies in a vertical plane in the path of the radial lip 235 on curved plate 229 and the rat._ial L,p 228 or stop on the plate 227, when the cranl, arm 243 is in the fully raised position shown in Fig. 19. Tl–j–,.is, assuming that the ratchet and pa–,_,,l are in driving enaagement, in thei_– clockwise rota– tion as vie_ved in Fig. 20, first the lip 235 will hit the arm 243 to disengage the ratchet and pawl w.echp,nism and theil the lip or stop 228 on the plate 227 will hit the arm 223, thus stopping the plal'e and entirely discontinuing the transfer of power to the driven elements of the fare box, allowing 'Lhe motor to coast to a stop if it has been deenergized at the same time. 1 The motor shaft 221 has affixed thereto for rotation therewith a dis–. 252 (Fi_u. 19) having a series of three cams depending downwardly from its periphery. The bell crank arm 243 has a, pin 254 protruding therefrom, which when the arm 243 is in the raised position of Fig. 19, hes in the path of the eams 253. In Mg. 19 one of the cams is shown about to engage the pin 254. Upon energization of the motor 218 rotation of the ca.,n 253 will depress bell crank arm 243 ag–qinst the action of spring 247 and the arm 243 ,A7ill release the lips 235 and 228. Spring 239 will thereupon engage the pawl leg 236 with the ra–tchet 223 so that

the plate 227 will be positively dr,'Lven through one revolution, whereupon the bell crank arm 243 will again disengage the positive ratchet and panvl clutch mechanism. Figs. 21 and 22 show an overload release clutch ri).echanism which prevents damage to the machine in the event of a jam therein. In Fig. 21 is shown a pair of curved lever arms 255 and 256 pivotally secured to the top of the pla–te 227 by a pair of screws 257 and 258. A teiision spring 259 urges their free ends together. Counterclockwise rotation of lever 255 is limited by a stop screw 262 passing through a stud 263 fixed to the plate 227. The other lever 256 carries a roller 264 free to rotate on a, pin 265, The roller 264 bears against the periphery of a cam disc 266 above the mechanism shown in Flg. 21 and fixedly secured to the driven shaft 224, and norinally is seated in a depression 267 in the periphery, being resi–liently held therein by the spring 2o'B, with a force sufficient to transmit normal forces to the disc 266. In the event of a jam in the machine the roller will merely ride up out of the depression 267 thereby c–,asing to transr.–lit rotation. The roller can circle the plate 266, riding into and out of the depression 267 thereby ceasing to transmitrotation. The roller can circle the plate 266, riding into and out of the depression 267 until the motor 218 is deenergized. Above the cam disc 266 is –Qxedly secured to the shaft 224 a bevel gear 268 which drives the coin and token counter mechanism through a bevel pinion 270 (Fig. 29). This counter mechanism wiU be described later. Secured to the shaft 224 for rotation therewith, above the frame member 225, is an elongated cam 269 having a profile as shov,7n iti Figure 22a, and a funettion to be described later. Suitably afrxed to the top of the driven shaft 224 for rotation therewith is a gear 272 that has a stud 273 protruding from its upper surface which serves as a crank–pin for driving a connecting rod 274 that in turn is connected by a pin 275 (Figure 13) to a coin ram 276 that is guided for rectilinear motion by the guide pla'ues 196 and 197 (Figure 13). The coin ram is confine,l against vertical movement by the bottom surface of the platform 19 2 and the top surface of the coi–n plate 198 (14'igure 5), and the underside of the platform 192 has a central recess 277 (dotted in Figure 5) to provide clearance for the pin 275. The coin plate 198 is also recessed as shown at 278 (Figure 12) to provide clearance for the pin 275 and the rlght or forward eild of the connecting rod 274 when at the forward end of its stroke. Figure 12 shows the coin rarn 276 at the full end of i.ts working stroke, and in its normal zero or withdrawn position, which it occupies when the clutch mechanism is as shown in Fig–are 19, the stud or crank pin 273 is 180 degrees away from the position shown in Figure 12. Secured to the driven shaft 224 below the gear 2i2, but above the frame member 226 is a plate cam,270 having a profile best shown in Figures 12 and 16. A cam follower 282 is carried by a lever 2OU3 pivoted to the internal frame 51 by a pin 284 and urged clockwise by a tension spring 285. Thecam2l9hasafirstdepression286which by means of the cam follower 282 and spring 285 resiliently holds the shaft 224 in such position that the stud or crank pin 273 is in its zero or withdrawn position shown in Figure 16. The fol– lower 282 thus assists in holding the driven shaft 2'24 in the position that it occupies before a rotation cycle or series of Gycles. The cam 2'p 9 has a second depression 287 separated from depression 286 by a rise 288' (Figure 16). The action of the plate cam 2–gS is such that after rotation of shaft 224 is initiated by the motor, further rotation beyond the rise 288 is assisted by the slope of the cam profile toward the second depression 287. This occurs during a portion of the cycle where– in the load on the motor is relatively high, and theadditional torque provided by the action of the spring pressed cam follower 282 at this point smootbs out the motor load. A vertical bracket having two walls 289 and 290 (Figures 3 and 5) is secured to the top of the horizontal frame member 205 as by three screws 293 (Figure 3) passing through horizontal legs 294 and 295 at the bottom of the vertical bracket. A vertical shaft '296 (Figures 3 and 5) is jour–nalled for rotation in bearings in the frame raember 205 and in a horizontal lip 297 protruding inwardly from the bracket wall 290. Adi4acent its bottom the shaft 296 has a pinion gear 298 (Figure 3) that iiieshes with the gear 212, thereby driving shaft 296 at a much greater speed than the driven shaft 224. Adjacent the top of shaft 296 is a bevel gear 299 (Figure 5) that meshes with a mating bevel gear 300 fixed to a short shaft journalled in vertical wall 290. The same shaft has affixed to it a gear 303 that drives a gear 304 on shaft 209 through an idler gear 305 (Figure 3) inounted on stub shaft 306. Bevel gears 299, 300, gear 303, idler 305 and .–ear 304 thus provide the rotative power for shaft 209 that dr;.Ves the –rubber wheel 208 in the hopper discharge chute. Also secured to the shaft 296 but below the bevel gear 299 is a worm 307 (Figure 5) which rneshes with a worm wheel 303 (Figure 3) upon a shaft 309 fixedly secured to the bracket wall 289. Suitably keyed to worm wheel 208 is a hard rt_ober or Bakelite cam 30,0 havir_g a circular profile except for a singledepression 'Q II (Figure 3a. An electr–le swi–tch 3f,4 –is suitably se– cured to the bracket vertical wall 289. This switch has a plunger 315 that when pressed inwardly against the force of an internal spring, closes the circuit in which the sivitch is located. A lever 316 is pivotally secured to the switch 7o body at a pivot 317, and at its other end carries a cam follower roller 3 1 8 that rides on the periphery of the card– 3 1 0, being resiliently pressed thereagainst by the switch plunger .0.1 5. In the position shown in Figure 3a the plunger 315 is pushed in and the switch 3 14 is closed. The cam 310 rotates counter–clockwise once for every 13 revolli.tions of the large gear 272 that actuates the coinram 276 andthe function of the cam 310 a–rid sv7itch 311_' is to assure that the power circuit to the ir_otor, once closed, will operate the 5 coin ra:,–, 27G at least 13 t–imes, before the depressi ' on ol–'–ovvs the cam follower 3 1 8 and lever 61 _P, to r_elease pluiiger 315 a–nd oper– the switch Si 4. If afte,. these 13 operations of the coin ram the motor eirei:ii_ is still energized by another 'I 0 will be rotated again p,iraliel,– then cam _L–ad_ again open the switch 14 after 13 op–,ra_– tions,.of the c–ni–,i rai–ii. It iray be explained at this time that the raotor is initially energized by push_ng in the knob 103 15 to dump the coiiis i–qto the hopper, because this actio ' n closes the rnain switch 1.15 (Figure 7) as prev–Lously explained. Switch 314 is in parallel with the main switch 175 and thus maintains _I holding circuit to energize the motor while the 20 coin ram 276 makes 13 ope,:ations. If all of the coins dumped into the hopper have been disc_liarged from the hopper chute then the motor –,vill become deenergized at this time. Hoivever, i–s – etaincd in tne coin chute by the o; c_intoet 2 _ 5 of Figure 6 then the motor circuit will be again closed through contact of the coid – _,7it,h the chute bottom i86 and –_vith the contact 2 The holding eircui–t established by the sv_Titch 8 I _, aiid cam 3 1 0 will thus again cause "3 0 the –.,iiotor to dr,',Ve the coin ram through 13 opt4 era icins. C–peratiol–i of the protruding contaet 215 is as follov_,s, Feferrir_., to Figure 9, the contact 215 is inouiited ii–oon o,,ie leg of a bell crank 319 piv– ailtached to –qn elem–ent of the coin chute by nscrew 322. A tension spring 3__3 ur,,es the bell –,rqTh,, 319 counter–clockwise 'uo its norriial posi–tion where–in +he contact 215 prc)trudes above the –floor igg of the chute to prevent passa.–e of a coin there–oast. A bottom ver'uical lip or edge 324 o_–i the bell crank 319 engages one e–rld 325

of a horizontal lever pivotally ir_ouiated upon a pin 326 (Figure 7) for rotary reciprocati –ng movement witilin a slot 327 in the underside of the ' platform i22, so that the lever operates in a plane just above the top of the coin raiia 278 and w–ith the other end 328 of the lever i–n +he path of th,– pin 275 (Figures 12 aiid 13). The a–loresp–Id lever is urged clockwise, as vic–wed in ;_ligure 7, by the ac'uion of the spring 323 9,nd the bell cranl_ carryiyig the contact 2 1 5, so that its norr.–ial pos–i'_ion is as shown in Figure 7, with tli.e '–imit o_' the clockwise mover–yient of arm 320 ostablished _Dy the left v_all of the slot 327,. The lever is –o lo;–,ated along the path of the aforesaid pin 27.3 that the pin strikes the arm 328 j L,.st before the pi–i'i reaches the end of its st–,,oke (towa–rds the r3ght as viewed in Figure 12), and the pin 273 wi.11 thjs riove the lever arm 32k,, cou–iiter–clocl,–,_vi'se (!,'igure 7) to rotate the bell crei,nk 3 i 9 (Figure 9) clockwise a,–;ainst the tensioii ol_ s–critig 323, aiid thus pull –the contoet bellow the '–.loor of the coin cl–l–Lite to perr_,iit the next coiii tr, slide to the bottoiii o–f the chute. The contg.,–;t 2 i 5 i__ insula–ted from the bell crank S(O that car.__ies i–u, and a wire 329 leads fi:om the cotitact bo orie side of the motor circuit, the otl,er –side of the rrotor circuit beiiig grounded. 7o Co–_'n sing_'i7,.g and gaging mechanism .z ,ks each coin 'i–s ieleas–.d by the depression of contact 2_5, it sli–des the remaining way do–wn coin ran– 276, whi–ch i–s a_u this time at the full end of its working s'Lroke, as viewed i–n Figure 12. The bottom of the coin chute wall 18 9 (iligure 3) jlist clears the top of the mm 276, and during the ret,,irn stroke of the ra–m the coin will be ,T.7iped otT– the top of the ram by this wa–11 I S9, o_nd drop onto the elongated coin Dla–te 198 where it now lies in the path o–f the next working stroke of luhe ram 278. As showp– in Fi–.–ures and 13 the left or discharge end o_L 'uhe ccin plate 198 curves downwardly at 332 to perr;.iit the coins to drop vertically throti_h a slot 333 i–i the horizc–.ntal fra–,_–1–_ rfier_iber 205. During the worki,g of –Lhe rair 276 the coin restirg upon the coin plate ,Tiill th–us be pushed to the left iintil it drops into 'Uhe slot 333 and enteis the sortitig i–ne–hanis__n in a vertical plane. During this –noveli'lent the coin is pushed be_vveeri a Exed roller 33.1 mourited upot–i a stud 335 and a, iyiovable s'u–Ud 339, to be described, the roller for–.Tii_ng a fi_.ed ga.–i_ig elei–ient. On the other side of the path of the coii–is is a niovable gag;_ng elemenlu in the forl–D of –ri, bell crank 336 (Figure 12) pivotally mounted upon a _lixed stud 337 sc–cured to the fra,–r_ie rpeir.–ber 205. One arin 'QSC has the previo,,:tsly mentioned stud 339 dependiii.– therefoor, (,'_–igures 15 and 18) so that the stud is in the path of the coilis being pushed by 'lie coin ra–r–,i tc),j..,ard the slot 3_'3, a–_id it will be –a–opare,nt that the clockwise –noverilent of the aging element 336 v,,ill in each instonce be de?oendent ,lpon the dipimeter of the pai__icular coin being gaged be"–ween the fixed ro'iler 334 and the I' stud 339 on the b,,ll crank 336. It tal_es ec)psiderable force to push –) coin between the statioiia.– cy al'id ri–iovable gaging elements, ar–d althou–h –the pusl).ing end of the coi–a ram is fi,,it there is the possibility that a c__in would coel_,, out o4 il–s ho–,,izot–ltn–l position. Also, it must be assured that only a singlf– coin at a t–'lne is pushed through the ga–ing e7iersients by the rani 276. For that –,eason, a vertictlly movable gate 342 (F,;gi_,res 3, 5, 7 aild 11) is Tirovided. The gate 342 lie–,s transvelse of the pa_th of the coilis that are be"ng pushed through the co4n gaging –Iemei–its by the coin ro_ni tnd coiriprises a blo–k of Ine'bai havin., verti_,al slats SC,3 a_ld 344 (Figure 11) e,– tch of I . ivnich has protr,,_,ding tiiereinto a Pa–ir of studs 345 and 340 respectively. As best shown in Figure 11, these stuc–)s are adjustable through the wall.– 188 ar–ld '._q9 of 'he ch–Litc–, and are secured by loc?,uiuts afl_er the s_u.ds are adjlisted to provide a free vei:_,ical movemeiit for the gate 3,2. As I)est showii '_n Figure 7, the face '_D4–3 o–f t_he gate toward the i–am i–s in the foi'm of a of ',I cylinder, which at its lower ed,_e is iiiidercut i–il a si–).ooth cu–,–ve to–_Tiard the OT)TDosite vertical face of the –Pte 392 to ;)rovide a cairni;r–,–; surfac_3 t',–iat calises '_lie _ate to be liitc–d _vhen a coin Is forced against its curved –'cqce 343. adjacen_ the botton_ +_hereof. The gate 3L–_,2 iests upo–,,! the coi–n –olate I P3 and –is spring pres,,ed therea–ainst by a pa–r of co–'! springs 35i and I So'R (F–igure 11) seated in blind bo_–es in the –ate 342, and vjith thei,– upper end_, beal–,lng agailist a hor4 zontal leg " i 1 _53 o–f n_n L shaned hoild down bracket that –is secured by its vertical leg 3,q4 and a pair of screws 355 (Figure 5) to the fi–oiat I_ace.– 138 alid 180 of the coin chute. As shown in Figure 11 tl–iere is a clear–ance space bet,_,.–7een –the top of the ga–te L'42 and the leg of th,hold down braeket, to permit the gate to rise whel'i a coin paqses bereath it. Besides preventthe coin chute and falls upon the top of the 75 ing the cocking of a coin the gate 342 also pro– vides a singling device that prevents the rarnming of rnore than the lowermost coin if there be two or more coins resting upon the coin plate 198. In order to ass–ore that a coin passes the coin gate, the leadiiig edge of the ra–.m 276 in its ramming action, also passes b–,ne,,tth the coin gate, thus preventing the holding of a, coin bell–eath the gate as a result of the acti–on of the springs 351 and 352. Coin sorting mecha?iism Among the mecbanisrrs controlled by the clockwise movement oil the coin ,ag,:D.– elemel–it 336 is the coin sorting mechanisin which receives the coins or tokens passing vertically –through the slot 333, sorts them according to diameter, and delivers the–,D to the proper barrel 152–157 in the change rnaker 149. The mecha–yiism for controlling the sorter will first be described. Referring particularly to Figs. 16 and 17, a gear 356 is affixed to a horizontal sha–.Lt 357 journalled for rotation in spaced elements of the frame 51 below and supportin– the horizo–,ital frame rnember 205. This gear a56 does not rotate through a large angle, and adj–'acert its top it carries a st,,id 358 upon Vi,'_ch is rnounted o–iie end of a connecti.ng rod 359 that is adjustable Li length. The connecting rod 359 includes an elongated nut 362 _vhich threadedly receives one el–id of an eye bolt elei–Dent 363 the other end of v,7hiih is pivotal'y inounted upon stud 358. Another element 364 has one end threadedly received ir– the other end of the elongated nut 362, the other end havin.– an elongated slot 365 which passes a stud 366 whj'.ch is carried by the vertical leg of an angle brae7zet 367 that is rigidly secured t(_gt; the top of frar–ne –niei–qber 205 as by rivets 368. Thus the egnnecting rod.z59 has a pivotal mouii_uing upon gear 356 at one end a–Tid a sliding mountin,g upon stud 366 adjace–lit the other erd, –v,,h–ich said other end li–es 4_n the path of tt_e mover_ient of the other leg 369 of the bell crank oi– gaging element 336. Loelz nuts 372 upon the threaded secti–Ons of connect;_ng rod elements 363 a_lid 364 assure the niaintaining of the Droper adjusted length of the connect4ng rod, it being utiderstood that the internal tbxeacls –iii– the ep–ds of elonga'6ad nut 862 are of opposite haiid whereby the length o.f the conp–ecting rod can be adjusted by turning the nut 302 a–fter the locl,.iiuts 272 have :Prst been loosened. '_t w4ll be adparent that whenevej: the gaging element 33C ;_S rotated clockwise (F–ig. 16) di–iriiig the gaging of a coin, the gear 356 Nvill be ro'–Uated counter–clockwise (Fig. 17) through a comniensurate angle. Return mo_rement of these ele,,iients to their initial positions 1,5 spring in,–iuenced, as vii–11– be described. S.'Liowii in enlorged detail in Fdgs. 25 and 26 is an asseiibly that is moudted in the intei–

_ial fraine 5! ef _Lhe macljine for reciprocating vertical move−rnent under the infiuence of the gear 3BG and a return sprir_g 373 (Figs. 14 and 17). This asserqbly includes an elongated square rod 37−4 having rack tee−_h 375 oii the upper portion of its length, which teeth are in engagement with the teeth of gear 306. It is pointed out now that in order to show iiiore clearly the elements carried by rod 374, 'uhe posi.Itlions of the rod 374 and the elements carried thereby are viewed from an opposite diree−tiOn in F−igs. 25, 26 and 27 than in Figs. 14 and 17. Securely fastened to one side of the rod 374 and at the to,,o thereof as by rivets 377, is a cam plate 376 that is shoivn in still larger detail in Fig. 27. Along one edge the cam plate 376 has 9, series of notches of varying de−Dths and haviilo horizontal lands 370−383 iiliclusive, oiae fcr each size of coin or token to be handled by the fare box, as will be appare−,it later. At its lower end the rod 374 is round in section, and o,−uided by ,. holle ira horizontal flange 3 8,') at the bolutom end of a vertical flat plate 330 that is secured to a vertical meraber of the internal fi−ame 51 as by screws 386 and 387 (Figs. 14 and 17). 'n,,e up− per elid, of assembly 37P_ s_−nd 376 is guided by a se'b of tb−ree rollers 388, 339 and 390 (Figs. 14 and 17) that are carried by parallel sp,_xed frame nierilbers 393 and 39,'_' (F−ig. 16) secured to internal frame 51 and whi.−h also act as side guides for the top of the rod−plate assenibly 374, 376. The coiled coinpression spring 3'3 oia the round section of rod 374 bears agair−st t'he flange 384 and against the bottom of the square section of rod 374 to urge the rod upwardly. Thiis whe_,l t'−Qe coin gaging eieri−ient 'e.6 acts to ,,otate gear 356 counter−clockwise (F;z−. 17) and lo lower the rod 374 through the rac_ 375 thi−s m"ove,.iient is resisted by spring 373. Each coin or token of difereiit diar_ieter op−era+_es the gaging elenlent 336 lo lower the rod 374 by varying amourts that are_ dependent upon the coin or token diariieter. Sho_,vn best in Fig. 24 is a lever 395 pivoted for movement in the ho.−izontal plane about a pi−vot 398 carri.ed by the horizontal frame member 203. The lever SeB has a projecting arm 397 (see also !,−,ig. 27) that '6erminates in a chisc−I end 398 that is squared at its end to avoid a sharp and r−,lat−'.Ve−ly poi,nt. The undersi.de of the end 398 is horizontal. The lever 395 is urged clor−kwise (Fig. 24) into, engagemen' w'th the serra−Lled ed.−e o4− the cai−q plate 376 (see 'Flig. 27) by a tenS4 on spring Q'99 (Fi_,24), so that as the carn plate' 37C is dep−ressed by bbe action of the ga.,_g elemen− 320 the chisel 4o end 398 of the projection will e_ter the notches of the cam plate. As the dep,,− ession of the cam plate 37 6 depends upon the coin d_ameter the vert_,"c_al spacing of t−lie lands of the notches in the c−.t nlate is comme,_asurate with the coin cliai−qe−ter. −As shown in Fig. 27 +,'−'le notches have canisurfaces above each land 3',18−383, so that the s'pring urged projee−tion 39'1 v−7ill ride over the successive notches until the calm plate has r−lached the maximum depression according to t..b−e coin that has been gaged, vjhereupon tl−ie eiad 398 of the projection 397_ being spring pressed to, the 1−e.−'t (Fi,,P−. 27) will engage the part;cular land corresponding to the gaged coin, and hold tl−.e cam plate 376 and the rod 374 in that depressed coiidition until released for rel'urn to initial position under the id−qilence of si3ring The viithdxawal of the pro−jection _'oB'g' 'Lroin the n6tch, and the refurn of 'Lhe rod 374 to iii−'Ltial position is not accompl−ished unt−.',I the _ue6o ceeding ramming Gycle of the coin rarq 2'16, because after the rod 374 has been depressed according to the co−in diameter it is the flnction of the lever 395 and its spring 399 to hold the rod 374 depressed until the gaged coin has beep− sorted a−nd delivered to its proper coin barrel in the cl_iange i−nal,,er 149, an−' un' il the value of the coi−n or token has been entered in the register visible through t−he windo_vs IS3−135 of Fig. 2. T−_iis withdrawal of the − oroiect−lon 397 from the iiotches, and the conseauent return of rod 374 to initial position is accorriplished at the start of the next coin singling and gaging cycle by the action of a stud 409 (E−lig. 5) __hat is se,−i−ired to the gear 272 and protrudes downwardly there− 7,5 from so that it engages a cam surface 403 on the end of the lever 395. As seen in Fig. 12, when the ram 276 is in its initial position, beiore th'e beginning of a worl_cing s_roke, the stud 400 is but slightly −pace,,' from the cam surface , 403, so that as soon as tbe ge_−r 2T2 rotates o7−aly a few degrees the stud 400 Nvill'enga._e the cani surface 403 to r__,iease the proje,,_t−lon 397 from the nol.−cl−,e,_ and allow the foci 3 1. 11 t.− −,eturn to its uppermost positior,., after ivhich it −viill be depressed a._ai−ii as tb−e iiext coi.ii pu!shed by the rai−n 276 pass−s between the gagi−n.− elements 334 and 339. As each coin is gaged and is pushed to the elid of the coin plate 198 to enter fhe 333 _n vertical positi.on, it enters a space bet,,veen a pair of para'ilel spaced vertica−l walls kID4 and 405 5, 12, 14 etc.). As best sholvn ir_ Figs. 4, aiid 18, these walls 404 arl−d 405 have trans'verse parallel _loill ,ng slots 406 therethrough. A sorter leaf platePO7 (seeolsoFig.2−3) passestlarougnthese slots to forrd− a slopin_−3− floor 408 between tl−ie afo.resai.,,l vertical walls 404 and 405. This slop_ng fioor is reciprocable, by means to be described tlaroul,h P,. range of positions betwe . en Nvhich a st−ial_l tok_lii will− drop into barrel 157 to a posit_on where a qi:tarte−,, −_vill drop into the barrel 152. These posilions occur as the floor 408 Is:' s]7_ifted from its ,nitial posit−loli to tl−ie ri._ht (ir, −P',ig. 12) until it reacl−i.−s its maximum deflection whereupon a au,,,,rter will roll alo−ng tlie floor u−,iuil it drops ofL the end 409 thereof (F−ig. 28) iiito ihe quarter borrel 152. As perhaps best ohowri ,.n 15 9,p−d 28, the floor is stepped so '.hat a'ong its '−,ength it has various widths,,and at the lowermost end of each of the stepped ividths it is provi O'eJ, −_vith vertica,'−_ stops 4 i 1−4 i iiist, abova eac' i o−l_ tne div'ding walls 167 in the casting I 5 8, tile walls 404 and 41,".; being provided with spaced −ot,,−_ 41 6 (Fig. 15) so lbat the _.to '41 1 veltic,,Ll s'_ Ds 4! 8 cat−i move transverseiy 'chrough the wal_is 4.9 4 and 405. 'rhe actioii of the sorter leaf plate 407 is such ._bg,t, for example N_7hela a nickel has been gaged, the plate w−'−!! −rp−ove to t_ie (Fig−. 1,2) or doiinward (Fig. 28) until the stop 4.iB b'Locks the sloping passageway bet,_veen 'Lhe vertical.walls,40 4 and eG5 while the stepped ,'loor 40 0 is. discortinued just above the space leading to tl−ie nic'_el barrel 153. The move_−iients of the sorter leaf plate,4.07, which delivers each coi−n to the coin barr,els 152 15T in acco−,.dance with their dia,,−aeter.−, is controiled by the ga.− in_,− element 336, the adj−'ustable connect,ing rod 359, tb−e iilovemeiits of gear−.356, o,nd the earn plate 376 of the assembly, shown, in Figs. 25 and 26. As best shown in Figs. 25 and 27, one edge of the carn plate 376 has a working pro.tie which in tl,_e illustrated embodiment has three differently sl_oping sections 417, 1418 and 419. 'rhese slopilig −ections, wlil:ch constitute the wo−el−,ing profile, are continuously enga.− e,d by a protrusion 422 (Fig. 17) on a lever 423 that is pivoied for free rota−tion about the saine shaft,3,57 as _ tiae gear 3 5 6. A reciprocable rod 42 4 (Figs. 14 and 17) is journalled for horizontal sliding movement within an elenent 425 of the iliternal frame 51. At its rightmost end,in Figs.11,1.and −424 is threaded into 9, tbielieiied abut− 17 the rod ment 426 (Fig. 28) thet, is integral with the sorter leaf plate 407. A locknut, 427 (Figs. 17 and 28) secures the adii_sted position of the rod 424 with respect to the,abutment 426 and the sorter pla−te 407. At its other end _iie rod 424 has an.'e'nlarged head 428, (−Figs. IA4 and 17) that is received .Within,,a bifurcated

saddle 429. thats is pi–votally secured, as by a pin 432 to the lower end,of_–tlie lever 423. A coi–ic–d compression sr–r–iv–ig 433 (Figs. 14 and 17) on the .,od 0,24 iirges the rod '_–o the left, With its enlarged head A2'01 ir, engagei–ient –,viih tl–.e lo,_ier end of the le,,Ter f–,23. T'–rie sadj.'.e d 29 serves to gu–'– de the eild o–_' –"Od an_, to keep it from_ slipping sidev;oys frc)iy,– _,vic n _–he 16–_ver end of the le–ver a'AB. Thus by means of the spriiig 433 the rod k_2,4' t–,4–ia_ 4–_ r,"gj.dly conr,–ect,ed to the slortt–r plalu,– 40__ is res_l,"e–iitly urged 1(to t–lie lc–ft (Figg. 14 and 17) into at iLI s _nlarged head 428, with tlie lower end o–, t_ie 'levei: coi,.s–.o,,,iently i–irging the proLYusion 422 into erga–gement v_ith the work,',ng rjrofile sectiol–is 417–,llg of the cain pl_ate B_r tiiis coiistr_Lic_,u–io.,i the gag,ng elen–i–,nt :'_3S con(–,rols the roqit–lon of the catn sorter plate 407 in icco3.–donc–.– ivith _he –cin diameter, during –1– sortl__–.hbuldbeLir_derstoodthatwhen the qol–'ter plate is posit–tored in accordance w–it–_i the diameter of a coin measured b,y the gdgi hg elei–i,_–,it 336 – it rem ain in that gaged p6si tion by resson of the e,,igagei–aent of projecti6n 197 on lever 395 until the next cy3le of operation of the rilachine, Nvhereupon the proj'e_–.– tior_ 39T ,vi–ii be disengaged from the notches 378383 by the action of the stud 40_l, o_,i gear 272 and Sp–riiigs 373 and Po33 _,iill retu–.–_n earn plate 376 and sorter 1–ilate 407 to their initial or zero positions bef6re they are again po._itior–ed to sort the next _'C_ coin accordiiig to its diameter. Coin and token registering –niechanisi7i Se–ure,–l to the squere rod 374 as by rivets 434 (Fig. 26) is 9, brae'f_et mem– ber 435 'That includes –,.L verti–,ai e,emen . t 439 i_rc)riiv_hich protrude a pair ol L soaced parallel horizontal legs 437 ai–id 433 (Fil–gs. ',.7 and 25) trirbugh which Passes a vertical Pin _,39 that provides a pivot for a lever 4__2. Another lever hav;,ng legs 443 and 40,4 (F4_g. 22a) is pivoted about a –vertical shaft 445 and is also vert4caly slidable upon the shaft 445. The lever 442 ond bhe left 444 of the other lever are conr,–ected by a tension spring 4,.16 that resilielitly urges both said elerlents against the ca_–n 2G9, at poily6s spaced s–LiasI.antially 180 idegrees apart, as best shown in F4_g. 22a. The breeket iderr_ber 435, secured to 'u–he square rod 374, iiioves vertically –wlith the aforesaid rod in ac,–ordance with the diamelver o,–' the coin being gaged. The _lt;)ther –0 lever, s.Lidable on shaft 445 i–no–ves vertically with the sq_iare rod a!7cj by :eason of the fact that its leg 443 is engaged in a horizontal slot 447 'in the ve_–tical elernent 436 o–f the bracket meiliber The norr–yial position of th6 lever 442 and of the lever on shaft 445 is as sho–vvn in Fig. 22a, this position occui:ring before a cycle ol_ operation of thegear272andthecoinram2',G. ThecamA68, carried by the driven shaft 224 rotates counterclockwise as viewed in Figure 22a, and as a edn– (io secuence it first r,ot.a,tes lever 4P2 clockviis–, and then 'lever leg _.44 counterclockl,,7,se, against (,he force of spring 4 46, di–,ring one revolution of tb–e driven shaft 22i. This viill occur no matter vihat the vertical position of the square rod 374 be– cauze the cara 269 is elongated along the axis of the driven,shaft 224– as best sho– ,vii in Fig. 19. The outer end of lever 442, on the opposite edge from that engaging the earn 269, is narrowed to provide a lip I 40 that selectively engages and depresses one of six levers 451–4r,,'u (Fig. 3i,l o'L the register ,iiechan.is.–n to effect the totalizaltion of either coins, tokens or the like that are being gaged and sorted. Levers 451, 452 and 454 are pivoted upon an elongated pin 457. The lever 45,3_ effects the registration of: pennies into the r,entral or coin counter 458 (Fig. _9) visible through iT,7indow 13Z through the medium of an integral leg 459 (Fig. 32) at right angles to lever 45'0, and having a pivotal connection 602 (F–ig. 32) to a spring (P,83) pressed pawl Pi64 the free end of which engages the teeth of a circular ratchet 0,C5 that drives the uilits wheel 466 of the coin counter 458. Return to the right (Fig. 32) of the pavvl 464 is by a spring 4,' 7 connected by pin 468 to the lever leg 459. A convenbional carry–over n,iechanism rotates the tens wheel 469 one tenth of a revolution for every complete revolution of the units wheel 46'6. A spring (c_72 Fig. 3,_^,) pressed detent lever Pi73 having roller 474 engages serrations in a stop wheel 475 to hold the units wheel 466 irhile the pawl 464 rides backward over the teeth of the ratchet wheel 465, and also holds the said units wheel against rotatio–n except by the influence of pawl 464. The upper lever 451 when depressed, actuates the upper, or sniall token register S76 in the sa,,rne manner to register and add s_,nall tokens, the lever 451 being connected to a right ,tngled leg 477 by an integral_ tube 478 mounted upon the elongated pin _,57. In a similar manner, tube 4'1–3, on pin C57 is integral with leg 481 and when lever 454 is depressed by the lip f_40 on lever 442, the leg 48_ actuates the lower or large token reg4ister VIBO to total the large tokens that are gaged and sorted. The registration of din–ies, nickels and quarters into the coin counter 458 is accorr_p'_ished as follows by the selective depression of levers P,52, 455 _r 456, all pivoted upon a si,.igle pin 47E–,2, in combiiiatio–q w4_th the rotation of b–vel gear 2'_O, driven by the large bevel gear 268 on the driven sha'Lt 22–4. Since the 1–arge gear 268 will rotate througl–i one revolution for each rotation of the driven shaft 22,1, '_he snall gear 27_3 Will– rotate t greater number of revolutions. __he srnall gear 270 is on a shaft 48fj liournalled in the side walls 480 and 4OP4 of the register frame. Five spacer bars 485 (Fig. 39,) separate these side walls. ' A drive gear 46'1 i–S ir_ounted u–oon the sha–ft 636 adjacent the inside of side wall 483 (Fig. 29). It is in conti,–Liuous driving engagement wit'_l a freely rotating gear 488 (Fig. 34) upon a shaft 489, the gear 468 having an integral collar 490 that has an integral pair of diametrically spaced and axially extending clutch teeth C_91 either of –vvhich may engage and drive a single axial tooth 992 upon a sleeve journalled for rotating and sliding movement upon the shaft 489. Normally, the 'Lleeth 491 and 692 are disengaged by reason of a spring 41_ll (Fig. 34) surrounding the sliaft 489 between the collar 490 and the sleeve 493, but when sleeve 493 is moved to the le–ft by t–liedepression of levers 432, 455 or 450 the clutch teeth 491 and 492 are engaged so that sleeve 493 will be rotated until the proper sun–i, five cents, ten cents or twenILy cents isregistered into the coin counter 458, Nvhere,,ipon the te6th 491 and 492 will disengage. Each o–_' the levers 452, 455 and '_56 has a protuberan,–e 495, 498 or 497 (Fig. 31) on its eiid, which e.,Ligages respectively a sleeve 498, 493 or 500 to move the sleeve 493 to the left (Fig. 34) to engage the clutch teeth 491 and 492 to drive the sleeve 493 until the proper surn has been added into the coin counter 453. The details of construction Of the mechanis_–n by ivhich this is accomplished are wehl knoi7_n as exemplified for exar–riple in Fig. 6 of the aforesaid Daugherty Patelit 2,338,575 and for that reason the details need not be explained here, it being sufficient to explain coin is gaged and sorted its value is added to the total previ. ouslyregistered by the coin counter 01.8, just as in the aforesaid Pacent 2,338,575. It should be apparent that the complete deuression of the selected le–ver 451–456 by the cam 269 and the lever l_42 (Fig. 22a) occurs approxin_ ately during the i–irst _80 degree rotation of the driveii shaft 224. As the shaft 224 continues the rerriainder of its 360 degree rotati.on to return the com 209 to the position shown in –Pig. 22a, the carii 269 moves the lever 444 counfer–clockwise to the liinit of its rpover–qent and the–Ti re'_ease_– '_t to srpp back to its initio–I positio–n u?–ider the influence of spring 446. Th–is happens

irre– 1.5 spective of the height of the lever 444 at the time, as determined by the diameter of the coin or token that has just been gaged, sorted and registered. As shown in Fig. 14 there are four nested bells or gongs identified lay the reference iiumbers 503, 504, 505 nnd 5CS, that are sounded respective'ly by the clappers 507, 508, 509 and 'Ihese clappers are attached to similar legs of bell cranks 513, 515 and 5_6 (Fig. 19) that are connected by pins to the lower ends of vertical pull rods 517–520 (Fig. 19) secured at their –Lipper ends to bell cranks 1,;23–526 moving ill– vert;Acal planes about a common horizontal pivot shaft 534 (Fig. 19). As shown in Figs. 19 and 19a t"iiere are seven bell cranks 527–533 pivoted about a vertical shaft 535. As viewed in Fig. 19 the left legs of the bell cranks are all of the same length., and in the path of movement of a projeeting lip 536 (Fig. 22a) on 33 the leg 444 of the vertical shiftable bell crank on shaft 445. Depending upon the vertical position of (_he bell crank leg 444 resulting from coin gaging, ihe projecting lip 53G move one or more of the bell cranks 527–,N33 counterclockwise and –10 then release it, causing selected clappers 507–510 to strike the bells 503–506 under the irl–fluence of springs 537, one for each clapper. It is the function of the bells 503 to 506 to indicate by their sound, either siiagly or incombinatio–ti, as when two or rnore are simultaneously struck, the value of a coin or token that has just been gaged, sorted and registered. As viill be best apparent from Fig. 19a movement of the bell crank 532 by the lip 536, and the subsequent release of the crank, will cause the simultaneous striking of all four bells, which will produce a particular tone denoting the gaging and sorting of a quarter, which is the largest diameter coin or token normally handled by the illustrated fare box. The lower– most and seventh bell crank 533 would only ring the large bell 503, but sinc– the illustrated fare box handles only six different diameter coins, tokens or the like as. determined by the six lands 378–383 in the cam plate 376, the aforesaid bell crank 533 is supefluous in the illustrated embodiment and will normally be used only when the fare box is enlarged to handle coins, tokens or the like of seven different diamete_–s. Takin,another example, if a penny is gaged and sorted, it being the third from the smallest coin or toke–n handled, the bell crank element 444 v7ill be depressed three steps so that it engages and releases the bell crank 529 (Figs. 19 and 19a) to simultaneously ring the two srlaller bells 505 and 506. Thus, as will be apparent from the various lengths of the bell cranks 527–523 and 523–526 of Fig. 19a, the particular bell or combination of bells that is rung will depend upon the diameter of the coin or token that has been gaged and sorted. Prom the foregoing deserli_tion, it will be appo,rent to those skilled in the art that our gaging, registering and totalizing mechanism may be readily adapted for various other uses in gaging and sorting. Locking arrangement One of the features of the illustrated fare box is a key controlled arrangement by which the operator can turn a key to place the fare box in operating condition, to turn it off so that the motor will not operate, and to lock it so that neither the motor nor the change maker will operate, thereby locking the change maker so that no one can remove coins from it, as when the operator is absent from the vehicle. The lock is indicated in Fig. 1 at 540, with a key 541. In the illustrated position the lock is "on" so that the motor and change maker will operate normally. A cam plate 542 is mounted on the lock inside the casing, and rotates with the key 541 from the normal position shown at 542 (Fig. 1) to a second position 543 and to a thi–rd position. In the "on" position Pt 542 the cam plate raises the lever 545 (Fig. 15) of the switch arm of a main switch 546 to close the sv_itch and condition the fare box for motor operation upon actuation of the plunger 103. By rotating the key 541 (and thus the cam plate 542) counter–clockxvise the swi–tch 546 is opened, thus preventing energization of the fare box operating motor 218. During its counter–clockwise rotation through 180 degrees the cam plate 542 will pass through the "off" positiov–i at 543 and finally to the "lock" position at 544. During 'uhe last degrees portion of this movement it will depress a platform 547 (Fig. 15) that is integral with an upwardly extending member 548 (Fig. 35) and a downwardly extending element 549 that has a camming connection with a longitudinally movable locking plate 552 having vertical projections 553 that when pulled to the left as in Fig. 35 will positively secure or lock the keys 554 against depression, so that they cannot be operated to remove coins from the coin barrels. Thus the main motor switch 546 is open, and the change maker is locked when the key 541 is turned to make the cam 542 occupy the position shown at 544 in Fig. 1. When the key is turned to rotate the com plate back to the initial position at 542 the locking plate 552 may be returned to the right (Fig. 35) to its unlocked position by manually pushing on a knob 555 that is secured to said plate. For a description of the locking of the change maker by the locking plate 552 reference may be had to the Daughterty patent 2,338,576. The member 548 extending upwardly from the platform 547 has a pin 556 that passes between a pair of toggle levers mounted upon pins 560 and 561 (Fig. 15) that have legs 562 and 563, which whei–i the platform 547 is depressed as in Fig. 15, underlie the levers i45 and 146 and prevent their depression to actuate the counter assemblies 143 and 144 (Fig. 1). Raising of the platform and of the pin 556 rotates the toggle lovers so that their legs 562 and 563 clear the levers 145 and 146. In the appended claims the term "fare" is used to define coins, tokens or the like used in the payment of fares, and other objects which it may be desired to register or count and sort with our improved mechanism. The invention may be embodied in other spe– essential characteristics thereof. The preselit embodiment is therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein. What is claimed and desired to be secured by United States Letters Patent is: 1. In a mechanism of the class described a coin receiving hopper, a fare handling device; means forming a fare passage between said hopper and i,_) said handling device; rotary electric motor means operable to drive said handling device; and electric circuit for energizing said motor includin.a a first switch; means for closing said switch; a second switch in said circuit operable to be closed by a, fare in said passage including a movable contact mounted for reciprocating movement between a first position where it blocks said passage and engages a fare in the chute to close the circuit, and a second position removed from said passageway; a third switch in said circuit; means driven by said motor means to keep said third switch closed until a predeterriained number of hancuing cycles have been com–oleted following the closing of either said flrst–or second switches; and means driven by said motor during each handling cycle for reciprocating the movable contact of said second switch between its first qnd se_–ond positions. 2. In a fare box, a hopper; a fare singling and gaging device; means forming a fare passage between said hopper and said device; a motor drive for said fare si–ngling and gaging device; rejecting Means preventing the passage of mutilated fares and objects larger than fares through said fare passage; a connection between said motor drive and said rejecting means to

operate said rejecting means frorn said mol_or dr–1ve; and overload clutch between said motor drive and said coin singling and Paging device, operable to per– 4,–, mit operation of said motor drive –Ln the event of stoppage of the singling and gaging device. 3. In a fare box, a fare receiving hopper; a coin Singling and gaging mechanism including a reciprocable ram; a passageway between said hop– _,5 0 Per and singling and gaging mechanism terminating at a point in the path of the working face of the ram; a rotating motor; a connection between the motor and ram including a crank Pin and connecting rod for converting rotary mo– tion of the motor to reciprocating motion of the ram; an electric circuit including a motor starting switch and a holding switch in parallel, operative to energize the motor through at least one cycle of operation of the ram; clutch means in said connection between the motor and ram; a fixed stop operative to disengage said clutch at the end of one full revolution of said crank pin; and means effective in response to movement of said motor to engage said clutch means. 4. In a fare box, a fare singling and gaging mechanism including a reciprocable ram; a rotating motor; a connection between the motor and ram operative to convert rotary motion to reciprocating motion; and electric circuit in– eluding a motor starting switch and a holding switch in parallel, operative to energize said motor through at least one cycle of operation of the ram; clutch means in said connection between the motor and ram; means operative to disenei,–ic forms without departing from the spirit or 75 gage said clutch at the end of one full revolu. _t!On of said crank pin; and spring pressed detent means effective to hold the ram at the beginning of a working stroke upon disengagement of said clutch. 5. In a fare sorting and re._istering mecha– nism; a gaging element, a fare sorting device op– –erable to direct fares along different ppths according to their diameters; a gear driven in clie direction by saild ga.aing element; a rack driven .by said gear; a cam on said rack connected to control said sorting device; a plurality of registers for totaling coins of different diameters; a .second cam on said rack for selecting a register according to coin diameter; and means cooperating with said second cam to actuate the selected register. 6. In a fare box, coin and token singling and gaging means; a sorter mechanism responsive to said gaging means and operable to receive coins and tokens; a hopper for Teceiving coins and 2.0 tokens having a passage therefor leading to said singling means; a change maker positioned to re– .ceive coins from said sorter mechanisr–,i; an electric motor connected to drive said singling and gaging means; an electric circuit for e,_iergizing said motor and including a first switch for initiauy closing said circuit; a second switch in ,parallel with said first switch and driven by said motor to hold said circuit closed for a predetermined nuinber of operatiori–s of said singling ,means; a third switch in parallel in said circuit and responsive to engagement by a coin or token in said passage to close said circuit; a fourth switch in series with said circuit; and xneans for opening said fourth switch. 7. In a fare box, a fare singling mechanism; a hopper opening into sa,'_d singling mechanism; a rotating motor; a drive connection between the motor and singling mechanism; an electric circuit including a motor starting switch and a hold– ing switch in parallel, operative to energize the motor through a predetermined number of cycles of operation of the singling m–echanisrn; clutch means in said conilection between the motor and singling mechanism; a fixed stop operative to periodically disengage said electric motor –'Lrorn said singling mechanism and means responsive to .–Movernent of said rnotor to engage said clutch means to produce a periodic and momentary interruption in the drive to said singling mechanism. 8. In a fare box; a fare singl,_ng mechanism; a rotating inotor; a connection between the motor and singling mechanism operative to drive said singling mechanism; an electric circuit in,–luding a motor starting switch and holding switch in para7LIel, operative to energize said motor through a predetermined number of cycles of operation of said siii–gling mechanism; clutch means in said connection between the motor and singling mechanism; means operative to disengage said clutch at the end of one cycle of operatiori of said singling mechanism; and spring pressecl detent _–neans effective to hold the singling i–nechanism at the beginning of a cycle upon disengagement of said clutch. 9. In a fare box, a fare singling and gauging device; a hopper openiilp,_ into said singiing and gauging device; a motor drive for said fare singling and gauging device; rejecting means preventing the passage of niultilated fares to said gauging device; an overload clutch between said niotor drive and said coin singling device, operable to permit operation of said motor drive in the event of stoppage of the singling and gauging device.

0) US4314352A – BANKING MACHINE

2) Family number: 30170761 (US4314352A) © PatBase

Title: Banking machine

Priority: 19530814 DE1954S040426 19540814 DK19730001831 19730404 US19720243339 19720412

Family:

Publication number	Publication date	Application number	Application date
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NL94797 C	00000000		00000000
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Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DOCUTEL CO ; DOCUTEL CORP ; DOCUTEL CORP 2625 EAST GRAUWYLER ROAD IRVING DALL ; SODECO ; SODECO COMPTEURS DE GENEVE

Assignee(s): DOCUTEL TE IRVING TEXAS VER ST V AM CORP ; FOUGHT HAROLD D ; SODECO SOC DES COMPTEURS DE GENEVE ; BANKERS TRUST CO ; DIEBOLD INC ; DOCUTEL CORP 2625 EAST GRAUWYLER ROAD IRVING DALLA ; DOCUTEL CORP 2625 EAST GRAUWYLER ROAD IRVING DALLAS COUNTY TEXAS E U A ; DOCUTEL CORP IRVING TEX V ST A ; DOCUTEL CORP US ; OLSY NORTH AMERICA INC

Inventor(s):(std)**:** FOUGHT HAROLD DON ; FOUGHT HAROLD D ; MELONI MARIO ; FOUGHT H D ; MARIO MELONI ; HD FOUGHT

Inventor(s): FOUGHT HAROLD DON DALLAS TEX ; FOUGHT HAROLD DON DALLAS TEX V ST A ; HAROLD DON FOUGHT ; H D FOUGHT

International class (IPC 8–9): G06F15/00 G07F19/00 G07G1/12 H04M15/28 H04M17/02 (Advanced/Invention); G07F19/00 G07G1/12 H04M15/28 H04M17/00 (Core/Invention); G06F (Subclass/Invention)

International class (IPC 1–7): G06F15/30 G07D7/00 G07F19/00 G07F7/02 G07F7/04 G07F7/10 H04M1/31 H04M15/28 H04M17/00 H04M9/00

CPC: G07F19/20 G07F19/207 G07F19/211 H04M15/28 H04M17/023

European class: G07F19/00F G07F19/20 G07F19/207 G07F19/211 H04M15/28 H04M17/02B

US class: 235/379 364/900 902/15 902/18 902/20 902/4 902/5 902/9

Classification Explorer

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Abstract:
Source: US4314352A A high speed, computer controlled banking machine provides fully automatic teller stations for completing banking functions in response to a coded credit card presented thereto. After the credit card presented to the machine has been initially checked to determine if the card has the proper format, coded information thereon is evaluated to check the user's identity prior to authorizing him to complete a selected banking function. When each of several standard checks of the credit card code have been completed, a check is made of a bank interchange file to determine if the presented card will be honored at a particular station. Upon a satisfactory response at the interchange check, a bad account verification is made to determine if the accounts encoded on the card are delinquent in any respect. For cards showing a good account, the computer advances the system operation to a transaction selection procedure wherein one of four separate banking function selections are made by a push button interface between a user and the system. Following the selection of a correct banking function for the presented card, operation of the system continues to a transaction processing procedure wherein the selected transaction is completed. In the transaction processing procedure, either currency is dispensed, funds deposited to one of several accounts or funds transferred between accounts of the user. Upon completion of any one of these three functions, the system advances to a receipt printing procedure wherein a record of the completed banking function is made. This receipt and the currency, where applicable, are delivered to the user along with his credit card for future use.

0) US3246932A – COIN CONVEYOR

3) Family number: 22781923 (US3246932A) © PatBase

Title: Coin conveyor

Priority: FR19600837448 19600831 GB19600027771 19600810 US19640384275 19640610 US19640384277 19640610 US19640384276 19640610 US19590798264 19590309

Family:

Publication number	Publication date	Application number	Application date
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US3196887 A	19650727	US19640384275	19640610
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Probable Assignee: ELECTRONIC COIN PROC CORP

Assignee(s):(std)**:** ELECTRONIC COIL PROC CORP ; ELECTRONIC COIN PROC CORP ; WHITE JR ROBY B

Assignee(s): ELECTRONIC COIN PROCESSING CORP ; ELECTRONIC COIL PROCESSING CORP

Inventor(s):(std)**:** WHITE ROBY BYRON ; WHITE JR ROBY B

Inventor(s): JR ROBY B WHITE

International class (IPC 8–9): G07D3/10 G07D5/00 G07D5/10 G07D9/00 (Advanced/Invention); G07D3/00 G07D5/00 G07D9/00 (Core/Invention)

International class (IPC 1–7): G07D3/00 G07D3/10 G07D5/00 G07F3/02 G07F9/06

CPC: G07D5/005 G07D5/10 G07D3/10 G07D9/00 G07D5/00

European class: G07D3/10 G07D5/00 G07D5/00P G07D5/10 G07D9/00

US class: 194/317 194/333 194/335 232/1R 406/151 406/196 453/3 453/7 453/8

Classification Explorer

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Abstract:
Source: GB914017A 914,017. Sorting and testing coins. ELECTRONIC COIN PROCESSING CORPORATION. Aug. 10, 1960, No. 27771/60. Class 27. Coin–handling apparatus comprises means for sorting coins into batches according to their sizes and feeding these batches to respective testers which cause a coin to ring at its natural frequency in air and have means responsive to a predetermined frequency band for directing authentic coins to collecting means. The apparatus is described as either set up at a central station to which coins collected from

parking meters, vending machines, telephone boxes, c. are brought or disposed on a vehicle for making the collection. As shown in Fig. 1, the apparatus is mounted on a vehicle and comprises a sorter 6 arranged to distribute the coins according to size to testers 9... 13 leading to compartments 19, 20, 21, 23, 24, for authentic coins and a compartment 22 for rejected or counterfeit coins. The coins may be delivered to a hopper 7 which feeds them by a conveyer 8 to the sorter 6 or they may be pumped directly from the coin box of a parking meter through a hose 40, Fig. 4, having a coin–receiving head 41 attachable to the meter. The hose 40 is connected to a box 42 housing an impeller 43 for inducing a downward flow of air through a perforated pipe 45 connected to the hose so that coins are drawn through the hose and drop down the pipe 45; at the outlet end of the pipe 45, a vaned valve 49 is rotated slowly by a motor 51 to discharge the coins through a shoot to the sorter. A closure device fitted within a casing 56 between the hose and head 41 allows free passage of the coins as long as the hose is fitted to the meter but closes to prevent coins from being extracted from that end of the hose should the latter be inverted after it has been detached. The sorter to which the coins are then fed comprises an assembly of concentric and perforated drums 70, 71, 72, 73, Fig. 7, which are arranged at a slight downward inclination and, together with an enclosing imperforate drum 74, are secured at one end for rotation by a motor 77. Coins fed through a shoot 79 into the upper end of the innermost drum are sorted by the various drums and discharged through shoots 82, 86, 87, 88, 89 at their lower ends, the perforations in the various drums being of such sizes that the innermost drum retains all but the large size coins for which it is effective and passes the rest to the next drum which similarly retains the coins of the next size and passes the remainder to the next drum, and so on; small perforations may be provided in the outer drum 74 for the passage of small inwanted coins. The drums may be cylindrical or of polygonal cross–section with the perforations disposed at the corners, or, as shown in Fig. 16, of saw–tooth cross–section and provided, if desired, with transverse braking ribs 101. On a vehicle, the drums are mounted in a pivoted and weighted cage to ensure that they always adopt a slight downward inclination. Each of the shoots from the sorter leads to a separate tester comprising a hopper 120, Fig. 18, the base 123 of which is rotated about its axis by a motor 125 so that the coins are flung radially outward and directed out of the hopper one at a time through a guide passage 129, Fig. 20. Should two coins stacked one on the other attempt to enter the passage together, the upper coin is deflected past the entrance by its engagement with the rim of a second disc 128 –which projects into the passage in spaced relation above the base 123 and is rotated by the motor 125 at a much greater speed than is the base. As it leaves the passage 129, the coin is picked up between an upper pair of driven belts 148 passing over pulleys 142 and a lower pair of pulleys 150 and fed thereby to the upper end of a vertical shoot 161 where it is centred between a fast–moving belt 153 and a driven roller 164 and projected down the shoot at considerable speed; to enable the belt 148 to cope with both thick and thin coins, the beltengaging surfaces of the pulleys 142 are irregularly formed so that the spacing of the belt from the base 123 constantly varies and, should two coins overlap each other on the pulleys 150, the fast–moving belt 153 ensures that the leading coin will be accelerated down the shoot well in advance of the other coin. When the coin leaves the shoot 161, its edge is arranged to strike against an anvil 171; as shown in Figs. 19b... 19d, the coin 173 successively hits a flexible insert 172 embedded in the anvil, flips over to cause its edge to strike the anvil and so ring at its natural resonant frequency while suspended in free air, and then spins back in reverse direction. The ringing sound so produced is received by a microphone 177, Fig. 20, and fed to a valve circuit which is designed to respond only to sounds falling within a predetermined frequency range (i.e. the range corresponding to the particular coins for which the tester is employed). An authentic coin causes the circuit briefly to operate a relay resulting in the energization of a solenoid 179, Fig. 18, the plunger of which then advances to hit the coin as it spins back from the anvil and direct it into a shoot 178; a coin which fails to energize the solenoid merely bounces off the anvil into a reject shoot 186. The operation of the relay also actuates counters to register the number of authentic coins collected from each source and the total number collected from all sources and may control apparatus for registering these amounts on punched cards. The outlet from each compartment receiving authenticated and rejected coins from the testers is fitted with a cylindrical valve block which has a diametric opening and is rotatable to register the opening with the outlet through gearing from a manually–operable shaft. Separate opening shafts may be provided for the different compartments or one shaft common to all the compartments, and the operating handle of the shaft projects into a locked compartment. Coins collected by a vehicle may be discharged at a central station through an opening in the floor of the latter after a telescoping shoot has been raised hydraulically or otherwise through the floor into contact with the valve. Either disposed on the vehicle or permanently installed at a fixed location is a further device for detecting abnormalities in the diameter and thickness of coins which have been previously authenticated. In this device, coins are fed one at a time from a stack in a cylinder to openings 254, Fig. 35, in the upper run of an endless belt 251 moving over a support 250. Variations in diameter detected by the tip of a spring–pressed finger 258 result in the opposite end of the finger closing one of two contacts 266, 267. Similarly, variations in thickness detected by the tips 273 of a number of spring– urged fingers 271 result in the opposite ends of the fingers closing one of two contacts 277, 278. Closing of any of the contacts 266, 267, 277, 278 energizes relays in a control circuit and the activation of a solenoid 288 to slide an ejector plate 285 transversely below the belt so that the defective coin drops from its opening 254 into an opening 287 in the plate 285 and is withdrawn with the latter when the solenoid is de–energized. The control circuit also automatically registers the number of coins rejected. For use in a bank, the apparatus may be arranged to test and count only one denomination of coin which has been sorted from a batch fed to the sorter.

0) GB876626A – IMPROVEMENTS IN OR RELATING TO APPARATUS FOR AC...

4) Family number: 23066778 (GB876626A) © PatBase

Title: Improvements in or relating to apparatus for acting in turn on documents in a pile thereof

Priority: GB19570003335 19570130 GB19590032547 19580127 FR19580757119 19580130

Family:

Publication number	Publication date	Application number	Application date
DE1291548 B	19690327	DE1958A034834	19580130
FR1274374 A	19611027	FR19580757119	19580130
GB876626 A	19610906	GB19570003335	19570130
NL28075 C	19630525		00000000

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Assignee(s): GEORGE EDMOND BRACKENBURY ABELL

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Inventor(s): ABELL GEORGE EDMOND BRACKENBURY

International class (IPC 8–9): G01R27/26 G06M9/02 G07D7/00 (Advanced/Invention); G01R27/26 G06M9/00 G07D7/00 (Core/Invention)

International class (IPC 1–7): G06C25/00 G06M9/02

CPC: G01R27/2647 G06M9/02 G07D7/00

European class: G01R27/26D4C G06M9/02 G07D7/00

Classification Explorer

Forward Citations: FR2422210, FR2179270, FR2048072,

Abstract:
Source: GB876626A 876,626. Countng–apparatus. ABELL, G. E. B., CHADDER, H. L., PRICE, P. R., and BUCKLE, G. Jan. 27, 1958 [Jan. 30, 1957], No. 3335/57. Class 106 (1). Apparatus for acting in turn on documents in a pack or pile comprises means for initiating separation of the documents individually in turn, means for increasing separation of each document and sensing means for sensing a property of the separated part of each document. The embodiments of Figs. 1–57 constitute improvements in the counting apparatus described in Specification 784,209. First embodiment.–As shown in Fig. 1, a tubular nozzle 1 is surrounded by a rotatable slide valve 2 having openings 4 adapted once in each revolution of the valve 2 to be connected by an opening in the tubular nozzle to a vacuum source. A release member 7 rotates eccentrically of the axis of the nozzle 1 and is adapted to increase the separation of banknotes 5 successively detached from a pile 6 by the action of the vacuum and transfer the separated portion of the note from the pile 6 to the pile 10, the remote portions of the note being clamped together. The member 7 carries brushes 13 adapted to contact the valve 2 during part of the revolution of the member 7, if no note is present. A cam 17 rotating with the member 7, Fig. 4, is arranged to open contacts 18 for part of the period during which the brushes 13 are adapted to contact the valve 2 so that, should a note be present, the circuit through an electromechanical counter 21 is temporarily interrupted to increase by one the number registered by the counter. Second embodiment, Figs. 6–9 (only Fig. 6 shown).–The brushes 13 are replaced by contacts 27 between which the member 7 provides an electrical circuit when no note is present. The function of the cam 17 of the first embodiment in providing a circuit between the counter 21 and earth is performed by a transparent rotatable disc 32 having an opaque sector adapted to form an electrical pulse when it interrupts the beam of light between a lamp 34 and photo–cell 35. Alternatively, the pulse may be provided by means of the current generated in a stationary coil by the motion of a permanent magnet moving with the member 7 (Figs. 10, 11, not shown). Third embodiment, Figs. 12–17 (only Figs. 12 and 17 shown).–The contacts 27 of the second embodiment are replaced by two sets of spring–urged ball contacts 47, 48 mounted in a member 49. When no document is present, the contacts 47 are first bridged to energize a relay RL1, Fig. 17, which holds over contacts RL1–1 but is de–energized by the closure of contacts 48. Fourth embodiment, Figs. 18–21 (only Fig. 18 shown). The presence of a note is detected by a photo–cell 64 and lamp 63 which are mounted in a member 65, a lens 66 focusing light through an opening 67 in the member 65. When a document passes the opening 67, light is reflected therefrom on to the photo–cell 64. The photo–cell and lamp may be duplicated. The photo–cell or photo–cells are arranged in the energizing circuit of a relay which has a set of contacts in the circuit of an

electromechanical counter. Electronic pulse forming circuits.–The above embodiments may employ electronic counting circuits in place of the electromechanical counters. The second embodiment may employ the pulse–forming circuit of Fig. 24 (not shown) together with a multi–cathode electronic counting circuit (Figs. 51, 52, not shown) but preferably the pulse forming circuit of Fig. 25 is employed. The construction of Figs. 6–9 is modified (Fig. 22, not shown) by the provision of two photo–cells 82, 83 and associated lamps to provide two spaced pulses. When no note 5 is present, a point 97 is earthed over the contacts 27, but when a note is present, the point 97 is only earthed while the photo–cell 83 conducts, and when the photo–cell 83 is interrupted, a thyratron V1 fires thus causing the side V2A of an amplifier and pulse former stage V2 to conduct which causes a bi–stable multivibrator to change its state thereby providing an output which is differentiated by a capacitor C3 to give an output pulse at the terminal 76. The multivibrator is reset by a pulse from the photo–cell 82 which fires a thyratron V4. The multivibrator is initially set to a particular one of its stable states by a switch 103 which is operated when the clamping plate 11 is moved for insertion of a pile of banknotes (Fig. 23, not shown). Pulse–forming circuits for the third embodiment (Figs. 28, 29, not shown), and the fourth embodiment (Figs. 31, 32, not shown) are described. Fifth embodiment–sensing banknote numbers, Figs. 34–38 (only Figs. 34, 38 shown).– The presence of numbers printed in magnetizable ink is sensed by one of four reading heads, one for each of four possible positions of the numbers, the heads comprising permanent magnets 147 adapted to magnetize the ink which is then sensed by a pick–up head 149. The magnetic elements are supported in an insulating block 154. Assuming that the banknotes have seven digit serial numbers, then a circuit is adapted to provide a pulse to be counted for each seven pulses provided by the pick–up head 149. Pulses from one of the heads 149 are amplified by a valve V13 and shaped at V14. The shaped pulses pass to a Miller integrator valve V15 which when a predetermined voltage level is reached applies a pulse to an amplifier V16 and inverter V17A the output of which is fed back via a delay 162 to reset the integrator V15. The delay determines the length of the output pulse at 76. An alternative circuit employing a multi–cathode counting tube instead of a Miller integrator is described (Fig. 40, not shown). Sixth embodiment–sensing metal threads, Figs. 41–47 (only Figs. 44, 45 shown).–Metal threads are detected by four conducting plates 181–184 mounted in an insulating body 185, which plates are connected in pairs by conductors 186, 187, the conductor 186 being connected to an oscillator 188, Fig. 45, so that when a metal or metallized thread capacitively connects the plates 181, 183 with 182, 184, a pulse is obtained in the conductor 187 to set a bistable circuit 194 which is reset by a pulse obtained from a magnetic pulse generator 196 which may be mounted on the shaft 23, driving the member 7. A pulse to be counted is thus obtained at the terminal 76 for each banknote 5. A detailed circuit is described (Figs. 46, 47). Seventh embodiment (Figs. 48–50, not shown). –Both magnetic reading heads for sensing magnetizable numbers and plates for detecting capacitively metal threads are provided. Electronic counting circuit, Fig. 52.–The circuit shown is adapted for checking the number of banknotes in packets each of which should contain 100 notes. The pulses from any of the pulse–forming circuits described above are fed to an input terminal 212 and pass to a cold–cathode tetrode V28 feeding a ten–cathode units counting tube V29. A twelve–cathode counting tube V31 counts the tens. The outputs from the " 10 " cathode of the tube V31 and the "0" cathode of the tube V29 are taken to a gate comprising rectifiers D5, D6, D7, which is also supplied with an input from a thyratron V32 which is fired by an "end of count pulse" from the switch 103 operated by the clamping plate 11 when the counted bundle of notes is removed, so that a thyratron V33 is fired if the correct count of 100 has been attained. A " correct " relay RL6 and "correct" electromechanical counter CM2 are then operated. Should the thyratron V32 fail to fire, due to an incorrect count, the thyratron V33, the relay RL4 in its anode circuit operates to cause an " incorrect " relay RL7 and " incorrect " counter CM1 to operate. The counting tubes V29, V31 are reset by contacts RL4–1 of the relay RL4. Reading coded information, Fig. 53.–Reading heads 146 are positioned to read timing marks 223 and coded marks as shown in the lower row, and the signals produced may be arranged to fire thyratrons indicating the number represented by the code. The number of marks in each row may be counted and a thyratron arranged to fire only when each number is correct. In the embodiment shown in Fig. 58 which is a modification of that described in Specifications 769,065 and 775,419, a disc 231 provided with five sucker heads 233–237 rotates anticlockwise, the heads rotating clockwise. Initial separation of a note 5 from the pile 6 is by the nearest sucker head, e.g. the head 234, the separation being increased by the following head. Contacts carried by an insulating member 49a are actuated as described in the third embodiment, the successive sucker heads replacing the member 7. A table of values of the components used in the various electronic circuits is given in the Specification. Specifications 557,086, 685,288, and 876,627 are also referred to.

0) US3253709A – CURRENCY DETECTORS

5) Family number: 26055973 (US3253709A) © PatBase

Title: CURRENCY DETECTORS

Priority: FR19610863020 19610526 US19600087472 19601020

Family:

Publication number	Publication date	Application number	Application date
AT241171 B	19650712	AT19610004190	19610529
BE604343 A1	19611129	BE19610604343	19610529
CH411417 A	19660415	CH19610006236	19610529
DK105893 C	19661121	DK19610002196	19610529
FR1403610 A	19650625	FR19610863020	19610526
GB993142 A	19650526	GB19610019258	19610529
US3253709 A	19660531	US19600087472	19601020

Probable Assignee: NAT REJECTORS GMBH

Assignee(s):(std)**:** NAT REJECTORS ; NAT REJECTORS GMBH

Assignee(s): NATIONAL REJECTORS INC

Inventor(s):(std)**:** MERRILL JENKINS ; JENKINS M

Inventor(s): M JENKINS ; JENKINS MERRILL

International class(IPC 8–9)**:** G07D7/00 (Advanced/Invention); G07D7/00 (Core/Invention)

International class(IPC 1–7)**:** G05G G07C G07D7/00 G07F7/04

CPC: G07D7/00

European class: G07D7/00

US class: 209/534 209/567

Classification Explorer

Cited documents: US3132737 A, US2995976 A, US2967452 A, US2961649 A, US2960377 A, US2957387 A, US2951164 A, US2932392 A, US2827822 A, US2802905 A, US2731621 A, US2597675 A, US2314027 A, US2081280 A, US2076493 A, US2071139 A, US1436543 A,

Forward Citations: US7613298, US5761089,

Abstract:
Source: GB993142A 993,142. Checking cash. NATIONAL REJECTORS Inc. May 26, 1961 [Oct. 20, 1960], No. 19258/61. Heading G4T. Apparatus for identifying authentic currency bills comprises members for gripping a bill and feeding it to a sensing system including a sensing head with an airgap, means for moving the bill intimately against the sensing head, said means being operated by the bill, and means under the control of the sensing head for causing an unacceptable bill to be fed in a direction opposite to that in which it entered the apparatus. The apparatus may be associated with a vending or a change–giving machine. A spurious bill is returned, as is also a genuine bill if a withdrawing card c. is attached to it. The bills are printed in magnetic ink in known manner, and they pass under a magnetic head which controls the feed of the bills. The conveying means comprises two pairs of opposed timing belts 270, 272 which are spaced apart to engage the two sides of a bill, and the bill is fed along a horizontal path defined by two spaced–apart platens 50, 94 provided with edge guide plates to prevent skewing of the bill. The top belts 270 are supported on toothed pulleys 204, 164, the front pulleys 204 being vertically movable against spring action by a solenoid 230 which acts through levers 224, 214, and 207, so that a bill placed on a support 336 can be placed between the belts. The lower belts 272 are mounted on toothed pulleys 180, 194, the pulleys 180 being driven by a reversible motor 188 through worm gearing: the shaft of the pulleys 180 is geared to the shaft 162 of the pulleys 164, so that both sets of belts are driven in synchronism and without slip. Each belt is supported opposed wear–resisting guides 260 which also engage the sides of the belts, and the arrangement is such that there is alternate downward and upward bowing of the belts causing them to undulate as they travel, causing undulations in the currency bill gripped between them, and thus stiffening the bill and eliminating any wrinkles c. therein. The bills are inserted through a slot in the front plate 36, and pass through a slot in a gate 370 which is lowered, when a bill has been fully fed into the apparatus, by a solenoid 344 acting through levers 350, 352. Each bill is adapted to depress a number of curved switch arms, such as 276, 288, to operate switches, such as 274, 286, arranged between the feed belts. The bills are delivered to a cash box c. by

opposed pairs of sift faced rollers 314, 321, the shafts of the rollers 314 being driven by a belt and pulley arrangement and a spring clutch 168, 170, 176 from the shaft 162, whereby the rollers travel faster than the speed of the belts. When the rollers 314, 321 first engage a bill, they cannot rotate at their normal rate, the torsion spring 176 of the clutch drive is thus wound tighter, thereby storming energy within itself. When the trailing edge of the bill leaves the feed belts 270, 272, the spring 176 will restore itself to normal condition, the rollers 314, 321 will be rapidly rotated, and the bill will be ejected at high speed. The magnetic head 244 of the currency detector is slidably mounted on the limbs of a U−shaped frame 238, and is biassed downwardly by a spring 246 on an adjustment screw device 248. A soft−faced roller 326 co−operating with the head 244 is carried by a bell−crank lever 323 which is connected by a link 334 to a solenoid 330. Operation:− When the leading edge of a bill is inserted between the timing belts 270, 272 and a start button 340 is depressed, the solenoid 230 is energized to allow springs 208 to force downwardly the belt pulleys 204 so that the bell is gripped by the belts, and the motor 188 is then energized by a switch 232 operated by the solenoidoperated lever 214 to cause the bill to be fed. The circuit connections established by the button 340 are maintained and further connections are made, by the bill depressing switch arms, such as 276 and 286, so that as the bill is fed the solenoid 330 is energized to cause the soft−faced roller 326 to press the bill against the convex face of the magnetic head 244 and force the latter upwardly against its spring 246. The voltage variations set up in the head 244 by the magnetic ink of a genuine bill are amplified to produce two validating signals, the second of which can cause a connection to be made to a vending, change making, or other machine to be controlled by the currency detector. The solenoid 344 is now energized to release the front gate 370 which falls to close the bill slot, and operates a holding switch 362. The bill moves forward, operating switches in its path to condition the circuit and that of the associated vending c. machine, and is finally ejected by the rapidly rotating rollers 314, 321. When a spurious bill is inserted, the two validating signals are not generated in the magnetic head 244, so that the front gate 370 is not moved down to close the billt slot in plate 36, the connections to the motor 188 are reversed, the belts 270, 272 are driven in the opposite direction to return the bill, and the roller 326 is moved away from the head 244. If a genuine bill with an attached withdrawing string c. is inserted, the gate 370 cannot fall completely to close the switch 362, and the connections to the motor 188 are again reversed to cause the bill to be returned. Whenever the motor 188 reverses, the clutch in the drive to the shaft 162 slips, and the rollers 314, 321 are not driven reversely. In a modification (Figs. 21−24, not shown), an accepted bill is discharged by forcing it downwardly through slots in the platens 94, 50 by a sharp−edge plate which is oscillated vertically by a solenoid.

0) FR1363888A – MACHINE POUR EFFECTUER DES DEPOTS DE FONDS OU D...

6) Family number: 23100931 (FR1363888A) © PatBase

Title: MACHINE POUR EFFECTUER DES DEPOTS DE FONDS OU DE DOCUMENTS COMBINEE A DES DISPOSITIFS D'ANALYSE ET D'ENREGISTREMENT D'IMAGES MACHINE FOR MAKING DEPOSITS OF FUNDS OR DOCUMENTS TO COMBINED DEVICES OF ANALYSIS AND IMAGE RECORDING (Machine translation)

Priority: FR19620915393 19621114

Family:

Publication number	Publication date	Application number	Application date
FR1363888 A	19640619	FR19620915393	19621114

Probable Assignee: UNIVERSAL MATCH CORP

Assignee(s):(std)**:** UNIVERSAL MATCH CORP

International class (IPC 8–9): G07D11/00 (Advanced/Invention); G07D11/00 (Core/Invention)

International class (IPC 1–7): G06C25/00

CPC: G07D11/0096

European class: G07D11/00M4

Classification Explorer

Forward Citations: FR2430639,

Abstract:
Source: FR1363888A [Source: Claim 1] RESUME La presente invention a pour objet le produit industriel nouveau que constitue une machine destinee a effectuer des depots de documents, comme des cheques ou des billets de banque, ladite machine presentant les caracteristiques suivantes, prises isolement ou en combinaison 10 Elle comporte un carter ferme, une ouverture menagee dans ledit carter pour recevoir d'un deposant un depot comportant des articles comme une fiche de depot et du papier–monnaie, des dispositifs d'application de marques disposes a l'interieur du carter precite, un dispositif transporteur dispose de facon a recevoir les articles precites dans le dispositif d'ouverture et de facon a transporter chacun d'eux en succession au–dela du dispositif precite d'application de marques, un dispositif de commande agence de facon a commander le dispositif d'application de marques precite et produisant l'actionne– ment de ce dispositif en reponse au passage d'une fiche de depot au–dela dudit dispositif d'application de marques afin d'apposer des marques d'identification sur la fiche precitee, tout en empechant l'application de marques lorsqu'un billet de banque passe au–dela du dispositif d'application de marques; 20 La machine comprend un dispositif analyseur agence de facon a analyser le genre des articles recus dans l'ouverture precitee, un dispositif recepteur d'une fiche de depot supplementaire, un dispositif d'application de marques relie au dispositif analyseur precite et cooperant avec la fiche de depot supplementaire, pour y apposer des marques selon le genre de chaque article passant dans le dispositif analyseur; un dispositif deplacant la fiche de depot precitee et les articles, apres leur passage dans le dispositif analyseur, jusqu'a des dispositifs d'emmagasinage disposes de facon que le deposant ne puisse y avoir acces; enfin, un dispositif mettant a la disposition du deposant la fiche de depot supplementaire sur laquelle des marques ont ete apposees par le dispositif precite d'apposition de marques; 30 Un dispositif d'enregistrement d'images est dispose de facon que chaque article qui a ete recu dans l'ouverture precitee se trouve dans le champ en meme temps que les marques apposees par le dispositif analyseur, et un dispositif fait fonctionner le dispositif precite d'enregistrement d'images apres que le dispositif analyseur a fonctionne, grace a quoi on produit en relation associee identifiable une image enregistree de chacun des articles ainsi que des marques afferentes auxdits articles qui ont ete produites par le dispositif analyseur precite; 40 Un dispositif imprimeur est relie au dispositif d'analyse, ce dispositif imprimeur etant agence de facon a saisir une formule recue sur laquelle ce dispositif imprimeur appose des marques en fonction des indications apposees par le dispositif analyseur, grace a quoi ladite formule constitue un recu detaille du depot effectue; S La formule de recu precitee est amenee au dispositif d'impression par le deposant lui–meme; 60 Un dispositif de guidage est agence de facon a guider la premiere fiche de depot ainsi que les articles qui y ont ete deposes, depuis ladite ouverture jusqu'a un recipient de garde; un dispositif analyseur de documents et un premier dispositif d'application de marques sont disposes le long du trajet du dispositif de guidage precite; un second dispositif d'application de marques est agence de facon a apposer des marques sur la seconde fiche de depot precitee; un troisieme dispositif d'application de marques est dispose a l'interieur de la machine et coopere avec d'autres dispositifs d'enregistrement; le premier et le troisieme des dispositifs precites d'application de marques sont actionnes lors de la reception de la premiere fiche de depot et munissent la premiere fiche de depot, ainsi que l'autre dispositif d'enregistrement, de donnees predeterminees; le dispositif precite d'analyse de document est actionne lorsque des articles sont disposes sur le dispositif de guidage et fournit des signaux selon le genre de chaque article qui a ete depose; le second et le troisieme dispositif d'apposition de marques sont branches de facon a recevoir les signaux precites emis par le dispositif analyseur et apposent respectivement des marques correspondantes sur la seconde fiche de depot ainsi que sur

ledit autre dispositif d'enregistrement; enfin, un dispositif permet a un deposant utilisant la machine d'entrer en possession de la seconde fiche de depot sur laquelle ont ete apposees des marques correspondant aux signaux provenant du dispositif analyseur; 70 Le dispositif analyseur precite emet des signaux caracterisant la valeur d'un billet de banque depose; le second et le troisieme dispositif d'apposition de marques comportent un dispositif totalisateur destine a munir la seconde fiche de depot ainsi que ledit autre dispositif d'enregistrement precite de marques indiquant le total de la valeur des billets de banque precites; 8 Un dispositif d'enregistrement d'images est dispose de facon a avoir dans son champ des articles deposes ainsi que les marques apposees par le troisieme dispositif d'apposition de marques, ledit dispositif d'enregistrement d'images etant actionne de facon que l'image de l'article precite ainsi que celle des marques qui ont ete apposees selon le genre de l'article puissent etre en relation d'identification les unes avec les autres. [Source: Claim 1] SUMMARY The present invention relates to the new industrial product is a destiny machine perform document repositories, such as checks or bank notes, said machine presenting the following characteristics, taken singly or in combination 10 She has a housing farm, an opening provided in said housing for receiving a depositor a deposit which includes items like a deposit card and paper money, willing to tag application devices in the interior of the case cited above, has a conveyor device of way to receive the aforementioned articles in the opener and way to transport all of them–beyond the succession of the device mark application cited above, a way of agency control device controlling the application device cited above of brands and producing ment of this device actuation in response to the passage of a deposit sheet beyond said tag application device to affix identification marks on the record cited above, while preventing application brands when banknote goes beyond the tag application device; 20 The machine has a way of agency analyzer device to analyze the type of items in the above cited Receipts opening, a receiver device of an additional deposit slip, a trademark application device connects to the previously cited analyzer device and cooperating with the Record additional deposit, to affix marks gender of each item passing through the analyzer device; a device moving depot cited above of the plug and the articles after they pass through the analyzer device, until the willing manner of storage devices that the applicant can not have access; finally putting a device available to the applicant an additional deposit of card on which were tagged by the device for affixing marks cited above; 30 An image recording device has way that each article was received in the above cited opening is in the same time range as apposed marks by the analyzer device, and a device operating the device cited above images after recording the analyzer device works, thanks to what is produced in associated identifiable relationship registered a picture of each item as well as afferent brands in those articles which were produced by the analyzer device cited above; 40 A printer device is connected to the analysis device, this printer device being way agency recue enter a formula on which the printer device affixes depending on the indication marks affixed by the analyzer device, thanks to what constitutes a receipt said formula detailed the deposit made; S received formula cited above is people brought to the printing device by the applicant himself; 60 A guide device is a guide agency way the first deposit sheet and sections which were deposited there, from said opening up a guard vessel; a document scanner device and a first tag application device are arranged along the path of said guide device; a second tag application system is a way of agency affix marks the second depot Record cited above; a third tag application system is available on the inside of the machine and cooperates with other recording devices; the first and third brands of applying the aforementioned devices are sets in action when receiving the first deposit sheet and provide with the first deposit slip, and the other recording device, predetermined data; the device document analysis cited above is activated when articles are arranged on the guide and provides signals depending on the type of each item that has been filed; the second and third device marks are affixed branches of way to receive the signals emitted by the ABOVE analyzer device and affix corresponding marks respectively on the second deposit sheet and on said other recording device; Finally, a device allows an applicant using the machine to come into possession of the second depot sheet on which were affixed marks corresponding to signals from the analyzer device; The analyzer device 70 cited above emits signals characterizing the value of the deposited banknote; the second and third brands apply means comprise a counter device intended to equip the second depot sheet and said another recording device cited above marks indicating the total value of banknotes ABOVE; 8 An image recording device is disposed A way of having his field articles deposited as apposed marks the third brand affixing device, said image recording device being actuates way that the image of the article cited above as well as the brands that were affixed by type of item can be related with each other identification.

0) US3495066A – ELECTRIC–ARC WELDING WITH A PROTECTIVE GAS FLUX...

7) Family number: 30993399 (US3495066A) © PatBase

Title: ELECTRIC–ARC WELDING WITH A PROTECTIVE GAS FLUX

Priority: CA19750225805 19750423 CA19780317962 19781214 FR19657525514 19650721 FR19667546080 19660117 US19740482860 19740625 FR19667569565 19660715

Family:

Publication number	Publication date	Application number	Application date
BR7503987 A	19760706	BR19750005128D	19750625
CA1064621 A1	19791016	CA19780317962	19781214
CA1064621 A2	19791016	CA19780317962	19781214
CA1066416 A1	19791113	CA19750225805	19750423
DE1565426 A1	19700305	DE1966B088118	19660721
DE2525484 A1	19760115	DE19752525484	19750607
DE2525484 C2	19870813	DE19752525484	19750607
FR1488981 A	19670721	FR19650025514	19650721
FR2276638 A1	19760123	FR19750015095	19750506
FR2276638 B1	19771209	FR19750015095	19750506
FR90376 E	19680214	FR19667546080	19660117
FR90492 E	19671222	FR19667569565	19660715
GB1161011 A	19690813	GB19660032105	19660718
GB1496089 A	19771221	GB19750022916	19750523
IT1039309 A	19791210	IT19750024648	19750623
JP1239900 C3	19841113	JP19750072782	19750617
JP51014239 A2	19760204	JP19750072782	19750617
JP59011144 B4	19840313	JP19750072782	19750617
US3495066 A	19700210	US19660566676	19660720
US3937925 A	19760210	US19740482860	19740625

Probable Assignee: IBM

Assignee(s):(std): BROYARD YVON ; GUETET ROBERT ; IBM ; RENE NAUTRE ; YVON BROYARD ; NAUTRE RENE ; ROBERT GUETET

Assignee(s): INTAANASHONARU BIJINESU MASHIINZU CORP ; INT BUSINESS MACHINES CORP ARMONK N Y US ; IBM CORP ; INT BUSINESS MACHINES CORP ; INTERBOLD A NY GENERAL PARTNERSHIP ; BOOTHROYD WILLIAM A

Inventor(s):(std): BOOTHROYD W ; BOOTHROYD WILLIAM A ; BOOTHROYD WILLIAM ARNOLD ; BROYARD YVON ; GUETET ROBERT ; NAUTRE RENE ; UIRIAMU EI BUUSUROIDO ; WILLIAM A BOOTHROYD

Inventor(s): YVON BROYARD ; ARNOLD BOOTHROYD WILLIAM ; RENE NAUTRE ; ROBERT GUETET ; BOOTHROYD WILLIAM ARNOLD SAN JOSE CALIF

International class (IPC 8–9): B23K10/02 B23K9/173 B23K9/29 G06F15/00 G06F15/02 G06F7/00 G06K7/08 G06Q20/00 G06Q20/18 G06Q40/00 G07F19/00 G07F7/08 (Advanced/Invention); B23K10/02 G06F15/00 G06F7/00 G06K7/08 G06Q20/00 G06Q40/00 G07F19/00 G07F7/08 (Core/Invention)

International class (IPC 1–7): B23K28/00 B23K35/38 B23K9/00 B23K9/16 G06F13/00 G06F15/02 G06F15/20 G06F15/30 G06F3/04 G06F7/00 G06F9/00 G06F9/06 G06K17/00 G06K5/00 G06K7/08 G07D1/00 G07D1/04 G07F7/08 G07F7/10

CPC: B23K9/291 B65H31/3027 B23K9/173 G06Q40/02 B23K10/02 G06Q20/18 G07F19/20 G07F19/201 G07F19/209

European class: B23K10/02 B23K9/173 B23K9/29G G06F17/60D2 G06Q20/18 G06Q40/02 G07F19/00F G07F19/20 G07F19/201 G07F19/209

US class: 219/137R 219/74 235/379 346/22 902/16 902/17 902/20 902/40

Cited documents: US3852571 A, US3845277 A, US3818187 A, US3710324 A, US3705384 A, US3648020 A, US3629834 A, US3082314 A, US3053967 A, US3027446 A, JP44005787 A2, FR2179785 A1, FR2128848 A1, DE2127815 A1,

Forward Citations: WO8603289, WO8101477, WO7901055, US9676049, US9437050, US9026578, US8959637, US8864028, US8809723, US8653402, US8630942, US8600890, US8600889, US8600888, US8600887, US8583522, US8571952, US8554677, US8543507, US8229844, US8190513, US8156448, US8132715, US8132714, US8065600, US7890604, US7837101, US7802718, US7793830, US7699220, US7621444, US7617973, US7600677, US7597251, US7597248, US7596782, US7594001, US7591420, US7581112, US7575158, US7574653, US7571850, US7568205, US7530058, US7518084, US7493397, US7464386, US7451352, US7428725, US7415524, US7380250, US7291802, US7216294, US7163144, US7162723, US7152045, US7110512, US7092501, US7076786, US7013340, US6945457, US6944797, US6915454, US6868408, US6856965, US6786398, US6785372, US6695204, US6660958, US6286756, US6149056, US6145738, US6122625, US6060690, US6047887, US6047067, US5963648, US5953423, US5920629, US5898154, US5799087, US5719383, US5623547, US5455407, US5453601, US5183999, US5105069, US5007083, US4980543, US4951245, US4788420, US4754126, US4729681, US4639889, US4616111, US4611277, US4597330, US4570223, US4554444, US4527038, US4517412, US4493962, US4468750, US4454405, US4439636, US4437158, US4395614, US4355369, US4320854, US4319336, US4319132, US4306137, US4305059, US4282424, US4262333, US4225779, US4221376, US4187498, US4186871, US4179031, US4166945, US4166940, US4163215, US4148012, US4141078, US4114027, US4109238, US4091448, US4090057, US4075460, US4025905, US3975712, US3811029, US2013126501, US2009307775, US2009277878, US2009199044, US2009055315, US2009049529, US2009048975, US2008093443, US2008093440, US2008093439, US2008067239, US2008067238, US2008067237, US2008067234, US2008065540, US2008061135, US2008061134, US2008061133, US2008061132, US2008061130, US2008061129, US2007251923, US2007121851, US2006156389, US2006151442, US2006020883, US2005278351, US2005268292, US2005256933, US2005256924, US2005256834, US2005251380, US2005211764, US2005193097, US2005091230, US2004073873, US2004037634, US2003233477, US2003105725, US2003097639, US2003018827, US2002061092, US2002059321, JP6232062, JP61061479, JP61048070, JP60070782, JP59045580, JP53017860, JP52058036, GB2268605, FR2526601, FR2514279, FR2508680, FR2471941, FR2471940, FR2417803, FR2416762, EP2085936, EP0391059, EP0077705, EP0036266, EP0033210, EP0031736, EP0025181, EP0005630, EP0005576, EP0003702, DE8814238, DE3519384, DE3411373, DE3220949, DE3118687, DE3034542, DE2833264, DE2815591, CN102324136,

Abstract:
Source: US3495066A ABSTRACT OF THE DISCLOSURE Welding process and torch using a consumable electrode and an inert gas flow forming a protective sheath around said electrode and the arc issued therefrom, wherein said flow is formed as a free spiral vortex coaxial with said electrode and arc and rotating in a direction such that the electron deviation by the electromagnetic field created by said vortex ionised by the arc will be axipetal.

0) GB1079981A – IMPROVED COIN HANDLING DEVICE

8) Family number: 23057469 (GB1079981A) © PatBase

Title: Improved coin handling device

Priority: GB19650027451 19650629

Family:

Publication number	Publication date	Application number	Application date
GB1079981 A	19670816	GB19650027451	19650629

Probable Assignee: JOHNSON FARE BOX COMPANY

Assignee(s):(std)**:** JOHNSON FARE BOX COMPANY

Assignee(s): JOHNSON FARE BOX CO

Inventor(s):(std)**:** GOLLAND WESLEY ARTHUR ; GRIESEMER RAYMOND HARRY

International class (IPC 8–9)**:** G07D3/10 (Advanced/Invention); G07D3/00 (Core/Invention)

International class (IPC 1–7)**:** G07D9/04

CPC: G07D3/10

European class: G07D3/10

Classification Explorer

Forward Citations: WO04029886, GB2214683, EP1903511,

Abstract:
Source: GB1079981A 1,079,981. Coin counting and sorting. JOHNSON FARE BOX CO. June 29, 1965, No. 27451/65. Heading G4X. A coin counter and sorter comprises a hopper 25 from which loose coins are conveyed intermittently to a second hopper and thence to sorting and counting mechanism from which they are discharged to appropriate coin compartments, the counting mechanism being connected with a totalizer and printer. In operation a card is inserted through slot 31 to rest on a stop 197 and arm 43 is raised, closing switch 205 to prepare the energizing circuit for the sorting and counting mechanism. Arm 37 is moved to the right thereby printing on the card the initial total and closing switch 237 to complete the circuit and thus energize conveyer and counter motors (61, 117) respectively (Figs. 15, 14, not shown). An interlock 131 permits movement of lever 37 to the right or left only when arm 43 is in its upper or lower position respectively. Coins are conveyed from hopper 25 to counter hopper (101) (Fig. 3, not shown), the conveyer motor (61) being stopped by coins closing a switch (401) when hopper (101) contains a predetermined level of coins. A four–minute tone cycle ensures that the apparatus will not be stopped in its entirety while it still contains unsorted coins. Coins pass from the counter, which is substantially as disclosed in U.S.A. Specification 1,295,900, down shoot 271 to the sorter. The counter motor (117) shakes a downwardly inclined sorter plate (246) (Fig. 13, not shown) having apertures allowing dimes and nickels to fall respectively down shoots 255, 257 into compartments 47, 49, quarters falling off the end of the plate into compartment 51. When all the coins have been counted and sorted arm 43 is moved to its closed, lower position thereby raising the card stop 197 so that a closing reading may be printed above the initial total as the arm 37 is moved to the left.

0) US3519802A – CARDS EMPLOYING CAPACITOR SENSING OF ENCODED DA...

9) Family number: 3747878 (US3519802A) © PatBase

Title: CARDS EMPLOYING CAPACITOR SENSING OF ENCODED DATA

Priority: FR19700020415 19700603 GB19700029220 19700616 US19680779447 19681127

Family:

Publication number	Publication date	Application number	Application date
FR2093151 A5	19720128	FR19700020415	19700603
GB1317959 A	19730523	GB19700029220	19700616
US3519802 A	19700707	US19680779447	19681127

Probable Assignee: SECURADYNE LTD

Assignee(s):(std)**:** SECURADYNE LTD

Inventor(s):(std)**:** CINQUE ALPHONSE ; SCHWEIZER MAX NORMAN

Inventor(s): ALPHONSE CINQUE ; MAX NORMAN SCHWEIZER

International class (IPC 8–9)**:** G06K19/067 G06K19/10 G07F7/00 G07F7/08 (Advanced/Invention); G06K19/067 G06K19/10 G07F7/00 G07F7/08 (Core/Invention)

International class (IPC 1–7)**:** B42D15/00 B42D15/02 G06K7/08 G07D1/00 G07D7/00

CPC: G06K19/067 G06K19/10 G07F7/00 G07F7/086

European class: 43A90 G06K19/067 G06K19/10 G07F7/00 G07F7/08B

US class: 235/451 235/488 235/492

Classification Explorer

Cited documents: US3387265 A, US2848163 A, US2774060 A, US2478274 A, US2294681 A,

Forward Citations: US8400426, US8098240, US6834251, US6202929, US6168080, US5453602, US5159181, US4501960, US4181251, US3872438, US3842194, US3699311, GB2185440,

Abstract:
Source: US3519802A ABSTRACT OF THE DISCLOSURE An improved credit card and the like which includes internally coded data by which it is possible to uniquely identify the proper holder of the card. The encoded data 15 takes the form of a plurality of conductive members hav–ing portions thereof in différent planes whereby, with the aid of external sensing means, it is possible to generate preselected areas of maximum and minimum capacitance within the card.

0) FR2065657A – PROCEDE ET DISPOSITIF OPTIQUE D'IDENTIFICATION ...

10) Family number: 110108 (FR2065657A) © PatBase

Title: PROCEDE ET DISPOSITIF OPTIQUE D'IDENTIFICATION DE CARTES CODEES

Priority: US19690818711 19690423

Family:

Publication number	Publication date	Application number	Application date
BE749280 A1	19701021	BE19700749280	19700421
DE2018909 A1	19701119	DE19702018909	19700420
FR2065657 A1	19710806	FR19700014541	19700422
NL7004281 A	19701027	NL19700004281	19700325

Probable Assignee: ICV INC

Assignee(s):(std)**:** ICV INC

Assignee(s): ICV INC 230 PARK AVENUE SUITE 1924 A NEW YORK NEW ; ICV INC 230 PARK AVENUE SUITE 1924 A NEW YORK NEW YORK 10017 E U A

Inventor(s):(std)**:** EPSTEIN L C ; BAUS R JR ; CHRISTY E ; SUTHERLIN K K

Inventor(s): E CHRISTY ; K K SUTHERLIN ; L C EPSTEIN ; R BAUS JR

International class (IPC 8–9): G03H1/00 G06K9/74 (Advanced/Invention); G03H1/00 G06K9/74 (Core/Invention)

International class (IPC 1–7): G02B27/00 G03H1/00 G06K13/00 G06K21/00 G06K9/00 G07C9/02 G07D1/00 G07D7/00 G09F9/00 G11C13/04

CPC: G03H1/00 G06K9/74

European class: G03H1/00 G06K9/74

Classification Explorer

Abstract:
Source: FR2065657A 1. Procede d'identification optique determinant la non validite eventuelle d'un titre donne, utilisant un banc optique a 3 plans paralleles fixes, caracterise en ce qu'il realise, entre les deux premiers plans,– un faisceau module par un signal optique representant le titre non valable et concentrant au 3e plan une image dont les informations concernent, a la fois, la non validite du titre examine et la subdivision a laquelle il appartient; l'identification de cette subdivision par ledit faisceau optique etant obtenue par la correspondance entre le code et la division en regions spatiales, division appliquee a la liste de reference ainsi quJA tout autre accessoire, places respectivement au 2e et au 3e plan dudit banc, ou chaque'region est attribuee a une subdivision de l'ensemble, indiquee par l'un des digits du code, l'autre digit, attribue en propre au titre examine, etant represente par ledit signal optique porte par la region de la liste de reference, de sorte que l'image formee au 3e plan, est transmise a ltensem– ble de l'observation visuelle ou au dispositif optoelectronique indiquant la non validite. 1. Process for optical identification determinant non validity of an eventual title gives, using an optical bench 3 stills parallel, in that it characterizes realized between the first two planes – a modulated beam by an optical signal representing the as invalid and focusing on the 3rd map an image whose information relates, at the same time, the non validity of the subdivision under consideration and to which it belongs; the identification of this subdivision by said optical beam being obtained by the correspondence between the code and the regions Space division, division applied to the list of reference and quJA any accessory places respectively 2nd and 3rd plane of the bench, or chaque'region is attributed to a subdivision of the set, indicated by one of the digits of the code, one digit, assigns own under review, being represented by said optical signal carries through the region of the reference list so that FORMED third image plane is transmitted to ltensem– ble visual observation or optoelectronics device indicating the non validity.

0) GB1272505A – AUTOMATIC CARD SYSTEM

11) Family number: 426125 (GB1272505A) © PatBase

Title: AUTOMATIC CARD SYSTEM

Priority: JP19690072137 19690911

Family:

Publication number	Publication date	Application number	Application date
DE2044413 A1	19710401	DE19702044413	19700908
FR2061252 A5	19710618	FR19700032915	19700910
GB1272505 A	19720503	GB19700043186	19700909
JP50001611 B4	19750120	JP19690072137	19690911

Probable Assignee: OMRON TATEISI ELECTRONICS CO

Assignee(s):(std)**:** OMRON TATEISI ELECTRONICS CO

Assignee(s): OMRON TATEISI ELECTRONICS COMPANY ; OMRON TATEISI ELECTRONIC

Inventor(s):(std)**:** MORITA TADAO ; NAGATA MASANORI

Inventor(s): TADAO MORITA ; MASANORI NAGATA

International class (IPC 8–9)**:** G06Q20/40 G06Q40/00 G06Q40/02 G07B15/00 G07F7/08 G07F7/12 (Advanced/Invention); G06Q40/00 G07B15/00 G07F7/08 G07F7/12 (Core/Invention)

International class (IPC 1–7)**:** G06F15/30 G06K13/00 G07B11/00 G07B15/02 G07C11/00 G07D1/00 G07D1/04 G07D7/00 G07F9/00

CPC: G07F7/08 G07F7/12

European class: G07F7/08 G07F7/12

Classification Explorer

Abstract:
Source: GB1272505A 1,272,505. Checking credit cards; cash dispensers. OMRON TATEISI ELECTRONICS CO. 9 Sept., 1970 [11 Sept., 1969], No. 43186/70. Heading G4X. A credit card or the like 10 which controls the operation of an automatic card system such as a cash dispenser has recorded on it a term of availability which is read by card reader 11 and stored in register 12. A term setting circuit 15 of the system sets a second term of availability, including the time at which the card is presented to the system, and the two terms are compared by collating circuit 16. If a predetermined relationship exists between the two terms dispensation by cash dispenser 17 is permitted and a new unit term of availability determined by a second setting circuit 20 and succeeding that set by the first setting circuit 15 is written on the card by writing head 19. An identification number read from the card and the amount dispensed may also be permanently recorded by register 13. In the embodiment described the unit term of availability is one month. To allow for the use of a card in say October which has not been used in September, the effective term set by the system may include at least one preceding month as well as the month in which the card is presented, or alternatively the effective term of the card is considered as the month read from the card and at least one of the succeeding months.

0) DE2365845B2 – ANORDNUNG ZUM FESTSTELLEN DER KANTEN VON GEPRAE...

12) Family number: 1036525 (DE2365845B2) © PatBase

Title: ANORDNUNG ZUM FESTSTELLEN DER KANTEN VON GEPRAEGTEN UND/ODER ERHABENEN ZEICHEN AUF AUFZEICHNUNGSTRAEGERN

Priority: AT19720000849 19720203

Family:

Publication number	Publication date	Application number	Application date
AT307109 B	19730510	AT19720000849	19720203
CH561938 A	19750515	CH19730001511	19730202
DE2304416 A1	19730816	DE19732304416	19730130
DE2304416 B2	19761223	DE19732304416	19730130
DE2304416 C3	19770811	DE19732304416	19730130
DE2365845 A1	19761209	DE19732365845	19730130
DE2365845 B2	19770721	DE19732365845	19730130
DE2365845 C3	19780302	DE19732365845	19730130

Probable Assignee: INTERNAT SECURITY SYSTEMS S A

Assignee(s):(std)**:** GAO GES AUTOMATION ORG ; INT SECURITY SYSTEMS SA ; INTERNAT SECURITY SYSTEMS S A

Assignee(s): INTERNATIONAL SECURITY SYSTEMS S A ; GAO GES F AUTOMATION U ORGANISATION MBH ; INT SECURITY SYSTEMS S A ; G A O GESELLSCHAFT FUER AUTOMATION UND ORGANISATION MBH ; G A O GESELLSCHAFT FUER AUTOMATION UND ORGANISATION MBH 8000 MUENCHEN

Inventor(s):(std)**:** GROETRUP HELMUT DIPL ING ; GROETTRUP HELMUT DIPL ING

Inventor(s): GROETTRUP HELMUT DIPL ING 8000 MUENCHEN ; GROETRUP HELMUT DIPL ING 8000 MUENCHEN

International class (IPC 8–9): G07D7/00 (Advanced/Invention); G07D7/00 (Core/Invention)

International class (IPC 1–7): G06K7/10 G07D7/00

CPC: G07D7/00

European class: G07D7/00

Classification Explorer

Forward Citations: US7991184, US7539325, EP1050005,

Abstract:
Source: DE2304416B2 The system is used particularly to scan water marks on securities, documents or identification cards to guard against forgery. On the side of the recording medium turned away from the scanner a sequence of absorbing and reflecting surfaces is moved past across the beam path during the scanning process. At least one optical scanner is active on one side of the recording medium at two points which have such an interval between them that independent scanning of the marks and the clock track is made possible. A common scanner can be used for the marks and clock track and is adjusted alternately to the marks and track markings.

0) US3775755A – APPARATUS AND METHOD OF CODING INFORMATION

13) Family number: 40965224 (US3775755A) © PatBase

Title: APPARATUS AND METHOD OF CODING INFORMATION

Priority: AU19730051515 19730126 US19720223272 19720203 US19730363825 19730525 US19740451997 19740318 US19720242382 19720410 US19720273434 19720720

Family:

Publication number	Publication date	Application number	Application date
AR197397 A1	19740405	AR19730246380	19730131
AT360784 B	19810126	AT19730000873	19730201
AT87373 A	19800615	AT19730000873	19730201
AU197351515 A1	19740801	AU19730051515	19730126
AU197351516 A1	19740801	AU19730051516	19730126
AU207351515 A1	19740801	AU19730051515	19730126
AU464793 B2	19750904	AU19730051516	19730126
AU465900 B2	19751009	AU19730051515	19730126
BE794896 A1	19730802		00000000
BR7300686 A0	19731009	BR19730000686	19730130
BR7300687 A0	19731025	BR19730000687	19730130
CA1009751 A1	19770503	CA19730161889	19730123
CA1015852 A1	19770816	CA19730161887	19730123
CH572640 A	19760213	CH19730001580	19730205
DE2305165 A1	19730809	DE19732305165	19730202
DE2305166 A1	19730816	DE19732305166	19730202
DE2305166 B2	19771229	DE19732305166	19730202
DE2305166 C3	19780824	DE19732305166	19730202
DK146869 B	19840123	DK19730000547	19730201
DK146869 C	19840709	DK19730000547	19730201
ES191330 U	19740701	ES19730191330U	19730509
ES191330 Y	19741201	ES19730191330U	19730509
ES191331 U	19740701	ES19730191331U	19730509
ES191331 Y	19750116	ES19730191331U	19730509
ES411234 A1	19770116	ES19730411234	19730202
ES414592 A1	19760616	ES19730414592	19730509
FR2170768 A5	19730914	FR19730003807	19730202
FR2170769 A5	19730914	FR19730003808	19730202
GB1414817 A	19751119	GB19730004797	19730131
GB1424442 A	19760211	GB19730004796	19730131
HK48676 A	19760806	HK19760000486	19760729
IL41386 A0	19730730	IL19730041386	19730124
IL41386 A1	19751015	IL19730041386	19730124
IT978729 A	19740920	IT19730019933	19730201
IT978730 A	19740920	IT19730019934	19730201
JP1191800 C3	19840229	JP19730013611	19730202
JP48085208 A2	19731112	JP19730013612	19730202
JP48085217 A2	19731112	JP19730013611	19730202
JP4885208 A2	19731112	JP19730013612	19730202
JP58000055 B4	19830105	JP19730013611	19730202
SE398014 B	19771128	SE19730001419	19730201

SE398014 C	19780309	SE19730001419	19730201	
US3775755 A	19731127		00000000	
US3802101 A	19740409	US19720223272	19720203	
US3858032 A	19741231	US19730363825	19730525	
US3987725 A	19761026	US19740451997	19740318	
ZA7300762 A	19731128	ZA19730000762	19730202	
ZA7300763 A	19731128	ZA19730000763	19730202	

Probable Assignee: TRANSACTION TECHNOLOGY INC

Assignee(s):(std)**:** TRANSACTION TECH INC ; TRANSACTION TECH INC INC ; TRANSACTION TECHNOLOGY INC

Assignee(s): TRANSACTION TECHNOLOGY INC 10 880 WILSHIRE BLVD LO ; TRANSACTION TECHNOLOGY INC LOS ANGELES CALIF V ST ; TRANSACTION TECHNOLOGY INC US ; TRANSACTION TECHNOLOGY INC 10 880 WILSHIRE BLVD LOS ANGELES CALIFORNIE E U A ; TRANSACTION TECHNOLOGY INC LOS ANGELES CALIF V ST A ; TRANSACTIONS TECHNOLOGY INC ; SCANTLIN JOHN R

Inventor(s):(std)**:** SCANTLIN DEJ R ; SCANTLIN J ; SCANTLIN J R ; SCANTILIN J ; SCANTLIN JOHN R ; SCANTLIN JOHN ROBERT

Inventor(s): SCANTLIN JOHN R LOS ANGELES CALIF V ST A ; SCANTILIN J US ; SCANTLIN J US ; DEJ R SCANTLIN ; J R SCANTLIN ; JOHN ROBERT SCANTLIN ; JON ROBAATO SUKANTORIN

Agent(s): REINHOLD COHN AND PARTNERS

International class (IPC 8–9)**:** B41M1/12 B41M3/14 B42D15/10 B44F1/12 G03F7/12 G06F11/00 G06K1/12 G06K19/06 G06K19/10 G06K19/14 G06K7/016 G06K7/10 G06K7/14 G11B19/04 (Advanced/Invention); B41M1/12 B41M3/14 B42D15/10 B44F1/00 G03F7/12 G06F11/00 G06K1/00 G06K19/06 G06K19/10 G06K19/14 G06K7/01 G06K7/10 G06K7/14 G11B19/04 (Core/Invention); B42D G11B (Subclass/Invention)

International class (IPC 1–7)**:** B31F1/20 B41C1/14 G06K1/00 G06K1/20 G06K15/00 G06K19/02 G06K19/04 G06K19/06 G06K3/00 G06K7/00 G06K7/016 G06K7/10 G06K7/14 G06K9/18 G07C11/00 G07D7/00 G07F7/08 G09F3/02 G09F3/04 G11B23/30 G11B5/00 G11B7/00

CPC: Y10S283/904 G06K19/14 G06K7/0163 B42D25/43 B41M3/14 G03F7/12 G06K1/126 G06K19/06046 B42D25/00 B42D25/455 B42D25/46 B42D25/475 B42D25/30 B41M1/12 B42D2033/10 B42D2033/20 B42D2033/22 B42D2033/30 B42D2035/08 B42D2035/30 B42D2035/34

European class: 43A90 B41M1/12 B41M3/14 B42D15/10 G03F7/12 G06K1/12D G06K19/06C5 G06K19/14 G06K7/016C L42D31/06 L42D31/16 L42D31/22 L42D31/24 L42D31/30 L42D33/10 L42D33/20 L42D33/22 L42D33/30 L42D35/08 L42D35/30 L42D35/34

US class: 101/123 101/127.1 101/128.4 101/129 235/454 235/474 235/487 235/6.1.12R 283/108 283/110 283/111 283/85 283/87 283/904 283/91 40/0.2.2 902/29

Classification Explorer

Cited documents: US3716296 A, US3655948 A, US3645626 A, US3643358 A, US3643066 A, US3639729 A, US3627990 A, US3566521 A, US3536894 A, US3507654 A, US3496342 A, US3474232 A, US3468046 A, US3461305 A, US3457391 A, US3453598 A, US3356023 A, US3341691 A, US3275806 A, US3245697 A, US3238357 A, US3229073 A, US3195257 A, US3160155 A, US3000104 A, US2984030 A, US2969732 A, US2835993 A, US2630755 A, US2395804 A, JP48013611 A2, JP45021741 A2, JP43002047 A2, JP43000125 A2, JP42022911 Y1, JP40018482 A2,

Forward Citations: WO8602047, WO8203713, WO15161834, WO10037834, WO10037834, WO08053202, WO08053202, WO02098670, WO02098670, WO0200068, WO0125872, WO0125872, USRE29449, US9592626, US9519851, US9082322, US8992105, US8931704, US8833663, US8684416, US8675261, US8550358, US8500020, US8408602, US8256669, US8235298, US8191788, US8156776, US8116685, US8083152, US8066190, US8025239, US8016193, US7980596, US7931413, US7837118, US7837116, US7824029, US7815124, US7804982, US7798413, US7793846, US7789311, US7744001, US7728726, US7728048, US7694887, US7661600, US7651031, US7621451, US7619520, US7607583, US7529385, US7407195, US7380715, US7267285, US7184569, US7086666, US7059521, US7044386, US6986465, US6732936, US6705530, US6678360, US6570967, US6512415, US6484780, US6449346, US6434223, US6424703, US6349134, US6296188, US6292547, US6290137, US6177176, US6148065, US6044135, US6035021,

US6016344, US5988501, US5917893, US5898762, US5787156, US5649480, US5553536, US5498202, US5312656, US5288011, US5216543, US4941686, US4869165, US4856424, US4835544, US4831244, US4779120, US4776271, US4720824, US4694148, US4678898, US4660859, US4591189, US4583766, US4544184, US4522428, US4508686, US4463970, US4407525, US4370057, US4307899, US4298792, US4290630, US4237799, US4237375, US4182482, US4177729, US4142464, US4130756, US4119361, US4112292, US4096015, US4074114, US3993893, US3961160, US3959627, US3947666, US3919447, US3902262, US2015235225, US2015085285, US2012314268, US2012176652, US2011303112, US2011227328, US2011183612, US2010025475, US2009293565, US2009242637, US2009166436, US2008282593, US2008251581, US2008203172, US2008197200, US2007187515, US2007145735, US2007085337, US2007040018, US2007015649, US2006171757, US2006171756, US2006170557, US2006170436, US2006163363, US2006086803, US2005051633, US2005035589, US2005006455, US2004124245, US2003146288, US2003005304, JP61017158, JP56501106, JP54006600, JP53103800, JP52087325, JP4658958, JP2007512981, GB2157040, GB2122545, FR2577582, FR2455303, FR2409556, FR2406854, FR2321158, FR2321158, EP2559562, EP1862326, EP1862326, EP0794509, EP0408393, EP0368570, EP0368570, EP0271673, EP0109971, EP0088939, EP0042183, EP0023318, EP0018887,

Abstract:
Source: US3775755A An apparatus and method of recording and reproducing information on a recording medium including recording at least a first track of encoded data information and with the data information occurring at first regular intervals along the recording medium and recording a second track of clock information and with the clock information occurring at second regular intervals along the recording medium and with the second regular intervals occurring no more than every other one of the first regular intervals. The encoded data information on the first track is reproduced and stored and with the reproduction and storage controlled in accordance with the reproduction of the clock information in the second track. The second track of clock information is reproduced by at least a pair of spaced sensors for successively reproducing the clock information along the second track and with the reproduction of the clock information successively alternating between the sensors and wherein the reproduction and storage of the encoded data information is controlled by the successive alternating reproduction by the pair of sensors so that each portion of the encoded data information occurring at the first regular intervals is not reproduced and stored until both sensors have alternately reproduced clock information.

0) US3877559A – APPARATUS FOR DISPENSING BANK NOTES

14) Family number: 24051993 (US3877559A) © PatBase

Title: APPARATUS FOR DISPENSING BANK NOTES

Priority: CH19720001636 19720204 US19730328936 19730202 US19750607434 19750825

Family:

Publication number	Publication date	Application number	Application date
CH550443 A	19740614	CH19720001636	19720204
DE2305059 A1	19730809	DE19732305059	19730202
FR2169986 A1	19730914	FR19730003091	19730129
FR2169986 B1	19780623	FR19730003091	19730129
GB1385446 A	19750226	GB19730005388	19730202
JP48085299 A2	19731112	JP19730014219	19730203
US3877559 A	19750415	US19730328936	19730202
USRE28731 E	19760309	US19750607434	19750825

Probable Assignee: BURGIN GERARD N

Assignee(s):(std)**:** BURGIN G ; BURGIN GERARD ; BURGIN GERARD N

Assignee(s): BURGIN GERARD FR ; BURGIN GERARD KINGERSHEIM FRANKREICH

Inventor(s):(std)**:** BURGIN GERARD

Inventor(s): BURGIN GERARD KINGERSHEIM FRANKREICH

International class (IPC 8–9)**:** G06Q40/00 G07D11/00 G07D9/00 G07F19/00 G07F7/12 (Advanced/Invention); G06Q40/00 G07D11/00 G07D9/00 G07F19/00 G07F7/12 (Core/Invention)

International class (IPC 1–7)**:** G07D1/00 G07D7/00 G07F11/00 G07F3/00 G07F7/02

CPC: G07D11/0003 G07D11/0027 G07F19/20 G07F19/202 G07D11/0096 G07F7/08 G07F7/12

European class: G07D11/00D G07D11/00D6D G07D11/00M4 G07F19/00F G07F19/20 G07F19/202 G07F7/08 G07F7/12

US class: 194/210 194/211 194/212 194/4G 235/478 271/20 902/13 902/16 902/25 902/4 902/5

Classification Explorer

Cited documents: US3675816 A, US3657521 A, US3643216 A, US3588449 A, US3570643 A, US3163414 A, US2524417 A, US2033849 A, US1458462 A, JP47000809, GB824069 A,

Forward Citations: WO8504274, US7025259, US6196147, US5704304, US5572940, US4157692, US4113140, US2005139654, JP52082156, FR2576436, FR2561014, FR2339729, EP0313294, EP0313294,

Abstract:
Source: US3877559A Apparatus for dispensing bank notes, of the type operating with a bank identity card. This apparatus requires the simultaneous utilization of a bank identity card and of a cheque the amount of which corresponds to the sum requested. It comprises rotary reading heads for verifying the authenticity and the non falsification of the card or cheque, as well as a combined verification device for verifying the correspondence between the card and the cheque for controlling the dispensing of notes.

0) GB1428469A – METHOD AND APPARATUS FOR CONVERSION OF GRAPHICA...

15) Family number: 1366199 (GB1428469A) © PatBase

Title: METHOD AND APPARATUS FOR CONVERSION OF GRAPHICAL CLEAR INFORMATION INTO CIPHERED GRAPHICAL INFORMATION AND VICE VERSA

Priority: CH19720008592 19720609

Family:

Publication number	Publication date	Application number	Application date
CA991995 A1	19760629	CA19730173462	19730607
CH555577 A	19741031	CH19720008592	19720609
DE2231242 A1	19731220	DE19722231242	19720626
GB1428469 A	19760317	GB19730027514	19730608
JP49085941 A2	19740817	JP19730065323	19730609

Probable Assignee: GRETAG AG

Assignee(s):(std): GRETAG AG

Assignee(s): GRETAG AG REGENSDORF SCHWEIZ ; GRETAG AKTIENGESELLSCHAFT ; GRETAG REGENSDORF SCHWEIZ AG ; EHRAT KURT

Inventor(s):(std): EHRAT KURT ; EHRAT KURT DIPL ING

Inventor(s): EHRAT KURT DIPL ING ZUERICH SCHWEIZ

International class (IPC 8–9): G06K7/10 G06K9/20 G06T7/00 G07C9/00 G09C5/00 (Advanced/Invention); G06K7/10 G06K9/20 G06T7/00 G07C9/00 G09C5/00 (Core/Invention)

International class (IPC 1–7): G07C9/00 G07D7/00 G09C1/00 G09C5/00

CPC: G07C9/00055 G09C5/00

European class: 43A90 G07C9/00B6C2 G09C5/00

Classification Explorer

Forward Citations: WO8504746, US4454610, JP60136869, GB2282563, GB2179008, FR2592197, FR2370328, EP0042361, EP0011671, EP0006498, EP0006419,

Abstract:
Source: GB1428469A 1428469 Ciphering and deciphering graphical data GRETAG AG 8 June 1973 [9 June 1972] 27514/73 Heading G5X To convert graphical information, e.g. a cheque card signature, into enciphered form, and to decipher the enciphered form to obtain a clear copy, two similar devices, or possibly one with combined facilities, scan the input optically by means of a flying spot television camera, synchronized with a second CRT displaying the converted data ready to be photographed on to a card in the enciphering application, or open to view when deciphering. The clear data converted to binary pulse form is enciphered by combining it via a modulo−2− mixer (producing pulse output for pulse on one but not both of inputs), with a secret code pulse train, itself selected from a larger stored train by a supplementary code number input via a separate terminal. In addition to the enciphered data the output display contains the supplementary code together with timing and synchronizing pulses. In deciphering, the timing and synchronizing pulses ensure that the device scans the image correctly, in spite of minor errors in position, orientation and scale, and the supplementary code enables the correct part of the secret code train to be drawn out of store. In both devices (Figs. 1, 3) the scanning spot of fixed brightness on CRT 1 is focused on the signature or enciphered card 4 in holder 35, the instantaneous brightness of the reflected spot being measured by photo−electric device 5, amplified 13 and sampled and clipped 14 to produce a pulse train in time with pulses from clock 12. This input train enters the encipher or decipher device at terminals A or D, and the converted train emerges at terminals B or E for possible remote transmission, or via brightness modulator 9 to CRT 2, on which the image is displayed. Both devices possess clock 12, master controller or program generator 11, 23, secret code store 20, code pulse computer 19, modulo− 2−mixer 22, 32 and shift register 15, 33. Synchronizing pulse generators 17 and 28 are similar but have slightly different functions, and supplementary code stores 18, 29 accept code from terminal C and from incoming optical data respectively. In addition the enciphering device (Fig. 1) has AND gate 16 and OR gate 21, while deciphering device (Fig. 3) has AND gates 26, 30, 31, clock synchronizing unit 27 and correlator 43. A signature can be scanned by 120 lines, while each tube displays 600, thus in enciphering the contents of the first of each five lines are stored in shift register 15 and copied four times after the original, forming a line set of five identical lines. Before scan of the signature begins, three line sets in group I (Fig. 2) and a further three in II are traversed in order to print on the enciphered card 6 the pulses in fields TR, SI1, IN, SI2 in groups I and II. When the data scan area III is reached, fields TR and SI1 are added before, and SI2 after, the data. Field TR contains 8 clock pulses in all cases, field IN contains clock pulses in group I, supplementary code as a binary number in group II, and enciphered data in group III. In all

groups, fields SI1 and SI2 each occupy ten pulses, of which seven form a synchronizing train from generator 17 of binary form 1110100, starting in alternate line sets at pulse 1 and 4. Counting of pulses and lines to delimit fields and groups is controlled by program generator 11. In deciphering, scan takes place over a field larger than card 6, and as soon as pulses are detected, the pulses in field TR are used to set in clock synchronizer 27 frequency and phase of clock 12 to match the card, a process later reinforced by clock pulses in field IN. The phases (start at 1 or 4) of synchronizing pulses in fields SI1 and SI2 are compared and generate any necessary horizontal component added to vertical scan to correct misalignment of the card with the horizontal scan axis. The line in each line set used for deciphering purposes is the second after the first having SI1 and SI2 pulses in phase with each other, i.e. normally the middle line of five. The start of scan of the critical IN field must be perfectly synchronized with the switch−on of deciphering circuits at deflection Y3; this is accomplished by generating in 28 five synchronizing 1110100 trains, each delayed by one pulse. Only one of these will correlate perfectly, as detected by correlator 43, with the train read from card 7, and three pulses after the end of the selected train, or immediately if the card train starts at pulse 4, the deciphering circuits are activated. In group II these read the supplementary code and load it into store 18, from which it selects the correct block of secret code in store 20, and makes ready code pulse computer 19. On entering the seventh line set, i.e. group III, entry at Y3 into field IN initiates reading of the secret code, continued in each line set for the pre−fixed count of pulses in IN, and re−started at Y3 in the following line set. The secret code pulses are combined with the enciphered data pulses in modulo−2−mixer 32 to produce clear output, stored in shift register 33 and displayed in five successive lines on CRT 2. Use of the wrong secret code can be recognized by blank background areas of the signature field incorrectly deciphered as filled with random pulses.

0) DE2329759A1 – VORRICHTUNG ZUM SORTIEREN UND ZAEHLEN VON MUENZ...

16) Family number: 1984807 (DE2329759A1) © PatBase

Title: VORRICHTUNG ZUM SORTIEREN UND ZAEHLEN VON MUENZEN AUTOMATIC COIN SORTER AND COUNTER – HAS ROCKERS WITH GRADED PASSAGES TIPPING OVERSIZE COINS TO NEXT PASSAGE

Priority: DE19732329759 19730612

Family:

Publication number	Publication date	Application number	Application date
DE2329759 A1	19750109	DE19732329759	19730612

Probable Assignee: SEIBOLD WILHELM

Assignee(s):(std)**:** SEIBOLD WILHELM

Assignee(s): SEIBOLD WILHELM 8500 NUERNBERG

Inventor(s): NICHTNENNUNG BEANTRAGT

International class (IPC 8–9): G07D3/00 (Advanced/Invention); G07D3/00 (Core/Invention)

International class (IPC 1–7): G07D3/16

CPC: G07D3/00

European class: G07D3/00

Classification Explorer

Abstract:
Source: DE2329759A1 Patentansprueche Vorrichtung zum Sortieren und Zaehlen von Muenzen,gekennzeichnetdurch wenigstens eine Wippe (33; 33a – 33d greater than, die einen Durchgang aufweist, dessen Abmessungen so gewaehlt sind, dass die Muenzen (37; 81) einer ersten Sorte hindurchfallen, waehrend die Muenzen (38; 80) wenigstens einer zweiten Sorte nicht hindurch passen, so dass sie von der Wippe abgefangen werden, die so ausgebildet ist, dass sie von den abgefangenen Muenzen zum Kippen gebracht wird und diese Muenzen seitlich abgibt, 2Vorrichtung nach Anspruch 1,dadurchgekennzeichnet, dass der Durchgang an zwei gegenueberliegen den Seiten von zwei Vorspruengen (35, 36s 35a – 35d, 36a 36d) begrenzt wird, die von einem flachen bzw, ebenen Grundkoerper (34) vorstehen, 3. A very simple and inexpensive apparatus for sorting and counting of coins consists of a number of graduated rockers which are arranged in descending order. The top rocker has the smallest passage at its bottom pocket so that only the smallest coin of the range can pass. Larger coins rest on top of its entry slot; they are tipped into the rocker below because the rockers are eccentrically pivoted. This process is repeated until the largest coins pass through the bottom rocker outlet passage. A feeler in the path of each sort of coin operates a separate counter.

17) Family number: 1339195 (US3990558A) © PatBase

Title: METHOD AND APPARATUS FOR PREPARING AND ASSESSING PAYMENT DOCUMENTS

Priority: DE19732350418 19731008

Family:

Publication number	Publication date	Application number	Application date
CH585439 A	19770228	CH19740013318	19741003
DE2350418 A1	19750410	DE19732350418	19731008
DE2350418 C2	19870813	DE19732350418	19731008
FR2246913 A1	19750502	FR19740033714	19741007
FR2246913 B1	19761022	FR19740033714	19741007
GB1484042 A	19770824	GB19740043401	19741007
JP50067048 A2	19750605	JP19740115262	19741008
US3990558 A	19761109	US19740512999	19741007

Probable Assignee: GRETAG AG

Assignee(s):(std)**:** GRETAG AG

Assignee(s): GRETAG AG CH ; GRETAG AG REGENSDORF ZUERICH CH ; GRETAG AKTIENGESELLSCHAFT ; GRETAG CH AG ; GRETAG DATA SYSTEMS AG ; GRETAG REGENSDORF ZUERICH CH AG

Inventor(s):(std)**:** EHRAT KURT ; EHRAT KURT DIPL ING

International class (IPC 8–9)**:** G06K19/10 G06K5/00 G06Q20/04 G06Q20/40 G06Q40/00 G07D7/00 G07D7/04 G07D7/20 G07F19/00 G07F7/12 G07G5/00 (Advanced/Invention); G06K19/10 G06K5/00 G06Q40/00 G07D7/00 G07F19/00 G07F7/12 G07G5/00 (Core/Invention)

International class (IPC 1–7)**:** G06F15/30 G06F7/06 G06K17/00 G06K19/00 G07C11/00 G07C9/00 G07D1/00 G07D1/04 G07D7/00 G07F1/06 G07F7/00 G07F9/00 G07G1/00 G09C1/00 G09C5/00

CPC: G06K5/00 G06K19/10 G06Q20/042 G07D7/004 G07D7/04 G07D7/20 G07F7/08 G07F7/125 G07F19/20 G07G5/00 G06Q20/401

European class: G06K19/10 G06K5/00 G06Q20/042 G06Q20/401 G07D7/00D G07D7/04 G07D7/20 G07F19/00F G07F19/20 G07F7/08 G07F7/12B G07G5/00

US class: 194/206 194/4R 340/5.9 705/75 713/176

Classification Explorer

Cited documents: US3845470 A, US3697729 A, US3655946 A, US3648020 A, US3570643 A, US3487905 A, DE2237911 A1, DE2119491 A1,

Forward Citations: WO9735403, WO9735403, WO9726615, WO9718536, WO8400229, WO8101477, WO8002757, WO16096412, WO14090804, WO0133499, WO0025246, USRE42893, USRE42018, USRE41960, USRE40220, US8606697, US8571978, US8571977, US8566231, US8556728, US8549310, US8353752, US8262394, US8250369, US8092224, US8069056, US8055509, US8036985, US7822679, US7821404, US7801745, US7711639, US7553235, US7553234, US7266527, US6959387, US6938018, US6411942, US6356919, US6321894, US6289453, US6263438, US6240403, US6230149, US6181814, US5923763, US5918234, US5895904, US5890141, US5884277, US5867577, US5828751, US5822738, US5781654, US5778066, US5737418, US5495098, US5491325, US5341428, US4965568, US4858138, US4829568, US4809185, US4795892, US4775246, US4774513, US4760534, US4757537, US4743747, US4660221, US4649266, US4641347, US4641346, US4637051, US4339820, US4214230, US4198619, US4193131, US4186871, US4048618, US4035614, US2011004548, US2009313473, US2007055600, US2006276931, US2006234793, US2006234792, US2006218014, US2005283432, US2004138991, US2003201904, JP61276064, JP61276063, JP61276062, GB2512450, GB2512450, GB2415074, GB2415074, GB2403325, GB2403325, GB2342743, GB2342743, GB2278002, GB2278002, FR2741176, FR2734655, FR2728372, FR2717286, FR2704081, FR2605429, FR2604546, FR2603408, FR2581464, FR2536885, FR2534712, FR2459515, FR2415340, FR2316666, EP2743893, EP2071489,

EP2071489, EP0740275, EP0708417, EP0671712, EP0621570, EP0619563, EP0609937, EP0609937, EP0453930, EP0453930, EP0219881, EP0219880, EP0219879, EP0154972, EP0154972, EP0151874, EP0151491, EP0132782, EP0031736, EP0030381, EP0030381, EP0029733, EP0006498, DE3613025, DE2734456,

Abstract:
Source: US3990558A A method and apparatus is described for preparing and assessing machine readable payment documents such as bank or postal checks to avoid fraud. The checks are prepared by enciphering the serial number and the amount for which the check is made out with secret code data to provide a crypto number which is printed on the check with the serial number and the amount. The check is assessed as valid by reading out the printed data and enciphering the amount and serial number with the same secret code data as used when preparing the check to provide a crypto number which is compared with the crypto number read from the check. If the two crypto numbers are the same the check is assessed as valid.

0) US3880320A – ROTARY CASH DRAWER MECHANISM FOR CURRENCY DISPE...

18) Family number: 1135987 (US3880320A) © PatBase

Title: Rotary cash drawer mechanism for currency dispenser

Priority: US19740445236 19740225

Family:

Publication number	Publication date	Application number	Application date
AU197578508 A1	19760826	AU19750078508	19750224
BR7500987 A	19751202	BR19750000987	19750218
CA1016919 A1	19770906	CA19750218322	19750121
DE2508068 A1	19750904	DE19752508068	19750225
DE2508068 B2	19760805	DE19752508068	19750225
DE2508068 C3	19770324	DE19752508068	19750225
ES434113 A1	19761216	ES19750434113	19750124
FR2262358 A1	19750919	FR19750005790	19750225
FR2262358 B1	19810821	FR19750005790	19750225
GB1488927 A	19771019	GB19750007273	19750221
IT1031212 A	19790430	IT19750019661	19750128
JP1205388 C3	19840511	JP19750015220	19750205
JP50116097 A2	19750911	JP19750015220	19750205
JP58040234 B4	19830903	JP19750015220	19750205
SE397015 B	19771010	SE19750001625	19750213
SE397015 C	19780119	SE19750001625	19750213
SE7501625 A	19750826	SE19750001625	19750213
SE7501625 L	19750826	SE19750001625	19750213
US3880320 A	19750429	US19740445236	19740225
ZA7500475 A	19760128	ZA19750000475	19751122

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD INC

Assignee(s): DIEBOLD INC US ; KECK RICHARD E ; MORELLO HERBERT ; MOUNTFORD GEORGE S ; DIEBOLD

Inventor(s):(std)**:** MORELLO HERBERT ; KECK RICHARD E ; KECK RICHARD ELLIS ; KECK R E ; KECK R ; MOUNTFORD GEORGE S ; MOUNTFORD GEORGE SAMUEL ; MOUNTFORD G S ; MORELLO H ; MOUNTFORD G

Inventor(s): JOOJI ESU MAUNTOFUOODO ; MORELLO HERBERT NORTH CANTON ; MOUNTFORD GEORGE SAMUEL CHIPPEWA LAKE VILLAGE ; OHIO ; SAMUEL MOUNTFORD GEORGE ; RICHARD E KECK ; RICHAADO II KETSUKU ; R E KECK ; KECK RICHARD ELLIS AKRON ; ELLIS KECK RICHARD ; G S MOUNTFORD ; GEORGE S MOUNTFORD ; HERBERT MORELLO ; HAABAATO MORERO ; H MORELLO

International class (IPC 8–9): G06C29/00 G06Q40/00 G07D1/00 G07D11/00 G07G1/00 (Advanced/Invention); E05G7/00 (Advanced/Non–invention); G06C29/00 G06Q40/00 G07D1/00 G07D11/00 G07G1/00 (Core/Invention); E05G7/00 (Core/Non–invention)

International class (IPC 1–7): G06C29/00 G06F15/30 G07D1/00 G07D9/00 G07F7/08 G07G1/00 G07G1/02

CPC: E05G7/005 G07D11/0018

European class: G07D11/00D4 P05G7/00D4

US class: 221/266 221/9 902/15

Classification Explorer

Cited documents: US3487905 A, US2977023 A, US2840265 A, JP48069096 U1,

Forward Citations: WO16140575, US9147303, US8985297, US7900764, US7721952, US5927936, US5899358, US5199697, US5020787, US4429639, US4340150, US3999681, US2013020348, US2010213023, US2009211875, US2009033020, US2006000848, NL1030879, JP61084976, JP58133868, JP58121493, JP53094187, JP52151083, GB2219120, GB2219120, FR2531412, FR2484518, FR2471941, FR2471940, FR2434433, EP2515280, EP1519331, EP1457940, EP1394348, EP0471300, EP0049533, EP0034502, DE3915030, DE3915030, CN104574644, CN102279984,

Abstract:
Source: US3880320A An automatic banking unit at a remote customer station having a mechanism to dispense currency in response to the presentation of coded card means for verification and authorization followed by keyboard entries of data necessary to actuate the currency dispensing mechanism from which a selected number of paper money bills is delivered to a rotary cash drawer pocket normally located in a drawer "home" currency−receiving position. The drawer then rotates to an "open" position which permits the customer to remove the currency from the pocket. Upon removal, the drawer returns to a "dump" position for dumping any object remaining in the pocket. Then the drawer returns to "home" position, ready for another dispensing cycle of movement. The rotary drawer is equipped with sensor means which detect the presence or absence of currency in the drawer pocket so as to signal the fact that currency has been completely removed by a customer when removing currency from the drawer in open position. The drawer is equipped with locking mechanism to hold the drawer locked in "home" position, except during a dispensing cycle of movement; and also is equipped with means to prevent reverse movement of the drawer toward open position during its movement toward "dump" position.

0) US3898689A – CODE CONVERTER

19) Family number: 1223269 (US3898689A) © PatBase

Title: Code converter

Priority: US19740494030 19740802 US19740494031 19740802 US19750553528 19750227

Family:

Publication number	Publication date	Application number	Application date
BE831883 A1	19751117	BE19750158746	19750729
BE831932 A1	19751117	BE19750158781	19750730
CA1059238 A1	19790724	CA19750227894	19750528
DE2534456 A1	19760219	DE19752534456	19750801
DE2534456 C2	19830804	DE19752534456	19750801
DE2534457 A1	19760304	DE19752534457	19750801
ES439928 A1	19770301	ES19750439928	19750801
ES439929 A1	19770516	ES19750439929	19750801
FR2281011 A1	19760227	FR19750024193	19750801
FR2281011 B1	19790330	FR19750024193	19750801
FR2281012 A1	19760227	FR19750024194	19750801
FR2281012 B1	19800711	FR19750024194	19750801
GB1513960 A	19780614	GB19750031988	19750731
IT1041439 A	19800110	IT19750068987	19750730
IT1041456 A	19800110	IT19750069007	19750731
JP1239725 C3	19841113	JP19750093291	19750801
JP1239726 C3	19841113	JP19750093292	19750801
JP51040909 A2	19760406	JP19750093292	19750801
JP51049014 A2	19760427	JP19750093291	19750801
JP59013070 B4	19840327	JP19750093292	19750801
JP59013071 B4	19840327	JP19750093291	19750801
NL181606 B	19870416	NL19750009215	19750801
NL181606 C	19870916	NL19750009215	19750801
NL7509215 A	19760204	NL19750009215	19750801
NL7509221 A	19760204	NL19750009221	19750801
SE402827 B	19780717	SE19750008483	19750725
SE402827 C	19790920	SE19750008483	19750725
SE409149 B	19790730	SE19750008250	19750718
SE409149 C	19791108	SE19750008250	19750718
SE7508250 A	19760203	SE19750008250D	19750718
SE7508250 L	19760203	SE19750008250	19750718
SE7508483 A	19760203	SE19750008483D	19750725
US3898689 A	19750805	US19740494030	19740802
US3932731 A	19760113	US19750553528	19750227

Probable Assignee: BELL TELEPHONE LABOR INC

Assignee(s):(std)**:** BELL TELEPHONE LABOR INC ; WESTINGHOUSE ELECTRIC CO ; WESTERN ELECTRIC CO

Assignee(s): WESTERN ELECTRIC CO INC ; WESTERN ELECTRIC CY INC ; WESTERN ELECTRIC CO INC 10038 NEW YORK N Y US ; WESTERN ELECTRIC CO INC TE NEW YORK ; WESTERN ELECTRIC CO INC TE NEW YORK NEW YORK VER ST V AM ; BELL TELEPHONE LABORATORIES INC ; D ORAZIO ROBERT J ; SOLOWAY GERALD S

Inventor(s):(std)**:** D ORAZIO R J ; D ORAZIO ROBERT J ; D ORAZIO ROBERT JOSEPH ; ROBAATO JOSEFU DORAJIO ; MOORE JR G E ; JERARUDO SUTEIIUN SOROEI ; MOORE JUN

	GLENN ELLIS ; GUREN ERISU MUUA JUNYA ; SOLOWAY G S ; SOLOWAY GERALD S ; SOLOWAY GERALD STEVEN ; MOORE G E ; MOORE JR GLENN ELLIS
Inventor(s):	R J D ORAZIO ; SOLOWAY GERALD STEVEN BROOKLYN N Y ; SOLOWAY GERALD STEVEN BROOKLYN N Y US ; STEVEN SOLOWAY GERALD ; ELLIS MOORE JUN ; D ORAZIO ROBERT JOSEPH JACKSON N J ; D ORAZIO ROBERT JOSEPH JACKSON N J US ; G E MOORE JR ; G S SOLOWAY ; JOSEPH D ORAZIO ROBERT
International class (IPC 8–9):	G06K7/00 G06K7/016 G06K7/08 G06K7/10 G11B20/08 G11B20/10 G11B20/14 G11B5/09 G11B5/39 H03M5/00 (Advanced/Invention); G06K7/00 G06K7/01 G06K7/08 G06K7/10 G11B20/08 G11B20/10 G11B20/14 G11B5/39 H03M5/00 (Core/Invention)
International class (IPC 1–7):	G03B21/11 G06F3/06 G06F3/08 G06K19/06 G06K5/00 G06K7/016 G06K7/08 G06K9/18 G07D7/00 G11B5/02 G11B5/09 G11B5/30 H03K13/00 H03K13/24 H04L3/00
CPC:	G06K7/0166 G11B20/1419 G06K7/08 G11B5/3903 G11B5/3948
European class:	G06K7/016D G06K7/08 G11B20/14A1D G11B5/39C G11B5/39C1M2
US class:	235/449 235/462.18 235/61.11D 360/40 G9B/005.116 G9B/005.129 G9B/020.039 G9B/20.039 G9B/5.116 G9B/5.129
Classification Explorer	
Cited documents:	US3796862 A, US3794812 A, US3763351 A, US3720927 A, US3708748 A, DE2017703 A1,
Forward Citations:	US7577551, US6931075, US6722567, US6260146, US6202929, US5780828, US5770846, US5420734, US5268562, US4988850, US4705939, US4380734, US4218674, US4176259, US4174891, US4172554, US4171479, US4053736, US4023208, US2007288203, US2003047612, JP56107318, FR2656454, EP0434547, EP0180331, EP0075413, DE8413519,

Abstract:
Source: US3898689A A bitstream encoded in the Aiken or similar self–clocking code is converted to a binary waveform with clocking by apparatus including two spaced apart sensing devices which read the bitstream, a memory circuit for storing the data content of the portion of the bitstream disposed between the sensing devices, and logic circuitry jointly responsive to the memory and sensing devices for determining the data content of the present bit. Timing information is extracted from the bitstream by another logic circuit jointly responsive to the output of one sensing device and to the memory circuit.

20) Family number: 1261750 (US4129382A) © PatBase

Title: Method and apparatus for storing and reading authenticating information

Priority: CH19750010602 19750814

Family:

Publication number	Publication date	Application number	Application date
BE845176 A1	19761201	BE19760169800	19760813
CA1077314 A1	19800513	CA19760259026	19760813
CH589897 A	19770729	CH19750010602	19750814
DE2538875 A1	19770217	DE19752538875	19750902
DE2538875 B2	19780105	DE19752538875	19750902
DE2538875 C3	19780914	DE19752538875	19750902
FR2321155 A1	19770311	FR19760018606	19760618
FR2321155 B1	19810807	FR19760018606	19760618
GB1525328 A	19780920	GB19760032696	19760805
IT1066887 A	19850312	IT19760026089	19760806
JP1027817 C3	19801225	JP19760092105	19760803
JP52023232 A2	19770222	JP19760092105	19760803
JP55017432 B4	19800512	JP19760092105	19760803
SE428403 B	19830727	SE19760008968	19760811
SE428403 C	19831006	SE19760008968	19760811
SE7608968 A	19770215	SE19760008968D	19760811
SE7608968 L	19770215	SE19760008968	19760811
US4129382 A	19781212	US19760712751	19760809

Probable Assignee: LANDIS AND GYR AG

Assignee(s):(std)**:** LANDIS AND GYR AG

Assignee(s): LANDIS AND GYR LGZ ZUG AG ; LANDIS AND GYR ZUG AG LGZ ; LANDIS AND GYR ZUG LGZ AG ; LANDIS ET GYR ZUG AG ; LGZ LANDIS AND GYR ZUG AG ; LGZ LANDIS AND GYR ZUG ZUG SCHWEIZ AG ; LGZ LANDIS UND GYR ZUG AG ; LGZ LANDIS Ÿand GYR AG ; LGZ LANDIS AND GYR ZUG AG ZUG SCHWEIZ ; ERU GEE TSUETSUTO RANDEISU UNTO GIIRU TSUUKU AG ; GREENAWAY DAVID L ; LANDIS AND GYR

Inventor(s):(std)**:** GREENAWAY D L ; GREENAWAY DAVID L ; GREENAWAY DAVID LESLIE ; GREENAWAY DAVID LESLIE DR ; DATSUBITSUDO RESURII GURIINAUE

Inventor(s): DATSUBITSUDO RESURII GURIINAUEI ; DAVID LESLIE GREENAWAY ; D L GREENAWAY ; GREENAWAY DAVID LESLIE DR PHYS ; GREENAWAY DAVID LESLIE DR PHYS BIRCHWIL SCHWEIZ ; LESLIE DR PHYS GREENAWAY DAVID

International class (IPC 8–9): G02B27/00 G02B27/42 G02B5/18 G02B5/28 G06K1/12 G06K17/00 G06K19/16 G06K7/12 G06K7/14 G07F7/08 (Advanced/Invention); G02B27/00 G02B27/42 G02B5/18 G02B5/28 G06K1/00 G06K17/00 G06K19/14 G06K7/12 G06K7/14 G07F7/08 (Core/Invention)

International class (IPC 1–7): G01D G02B27/38 G02B27/42 G02B5/18 G02B5/28 G03H1/22 G06C13/04 G06F15/30 G06K7/10 G06K7/12 G07C11/00 G07C9/00 G07D7/00 G07F7/08 G11C13/04

CPC: G02B5/1857 G06K1/126 G06K7/14 G06K19/16 G07F7/086

European class: G02B5/18M2 G02B5/28 G06K1/12D G06K19/16 G06K7/14 G07F7/08B

US class: 250/550 356/71 359/569

Classification Explorer

Cited documents: US4023010 A, US3689772 A, US3633037 A, US3412493 A, JP49058715 A2, JP49049382 A2, JP49017392 A2, JP48088841 A2, JP40024646 A2, FR1528140 A, FR1522937 A,

Forward Citations: WO9512860, US8064138, US8040606, US8040605, US8035896, US8035895, US7808704, US7315419, US7193754, US6822769, US6252685, US5815292, US5757521, US5751412, US5565667, US5444225, US5442433, US5438403, US5411296, US5347111, US5291006, US5200794, US5155604, US5145212, US4832445, US4662653, US4568141, US4544266, US4537504, US4501439, US4484072, US4370057, US2010226015, US2010226014, US2010226013, US2010226012, US2010225852, US2008112052, US2005093856, US2005078374, JP60168278, JP58050074, JP58050073, JP57139872, JP4320594, JP3071384, FR2515396, FR2420794, FR2395550, EP1644779, EP0325914, EP0247471, EP0247471, EP0155414, EP0151706, EP0151706, EP0105099, EP0075674, EP0060937, EP0057271, DE3442794, DE3233197, DE2907389, CH661368, CH659433, AU567923,

Abstract:
Source: US4129382A A method and apparatus are provided for storing and reading authenticating information which is recorded on a carrier comprising at least one diffraction screen for modifying the path of a beam from an optical reading apparatus consisting of a light−source and a light−receiver. A method is provided for producing an information carrier having at least one diffraction screen.

21) Family number: 1263121 (US4218674A) © PatBase

Title: METHOD AND A SYSTEM FOR VERIFYING AUTHENTICITY SAFE AGAINST FORGERY

Priority: US19750611608 19750909 US19780898149 19780420

Family:

Publication number	Publication date	Application number	Application date
AU197617267 A1	19780309	AU19760017267	19760830
BE845935 A1	19761231	BE19760170421	19760908
BR7605910 A	19770816	BR19760005910	19760908
CH607168 A	19781130	CH19760011396	19760908
DE2635795 A1	19770317	DE19762635795	19760809
DE2635795 B2	19800821	DE19762635795	19760809
ES451368 A1	19771101	ES19760451368	19760909
FR2324060 A1	19770408	FR19760027139	19760909
JP52033444 A2	19770314	JP19760107327	19760909
NL7610007 A	19770311	NL19760010007	19760909
SE7609944 A	19770310	SE19760009944	19760909
US4218674 A	19800819	US19780898149	19780420

Probable Assignee: DASY INT SA

Assignee(s):(std)**:** DASY INT SA

Assignee(s): DASY INTER S A ; DASY INTER S A GENF SCHWEIZ ; DASY INTER S A TE GENEVE ZWITSERLAND ; DASY INTER SA ; DASY INTER TE GENEVE ZWITSERLAND SA

Inventor(s):(std)**:** IERUGEN BUROSOO ; FURUGARD ERIK GENF SCHWEIZ ; FURUGARD ERIK ; FURUGARD E ; ERIKU FURUGARUTO ; BROSOW K ; BROSOW JORGEN ; BROSOW JOERGEN ; BROSOW J

Inventor(s): JORGEN BROSOW ; JOERGEN BROSOW ; BROSOW JOERGEN ELSENWANG HOF OESTERREICH ; ERIK FURUGARD

International class (IPC 8–9): B42D15/10 G06K19/10 G06K7/00 G06K7/016 G07D7/00 G07D7/04 G07D7/20 G07F7/08 (Advanced/Invention); G06K17/00 (Advanced/Non–invention); B42D15/10 G06K19/10 G06K7/00 G06K7/01 G07D7/00 G07F7/08 (Core/Invention); G06K17/00 (Core/Non–invention)

International class (IPC 1–7): B42D15/02 B44F1/12 G05B1/00 G06F15/20 G06K5/00 G06K7/08 G06K9/00 G07C11/00 G07C9/00 G07D7/00 G07F7/00 G07F7/08 G07F7/10 G11B5/02

CPC: B42D25/00 G06K9/00577 G06K7/0163 G06K19/086 G06K19/10 G06K2017/0064 G07D7/20 G07F7/086 B42D25/21 B42D25/369 G07D7/04 B42D2035/02 B42D2035/12 B42D2035/16 B42D2035/20 B42D2033/00 B42D2033/16 B42D2035/34 G07D7/0047

European class: B42D15/10 G06K19/08C2 G06K19/10 G06K7/016C G06K9/00R G07D7/00B8 G07D7/00D4 G07D7/04 G07D7/20 G07F7/08B L42D33/00 L42D33/16 L42D35/02 L42D35/12 L42D35/16 L42D35/20 L42D35/34 S06K17/00W18

US class: 235/380 235/493 340/149.0A 340/149A 340/5.86

Classification Explorer

Cited documents: US4114032 A, US4025760 A, US3932731 A, US3882301 A, US3878367 A, US3873975 A, US3808404 A, US3793600 A, US3790754 A, US3788617 A, US3727187 A, US3636318 A, US3598968 A, US3356602 A, GB1308331 A,

Forward Citations: WO9954842, WO9926205, WO9909526, WO9857299, WO9826379, WO9826379, WO9826378, WO9826378, WO9826377, WO9826377, WO9726501, WO9724699, WO9527956, WO9119614, WO9101534, WO9101534, WO8705728, WO8701845, WO8700323, WO8201778, WO8200062, WO8100776, WO8001010, WO13110692, WO13064806, WO11006640, WO10006583, WO10006583, WO09130009, WO09130009, WO05116941, WO05080088, WO04070667, WO04070667, WO03049047, WO0065541,

USRE35599, USRE33553, US9646206, US9600951, US9582714, US9553582, US9443298, US9350552, US9152862, US9058543, US9019567, US8983117, US8943325, US8923550, US8896885, US8892556, US8842876, US8774455, US8766800, US8757493, US8749386, US8746555, US8699088, US8672218, US8615475, US8578509, US8561201, US8505108, US8502668, US8497983, US8421625, US8186573, US8126203, US8121386, US8103046, US8078875, US8077905, US8068027, US7974495, US7950587, US7949148, US7891565, US7853792, US7812935, US7687271, US7680306, US7570784, US7427020, US7338709, US7239734, US7188774, US7131776, US7130087, US7035428, US7032828, US6973198, US6973196, US6888442, US6830192, US6598793, US6584214, US6565002, US6491221, US6471878, US6357656, US6257488, US6031464, US6002343, US5992741, US5756220, US5719939, US5698839, US5646365, US5602381, US5601931, US5594229, US5583333, US5521831, US5473147, US5451759, US5354097, US5216229, US5177344, US5032709, US5018830, US4985614, US4929821, US4926031, US4906988, US4837840, US4837426, US4816657, US4806740, US4680807, US4677435, US4650979, US4641017, US4582986, US4579598, US4493107, US4489318, US4469937, US4423415, US4315247, US2013287267, US2011164748, US2011155798, US2011109430, US2011109429, US2011109428, US2011108618, US2010316251, US2010200649, US2010027969, US2010007930, US2009309733, US2009303000, US2009274298, US2009174914, US2008118099, US2008084634, US2008074787, US2008040813, US2008036596, US2007214406, US2007211920, US2007199991, US2007164729, US2007053005, US2007028108, US2007028107, US2007028093, US2007023494, US2006171558, US2005262350, US2005257064, US2005239207, US2005226666, US2005109851, US2005053236, US2005018874, US2003118191, US2003035148, US2003035147, RU2527374, NL1008929, JP7020781, JP6103424, JP6103423, JP6016312, JP3282690, JP2820844, JP2501961, JP2008509497, GB2437324, GB2429092, GB2429092, GB2324065, GB2304077, FR2765014, FR2567947, FR2505041, FR2492134, FR2492133, FR2478846, FR2449930, EP2637145, EP2293261, EP2293260, EP2293259, EP2293258, EP2273457, EP1887780, EP1513112, EP1477940, EP1475242, EP1335327, EP1318486, EP1073993, EP0951702, EP0897569, EP0848356, EP0848355, EP0656607, EP0625766, EP0625766, EP0589195, EP0570162, EP0541514, EP0490083, EP0298156, EP0298156, EP0298156, EP0260940, EP0260940, EP0172765, EP0158167, EP0158167, EP0155982, EP0147396, EP0057271, EP0054071, DE3410937, DE3038602, DE3011317, DE3000560, DE2921878, DE2858685, DE2858266, DE2829778, DE19540348, DE102012201016, DE102008034022, DE102008034021, DE102008032781, DE102008015466, DE102004051056, DE10155780, CN102767112, CN102767112, CN101715589, AU732892, AU723490, AT388707,

Abstract:
Source: US4218674A This invention relates to a method and system for verifying authenticity safe against forgery of an object releasing a function said object being of base material having random imperfections in or on the same, comprising measuring random imperfections in or on the base material of said object in a predetermined measuring track over the surface of said object of base material having random imperfections in or on the same by means of a detector for detecting said random imperfections, said random imperfections optionally being supplied to said base material, converting said measured random imperfections into pulses, supplying said pulses together with timing pulses to an AND gate, whereby only simultaneously arriving pulses are passed, supplying said passed pulses to a shift register shifting with said timing pulses to obtain a binary code, comparing said binary code with a previously stored binary code of the same object, whereby the function is released if said binary codes are identical; as well as a system for carrying out the method.

0) US4192972A – PAY–TELEPHONE STATION WITH DEFERRED COLLECTION ...

22) Family number: 7683941 (US4192972A) © PatBase

Title: Pay–telephone station with deferred collection

Priority: IT19760008016 19760427 IT19760068016 19760427 US19780964339 19781128 US19770788757 19770419

Family:

Publication number	Publication date	Application number	Application date
BE853883 A1	19770816	BE19770176953	19770422
CH619819 A	19801015	CH19770005172	19770426
DE2718430 A1	19771110	DE19772718430	19770426
DE2718430 B2	19791206	DE19772718430	19770426
FR2350017 A1	19771125	FR19770011579	19770418
FR2350017 B1	19820416	FR19770011579	19770418
GB1565445 A	19800423	GB19770017676	19770427
IT1059923 A	19820621	IT19760068016	19760427
US4192972 A	19800311	US19780964339	19781128

Probable Assignee: CSELT CENTRO STUDI LAB TELECOM

Assignee(s):(std): CT STUDI E LAB TELECOMUNICAZIO ; CSELT CENTRO STUDI LAB TELECOM

Assignee(s): CSELT CENTRO STUDI LABO TELECOM ; CSELT SPA ; CSELT CENTRO STUDI E LABORATORI TELECOMUNICAZIONI SPA ; CSELT CENTRO STUDI E LABORATORI TELECOMUNICAZIONI S P A ; CSELT CENTRO STUDI E LABORATORI TELECOMUNICAZIONI S P A TURIN ITALIEN ; CENTRO STUDI E LAB TELECOMUNICAZIONI ; CENTRO STUDI E LABORATORI TELECOMUNICAZIONI S P A ; CENTRO STUDI E LABORATORI TELECOMUNICAZIONI SPA ; CSELT CENTRO STUDI E LABORATORI TELECOMUNICAZIONI

Inventor(s):(std): BERTOGLIO O ; BERTOGLIO OTTAVIO ; CACCIA A ; CACCIA AURELIO ; FIDANZA R ; FIDANZA RICCARDO ; VANVEEN WOUTER M D ; VAN VEEN W ; VEEN WOUTER MARTINUS DIRK VAN

Inventor(s): AURELIO CACCIA ; VAN VEEN WOUTER MARTINUS DIRK ; VEEN WOUTER MARTINUS DIRK VAN SAN MAURIZIO CANAVES ; VEEN WOUTER MARTINUS DIRK VAN SAN MAURIZIO CANAVESE TURIN ; WOUTER MARTINUS DIRK VAN VEEN ; OTTAVIO BERTOGLIO ; OTTAVIO BERTOGLIO AURELIO CACCIA RICCARDO FIDANZA ; OTTAVIO BERTOGLIO AURELIO CACCIA RICCARDO FIDANZA ET WOUTER MARTINUS DIRK VAN VEEN ; RICCARDO FIDANZA

International class (IPC 8–9): G07D1/06 G07F1/04 G07F7/00 H04M17/02 (Advanced/Invention); G07D1/02 G07F1/00 G07F7/00 H04M17/00 (Core/Invention)

International class (IPC 1–7): G07F7/00 H04M15/28 H04M17/00 H04M17/02

CPC: G07D1/06 G07F1/047 H04M17/023 G07F17/0014

European class: G07D1/06 G07F1/04H G07F17/00C G07F7/00C H04M17/02B

US class: 179/6.300R 194/216 379/123 379/144.01 379/144.04 379/150

Classification Explorer

Cited documents: US4105867 A, US4034839 A, US4028494 A, US3841456 A, US3820642 A, DE2247340 A1, DE2037671 A1, DE1437554 A1,

Forward Citations: WO9403875, WO8001126, USRE45241, USRE42154, US8086532, US8045957, US7917436, US7881664, US7486945, US7366495, US6963737, US6907976, US6704563, US6684333, US6570967, US6512415, US6434223, US6377938, US6349134, US6249865, US6163603, US6045443, US6039165, US5960416, US5949875, US5737414, US5719926, US5607350, US5595277, US5577957, US5542519, US5027390, US4924497, US4916733, US4845740, US4777647, US4750201, US4541519, US2011145143, US2008182552, US2004208299, US2004129526, US2004101480, US2002177430, US2002080934, US2002034283, US2002025027, US2001025273, US2001021245, GB2184919, GB2184919, GB2179524, GB2179524, FR2619943, FR2540317, FR2533097, FR2405602, FR2402980,

FR2402979, EP0367592, EP0305290, EP0012102, DE3240020, DE3208852, DE2953192, DE2947164, DE2825793, AU579943, AT379719,

Abstract:
Source: US4192972A A pay−telephone station equipped to handle local and long−distance calls includes a microcomputer which, at the end of a conversation or under certain conditions during a call, selectively collects predeposited payment items (coins, bills and/or prepayment entries of subscription cards) of different denominations calculated according to the debt incurred and to the denominations available to optimize the refunding of any excess to a user. The microcomputer also determines, upon the start of dialing by a caller, whether the initial deposit suffices for at least the basic charge on the type of connection (local or trunk call) sought to be set up and, if it does not, invites the user to make an additional deposit before aborting the call. The remaining credit balance is continuously signaled to the caller on a display unit and, even before actual collection, is diminished according to the applicable rate in response to each metering pulse arriving from the exchange.

0) US4161641A – EDM PROCESS AND APPARATUS FOR OVERCUT MACHINING...

23) Family number: 1565533 (US4161641A) © PatBase

Title: EDM PROCESS AND APPARATUS FOR OVERCUT MACHINING OF A WORKPIECE BY AN ELECTRODE TOOL

Priority: CH19760001568 19760206 CH19760015688 19761214

Family:

Publication number	Publication date	Application number	Application date
CH602263 A	19780731	CH19760015688	19761214
CH602563 A	19780731	CH19740017398	19741231
CH604601 A	19780915	CH19760001568	19760206
DE2752475 A1	19780615	DE19772752475	19771124
DE2752475 C2	19870702	DE19772752475	19771124
FR2374132 A1	19780713	FR19770037235	19771209
FR2374132 B1	19810814	FR19770037235	19771209
GB1594990 A	19810805	GB19770048054	19771118
JP1104716 C3	19820716	JP19770149811	19771213
JP53075595 A2	19780705	JP19770149811	19771213
JP56051047 B4	19811203	JP19770149811	19771213
US4161641 A	19790717	US19770859219	19771209

Probable Assignee: CHARMILLES ATELIERS SA

Assignee(s):(std)**:** BAYER AG ; CHARMILLES ATELIERS SA ; CHARMILLES SA ATELIERS ; MONNAIE PARKING SA

Assignee(s): CHARMILLES TECHNOLOGIES 109 RUE DE LYON 1211 GENEVE 13 SWITZERLAND SA ; CHARMILLES TECHNOLOGIES SA ; CHARMILLES ATELIERS DES SA ; ATALIERS DES CHARMILLES S A ; ATELIERS DES CHARMILLES S A ; ATELIERS DES CHARMILLES S A GENF GENEVE CH ; ATELIERS DES CHARMILLES SA

Inventor(s):(std)**:** VOGEL AXEL ; BONGA BENNO ; RAPPAZ HENRY ; BENNO BONGA

Inventor(s): HENRY RAPPAZ ; AXEL VOGEL ; BONGA BENNO CRANS WAADT CH

International class (IPC 8–9): A45C1/02 B23H7/28 G07D9/00 (Advanced/Invention); B23H7/26 (Core/Invention)

International class (IPC 1–7): A45C1/02 B23H7/28 B23K9/16 B23P1/08 B23P1/12 C07C76/06 C07C79/37

CPC: A45C1/02 A45C2001/108 G07D9/002 Y10T409/30672 B23H7/28

European class: A45C1/02 B23H7/28 G07D9/00C K45C1/10R6D

US class: 219/69.0M 219/69.17 219/69.2 219/69M 409/184

Classification Explorer

Cited documents: US4104501 A, US4041268 A, US3919516 A, JP51097898 A2, FR2179233 A1, DE2550749 A1, DE1690763 B1,

Forward Citations: US7692114, US4365300, US4347422, US2007080145, JP54157396, FR2543863, FR2434679,

Abstract:
Source: US4161641A An EDM process and apparatus capable of transversely displacing the electrode tool relative to the electrode workpiece according to a translation motion, while simultaneously linearly advancing the electrode tool relative to the electrode workpiece along a longitudinal axis. The process and apparatus of the invention consist in monitoring a machining dimension and comparing it to a predetermined parameter, and, as soon as such predetermined dimension parameter is achieved, sequentially retracting the electrode tool and re−establishing the feed of the electrode tool, while changing the radial direction of electrode translation motion between the beginning of the electrode tool retraction and the end of the electrode tool feed.

0) GB1518995A – AUTOMATIC BANK NOTE ACCEPTING MACHINE

24) Family number: 2281051 (GB1518995A) © PatBase

Title: AUTOMATIC BANK NOTE ACCEPTING MACHINE

Priority: GB19750027750 19750701

Family:

Publication number	Publication date	Application number	Application date
GB1518995 A	19780726	GB19750027750	19750701
HK17583 A	19830603	HK19830000175	19830526

Probable Assignee: TOKYO SHIBAURA ELECTRIC CO

Assignee(s):(std)**:** TOKYO SHIBAURA ELECTRIC CO

Assignee(s): TOKYO SHIBAURA ELECTRIC CO LTD

Inventor(s):(std)**:** NOBUO KOBAYASHI ; SHUNICHI NAKAJIMA ; YOSHIO ARIGA

International class (IPC 8–9)**:** G07D11/00 G07D7/00 (Advanced/Invention); G07D11/00 G07D7/00 (Core/Invention)

International class (IPC 1–7)**:** B65H29/62 C07D7/00 G07D7/00

CPC: G07D7/00 G07D11/00

European class: G07D11/00 G07D7/00

Classification Explorer

Forward Citations: US4980543, US4554444,

Abstract:
Source: GB1518995A 1518995 Bank note accepting machine TOKYO SHIBAURA ELECTRIC CO Ltd 1 July 1975 27750/75 Heading B8R [Also in Division G4] An automatic bank note accepting machine comprises a supply section 3 into which bank notes are deposited, a vacuum takeout roller 19, for taking out the bank notes one by one from the supply section, a light source 25, and light receiving elements 26, for determining at least one of genuiness, validity or denomination of the bank notes as well as if any of the bank notes overlap, a sorting gate 23 for sorting fit notes, unfit notes and overlapped notes as a result of the determination at the sensing section, a reject pocket 30 into which the unfit and overlapped notes are sent, a storage section 34 for fit notes and a device for totalling the amount of fit bank notes. Notes are fed through the machine between belt conveyers. A bundle of notes is initially positioned between a front check 13 and a spring biased backup 11. Their positioning is determined by lamp 15a and photoelectric sensor 15b. The notes are then fed past light source 25 and sensors 26. Lamp 55a and receiving element 55b detect if jamming occurs after the sensing operation. Sorting gate 23 is operated to direct the notes to storage section 34 or reject pocket 30. Notes in the reject pocket are detected by lamp 31a and sensor 31b. Notes fed to the storage section rest on stake plate 38. If the operator presses an accept button the stack plate is fed down inside a cash box 47 until sensor 48 detects already stacked notes. The plate is then moved laterally and up the outside of the cash box to the start position. A slit 82 accepts a magnetic card that identifies the operator. A receipt can be issued.

0) DE2714386A1 – ANLAGE ZUR AUSGABE VON GELD UND WERTSACHEN MIT ...

25) Family number: 1643759 (DE2714386A1) © PatBase

Title: ANLAGE ZUR AUSGABE VON GELD UND WERTSACHEN MIT WERTSICHERUNG SAFE DEPOSIT SYSTEM FOR CURRENCY AND SMALL VALUABLES – HAS FULLY INTERLOCKED MECHANISM TO PROVIDE MAX. ACCESS SECURITY OF CONTENTS

Priority: DE19772714386 19770329

Family:

Publication number	Publication date	Application number	Application date
DE2714386 A1	19781005	DE19772714386	19770329
DE2714386 C2	19881222	DE19772714386	19770329

Probable Assignee: HIRSCHSON RICHARD

Assignee(s):(std)**:** HIRSCHSON RICHARD

Assignee(s): HIRSCHSON RICHARD 1000 BERLIN DE

Inventor(s):(std)**:** HIRSCHSON RICHARD

Inventor(s): HIRSCHSON RICHARD 1000 BERLIN DE

International class (IPC 8–9): G07D11/00 (Advanced/Invention); G07D11/00 (Core/Invention)

International class (IPC 1–7): E05G1/04 G07D1/00

CPC: G07D11/0003

European class: G07D11/00D

Classification Explorer

Cited documents: DE2512353, DE2246192,

Forward Citations: US7206763,

Abstract:
Source: DE2714386A1 P a t e n t a n s p r ue c h e 1 Anlage zur Ausgabe von Geld und ertsachen, welche in einer Vielzahl von Teilmengen in einer Vielzahl von abgeschlossenen Aufbewahrungsraeumen im Innern der Anlage gelagert sind, welche entweder in eine oeffnungslage bewegbar(z3. A high security system is designed for the storage of currency and other small valuables within safe deposit boxes within a secured area of a bank. The individual segments of a security box are built into a general housing that has a general lock mechanism running the length of the unit. Individual security devices are located in the region of the front cover. Interlocks to control access are provided by timers controlling the rotation of individual mechanical stops.

26) Family number: 8081088 (US4236639A) © PatBase

Title: METHOD OF AUTOMATICALLY SORTING THIN SHEET ARTICLES

Priority:

DE19772729830 19770701
DE19772759677 19770701
DE19772759678 19770701
DE19772760165 19770701
DE19772760166 19770701
DE19772760269 19770701
DE19782814306 19780403
GB19780028298 19780629
DE19782814306 19780304
GB19800022895 19780629
DE19772760453 19770701
GB19800023204 19780629
GB19800023104 19780629
GB19800023104 19780629
US19780867011 19780105
US19790025196 19790329
JP19780078775 19780630
GB19800023204 19780629
GB19800023444 19780629

Family:

Publication number	Publication date	Application number	Application date
DE2729830 A1	19790111	DE19772729830	19770701
DE2729830 C2	19870723	DE19772729830	19770701
DE2759677 C2	19830601	DE19772759677	19770701
DE2759678 C2	19820225	DE19772759678	19770701
DE2760165 C2	19880601	DE19772760165	19770701
DE2760166 C2	19881117	DE19772760166	19770701
DE2760269 A1	19850530	DE19772760269	19770701
DE2760269 C2	19870305	DE19772760269	19770701
DE2760453 C2	19910627	DE19772760453	19770701
DE2814306 A1	19791011	DE19782814306	19780304
DE2814306 C2	19870416	DE19782814306	19780304
GB2000487 A1	19790110	GB19780028298	19780629
GB2000487 B2	19820526	GB19780028298	19780629
GB2055083 A1	19810225	GB19800023104	19780629
GB2055083 B2	19820818	GB19800023104	19780629
GB2055085 A1	19810225	GB19800022895	19780629
GB2055087 A1	19810225	GB19800023444	19780629
GB2058607 A1	19810415	GB19800023204	19780629
GB2058607 B2	19821020	GB19800023204	19780629
JP1050956 B4	19891101	JP19850140663	19850628
JP1052788 B4	19891110	JP19850140665	19850628
JP1566764 C3	19900625	JP19850140663	19850628
JP1580791 C3	19901011	JP19780078775	19780630
JP1595565 C3	19901227	JP19850140661	19850628
JP1595566 C3	19901227	JP19850140662	19850628
JP1647225 C3	19920313	JP19850140665	19850628
JP2002195 B4	19900117	JP19780078775	19780630
JP2017834 B4	19900423	JP19850140661	19850628
JP2017835 B4	19900423	JP19850140662	19850628
JP54042768 A2	19790404	JP19780078775	19780630
JP61062989 A2	19860331	JP19850140663	19850628
JP61070412 A2	19860411	JP19850140664	19850628
JP61075491 A2	19860417	JP19850140661	19850628
JP61075492 A2	19860417	JP19850140662	19850628
JP61075493 A2	19860417	JP19850140665	19850628
US4236639 A	19801202	US19780867011	19780105
US4324394 A	19820413	US19800115074	19800124
US4339221 A	19820713	US19800115032	19800124

US4346851 A	19820831	US19800115120	19800124	

Probable Assignee: GAO GES AUTOMATION ORG

Assignee(s):(std)**:** GAO GES AUTOMATION ORG ; G A O GES F AUTOMATION AND ; G A O GES FUER AUTOMATION AND

Assignee(s): G A O GESELLSCHAFT FUER AUTOMATION AND ORGANISATIO ; G A O GESELLSCHAFT FUER AUTOMATION AND ORGANISATION MBH ; G A O GES F AUTOMATION AND ORGANISATION MBH ; GAO GESELLSCHAFT FUER AUTOMATION UND ORGANISATION ; G A O GESELLSCHAFT FUER AUTOMATION UND ORGANISATIO ; GAO AUTOMATION ORGANISATION GMBH ; GAO GES FUER AUTOMATION UND ORGANISATION MBH ; GAO GES AUTOM ORG MBH ; G A O GESELLSCHAFT FUER AUTOMATION UND ORGANISATION MBH ; GAO GESELLSCHAFT FUER AUTOMATION UND ORGANISATION MBH 8000 MUENCHEN DE ; GAO GES F AUTOMATION U ORGANISATION MBH ; GAO GES F AUTOMATION U ORGANISATION MBH 8000 MUENCHEN DE ; GEE AA OO G FUYUURU AUTOMATSUIOON UNTO ORUGANIZATS ; GEE AA OO G FUYUURU AUTOMATSUIOON UNTO ORUGANIZATSUIOON MBH ; GAOGESELLSCHAFT F AUTOMATION U ORGANISATION MBH

Inventor(s):(std)**:** ASCHWEGE GERD ; ASCHWEGE GERD VON ING GRAD ; BERNARDI HERBERT ; BERNARDI HERBERT ING GRAD ; BERNARDIE HERBERT ; BOETTGE HORST ; BOETTGE HORST DR ; BOETTGE HORST DR ING ; BOTTGE HORST ; DUSCHEK RUDOLF ; FURANKU HEEZE ; GEIER JOSEF ; GIYUNTERU PAURI ; HARARUTO HERUMURITSUHI ; HOSE PRANK ; KAJIMIIRU ARUTSUISUZEUSUKII ; MITZEL WILHELM ; MITZEL WILHELM DIPL PHYS ; MITZEL WILHELM DIPL ING ; OSSWALD NORBERT DIPL PHYS ; PAULI GUNTER ; SCHAETZ ROBERT DIPL ING ; SCHATZ ROBERT ; VON ASCHWEGE GERD ; YOOZEFU GAIERU ; UIRUHERUMU MITSUTSUERU ; SCHAETZ ROBERT ; RUUDORUFU DOUSHIEKU ; ROOBERUTO SHIETSUTSU ; OSSWALD NORBERT ; NORUBERUTO OSUUARUTO ; HOESE FRANK ; HELMRICH HARALD ; GAJIMIIRU ARUTSUISUZEUSUKII ; PAULI GUENTER ; ASCHWEGE GERD VON ; ARCISZEWSKI KASIMIR ; PAULI GUENTER DIPL ING ; HOESE FRANK DIPL ING ; HORUSUTO BETSUTOGE ; HERUBERUTO BERUNARUDEI ; HARARU ; GERUTO FUON ASHIYUUEEGE

Inventor(s): ASCHWEGE GERD V 8900 AUGSBURG DE ; OSSWALD NORBERT DIPL PHYS 8000 MUENCHEN DE ; BOETTGE HORST DR ING 8192 GARTENBERG DE ; BERNARDI HERBERT 8051 HAAG DE ; ASCHWEGE GERD VON NEW YORK NY ; MITZEL WILHELM 8011 NEUKEFERLOH DE ; HOESE FRANK DIPL ING 8061 GROSSINZEMOOS DE ; PAULI GUENTER DIPL ING 8039 PUCHHEIM DE ; SCHAETZ ROBERT DIPL ING 8025 UNTERHACHING DE ; ROOBERUTO SHETSUTSU ; RUUDORUFU DOSHEKU ; SCHAETZ ROBERT 8000 MUENCHEN DE ; PAULI GUENTER 8031 EICHENAU DE ; MITZEL WILHELM DIPL ING 8011 NEUKEFERLOH DE ; MITZEL WILHELM DIPL PHYS 8011 NEUKEFERLOH DE ; NORUBERUTO OSUARUTO ; OSSWALD NORBERT 8046 HOCHBRUCK DE ; MITZEL WILHELM 8011 NEU KEFERLOH DE ; HELMRICH HARALD 8000 MUENCHEN DE ; HOESE FRANK 8061 GROSS INZEMOOS DE ; HARARUTO HERU ; GEIER JOSEF 8000 MUENCHEN DE ; GERUTO FUON ASHUEEGE ; DUSCHEK RUDOLF 8000 MUENCHEN DE ; BOETTGE HORST DR 8192 GERETSRIED DE ; BERNARDI HERBERT ING GRAD 8011 ARGET DE ; BERNARDI HERBERT ING GRAD 8051 HAAG DE ; BERNARDI HERBERT 8011 ARGET DE ; BERNARDI HERBERT ING ; ASCHWEGE GERD VON ING GRAD 8000 MUENCHEN DE ; ASCHWEGE GERD VON NEW YORK N Y ; ASCHWEGE GERD V ; ASCHWEGE GERD VON 8900 AUGSBURG DE

International class (IPC 8–9): B07C3/00 B07C3/08 B07C5/38 B07C7/00 B65B69/00 B65H1/04 B65H29/60 B65H3/10 B65H3/14 B65H3/46 B65H3/48 B65H3/52 B65H35/04 B65H39/11 B65H43/04 G01D3/00 G06K13/107 G07D11/00 G07D3/00 G07D7/00 (Advanced/Invention); B07C3/00 B07C3/02 B07C5/36 B07C7/00 B65B69/00 B65H29/60 B65H3/10 B65H3/14 B65H3/46 B65H3/48 B65H3/52 B65H35/04 B65H39/11 B65H43/04 G01D3/00 G06K13/02 G07D11/00 G07D3/00 G07D7/00 (Core/Invention)

International class (IPC 1–7): B02C18/16 B02C18/40 B02C4/42 B07C3/00 B07C5/34 B07C5/342 B07C5/38 B07C7/00 B65B69/00 B65H1/04 B65H29/60 B65H29/62 B65H3/10 B65H3/14 B65H3/52 B65H3/54 B65H3/68 B65H35/04 B65H39/10 B65H43/04 D21H1/48 G01D3/00 G06F15/30 G06F7/06 G06K13/10 G06K13/107 G06K13/16 G07B11/11 G07D3/00 G07D7/00

CPC: B65H3/523 B65H3/14 G06K13/107 B65H1/04 G07D11/0009 Y10T83/4702 Y10T83/783 B65H3/46 B65H3/52 G07D11/0084 B65H3/5284 G07D11/0081 B65B69/0025 B65H3/10 B65H3/48 B65H3/5238 B65H29/60 B65H2701/1912

European class: B65B69/00B B65H1/04 B65H29/60 B65H3/10 B65H3/14 B65H3/46 B65H3/48 B65H3/52 B65H3/52A4 B65H3/52A4B B65H3/52B6B G06K13/107 G07D11/00D2B G07D11/00H G07D11/00K L65H701/1912

US class: 209/534 209/548 209/565 221/154 241/159 241/223 241/236 271/104 271/195 271/5 271/98 312/42 414/114 414/416.09 414/796 414/801 414/811 83/302 83/500

Classification Explorer

Cited documents: US4189139 A, US4166030 A, US4113140 A, US4095781 A, US4068805 A, US4025420 A, US3976291 A, US3976198 A, US3894697 A, US3747922 A, US3645526 A, US3560067 A, US3529782 A, US3318640 A, US3099442 A, US2431523 A, US1779004 A, JP54125224 U1, JP54125224 U, JP52021896 A2, JP52005068 U1, JP52005068 U, JP50136785 A2, JP50107988 A2, JP50085275 U1, JP50085275 U, JP50069949 A2, JP50061162 A2, JP50017895 A2, JP48027354 A2, JP47041956 A2, FR2196494 A1, DE2729830 A1, DE2446280 A1, DE2328126 A1, DE2202930 A1, DE1941746 A1,

Forward Citations: WO9948060, WO9938127, WO9935618, WO9927488, WO9847800, WO9832103, WO9821698, WO9636931, WO9636931, WO9630878, WO9629683, WO16165830, WO15161925, WO14037913, WO09106355, WO07112943, WO07112943, WO05096233, WO05096233, WO0199060, WO0167376, WO0119681, WO0057367, WO0046758, US8833761, US8811710, US8528900, US8434627, US8408398, US8381917, US8327994, US8162124, US8157102, US7886889, US7817842, US7815184, US7735621, US7672499, US7590274, US7551764, US7536046, US7380675, US7269279, US7248731, US7222846, US7201340, US7158662, US7152744, US6959800, US6957733, US6955263, US6955253, US6929109, US6922973, US6915893, US6913130, US6892872, US6877733, US6874611, US6866134, US6860375, US6820874, US6715671, US6640156, US6601687, US6588569, US6578695, US6562430, US6505755, US6439395, US6351552, US6321894, US6171167, US6047886, US5909792, US5842693, US5829697, US5798929, US5735516, US5704607, US5676321, US5662201, US5655725, US5651941, US5636801, US5617956, US5547180, US5540338, US5518121, US5460273, US5441248, US5441159, US5439118, US5417158, US5397003, US5368148, US5310062, US5310036, US5299371, US5295633, US5255907, US5090573, US5088717, US5071080, US5039020, US5012932, US4965926, US4951933, US4922109, US4913360, US4878626, US4863037, US4790525, US4787518, US4754933, US4746259, US4739982, US4728091, US4722443, US4717137, US4696615, US4688857, US4660818, US4653647, US4586232, US4582463, US4580770, US4580422, US4553312, US4548395, US4519523, US4517451, US4512952, US4494655, US4404723, US4402410, US4376364, US4369360, US2012223473, US2012134572, US2011296802, US2011005982, US2010198708, US2010059418, US2010032351, US2008161120, US2007262512, US2005133648, US2004251591, US2004225407, US2004140431, US2004039479, US2004007509, US2003136630, US2003106770, US2003023342, US2002040865, RU2507587, JP6052388, JP60026373, JP59070270, JP58031842, JP57062476, JP56164489, JP56047889, JP56047888, JP56047887, JP56044991, JP56027490, JP55162190, ITMI20121500, GB2289887, GB2289887, GB2147572, GB2137178, FR2758638, FR2495352, EP2431950, EP2431950, EP1543880, EP1486440, EP1361547, EP1331612, EP1195725, EP1195725, EP1168252, EP1073986, EP1062643, EP1012795, EP0960399, EP0932123, EP0903701, EP0861796, EP0824735, EP0760987, EP0723243, EP0675065, EP0645328, EP0645328, EP0559616, EP0559615, EP0507306, EP0453930, EP0453930, EP0374481, EP0338123, EP0332824, EP0292198, EP0186152, EP0185395, EP0184786, EP0110264, EP0106278, EA003308, DE4409684, DE3920407, DE3815375, DE3815375, DE3447777, DE3444709, DE3412725, DE3337463, DE3333365, DE3247862, DE3229765, DE3222649, DE3205651, DE3201956, DE3137667, DE3118113, DE3033718, DE3032517, DE3030144, DE2814306, DE102015219736, DE102015004875, DE102014006053, DE102013021976, DE102010046115, DE102009049513, DE102006042763, DE102005052670, DE102004060316, DE10123119, DE10050486, DE10030221, CN102653349, CN102653349, AU580180, AU2009291664,

Abstract:
Source: US4236639A A method and apparatus for automatically sorting packets of thin sheet articles such as securities, bank notes and the like which are bound in a stack by a band. A series of modular units are provided in which the band and the stack are mechanically separated, each sheet of the stack is conveyed independent of the band, each sheet is tested and directed to a target location dependent upon the results of the test. The transport of sheets having predetermined characteristics is coordinated with the transport of the band.

27) Family number: 1520619 (CA1060995A) © PatBase

Title: METHOD AND APPARATUS FOR PREPARING AND ASSESSING PAYMENT DOCUMENTS

Priority: CA19740211089 19741009

Family:

Publication number	Publication date	Application number	Application date
CA1060995 A1	19790821	CA19740211089	19741009

Probable Assignee: GRETAG AG

Assignee(s):(std)**:** GRETAG AG

Assignee(s): GRETAG AKTIENGESELLSCHAFT ; EHRAT KURT

Inventor(s):(std)**:** EHRAT KURT

International class (IPC 8–9): B42D25/29 G07D7/00 G07F1/06 (Advanced/Invention); G07D7/00 G07F1/00 (Core/Invention)

International class (IPC 1–7): G07D7/00 G07F1/06

Classification Explorer

Abstract:
Source: CA1060995A A method and apparatus is described for preparing and assessing machine readable payment documents such as bank or postal cheques to avoid fraud. The cheques are prepared by digitizing the serial number and the amount for which the cheque is made out with secret code data to provide a crypto number which is printed on the cheque with the serial number and the amount. The cheque is assessed as valid by reading out the printed data and digitizing the amount and serial number with the same secret code data as used when preparing the cheque to provide a crypto number which is compared with the crypto number read from the cheque. If the two crypto numbers are the same the cheque is assessed as valid. The crypto number can be derived from additional data such as the credit card number of the person making out the cheque, the time and date and the number of the machine preparing the document.

28) Family number: 30772037 (US4199100A) © PatBase

Title: Credit card automated system for vehicle service stations

Priority: CA19790327445 19790511 JP19780042383 19780411 US19780913917 19780608

Family:

Publication number	Publication date	Application number	Application date
CA1131783 A1	19820914	CA19790327445	19790511
GB2018474 A1	19791017	GB19780032902	19780810
GB2018474 B2	19820728	GB19780032902	19780810
JP1486664 C3	19890314	JP19790070542	19790605
JP54134669 A2	19791019	JP19780042383	19780411
JP55023596 A2	19800220	JP19790070542	19790605
JP63036027 B4	19880718	JP19790070542	19790605
SE445399 B	19860616	SE19790004977	19790607
SE445399 C	19860925	SE19790004977	19790607
SE7904977 A	19791209	SE19790004977	19790607
SE7904977 L	19791209	SE19790004977	19790607
US4199100 A	19800422	US19780913917	19780608
US4370067 A	19830125	US19800147006	19800506

Probable Assignee: CITIZEN WATCH CO A CORP OF JAPAN LTD

Assignee(s):(std)**:** CITIZEN WATCH CO LTD ; ATLANTIC RICHFIELD CO

Assignee(s): ATLANTIC RICHFIELD COMPANY ; ATORANCHITSUKU RITSUCHIFUIIRUDO CO ; CITIZEN WATCH CO A CORP OF JAPAN LTD ; ATLANTIC RICHFIELD ; EXCHANGE NATIONAL BANK OF CHICAGO ; CITIZEN WATCH COMPANY LIMITED ; WOSTL WOLFGANG J ; ROACH THOMAS L ; SEGAL JACK S ; MOORE ROBERT A ; CITIZEN WATCH CO NO 1 1 2 CHOME NISHISHINJUKU SHINJUKU KU TOKYO JAPAN A CORP OF JAPAN LTD

Inventor(s):(std)**:** J S SEGAL ; R A MOORE ; T L ROACH ; W J WOSTL ; WOSTL WOLFGANG J ; WOSTL W J ; URUFUGYANGU JEI UOTSUSURU ; URUFUGIYANGU JIEI UOTSUSURU ; TOOMASU ERU ROOCHI ; TAKAHASHI KAZUTOSHI ; TAKAHASHI KAZUHISA ; SEGAL JACK S ; SEGAL J S ; ROBAATO EI MUUA ; ROACH THOMAS L ; ROACH T L ; NITTA TATSUO ; NITSUTA TATSUO ; MOORE ROBERT A ; MOORE R A ; JIYATSUKU ESU SHIIGARU ; JATSUKU ESU SHIIGARU ; IWAKURA YOSHIKI ; IWAKURA RYOJI ; 4R A MOORE ; 3T L ROACH ; 2J S SEGAL ; 1W J WOSTL

Inventor(s): 4 R A MOORE ; 3 T L ROACH ; 2 J S SEGAL ; 1 W J WOSTL

Agent(s): OSLER HOSKIN AND HARCOURT LLP

International class (IPC 8–9)**:** B67D7/02 B67D7/14 B67D7/24 G04F5/06 G04G13/02 G04G3/02 G04G9/00 G04G99/00 G06F1/00 G07F13/02 G07F7/02 G07F7/08 (Advanced/Invention); B67D7/00 B67D7/08 B67D7/22 G04F5/00 G04G13/00 G04G3/00 G04G9/00 G04G99/00 G07F13/00 G07F7/00 G07F7/08 (Core/Invention)

International class (IPC 1–7)**:** B67D5/02 B67D5/14 G04B17/20 G04B23/02 G04C17/00 G04C3/00 G06F1/00 G06F15/21 G07D7/00 G07F7/02 G07F7/08 G09F9/30 H04Q1/30

CPC: G06Q20/342 G07F7/025 G07F13/025 G04F5/06 G04G3/022 G04G9/0047 G04G13/023 G04G99/00

European class: G04F5/06 G04G13/02A2 G04G3/02B G04G9/00D1C G04G99/00 G06Q20/342 G07F13/02B G07F7/02E

US class: 235/381 327/176 331/143 331/57 340/5.9 368/202 368/239 368/245 377/114 377/20 377/42 968/823 968/903 968/933 968/971

Classification Explorer

Cited documents: US4272840 A, US4143362 A, US4135149 A, US4114363 A, US4072929 A, US4015208 A, US3999370 A, US3938316 A, US3913069 A, US3895486 A, US3873019 A, US3786421 A, US3644713 A, US3632988 A, JP49011499 A2, JP48076492 A2,

Forward Citations: WO9916701, WO9845820, WO9800817, WO9721199, WO9720291, WO8401630, US9218704, US8762209, US8538801, US7653571, US7640185, US7571139, US7389919, US7375506, US7289877, US7027890, US7020541, US6845907, US6813609, US6729755, US6573884, US6442448, US6364550, US6321984, US6152591, US6112981, US6112035, US6087954, US6073840, US6064915, US6035725, US6032126, US6004053, US5945975, US5894416, US5835552, US5828717, US5797470, US5684379, US5596501, US5502771, US5493364, US5488454, US5420667, US5359391, US5293196, US5277497, US5258906, US5186281, US5184179, US5130565, US5077582, US5066853, US4980543, US4891828, US4853684, US4747049, US4745267, US4554444, US4526477, US4395627, US4395626, US4266121, US2014074282, US2010088176, US2008071628, US2007145126, US2007040546, US2005261916, US2005098625, US2004238629, US2003200008, US2002152123, US2002107608, US2002062174, US2002046117, US2001020279, US2001020198, JP63283918, JP58159175, JP57206980, FR2889378, FR2750521, EP1750372, EP0979494, EP0907938, EP0152703, EP0114447, EP0112609, AU2013329613,

Abstract:
Source: US4199100A An attendant−controlled terminal, operating under the control of a conventional microprocessor, monitors and controls remote fuel pumping units, combines fuel sale information with information concerning additional sales keyboarded by the attendant, accepts customer account information recorded on a credit card, verifies that the identified account is in good standing, and prints a credit card receipt for signature by the customer, the receipt being printed in an optically−readable format compatible with conventional automated invoice processing equipment.

0) DE2833264A1 – GERAET ZUR AUTOMATISCHEN ZAHLUNGSABWICKLUNG AU...

29) Family number: 1732313 (DE2833264A1) © PatBase

Title: GERAET ZUR AUTOMATISCHEN ZAHLUNGSABWICKLUNG AUTOMATIC MONETARY TRANSACTION EQUIPMENT FOR BANK – HAS BASIC MODULE WITH USER OPERATION UNIT AND CARD PROCESSOR TRANSACTION RECORDER AND CASH DELIVERY UNIT

Priority: DE19782833264 19780728

Family:

Publication number	Publication date	Application number	Application date
DE2833264 A1	19800207	DE19782833264	19780728
DE2833264 C2	19831006	DE19782833264	19780728

Probable Assignee: HITACHI LTD

Assignee(s):(std)**:** HITACHI LTD

Assignee(s): HITACHI LTD TOKYO JP

Inventor(s):(std)**:** AOMORI KOKICHI ; INOYAMA TADAO ; TERAI HIDEKAZU

Inventor(s): TERAI HIDEKAZU KODAIRA TOKYO JP ; INOYAMA TADAO YOKOHAMA KANAGAWA JP ; AOMORI KOKICHI TOKYO JP

International class (IPC 8–9): G06Q40/00 G07D11/00 G07F7/10 (Advanced/Invention)

International class (IPC 1–7): G06F15/30 G06F3/00 G07D1/00

CPC: G06Q40/02 G07D11/0096 G07F7/1016

European class: G06F17/60D2 G06Q40/02 G07D11/00M4 G07F7/10E

Classification Explorer

Cited documents: US3937925 A,

Forward Citations: US4542287, EP1562155, DE3412695, DE3302628, DE3029246,

Abstract:
Source: DE2833264A1 Geraet zur automatischen Zahlungsabwicklung Patentansprueche 1 Geraet zur Zuhlungsabwicklung,dadurchgekennzeichne t, dass ein Grundmoui (31, fOO)zur Ausfuehrung von Hauptabwicklungen wenigsten ein Untermodul (33, 320; 34, 330) zur Durchfuehrung von ZusatzabwicklunLen sowie Einrichtungen vorgesehen sind, die den Grundmodul (31, 300) und den Untermodul (33, 320; 34, 330) miteinander verbinden, dass der Grundmodul (300) folgende Teile aufweist: einen ersten Datenuebertragungsweg (308) zum Uebertragen von Adressen–und Steuerdaten, eine Benutzer–Bedienungseiheit 305), die entsprechend einem Abwicklungsvorgang von einem Benutzer bedient wird, um Information zum Einstellen der Abwicklungsbedingungen einzugeben, eine erste Eingabe/Ausgabe–Steuereinrichtung (307; 450), die zur die Steuerung der Benutzer–Bedienungseinheit (305) mit dem Datenuebertragungsweg (308) verbunden ist, in Abhaengigkeit von den vorgegebenen Adressendaten auf dem Datenuebertragungsweg (308) betaetigt wird, selektiv Steuersignale zum Betaetigen der Benutzer–Bedienungs– einheit (305; 431, 432) entsprechend den Steuerdaten auf dem Uebertragungsweg (308) erzeugt, und die Zustandssignale der Benutzer–Bedienungseinheit (305; 431, 432) dem Datenuebertragungsweg (308) selektiv bereitstellt, eine erster, die mit der Abwicklung zusam menhaengenden Grgenstaende behandelnde Einheit (31; 433436), die die mit der abwicklung zusammenhaengenden Gegenstaende, welche mit den Hauptabwicklungen zusamen– haengen, behandelt, eine zweite Eingsbe/4usgabe–Steuer– einrichtung (500, 540), die mit dem Datenuebertragungsweg (308) verbunden ist und die erste, die mit der Abwicklung zusammenhaengenden Gegenstaende behandelnde Einheit (31;; 433–436) steuert, in Abhaengigkeit von einer vorgegebenen Adresse auf de–m Datenuebertragungsweg (308) betrieben wird, Steuersignale zum Betreiben der die mit der Abwicklung zusammenhaengenden Gegenstaende behandelnden Einheit (31;433–43G) in AbhaengigKeit von den Steuerdaten auf dem Datenuebertragungsweg (308) selektiv erzeugt, und die Zustandssignale fuer die die mit der AbwiRlungs zusammenhaengenden Gegenstaende behandelnde Einheit (31; 433–436) dem Datenuebertragungsweg (308) selektiv bereitstellt, eine erste Interfaceeinheit (304), die mit dem Datenuebertragungsweg (308) zum Datenaustausch mit dem Zusatzmodul (320, 330) verbunden ist, sowie einen programmierbaren Mikroprozessor (301), der mit dem Datenuebertragungsweg (308) verbunden ist, einen Programmspeicher, der mehrere Abwicklungsfolgeprogramme entsprechend der Art der Abwicklungen speichert, und einen Datenspeicher, der die Daten zeitweilig speichert, aufweist, die Daten auf dem Datenuebertragungsweg (308) entsprechend dem Programm zugefuehrt erhaelt und dem Datenuebertragungsweg (308) die Adressendaten und die Steuerdaten fiir die Durchfuehrung der Abwicklungsvorgaenge bereitstellt, dass der Untermodul (320; 330) folgende Teile aufweist: einen zweiten

Datenuebertragungsweg (707, 807), der Adressendaten und Steuerdaten uebertraegt, eine zweite die mit der Abwicklung zusammenhaengenden Gegenstaende behandelnde Einheit (33, 706; 34, 806), die die mit der Abwicklung zusammenhaengenden Gegenstaende, welche mit den Zusatzabwicklungen zusammenhaengen, behandeln, eine dritte Eingabe/Ausgabe−Steuereinrichtung (705; 805), die mit dem zweiten Datenuebertragungsweg (707; 807) verbunden ist, die zweite, die mit der Abwicklung zusammenhaengenden Gegenstaende behandelnde Einheit (706; 806) steuert, in Abhaengigkeit von den vorgegebenen Daten auf dem zweiten Datenuebertragungsweg (707; 807) betrieben wird, Steuersignale zum Betaetigen der zweiten, die mit der Abwicklung zusammenhaengenden Gegenstaende behandelnden Einheit (706; 806) entsprechend den Steuerdaten auf dem zweiten Uebertragungsweg (707; 807) selektiv erzeugt, und Zustandssignale fuer die zweite, die mit der Behandlung zusammenhaengenden Artikel behandelnde Einheit (706; 806) selektiv im zweiten Datenuebertragungsweg (707; 807) bereitstellt, eine zweite Interfaceeinheit (703; 803), die wer den zweiten Uebertragungsweg (707; 807) zum Datenaustausch mit dem Grundmodul (300) verbunden ist, sowie einen zweiten programmierbaren ilikroproeessor (701; 801), der mit dem zweiten Datenuebertragungsweg (707; 807) verbunden ist, einen Programmspeicher zum Speichern der Unterprogramme und einen Datenspeicher zum zeitweiligen Speichern der Daten aufweist, die Daten auf dem zweiten Datenuebertragungsweg (707; 807) gemaess dem Unterprogramm in Abhaengigkeit von den von der zweiten Interfaceeinheit (703; 803) kommenden Daten zugefuehrt erhaelt und Adressendaten sowie Steuerdaten zur Durchfuehrung der Abwicklungsvorgaenge an den zweiten patenuebertragung sweg (707;807) gibt, und dass der Grundmodul (300) dem Untermodul (320; 330) Daten fuer vorgegebene Punktionen des Untermoduls(320; 330) ueber die erste und zweite Interfaceeinheit (304; 703, 803) selektiv bereitstellt 2. The versatile automatic transaction equipment comprises: a basic module including a user operation unit, an ID card processing unit, a transaction recording unit, and a cash delivery unit for cash payment transaction or verification of customer account balance. A deposit−receiving sub−module includes a unit for identifying the type or class and authenticity of bill or bills inserted into the equipment for a deposit by a user and for counting the amount of money received as a deposit, and a bill transport unit is for separately transporting the bills in two routes of rejection and receipt in accordance with the result of identification.

30) Family number: 3865927 (US4450348A) © PatBase

Title: Method and device for characterizing and identifying falsification proof data boards

Priority: CA19800366692 19801212 CH19810000090 19810108 GB19800040728 19801219 DE19803050473 19800109 FR19800027241 19801222 DE19803000560 19800109 US19800221547 19801231 JP19800189398 19801226

Family:

Publication number	Publication date	Application number	Application date
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YU3581 A	19840630	YU19810000035	19810109

Probable Assignee: WINDERLICH HANS

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Assignee(s): WINDERLICH H G ; WINDERLICH HANS GEORG DE ; STOCKBURGER HERMAN DE ; HERMANN STOCKBURGER ; HERMANN STOCKBURGER TE ST GEORGEN EN HANS GEORG WINDERLICH TE VILLINGEN BONDSREPUBLIEK DUITSLAND ; STOCKBURGER HERMANN ; STOCKBURGER H WINDERLICH H G ; STOCKBURGER HERMANN 7742 ST GEORGEN DE ; HERUMAN SUTOTSUKUBURUGAA ; STOCKBURGER HERMANN DE ; HANS GEORG WINDERLICH

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Inventor(s): HERMANN STOCKBURGER ; HANS GEORG WINDERLICH ; STOCBURGER HERMAN DE ; HG WINDERLICH ; STOCKBURGER HERMANN DE ; STOCKBURGER HERMAN DE ; H G WINDERLICH ; H STOCKBURGER ; WINDERLICH HANS GEORG 7730 VILLINGEN SCHWENNINGEN DE ; WINDERLICH HANS GEORG DE ; WINDERLICH HANS GEORG 7730 VILLINGEN SCHWENNINGEN ; WINDERLICH HANS GEORG 7730 VILLINGEN DE ; STOCKBURGER HERMANN 7742 ST GEORGEN DE

Agent(s): GOUDREAU GAGE DUBUC

International class (IPC 8–9): B42D15/02 B42D15/10 G06K1/12 G06K17/00 G06K19/08 G06K19/10 G06K19/14 G06K5/00 G06K7/00 G06K9/62 G06Q40/00 G07F7/08 G07F7/12 (Advanced/Invention); B42D15/02 B42D15/10 G06K1/00 G06K17/00 G06K19/10 G06K19/14 G06K7/00 G06Q40/00 G07F7/08 G07F7/12 (Core/Invention)

International class (IPC 1–7): B42D15/02 B44F1/12 C07C11/00 G06F15/21 G06F15/30 G06F3/06 G06K17/00 G06K19/00 G06K19/06 G06K19/06 G06K19/08 G06K5/00 G06K7/00 G06K7/06 G06K7/10 G06K9/00 G06K9/18 G06K9/62 G07C11/00 G07C9/00 G07C9/00 G07D7/00 G07F7/08 G07F7/10

CPC: G06K1/121 G06K19/10 G06K19/14 G07F7/086 G07F7/125 G06Q20/347

European class: G06K1/12B G06K19/10 G06K19/14 G06Q20/347 G07F7/08B G07F7/12B

US class: 235/380 235/382 235/454 235/487 235/493 369/14

Classification Explorer

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Abstract:
Source: US4450348A The method of characterizing and identifying data supports such as value or identity cards in view of protection against falsification, imitation or duplication, comprises measurement of physical characterizing features of the data support and the measured characterizing values are converted into characterizing data recorded on the data support. The data supports are provided, at least in a zone of a reading track, with a surface pattern the lines, areas or dots of which differ from one data support to another by their widths and/or densities and/or respective associations. The surface pattern is read at selected positions of the reading track over limited paths or in punctual manner, and at least some selected reading results are used as said characterizing values.

0) US4423415A – NON–COUNTERFEITABLE DOCUMENT SYSTEM

31) Family number: 30900566 (US4423415A) © PatBase

Title: NON–COUNTERFEITABLE DOCUMENT SYSTEM

Priority:

CA19810380366	19810622	CA19810433839	19810622	CA19830426158	19830419
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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: LIGHT SIGNATURES INC

Assignee(s):(std)**:** LIGHT SIGNATURES INC ; LIGHTS SIGNATURES INC

Assignee(s): TELECREDIT INC ; RAITO SHIGUNEICHAAZU INC ; RAITO SHIGUNEICHIYAAZU INC ; LIGHT SIGNATURES INC A CORP OF CA ; TELECREDIT INC A CORP OF DE ; LIGHT SIGNATURES INC A CORPOF CA ; LIGHT SIGNATURES INC WAS NEW LSI INC 1901 AVENUE O ; LIGHT SIGNATURES INC LOS ANGELES CALIF US ; LIGHT SIGNATURES INC WAS NEW LSI INC 1901 AVENUE OF STARS LOS ANGELES CA 90067 A CORP OF CA.. ; LIGHT SIGNATURES INC 1901 AVENUE OF STARS LOS ANGE ; LIGHT SIGNATURES INC 1901 AVENUE OF STARS LOS ANGELES CA 90067 ; LIGHT SIGNATURES INC A CA CORP ; GOLDMAN ROBERT N ; KATZ RONALD A ; LIGHT SIGNATURES IN ; LIGHT SIGNATURES IN 1901 AVE STARS LOS ANGELES CA

Inventor(s):(std)**:** GOLDMAN R ; GOLDMAN R N ; GOLDMAN ROBERT ; GOLDMAN ROBERT N ; GOLD DAVID ; GOLDMAN NORMAN ; KATZ RONALD ; KATZ RONALD ALAN ; RN GOLDMAN ; ROBAATO ENU GOORUDOMAN ; ROBAATO NOOMAN GOORUDOMAN ; RONARUDO ARAN KATSUZU ; KATZ RONALD A ; GOLDMAN ROBERT NORMAN

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Agent(s): GOWLING LAFLEUR HENDERSON LLP

Designated states: AT AU BE BR CH DE DK FI FR GB HU IT JP KP LI LU NL NO SE

International class (IPC 8–9)**:** B42D15/02 B42D15/10 B65G47/49 G05B1/00 G06F19/00 G06K17/00 G06K19/08 G06K19/10 G06K19/14 G06K5/00 G06K9/00 G06K9/36 G06K9/62 G06Q30/00 G06Q30/02 G06Q50/00 G07D1/00 G07D7/00 G07D7/12 G07D7/20 G07F1/00 G07F1/04

G07F7/08 G07F7/10 G07F7/12 G09F3/00 G11B20/12 G11B23/00 G11B23/40 G11B23/44 H04Q9/00 (Advanced/Invention);
B42D15/02 B42D15/10 B65G47/48 G05B1/00 G06F19/00 G06K17/00 G06K19/08 G06K19/10 G06K19/14 G06K5/00 G06K9/36 G06Q30/00 G07D7/00 G07F7/08 G07F7/12 G09F3/00 H04Q9/00 (Core/Invention);
G06K (Subclass/Invention)

International class (IPC 1–7): B42D15/02 B65C9/46 B65G47/49 D21H5/10 G05B1/00 G06F15/20 G06F15/21 G06F15/30 G06F7/04 G06K17/00 G06K19/00 G06K19/08 G06K19/10 G06K5/00 G06K7/08 G06K7/10 G06K9/00 G06K9/36 G06K9/62 G07C G07D1/00 G07D7/00 G07F1/00 G07F7/08 G09C5/00 G09F3/00 G09F3/03 G11B20/12 G11B5/09 G11B5/80 G11B7/00 H04Q9/00

CPC: G06K19/086 G07F7/10 G07F7/1066 G07F7/127 Y10S283/904 G07F7/08 G07F7/0813 G07F7/12 G06K19/14 G06Q20/347 G07F7/125 G07D7/0043 G07D7/0047 G06Q30/02 G06K17/00 G06K19/10 G06K2017/0064 G06K2017/0067 G07D7/004 G07D7/12 G07D7/20 G07F7/086

European class: G06F17/60B2 G06K17/00 G06K19/08C2 G06K19/10 G06K19/14 G06Q20/347 G06Q30/02 G07D7/00B6 G07D7/00B8 G07D7/00D G07D7/00D2 G07D7/00D4 G07D7/12 G07D7/20 G07F7/08 G07F7/08A2 G07F7/08B G07F7/10 G07F7/10P6B G07F7/12 G07F7/12B G07F7/12C S06K17/00W18 S06K17/00W20

US class: 235/375 235/380 235/381 235/382 235/385 235/454 235/468 235/487 235/493 283/112 283/113 283/58 283/72 283/74 283/77 283/79 283/82 283/83 283/904 283/91 340/10.41 340/5.28 340/5.4 340/5.66 340/5.86 340/5.9 340/5.92 340/825.034 340/825.34 340/825.35 356/71 380/51 380/54 713/168 713/176 713/185 902/22 902/25 902/29 902/4 902/5 902/6 902/7

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Abstract:
Source: US4423415A A system is disclosed for authenticating an object on the basis of certain physical phenomena or character, specifically, measurable, but not practicably duplicable random variations in the object. In one form, the object (authenticator (T)) is a paper tag having a reference space (14), the varying translucency pattern of which is a measurable but practicably unduplicable characteristic of the paper. The reference space (14) is sensed to provide reference signals indicative of the varying translucency. A reference numeral (10) is then provided from some registered form, as on the tag or in a list. If the numeral (10) is readily accessible, it likely will be cryptographically encoded. Note the value of putting encoded information on the tag to avoid the need for large reference files. For verification, freshly sensed reference signals, as from the tag (T) (actually characteristic of the tag) are compared with signals that previously were sensed as characteristic of the tag (T). Structures are disclosed as specific forms of the authenticator (T), along with apparatus for authenticator production, detection and manipulation. Different forms of tags (210) are disclosed, the measurable characteristic of which involves light transmissivity and reflectivity. Apparatus (111) for spectrographic confirmation of tag material is also disclosed. In an illustrative form of a tag (T) as an identification means, tags and processing apparatus utilize magnetic medium (218) and printed images (214). The magnetic medium is also disclosed to be recorded as for developing information on shelf life and sales channels.

32) Family number: 2381603 (US4400616A) © PatBase

Title: DOCUMENT CARD CONTAINING INFORMATION IN HOLOGRAPHIC FORM

Priority: EP19800104962 19800821

Family:

Publication number	Publication date	Application number	Application date
DE3069558 D1	19841206	DE19803069558	19800821
EP0047326 A1	19820317	EP19800104962	19800821
EP0047326 B1	19841031	EP19800104962	19800821
JP1422437 C3	19880129	JP19810107169	19810710
JP57060365 A2	19820412	JP19810107169	19810710
JP62029791 B4	19870629	JP19810107169	19810710
US4400616 A	19830823	US19810293069	19810817

Probable Assignee: INT BUSINESS MACHINES CORP

Assignee(s):(std)**:** IBM

Assignee(s): INT BUSINESS MACHINES CORP ; INTAANASHONARU BIJINESU MASHIINZU CORP ; INTERN BUSINESS MACHINES CORP

Inventor(s):(std)**:** CHEVILLAT PIERRE R ; PIEERU RANEI SHEBIRA ; PIEERU RANEI SHIEBIRA ; GFELLER FRITZ ; FURITSUTSU KUFUERAA ; CHEVILLAT PIERRE

Designated states: DE FR GB

International class (IPC 8–9)**:** B42D15/10 G02B6/12 G02B6/34 G03H1/04 G06K1/12 G06K19/16 G07D7/12 G07D7/20 G07F7/08 (Advanced/Invention); B42D15/10 G02B6/12 G02B6/34 G03H1/04 G06K1/00 G06K19/14 G07D7/00 G07F7/08 (Core/Invention)

International class (IPC 1–7)**:** B42D15/02 G02B5/174 G02B6/34 G03H1/00 G03H1/04 G06K1/12 G06K19/06 G06K19/08

CPC: Y10S283/901 G03H1/0011 G03H1/0408 G03H2222/47 G06K1/126 G06K19/16 G07D7/20 G07D7/0032 G07F7/086

European class: G06K1/12D G06K19/16 G07D7/00B2 G07D7/20 G07F7/08B S03H1/00A1 S03H1/04A3 S03H222/47

US class: 235/457 235/487 283/75 283/86 283/901 350/3.61 359/34 430/1

Classification Explorer

Cited documents: US4171766 A, US4143810 A, US4119361 A, US3858031 A, US3647275 A, US3620590 A, FR2321158 A1, DE2659639 A1, DE2613034 A1, DE2538956 A1, DE2441343 A1, DE2166913 A1, DE1939594 A1,

Forward Citations: WO9906966, WO11147520, WO06020363, WO06020363, WO06000980, WO0157602, US9268983, US8614852, US8565475, US8505827, US8498052, US8470605, US8351604, US8333325, US8081792, US8049893, US7923260, US7901630, US7900836, US7898735, US7872804, US7843567, US7830575, US7796333, US7791802, US7659983, US7623624, US7619819, US7604173, US7602952, US7570567, US7508608, US7441703, US7433123, US7399643, US7375890, US7349158, US7321540, US6954293, US6811728, US6729541, US6523750, US6414761, US6259545, US6205106, US6169614, US5854697, US5825475, US5822089, US5710645, US5535023, US5515184, US5465311, US5455693, US5448659, US5396559, US5337169, US5295208, US5003600, US4945215, US4662711, US2012299287, US2012061476, US2010072278, US2010046750, US2009034078, US2006139635, US2006028727, US2005201247, US2005041557, US2003161247, JP64086188, JP4273392, JP1153269, JP1086188, EP1826729, EP1578617, EP0892362, EP0609812, EP0420261, EP0337921, EP0337921, EP0304194, EP0304194, DE102006055480,

Abstract:
Source: US4400616A An identification card provided with secret data contained in the form of a wave guide hologram recorded in a layer on the card. Light for developing or displaying the hologram is introduced into a wave guide layer extending along the surface of the card through a grating that admits light only of a given wave

length suitable for developing the wave guide hologram. The secrecy of the wave guide hologram is further enhanced by incorporating into the light coupling grating a further hologram by which light only of a predetermined pattern can be coupled to the wave guide for delivery to the wave guide hologram.

0) US4420153A – DOCUMENT HANDLING COUNTING AND EXAMINING DEVICE...

33) Family number: 1433154 (US4420153A) © PatBase

Title: Document handling counting and examining device incorporating high speed rotary gating means

Priority: CA19810385952 19810915 US19800188906 19800919

Family:

Publication number	Publication date	Application number	Application date
AU198175476 A1	19820506	AU19810075476	19810918
AU550308 B2	19860320	AU19810075476	19810918
CA1187519 A1	19850521	CA19810385952	19810915
DE3137259 A1	19820701	DE19813137259	19810918
DE3137259 C2	19870122	DE19813137259	19810918
FR2490608 A1	19820326	FR19810017707	19810918
FR2490608 B1	19861024	FR19810017707	19810918
GB2085850 A1	19820506	GB19810028497	19810921
GB2085850 B2	19850327	GB19810028497	19810921
JP57121551 A2	19820729	JP19810148668	19810919
SE8105323 A	19820320	SE19810005323D	19810908
SE8105323 L	19820320	SE19810005323	19810908
US4420153 A	19831213	US19800188906	19800919

Probable Assignee: BRANDT INC

Assignee(s):(std)**:** BRANDT INC ; BRANDT PRA INC ; BURAANTO PII AARU EI INC

Assignee(s): REED FRANK J ; SANWA BUSINESS CREDIT CORP ; WINKLER THEODORE ; BRANDT INC CORNWELLS HEIGHTS PA US ; BRANDT INC WATERTOWN WIS53094 A CORP

Inventor(s):(std)**:** FURANKU JEI RIIDO ; FURANKU JIEI RIIDO ; REED F J ; TEODOAA UINKURAA ; WINKLER T ; WINKLER THEODORE ; REEDG FRANK J ; REED FRANK J

Inventor(s): THEODORE WINKLER ; FRANK J REED ; T WINKLER ; F J REED ; WINKLER THEODORE 19056 LEVITTOWN PA ; WINKLER THEODORE 19056 LEVITTOWN PA US ; THEODORE WINKLER ET FRANK J REED ; REED FRANK J 19050 PHILADELPHIA PA US ; J REED FRANK

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; BORDEN LADNER GERVAIS LLP

International class (IPC 8–9): B41F33/14 B65H29/60 B65H3/06 B65H5/00 G07D11/00 G07D7/16 G07D7/18 (Advanced/Invention);
B41F33/14 (Advanced/Non–invention);
B41F33/14 B65H29/60 B65H3/06 G07D11/00 G07D7/00 (Core/Invention)

International class (IPC 1–7): B07C5/34 B41F33/00 B65H27/00 B65H29/18 B65H29/40 B65H29/58 B65H29/60 B65H29/62 B65H33/14 B65H43/02 B65H43/04 B65H5/00 B65H5/02 G06K13/16 G06M7/06 G07D7/00

CPC: B65H3/063 B65H29/60 G07D7/162 G07D7/185 G07D11/0084

European class: B65H29/60 B65H3/06F G07D11/00K G07D7/16B G07D7/18C

US class: 271/202 271/304 271/315

Classification Explorer

Cited documents: US4373713 A, US4277061 A, US4275874 A, US4251000 A, US3894479 A, US3847384 A, US3759382 A, US3472506 A, US3426879 A, US3327850 A, US3265208 A, US3205741 A, US3166313 A, US2563498 A, US2526916 A, US1825217 A, DE2749641 A1, DE2654636 A1, CH371621 A,

Forward Citations: WO9420398, WO05043472, WO0170610, USRE44252, US9558418, US9495808, US9477896, US9390574, US9355295, US9195889, US9189780, US9142075, US9141876, US9129271, US8958626, US8950566, US8948490, US8944234,

US8929640, US8787652, US8714336, US8701857, US8655046, US8655045, US8644585, US8644584, US8644583, US8639015, US8627939, US8625875, US8594414, US8582123, US8559695, US8542904, US8538123, US8514379, US8478020, US8478019, US8467591, US8459436, US8442296, US8437532, US8437531, US8437530, US8437529, US8437528, US8433123, US8428332, US8417017, US8396278, US8391583, US8380573, US8352322, US8346610, US8339589, US8204293, US8169602, US8162125, US8126793, US8125624, US8103084, US8041098, US7980378, US7949582, US7946406, US7929749, US7903863, US7896148, US7882000, US7881519, US7817842, US7778456, US7735621, US7672499, US7647275, US7624982, US7619721, US7590274, US7551764, US7542598, US7536046, US7391897, US7366338, US7362891, US7349566, US7269279, US7248731, US7232024, US7200255, US7187795, US7158662, US7016767, US7000828, US6996263, US6959800, US6957733, US6955253, US6929109, US6915893, US6913130, US6880692, US6866134, US6860375, US6810137, US6796557, US6755415, US6731786, US6724927, US6724926, US6678402, US6678401, US6665431, US6661910, US6654486, US6650767, US6647136, US6636624, US6621919, US6603872, US6493461, US6459806, US6394445, US6364548, US6241069, US6073744, US6072896, US6028951, US5867589, US5761089, US5751840, US5692067, US5657980, US5430664, US5394992, US5234211, US5234210, US5201424, US5088722, US5049947, US4993700, US4941655, US4714394, US2012057147, US2010244361, US2007272730, US2002113366, JP6024620, JP3257712, GB2280893, GB2157270, EP1589495, EP1160737, EP1160737, EP1014192, EP0814439, EP0814439, EP0556714, EP0490144, EP0407151, CN103971451,

Abstract:
Source: US4420153A Document handling apparatus for determing the fitness of documents such as paper sheets, paper currency and the like and including a feed mechanism for feeding documents in a single file through an examining location. Documents pass through the examining location and are examined for relative limpness or stiffness, density (i.e. clean or dirty,), perforations, cuts, tears, holes and the like, missing and/or folded corners and a test for document genuineness. Based upon the results of the tests, the sheets, which are still moving at high speed in a single file after examination, are directed toward a rotatably mounted gating roller which, dependent upon the condition of the examined sheets, is rotated either in a clockwise or counterclockwise direction, at extremely high speed, to deflect sheets toward either of two possible output paths. The gating roller may be either a continuous or dicontinuous member. Sheets, after undergoing deflection, are collected by associted output stackers, which include feeding and guiding belts for guiding the sheets and aiding in the insertion of the sheets into a rotary stacker member, and stripping and guiding belts for stripping sheets from the rotary stacker member and for driving sheets to the supporting surface of a stacker plate to facilitate formation of a neat, compact stack. The gating roller may have a continuous or discontinuous surface, preferably of low mass, to facilitate rapid acceleration and deceleration thereof, and may be utilized with control circuitry to advance sheets towards one of the three possible paths.

34) Family number: 5240771 (US4650977A) © PatBase

Title: Automatic self service machine system and method

Priority: US19830564474 19831221

Family:

Publication number	Publication date	Application number	Application date
EP0146812 A2	19850703	EP19840114432	19841130
EP0146812 A3	19870909	EP19840114432	19841130
JP1807884 C3	19931210	JP19840244719	19841121
JP5010702 B4	19930210	JP19840244719	19841121
JP60142471 A2	19850727	JP19840244719	19841121
US4650977 A	19870317	US19830564474	19831221

Probable Assignee: IBM

Assignee(s):(std)**:** IBM

Assignee(s): INT BUSINESS MACHINES CORP ; INTAANASHONARU BIJINESU MASHIINZU CORP ; INTERN BUSINESS MACHINES CORP

Inventor(s):(std)**:** COUCH WILFRED R ; UIRUFURETSUDO AARU KOOCHI

Designated states: DE FR GB

International class (IPC 8–9)**:** G07D9/00 G07F19/00 G07F7/02 G07F7/10 (Advanced/Invention); G07D9/00 G07F19/00 G07F7/00 G07F7/10 (Core/Invention)

International class (IPC 1–7)**:** G06F15/30 G07C9/00 G07D9/00 G07F7/02 G07F7/10

CPC: G07F19/20 G06Q20/342 G07F7/025 G07F7/10 G07F19/201

European class: G06Q20/342 G07F19/00F G07F19/20 G07F19/201 G07F7/02E G07F7/10

US class: 235/379 235/381 902/13 902/40

Classification Explorer

Cited documents: US4166945 A, US4023012 A, US4016405 A, JP57170444 U1, JP57170444 U, GB1551301 A, GB1458646 A, GB1448141 A,

Forward Citations: WO9719549, WO8807727, WO04092923, WO04092923, WO03023565, WO03023565, WO0186385, WO0186385, WO0180066, WO0115027, USD587744, US9615134, US9582954, US9569911, US9558316, US9542661, US9524368, US9508066, US9495465, US9489693, US9489691, US9390577, US9367875, US9367874, US9348822, US9286617, US9275383, US9123044, US9104990, US8996162, US8818904, US8806275, US8768789, US8762274, US8762267, US8746551, US8738973, US8712872, US8600890, US8600889, US8600888, US8600887, US8593971, US8583522, US8571952, US8554677, US8549512, US8543507, US8538581, US8504473, US8495424, US8452653, US8417380, US8412374, US8397108, US8332321, US8214290, US8162207, US8161330, US8155784, US8132715, US8132714, US8060247, US7988049, US7954702, US7954701, US7933835, US7891554, US7861928, US7853354, US7837101, US7802718, US7797077, US7793830, US7787987, US7747346, US7726557, US7708199, US7699220, US7690562, US7665656, US7661590, US7621444, US7617973, US7606632, US7600677, US7597251, US7597248, US7591420, US7584869, US7575158, US7571850, US7499768, US7454363, US7447605, US7441196, US7419092, US7366586, US7275991, US7206544, US7194698, US6945457, US6854642, US6823172, US6796492, US6792334, US6746330, US6736725, US6729958, US6729957, US6676517, US6611881, US6539282, US6446832, US6439454, US6427912, US6370240, US6293469, US6220511, US6149055, US5993048, US5875110, US5859416, US5768142, US5751590, US5726898, US5673309, US5600563, US5576951, US5561604, US5559714, US5550746, US5546523, US5546316, US5513116, US5429361, US5371345, US5350906, US5326960, US5237487, US5205436, US5113351, US5105364, US5056643, US5047613, US5023782, US4970655, US4884212, US4808801, US2012116865, US2011145033, US2011047010, US2010312701, US2010312380, US2010102125, US2010102121, US2010102120, US2010057871, US2010017295, US2009287562,

US2009242625, US2009138799, US2009124359, US2009018792, US2009005904, US2008277464, US2008169345, US2008093443, US2008093440, US2008093439, US2008067239, US2008067238, US2008067237, US2008067234, US2008065540, US2008061135, US2008061134, US2008061133, US2008061132, US2008061130, US2008061129, US2008041871, US2008026823, US2007210150, US2007208618, US2007205275, US2007170244, US2007143187, US2006272922, US2006259192, US2006259190, US2006229930, US2006128472, US2005283272, US2005211764, US2005173519, US2005148386, US2005139649, US2005032547, US2005021387, US2005020353, US2004219974, US2004199932, US2004150677, US2004150676, US2004133495, US2003209599, US2003167231, US2003150907, US2002097261, GB2356964, GB2254721, EP1573631, EP0352177, EP0232240, EP0232240, DE4432411, AU2004229968, AU2003297322,

Abstract:
Source: US4650977A The automatic self service machine system of this invention operates in an off−line manner without the necessity of a data communication link to a host computer and is characterized in that it does not require the issuance of special identification cards to users of the machine. Moreover, the system permits each user to employ any encoded machine readable card already in his possession as the authorization card or "key"0 for using the machine. The system also provides a unique portable storage cartridge for storage of articles to be dispensed or received by the machine, such as money, tickets, travelers checks, documents, and the like as well as data relating to the dispensing or receipt of such articles.

0) US4686357A – METHOD FOR CONFIRMING SETTLED CHECK CARDS AND C...

35) Family number: 3786774 (US4686357A) © PatBase

Title: METHOD FOR CONFIRMING SETTLED CHECK CARDS AND CHECK CARD DRAWING APPARATUS

Priority: JP19840157065 19840727

Family:

Publication number	Publication date	Application number	Application date
DE3526678 A1	19860206	DE19853526678	19850725
DE3526678 C2	19900920	DE19853526678	19850725
JP61034689 A2	19860218	JP19840157065	19840727
US4686357 A	19870811	US19850746982	19850619

Probable Assignee: GLORY KOGYO KK

Assignee(s):(std): GLORY KOGYO KK

Assignee(s): GLORY LTD ; GLORY KOGYO K K ; GLORY KOGYO K K HIMEJI HYOGO JP ; GLORY KOGYO KABUSHIKI KAISHA

Inventor(s):(std): DOUNO SHUGO ; DUONO SHUGO ; TOMIYAMA HIROSHI ; DONO SHUGO

Inventor(s): TOMIYAMA HIROSHI HIMEJI HYOGO JP

International class (IPC 8–9): G06Q20/00 G06Q40/00 G06Q40/02 G07D9/00 G07F7/08 (Advanced/Invention); G06Q20/00 G06Q40/00 G07D9/00 G07F7/08 (Core/Invention)

International class (IPC 1–7): G06F15/30 G06K17/00 G06K5/00 G07D9/00 G07F7/08

CPC: G06Q20/04 G06Q20/0425

European class: G06Q20/04 G06Q20/0425 G07F19/00B

US class: 235/379 235/419 235/489 902/27 902/40 902/5

Classification Explorer

Cited documents: US4733060 A, US4321672 A, US4053735 A, US3890599 A, US3624357 A, JP59095671 A2, DE3001888 A1, DE2452661 A1,

Forward Citations: USRE44252, US9558418, US9535563, US9495808, US9477896, US9390574, US9355295, US9195889, US9189780, US9142075, US9141876, US9129271, US8958626, US8950566, US8948490, US8944234, US8929640, US8892495, US8787652, US8714336, US8701857, US8655046, US8655045, US8644585, US8644584, US8644583, US8639015, US8627939, US8625875, US8594414, US8573478, US8559695, US8542904, US8538123, US8514379, US8478020, US8478019, US8467591, US8459436, US8442296, US8437532, US8437531, US8437530, US8437529, US8437528, US8433123, US8428332, US8417017, US8396278, US8391583, US8380573, US8339589, US8204293, US8169602, US8162125, US8126793, US8125624, US8103084, US8041098, US7980378, US7962412, US7946406, US7929749, US7903863, US7882000, US7881519, US7778456, US7647275, US7619721, US7584148, US7542598, US7391897, US7366338, US7362891, US7349566, US7257246, US7200255, US7187795, US7028888, US7000828, US6996263, US6810137, US6731786, US6724927, US6724926, US6665431, US6654486, US6650767, US6647136, US6603872, US5974148, US5949047, US5936541, US5793302, US5646998, US5555303, US5524073, US5521831, US5393963, US5267314, US5135095, US5013896, US4877946, US4812632, US4745265, US2010281300, US2009284803, US2009222367, US2005281450, US2003163696, US2003126082, US2003085271, JP3879799, JP11129551,

Abstract:
Source: US4686357A In commercial transactions, settlement is conventionally made by cash or by checks drawn from a current account in a bank. Users of such checking system enjoy the convenience. In the conventional process of check negotiation, however, such system involves a vast amount of complicated procedures including several steps of mechanical processing as well as manual handling. There is also a risk of illicit use if the check book is lost or stolen unless the loss or theft thereof is reported to the bank immediately. Collation of the settled checks returned to the drawer with the record of drawing further complicates the process. This invention method enables to process a drawn check card, and identify a settled check card with an automatic and yet simple

operation, thus improving the check card negotiation system.

0) US4697072A – IDENTIFICATION CARD AND AUTHENTICATION SYSTEM T...

36) Family number: 3107054 (US4697072A) © PatBase

Title: IDENTIFICATION CARD AND AUTHENTICATION SYSTEM THEREFOR

Priority: JP19840187406 19840907

Family:

Publication number	Publication date	Application number	Application date
DE3585188 D1	19920227	DE19853585188	19850904
EP0174016 A2	19860312	EP19850111152	19850904
EP0174016 A3	19880907	EP19850111152	19850904
EP0174016 B1	19920115	EP19850111152	19850904
FR2570207 A1	19860314	FR19850013265	19850906
FR2570207 B1	19910419	FR19850013265	19850906
JP1942459 C3	19950623	JP19840187406	19840907
JP6070818 B4	19940907	JP19840187406	19840907
JP61067192 A2	19860407	JP19840187406	19840907
US4697072 A	19870929	US19850769872	19850827

Probable Assignee: CASIO COMPUTER CO LTD

Assignee(s):(std)**:** CASIO COMPUTER CO LTD

Assignee(s): CASIO COMPUTER CO LTD A CORP OF JAPAN ; CASIO COMPUTER CO LTD TOKIO TOKYO JP ; CASIO COMPUTER COMPANY LIMITED ; CASIO COMPUT CO LTD ; CASIO COMPUTER CO

Inventor(s):(std)**:** KAWANA SHIGEYUKI

Inventor(s): KAWANA SHIGEYUKI TOKYO JP ; SHIGEYUKI KAWANA

Designated states: CH DE GB IT LI

International class(IPC 8–9)**:** G06Q20/00 G06Q20/40 G06Q20/42 G06Q40/00 G06Q40/02 G06Q50/00 G07F7/08 G07F7/10 G07F7/12 (Advanced/Invention); G06Q20/00 G06Q40/00 G06Q50/00 G07F7/08 G07F7/10 G07F7/12 (Core/Invention)

International class(IPC 1–7)**:** G06F15/02 G06F15/21 G06F15/30 G06K19/00 G07D7/00 G07F7/08 G07F7/10 G07F7/12

CPC: Y10S283/904 G07F7/1008 G06Q20/341 G06Q20/3415 G06Q20/385 G06Q20/4012 G06Q20/4093 G07F7/1016

European class: G06Q20/341 G06Q20/3415 G06Q20/385 G06Q20/4012 G06Q20/4093 G07F7/10D G07F7/10E

US class: 235/375 235/376 235/379 235/380 283/904 705/72 713/184 902/22 902/5 D18/007 D18/7

Classification Explorer

Cited documents: WO8203484 A1, US4529870 A, US4320387 A, US4105156 A, US3906460 A, JPS58139271, JP58139271 A2, EP0096599 A1, DE3222288 A1,

Forward Citations: WO9214222, WO9007756, WO9000783, WO8911762, WO8809019, WO07038896, WO07038896, WO03096287, WO0074008, USD643064, USD636021, USD628236, USD623690, USD622315, USD622314, USD620975, USD617378, USD524820, US9460469, US9240089, US9058626, US8966284, US8924289, US8849716, US8805739, US8793160, US8781905, US8781904, US8751391, US8751383, US8725589, US8707410, US8688990, US8622308, US8590008, US8589288, US8543504, US8543503, US8533086, US8517258, US8515868, US8473395, US8459562, US8447672, US8447670, US8447641, US8423788, US8408455, US8396809, US8396798, US8380597, US8375212, US8322606, US8321686, US8306907, US8301493, US8220039, US8185940, US8160960, US8160942, US8145549, US8121944, US8108691, US8020754, US7987501, US7966496, US7945492, US7926711, US7899753, US7890422, US7865738, US7860789, US7822682, US7822656, US7809595, US7801816, US7801814, US7801799, US7784682, US7766244, US7756816, US7753259, US7748031, US7743409, US7702538, US7536540, US7533828, US7392388, US7278581, US6915951, US6836548, US6498847, US6378775, US6257486, US6089451, US6028926,

US6014441, US5949874, US5907597, US5907142, US5894521, US5889267, US5825871, US5818930, US5789732, US5745555, US5732133, US5583933, US5550358, US5485519, US5436971, US5401950, US5280625, US5237609, US5214699, US5180902, US5163098, US5140517, US5130519, US5060263, US5017766, US4985920, US4959788, US4942606, US4926480, US4924075, US4910774, US4868376, US4839506, US4814591, US2011093708, US2009272796, US2009159703, US2007295806, US2006206402, US2006053125, US2005067485, US2004059952, US2003075610, US2002029342, US2002019939, JP64076393, JP1076393, GB2449410, GB2449410, GB2255934, GB2255934, GB2201125, GB2190820, GB2190820, GB2189741, GB2189741, FR2835078, FR2771533, FR2646263, FR2634300, ES2177417, EP1504424, EP1004980, EP0316689, EP0257648, EP0247623, EP0247450, EP0247450, EP0246823, EP0197535, EP0197535, DE4230866, DE4230866, DE3833938, DE3811831, AU706073, AT389776,

Abstract:
Source: US4697072A A card holder inputs personal identification number (PIN') data as secret data and transaction data (AMT) in an LSI in an identification card through a keyboard. The LSI calculates encrypted data (SAN) in accordance with the input data (PIN' and AMT). The encrypted data (SAN) is shown by the card holder to a cashier at a point−of−sales (POS) terminal. The POS terminal performs authentication of the card and the card holder in accordance with the encrypted data (SAN).

0) US4684791A – CARD IDENTIFICATION SYSTEM

37) Family number: 5346993 (US4684791A) © PatBase

Title: CARD IDENTIFICATION SYSTEM

Priority: JP19840213571 19841012

Family:

Publication number	Publication date	Application number	Application date
DE3583321 D1	19910801	DE19853583321	19851003
EP0177900 A2	19860416	EP19850112523	19851003
EP0177900 A3	19880831	EP19850112523	19851003
EP0177900 B1	19910626	EP19850112523	19851003
FR2571873 A1	19860418	FR19850015100	19851011
FR2571873 B1	19910719	FR19850015100	19851011
JP61091790 A2	19860509	JP19840213571	19841012
US4684791 A	19870804	US19850782518	19851001

Probable Assignee: CASIO COMPUTER CO LTD

Assignee(s):(std): CASIO COMPUTER CO LTD

Assignee(s): CASIO COMPUTER CO LTD 6 1 2 CHOME NISHI SHINJUKU S ; CASIO COMPUTER CO LTD 6 1 2 CHOME NISHI SHINJUKU SHINJUKU KU TOKYO JAPAN A CORP OF JAPAN ; CASIO COMPUTER COMPANY LIMITED ; CASIO COMPUTER CO LTD TOKIO TOKYO JP ; CASIO COMPUT CO LTD ; CASIO COMPUTER CO

Inventor(s):(std): BITO HIROYASU ; MIFUJI HITOYASU

Inventor(s): BITO HIROYASU INAGI SHI TOKYO JP ; HIROYASU BITO

Designated states: CH DE GB IT LI

International class (IPC 8–9): G06K17/00 G06K19/10 G06K7/00 G06Q20/40 G06Q40/00 G06Q40/02 G07D1/00 G07F7/08 G07F7/10 G07F7/12 (Advanced/Invention); G06K17/00 G06K19/10 G06K7/00 G06Q40/00 G07D1/00 G07F7/08 G07F7/10 G07F7/12 (Core/Invention)

International class (IPC 1–7): G06F15/30 G06K19/08 G06K5/00 G06K7/08 G07D1/00 G07F7/08 G07F7/10

CPC: G07F7/1008 G06Q20/341 G06Q20/409 G07F7/084

European class: G06Q20/341 G06Q20/409 G07F7/08A4B G07F7/10D

US class: 235/380 235/382 235/487 235/492 902/26

Classification Explorer

Cited documents: US4588991 A, US4550248 A, US4463971 A, US4423415 A, US4094462 A, US3818190 A, JP61020185 A2, JP59178574 A2, JP59045581, FR2505523 A1, FR2477303 A1, EP0138386 A2, EP0134110 A2, EP0112747 A1,

Forward Citations: WO9901823, WO9848336, WO9848336, WO9117524, WO9109383, USD765767, US8678294, US8566244, US8532640, US7899751, US7792522, US7634448, US7392941, US7207477, US7040533, US6920437, US6905072, US6840446, US6702181, US6510983, US6463416, US6394353, US6343284, US6315195, US6089451, US6012636, US6012635, US5949046, US5883452, US5594227, US5453602, US5426701, US5401950, US5379344, US5118917, US5018146, US5006698, US4995086, US4945210, US4855583, US4827518, US4827425, US4825052, US4811303, US4782217, US2012273578, US2010293096, US2009045257, US2005251615, US2004129776, US2004084524, US2003052159, JP5159118, GB2259380, GB2259380, GB2188180, FR2657444, FR2640783, FR2638549, ES2081735, EP0766851, EP0766851, EP0647342, EP0647342, EP0570924, EP0416826, EP0367216, EP0367216, EP0348932, EP0291342, CN102760241,

Abstract:
Source: US4684791A A card identification system comprises an IC card, a terminal and an identification device. The IC card has a magnetic recording stripe for recording first identification data and an IC chip for storing second identification data. The IC card is inserted into the terminal wherein the first and second identification data read

out from the IC card are compared respectively with predetermined identification data registered in the terminal for identifying the IC card and the terminal.

0) US4864109A – ELECTRONIC BANKBOOK AND TRANSACTION SYSTEM FOR ...

38) Family number: 29319560 (US4864109A) © PatBase

Title: Electronic bankbook and transaction system for use therewith

Priority: JP19840236744 19841112 JP19840242265 19841119 JP19840246091 19841122 JP19840248178 19841126 JP19850005783 19850118

Family:

Publication number	Publication date	Application number	Application date
DE3576009 D1	19900315	DE19853576009	19851111
EP0182244 A2	19860528	EP19850114334	19851111
EP0182244 A3	19871111	EP19850114334	19851111
EP0182244 B1	19900207	EP19850114334	19851111
JP1712785 C3	19921127	JP19840242265	19841119
JP1712787 C3	19921127	JP19840248178	19841126
JP1751290 C3	19930408	JP19840236744	19841112
JP1751292 C3	19930408	JP19840246091	19841122
JP1760348 C3	19930520	JP19850005783	19850118
JP3076514 B4	19911205	JP19840248178	19841126
JP3076515 B4	19911205	JP19840242265	19841119
JP4038032 B4	19920623	JP19840236744	19841112
JP4038033 B4	19920623	JP19840246091	19841122
JP4048270 B1	19920806	JP19850005783	19850118
JP4048270 B4	19920806	JP19850005783	19850118
JP61114895 A2	19860602	JP19840236744	19841112
JP61121171 A2	19860609	JP19840242265	19841119
JP61125681 A2	19860613	JP19840246091	19841122
JP61127068 A2	19860614	JP19840248178	19841126
JP61166680 A2	19860728	JP19850005783	19850118
KR920008069 B1	19920922	KR19850008410	19851111
US4864109 A	19890905	US19850796449	19851108

Probable Assignee: OKI ELECTRIC IND CO LTD

Assignee(s):(std)**:** OKI ELECTRIC IND CO LTD ; KOSHIDA YOSHINORI ; MINEMATSU NOBUO

Assignee(s): OKI ELECTRIC IND ; OKI ELECTRIC IND CO LTD 7 12 TORANOMON 1 CHOME MIN ; OKI ELECTRIC INDUSTRY CO ; OKI ELECTRIC INDUSTRY COMPANY LIMITED ; OKI ELECTRIC INDUSTRY CO LTD TOKIO TOKYO JP ; OKI ELECTRIC INDUSTRY CO LTD

Inventor(s):(std)**:** MINEMATSU NOBUO OKI ELECTRIC I ; MINEMATSU NOBUO ; MIEMATSU NOBUO ; KOSHIDA YOSHINORI OKI ELECTRIC ; KOSHIDA YOSHINORI

Inventor(s): MINEMATSU NOBUO OKI ELECTRIC INDUSTRY CO LTD ; KOSHIDA YOSHINORI OKI ELECTRIC INDUSTRY CO LTD ; KOSHIDA YOSHINORI OKI ELECTRIC INDUSTRY CO

Designated states: DE FR GB

International class (IPC 8–9): B41J21/00 B41J5/30 B42D1/00 B42D11/00 B42D15/10 G06F15/02 G06K17/00 G06K19/00 G06K19/07 G06K19/073 G06Q40/00 G06Q40/02 G07D9/00 G07F19/00 G07F7/08 G07F7/10 G07F7/12 (Advanced/Invention); B41J21/00 B41J5/30 B42D1/00 B42D11/00 B42D15/10 G06F15/02 G06K17/00 G06K19/00 G06K19/07 G06K19/073 G06Q40/00 G07D9/00 G07F7/08 G07F7/12 (Core/Invention)

International class (IPC 1–7): B41J21/00 B41J5/30 B42D1/00 B42D11/00 B42D15/10 G06F15/02 G06F15/30 G06K17/00 G06K19/00 G06K19/07 G07D9/00 G07F19/00 G07F7/08 G07F7/10 G07F7/12

CPC: G06K19/07 G06Q20/341 G06Q20/4093 G07F7/1008 G07F19/20 G07F19/201

European class: G06K19/07 G06Q20/341 G06Q20/4093 G07F19/00F G07F19/20 G07F19/201 G07F7/10D

US class: 235/379 235/492

Classification Explorer

Cited documents: WO8303694 A1, WO8203484 A1, US4614861 A, US4590365 A, US4575621 A, US4536647 A, US4523087 A, US4498000 A, US4449040 A, US4394654 A, US4001550 A, US3906460 A, JP61141076 A2, JP61005389 A2, JP56014369 A2, JP56014369, JP52007649 A2, FR2473755 A1, EP0162221 A2, EP0131906 A2, DE3222288 A1, BE899285 A1,

Forward Citations: WO9410658, WO9324906, WO8806766, US9626611, US9489608, US9483722, US9390359, US9251453, US9208423, US9202156, US9122965, US9117152, US9092708, US9004361, US8937549, US8913778, US8866614, US8814053, US8573494, US8474718, US8451122, US8410936, US8408463, US8231061, US8136732, US8091786, US8083145, US8072331, US7849279, US7644040, US7379915, US7293717, US6966497, US6955299, US6868408, US6760460, US6744903, US6616035, US6164529, US6126069, US6122625, US6047887, US6047067, US5991747, US5963648, US5954583, US5953423, US5920629, US5914471, US5898154, US5889266, US5799087, US5610981, US5515440, US5508548, US5438213, US5327497, US5161231, US5034597, US5034596, US4983053, US4953086, US4852042, US2011180610, US2010033310, US2004073744, JP64044556, JP63249284, JP63123162, JP63000788, JP62089189, JP2108156, JP1044556, FR2674647, FR2663142, FR2627609, FR2619463, FR2604541, EP0854456, EP0292658, EP0291834, EP0232057, DE10208112,

Abstract:
Source: US4864109A A transaction system includes a card−shaped electronic bankbook and a transaction device. The electronic bankbook includes an IC chip encapsulated in an insulating card substrate and composed of a CPU and data memories display, a key switch including keys for instructing transaction data items and switching display data, a power supply, and an interface for receiving or delivering a signal on transactions from or to a transaction device. The system has a crime prevention function where transactions are made invalid if identification information on the electronic bankbook is erronesouly entered in repetition over the prescribed number of times into the transactin system of the electronic bankbook.

0) US4664417A – FOREIGN CURRENCY DISPENSER ENVELOPE

39) Family number: 2163030 (US4664417A) © PatBase

Title: Foreign currency dispenser envelope

Priority: US19850763243 19850807 US19860830082 19860218

Family:

Publication number	Publication date	Application number	Application date
GB2178884 A1	19870218	GB19860018749	19860731
GB2178884 B2	19890823	GB19860018749	19860731
GB8618749 A0	19860910	GB19860018749	19860731
US4664417 A	19870512	US19860830082	19860218

Probable Assignee: ROSENSTRACH I

Assignee(s):(std)**:** ROSENSTRACH I ; ROSENSTRACH IVAN ; STEINTHAL R ; STEINTHAL ROBERT

Assignee(s): IVAN ROSENSTRACH ; ROBERT STEINTHAL

Inventor(s):(std)**:** ROSENSTRACH IVAN ; STEINTHAL ROBERT

Inventor(s): ROBERT STEINTHAL ; IVAN ROSENSTRACH

International class (IPC 8–9): G07D9/00 (Advanced/Invention); G07D9/00 (Core/Invention)

International class (IPC 1–7): B31B1/62 B42D15/00 G06K15/00 G07F7/00

CPC: G07D9/002

European class: G07D9/00C

US class: 229/68.1 229/80 235/383 283/116 283/1B 493/254

Classification Explorer

Cited documents: US4529871 A, US4518852 A, US4445635 A, US4002886 A, US3933094 A, US3770941 A, US3666926 A, US3593913 A, US2484880 A, US2142374 A, US1944794 A, GB1365240 A,

Forward Citations: WO0229737, WO0156027, WO0156027, USD591356, US7954699, US7334719, US7267263, US7131593, US7131593, US6955263, US6027025, US2007095893, US2002174031, US2002040865, EP1195725, EP1195725,

Abstract:
Source: US4664417A A currency dispenser packet for facilitating the sale of prepackaged foreign currency at a retail outlet includes an envelope containing a preselected quantity of a currency of a foreign country. The envelope is imprinted with a machine–readable code identifying the contents of the envelope as well as the identity of the seller. The code on the envelope is scanned or "read" at the point of sales and the read data is transmitted to a central station processor at which current foreign currency exchange rates are maintained. The processor computes the cost of the foreign currency in U.S. dollars or currency of purchase as well as the applicable commissions and transmits this information to the point–of–sale location. The packet thus allows foreign currency to be sold at locations dealing with travelers such as travel agencies, airline ticket terminals, and other outlets where such sales have heretofore not been practical. It also makes possible speedier transactions and daily reconciliations since the sales transaction is recorded in the processor. Additionally, the packet and processor system make possible improved currency inventory control by the currency wholesaler and retailer as well as improved security of the foreign currencies being held.

0) US4832445A – SECURITY DIFFRACTION DEVICES DIFFICULT TO EXACT...

40) Family number: 2857577 (US4832445A) © PatBase

Title: SECURITY DIFFRACTION DEVICES DIFFICULT TO EXACTLY DUPLICATE

Priority: CA19870537397 19870519 US19860864193 19860516 WO1987US01175 19870518

Family:

Publication number	Publication date	Application number	Application date
AU198774804 A1	19871201	AU19870074804	19870518
AU595892 B2	19900412	AU19870074804	19870518
CA1286132 A1	19910716	CA19870537397	19870519
DK7988 A	19880108	DK19880000079	19880108
DK7988 A0	19880108	DK19880000079	19880108
EP0247471 A2	19871202	EP19870107146	19870518
EP0247471 A3	19881005	EP19870107146	19870518
JP63503331 T2	19881202	JP19870503216T	19870518
US4832445 A	19890523	US19860864193	19860516
WO8707034 A1	19871119	WO1987US01175	19870518

Probable Assignee: AMERICAN BANK NOTE HOLOGRAPHIC INC

Assignee(s):(std)**:** AMERICAN BANK NOTE HOLOGRAPHIC

Assignee(s): AMERICAN BANK NOTE HOLOGRAPHIC INC ; AMERICAN BANK NOTE HOLOGRAPHICS ; AMERICAN BANK NOTE HOLOGRAPHICS INC ; CHASE MANHATTAN BANK AGENT AS ; CHASE MANHATTAN BANK AS AGENT ; FOOTHILL CAPITAL CORP ; WELLER ROBERT H ; HAINES KENNETH A

Inventor(s):(std)**:** HAINES KENNETH A ; WELLER ROBERT H

Inventor(s): KENNETH A HAINES ; ROBERT H WELLER

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; CASSAN MACLEAN

Designated states: AT AU BE BR CH DE DK ES FR GB GR IT JP KR LI LU NL SE

International class (IPC 8–9)**:** G02B27/42 G02B27/44 G02B5/18 G02B5/32 G03H1/00 G03H1/04 G03H1/18 G06K19/16 G07D7/00 G07D7/12 G07F7/08 (Advanced/Invention); G02B27/42 G02B5/32 G03H1/00 G03H1/18 (Advanced/Non–invention); G02B27/42 G02B5/18 G02B5/32 G03H1/00 G03H1/04 G03H1/18 G06K19/14 G07D7/00 G07F7/08 (Core/Invention)

International class (IPC 1–7)**:** B44F1/12 B60T8/02 G02B27/42 G02B27/44 G02B5/18 G02B5/32 G03H1/00 G03H1/04 G03H1/18 G03H1/20 G06K19/08 G07D7/00

CPC: Y10S283/904 Y10S359/90 G02B5/1842 G06K19/16 G07F7/086 G03H1/0011 G03H2001/0027 G07D7/0032 G03H1/041

European class: G02B5/18L G03H1/04A4 G03H1/04C G06K19/16 G07D7/00B2 G07F7/08B

US class: 283/86 283/904 283/91 350/162.19 350/162.2 350/3.69 359/12 359/2 359/568 359/569 359/900

Classification Explorer

Cited documents: US4576439 A, US4568141 A, US4484797 A, US4417784 A, US4304809 A, US4129382 A, US3957354 A, US3633989 A, GB2116908 A1, GB2093404 A1, EP0105099 B1, EP0012375 A2, DE12375 A, DE105099 A, AU561688 B2, AU558221 B2, AU549963 B2,

Forward Citations: WO9727504, WO9635191, WO9635191, WO9607939, WO9523986, WO9521747, WO9325941, WO9103747, WO08154541, WO0180175, US7916355, US7800803, US7548360, US7542175, US7333252, US7324248, US7267280, US7262891, US7161722, US7042605, US7009742, US6980336, US6930811, US6906861, US6870678, US6806983, US6730442, US6638386, US6552830, US6497778, US6493014, US6369947, US6271967, US6268942, US6088140, US6086708, US5986781, US5912767, US5896192, US5825547, US5812287, US5810957, US5808776, US5759683, US5753349, US5674580, US5643678, US5634669, US5629070, US5593017, US5464690, US5458713, US5428479, US5410397, US5331443, US2013218103, US2010067076, US2009219596, US2009185234,

US2008158630, US2008151340, US2007030544, US2006114532, US2005273434, US2005200927, US2005200924, US2005199724, US2005128525, US2005052717, US2005052716, US2004175627, US2004166336, US2003156308, US2003058490, EP1475242, EP1275084, EP0992020, EP0919961, EP0919961, EP0876629, EP0826191, EP0813172, EP0715232, EP0712012, EP0699310, EP0645024, EP0449893, EP0377167, EP0337921, EP0337921, DE10054503, DE10054503, CH697447, AU674521, AU635255,

Abstract:
Source: US4832445A Holograms, including diffraction gratings, and methods of making them, that reconstruct an image which changes as the hologram is tilted with respect to the viewer and in a manner that images reconstructed from copies made of the hologram in monochromatic light do not have that motion. The hologram is a valuable security device for authenticating documents or objects to which it is attached since it is extremely difficult to duplicate.

0) US5267149A – SYSTEM AND METHOD FOR REGISTERING PASSWORDS

41) Family number: 11374788 (US5267149A) © PatBase

Title: System and method for registering passwords

Priority: JP19860192934 19860820 JP19870004900 19870114 US19910664523 19910305 US19870086576 19870818 US19890390391 19890807 JP19870009052 19870120

Family:

Publication number	Publication date	Application number	Application date
JP63049971 A2	19880302	JP19860192934	19860820
JP63174172 A2	19880718	JP19870004900	19870114
JP63178381 A2	19880722	JP19870009052	19870120
KR910005350 B1	19910725	KR19870009054	19870819
US5267149 A	19931130	US19910664523	19910305

Probable Assignee: OKI ELECTRIC IND CO LTD

Assignee(s):(std)**:** OKI ELECTRIC IND CO LTD ; OKI ELECTRICS CO LTD

Assignee(s): OKI ELECTRIC INDUSTRY CO LTD ; OKI ELECTRICS CO

Inventor(s):(std)**:** ABE TADAO ; ANADA NORIAKI ; ANATA NORIAKI

International class (IPC 8–9)**:** G06F21/00 G06K17/00 G06Q20/00 G06Q20/24 G06Q20/40 G06Q40/00 G06Q40/02 G06Q50/00 G07D9/00 G07F7/08 G07F7/10 G07F7/12 (Advanced/Invention); G06K17/00 G06Q40/00 G07D9/00 G07F7/08 G07F7/12 (Core/Invention)

International class (IPC 1–7)**:** G06F15/21 G06F15/30 G06K17/00 G07D9/00 G07F7/08

CPC: G06F21/34 G07F7/10 G06Q20/1085 G06Q20/40

European class: G06F1/00N5A2D2 G06F21/34 G06Q20/1085 G06Q20/40 G07F7/10

US class: 235/379 235/380 364/408 705/43 705/44

Classification Explorer

Cited documents: US4758718 A, US4694147 A, US4692600 A, US4629872 A, US4617457 A, US4532416 A, US4528442 A, US4523087 A, US4423313 A, US4123747 A, US4023012 A, US3876864 A, US30773 A, JP61253580 A2, JP61097781 A2, JP60229170 A2, JP60134967 A2, JP58144969 A2, JP55074679 A2, JP54054097 A2,

Forward Citations: WO9818097, WO9512169, WO0152203, WO0146788, WO0076215, USRE38255, USRE37122, USRE36365, US9280763, US9270729, US8830325, US8763026, US8654109, US8560621, US8249960, US8155768, US8095597, US8010451, US7996861, US7965284, US7788184, US7782330, US7717333, US7593870, US7397476, US7357315, US7330876, US7302703, US7275032, US7213745, US6959874, US6629636, US6105011, US6088683, US6039247, US6021944, US6000606, US5902981, US5793952, US5699522, US5477038, US5446796, US5423036, US2011210977, US2011176004, US2010309210, US2009030840, US2008147912, US2008116258, US2007203715, US2007073622, US2006289629, US2006266209, US2006054685, US2005049969, US2004215451, US2004068693, US2002148892, US2002108108, NL1027546, NL1008287, JP7107211, JP2011044049, EP1367521, EP1183868, AU686276,

Abstract:
Source: US5267149A A system and method for registering a password includes a data center that processes and stores transaction data, and a teller window transaction device communicating with the data center. The teller window transaction device has a first input device such as a keyboard used by a teller for inputting transaction data, a first display unit used by the teller for displaying the transaction data, a second input device such as an input panel used by the customer, and a second display unit used by the customer for displaying the transaction data. When a new customer's card is issued, the first input device is used by the teller for inputting information such as the customer's name and address, and this information is shown on the second display unit as well as the first display unit so that the customer can confirm that it has been accurately entered. Thereafter the customer is prompted to use the second input device to enter a secret password, which has not been disclosed to the teller. Preferably the customer enters the password several times, to impress it on his memory and to permit one entry of the password to be checked electronically against another entry of the password. Other embodiments permit a customer who has already been issued a card to change the password without revealing the new password to the teller or others. This updating of the password may be conducted regardless of whether the customer still

possesses the card. The teller display and the customer display are arranged in substantially face–to–face relationship. Passwords are entered by the customer at the second input device without revealing the passwords to others.

0) US4806740A – MAGNETIC CHARACTERISTIC IDENTIFICATION SYSTEM

42) Family number: 2866811 (US4806740A) © PatBase

Title: MAGNETIC CHARACTERISTIC IDENTIFICATION SYSTEM

Priority: CA19870542439 19870717 US19860909145 19860919

Family:

Publication number	Publication date	Application number	Application date
CA1291564 A1	19911029	CA19870542439	19870717
DE3751697 D1	19960321	DE19873751697	19870916
DE3751697 T2	19960620	DE19873751697T	19870916
EP0260940 A2	19880323	EP19870308178	19870916
EP0260940 A3	19891123	EP19870308178	19870916
EP0260940 B1	19960207	EP19870308178	19870916
JP63129520 A2	19880601	JP19870226749	19870911
US4806740 A	19890221	US19860909145	19860919

Probable Assignee: LIGHT SIGNATURES INC

Assignee(s):(std)**:** LIGHT SIGNATURES INC

Assignee(s): LIGHT SIGNATURES INC 1901 AVENUE OF STARS LOS ANGE ; LIGHT SIGNATURES INC 1901 AVENUE OF STARS LOS ANGELES CA 90067 A CORP OF CA ; LIGHT SIGNATURES INC LOS ANGELES CALIF US ; RAITO SHIGUNEICHIYAAZU INC ; TUCKER FRANK D ; GOLD DAVID G

Inventor(s):(std)**:** DEBITSUDO JII GOORUDO ; FURANKU DEII TATSUKAA ; GOLD DAVID G ; GOLD DAVID GENE ; TUCKER FRANK D ; TUCKER FRANK DAN

Inventor(s): TUCKER FRANK DAN VALENCIA CALIFORNIA 91355 US ; GOLD DAVID GENE SANTA MONICA CALIFORNIA 90402 US

Agent(s): OYEN WIGGS GREEN AND MUTALA LLP

Designated states: BE CH DE ES FR GB IT LI NL SE

International class (IPC 8–9)**:** B42D15/10 C09D5/23 C09D7/12 G06K17/00 G06K19/10 G07D7/00 G07D7/04 G07D7/20 G07F7/08 G11B5/73 G11B5/80 (Advanced/Invention); B42D15/10 C09D5/23 C09D7/12 G06K17/00 G06K19/10 G07D7/00 G07F7/08 G11B5/62 G11B5/80 (Core/Invention)

International class (IPC 1–7)**:** B42D15/02 G06K17/00 G06K19/00 G06K7/06 G07D7/00 G07F7/08 G11B5/80

CPC: G07D7/0047 G07F7/086 G07D7/04 G07D7/20

European class: G07D7/00B8 G07D7/00D4 G07D7/04 G07D7/20 G07F7/08B

US class: 235/449 235/493 283/74 283/82

Classification Explorer

Cited documents: US4630845 A, US4620727 A, US4432567 A, US4218674 A, US4114032 A, US4038596 A, US4025759 A, US4013894 A, US3859508 A, US3790754 A, US3760357 A, US3662156 A, US3636318 A, US3275806 A, JP61139498 A2, JP58091531 A2, JP58091531,

Forward Citations: WO9724699, WO9719421, WO9631834, WO9608012, WO9602901, WO9424641, WO9424639, WO9424638, WO9401837, WO9401837, WO9206445, WO0013128, WO0013128, USRE41925, USRE35599, USD522052, USD511543, USD498788, USD490104, US8622434, US8447991, US7673799, US7597255, US7500603, US7478751, US7434732, US7416136, US7377433, US7370811, US7370805, US7347370, US7299984, US7210627, US7090138, US6899269, US6708618, US6611598, US6600823, US6491324, US6431445, US6212504, US6138917, US6098881, US6003763, US5984191, US5959794, US5920628, US5883377, US5863076, US5844230, US5761089, US5740244, US5739517, US5661805, US5627357, US5625689, US5587654, US5546462, US5473147, US5453602, US5451759, US5430664, US5428683, US5408505, US5365586, US5216229, US5206814, US5177344, US5027113, US4985614, US4937995, US4929821, US4906988, US2008215887, US2008179401, US2007170240, US2007084921,

US2006249575, US2006208078, US2006027647, US2005242193, US2005218229, US2005194436, US2005173530, US2005167495, US2005150955, US2005133590, US2004195340, JP6103424, JP6103423, JP6096294, JP3282690, JP2820844, JP2007080444, GB2290897, GB2290897, FR2765014, FR2657981, EP1508879, EP0870269, EP0806748, EP0693201, EP0589195, EP0570162, EP0490083, EP0416826, DE10027178, AU688956, AU680901, AU680498, AU631095,

Abstract:
Source: US4806740A A system for authenticating an object on the basis of a repeatably sensible, random magnetic medium or substance deposited on an object, for example in the form of a document. A magnetic medium printed on the document is sensed for its random characteristic which is reduced to a data format that is recorded on the object, e.g. document. Specifically, the repeatably sensible, random characteristic of the magnetic medium is recorded in a digital format on a magnetic stripe of a document so as to identify or verify the document. Conditioning techniques, as depositing and recording the magnetic characteristic medium and selectively sensing it, accomplish various specific objectives.

0) US5010238A – AUTOMATIC CASH TRANSACTION SYSTEM AND METHOD

43) Family number: 24157282 (US5010238A) © PatBase

Title: AUTOMATIC CASH TRANSACTION SYSTEM AND METHOD

Priority: JP19880063278 19880318 JP19880093123 19880415

Family:

Publication number	Publication date	Application number	Application date
JP1237761 A2	19890922	JP19880063278	19880318
JP1263869 A2	19891020	JP19880093123	19880415
KR910007763 B1	19911002	KR19890001464	19890209
US5010238 A	19910423	US19890304095	19890131

Probable Assignee: HITACHI LTD

Assignee(s):(std)**:** HITACHI LTD

Assignee(s): HITACHI LTD A CORP OF JAPAN

Inventor(s):(std)**:** USIJIMA GUNIO ; GATONO OSAMOO ; USHIZIMA KUNIO ; USHIJIMA KUNIO ; MONNO OSAMU ; KADONO OSAMU

International class (IPC 8–9): G06F11/30 G06Q40/00 G06Q40/02 G07D9/00 G07F19/00 (Advanced/Invention); G06F11/30 G06Q40/00 G07D9/00 G07F19/00 (Core/Invention)

International class (IPC 1–7): G06F11/30 G06F15/30 G07D9/00

CPC: G06Q40/02 G07F19/20 G07F19/207 G07F19/211

European class: G06F17/60D2 G06Q40/02 G07F19/00F G07F19/20 G07F19/207 G07F19/211

US class: 235/379 235/454 902/40 902/8

Classification Explorer

Cited documents: US4864108 A, US4761542 A, US4580040 A, US4555617 A, US4523330 A, JP61253597 A2, JP61161572 A2, JP60183676 A2, JP55062548 A2,

Forward Citations: WO9811714, WO9811714, WO9535549, USRE44689, USRE44252, USRE38147, USRE37011, US9684931, US9633500, US9594982, US9558418, US9508208, US9501885, US9495808, US9477896, US9443367, US9437069, US9430893, US9412132, US9390574, US9355295, US9330515, US9235945, US9230381, US9195889, US9189780, US9183687, US9142075, US9141876, US9129294, US9129279, US9129271, US9092924, US9064268, US9036890, US9022841, US8967361, US8959029, US8958626, US8950566, US8948490, US8944234, US8929640, US8874467, US8787652, US8756099, US8733642, US8719164, US8714336, US8701860, US8701857, US8684160, US8684159, US8655046, US8655045, US8644585, US8644584, US8644583, US8639015, US8627939, US8625875, US8602200, US8594414, US8571972, US8559695, US8559694, US8554669, US8545295, US8543982, US8543506, US8542904, US8538123, US8523641, US8514379, US8490864, US8478020, US8478019, US8467591, US8459436, US8444051, US8443958, US8442296, US8437532, US8437531, US8437530, US8437529, US8437528, US8433648, US8433123, US8428332, US8417017, US8396278, US8393455, US8391583, US8380573, US8352322, US8346610, US8339589, US8332313, US8229851, US8229821, US8204830, US8204293, US8169602, US8162125, US8126793, US8125624, US8112330, US8103586, US8103084, US8095445, US8086532, US8042732, US8041098, US8033375, US8024272, US8023715, US8010451, US8001040, US7980378, US7971699, US7954702, US7954701, US7949582, US7946406, US7929749, US7917436, US7903863, US7891554, US7890393, US7882000, US7874478, US7865432, US7861928, US7845550, US7837097, US7778456, US7708199, US7665656, US7661590, US7653599, US7542598, US7533806, US7533805, US7527195, US7527193, US7520374, US7502752, US7475181, US7475180, US7475044, US7464802, US7451919, US7406630, US7401264, US7400741, US7391897, US7363274, US7349566, US7303119, US7143942, US7143942, US7131580, US7089342, US7036048, US7028827, US6976570, US6854581, US6796492, US6758316, US6736251, US6549970, US6520410, US6513088, US6247090, US6216790, US6182710, US6149055, US6148094, US6073120, US6039123, US6021400, US6006989, US5983197, US5950872, US5887147, US5880444, US5859416, US5756978, US5610382, US5586313, US5562162,

US5546523, US5488660, US5448047, US5438186, US5389773, US5329589, US2014023227, US2012173427, US2012078794, US2011213708, US2011099105, US2010102125, US2010102121, US2010102120, US2010026627, US2010001060, US2009266878, US2009242625, US2009159395, US2009144897, US2009138393, US2008203153, US2008167956, US2008087520, US2007288375, US2007272741, US2007237381, US2007221470, US2007069007, US2006229996, US2006229974, US2006226216, US2006191770, US2006175176, US2006069642, US2006064379, US2006060445, US2005262829, US2005220325, US2005212658, US2005207634, US2005205675, US2005173519, US2005087598, US2005015342, US2004155979, US2004124062, US2004078328, US2004061692, US2003209599, US2003202690, US2003163716, US2003163703, US2003081824, US2002152347, US2002147879, US2002082994, US2001051923, JP6068120, JP3260763, JP2016167318, GB2244583, EP1182627, EP1182627, EP1182626, EP1091329, EP0653717,

Abstract:
Source: US5010238A An automatic cash transaction system having a plurality of automated teller machines and a supervisory center for supervising the automated teller machines, wherein cash transactions are performed using an identification card storing at least an index representative of the number of a user's account. Each of the automated teller machine includes a guidance display unit for displaying a guidance such as a transaction operation guidance; an optical information reading unit for taking an image of surface information of an identification card; an operation unit for inputting necessary data for a transaction operation, and designating a particular transaction already performed; a data storing unit for storing for each transaction the surface information of an identification card obtained by the optical information reading unit, and the corresponding transaction information entered by using the identification card; and a controller for reading the surface information of an identification card associated with an already performed transaction information designated by the operation unit to display the surface information on the guidance display unit, and upon a transaction failure sending a current transaction information and the surface information of an identification card to the supervisory center. The supervisory center includes a supervisory display unit for displaying thereon transaction information and identification card surface information sent from the controller. An automatic cash transaction method used in the transaction system includes the steps of optically reading an image of surface information of an identification card; storing for each transaction the surface information and the transaction information entered by using the identification card; searching designated transaction information from past transactions already performed; and reading and displaying the surface information of the identification card associated with the designated transaction information.

0) US5267315A – SECRET IDENTIFICATION NUMBER CHECKING SYSTEM

44) Family number: 3225291 (US5267315A) © PatBase

Title: Secret identification number checking system

Priority: JP19880260384 19881018 JP19890510619 19891016 WO1989JP01062 19891016

Family:

Publication number	Publication date	Application number	Application date
AU198943487 A1	19900514	AU19890043487	19891016
AU626331 B2	19920730	AU19890043487	19891016
DE68928170 D1	19970814	DE19896028170	19891016
DE68928170 T2	19980219	DE19896028170T	19891016
EP0439609 A1	19910807	EP19890911389	19891016
EP0439609 A4	19931208	EP19890911389	19891016
EP0439609 B1	19970709	EP19890911389	19891016
JP2523197 B2	19960807	JP19890510619T	19891016
US5267315 A	19931130	US19920684911	19920412
WO9004832 A1	19900503	WO1989JP01062	19891016

Probable Assignee: OKI ELECTRIC IND CO LTD

Assignee(s):(std)**:** OKI ELECTRIC IND CO LTD

Assignee(s): OKI ELECTRIC INDUSTRY CO ; OKI ELECTRIC INDUSTRY CO LTD ; OKI ELECTRIC INDUSTRY CO LTD TOKIO TOKYO JP ; OKI ELECTRIC INDUSTRY COMPANY LIMITED ; OKI ELECTRIC IND ; OKI ELECTRIC IND CO

Inventor(s):(std)**:** NARITA KIYOKAZU ; NARITA KIYOKAZU OKI ELECTRIC I ; TAKIZAWA TOSHIO ; TAKIZAWA TOSHIO OKI ELECTRIC I

Inventor(s): TAKIZAWA TOSHIO OKI ELECTRIC IND CO ; TAKIZAWA TOSHIO OKI ELECTRIC INDUSTRY CO ; TOSHIO TAKIZAWA ; NARITA KIYOKAZU OKI ELECTRIC IND CO ; NARITA KIYOKAZU OKI ELECTRIC INDUSTRY CO ; NARITA KYOKAZU ; KIYOKAZU NARITA

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS

Designated states: AT AU BE CH DE FR GB IT JP LU NL SE US

International class (IPC 8–9): G06F19/00 G06K17/00 G06Q20/40 G06Q40/00 G06Q40/02 G07D9/00 G07F7/10 (Advanced/Invention); G07F7/10 (Core/Invention)

International class (IPC 1–7): G06F15/30 G06F19/00 G06K17/00 G06K19/00 G07D9/00 G07F7/10 H04L9/04

CPC: G06Q20/346 G07F7/10 G07F7/1008 G07F7/1066 G06Q20/3674 G06Q20/4012

European class: G06Q20/346 G06Q20/3674 G06Q20/4012 G07F7/10 G07F7/10D G07F7/10P6B

US class: 380/24 705/67 705/72 713/169

Classification Explorer

Cited documents: WO8801818 A1, US5093862 A, US5036461 A, US4961142 A, US4910773 A, US4802218 A, US4612413 A, JP62251946 A2, JP62221052 A2, JP62189593 A2, JP62128386 A2, JP61255491 A2, JP60049471 A2, FR2616937 A1, EP0193920 A2, AU525982 B2,

Forward Citations: US9225519, US8939834, US8898077, US8825928, US8762283, US8579705, US8566244, US8532640, US8423781, US8380636, US8370225, US8271395, US8019691, US7991701, US7974929, US7899751, US7827115, US7792522, US7707120, US7373518, US6920437, US6676017, US6558256, US6547664, US6471590, US6463416, US6240515, US6023682, US5809143, US5544246, US2011153471, US2010332393, US2010057619, US2009177619, US2008301056, US2007226805, US2004098353, US2003212642, US2003084303, US2002111919, US2002042879, US2002038287, US2001027126, EP1271435, EP0903703, DE10212567, AT409425,

Abstract:
Source: US5267315A The present invention relates to a secret identification number checking system for comparing a secret identification number stored in a magnetic card (11) and a secret identification number entered by the bearer of the magnetic card. Data to enable the comparison is stored in a card medium (13), and the card medium (13) and a transaction machine (17) mutually authenticate each other. When if both the card medium (13) and the transaction machine (17) are legitimate, the card medium (13) sends the data to the transaction machine (17) to permit the secret identification number stored in the magnetic card (11) to be compared with the secret identification number entered by the bearer of the magnetic card. The secret identification number checking system thus improves the security of transactions.

0) US4936564A – SHEET HANDLING APPARATUS

45) Family number: 15268501 (US4936564A) © PatBase

Title: Sheet handling apparatus

Priority: CA19890609639 19890829 GB19880025756 19881103 US19890342513 19890424

Family:

Publication number	Publication date	Application number	Application date
CA1313888 A1	19930223	CA19890609639	19890829
DE68913007 D1	19940324	DE19896013007	19891027
DE68913007 T2	19940929	DE19896013007T	19891027
EP0367519 A2	19900509	EP19890311146	19891027
EP0367519 A3	19910306	EP19890311146	19891027
EP0367519 B1	19940209	EP19890311146	19891027
GB8825756 A0	19881207	GB19880025756	19881103
JP2188361 A2	19900724	JP19890273914	19891023
JP2759194 B2	19980528	JP19890273914	19891023
US4936564 A	19900626	US19890342513	19890424

Probable Assignee: NCR INT INC

Assignee(s):(std)**:** NCR CO ; NCR INT INC

Assignee(s): NCR INT INC DAYTON OHIO US ; NCR CORP ; NCR CORP DAYTON OHIO US ; ENU SHII AARU INTERN INC ; HAIN DAVID A ; NCR A CORP OF MD CORP

Inventor(s):(std)**:** DEIBUITSUDO AREKUSANDAA HAIN ; HAIN DAVID A ; HAIN DAVID ALEXANDER

Inventor(s): HAIN DAVID ALEXANDER DUNDEE DD5 4DR SCOTLAND GB ; DEIUITSUDO AREKUSANDAA HAIN

Agent(s): SMART AND BIGGAR

Designated states: DE FR GB

International class (IPC 8–9): B65H29/12 B65H29/14 B65H29/40 B65H31/30 B65H39/042 G07D1/00 (Advanced/Invention); B65H29/38 B65H31/30 B65H39/00 (Core/Invention)

International class (IPC 1–7): B65H29/12 B65H29/14 B65H29/40 B65H31/30 B65H39/042 B65H5/02 G07D1/00

CPC: B65H29/40 B65H31/3027 B65H31/3063 B65H39/042 B65H2301/3322 B65H2301/42262 B65H2408/13 B65H2701/1912

European class: B65H29/40 B65H31/30B B65H31/30D1 B65H39/042 L65H301/3322 L65H301/42262 L65H408/13 L65H701/1912

US class: 271/198 271/273 271/274 271/298 271/3 271/3.19 271/69 271/7

Classification Explorer

Cited documents: US4822018 A, US4813658 A, US4709820 A, US4697944 A, US4649832 A, US4578009 A, JP62109190 A2, JP61049736 U1, JP53041228 A2, GB2106687 A1, GB2085410 A1,

Forward Citations: WO9859308, WO10119451, WO10119451, US9460426, US8899476, US8121948, US7991696, US7653600, US7651092, US7611140, US7611045, US7556259, US6983880, US6276603, US6241150, US6203000, US6196457, US6012048, US5987439, US5897625, US5857394, US5681254, US5267826, US5067701, US2010114772, US2010114766, US2010102119, US2009266880, US2008174626, US2007216081, US2006208413, US2005035193, US2004212141, EP0965956, EP0965955, EP0965953, EP0499458, CN102396007,

Abstract:
Source: US4936564A A cash dispensing unit includes first (68) and second (70) cooperating endless groups of belts for feeding a stack (72) of currency notes to an exit location (50). First ends of the first (68) and second (70) groups of belts respectively pass round first (26) and second (30) group of pulleys of equal diameter mounted in a central position of a support framework (11), and second ends of the two groups of belts (68, 70) respectively pass round two smaller groups of pulleys (66, 52) disposed adjacent the exit location (50). The first group of belts (68) pass partly around the periphery of the second group of pulleys (30), and are resiliently stretchable so that

the stack (72) can pass between this group of belts (68) and this group of pulleys (30). The cash dispensing unit can be a rear loading unit in which the smaller groups of pulleys (66, 52) are located adjacent one end of the framework (11), or can be a front loading unit in which these groups of pulleys (66, 52) are repositioned adjacent the opposite end of the framework (11).

0) US4997188A – DIVIDED–PAYING TRAVELERS CHECKS AND SYSTEM

46) Family number: 12010315 (US4997188A) © PatBase

Title: Divided–paying travelers checks and system

Priority: US19870118000 19871109 US19890305543 19890203 US19900537141 19900613 US19900608679 19901105 US19920919242 19920723 US19890312455 19890221 WO1991US00975 19910213

Family:

Publication number	Publication date	Application number	Application date
AU199172427 A1	19920107	AU19910072427	19910213
CA2085240 AA	19921211	CA19912085240	19910213
US4997188 A	19910305	US19900537141	19900613
US5083782 A	19920128	US19900608679	19901105
US6017063 A	20000125	US19920919242	19920723
WO9120061 A2	19911226	WO1991US00975	19910213

Probable Assignee: NILSSEN OLE K

Assignee(s):(std): NILSSEN OLE K

Assignee(s): OLE K NILSSEN

Inventor(s):(std): NILSSEN OLE K

Inventor(s): OLE K NILSSEN

Agent(s): MARKS AND CLERK

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CM DE DK ES FI FR GA GB GR HU IT JP KP KR LK LU MC MG ML MR MW NL NO PL RO SD SE SN SU TD TG

International class (IPC 8–9): B42D15/00 G06Q40/00 G07D13/00 G07F19/00 G07G5/00 (Advanced/Invention); G07D13/00 (Advanced/Non–invention); B42D15/00 G06Q40/00 (Core/Invention)

International class (IPC 1–7): A63B71/00 B42D15/00 G06F15/20 G07C15/00 G07F19/00 G07G5/00

CPC: G06Q40/02 G06Q30/0212 G06Q40/00 B42D25/29

European class: B42D15/00C G06F17/60D G06Q30/0212 G06Q40/00 G06Q40/02

US class: 235/379 273/138.2 273/138A 273/138R 283/57 283/67 364/408 463/26 705/14 705/14.14 705/35

Classification Explorer

Cited documents: US5193855 A, US5178417 A, US4997188 A,

Forward Citations: WO9923590, WO07117479, WO02091113, WO02091113, WO0186569, US9594982, US9443367, US9235945, US9230381, US9183687, US9129294, US9064268, US9036890, US9022841, US8967361, US8874467, US8725624, US8708231, US8632007, US8600890, US8600889, US8600888, US8600887, US8595048, US8583522, US8571952, US8560451, US8554677, US8548885, US8543507, US8535144, US8484117, US8468079, US8401969, US8346654, US8150758, US8137187, US8132715, US8132714, US8099360, US8082202, US7971699, US7895120, US7874478, US7860779, US7848985, US7837101, US7827080, US7802718, US7793830, US7780514, US7747522, US7716106, US7699220, US7617973, US7600677, US7597251, US7597248, US7591420, US7575158, US7574390, US7571850, US7537521, US7496537, US7438640, US7407436, US7387569, US7384333, US7384332, US7376580, US7300349, US7155468, US7149712, US7149712, US7127423, US7127423, US7024384, US7020626, US6988083, US6922677, US6908382, US6856971, US6599186, US6513020, US6497359, US6338049, US6330544, US6282523, US6193155, US6188993, US6112189, US6098051, US6086477, US6016483, US6012046, US5991736, US5987435, US5950177, US5903875, US5884286, US5798508, US5774884, US5765141, US5557517, US5513102, US5083784, US5083782, US5082275, US2014081730, US2011218913, US2011145142, US2010211526, US2010121758, US2010063941, US2009150282, US2009138401, US2009138400, US2009098934, US2009089104, US2008288418, US2008287177, US2008208663, US2008102946,

US2008067238, US2008067236, US2008067235, US2008065545, US2008065544, US2008065543, US2008065542, US2008065541, US2008065539, US2008065538, US2008065537, US2008065536, US2008061131, US2007287533, US2007239583, US2007043644, US2007027787, US2006223623, US2006223622, US2006223621, US2006219519, US2006213985, US2006213984, US2006213983, US2006207856, US2006155631, US2006105839, US2006053062, US2005215308, US2005196746, US2005114251, US2005114250, US2005108139, US2005108138, US2005086144, US2005021439, US2004254871, US2004103050, US2004054548, US2004029630, US2003208397, US2003125108, US2003023535, US2002198833, US2002194099, US2002107766, US2002052795, US2002042766, US2001056392, US2001025263,

Abstract:
Source: US4997188A A financial institution, such as a bank, issues numerous uniquely coded travelers checks to various individual entities in exchange for value received. The holder of each travelers check in entitled to receive a certain average rate of income from the dollar−value represented by that check; which average rate of income would generally be proportional to prevailing interest rate as well as to the dollar−value represented by the check. To avoid the relatively high transaction costs associated with periodic payments of a relatively modest income to the holder of each of numerous individual checks, a statistical method is used. By way of this statistical method, a relatively few of the numerous uniquely coded travelers checks are randomly chosen at the end of each of a continuous sequence of time periods, and all the income attributable to all the issued travelers checks for the associated time period is then paid to the holders of the relatively few travelers checks chosen for that time period.

0) US2001027994A – ELECTRONIC CASHLESS SYSTEM

47) Family number: 30036953 (US2001027994A) © PatBase

Title: ELECTRONIC CASHLESS SYSTEM

Priority: EP19900309751 19900906 JP19890230893 19890906 US19900578234 19900906 US19920959458 19921009 US20020045094 20020115 US20000616969 20000714 US20010852842 20010511 US19970857568 19970516 US19990365032 19990802 US19960656913 19960603 US19960634850 19960419 US19940279856 19940726

Family:

Publication number	Publication date	Application number	Application date
DE69033207 D1	19990819	DE19906033207	19900906
DE69033207 T2	19991104	DE19906033207T	19900906
EP0416916 A2	19910313	EP19900309751	19900906
EP0416916 A3	19910515	EP19900309751	19900906
EP0416916 B1	19990714	EP19900309751	19900906
EP0768628 A2	19970416	EP19960203461	19900906
EP0768628 A3	19970521	EP19960203461	19900906
EP0834843 A2	19980408	EP19970118508	19900906
EP0834843 A3	19981216	EP19970118508	19900906
ES2136057 T3	19991116	ES19900309751T	19900906
JP3092966 A2	19910418	JP19890230893	19890906
JP3184196 B2	20010709	JP19890230893	19890906
KR960007940 B1	19960617	KR19900014070	19900906
US2001027994 AA	20011011	US20010852842	20010511
US2002060242 AA	20020523	US20020045094	20020115
US5644118 A	19970701	US19960634850	19960419
US5949043 A	19990907	US19970857568	19970516
US6003762 A	19991221	US19940279856	19940726
US6003767 A	19991221	US19960656913	19960603
US6257487 BA	20010710	US19990365032	19990802
US6378775 BB	20020430	US20010852842	20010511
US6915951 BB	20050712	US20020045094	20020115
US6926200 BA	20050809	US20000616969	20000714

Probable Assignee: FUJITSU LTD

Assignee(s):(std)**:** FUJITSU SYST SOKEN K K ; FUJITSU SYST SOKEN KK ; FUJITSU LTD

Assignee(s): FUJITSU LTD KAWASAKI ; FUJITSU LIMITED ; HAYASHIDA SHOJI ; SEAGATE TECHNOLOGY INC

Inventor(s):(std)**:** HAYASHIDA SHOJI ; SOZI HAYASIDA

Agent(s): STAAS AND HALSEY LLP

Designated states: DE ES FR GB

International class (IPC 8–9)**:** G06K17/00 G06Q20/00 G06Q20/04 G06Q20/10 G06Q20/26 G06Q20/38 G06Q20/40 G06Q40/00 G06Q40/02 G07D9/00 G07F19/00 G07F7/08 (Advanced/Invention)

International class (IPC 1–7)**:** G06F15/30 G06F17/60 G06K17/00 G06K17/60 G06K19/06 G06K5/00 G07D9/00 G07F19/00 G07F7/08 G07F7/10 G07G1/14

CPC: G06Q20/04 G06Q20/26 G06Q20/3221 G06Q20/349 G06Q20/354 G06Q20/355 G06Q20/4037 G07F19/20 G07F19/202 G07F7/0866 G07F19/204 G06Q20/108 G06Q20/382 G06Q20/401

European class: G06Q20/04 G06Q20/108 G06Q20/26 G06Q20/3221 G06Q20/349 G06Q20/354 G06Q20/355 G06Q20/382 G06Q20/401 G06Q20/4037 G07F19/00B G07F19/00F G07F19/20 G07F19/202 G07F19/204 G07F7/08C

US class: 235/375 235/379 235/379P 235/380 235/380P 235/382 235/383 235/384 235/487 235/492 705/64 705/70 705/75 902/8

Classification Explorer

Cited documents: WO8605613 A1, WO8303694 A1, WO8303018 A1, US6378775 BB, US6257487 BA, US6003767 A, US6003762 A, US5949043 A, US5644118 A, US5453601 A, US5440108 A, US5278752 A, US5168151 A, US5147021 A, US5122643 A, US5093787 A, US5055662 A, US5051564 A, US5023436 A, US5016274 A, US5015274 A, US5012076 A, US5010485 A, US5003520 A, US4968873 A, US4961142 A, US4926996 A, US4926325 A, US4900905 A, US4877947 A, US4870259 A, US4859837 A, US4839504 A, US4795892 A, US4752676 A, US4734564 A, US4727243 A, US4717815 A, US4707592 A, US4707072 A, US4700055 A, US4697072 A, US4692600 A, US4673802 A, US4650978 A, US4630201 A, US4614861 A, US4501958 A, US4454414 A, US4305059 A, US4303904 A, US4295039 A, US4288688 A, US4278879 A, US4277837 A, US4105156 A, US3984660 A, US3958103 A, US3956615 A, US3870866 A, US3852571 A, US3748441 A, US3609300 A, US3501622 A, JP63080666 A2, JP59178754 A2, JP2001049 A2, EP97118508, EP97118508, EP0834843 A2, EP0363122 B1, EP0363122 A2, EP0316689 A2, EP0118508 A1, DE3406615 A1,

Forward Citations: WO9933033, WO9933033, WO9814920, WO9811518, WO9811518, WO9641286, WO9618161, WO9524690, WO9300662, WO06122373, WO05010679, WO05010679, WO0211394, WO0211394, WO0207115, WO0201521, WO0197118, WO0131555, WO0048146, USD693984, USD690074, USD678653, USD602522, US9679293, US9672508, US9661021, US9646304, US9608826, US9569756, US9558418, US9542687, US9495808, US9477896, US9460469, US9419957, US9390574, US9374366, US9355397, US9355295, US9336517, US9311634, US9286514, US9275506, US9240089, US9240012, US9224136, US9202330, US9195889, US9189780, US9177198, US9177197, US9158966, US9142075, US9141876, US9129340, US9129271, US9092447, US9058626, US9020850, US8977571, US8977567, US8967468, US8959033, US8958626, US8955744, US8948490, US8944234, US8930279, US8929640, US8925802, US8924289, US8919644, US8903734, US8886570, US8849716, US8837806, US8831980, US8820638, US8805739, US8800857, US8799147, US8793490, US8793160, US8788281, US8787652, US8781905, US8768836, US8762270, US8752759, US8751391, US8732072, US8726011, US8723804, US8719085, US8714336, US8708227, US8701857, US8700529, US8699779, US8688579, US8676642, US8655046, US8655045, US8645971, US8645265, US8644585, US8644584, US8644583, US8639017, US8639015, US8630947, US8630898, US8627939, US8626642, US8625875, US8622308, US8615426, US8612342, US8612341, US8611635, US8600890, US8600889, US8600888, US8600887, US8595074, US8594414, US8590008, US8589288, US8583926, US8583522, US8571988, US8571975, US8571952, US8561895, US8560451, US8559695, US8554677, US8554673, US8549315, US8544737, US8543507, US8543504, US8543503, US8542921, US8542904, US8538801, US8538124, US8538123, US8533111, US8533086, US8517258, US8515815, US8514379, US8484129, US8478020, US8478019, US8473735, US8469265, US8468071, US8467591, US8464933, US8463681, US8459562, US8459436, US8458070, US8452689, US8452257, US8447641, US8442296, US8439274, US8438086, US8437532, US8437531, US8437530, US8437529, US8437528, US8433127, US8433123, US8429072, US8429069, US8428332, US8422758, US8417601, US8417017, US8408455, US8396809, US8396798, US8396278, US8392332, US8391599, US8391584, US8391583, US8380597, US8380573, US8376222, US8358826, US8351678, US8351677, US8339589, US8335855, US8321682, US8320657, US8308059, US8306907, US8301529, US8301493, US8290868, US8290863, US8290862, US8290237, US8285641, US8271789, US8265998, US8261974, US8249988, US8245909, US8244625, US8239323, US8239304, US8215560, US8204293, US8190893, US8185940, US8185877, US8170936, US8170527, US8169602, US8162125, US8160960, US8160942, US8145549, US8145522, US8132715, US8132714, US8126793, US8125624, US8121944, US8121385, US8118216, US8112355, US8103084, US8095463, US8095459, US8073773, US8065231, US8046301, US8045784, US8041098, US8033451, US8028922, US8020754, US8015096, US8015084, US8011580, US8005756, US8001051, US7996316, US7996315, US7996314, US7987501, US7983468, US7974899, US7970677, US7966496, US7962411, US7953663, US7949587, US7945492, US7941533, US7941355, US7926711, US7916925, US7904388, US7903863, US7900825, US7900822, US7899753, US7896232, US7890422, US7886969, US7885880, US7885451, US7882000, US7881519, US7877605, US7876949, US7873576, US7873200, US7860789, US7837101, US7822688, US7822684, US7822682, US7822656, US7818253, US7814003, US7809643, US7809642, US7809641, US7809636, US7809595, US7805368, US7805365, US7802718, US7801826, US7801816, US7801814, US7801799, US7793830, US7792749, US7792717, US7784684, US7784682, US7783578, US7769650, US7766244, US7756896, US7756816, US7753259, US7748620, US7747463, US7743979, US7734545, US7729996,

US7707111, US7702577, US7699220, US7689504, US7689482, US7685013, US7680735, US7676429, US7676425, US7676409, US7668363, US7660765, US7660763, US7647275, US7631807, US7627521, US7621444, US7620231, US7619721, US7617973, US7613656, US7606560, US7603283, US7602956, US7600677, US7599543, US7597251, US7597248, US7591420, US7591416, US7587363, US7584125, US7575158, US7571850, US7571139, US7546272, US7542598, US7536354, US7526448, US7519560, US7512566, US7505918, US7499887, US7479946, US7472825, US7472171, US7471818, US7461265, US7451917, US7444672, US7437327, US7433829, US7426530, US7426493, US7421696, US7413117, US7401731, US7401048, US7395243, US7392386, US7391897, US7382911, US7380707, US7379915, US7376838, US7366698, US7366338, US7363273, US7362891, US7360693, US7360686, US7357331, US7353383, US7353382, US7349871, US7349866, US7346579, US7328840, US7325727, US7321864, US7317823, US7311244, US7306141, US7266839, US7263507, US7260549, US7246324, US7246263, US7204412, US7191952, US7174317, US7174316, US7174315, US7174314, US7172114, US7171388, US7165049, US7163153, US7155614, US7143174, US7130828, US7121470, US7086586, US7072864, US7068832, US7058817, US7051925, US7028187, US6985888, US6981152, US6976625, US6945457, US6926200, US6915951, US6912653, US6907399, US6902106, US6898581, US6868408, US6867789, US6865547, US6857565, US6853983, US6834796, US6827258, US6796493, US6793132, US6789166, US6764001, US6678664, US6631849, US6609114, US6595413, US6539364, US6536661, US6484946, US6474545, US6382505, US6378775, US6345263, US6336590, US6298336, US6295522, US6257487, US6230971, US6199755, US6189782, US6167387, US6145035, US6138907, US6134328, US6122625, US6116506, US6105009, US6098055, US6095416, US6085168, US6076075, US6070794, US6047887, US6047067, US6038552, US6016956, US6012637, US6003767, US6003762, US5991747, US5987438, US5949043, US5914471, US5854581, US5778067, US5740427, US5692132, US2016335635, US2016307198, US2015120539, US2013185181, US2013185167, US2011284633, US2011010294, US2011010254, US2011010253, US2010211507, US2010193586, US2010123003, US2010123002, US2010036742, US2009228352, US2009078777, US2009072020, US2009063355, US2009043681, US2008290156, US2008272189, US2008201226, US2008183480, US2008179386, US2008167991, US2008154735, US2008126136, US2008109319, US2008067238, US2008061134, US2007290049, US2007164098, US2007125842, US2007118317, US2007022058, US2007017202, US2006249569, US2006206709, US2006181515, US2006175394, US2006144934, US2006043173, US2006015458, US2005209965, US2005203966, US2005187873, US2005137979, US2005133586, US2005098624, US2005060063, US2005027543, US2004243467, US2004178262, US2004139009, US2004139005, US2004133515, US2004133509, US2004107170, US2004098350, US2004026505, US2004010457, US2003229793, US2003159061, US2003132297, US2003132294, US2003111526, US2003038063, US2002190123, US2002179704, US2002111918, US2002099942, US2002092906, US2002087468, US2002077973, US2002073031, US2002046065, US2002029348, US2001013018, SG79270, SG79269, SG79268, SG145528, SG108227, NL1002630, JP8016673, JP4067836, JP3692098, JP3692097, JP3396638, JP3369406, JP3366808, JP2003233862, JP2003099689, JP2003091777, JP2002109439, JP11265417, JP10040321, JP10031711, FR2683062, FR2678087, EP2074570, EP1626374, EP1492067, EP1378845, EP1376500, EP1376432, EP1160745, EP1128339, EP1128339, EP1008094, EP0884701, EP0858057, EP0829829, EP0797174, EP0775990, EP0762692, EP0696021, EP0696021, EP0623903, DE4427039, DE10108819, DE10008280, AU783008, AU758710, AU711009,

Abstract:
Source: US2001027994A An electronic cashless system uses a cashless medium for memorizing amount information and for performing an operation of amount information. The electronic cashless system comprises an automatic transaction terminal device having a reading/writing unit for writing amount information to the cashless medium, and a center device having a unit for identifying the account balance of multiple accounts and for storing amount information and a non−settled fund file unit for storing amount information written by the cashless medium and a seller ledger file means for identifying the account balance of the multiple seller's accounts and for storing amount information.

48) Family number: 11240120 (US5231276A) © PatBase

Title: SYSTEM FOR PREVENTING A FALSE USE OF A CARD TYPE RECORDING MEDIUM AND A METHOD THEREOF

Priority: JP19890284851 19891102 US19900604769 19901026 US19920974846 19921110

Family:

Publication number	Publication date	Application number	Application date
DE69029989 D1	19970403	DE19906029989	19901030
DE69029989 T2	19970911	DE19906029989T	19901030
EP0426093 A2	19910508	EP19900120752	19901030
EP0426093 A3	19921216	EP19900120752	19901030
EP0426093 B1	19970226	EP19900120752	19901030
JP2055707 C3	19960523	JP19890284851	19891102
JP3147194 A2	19910624	JP19890284851	19891102
JP7076981 B4	19950816	JP19890284851	19891102
KR930000557 B1	19930125	KR19900016517	19901017
US5231276 A	19930727	US19900604769	19901026
US5270526 A	19931214	US19920974846	19921110

Probable Assignee: NIPPON CONLUX CO LTD

Assignee(s):(std)**:** NIPPON CONLUX CO LTD

Assignee(s): NIPPON CONLUX CO LTD TOKIO TOKYO JP ; NIPPON CONLUX CO

Inventor(s):(std)**:** YOSHIHARA KENJO ; YOSHIHARA KENZO ; YOSHIHARA KENZOU

Inventor(s): YOSHIHARA KENZOU KOUNOSU SHI SAITAMA KEN JP

Designated states: CH DE ES FR GB IT LI

International class (IPC 8–9)**:** B42D15/10 G06K17/00 G06K19/10 G06K19/14 G07F7/08 (Advanced/Invention); B42D15/10 G06K17/00 G06K19/10 G06K19/14 G07F7/08 (Core/Invention)

International class (IPC 1–7)**:** B42D15/10 G06K17/00 G06K19/00 G06K19/08 G06K19/10 G06K7/10 G07D7/00

CPC: Y10S283/904 G06K19/14 G07F7/086

European class: G06K19/14 G07F7/08B

US class: 235/449 235/454 235/468 235/487 235/488 283/88 283/904 360/2

Classification Explorer

Cited documents: WO8705728 A1, US4869532 A, US4853525 A, US4795894 A, US4795890 A, US4790566 A, US4711996 A, US4710617 A, US4694148 A, US4678898 A, US4641017 A, US4605846 A, US4544836 A, JPS6480594, JPS6423828, JPS6421695, JPS6417774, JPS63263602, JPS6318490, JPS624756, JPS62203290, JPS61136188, JPS61123056, JPS5944082, JPS58171995, JPS5613341, JPS5245279, JPS5184695, JP6487395 A2, JP64080594 A2, JP64023828 A2, JP64021695 A2, JP64017774 A2, JP63263602 A2, JP63018490 A2, JP62203290 A2, JP62004756 A2, JP61136188 A2, JP61123056 A2, JP59044082 A2, JP58171995 A2, JP56013341 A2, JP52045279 A2, JP51084695 A2, JP1087395 A2, JP1023828 A2, EP0411602 A2, CH662194,

Forward Citations: WO9535549, WO9403335, US8602309, US8397992, US8342411, US8196837, US8083152, US7824029, US7815124, US7804982, US7798413, US7793846, US7789311, US7694887, US7661600, US7546954, US7398930, US7398929, US7387253, US7383998, US7364085, US7063264, US6981648, US6612500, US6354502, US6241152, US6177683, US5867586, US5799316, US5763868, US5756978, US5719948, US5604640, US5548106, US5510720, US5442433, US5308121, US2006169785, US2005087606, US2003173406, JP4782286, DE4319555, AU672225,

Abstract:
Source: US5231276A This card type recording medium has plural types of inks which normally exhibit the same

color visually but exhibit different optical characteristics under a predetermined condition provided in blocks in a desired pattern and, by breaking the blocks block by block in accordance with the used amount or other factor, is capable of recording information corresponding to the breakage state of the blocks. First information can be recorded by a pattern of arrangement of these plural types of inks and second information can be recorded in accordance with the breakage state of the blocks. The first information is a collation pattern which indicates that the card type recording medium is a genuine one. Since the plural types of inks exhibit the same color visually, it cannot be visually discerned which type of ink is used on which block, which makes it difficult to counterfeit the card by imitating this collation pattern. Besides, since the ink arrangement pattern cannot be visually discerned, it is difficult to repair punched holes of broken blocks by using the ink used in forming this ink arrangement pattern so that false alteration of the second information can be prevented.

0) ZA9010211A – APPARATUS FOR CLASSIFYING BANKNOTES AND THE LIK...

49) Family number: 2832681 (ZA9010211A) © PatBase

Title: APPARATUS FOR CLASSIFYING BANKNOTES AND THE LIKE

Priority: AT19890002895 19891220 WO1990AT00123 19901214 YU19900002382 19901218

Family:

Publication number	Publication date	Application number	Application date
AT289589 A	19920815	AT19890002895	19891220
AT395916 B	19930426	AT19890002895	19891220
AU199169181 A1	19910718	AU19910069181	19901214
AU648530 B2	19940428	AU19910069181	19901214
CN1028459 C	19950517	CN19901010076	19901220
CN1052741 A	19910703	CN19901010076	19901220
CS9006485 A3	19920415	CS19900006485	19901220
CZ281862 B6	19970312	CS19900006485	19901220
DE59004567 D1	19940324	DE19905004567	19901214
EP0506713 A1	19921007	EP19910900664	19910712
EP0506713 A1	19921007	EP19910900664	19901214
EP0506713 B1	19940209	EP19910900664	19910712
EP0506713 B1	19940209	EP19910900664	19901214
IE904539 A1	19910703	IE19900004539	19901217
PL288330 A1	19910812	PL19900288330	19901219
PT96260 A	19930129	PT19900096260	19901219
PT96260 B	19980731	PT19900096260	19901219
RU2072559 C1	19970127	SU19905052402	19901214
SI9012382 A	19980228	SI19900012382	19901218
SI9012382 B	19981031	SI19900012382	19901218
SK278841 B6	19980304	SK19900006485	19901220
WO9109380 A1	19910627	WO1990AT00123	19901214
YU238290 A	19941115	YU19900002382	19901218
ZA9010211 A	19911030	ZA19900010211	19901219

Probable Assignee: CARE TEC GMBH

Assignee(s):(std): CARE TEC GESMBH ; CARE TEC GMBH

Assignee(s): KARE TEK GMBKH ; LITSCHEL DIETMAR ; CARETEC GES M B H ; CARETEC GES M B H WIEN AT ; CARETEC GESMBH ; CARE TEC G M B H ; CARE TEC GES M B H ; CARE TEC GES MBH ; CARE TEC GESELLSCHAFT M B H

Inventor(s):(std): DIETMAR LITSCHEL ; LITSCHEL DIETMAR ; LITSCHEL DIETMAR DR

Inventor(s): LITSCHEL DIETMAR A 3400 KLOSTERNEUBURG AT ; DITMAR LICHEL'[AT] ; DITMAR LICHEL

Agent(s): FB RICE; FB RICE PTY LTD

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CM DE DK ES FI FR GA GB GR HU IT JP KP KR LI LK LU MC MG ML MR MW NL NO RO SD SE SN SU TD TG US

International class (IPC 8–9): G06K9/22 G07D7/00 G07D7/18 G07D7/20 G09B21/00 G09B21/02 (Advanced/Invention); G06K9/22 G07D7/00 (Advanced/Non–invention); G06K9/22 G07D7/00 G09B21/00 (Core/Invention)

International class (IPC 1–7): B07C5/04 G06K9/22 G07D7/00 G09B21/00

CPC: G09B21/003 G07D7/162

European class: G07D7/16B G09B21/00B3

Classification Explorer

Cited documents: US4563771 A, US4355300 A, US4187463 A, US3906449 A, US3725667 A, GB2147725 A1, FR2410855 A1,

Forward Citations: WO0034924, FR2824410, FR2822031, FR2817988, EP1255232, EP1138027,

Abstract:
A device for classifying bank notes and other sheets made of paper, plastic, metal or the like with at least two parallel edges comprises a limit stop for one of the two edges of the sheet to be classified and display and measurement elements fo determining the distance from the opposite parallel edge. To ensure reliable classification, the device comprises at least one foliar body (1) with a bending edge (4) parallel to the limit stop around which the sheet to be checked can be wrapped.

0) US5459077A – METHODS FOR MODELLING TERTIARY STRUCTURES OF BI...

50) Family number: 12241904 (US5459077A) © PatBase

Title: METHODS FOR MODELLING TERTIARY STRUCTURES OF BIOLOGICALLY ACTIVE LIGANDS AND FOR MODELLING AGONISTS AND ANTAGONISTS THERETO

Priority: US19890458926 19891229 US19900577367 19900502 WO1990CA00457 19901228 US19930027561 19930305 US19970841830 19970506 US19950571678 19951213

Family:

Publication number	Publication date	Application number	Application date
AU199170347 A1	19910724	AU19910070347	19901228
CA2072363 AA	19920625	CA19902072363	19901228
EP0557276 A1	19930901	EP19910901261	19901228
HU65361 A2	19940502	HU19920002147	19901228
HU9202147 A0	19921028	HU19920002147	19901228
IE904705 A1	19910717	IE19900004705	19901228
JP5503691 T2	19930617	JP19910501654T	19901228
PT96440 A	19911015	PT19910096440	19910108
US5459077 A	19951017	US19930027561	19930305
US6060603 A	20000509	US19970841830	19970506
WO9110140 A2	19910711	WO1990CA00457	19901228
WO9110140 A3	19920402	WO1990CA00457	19901228
ZA9010460 A	19921125	ZA19900010460	19901228

Probable Assignee: PEPMETICS INC

Assignee(s):(std)**:** PEPMETICS INC ; UNIV TECHNOLOGIES INT INC ; UNIV TECHNOLOGIES INT

Assignee(s): UNIVERSITY TECHNOLOGIES INTERNATIONAL INC ; UNIVERSITY TECHNOLOGIES INTERNATIONAL INC UTI ; UNIVERSITY TECHNOLOGIES INTERNATIONAL INC CA ; TECHNOLOGIES INT INC UNIV ; TECHNOLOGIES INT INC UTI UNIV ; MATSOUKAS JOHN M ; MOORE GRAHAM J

Inventor(s):(std)**:** GRAHAM J MOORE ; JOHN M MATSOUKAS ; MATSOUKAS JOHN M ; MOORE GRAHAM J

Agent(s): PHILLIPS ORMONDE FITZPATRICK; OSLER HOSKIN AND HARCOURT LLP

Designated states: AT AU BE CA CH DE DK ES FR GB GR HU IT JP LI LU NL SE

International class (IPC 8–9)**:** A61K31/40 A61K31/41 C07B61/00 C07D207/34 C07D209/08 C07D209/10 C07D231/16 C07D231/56 C07D233/64 C07D233/68 C07D249/02 C07D249/04 C07D249/08 C07D249/18 C07D257/02 C07D257/04 C07D263/34 C07D271/02 C07D277/32 C07D285/04 C07D401/12 C07D403/12 C07K1/00 C07K14/57 C07K14/575 C07K5/072 C07K7/14 C07K7/16 G01N21/64 G01N24/08 G01N33/68 (Advanced/Invention); C07B61/00 C07D207/00 C07D209/00 C07D231/00 C07D233/00 C07D249/00 C07D257/00 C07D401/00 C07D403/00 C07K1/00 C07K14/43 C07K14/435 C07K7/00 G01N21/64 G01N24/00 G01N33/68 (Core/Invention)

International class (IPC 1–7)**:** A61K31/40 A61K31/41 C07B61/00 C07D207/34 C07D209/08 C07D209/10 C07D231/16 C07D231/56 C07D233/64 C07D233/68 C07D249/02 C07D249/08 C07D257/02 C07D257/04 C07D263/34 C07D271/02 C07D277/32 C07D285/04 C07D401/12 C07D403/12 C07K1/00 C07K5/06 C07K5/072 C07K7/14 C07K7/16 C07K99/02 C07K99/14 G01D233/64 G01N21/64 G01N24/08 G01N33/68 G07D233/68 G09B

CPC: Y10T436/24 G01N21/6408 G01N24/08 G01N33/68

European class: G01N21/64F G01N24/08 G01N33/68

US class: 324/307 324/312 436/172 436/173 436/86 530/315 530/316 548/252 548/342.5

Classification Explorer

Cited documents: WO9007111 A2, WO9007110 A1, US5177095 A, US5153197 A, US5151435 A, US5073566 A, US5043349 A, US5015651 A, US4853871 A, US4849407 A, US4845132 A, US4845075 A, US4830961 A, US4822746 A, US4818763 A, US4818684 A, US4789832 A, US4772684 A, US4702864 A, US4578361 A, US4485177 A, US4386026

A, US4355040 A, US3751404 A, US3386026 A, GB424317 A, GB323844 A, GB323841 A, GB263310 A, GB257993 A, GB253310 A, FR2125248 A1, EP0324377 A2, EP0323841 A2, EP0253310 A2,

Forward Citations: WO9923587, WO9923587, WO9912118, WO9804913, WO9718471, WO9718469, WO9718469, WO9603644, WO9603643, WO9518969, WO9303058, WO9303058, WO03104824, WO03104824, WO0101165, US7896485, US7878644, US7470543, US7377894, US6764858, US6677160, US6451734, US6341256, US6214561, US5989827, US5891643, US5854060, US5804390, US5798275, US5776763, US5741653, US5698401, US5616497, US5606512, US2007027215, US2004091937, US2004072211, EP1235072, EP1029297, EP0981049, EP0971230, EP0959352, EP0918296, EP0914605, EP0870197, EP0866967, EP0772771, EP0772770, EP0738390, CZ297275, AU711092, AU701810,

Abstract:
Source: US5459077A Disclosed are methods for modelling the three−dimensional structure (tertiary structure) of a ligand having one or more active sites employing a charge−transfer interaction. Also disclosed is a model for Angiotensin II derived from such method.

0) US5207611A – COIN SORTING APPARATUS

51) Family number: 7111948 (US5207611A) © PatBase

Title: COIN SORTING APPARATUS

Priority: JP19900187491 19900716

Family:

Publication number	Publication date	Application number	Application date
DE4123549 A1	19920123	DE19914123549	19910716
DE4123549 C2	19930923	DE19914123549	19910716
DE4123549 C3	19990408	DE19914123549	19910716
GB2248138 A1	19920325	GB19910015206	19910715
GB2248138 B2	19941019	GB19910015206	19910715
GB9115206 A0	19910828	GB19910015206	19910715
JP2518724 B2	19960731	JP19900187491	19900716
JP4077890 A2	19920311	JP19900187491	19900716
KR940003022 B1	19940411	KR19910011883	19910712
US5207611 A	19930504	US19910730997	19910716

Probable Assignee: LAUREL BANK MACHINE CO

Assignee(s):(std)**:** LAUREL BANK MACHINE CO

Assignee(s): LAUREL BANK MACHINES CO LTD ; LAUREL BANK MACHINES CO LTD TOKIO TOKYO JP ; LAUREL BANK MACH CO LTD

Inventor(s):(std)**:** IKEMOTO YASUNORI ; OKIDA TATSUO ; OKITA TATSUO ; SUZUKI MIKIO ; UEDA NOBUA ; UEDA NOBUO ; OKITA TATSUSUKE ; SHIBAO HIROYUKI

Inventor(s): SHIBAO HIROYUKI OSAKA JP ; UEDA NOBUO SAKAE OSAKA JP ; YASUNORI IKEMOTO ; SUZUKI MIKIO WAIZUMI OSAKA JP ; TATSUO OKITA ; OKITA TATSUO ITAMI HYOGO JP ; HIROYUKI SHIBAO ; IKEMOTO YASUNORI OSAKA JP ; MIKIO SUZUKI ; NOBUA UEDA

International class (IPC 8–9): G07D3/00 G07D3/10 G07D3/14 (Advanced/Invention); G07D3/00 (Core/Invention)

International class (IPC 1–7): G07D3/00 G07D3/10 G07D3/14 G07F3/04

CPC: G07D3/14

European class: G07D3/14

US class: 453/11 453/56

Classification Explorer

Cited documents: WO8707742 A1, WO8505478 A1, US4681204 A, US4370990 A, JP59009787 A2, JP53083691 A2, GB2054932 A1, GB1111636 A, EP0209675 B1, DE3518268 C1, DE3419589 C1, DE3204515 A1,

Forward Citations: WO9321607, WO9321606, US8992291, US8920223, US7591362, US7073653, US6739965, US6629885, US6086472, US5992602, US5518101, US2014106656, US2009191801, US2006154589, US2005230219, US2004035673, JP5059568, GB2412222, EP1391850, EP1391850, EP0940777, EP0940777, EP0676729, DE102012020155, DE102012020154,

Abstract:
Source: US5207611A The invention provides an apparatus for sorting various kinds of coins into various categories of coins. To this end, the invention includes a semicircular member having a plane surface and an arc surface. The semicircular member is capable of rotating between a first position wherein the plane surface is disposed substantially in the plane defined by a guiding edge and the arc surface is disposed within a guide rail and a second position wherein the plane surface is disposed normal to the guiding edge and the arc surface faces towards the upstream of the coin feeding direction. The semicircular member rotates from the first position to the second position when a first group coin is fed to collide with the semicircular member so as to diverge the coin away from the guiding edge so that the circumferential end of the coin closest to the guiding edge is disposed on a sort–out opening. The semicircular member returns to the first position when the coin passes the semicircular

member.

0) ES2025515A – SECURITY SYSTEM FOR OPENING THE PREMISES OF THE...

52) Family number: 5392089 (ES2025515A) © PatBase

Title: Security system for opening the premises of the public telephone enclosure by infrared

Priority: ES19910000579 19910307

Family:

Publication number	Publication date	Application number	Application date
ES2025515 AF	19920316	ES19910000579	19910307

Probable Assignee: CABITEL

Assignee(s):(std)**:** CABITEL

Assignee(s): CABINAS TELEFONICAS S A CABITEL

Inventor(s):(std)**:** HUMADA ORTEGA ANTONIO

International class (IPC 8–9)**:** E05B65/52 E05G1/026 G07D11/00 H04M17/02 (Advanced/Invention); E05B65/00 E05G1/00 G07D11/00 H04M17/00 (Core/Invention)

International class (IPC 1–7)**:** E05B65/52 E05G1/26 G07D11/0 H04M17/2

Classification Explorer

Forward Citations: ES2078850,

Abstract:
Security system for opening the premises of the public telephone enclosure by infrared, the system comprises a portable transmitter and a receiver plate situated within the enclosure, the transmitter having an encoding stage and an amplifying stage, transmitting the infrared by means of a diode, and the receiver has a lock release stage and another which monitors the code, their being interrelated by an optocoupler, being supplied with the voltage of the line of the release stage, and that of monitoring a 5 V signal controlled by the microprocessor.

0) ES2027116A – IMPROVEMENTS IN THE SUBJECT OF PRINCIPAL PATENT...

53) Family number: 19015863 (ES2027116A) © PatBase

Title: Improvements in the subject of principal patent number 8803960 relating to 'Apparatus to promote saving'

Priority: ES19900002895 19901114

Family:

Publication number	Publication date	Application number	Application date
ES2027116 AF	19920516	ES19900002895	19901114

Probable Assignee: MULTILOGIC BUSINESS SA

Assignee(s):(std)**:** MULTILOGIC BUSINESS S A ; MULTILOGIC BUSINESS SA

Inventor(s):(std)**:** CONSOLA LOZANO ANTONIO

International class (IPC 8–9)**:** A45C1/12 G07D11/00 G07D9/00 (Advanced/Invention); A45C1/00 G07D11/00 G07D9/00 (Core/Invention)

International class (IPC 1–7)**:** A45C1/12 G07D11/0 G07D9/0

Classification Explorer

Abstract:
Improvements in the subject of principal patent number 8803960 relating to 'Apparatus to promote saving'. The improvements subject of the invention stem from providing the apparatus 1 with a base 6, provided with a security door 7, in which there are located the coin–collecting pockets 11; from providing a system for detecting the passage of coins along the channels 16 of the distributor 12, based on sets of infrared–emitting diodes 19 and phototransistors 21; from effecting monitoring of the exhaustion of the roll 24 of envelopes 25 containing gifts by means of the photoelectric cell of the apparatus and a timer; and from providing the slots 3–4 for introducing the coins and the magnetic card, with an equal number of shutters 33–34 actuated by electromagnets 35–36.

0) ES1020977Y – DISPOSITIVO CLASIFICADOR DE MONEDAS Y/O FICHAS....

54) Family number: 17166790 (ES1020977Y) © PatBase

Title: DISPOSITIVO CLASIFICADOR DE MONEDAS Y/O FICHAS.

Priority: ES19920001260U 19920421

Family:

Publication number	Publication date	Application number	Application date
ES1020977 UA	19920816	ES19920001260U	19920421
ES1020977 Y1	19930316	ES19920001260U	19920421
ES1020977 YA	19930316	ES19920001260U	19920421

Probable Assignee: MORENO ORDUNA CARLOS

Assignee(s):(std)**:** MORENO ORDUNA CARLOS

International class (IPC 8–9): G07D3/00 (Advanced/Invention); G07D3/00 (Core/Invention)

International class (IPC 1–7): G07D3/00

Classification Explorer

Abstract:
Source: ES1020977U 1. Dispositivo clasicador de monedas y/o – chas, caracterizado por comprender un soporte compuesto por una estructura hueca formada por varios planos, de los cuales el delantero es necesa– riamente un plano inclinado en cuya zona superior va situada una pletina metalica dispuesta igual– mente en posicion inclinada en el sentido trans– versal de dicho plano a n de que tal pletina sirva de gua de deslizamiento a las monedas y/o chas que ruedan sobre su borde superior, entrando por su extremo mas alto y descendiendo por gravedad hasta el extremo nal inferior, siendo expulsadas por una serie longitudinal de piezas expulsoras dispuestas paralelamente a la citada pletina–gua; guardando dichas piezas distancias variables res– pecto de esta ultima, coincidiendo cada una de estas distancias con cada uno de los diametros de las monedas y/o chas a clasicar de modo que al ser expulsadas estas por las mencionadas piezas, son conducidas selectivamente a traves de unos tubos colectores verticales situados cada uno de– bajo de cada expulsor, los cuales las reciben y conducen nalmente, en su ca da por gravedad, una vez seleccionadas segun su valor, hacia va– rios cajones situados debajo de cada tubo colec– tor, yendo dichos cajones introducidos a traves de una ventana situada en la zona inferior de la mencionada estructura. 1. Coin clasicador device and / or – chas, characterized by comprising a support consisting of a hollow structure formed by several levels, of which the front is necessarily an inclined upper surface which is a region located a metal plate will equally disposed inclined in the transverse direction of said flat plate that such an act as sliding guide to coins and / or chas rolling on its top edge, entering its highest end and descending by gravity to the end position signal lower, being expelled by a series of parallel arranged longitudinal to said ejector plate–gua pieces; storing said relative response of the latter, parts varying distances coincide each of these distances with each of the diameters of the coins and / or chas to clasicar so that the expulsion of these by the said parts are selectively driven through of risers tubes each located beneath each slide, which receive them and lead ally in his ca da gravity, once selected according to its value, to va–rios drawers below each tube collector, moving said boxes inserted through a window located in the lower region of said structure.

0) EP0509916A1 – FEDUCIARY OR SECURITY DOCUMENT WITH A PRINTED D...

55) Family number: 4309881 (EP0509916A1) © PatBase

Title: FEDUCIARY OR SECURITY DOCUMENT WITH A PRINTED DESIGN AND SECURITY MARKINGS.

Priority: FR19910004782 19910418

Family:

Publication number	Publication date	Application number	Application date
DE69205875 D1	19951214	DE19926005875	19920415
DE69205875 T2	19960613	DE19926005875T	19920415
EP0509916 A1	19921021	EP19920401055	19920415
EP0509916 B1	19951108	EP19920401055	19920415
FR2675428 A1	19921023	FR19910004782	19910418
FR2675428 B1	19930827	FR19910004782	19910418
IE74178 B	19970716	IE19920001298	19920422
IE921298 A1	19921021	IE19920001298	19920422
OA9539 A	19921115	OA19920060185	19920416
RU2069626 C1	19961127	SU19925011754	19920417

Probable Assignee: BANQUE DE FRANCE

Assignee(s):(std)**:** BANQUE DE FRANCE

Assignee(s): BANQUE DE FRANCE PARIS FR ; FRANCE BANQUE ; BANK DE FRANS

Inventor(s):(std)**:** PUYPLAT OLIVIER ; PUYPLAT OLIVER ; OLIVIER PUYPLAT

Inventor(s): PUYPLAT OLIVIER F 92100 BOULOGNE BILLANCOURT FR ; OLIVE PYUJPLYA ; OLIVER PUYPLAT

Designated states: BE DE DK ES GB GR IT LU NL PT

International class(IPC 8–9)**:** B41M3/10 B41M3/14 B42D15/00 G06T1/00 G07D7/00 G07D7/12 (Advanced/Invention); B41M3/14 B42D15/00 G06T1/00 G07D7/00 (Core/Invention)

International class(IPC 1–7)**:** B41M3/10 B41M3/14 B42D15/00 G07D7/00

CPC: B42D25/29 B41M3/14

European class: B41M3/14 B42D15/00C

Classification Explorer

Cited documents: EP0234885 A2, EP0093009 B1,

Forward Citations: WO03080365, WO03080365, US9139034, US7207490, US6997482, EP2363296, EP1847400, EP1494874, EP1291195, EP1273461, EP1111552,

Abstract:
Source: EP0509916A1 The invention relates to a fiduciary or security document with a printed design and security markings. According to the invention, the document (1) comprises two superposed security markings (100, 200), of which one is a periodic watermark grid and one is a coding by the cutting of the printed image (G) into parallel strips, the effect of the superposition of these two security markings thus being to affect the individual reading of said markings. The invention is used on fiduciary or security documents, for example on banknotes.

56) Family number: 29872512 (US5204681A) © PatBase

Title: RADIO FREQUENCY AUTOMATIC IDENTIFICATION SYSTEM

Priority:

CA19922121778	19921029	CA19962191778	19961129	CA19962615013	19961129
CA19972273970	19971202	EP20030021485	19961128	EP19970954050	19971202
EP19960021485	19961128	EP20050007542	19971202	EP19980109122	19920924
EP19920921717	19920924	EP19960119102	19961128	CA19972499869	19971202
WO1997US22242	19971202	WO1992US08181	19920924	WO1992US08181	19920924
IL19920103259	19920923	NO19960002295	19960604	NO19940001048	19940323
NO19960002296	19960604	US19950431095	19950427	US19940203538	19940228
US19920978825	19921119	US19910765925	19910924	JP19960321961	19961202
US19940298070	19940830	US19990328651	19990609	US19960759294	19961202
US19910756925	19910924				

Family:

Publication number	Publication date	Application number	Application date
AT174436 E	19981215	AT19920921717T	19920924
AT189840 E	20000315	AT19920109122T	19920924
AU199228091 A1	19930427	AU19920028091	19920924
AU679672 B2	19970710	AU19920028091	19920924
CA2119774 AA	19940323	CA19922119774	19920924
CA2119774 C	19990223	CA19922119774	19920924
CA2191778 AA	19980529	CA19962191778	19961129
CA2273970 AA	19990602	CA19972273970	19971202
CA2273970 C	20060314	CA19972273970	19971202
CA2499869 AA	19980625	CA19972499869	19971202
CA2499869 C	20060606	CA19972499869	19971202
CA2615013 AA	19980529	CA19962615013	19961129
DE69227839 D1	19990121	DE19926027839	19920924
DE69227839 T2	19990610	DE19926027839T	19920924
DE69230697 D1	20000323	DE19926030697	19920924
DE69230697 T2	20001116	DE19926030697T	19920924
DE69733615 D1	20050728	DE19976033615	19971202
DE69733615 T2	20051201	DE19976033615T	19971202
DE69738742 D1	20080710	DE19976038742	19971202
DK0605650 T3	19990816	DK19920921717T	19920924
DK0871042 T3	20000613	DK19920109122T	19920924
DK0948751 T3	20050926	DK19970954050T	19971202
DK1550882 T3	20080901	DK19970007542T	19971202
EP0605650 A1	19940713	EP19920921717	19920924
EP0605650 A4	19950104	EP19920921717	19920924
EP0605650 B1	19981209	EP19920921717	19920924
EP0845754 A1	19980603	EP19960119102	19961128
EP0871042 A1	19981014	EP19980109122	19920924
EP0871042 B1	20000216	EP19980109122	19920924
EP0948751 A1	19991013	EP19970954050	19971202
EP0948751 A4	20000510	EP19970954050	19971202
EP0948751 B1	20050622	EP19970954050	19971202
EP0960961 A1	19991201	EP19990114530	19920924
EP1372104 A2	20031217	EP20030021485	19961128
EP1372104 A3	20051228	EP20030021485	19961128
EP1550882 A1	20050706	EP20050007542	19971202

EP1550882 B1	20080528	EP20050007542	19971202
EP2000824 A2	20081210	EP20080005883	19971202
ES2127763 T3	19990501	ES19920921717T	19920924
ES2142694 T3	20000416	ES19980109122T	19920924
ES2244014 T3	20051201	ES19970954050T	19971202
ES2308329 T3	20081201	ES20050007542T	19971202
FI106819 B	20010412	FI19940001351	19940323
FI20002793 A	20001220	FI20000002793	20001220
FI941351 A	19940509	FI19940001351	19940323
FI941351 A0	19940323	FI19940001351	19940323
GR3029615 T3	19990630	GR19990400702T	19990308
GR3033060 T3	20000831	GR20000400748T	20000327
HK1077636 A1	20090109	HK20060100035	20060103
HK1077636 A3	20060217	HK20060100035	20060103
IL103259 A1	19960514	IL19920103259	19920923
IL113607 A0	19950831	IL19920113607	19920923
IL113607 A1	19961016	IL19920113607	19920923
JP10171951 A2	19980626	JP19960321961	19961202
JP2922474 B2	19990726	JP19960321961	19961202
NO315096 B1	20030707	NO19960002295	19960604
NO315097 B1	20030707	NO19960002296	19960604
NO315624 B1	20030929	NO19940001048	19940323
NO941048 A	19940510	NO19940001048	19940323
NO941048 A0	19940323	NO19940001048	19940323
NO962295 A	19940510	NO19960002295	19960604
NO962295 A0	19960604	NO19960002295	19960604
NO962296 A	19940510	NO19960002296	19960604
NO962296 A0	19960604	NO19960002296	19960604
US5204681 A	19930420	US19910765925	19910924
US5291205 A	19940301	US19920978825	19921119
US5581257 A	19961203	US19940298070	19940830
US5891240 A	19990406	US19950431095	19950427
US6471878 BA	20021029	US19990328651	19990609
WO9306504 A1	19930401	WO1992US08181	19920924
WO9827442 A1	19980625	WO1997US22242	19971202

Probable Assignee: GORDION HOLDING CORP

Assignee(s):(std)**:** AMERICAN PROD DEV CORP ; GORDION HOLDING CORP ; GORDIAN HOLDING CORP

Assignee(s): GORDIAN HOLDING CORP DOVER DEL US ; GORDIAN HOLDING CORP VIENNA ; GORDIAN HOLDING CORP TYSONS CORNER ; HURLEY G WILLIAM ; GREENE MORTON ; AMERICAN PRODUCT DEV CORP ; AMERICAN PRODUCT DEVELOPMENT A DE CORP ; AMERICAN PRODUCT DEVELOPMENT CORP

Inventor(s):(std)**:** G WILLIAM HARRAY ; GREENE MORTON ; HURLEY WILLIAM ; HURLEY WILLIAM G ; MORTON GREEN ; MORTON GREENE ; HURLEY G WILLIAM

Inventor(s): HURLEY G ; GREENE MORTON ARLINGTON VA 22203 US

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; BORDEN LADNER GERVAIS LLP; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET; REINHOLD COHN AND PARTNERS; WOLFF BREGMAN AND GOLLER

Designated states: AT AU BE CA CH DE DK ES FI FR GB GR IE IL IT JP LI LU MC NL NO PT SE

International class (IPC 8–9): C30B29/18 C30B33/00 G01S13/02 G01S13/74 G01S13/75 G01S7/41 G01V13/00 G01V15/00 G01V3/12 G06K17/00 G06K19/06 G06K19/067 G06K19/07 G06K19/10 G06K19/14 G06K7/00 G06K7/08 G06K7/10 G07D7/06 G07D7/10 G07D7/20 G08B13/24 G11B23/28 H04B1/59 (Advanced/Invention); G01S13/76 H04B1/59 (Advanced/Non–invention); C30B33/00 G01S13/00 G01V13/00 G01V15/00 G01V3/12 G06K17/00 G06K19/06 G06K19/067 G06K19/07 G06K19/10 G06K19/14 G06K7/00 G06K7/08 G06K7/10 G07D7/00 G08B13/24 G11B23/28 (Core/Invention); G01S (Subclass/Invention); G06K (Subclass/Non–invention)

International class (IPC 1–7): C30B29/18 C30B33/00 G01S13/02 G01S13/02 G01S13/74 G01S13/75 G01S13/80 G01S7/41 G01V13/0 G01V15/0 G01V3/12 G06K17/00 G06K19/06 G06K19/067 G06K19/07 G06K19/10 G06K7/00 G06K7/08 G06K7/10 G07D7/00 G07D7/10 G08B13/24 H01B13/00 H01Q1/38 H04B1/59

CPC: G01S13/767 G06K7/086 G06K19/10 G01V15/00 G11B23/281 G07D7/10 G07D7/20 Y10S117/902 Y10T117/1008 C30B29/18 G08B13/2414 C30B33/00 G01S13/753 G06K7/0008 G06K7/10009 G06K19/0672 G06K19/07 G06K19/0723 G08B13/2417 G08B13/2422 G08B13/244 G08B13/2442 G08B13/2445 G08B13/2471 G08B13/2482

European class: C30B33/00 G01S13/75C2 G01V15/00 G06K19/067Q G06K19/07 G06K19/07T G06K19/10 G06K7/00E G06K7/08C2Q G06K7/10A G07D7/10 G07D7/20 G08B13/24B1G G08B13/24B1G1 G08B13/24B1M G08B13/24B3M1 G08B13/24B3M2 G08B13/24B3M3 G08B13/24B7A1 G08B13/24B7M S01S13/75C2 S01S13/76R S11B23/28A

US class: 117/202 117/48 117/7 117/902 117/942 216/100 216/13 216/62 216/66 216/75 235/375 340/10.1 340/101 340/572.4 342/27 342/42 342/44 342/51

Classification Explorer

Cited documents: WO9636010 A2, WO9306504 A1, US5786910 A, US5581257 A, US5444223 A, US5430441 A, US5414427 A, US5382784 A, US5291205 A, US5266926 A, US5214410 A, US5204681 A, US4837574 A, US4827395 A, US4820912 A, US4811408 A, US4748679 A, US4732647 A, US4673932 A, US4569124 A, US4566122 A, US4554717 A, US4497686 A, US4408156 A, US4292636 A, US4218674 A, US4209783 A, US4188707 A, US4123754 A, US4070672 A, US4069472 A, US4023167 A, US3959792 A, US3959630 A, US3893109 A, US3877122 A, US3876865 A, US3774205 A, US3750167 A, US3607166 A, US3363246 A, US298070, US08298070, JPS6114148, JPS5988327, JPS5833308, JP61014148 A2, JP61014148, JP59088327 A2, JP58033308 A2, JP5178632 A2, GB643448 A, GB2246492 A1, GB2050664 A1, DE4042260 A1, DE3408086 A1, DE2919158 A1,

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US2012176282, US2012154845, US2012042505, US2012033245, US2012017427, US2011226861, US2011226857, US2011142293, US2011140842, US2011133904, US2011096359, US2011084808, US2010228585, US2010141453, US2010127823, US2010097292, US2010092806, US2010090925, US2010081235, US2010072426, US2010071746, US2010067166, US2010067031, US2010066619, US2010060427, US2010017851, US2010014126, US2010013637, US2010012713, US2009315320, US2009289229, US2009289228, US2009273439, US2009226605, US2009213027, US2009160654, US2009128299, US2009100667, US2009033585, US2009012442, US2008308641, US2008306426, US2008283615, US2008272585, US2008267510, US2008240616, US2008186178, US2008179404, US2008174438, US2008161104, US2008150817, US2008149551, US2008135614, US2008111675, US2008073800, US2008072423, US2008030017, US2008007462, US2007273512, US2007271113, US2007222459, US2007083381, US2007035395, US2006196936, US2006148561, US2006125864, US2006125691, US2006124757, US2006103506, US2006077059, US2006037502, US2005270159, US2005262350, US2005195330, US2005151700, US2005141060, US2005121512, US2005113735, US2005113734, US2005083201, US2005045548, US2005040945, US2005005856, US2004267184, US2004243049, US2004243048, US2004243047, US2004233042, US2004189473, US2004178955, US2004172537, US2004137977, US2004126773, US2004125988, US2004069709, US2004005078, US2003237093, US2003232647, US2003219800, US2003206095, US2003166015, US2003141375, US2003134330, US2003064775, US2003064774, US2003063713, US2003059764, US2003036096, US2003008323, US2002152604, US2002030587, US2001033293, JP2013257884, JP2010287238, GB2445171, FR2982020, FR2812434, FR2730557, EP2937712, EP2642424, EP2410461, EP2215740, EP1936543, EP1884887, EP1820033, EP1727079, EP1550882, EP1391858, EP1372104, EP1176566, EP1157364, EP1127334, EP1104791, EP0984384, EP0948751, EP0845754, EP0755502, DE102012102417, DE102010031516, DE102004043064, CN103165020, CN103165020, AU670482,

Abstract:
Source: US5204681A A radio frequency automatic identification system detects targets which include solid resonators resonating at several frequencies, attributing information to the frequencies at which the target resonates. Preferred resonators are quartz crystals, which may be made by a process of heating quartz to soften it and cutting crystals to approximate size and resonant frequency. Resonators produced by such a process are measured to determine their actual resonant frequency, and preferably the crystals are sorted into predetermined frequency windows in accordance with their measured resonant frequency. A set of resonators having frequencies corresponding to predetermined data is selected from the sorted groups of resonators and incorporated into a target. The preferred target is an ink−like material having a plurality of resonators disposed in a matrix which is radio frequency transparent at the frequency of interest. Targets are preferably detected by repetitively sweeping the frequency of the interrogating signal through a range which includes the information−bearing range of the system.

0) EP0540867A2 – AUTOMATIC PAPER CURRENCY DISPENSING MACHINE ADA...

57) Family number: 16609878 (EP0540867A2) © PatBase

Title: AUTOMATIC PAPER CURRENCY DISPENSING MACHINE ADAPTED FOR EASY MANAGEMENT OF SAFES.

Priority: JP19910102394U 19911115 JP19910105602U 19911224 JP19910239972 19910919 JP19920012085U 19920311 JP19920028136 19920214 JP19920065032 19920323 JP19930017417 19930204 JP19920205201 19920731 JP19920077906 19920331

Family:

Publication number	Publication date	Application number	Application date
DE69216368 D1	19970213	DE19926016368	19920917
DE69216368 T2	19970731	DE19926016368T	19920917
EP0540867 A2	19930512	EP19920115932	19920917
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JP2834958 B2	19981214	JP19930017417	19930204
JP2918737 B2	19990712	JP19920065032	19920323
JP2926111 B2	19990728	JP19920077906	19920331
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KR100255494 B1	20000501	KR19920017131	19920919
TW203656 B	19930411	TW19920107665	19920926

Probable Assignee: OKI DENKI KOGYO KK

Assignee(s):(std)**:** OKI ELECTRIC IND CO LTD ; OKI ELECTRIC INDUSTRY CO LTD

Assignee(s): OKI ELECTRIC INDUSTRY CO LTD TOKIO TOKYO JP ; OKI DENKI KOGYO KK

Inventor(s):(std)**:** GOTO MASAO ; KOSHIDA YOSHINORI C O OKI ELEC ; OOYAMA TAKESHI ; YUASA KATSUNORI ; WAKO MASASHI ; TOMINAGA HIROYUKI ; OHYAMA TAKESHI ; KOSHIDA YOSHINORI ; GOTO MASSO ; AOKI HIDEO ; YUASA KATUNORI

Inventor(s): YUASA KATUNORI C O OKI ELECTRIC IND CO ; YUASA KATUNORI C O OKI ELECTRIC IND CO LTD TOKYO J ; KOSHIDA YOSHINORI C O OKI ELECTRIC IND CO ; TOMINAGA HIROYUKI C O OKI ELECTRIC IND CO ; TOMINAGA HIROYUKI C O OKI ELECTRIC IND CO LTD TOKY ; WAKAGIMI MASASHI ; WAKO MASASHI C O OKI ELECTRIC IND CO ; WAKO MASASHI C O OKI ELECTRIC IND CO LTD TOKYO JP ; KOSHIDA YOSHINORI C O OKI ELECTRIC IND CO LTD ; KOSHIDA YOSHINORI C O OKI ELECTRIC IND CO LTD TOKY ; OHYAMA TAKESHI C O OKI ELECTRIC IND CO ; OHYAMA TAKESHI C O OKI ELECTRIC IND CO LTD TOKYO J ; OOYAMA GOJI ; GOTO MASAO C O OKI ELECTRIC IND CO ; GOTO MASAO C O OKI ELECTRIC IND CO LTD TOKYO JP ; AOKI HIDEO C O OKI ELECTRIC IND CO ; AOKI HIDEO C O OKI ELECTRIC IND CO LTD TOKYO JP

Designated states: DE FR GB

International class (IPC 8–9): B65H1/04 B65H29/62 B65H3/06 B65H39/042 B65H7/02 B65H7/06 B65H83/02 B65H9/14 G07D1/00 G07D11/00 G07D9/00 G07F19/00 (Advanced/Invention); B65H1/04 B65H29/62 B65H3/06 B65H39/00 B65H7/02 B65H7/06 B65H9/14 G07D1/00 G07D11/00 G07D9/00 (Core/Invention)

International class (IPC 1–7): B65H1/04 B65H29/62 B65H3/06 B65H39/042 B65H7/02 B65H7/06 B65H83/02 B65H9/14 G07D1/00 G07D13/00 G07D7/00 G07D9/00 G07F19/00

CPC: G07D11/0012 G07D11/0018 G07D11/0039

European class: G07D11/00D2D G07D11/00D4 G07D11/00E2

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Forward Citations: WO9949421, WO15136780, WO15128926, WO14114061, WO12090301, WO11102415, WO11003955, WO06056599, US9520011, US8757348, US8752689, US8544629, US7857198, US7757940, US7419090, US6325242, US6098837, KR101078922, KR100854520, JP7157170, JP7149445, JP6031211, JP4877178, JP4226751, JP4076165, JP3483756, JP3359840, JP2763260, JP2015128926, JP2009083942, JP2008044708, JP2007076843, JP2005222336, JP2003081461, JP2001146334, JP11222325, JP10297781, EP2138984, EP1739636, EP1271425, EP1199682, EP1127817, EP1127817, EP1066096, EP1062010, CN105102088, CN103632434, CN103035063,

Abstract:
Source: EP0540867A2 An automatic paper currency dispensing machine which dispenses the paper currency (40, 40a) in response to an operator's instruction. A mechanism (44, 45, 42, 43, 48, 109) to discharge the paper currency (40, 40a) stored in the storage (400) is encased in the casing (53, 54) to constitute the safe (31, 419, 702, 825), and the paper currency (40, 40a) is discharged from the opening (58) formed on the casing (53, 54). The paper currency dispensing machine removably encases this casing (53, 54), and is provided with the paper currency pick–up slot (22) formed to communicate with the opening (58). This may be structured to contain more than one such safes (31, 419, 702, 825). In the case of the latter, the safe control (460) is provided within the casing (53, 54), to control the operations to dispense the paper currency (40, 40a) and to deliver them. This machine is also provided with the main control (434) which controls the safe control (460) in response to the operator's instruction, and those two controls are interconnected with detachable connector (426, 422, 423, 424). A blade (50) and a reject safe (51) may be provided within the safe (31, 419, 702, 825). The safe control (460) directs the blade (50) toward the reject safe (51), to guide the paper currency (40a), which has encountered a delivery error, toward the reject safe (51). With the above arrangement, there is provided an automatic paper currency dispensing machine, the safe of which can be handled in the most appropriate manner.

0) US2006100931A – POINT–OF–SALE SERVER AND METHOD

58) Family number: 23350238 (US2006100931A) © PatBase

Title: POINT–OF–SALE SERVER AND METHOD

Priority:

EP19950906202 19940721 US19890345475 19890501 US19920826255 19920124
US19920885649 19920519 US19920886382 19920519 US19920886383 19920519
US19930141471 19931020 US19930134071 19931008 US19920886385 19920519
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Family:

Publication number	Publication date	Application number	Application date
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US6993498 BA	20060131	US19990360820	19990726
US7464050 BA	20081209	US20030609331	20030626
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WO9503570 A2	19950202	WO1994US08221	19940721
WO9503570 A3	19950316	WO1994US08221	19940721

Probable Assignee: F POSZAT HU LLC

Assignee(s):(std)**:** CATALINA MARKETING CORP ; CATALINA MARKETING INT ; CREDIT VERIFICATION CORP ; INCENTECH INC ; MIDNIGHT BLUE REMOTE ACCESS LLC ; MIDNIGHT BLUE REMOTE ACCESS LL ; DEATON DAVID W ; GABRIEL RODNEY G

Assignee(s): CHECKOUT HOLDING CORP ; F POSZAT HU LLC ; IQCOMMERCE CORP ; INTER ACT SYSTEMS INC ; INTER ACT ELECTRONIC MARKETING INC ; MORGAN STANLEY AND CO INC ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; MODIV MEDIA INC ; CREDIT VERFICATION CORP ; COMDISCO INC ; FIRST GREENWICH CAPITAL LLC ONE UNIV ; INTER ACT ELECTRONIC MARKETING ; FIRST GREENWICH CAPITAL LLC ; CREDIT VERIFICATION A TX CORP ; INCENTECH INC A TEXAS CORP ; CMJ INVESTMENTS LLC ; CATALINA MARKETING PROCUREMENT LLC ; CATALINA MARKETING WORLDWIDE LLC ; CATALINA PACIFIC MEDIA LLC ; CATALINA MARKETING TECHNOLOGY SOLUTIONS INC ; CATALINA MARKETING INT INC ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; CATALINA HEALTH RESOURCE LLC

Inventor(s):(std)**:** DAVID W DEATON ; DEATON DAVID M ; DEATON DAVID W ; GABRIEL RODNEY G ; RODNEY G GABRIEL

Inventor(s): GABRIEL RODNEY ; DEATON DAVID

Agent(s): REYNOLDS JULIAN DAVID; STERNE KESSLER GOLDSTEIN AND FOX PLLC

Designated states: AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LK LT LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN TD TG TJ TT UA UZ VN

International class (IPC 8–9): G06F1/12 G06F15/00 G06F17/00 G06F17/60 G06F7/08 G06K15/00 G06K5/00 G06Q20/04 G06Q20/20 G06Q20/38 G06Q30/00 G06Q30/02 G06Q40/00 G06Q50/00 G07D7/00 G07F17/42 G07G1/00 G07G1/12 G07G1/14 (Advanced/Invention); G06Q20/00 G06Q30/00 G06Q40/00 G06Q50/00 G07F17/00 G07G1/00 G07G1/12 G07G1/14 (Core/Invention)

International class (IPC 1–7): G06F1/12 G06F15/00 G06F15/20 G06F17/00 G06F17/60 G06F19/00 G06F7/08 G06K15/00 G06K5/00 G06K9/00

CPC: G06Q30/06 G06Q20/20 G06Q20/201 G06Q20/202 G06Q20/203 G06Q30/0207 G06Q30/0222 G06Q30/0235 G06Q30/0238 G06Q30/0239 G06Q30/0601 G06Q30/0633 G06Q50/12 G06Q30/02 G07F17/42 G06Q20/387 G07G1/00 G07G1/145 G06Q40/02 G06Q30/0224 G06Q30/0242 G06Q30/0255 G06Q30/0268 G07D7/00 G07G1/0036 G07G1/12 G06Q20/0457 G06Q30/0236 G06Q20/042 G06Q20/204 G06Q20/208 G06Q30/0201 G06Q30/0211 G06Q30/0226 G06Q30/0269 G06Q20/045

European class: G06F17/60B2 G06F17/60D G06Q20/042 G06Q20/045 G06Q20/0457 G06Q20/20 G06Q20/201 G06Q20/202 G06Q20/203 G06Q20/204 G06Q20/208 G06Q20/387 G06Q30/02 G06Q30/0201 G06Q30/0207 G06Q30/0211 G06Q30/0222 G06Q30/0224 G06Q30/0226 G06Q30/0235 G06Q30/0236 G06Q30/0238 G06Q30/0239 G06Q30/0242 G06Q30/0255 G06Q30/0268 G06Q30/0269 G06Q30/06 G06Q30/0601 G06Q30/0633 G06Q40/02 G06Q50/12 G07D7/00 G07F17/42 G07G1/00 G07G1/00C G07G1/12 G07G1/14B

US class: 235/375 235/380 235/383 235/385 235/487 364/401 364/410 382/1 382/100 382/137 382/139 382/291 382/305 382/48 382/7 382/9 395/214 395/223 705/10 705/14 705/14.1 705/14.13 705/14.23 705/14.25 705/14.27 705/14.35 705/14.36 705/14.38 705/14.39 705/14.41 705/14.53 705/14.65 705/14.66 705/15 705/15P 705/16 705/17 705/20 705/21 705/22 705/23 705/26 705/26.1 705/26.8 705/45 705/7.29

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Abstract:
Source: US2006100931A A method for use in marketing includes detecting, at the point−of−sale, a plurality of Uniform Product Codes associated with respective items purchased by a customer. The method also includes transmitting, on a substantially real−time basis, the plurality of Uniform Product Codes over the Internet to a remote computer connected to the Internet.

59) Family number: 30509869 (US5471925A) © PatBase

Title: APPARATUS AND METHOD FOR CHANGING THE TEXT PORTION OF LOGOS FOR POSTAGE METERS

Priority:

CA19932099206 19930625	DE19920019183U 19920626	DE19935010376 19930621
DE19935009965 19930621	DE19935009587 19930621	DE19924221270 19920626
EP19930109899 19930621	EP19930250183 19930621	US19970879071 19970619
US19950484658 19950607	US19930083047 19930625	DE19935010377 19930621

Family:

Publication number	Publication date	Application number	Application date
CA2099206 AA	19931227	CA19932099206	19930625
CA2099206 C	19981027	CA19932099206	19930625
DE4221270 A1	19940105	DE19924221270	19920626
DE59309587 D1	19990624	DE19935009587	19930621
DE59309965 D1	20000413	DE19935009965	19930621
DE59310376 D1	20050915	DE19935010376	19930621
DE59310377 D1	20051006	DE19935010377	19930621
DE9219183 U1	19990701	DE19920019183U	19920626
EP0576113 A2	19931229	EP19930250183	19930621
EP0576113 A3	19941207	EP19930250183	19930621
EP0576113 B1	20000308	EP19930250183	19930621
EP0578042 A2	19940112	EP19930109899	19930621
EP0578042 A3	19941207	EP19930109899	19930621
EP0578042 B1	19990519	EP19930109899	19930621
EP0902400 A2	19990317	EP19980250402	19930621
EP0902400 A3	20000913	EP19980250402	19930621
EP0902400 B1	20050810	EP19980250402	19930621
EP0907149 A2	19990407	EP19980250403	19930621
EP0907149 A3	20000913	EP19980250403	19930621
EP0907150 A2	19990407	EP19980250404	19930621
EP0907150 A3	20000913	EP19980250404	19930621
EP0907150 B1	20050831	EP19980250404	19930621
US5471925 A	19951205	US19930083047	19930625
US5608636 A	19970304	US19940263378	19940621
US5894792 A	19990420	US19970879071	19970619

Probable Assignee: FRANCOTYP POSTALIA AND CO AG

Assignee(s):(std): FRANCOTYN POSTALIA GMBH ; FRANCOTYP POSTALIA AG ; FRANCOTYP POSTALIA GMBH

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Inventor(s):(std): EPPING THOMAS ; GUENTHER STEPHAN ; HEINRICH KLAUS ; GUENTHER STEPHEN ; THIEL WOLFGANG DR ; KUBATZKI RALF ; EPPING THOMAS W GRIESHEIM ; THIEL DR

Inventor(s): GUENTHER STEPHAN D 1000 BERLIN 28 DE ; HEINRICH KLAUS 6453 SELIGENSTADT DE ; EPPING THOMAS W 6103 GRIESHEIM ; EPPING THOMAS 6450 HANAU DE

Agent(s): FETHERSTONHAUGH AND CO

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9): G07B17/00 G07B17/04 G07D7/00 (Advanced/Invention); G07B17/00 G07D7/00 (Core/Invention)

International class (IPC 1–7): B41M3/14 G06K15/02 G07B17/00 G07B17/02 G07B17/04

CPC: G07D7/0047 G07B17/00661 G07B17/00024 G07B17/00193 G07B17/00362 G07B17/00435 G07B2017/00032 G07B2017/00258 G07B2017/00354 G07B2017/00395 G07B2017/00403 G07B2017/00443 G07B2017/0054 G07B2017/00588 G07B2017/00604 G07B2017/00709 G07B2017/0075 G07B17/00 G07B17/00508 G07B2017/00637 G07B2017/00645

European class: G07B17/00D1 G07B17/00E1 G07B17/00E3 G07B17/00E4 G07B17/00F2 G07B17/00F3 G07D7/00B8 G07D7/00D4 S07B17/00D1A S07B17/00E1H S07B17/00E2E S07B17/00E3D S07B17/00E3D1 S07B17/00E4A S07B17/00F2A1B S07B17/00F2B1A S07B17/00F2B3 S07B17/00F2D S07B17/00F2D1 S07B17/00F3E S07B17/00G1A

US class: 101/71 101/91 358/1.15 364/464.02 364/464.18 395/114 705/408 705/410

Classification Explorer

Cited documents: WO8801818 A1, US5471925 A, US5408416 A, US5394795 A, US5283744 A, US5233657 A, US5186498 A, US5075862 A, US5038153 A, US4949381 A, US4933849 A, US4872119 A, US4858138 A, US4831554 A, US4775246 A, US4746234 A, US4649266 A, US4648266 A, US4580144 A, US4168533 A, US3869986 A, FR2646943 A3, EP0492439 A2, EP0440021 A2, EP0421491 A2, EP0352498 A1, EP0294397 A1, EP0261978 A2, EP0172561 A2, DE4034292 A1, DE4003006 A1, DE3840041 A1, DE3823719 A1, DE3712100 A1,

Forward Citations: WO9916023, WO9916023, WO9740472, WO0003359, USD497560, USD490735, US8818915, US8805745, US8774412, US8505978, US8498943, US8360313, US8336916, US8301572, US8195579, US8135651, US8103547, US8065239, US8041644, US8027927, US8027926, US8027054, US7979358, US7965308, US7954709, US7933845, US7874593, US7818263, US7769694, US7752141, US7613639, US7567940, US7490065, US7392377, US7375844, US7343357, US7299210, US7266504, US7257558, US7257542, US7256804, US7240037, US7236956, US7233929, US7226494, US7216110, US7213987, US7186040, US7149726, US7144168, US7133849, US7133849, US7062474, US6960730, US6916129, US6868406, US6776544, US6775656, US6766302, US6739245, US6733194, US6694320, US6655579, US6587843, US6389327, US6208980, US6178411, US6173274, US6154733, US6141654, US6085180, US6064991, US6004048, US5970150, US5960418, US5894792, US5852813, US5819241, US5819240, US5818020, US5815172, US5805711, US5801944, US5787406, US5729461, US5724245, US5717597, US5712916, US5710706, US5707158, US5684949, US5671146, US5651103, US5600562, US2010282852, US2009238319, US2008071612, US2008021849, US2007282753, US2007239620, US2007192181, US2006181718, US2005125365, US2005105948, US2005071297, US2005069366, US2004215582, US2004168835, US2004096255, US2004090651, US2004064424, US2004003740, US2003180081, US2002167554, US2002085230, US2002073040, US2002023057, TWI430217, GB2347530, EP1828974, EP1696390, EP1538573, EP1519325, EP1416430, EP1118964, EP1097436, EP1017021, EP0996097, EP0996096, EP0973133, EP0969421, EP0780803, EP0772162, EP0762334, EP0745435, EP0732673, EP0725369, EP0717379, EP0647923, DE4447404, DE4447404, DE19958559, DE19913067, DE19913066, DE19549305, DE10230679, DE10230678, DE102005007220, DE102004027517, DE102004027517, DE102004027517,

Abstract:
Source: US5471925A An apparatus for changing the text portion of logos for postage meters includes a printer module for a fully electronically produced postage meter imprint having an advertising logo, at least one input, a display unit, an input/output control module, a nonvolatile memory for at least unchanging parts of the postage meter imprint, a control device, and a printer control for producing a printed pattern having been formed by a microprocessor–controlled printing process immediately prior to printing of fixed data and current data and being available in buffer–stored form. A first memory region is provided for storing data for the unchanging parts of the postage meter imprint applying at least to a frame of an advertising logo, and an associated name identifying the logo frame. A second memory region is provided for storing data for variable parts of the postage meter imprint applying to at least one logo text portion, and an associated name identifying the logo text portion. A third memory region is provided for storing data for a first association of the names of the logo text portions with the names of the logo frames. A method for changing the text portion of logos for postage meters includes loading agreed–upon types of logos by modem or chip card, selecting a logo frame, editing a text portion of a logo in the postage meter, and composing and displaying a complete view of a postage meter imprint.

0) US2002175515A – COIN–DISCRIMINATOR VOUCHER ANTI–COUNTERFEITING ...

60) Family number: 30431446 (US2002175515A) © PatBase

Title: COIN–DISCRIMINATOR VOUCHER ANTI–COUNTERFEITING METHOD AND APPARATUS

Priority:

AU19950024636	19950501	AU19950024636	19950501	AU19980071948	19980617
AU19980071949	19980617	CA19952189330	19950501	AU19990056048	19991025
CA19952235925	19950501	CA19952235925	19950501	CA19952235926	19950501
EP19950918879	19950501	US19970852328	19970507	US19970924098	19970905
US19960689926	19960812	US19970834952	19970407	US19920940931	19920904
US19960689826	19960812	US19940255539	19940606	CA19992287090	19991022
CA19982189330	19980710	EP20020759391	20020816	US19940237486	19940503
WO1995US05356	19950501	WO1993US08228	19930901	US19990422917	19991021
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Family:

Publication number	Publication date	Application number	Application date
AT207230 E	20011115	AT19950918879T	19950501
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CA2189330 AA	19961031	CA19952189330	19950501
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EP0924664 A2	19990623	EP19990103622	19950501	
EP0924665 A2	19990623	EP19990103623	19950501	
EP0924666 A2	19990623	EP19990103624	19950501	
EP0924666 A3	20000426	EP19990103624	19950501	
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EP1131782 B1	20101013	EP19990971128	19991021	
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EP1472098 B1	20150128	EP20020759391	20020816	
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GB2343979 A1	20000524	GB19990025225	19991025	
GB9925225 A0	19991222	GB19990025225	19991025	
JP9512655 T2	19971216	JP19950528451T	19950501	
MX9605331 A1	19971231	MX19960005331	19950501	
US2002175515 AA	20021128	US20020039181	20020105	
US2002189920 AA	20021219	US20020211804	20020801	
US2003196869 AA	20031023	US20030434384	20030507	
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US2009096205 AA	20090416	US20080235574	20080922	
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US5564546 A	19961015	US19940255539	19940606	
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Probable Assignee: COINSTAR LLC

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Assignee(s): CITIBANK NA TRUSTEE AS ; OUTERWALL INC BELLEVUE ; OUTERWALL INC A DELAWARE CORPORATION F K A COINSTAR INC ; OUTERWALL INC N K A COINSTAR LLC ; SILICON VALLEY BANK ; SCAN COIN IND ; SCAN COIN IND AB ; MOLBACK JENS H ; SILICON VALLEY BANK DOCUMENTATION GROUP ; BANK OF AMERICA NA ; BANK OF AMERICA NA COLLATERAL AGENT AS ; BANK OF AMERICA NA IN ITS CAPACITY ADMINISTRATIVE ; BANK OF AMERICA NA IN ITS CAPACITY ADMINISTRATIVE AGENT FOR ITSELF LENDERS AND L C ISSUER EACH IS DEFINED IN ATTACHED SECURITY AGREEMENT AS ; BANK OF AMERICA NA IN ITS CAPACITY ADMINISTRATIVE AGENT FOR ITSELF LENDERS AND L C ISSUER EAST IS DEFINED IN ATTACHED SECURITY AGREEMENT AS ; IMP BANK ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT PO BOX AS ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT AS ; JPMORGAN CHASE BANK AS ADMINISTRATIVE AGENT ; COINSTAR LLC ; COINSTAR SPV GUARANTOR LLC ; COINSTAR ASSET HOLDINGS LLC ; COINSTAR FUNDING LLC

Inventor(s):(std)**:** MANION TIMOTHY J ; SCHERER SCOTT J ; MOLBAK JENS H ; SUN VAE E ; MOLBACK JENS H ; MANION TIMOTHY ; SCHERER SCOTT ; STEVEN M GEIGER ; STEVEN GEIGER ; SCOTT J SCHERER ; SCOTT SCHERER ; TIMOTHY J MANION ; GEIGER STEVEN M ; GEIGER STEVEN ; LEWIS CAROL ; DORAN MICHAEL ; GERRITY DANIEL A ; JENS H MOLBAK ; BEACH KIRK ; BROWN DAVID ; BROWN DAVID J ; CARLSON JOHANNA ; DAVID J BROWN ; TIMOTHY MANION

Inventor(s): BROWN DAVID J PEORIA ; GERRITY DANIEL ; GEIGER STEVEN STANWOOD ; MOLBAK JENS ; SUN VAE ; SCHERER SCOTT SAN FRANCISCO ; MANION TIMOTHY SEATTLE

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; BULL HOUSSER AND TUPPER LLP; BULL HOUSSER AND TUPPER; OYEN WIGGS GREEN AND MUTALA LLP; GRUENECKER PATENT U RECHTSANWAELTE PARTG MBB; JEHAN ROBERT; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER; PERKINS COIE LLP, PATENT–SEA; PERKINS COIE LLP PATENT SEA; PERKINS COIE LLP,PATENT–SEA; PERKINS COIE LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN

SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B42D15/00 B42D15/10 G06F17/00 G06F19/00 G06K15/00 G06K5/00 G06M3/06 G06M3/08 G06Q20/00 G06Q20/34 G06Q40/00 G07B5/00 G07D1/04 G07D11/00 G07D3/00 G07D3/16 G07D5/00 G07D7/00 G07D7/14 G07D9/00 G07D9/04 G07F1/04 G07F17/42 G07F19/00 G07F5/18 G07F7/00 G07F7/02 G07F9/08 G07G5/00 G09B19/22 G09C1/00 (Advanced/Invention);
B42D15/00 G07B5/00 G07D3/00 G07D9/00 (Advanced/Non–invention);
B42D15/00 G06F19/00 G06K15/00 G06M3/00 G07D1/02 G07D3/00 G07D7/00 G07D9/00 G07D9/04 G07F1/00 G07F17/00 G07F19/00 G07F5/00 G07F7/00 G07F9/08 G07G5/00 (Core/Invention)

International class (IPC 1–7): B42D15/00 G06F17/60 G06F19/00 G06F7/00 G06F9/00 G06K15/00 G06K19/06 G06M3/08 G07B1/00 G07B5/00 G07D3/00 G07D3/16 G07D5/00 G07D7/00 G07D9/00 G07D9/04 G07F1/04 G07F17/42 G07F3/04 G07F7/00 G07F9/00 G07F9/02 G07F9/06 G07F9/08 G07G5/00

CPC: G07F1/04 Y10S283/901 Y10S283/902 B42D15/0053 G06Q20/3437 G07F7/02 G07D7/14 G07F7/00 G07F19/201 B42D25/346 B42D25/405 B42D25/29 G07F11/002 G07D1/04 G07D3/16 G07D9/00 G07D9/008 G07F5/18 G07F5/24 G07F9/08 G07F17/42 G07F19/20 G07F19/202 G07G5/00 B42D2033/22 B42D2035/34

European class: B42D15/00C B42D15/00F G06Q20/3437 G07D1/04 G07D3/16 G07D7/14 G07D9/00 G07D9/00F G07F1/04 G07F11/00B G07F17/42 G07F19/00F G07F19/20 G07F19/201 G07F19/202 G07F5/18 G07F5/24 G07F7/00 G07F7/02 G07F9/08 G07G5/00 L42D31/04 L42D33/22 L42D35/34

US class: 194/200 194/202 194/215 194/215S 194/216 194/217 194/218 194/335 194/344 194/346 194/347 194/348 194/351 235/375 235/379 235/379P 235/380 235/381 235/383 235/494 235/494P 283/113 283/17 283/48.1 283/57 283/57P 283/60.1 283/62 283/67 283/67P 283/70 283/72 283/72P 283/72S 283/73 283/901 283/902 283/92 283/92P 283/92S 340/5.54 340/5.9 340/825.32 377/7 453/10 453/3 453/32 453/4 453/6 700/235

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EP1934707, EP1862977, EP1840847, EP1736942, EP1481374, EP1481352, EP1474774, EP1393265,

EP1329335, EP1135318, EP1131697, EP1131697, EP1071561, EP1041518, EP1026642, EP0956543, EP0926634, EP0924666, EP0924663, EP0865005, EP0766859, DE202009015900, CN104268995, CN104268995, AU768931, AU756526, AU2004201498, AU2002345797,

Abstract:
Source: US2002175515A Vouchers and methods for providing vouchers configured to assist in distinguishing unauthorized duplicate or counterfeit vouchers are disclosed herein. In one embodiment, a voucher can include a substrate, a first indicia on the substrate, and a thermally responsive second indicia on the substrate. At least one of the first indicia and the second indicia indicating a value of the voucher. In another embodiment, a method is provided to assist in distinguishing duplicate or counterfeit vouchers. The method includes providing a substrate with a thermally responsive first indicia, and printing on the substrate at the coin–counting machine at least a second indicia. The second indicia containing at least an indication of a value of the voucher.

0) WO9411847A1 – COIN SORTERS TRIEUSES DE PIECES DE MONNAIE

61) Family number: 10548273 (WO9411847A1) © PatBase

Title: COIN SORTERS

Priority: GB19920023355 19921106 WO1993GB02273 19931104

Family:

Publication number	Publication date	Application number	Application date
CA2147365 AA	19950419	CA19932147365	19931104
DE69307338 D1	19970220	DE19936007338	19931104
DE69307338 T2	19970717	DE19936007338T	19931104
DK0667973 T3	19970714	DK19930924698T	19931104
EP0667973 A1	19950823	EP19930924698	19931104
EP0667973 B1	19970108	EP19930924698	19931104
ES2098798 T3	19970501	ES19930924698T	19931104
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WO9411847 A1	19940526	WO1993GB02273	19931104

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Assignee(s): MCL BOWEN LTD STANMORE MIDDLESEX GB ; MCL BOWEN LIMITED

Inventor(s):(std)**:** STEELE LEONARD MARMADUKE

Inventor(s): LEONARD MARMADUKE STEELE ; STEELE LEONARD MARMADUKE ENFIELD MIDDLESEX EN2 0QD ; STEELE LEONARD MARMADUKE ENFIELD MIDDLESEX EN2...

Agent(s): GOWLING LAFLEUR HENDERSON LLP

Designated states: AT BE CA CH DE DK ES FR GB GR IE IT JP LU MC NL PT SE US

International class (IPC 8–9): G07D3/00 G07D3/12 G07D3/14 G07D5/02 G07D5/08 (Advanced/Invention); G07D3/00 G07D5/00 (Core/Invention)

International class (IPC 1–7): G07D3/00 G07D3/14

CPC: G07D3/123 G07D5/02 G07D5/08

European class: G07D3/12B2 G07D5/02 G07D5/08

Classification Explorer

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Forward Citations: WO04081882, WO04081882, USRE44689, USRE44252, US9633500, US9508208, US9501885, US9437069, US9430893, US9330515, US9129271, US9092924, US8959029, US8950566, US8701860, US8701857, US8684160, US8684159, US8602200, US8559694, US8545295, US8523641, US8443958, US8393455, US8352322, US8346610, US8229821, US8042732, US8023715, US7980378, US7949582, US7946406, US7929749, US7778456, US6843418, US6778693, US6637576, US6552781, US6318537, US5992602, US5551542, ES2158803, EP1096432, EP0657855,

Abstract:
There are many occasions when it is required to sort a mixed lot of coins into their several denominations and when such a sort is carried out it is important that provision be made for distinguishing not only real coins of the required type one from another but also for differentiating both between these real coins and forgeries. The actual sorting – the physical separation of each denomination from the others – can be accomplished in a variety of ways, and two of the most common involve one or other of what are known as disc sorters and ramp sorters; unfortunately, for either a disc or ramp sorter not merely to sort but also to distinguish between proper and

improper coins the equipment is inevitably extremely bulky. The present invention seeks to overcome this size and weight problem, and indeed to provide a technically rather more effective apparatus, by proposing a sorter which combines the facilities of both a disc and a ramp sorter. More specifically, the invention suggests a coin sorter (10) having both a disc (11) and a ramp (12), the disc being to gather the coins (14) from an associated feed hopper (15) and to deliver them to the ramp (12) via one or more detector station (16, 17) at which one or more of the coin's physical parameters is measured to determine whether the coin is proper or improper (and, if proper, very preferably what denomination it is), and the ramp (12) being in effect simply to separate the coins (14) into their various size–defined denominations and feed them to the appropriate delivery chutes (17).

62) Family number: 29372813 (US5365586A) © PatBase

Title: Method and apparatus for fingerprinting magnetic media

Priority:

JP19960509506	19950814	US19930045071	19930409	US19930046040	19930409
US19930046071	19930409	US19950422849	19950417	US19930145943	19931029
US19940303690	19940909	US19940222693	19940404	US19930100567	19930730
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WO1994US03715	19940405	WO1994US03722	19940405	WO1994US03917	19940408
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WO1996US04286	19960401				

Family:

Publication number	Publication date	Application number	Application date
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WO9631834 A1	19961010	WO1996US04286	19960401
WO9633488 A1	19961024	WO1996US04914	19960409

Probable Assignee: UNIV WASHINGTON

Assignee(s):(std)**:** BINOPTIC INT SYSTEMS ; UNIV WASHINGTON ; WASHINGTON UNVERSITY ; WASHINGTON UNIVERSITY ; UNIV ST LOUIS

Assignee(s): MULLER MARCEL WETTSTEIN ; O SULLIVAN JOSEPH ANDREW ; WASHINGTON UNIVERSITY ST LOUIS ; WASHINGTON UNIV ; BINOPTIC INT SYSTEMS INC ; BINOPTIC INTERNATIONAL SYSTEMS INC ; ENGEL GEORGE LAWRENCE ; HEGE ALAN LEE ; INDECK RONALD S ; INDECK RONALD SCOTT

Inventor(s):(std)**:** ENGEL GEORGE L ; ENGEL GEORGE LAWRENCE ; HEGE ALAN L ; HEGE ALAN LEE ; INDECK RONALD S ; INDECK RONALD SCOTT ; INDECK S ; KAMPELMAN ANTHONY P ; MARCEL W MULLER ; MIAN GUO ; MULLER MARCEL W ; MULLER MARCEL WETTSTEIN ; MULLER MARCELL WETTSTEIN ; MULLER W ; O SULLIVAN JOSEPH ANDREW ; RASMUSSEN RALPH A ; RONALD S INDECK ; TACKE DAVID J ; MULLER MARCEL ; INDECK RONALD ; ENGEL GEORGE

Inventor(s): ALAN LEE HEGE ; GUO MIAN ; GEORGE LAWRENCE ENGEL ; MARCEL WETTSTEIN MULLER ; JOSEPH ANDREW O SULLIVAN ; ANTHONY P KAMPELMAN ; DAVID J TACKE ; RONALD SCOTT INDECK ; RALPH A RASMUSSEN ; MARCELL WETTSTEIN MULLER

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; OSLER HOSKIN AND HARCOURT LLP; PARKINSON NEIL SCOTT ET AL

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LI LK LR LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TT UA UG UZ VN

International class (IPC 8–9): B25J9/16 B42D15/10 G02B23/18 G06F1/00 G06F21/00 G06F21/10 G06F21/79 G06K1/12 G06K17/00 G06K19/06 G06K19/10 G06K19/12 G06K7/00 G06K7/015 G06K7/08 G06K9/00 G07D7/04 G07F7/08 G07F7/12 G09C1/00 G11B15/43 G11B15/62 G11B20/00 G11B20/02 G11B20/10 G11B20/18 G11B20/24 G11B21/10 G11B23/28 G11B33/10 G11B5/00 G11B5/008 G11B5/02 G11B5/027 G11B5/035 G11B5/09 G11B5/48 G11B5/54 G11B5/55 G11B5/58 G11B5/596 H04K1/00 H04L9/00 H04L9/32 (Advanced/Invention);
B42D15/10 G06F1/00 G06K17/00 G06K19/06 G06K19/10 G09C1/00 G11B20/02 G11B23/28 G11B33/10 G11B5/008 G11B5/02 G11B5/027 G11B5/09 G11B5/48

G11B5/596 H04L9/32 (Advanced/Non−invention);
B25J9/16 G02B23/16 G06F21/00 G06K1/00 G06K19/12 G06K7/01 G07D7/00 G07F7/08 G07F7/12 G11B15/43 G11B15/62 G11B20/00 G11B20/02 G11B20/10 G11B20/18 G11B20/24 G11B21/10 G11B23/28 G11B5/027 G11B5/035 G11B5/48 G11B5/54 G11B5/55 G11B5/58 G11B5/596 (Core/Invention);
G06F1/00 G11B23/28 G11B33/00 G11B5/09 G11B5/48 G11B5/596 (Core/Non−invention);
G11B (Subclass/Invention)

International class (IPC 1−7): B42D15/10 G01N27/72 G01R33/12 G02B23/18 G06K G06K1/12 G06K13/00 G06K17/00 G06K19/06 G06K19/10 G06K19/12 G06K7/00 G06K7/08 G06K9/00 G07F7/08 G09C1/00 G11B G11B15/00 G11B15/60 G11B20/02 G11B21/02 G11B23/28 G11B27/34 G11B27/36 G11B5/008 G11B5/02 G11B5/027 G11B5/035 G11B5/09 G11B5/29 G11B5/58 G11B5/584 H04K1/00 H04L1/00 H04L9/00 H04L9/32

CPC: G06F21/79 G06K1/125 G06K19/06187 G06K19/12 G11B5/00813 G11B5/02 G11B5/035 G11B5/488 G11B5/54 G11B5/58 G11B20/10009 G11B20/1816 G11B20/24 G11B33/10 G06F21/10 G06F2211/007 G06F2221/0737 G06F2221/0744 G06K7/015 G06K19/086 G06Q20/347 G07D7/04 G07F7/08 G07F7/0813 G07F7/086 G07F7/125 G11B5/59611 G11B5/59633 G11B20/00086 G11B20/00094 G11B20/00123 G11B21/106 G11B23/284 G11B5/00 G11B23/281 G11B23/283 G06Q20/3674 G11B15/43 G11B15/62 G11B23/28 G11B5/09 G11B5/5534 G02B23/18 B25J9/1697

European class: G02B23/18 G06F21/10 G06F21/79 G06K1/12C G06K19/06M G06K19/08C2 G06K19/12 G06K7/015 G06Q20/347 G06Q20/3674 G07D7/04 G07F7/08 G07F7/08A2 G07F7/08B G07F7/12B G11B15/43 G11B15/62 G11B20/00P G11B20/00P1 G11B20/00P1D G11B20/10A G11B20/18C G11B20/24 G11B21/10D G11B23/28B G11B23/28B2 G11B5/00 G11B5/02 G11B5/035 G11B5/48D G11B5/54 G11B5/55D1D1 G11B5/58 G11B5/596C1 G11B5/596F S06F211/014B S06F221/07C4 S06F221/07C6 S11B20/00P1 S11B20/00P1D S11B23/28 S11B23/28A S11B23/28B2 S11B33/10 S11B5/008T S11B5/035 S11B5/09 S11B5/48D S11B5/596F

US class: 235/380 235/437 235/440 235/448 235/449 235/493 324/212 324/225 360/110 360/2 360/25 360/31 360/53 360/55 360/60 360/71 360/73.09 360/73.12 360/77.12 380/22 380/23 380/3 380/4 705/58 705/67 713/176 713/185 713/193 G9B/005.026 G9B/005.032 G9B/005.181 G9B/005.202 G9B/005.218 G9B/005.222 G9B/015.048 G9B/015.082 G9B/020.010 G9B/020.051 G9B/020.063 G9B/021.020 G9B/023.087 G9B/15.048 G9B/15.082 G9B/20.002 G9B/20.01 G9B/20.051 G9B/20.063 G9B/21.02 G9B/23.087 G9B/5.026 G9B/5.032 G9B/5.181 G9B/5.202 G9B/5.218 G9B/5.222

Classification Explorer

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Forward Citations: WO9935641, WO9926205, WO9831123, WO9642151, WO9642151, WO12082793, WO12082793, WO06129242, WO06129242, WO06129240, WO06129240, WO06066273, WO06066271, WO06014805, WO06014805, WO05027032, WO0184543, WO0184543, WO0184543, WO0150665, USRE44307, USRE44222, US9679053, US9672565, US9648028, US9640214, US9639717, US9589309, US9589268, US9582831, US9582801, US9424413, US9419951, US9396222, US9374227, US9372971, US9361617, US9343093, US9323794, US9317848, US9270859, US9258116, US9213968, US9208813, US9191206, US9191205, US9176775, US9171136, US9159113, US9141953, US9123042, US9104922, US9104842, US9070193, US9070151, US9065643, US9038886, US9027831, US9021602, US9020928, US9019567, US8983119, US8976482, US8972303, US8930719, US8904181, US8896885, US8893967, US8893264, US8892556, US8886946, US8880501, US8843417, US8843408, US8827154, US8798268, US8789201, US8781121, US8774216, US8769275, US8768888, US8768805, US8767962, US8766800, US8762279, US8762249, US8757493, US8751452, US8749386, US8744958, US8739295, US8720774, US8712728, US8706621, US8706570, US8700824, US8699088, US8687841, US8655764, US8636205, US8626624, US8620881, US8615475, US8612765, US8606700, US8600856, US8600830, US8595490, US8595104, US8589291, US8549305, US8549024, US8543661, US8542831,

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Abstract:
Source: US5365586A A method and apparatus is disclosed for determining the remanent noise in a magnetic medium by DC saturation of a region thereof and measurement of the remaining DC magnetization. A conventional magnetic recording transducer may be used to determine the remanent noise. Upon determination, the remanent noise may then be digitized and recorded on the same magnetic medium to thereby "fingerprint" the magnetic medium. This "fingerprint" may then be later used to verify and authenticate the magnetic medium as being an original. In such manner, any magnetic medium, or any object having an associated magnetic medium, may be "fingerprinted" including credit cards, computer programs, compact discs, videotapes, cassette tapes, etc.

0) US5407049A – ELECTRONIC PARKING METER AND SYSTEM

63) Family number: 20708511 (US5407049A) © PatBase

Title: Electronic parking meter and system

Priority: US19930098157 19930728 US19940195300 19940210 US19940300253 19940902 WO1996US15302 19960924 WO1994US08398 19940726 US19950534893 19950928

Family:

Publication number	Publication date	Application number	Application date
AU199474048 A1	19950228	AU19940074048	19940726
AU199671173 A1	19970417	AU19960071173	19960924
US5407049 A	19950418	US19930098157	19930728
US5454461 A	19951003	US19940195300	19940210
US5570771 A	19961105	US19940300253	19940902
US5642119 A	19970624	US19950534893	19950928
WO9504336 A1	19950209	WO1994US08398	19940726
WO9712345 A1	19970403	WO1996US15302	19960924
ZA9608088 A	19970502	ZA19960008088	19960926

Probable Assignee: INTELLIGENT DEVICES INC

Assignee(s):(std)**:** INTELLIGENT DEVICES INC ; INTELLIGENT DEVICES INC A LEGAL BODY ORGANISED AN ; POSITRAN INC ; YOST VINCENT G ; YOST VINCENT

Assignee(s): INTELLIGENT DEVICES INC A LEGAL BODY ORGANISED AND EXISTING UNDER THE LAWS OF THE UNITED STATES OF AMERICA ; CAPITAL TRANSPORTATION LLC ; CAPITAL TRANSPORTATION LLC SUITE

Inventor(s):(std)**:** JACOBS JAMES P ; JAMES P JACOBS

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CN CU CZ DE DK EE ES FI FR GB GE GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

International class (IPC 8–9): G07D3/14 G07F17/24 (Advanced/Invention)

International class (IPC 1–7): G01S13/08 G07F17/24

CPC: G07D3/14 G07F17/24 G07F17/246

European class: G07D3/14 G07F17/24 G07F17/24D

US class: 194/200 194/217 194/317 194/337 340/539.1 340/932.2 342/69 368/7 368/90

Classification Explorer

Cited documents: US5442348 A, US5407049 A, US5366404 A, US5321241 A, US5266947 A, US5260910 A, US5259491 A, US5153586 A, US5119916 A, US5103957 A, US5097934 A, US5062518 A, US5060777 A, US4967895 A, US4908617 A, US4848556 A, US4823928 A, US4483431 A, US4460080 A, US4356903 A, US4249648 A, US4139834 A, US3998309 A, US3968491 A, US3211267 A, GB2173624 A1, GB2077475 A1, EP0184393 A2, DE3611678 A1,

Forward Citations: WO9855967, WO9849029, WO9748079, WO10071974, WO10071972, WO08118280, WO07128172, WO0169541, WO0113339, USRE37193, USD756808, USD756807, USD749000, USD747983, USD746704, USD733585, USD716671, USD716157, USD716156, USD714165, USD705090, USD684870, USD659557, USD652329, US9685085, US9674684, US9661403, US9652921, US9613532, US9602193, US9538332, US9536370, US9508198, US9494922, US9489776, US9443236, US9424691, US9420423, US9406056, US9286802, US9213957, US9183734, US9087453, US9064417, US9020687, US8816879, US8807317, US8799037, US8770371, US8751271, US8730062, US8727207, US8723688, US8671014, US8671002, US8636133, US8610597, US8600786, US8395532, US8339281, US8250887, US8234507, US7974265, US7899583, US7492283, US7391339, US7237716, US7025190, US7014355, US6946974, US6907976, US6885311, US6559776, US6513639, US6467604, US6344806, US6312152, US6275170,

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Abstract:
Source: US5407049A A low−powered electronic parking meter which can be powered solely by non−rechargeable, commercially available batteries. The meter includes a coin receptor with unique means for coin detection, slug detection, determination of coin denomination, and jam detection, which require very little power. The coin detection and denomination determination are performed using pivotable lever arms in contact with Piezo strips. The slug detection uses a permanent magnet mounted opposite a reed switch and the jam detection is performed by IR diode emitters and photocells. The meter also includes a processor, a liquid crystal display, a sonar transducer for detecting the presence of vehicles, and an IR transceiver enabling parking authority personnel to communicate with the meter. The components of the meter are operated in three conditions or states including an off condition, an inactive condition, and an active condition, to provide further conservation of power so that the meter is entirely battery operated.

0) US2002034320A – SECURITY READER FOR AUTOMATIC DETECTION OF TAMP...

64) Family number: 30476610 (US2002034320A) © PatBase

Title: SECURITY READER FOR AUTOMATIC DETECTION OF TAMPERING AND ALTERATION

Priority: AU1993PM01661 19931006 AU19940074294 19940928 AU19940079305 19941006 WO1994US11359 19941006 US19990442365 19991117 US19960624584 19960815 US20060276475 20060301 US20030629172 20030729

Family:

Publication number	Publication date	Application number	Application date
AU199474294 A1	19950427	AU19940074294	19940928
AU199479305 A1	19950501	AU19940079305	19941006
AU685830 B2	19980129	AU19940074294	19940928
CA2173230 AA	19960401	CA19942173230	19941006
CA2173230 C	20080422	CA19942173230	19941006
DE69418887 D1	19990708	DE19946018887	19941006
DE69418887 T2	20000309	DE19946018887T	19941006
EP0722597 A1	19960724	EP19940930065	19941006
EP0722597 B1	19990602	EP19940930065	19941006
ES2133583 T3	19990916	ES19940930065T	19941006
HK1013873 A1	20000623	HK19980115097	19981223
JP3636364 B2	20050406	JP19950511024	19941006
JP9504629 T2	19970506	JP19950511024T	19941006
KR100354883 B1	20021226	KR19960701767	19960404
KR19960705285 A	19961009	KR19960701767	19960404
US2002034320 AA	20020321	US19990442365	19991117
US2004022420 AA	20040205	US20030629172	20030729
US2006139622 AA	20060629	US20060276475	20060301
US6019287 A	20000201	US19960624584	19960815
US6611612 BB	20030826	US19990442365	19991117
US7259841 BB	20070821	US20030629172	20030729
US7821621 BB	20101026	US20060276475	20060301
WO9510097 A1	19950413	WO1994US11359	19941006

Probable Assignee: 3M INNOVATIVE PROPERTIES CO

Assignee(s):(std)**:** 3M AUSTRALIA PTY LTD ; 3M INNOVATIVE PROPERTIES CO ; MANN GRAEME R ; MINNESOTA MINING MFG AUSTRALIA ; MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ST PAUL MINN US ; MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MANUFACTURING COMPANY ; 3M INNOVATIVE PROPERTIES COMPANY ; GEMALTO SA

Inventor(s):(std)**:** GRAEME MANN ; GRAEME R MANN ; MANN GRAEME R ; MANN GRAEME

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SMART AND BIGGAR; 3M INNOVATIVE PROPERTIES COMPANY; MELISSA E

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LI LK LT LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA US UZ VN

International class (IPC 8–9)**:** B42D15/00 B42D15/10 G06K17/00 G06K19/06 G06K19/10 G06K19/14 G06K7/00 G06K7/10 G06K9/74 G07D7/00 G07D7/12 G07D7/20 (Advanced/Invention); G06K19/14 (Advanced/Non–invention)

International class (IPC 1–7)**:** B42D15/00 B42D15/10 G06K17/00 G06K19/10 G06K19/14 G06K7/00 G06K7/10 G06K9/00 G07D7/00

CPC: B42D25/29 G06K7/10574 G06K19/06046 G06K19/14

European class: B42D15/00C G06K19/06C5 G06K19/14 G06K7/10S2B2

US class: 235/454 235/488 356/71 356/71P 359/6 382/112 382/112P 382/118 382/118P 382/135 382/140

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Cited documents: US6611612 BB, US6326741 BA, US6269169 BA, US6019287 A, US5835616 A, US5787186 A, US5771315 A, US5754673 A, US5748755 A, US5742807 A, US5719948 A, US5670096 A, US5642160 A, US5640553 A, US5583950 A, US5522623 A, US5514860 A, US5497227 A, US5486686 A, US5333052 A, US5321470 A, US5310222 A, US5295196 A, US5259025 A, US5222153 A, US5132808 A, US5045426 A, US5025483 A, US4945215 A, US4922109 A, US4811408 A, US4765656 A, US4684795 A, US4650283 A, US4634872 A, US4598205 A, US4537054 A, US4222662 A, US4179686 A, US3801183 A, US3753240 A, US3718908 A, US3709119 A, US3478658 A, GB2212445 A1, FR2594982 A1, EP0219012 A2,

Forward Citations: WO10009593, WO08005724, WO08005724, WO0133492, US9060150, US8996483, US8903788, US8803060, US8646689, US8586285, US8485559, US8479004, US8459807, US8412946, US8302864, US8223964, US8185733, US8181878, US8134116, US8113434, US8096584, US8033450, US8006094, US7886977, US7885428, US7874490, US7831042, US7821621, US7720254, US7614558, US7591415, US7373726, US7259841, US6795201, US6022429, US5807461, US2014168719, US2010327050, US2010316959, US2010176319, US2010088512, US2009136079, US2008265036, US2008243751, US2008243688, US2008201580, US2008059800, US2008034426, US2008031542, US2007288441, US2007219942, US2007170259, US2007101595, US2007017990, US2006139622, US2006065714, US2006059555, US2004022420, JP2011509422, EP1895759, CN102306415,

Abstract:
Source: US2002034320A A document (10) is covered by a laminate (13) comprising a layer of microspheres (16) over an adhesive layer (14) covering a source image (12) such as a photograph, printed matter, or a bar code arranged on a substrate (11). Light impinging on the document (10) is split by the optical properties of the microspheres (16) and underlying specular reflectors. The remaining light passes through the microspheres (16), through the adhesive layer (14) and strikes the substrate (11) or source image (12) on the document (10), and is reflected (18) and scattered (20). Alternatively, the laminate (13) can comprise a plain or clear layer of polyester without microspheres over the adhesive layer (14). Light impinging on the laminate (13) passes through the polyester and laminate (14) to strike the substrate (11) or source image (12) where it is reflected and scattered. A first light source (24) directs light to the document (10). A second light source (26, 27) directs light towards a beam splitting mirror (23) which reflects the light to the document (10). The light turning properties of the mirror (23) produce a light source which appears to an image receiver (40) as being returned from the surface of the document (10) at an angle of less than 1 degrees. The image receiver (40) passes a signal via line (32) to a personal computer (41) which processes the received information. Such processing is to establish whether the document (10) includes a retroreflective laminate, a plain polyester laminate, or neither. Additionally, further processing can establish whether the document (10) has been tampered with, altered, or forged.

0) US5575374A – GAMES MACHINE WITH ELECTRONIC PAYMENT MECHANISM...

65) Family number: 10373454 (US5575374A) © PatBase

Title: Games machine with electronic payment mechanism

Priority: EP19930402560 19931018 US19940324657 19941018 US19960704918 19960830 US19960653883 19960528

Family:

Publication number	Publication date	Application number	Application date
DE69306392 D1	19970116	DE19936006392	19931018
DE69306392 T2	19970403	DE19936006392T	19931018
DE69306392 T3	20060727	DE19936006392T	19931018
EP0650148 A1	19950426	EP19930402560	19931018
EP0650148 B1	19961204	EP19930402560	19931018
EP0650148 B2	20051012	EP19930402560	19931018
ES2095021 T3	19970201	ES19930402560T	19931018
ES2095021 T5	20060501	ES19930402560T	19931018
JP3969749 B2	20070905	JP19940278520	19941018
JP7175959 A2	19950714	JP19940278520	19941018
US5575374 A	19961119	US19940324657	19941018
US5697482 A	19971216	US19960704918	19960830
US5706925 A	19980113	US19960653883	19960528

Probable Assignee: GEMPLUS CARD INT

Assignee(s):(std)**:** GEMPLUS CARD INT

Assignee(s): GEMPLUS CARD INTERNATIONAL ; GEMPLUS GEMENOS FR ; GEMPLUS KAADE INTERNATL SA ; GEMALTO SA ; GEMPLUS

Inventor(s):(std)**:** ANDORE RISHIYAARU ; ARAN NIKORAI ; ERUBUE ORU ; FOGLINO JEAN JACQUES ; FUARUMAN ROPE ; JIYANNJIYATSUKU FUORINO ; LOPEZ FIRMIN ; ORUS HERV E ACU E EE ; ORUS HERVE ; NICOLAI ALAIN ; RICHARD ANDR E ACU E EE ; RICHARD ANDRE

Inventor(s): RICHARD ANDRE F 75116 PARIS FR ; NICOLAI ALAIN F 75116 PARIS FR ; ORUS HERV AND E ACU E AND EE ; ORUS HERVE F 75116 PARIS FR ; RICHARD ANDR AND E ACU E AND EE ; LOPEZ FIRMIN F 75116 PARIS FR ; FOGLINO JEAN JACQUES F 75116 PARIS FR

Designated states: DE ES FR GB IT MC NL

International class (IPC 8–9): A63F9/00 G07D3/14 G07F1/06 G07F17/32 G07F7/00 G07F7/02 G07F7/08 (Advanced/Invention)

International class (IPC 1–7): A63F9/00 G07F17/32 G07F7/00 G07F7/02 G07F7/08

CPC: G07F1/06 G07F17/32 G07F7/00 G07F7/0866 G07F7/0873

European class: G07F1/06 G07F17/32 G07F7/00 G07F7/08C G07F7/08G

US class: 194/213 194/214 194/344 235/380

Classification Explorer

Cited documents: WO9109369 A1, WO8704831 A1, US5179517 A, US5147021 A, US5094922 A, US4969549 A, US4598810 A, US2450997 A, GB2243237 A1, GB2229845 A1, GB2177835 A1, FR2644268 A1, EP0534718 A2, EP0480513 A1, EP0436497 A2, EP0360613 B1, EP0360613 A2,

Forward Citations: WO07021506, WO04052479, WO04021288, WO04021288, WO0223491, US9424713, US9196121, US9098975, US9076281, US8888600, US8876594, US8834254, US8696444, US8645685, US8641521, US8606697, US8597115, US8579711, US8571978, US8571977, US8566231, US8562424, US8523664, US8500349, US8382582, US8282465, US8231455, US8210759, US8197334, US8167705, US8092293, US8070594, US8061913, US8057296, US8036985, US8029357,

US8016666, US7963843, US7950996, US7934991, US7931204, US7918455, US7883408, US7878896, US7866563, US7822679, US7758420, US7711639, US7549920, US7494414, US7382229, US7329187, US7318775, US7267614, US7147558, US7147558, US7063617, US7036012, US6786408, US6659875, US6629591, US6581747, US6577733, US6260686, US6050487, US6021949, US5908103, US5895321, US2011233273, US2011004552, US2010285869, US2010205092, US2010029374, US2009205928, US2009146373, US2008214258, US2008188292, US2008076529, US2007293309, US2007278314, US2007167134, US2007105616, US2007094721, US2007068766, US2007049373, US2007026949, US2006247028, US2006224913, US2006217186, US2006160628, US2006155644, US2006128462, US2006121984, US2006094498, US2006046855, US2006046824, US2006046819, US2005283433, US2005283431, US2005283430, US2005020354, US2004229682, US2004147311, US2004087375, US2004043814, US2004029635, US2004023721, US2003162588, US2003154153, US2003149582, US2003119584, US2003081824, US2003045354, US2002034299, US2002003165, JP4759019, JP2008296025, JP2003109046, GB2421877, GB2408134, GB2408134, GB2386733, GB2386733, GB2374191, GB2374191, GB2349003, GB2349003, EP1434179, EP1191489, DE202014102404, DE19942756, AU2001288777,

Abstract:
Source: US5575374A Game machines provided with electronic payment mechanisms. The conventional payment mechanism is replaced by a payment mechanism operating by tokens that are secured by contract−free detection and the machine is furthermore provided with a second payment mechanism operating by a chip card. Switching make it possible to change over from the token−operated payment mechanism to the chip−card operated payment mechanism when a card such as this is inserted into the corresponding payment mechanism. This device makes it possible to increase the efficiency of the games machines.

0) US5821871A – AUTHENTICATION METHOD

66) Family number: 9380596 (US5821871A) © PatBase

Title: Authentication method

Priority: DE19944402430 19940127 DE19944416665 19940511 DE19944419882 19940607 DE19944423415 19940705 DE19944430368 19940826 DE19944436340 19941011 DE19956000258 19950119 WO1995EP00178 19950119 DE19944443039 19941204

Family:

Publication number	Publication date	Application number	Application date
AT152270 E	19970515	AT19950906972T	19950119
CA2180031 AA	19960626	CA19952180031	19950119
DE4402430 A1	19950810	DE19944402430	19940127
DE4416665 A1	19951116	DE19944416665	19940511
DE4419882 A1	19960201	DE19944419882	19940607
DE4423415 A1	19960215	DE19944423415	19940705
DE4430368 A1	19960229	DE19944430368	19940826
DE4436340 A1	19960425	DE19944436340	19941011
DE4443039 A1	19960613	DE19944443039	19941204
DE69500258 D1	19970528	DE19956000258	19950119
DE69500258 T2	19970925	DE19956000258T	19950119
DK0706697 T3	19970526	DK19950906972T	19950119
EP0706697 A1	19960417	EP19950906972	19950119
EP0706697 B1	19970423	EP19950906972	19950119
ES2101607 T3	19970701	ES19950906972T	19950119
GR3023591 T3	19970829	GR19970401234T	19970530
US5821871 A	19981013	US19960682524	19960625
WO9520802 A1	19950803	WO1995EP00178	19950119

Probable Assignee: SC INFO AND INNO TECHNOLOGIE INFORMATIONEN AND INNOVATIONEN GMBH AND CO

Assignee(s):(std)**:** BENZLER HARTWIG ; SC INFO AND INNO TECHNOLOGIE INF

Assignee(s): SC INFO AND INNO TECHNOLOGIE INFORMATIONEN AND INN ; SC INFO AND INNO TECHNOLOGIE INFORMATIONEN AND I ; SC INFO AND INNO TECHNOLOGIE INFORMATIONEN AND ; SC INFO AND INNO TECHNOLOGIES INFORMATION U ; SC INFO AND INNO TECHNOLOGIE INFORMATIONEN UND INN ; SC INFO AND INNO TECHNOLOGIE INFORMATIONEN AND INNOVATIONEN GMBH AND CO ; SC INFO AND INNO TECHNOLOGIE INFORMATIONEN UND INNOVATIONEN GMBH AND CO 83620 FELDKIRCHEN WESTERHAM DE ; SC INFO AND INNO TECHNOLOGIE INFORMATIONEN AND INNOVATIONEN GMBH AND CO 83620 FELDKIRCHEN WESTERHAM DE ; SC INFO AND INNO TECHNOLOGIE INFORMATIONEN AND INNOVATIONEN GMBH CC ; SC INFO AND INNO TECHNOLOGIE INFORMATIONEN AND INNOVATIO

Inventor(s):(std)**:** BENZLER HARTWIG

Inventor(s): BENZLER HARTWIG D 83620 FELDKIRCHEN W DE

Agent(s): BORDEN LADNER GERVAIS LLP

Designated states: AT BE CA CH DE DK ES FR GB GR IE IT JP KR LI LU MC NL PT SE US

International class (IPC 8–9): G06K19/07 G07C9/00 G07F7/10 (Advanced/Invention); G07C9/00 G07F7/10 (Core/Invention)

International class (IPC 1–7): A61B5/117 A61B5/16 B42D15/10 B44F1/12 G06F12/14 G06K19/00 G06K19/07 G07C11/00 G07C3/00 G07C9/00 G07D7/00 G07F7/10

CPC: G07C9/00039 G07C9/00142

European class: G07C9/00B6B G07C9/00C2B

US class: 235/382 340/5.8 340/5.85 340/825.31 340/825.34

Classification Explorer

Cited documents: WO9324906 A1, WO9309621 A1, US5395319 A, US5323146 A, US5317637 A, US5150409 A, US5109427 A, US5037301 A, US4449189 A, US4432567 A, GB2112190 A1, GB2058417 A1, FR2584514 A1, EP0573245 A2, EP0564832 A1, EP0548967 A2, EP0532227 A2, EP0522473 A2, EP0466146 A2, EP0444351 A2, EP0441774 A1, EP0382410 A2, EP0085680 A1, EP0082304 A1, EP0034755 A1, EP0032304 A1, EP0029894 A2, EP0007002 A1, EP0006419 A1, DEA1762669, DEA1195057, DE683233 A, DE4220971 A1, DE4125870 A1, DE4107042 A1, DE4039648 A1, DE4036025 A1, DE4009051 A1, DE4008971 A1, DE4005448 A1, DE3943097 A1, DE3834048 A1, DE3834046 A1, DE3827172 A1, DE3301629 A1, DE2846974 A1, DE2254597 A1, DE2224667 A1, DE1762669 U, DE1195057 B, DE1084036 B,

Forward Citations: WO07063346, WO06042212, WO03022647, WO0072501, US9438633, US9398013, US9355273, US9141758, US9009798, US8983874, US8947197, US8930404, US8707388, US8522310, US8473452, US8380995, US8132226, US7865376, US7734929, US7441263, US7376677, US7305562, US7225132, US6897790, US6806869, US6779121, US6732113, US6542583, US6256737, US2013006479, US2012054057, US2011154483, US2010241569, US2010217973, US2010153276, US2010114607, US2008147554, US2008094220, US2008091474, US2005246764, US2005114705, US2005114334, US2004003260, US2003050745, US2003009321, US2002196963, US2002122064, US2002019947, ITTO20090035, FR2770919, EP0763802, DE19962915, DE19820484, DE10224785, DE10150661,

Abstract:
Source: US5821871A PCT No. PCT/EP95/00178 Sec. 371 Date Jun. 25, 1996 Sec. 102(e) Date Jun. 25, 1996 PCT Filed Jan. 19, 1995 PCT Pub. No. WO95/20802 PCT Pub. Date Aug. 3, 1995An authentifying method is revealed which uses as an identification feature images, tokens, texts or sounds which are based on individual knowledges and experiences of a person (PSPI) and which consist of a principal part and a complement or of associated notions, with that person performing the following steps with regard to a plurality of these PSPI: first register them within a memory and keep them inaccessible to other people, secondly make them visible or audible without the complement and in a sequence which other persons cannot foresee, thirdly restore them with the missing complement or verify them; or first subdivide them into their associated elements and assemble and register the latter ones within a plurality of element groups according to superordinated categories of these associated elements, whereby the elements may be accompanied by tokens like numbers or letters, secondly make them visible, audible or available in their subdivided form according to the groups, for the elements of one category in a determined sequence and for the elements of the other categories in a random sequence, thirdly and still in subdivided form, put them together into characteristic two−dimensional structures or linear chains, by means of connecting associated elements of the respective element groups and of connecting these reconstituted PSPI in a sequence which is defined by the way in which the elements were registered, made visible, audible or available, or by the inherent nature of the elements.

0) ES2078869A – AUTOMATIC SYSTEM FOR PROCESSING PAYMENT COLLECT...

67) Family number: 18802395 (ES2078869A) © PatBase

Title: Automatic system for processing payment collections and documents of value.

Priority: ES19930002000 19930922

Family:

Publication number	Publication date	Application number	Application date
CL1994001179 A1	19950808	CL19940001179	19940817
ES2078869 AB	19951216	ES19930002000	19930922
ES2078869 AC	19970216	ES19930002000	19930922
ES2078869 BA	19971016	ES19930002000	19930922

Probable Assignee: HART INFORMATICA S A

Assignee(s):(std)**:** HART INFORMATICA S A

Assignee(s): HART INFORMATICA SA

Inventor(s):(std)**:** LOPEZ JIMENEZ MIGUEL

Agent(s): HARNECKER

International class(IPC 8–9)**:** G06K9/00 G07D11/00 G07D13/00 G07D9/00 G07F17/42 G07F19/00 (Advanced/Invention); G06K9/00 G07D11/00 G07D9/00 G07F17/00 G07F19/00 (Core/Invention)

International class(IPC 1–7)**:** G06K9/00 G07D11/0 G07D9/00 G07F17/42 G07F19/00 G10L5/00

Classification Explorer

Cited documents: US4979211 A, ES2017360 AF, ES2017360 A2,

Forward Citations: ES2080683,

Abstract:
Automatic system for processing payment collections and documents of value. The purpose of this is to enable the payment of bills and the contracting of various services enabling payment by means of cheque, card or by personal identification using a fingerprint detector 22; capable of being used by a blind person through a microphone 24 and loudspeaker 25 connected to an electrical signal analysis circuit 23 included in a microcomputer 1. It also functions as an automatic cash dispenser. The microprocessor 1 is connected to a bar code reader 7, which may be an optical character or magnetic strip reader for reading bills or documents of value. This is connected to a banknote reader 8, to a banknote dispenser 10, to a coin reader 9, to a coin dispenser 11, and to an ISO card dispenser 13 for selling documents of value and enabling payment and effective collection.

0) US5787186A – BIOMETRIC SECURITY PROCESS FOR AUTHENTICATING I...

68) Family number: 17968906 (US5787186A) © PatBase

Title: BIOMETRIC SECURITY PROCESS FOR AUTHENTICATING IDENTITY AND CREDIT CARDS, VISAS, PASSPORTS AND FACIAL RECOGNITION

Priority: EP19950908943 19950220 ES19940000595 19940321 WO1995ES00021 19950220 ES19940001171 19940526 ES19940001452 19940705

Family:

Publication number	Publication date	Application number	Application date
AU199517077 A1	19951009	AU19950017077	19950220
CA2163341 AA	19951120	CA19952163341	19950220
CN1050328 C	20000315	CN19951090389	19950220
CN1128006 A	19960731	CN19951090389	19950220
EP0703094 A1	19960327	EP19950908943	19950220
EP0805409 A2	19971105	EP19970201824	19950220
EP0805409 A3	19980701	EP19970201824	19950220
ES2102296 AA	19970716	ES19940000595	19940321
ES2102296 BA	19980316	ES19940000595	19940321
ES2102307 AA	19970716	ES19940001171	19940526
ES2102307 BA	19980316	ES19940001171	19940526
ES2105936 AA	19971016	ES19940001452	19940705
ES2105936 BA	19980601	ES19940001452	19940705
US5787186 A	19980728	US19960553352	19960401
WO9525640 A1	19950928	WO1995ES00021	19950220

Probable Assignee: ID TEC SL

Assignee(s):(std)**:** COBIAN SCHROEDER CARLOS ; I D TEC S L

Assignee(s): ID TEC SL ; ID TEC SL SOTO DE VINUELAS SITE PICOS ; IDTEC SL

Inventor(s):(std)**:** C COBIAN SCHROEDER ; CARLOS COBIAN SCHROEDER ; COBIAN SCHROEDER CARLOS ; SCHROEDER C COBIAN ; SCHROEDER CARLOS COBIAN

Inventor(s): ID TEC SL

Agent(s): MARKS AND CLERK

Designated states: AT AU BE BR CA CH CN DE DK ES FI FR GB GR IE IT JP KR LI LU MC MX NL NO PL PT RO SE UA US

International class (IPC 8–9): B42D15/10 B42D25/30 B42D25/309 G06K9/00 G06K9/46 G07C9/00 (Advanced/Invention); B42D15/10 G06K9/00 G06K9/46 G07C9/00 (Core/Invention)

International class (IPC 1–7): B42D15/00 B42D15/10 B42D201/00 B42D203/00 B42D205/00 B42D217/00 B42D227/00 G06K5/00 G06K9/00 G06K9/46 G07D7/00

CPC: B42D25/00 B42D25/23 B42D25/24 G07C9/00079 B42D25/309 G06K9/00221 G06K9/00268

European class: B42D15/10 G06K9/00F G06K9/00F2 G07C9/00B6D2 L42D35/18

US class: 235/380 283/70 283/77 340/5.83 340/825.34 380/23 382/115 382/118 713/186 902/29 902/3

Classification Explorer

Cited documents: WO9419770 A1, WO9203804 A1, US5673320 A, US5635012 A, US5598474 A, US5490217 A, US5466918 A, US5432864 A, US5420924 A, US5386103 A, US5161204 A, US5057019 A, US4975969 A, US4972476 A, US4589687 A, US4557963 A, US4507349 A, US4469353 A, US4253086 A, GB2231699 A1, GB2173933 A1, ES2047643 T3, EP0440814 A1, EP0334616 A2,

Forward Citations: WO9917941, WO15138820, WO08001373, WO07087194, WO07087194, WO07079548, WO06052192, WO06052192, WO05034019, WO05034019, WO04074000, WO04052691, WO04010365, WO04010365, WO0200297, WO0067192, WO0049583, WO0022769,

USRE44034, USRE43333, US9613284, US9589309, US9582844, US9578107, US9569907, US9552471, US9536168, US9460572, US9360945, US9355273, US9342748, US9336453, US9330328, US9330327, US9330326, US9324004, US9317769, US9311554, US9311553, US9311552, US9310892, US9269015, US9262440, US9245308, US9245206, US9244943, US9230353, US9224196, US9208370, US9179033, US9159113, US9141845, US9141758, US9117268, US9087228, US9070193, US8983119, US8953848, US8942438, US8942430, US8938402, US8930404, US8898106, US8687841, US8675261, US8660298, US8659613, US8577091, US8543823, US8509477, US8489513, US8473452, US8438395, US8433658, US8423476, US8418615, US8411898, US8411316, US8401902, US8345316, US8316239, US8280101, US8199969, US8190901, US8175329, US8160988, US8135169, US8127137, US8126272, US8123134, US8095795, US8094869, US8087583, US8086867, US8083152, US8068638, US8055014, US8027509, US8025239, US8005777, US7980596, US7970722, US7958359, US7945076, US7865376, US7824029, US7821621, US7815124, US7809172, US7806322, US7804982, US7798413, US7789311, US7778440, US7778438, US7770013, US7769208, US7762468, US7744001, US7738673, US7728048, US7724920, US7697719, US7694887, US7661600, US7639837, US7616797, US7555139, US7537170, US7536721, US7508955, US7502937, US7471835, US7427030, US7424131, US7405666, US7389269, US7389208, US7376677, US7370807, US7369685, US7349555, US7346184, US7330563, US7313529, US7310734, US7305104, US7269275, US7259841, US7228428, US7225991, US7181042, US7152786, US7114079, US7113596, US7068301, US7043052, US7043048, US7027614, US7016516, US7010694, US7003140, US6988665, US6983882, US6980999, US6970573, US6952775, US6929413, US6920561, US6912295, US6891959, US6850626, US6816611, US6804378, US6804377, US6801907, US6775775, US6763123, US6758394, US6739627, US6738750, US6734887, US6732113, US6721440, US6718046, US6698653, US6695203, US6633321, US6618492, US6611612, US6609659, US6591249, US6529620, US6446210, US6315208, US6224109, US6221545, US6219439, US6202151, US6106020, US6105010, US6091836, US2017147806, US2015193471, US2015067775, US2014369570, US2014229306, US2014222596, US2014133714, US2014003659, US2013142401, US2011255751, US2011191250, US2011191249, US2011191248, US2011013814, US2011001760, US2010310071, US2010303288, US2010217973, US2010150434, US2010150405, US2010128924, US2010114607, US2010091336, US2010009714, US2009097713, US2009097695, US2009074309, US2009051941, US2009018984, US2008216149, US2008189776, US2008170746, US2008147554, US2008130945, US2008091474, US2007290499, US2007283160, US2007278313, US2007246543, US2007234066, US2007234065, US2007217493, US2007204162, US2007170248, US2007136597, US2007114788, US2007106561, US2007098213, US2007071288, US2007009139, US2006165256, US2006147093, US2006139622, US2006104489, US2006053184, US2006008112, US2005258247, US2005156048, US2005135656, US2005114334, US2005108282, US2005094848, US2005067487, US2005065886, US2005063562, US2005040240, US2005008189, US2004264732, US2004262909, US2004258274, US2004243806, US2004207646, US2004188519, US2004181676, US2004153649, US2004151347, US2004128512, US2004074973, US2004057603, US2004057597, US2004052418, US2004039914, US2004022420, US2004010696, US2004003295, US2003229506, US2003215128, US2003206644, US2003191694, US2003190076, US2003172027, US2003167235, US2003158819, US2003156740, US2003139984, US2003138128, US2003131247, US2003116630, US2003108373, US2003107639, US2003107638, US2003106943, US2003102660, US2003086591, US2003046555, US2003006277, US2003002710, US2002168085, US2002164052, US2002122583, US2002083320, US2002077841, US2002061120, SG92678, NL1022766, GB2452131, GB2452131, GB2364274, GB2340931, EP3144836, EP2325022, EP2097852, EP1952329, EP1952329, EP1837198, EP1484710, EP1484710, EP1479033, EP1319520, EP1131769, EP1131769, EP1044826, EP1023187, DE10240932, CN102760229, CN101976333,

Abstract:
Source: US5787186A PCT No. PCT/ES95/00021 Sec. 371 Date Apr. 1, 1996 Sec. 102(e) Date Apr. 1, 1996 PCT Filed Feb. 20, 1995 PCT Pub. No. WO95/25640 PCT Pub. Date Sep. 28, 1995A biometric security procedure for manufacturing an identity document, such as an identity card, credit card, visa or passport, which includes the steps of: providing a nucleus of the identity document, the nucleus including personal data of a holder of the identity document and a face image of the holder; carrying out, by a computer and an image capturer such as a scanner or a video camera, an analysis of face features of the face image, the computer carrying out an analysis of basic face features of the face image, comparing the basic face features with master/pattern features in a data base, wherein each master/pattern feature has a specific number; obtaining by the analysis a derived set of master/pattern features that corresponds to a characteristic synthetic image of the holder, the derived set of master/pattern features corresponding to a specific numeric code determined by the number of each of the master/pattern features making up the derived set of master/pattern features; and printing the specific numeric code by a printer connected to the computer, on an area of the identity document defined as a code window, whereby the specific numeric code univocally characterizes the holder of the identity document.

0) BRPI9400636A – PROCESSO DE VERIFICACAO, SEGURANCA E CONTROLE D...

69) Family number: 9000 (BRPI9400636A) © PatBase

Title: PROCESSO DE VERIFICACAO, SEGURANCA E CONTROLE DE INFORMACOES, ATRAVES DE LEITURA OTICA E MAGNETICA DOS DADOS IMPRESSOS EM DOCUMENTACAO ESPECIFICA, E DOCUMENTACAO ESPECIAL DE SEGURANCA Verification process, SAFETY AND INFORMATION CONTROL, THROUGH OTICA READING AND MAGNETIC OF PRINTED DATA ON SPECIFIC DOCUMENTATION, AND DOCUMENTATION SPECIAL SECURITY (Machine translation)

Priority: BR1994PI00636 19940222

Family:

Publication number	Publication date	Application number	Application date
BRPI9400636 A	19951024	BR1994PI00636	19940222

Probable Assignee: WNADERLEY LUIZ ALBERTO

Assignee(s):(std)**:** WNADERLEY LUIZ ALBERTO

Inventor(s):(std)**:** WANDERLEY LUIZ ALBERTO

Inventor(s): LUIZ ALBERTO WANDERLEY

International class (IPC 8–9)**:** G06K9/18 G07D7/00 (Advanced/Invention); G06K9/18 G07D7/00 (Core/Invention)

International class (IPC 1–7)**:** G06K9/18 G07D7/00

Classification Explorer

Abstract:
Source: BRPI9400636A [Source: Claim 1] 1. Processo de verificacao, seguranca e controle de informacoes, atraves de leitura otica e magnetica dos dados impressos em documentacao espedfica, incluindo and verificacao e o controle por meios eletronicos e dispositivos de leitura otica e magnetica da documentacao espedfica, bem como dos dados contidos na 5 referida documentacao, em que o processo inclui a fese de adocao de disposicoes de seguranca no preparo do pre–improsso, e fases subsequentes de verificacao e controle por meios oticos e magneticos da documentacao espedfica e dos dados nela enatirfM) afeteriaHn pnr – uma primeira fese de impressao de seguranca com a incorporacao, em 10 coqjunto, de medidas de seguranca no pte–impresso, que se constituem na impressao magnetizada de numeracao criptografada, empregando codigo de barras tal como do tipo CMC 7 e em que a criptografia e gerada por equipamento eletronico contendo a chave da referida criptografia, o qual esta adaptado para gerar numeracoes codificadas e criptografadas combinadas c a numeracao em CMC 7 e produzida por 15 impressao magnetica com tinta visivel e invisivel, sendo que a parte invisivel somente serf magnetizada para ser decodificada durante a fese de verificacao e leitura, promovendo nesta fese o processamento da "inteligencia" do processo; – uma fase de verificacao e leitura incluindo a decodificacao da numeracao criptografada e leitura simultaneas do codigo em CMC 7, por meio de 20 dispositivo eletronico do tipo "scanner" que incorpora cm conjunto as funcoes de leitor otico e magnetico,para ler tanto a parte magnetizada quanto oe demais dados impressos no documento especial, estando o dispositivo scanner conectado por meio de computador a sistema de banco de dados c/ou imagem; uma be de captura de imagem digitalizada documento erpecuue c dos aab da criptografia, ocorrendo oonoondbntomento com a leitura e verificacao doa dados e do documento em si; – uma fase intermediaria de armazenagem da imagem em banco de dados e/ou imagem ligado a Sistema de Banco de Dados Centralizador, – uma fase de envio por tekprocessamcnto de dados da imagem armazenada na fase intermediaria e incorporacao definitiva dos dados e da imagem do documento especial no Banco de Dados Centralizador para estar disponivel para recuperacao, visualizacao e para verificacao dos dados e do documento, sem no 10 entanto ser possivel a alteracao ou substituicao dos dados e informacoes e do documento. [Source: Claim 1] 1. process of checking, security and control of information, through optical and magnetic data reading printed on documentation, including espedfica and check and control by electronic media and optical reading devices and magnetica of documentation espedfica, as well as of the data contained in 5 referred to documentation, in that the process includes adoption of fese security provisions in the preparation of pre–improsso, and subsequent stages of verification and control for optical and magnetic media of the documentation and data espedfica her enatirfM) afeteriaHn pnr–a first for security printing with fese the incorporation, in coqjunto 10, security measures in the pte–printed, which constitute the impression of numeracao encrypted using magnetized codigo de barras as CMC and 7 type in the encryption and generated by electronic equipment containing the key of that encryption, which this adapted to generate numeracoes encoded and encrypted combined c numeracao in CMC 7 and produced by magnetic ink printing 15 visible and invisible, the invisible part only serf magnetized to be decoded during the fese of checking and reading, promoting this fese processing the "intelligence" of the process; –a phase of checking and reading including the decodificacao of numeracao encrypted and contains the reading code in CMC 7 through 20 electronic device of type "scanner" that incorporates cm set the functions of optical and magnetic reader, to read both the magnetized as oe data printed on the document too special, being the scanner device connected through the computer database system c/or image; a scanned image capture document c erpecuue of the aab of

cryptography, occurring oonoondbntomento with reading and checking data and doa document itself; –an intermediate phase of storing the image in database and/or image connected to Centralized database system,–a phase of shipping by tekprocessamcnto image data stored in the intermediate phase and final incorporation of data and special document image in the Centralized database to be available for recovery, viewing and checking of the data and the document without the 10 be possible the amendment or replacement of the information and data of the document.

0) US5564545A – PAPER CURRENCY ACCEPTOR

70) Family number: 8624036 (US5564545A) © PatBase

Title: Paper currency acceptor

Priority: JP19940208500 19940901 JP19950222199 19950830

Family:

Publication number	Publication date	Application number	Application date
AT168802 E	19980815	AT19950113284T	19950824
AU199530290 A1	19960314	AU19950030290	19950828
AU695203 B2	19980806	AU19950030290	19950828
CN1061314 C	20010131	CN19951016920	19950830
CN1125684 A	19960703	CN19951016920	19950830
DE69503582 D1	19980827	DE19956003582	19950824
DE69503582 T2	19981126	DE19956003582T	19950824
EP0700022 A1	19960306	EP19950113284	19950824
EP0700022 B1	19980722	EP19950113284	19950824
JP3710523 B2	20051026	JP19950222199	19950830
JP8123991 A2	19960517	JP19950222199	19950830
US5564545 A	19961015	US19950520240	19950828

Probable Assignee: UNIVERSAL ENTERTAINMENT CORP

Assignee(s):(std): UNIVERSAL HANBAI KK ; UNIVERSAL SALES CO ; UNIVERSAL SALES CO LTD

Assignee(s): UNIVERSAL TECHNOUS CO LTD ; UNIVERSAL SALES CO LTD TOKIO TOKYO JP ; ARUZE CORORATION ; ARUZE CORP ; UNIVERSAL ENTERTAINMENT CORP

Inventor(s):(std): SUZUKI YASUO

Inventor(s): SUZUKI YASUO MINATO KU TOKYO JP ; YASUO SUZUKI

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD

Designated states: AT DE FR GB IT

International class (IPC 8–9): B65H29/46 B65H31/00 G07D11/00 G07D9/00 (Advanced/Invention); B65H29/38 B65H31/00 G07D11/00 G07D9/00 (Core/Invention)

International class (IPC 1–7): B65H29/46 B65H31/00 B65H43/00 G07D1/00 G07D11/00 G07D13/00 G07D7/00 G07D9/00 G07F7/04

CPC: G07D11/0009 G07D11/0012 G07D11/0081

European class: G07D11/00D2B G07D11/00D2D G07D11/00H

US class: 194/206 194/350 271/180

Classification Explorer

Cited documents: US5419423 A, US5251738 A, US4325277 A, JP54106300, JP5083876 U, JP2304693, GB1598168 A,

Forward Citations: USRE39666, US8870663, US8616360, US7789214, US7503445, US7481308, US7422095, US7255341, US7241222, US7172111, US7004381, US6976919, US6749053, US6484938, US6375185, US6199856, US5863039, US5756985, US2010156036, US2007170828, US2007043470, US2006128477, US2006118382, US2006102446, US2004238614, US2004213620, US2004155102, US2004087374, JP4744004, JP4265000, JP4194139, JP2002362810, JP2000093645, JP2000057404, GB2305763, EP1693803, EP1659545, EP1659081, EP1492060, EA8726, EA8711, EA8554, EA008726, EA008711, EA008554, AU698122,

Abstract:
Source: US5564545A A paper currency acceptor receives paper currency and stores the paper currency therein. A paper currency validator verifies validity of paper currency temporarily received from the outside of the paper currency acceptor to validate or reject the paper currency. A removable paper currency storage unit stores the paper currency validated by the paper currency validator. The paper currency is transferred to the paper currency storage unit. The paper currency transferred is displaced into the paper currency storage unit for storage therein.

A drive source is provided for displacing the paper currency. The paper currency storage unit is locked to inhibit the paper currency storage unit from being removed from the paper currency acceptor. In the paper currency acceptor, the drive source is provided separately from the paper currency storage unit, and the drive source supplies driving force the locking/unlocking operation.

71) Family number: 33431798 (US2001055990A) © PatBase

Title: METHOD AND APPARATUS FOR CONTROLLING THE COST OF PLAYING AN ELECTRONIC GAMING DEVICE

Priority:

AU19950027192 19950726 AU19970048478 19971218 AU19980074161 19980703
AU19990024977 19990428 AU20020317546 20021218 AU20060203638 20060823
AU20030200581 20030214 AU20090245839 20091208 AU19990024979 19990428
AU19990024978 19990428 AU19990024981 19990428 AU19990032346 19990531
NZ19980330189 19980415 AU20090245868 20091209 AU20090245840 20091208
US19950465717 19950606 US19940322172 19941012 US19950465915 19950606
CA19982443301 19980414 CA19982443301 19980414 CA19982442442 19980414
CA19982442444 19980414 CA19992272499 19990519 CA19992272499 19990519
CA20032234681 20031028 CA19982234681 19980414 CA20032234681 20031021
CA20032234681 20031021 US19950467793 19950606 US19950465942 19950606
US20060580667 20061012 WO1995US11610 19951005 US20000574632 20000516
US20000573470 20000516 US20010878111 20010606 US20030443685 20030521
US20060380895 20060428 US20060380879 20060428 US20050118163 20050429
US20040932615 20040902 US20010827870 20010406 US19970922046 19970902
US20030366036 20030212 US19990425544 19991022 US19950467072 19950606
US19970998285 19971224 US20040932615 20040901 US19990373034 19990811
US19970843411 19970415 US19980086964 19980529

Family:

Publication number	Publication date	Application number	Application date
AU199527192 A1	19960502	AU19950027192	19950726
AU199535878 A1	19960506	AU19950035878	19951005
AU199748478 A1	19980226	AU19970048478	19971218
AU199861905 A1	19981022	AU19980061905	19980415
AU199874161 A1	19980903	AU19980074161	19980703
AU199924977 A1	19990812	AU19990024977	19990428
AU199924978 A1	19990812	AU19990024978	19990428
AU199924979 A1	19990826	AU19990024979	19990428
AU199924981 A1	19990812	AU19990024981	19990428
AU199932346 A1	20001130	AU19990032346	19990531
AU199932346 A5	20001130	AU19990032346	19990531
AU2003200581 AA	20030501	AU20030200581	20030214
AU2003200581 BB	20060803	AU20030200581	20030214
AU2006203638 AA	20060914	AU20060203638	20060823
AU2006203638 BB	20090910	AU20060203638	20060823
AU2009245839 AA	20100107	AU20090245839	20091208
AU2009245840 AA	20100107	AU20090245840	20091208
AU2009245868 AA	20100107	AU20090245868	20091209
AU686824 B2	19980212	AU19950027192	19950726
AU697582 B2	19981008	AU19970048478	19971218
AU716421 B2	20000224	AU19990024979	19990428
AU716421 B3	20000224	AU19990024979	19990428
AU716422 B2	20000224	AU19990024977	19990428
AU716422 B3	20000224	AU19990024977	19990428
AU716547 B2	20000224	AU19990024981	19990428
AU716547 B3	20000224	AU19990024981	19990428
AU716548 B2	20000224	AU19990024978	19990428
AU716548 B3	20000224	AU19990024978	19990428
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CA2234681 C	20031223	CA19982234681	19980414	
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CA2442442 C	20070306	CA19982442442	19980414	
CA2442444 AA	19981015	CA19982442444	19980414	
CA2442444 C	20060124	CA19982442444	19980414	
CA2443301 AA	19981015	CA19982443301	19980414	
CA2443301 C	20090804	CA19982443301	19980414	
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US2001055990 AA	20011227	US20010878111	20010606	
US2002058546 AB	20020516	US20010878111	20010606	
US2003148807 AA	20030807	US20030366036	20030212	
US2003228904 AA	20031211	US20010827870	20010406	
US2004002378 AA	20040101	US20030443685	20030521	
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US2006172804 AA	20060803	US20060380895	20060428	
US2006183529 AA	20060817	US20060380879	20060428	
US2007032301 AA	20070208	US20060580667	20061012	
US5655961 A	19970812	US19940322172	19941012	
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US6162122 A	20001219	US19970998285	19971224	
US6254483 BA	20010703	US19980086964	19980529	
US6257981 BA	20010710	US19970922046	19970902	
US6319125 BA	20011120	US19970843411	19970415	
US6565434 BA	20030520	US19990425544	19991022	
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US6832958 C1	20110301	US20030443685	20030521	
US6910964 BB	20050628	US20030366036	20030212	
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US7798899 BB	20100921	US20010878111	20010606	
US8172682 BB	20120508	US20040932615	20040902	
US8172682 BB	20120508	US20040932615	20040901	
US8172682 BB	20120508	US20040932615	20040902	
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USRE38812 E	20051004	US20000574632	20000516	
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ZA9803158 A	19990803	ZA19980003158	19980415	
ZA9903643 A	19991129	ZA19990003643	19990528	

Probable Assignee: IGT

Assignee(s):(std): ACRES GAMING INC ; ACRES JOHN F ; GINSBURG ALEC ; IGT RENO NEV ; WIEBENSON DAVID

Assignee(s): ACRES GAMIN INC ; WELLS FARGO BANK MINNESOTA NATIONAL ASSOCIATION ; WELLS FARGO BUSINESS CREDIT INC ; WELLS FARGO BUSINESS CREDIT INC A MINNESOTA CORP ; IGT ; EXXONMOBIL RESEARCH AND ENGINEERING CO

Inventor(s):(std): ACRES JOHN ; ACRES JOHN F ; GINSBURG ALEC ; WIEBENSON DAVID ; WIENBENSON DAVID

Inventor(s): JOHN ACRES ; JOHN F ACRES ; ALEC GINSBURG ; DAVID WIEBENSON ; DAVID WIENBENSON

Agent(s): PHILLIPS ORMONDE FITZPATRICK; WRAYS; OYEN WIGGS GREEN AND MUTALA LLP; SMART AND BIGGAR; MARGER JOHNSON AND MCCOLLOM PC; STEVE B LEWIS; BEYER WEAVER AND THOMAS LLP; MERGER JOHNSON AND MCCOLLOM PC; WEAVER AUSTIN VILLENEUVE AND SAMPSON LLP

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LK LR LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TT UA UG US UZ VN

International class (IPC 8–9): A63F13/00 A63F13/12 A63F13/30 A63F13/45 A63F13/70 A63F5/04 A63F9/00 A63F9/24 G06F17/00 G06F19/00 G06K7/01 G07D9/00 G07F17/32 H04L12/16 H04L29/00 (Advanced/Invention);
A63F13/12 A63F5/04 A63F9/00 A63F9/24 G06F17/00 G06F19/00 G06K7/01 G07F17/32 H04L12/16 H04L29/00 (Core/Invention);
A63F G07F (Subclass/Invention)

International class (IPC 1–7): A63F A63F13/00 A63F5/04 A63F9/00 A63F9/22 A63F9/24 G06F161/00 G06F17/00 G06F17/60 G06F19/00 G06K7/01 G07D9/00 G07F G07F17/32 H04L12/16 H04L29/00

CPC: G07F17/32 G07F17/3227 G07F17/323 G07F17/3234 G07F17/3239 G07F17/3251 G07F17/3255 G07F17/3258

European class: G07F17/32 G07F17/32E2 G07F17/32E4 G07F17/32E6B G07F17/32E6D2 G07F17/32K10 G07F17/32K12 G07F17/32K6

US class: 194/351 235/382 463/16 463/16P 463/16S 463/17 463/19 463/20 463/20S 463/21 463/23 463/25 463/25P 463/26 463/26P 463/27 463/27P 463/28 463/29 463/42 463/42P 463/42S 463/43 463/47 902/23

Classification Explorer

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Abstract:
Source: US2001055990A Electronic gaming machines, such as slot machines or video poker machines are interconnected by a computer network. The behavior of each machine is controlled by configuring selected parameters such as game speed, payback percentage, or game appearance. As the machines are played, any of the selected parameters may be changed responsive to commands issued over the network. The commands are issued in response to predetermined changes in variables such as rate of play, player status, and the time of the day, week, or month. The payback percentage may be changed by implementing a new pay table at the selected machine or machines or by implementing a bonus period during which a percentage of all money played on the selected machines accrues in a bonus pool. During the bonus period, the selected machines are eligible for bonus

awards that may be random or related to jackpots paid based on the pay tables in the selected machines.

0) US5911298A – MULTI–COMPACT–SENSOR ADAPTED FOR MOUNTING AT AN...

72) Family number: 29553204 (US5911298A) © PatBase

Title: Multi–compact–sensor adapted for mounting at an ascending angle

Priority: DE19951018229 19950512 DE19961080320 19960510 DE19962004503U 19960229 DE19965001188 19960510 WO1996DE00874 19960510

Family:

Publication number	Publication date	Application number	Application date
AT176069 E	19990215	AT19960914089T	19960510
AU199657595 A1	19961129	AU19960057595	19960510
DE19518229 A1	19961114	DE19951018229	19950512
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WO9636019 A2	19961114	WO1996DE00874	19960510
WO9636019 A3	19961212	WO1996DE00874	19960510

Probable Assignee: WHD ELEKTRONISCHE PRUEFTECHNIK GMBH

Assignee(s):(std): LFP ELEKTRONISCHE SPEZIALSICHE ; PUTTKAMMER FRANK ; WHD ELEKTRON PRUEFTECH GMBH ; WHD ELEKTRONISCHE PRUFTECHNIK ; WOLF TORSTEN ; WHD ELEKTRONISCHE PRUFTECHNIK GMBH

Assignee(s): WHD ELEKTRONISCHE PRUEFTECHNIK GMBH 01129 DRESDEN DE ; WHD ELEKTRONISCHE PRUEFTECHNIK GMBH IND ; WHD ELEKTRONISCHE PRUEFTECHNIK GMBH ; WHD ELEKTRONISCHE PRUEFTECHNIK GMBH 01129 DRESDEN ; LFP ELEKTRONISCHE SPEZIALSICHERHEITSTECHNIK GMBH ; LFP ELEKTRONISCHE SPEZIALSICHERHEITSTECHNIK GMBH 0 ; LFP ELEKTRONISCHE SPEZIALSICHERHEITSTECHNIK GMBH 01129 DRESDEN DE

Inventor(s):(std): TORSTEN WOLF ; WOLF TORSTEN ; FRANK PUTTKAMMER ; PUTTKAMMER FRANK

Inventor(s): PUTTKAMMER FRANK 01640 COSWIG DE ; WOLF TORSTEN 01640 COSWIG DE ; WOLF TORSTEN D 01640 COSWIG DE ; PUTTKAMMER FRANK D 01640 COSWIG DE

Designated states: AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TJ TM TR TT UA UG US UZ VN

International class (IPC 8–9): G01D21/00 G07D11/00 G07D7/00 G07D7/02 G07D7/04 G07D7/06 G07D7/16 (Advanced/Invention); G01D21/00 (Advanced/Non–invention); G01D21/00 G07D11/00 G07D7/00 (Core/Invention)

International class (IPC 1–7): G01D21/00 G01V3/08 G07D7/00 G07F7/04

CPC: G07D7/00 G07D7/02 G07D7/04 G07D7/06 G07D7/16 G07D11/0036

European class: G07D11/00E G07D7/00 G07D7/02 G07D7/04 G07D7/06 G07D7/16

US class: 194/206

Classification Explorer

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Forward Citations: US2010072023,

Abstract:
Source: US5911298A PCT No. PCT/DE96/00874 Sec. 371 Date Mar. 2, 1998 Sec. 102(e) Date Mar. 2, 1998 PCT Filed May 10, 1996 PCT Pub. No. WO96/36019 PCT Pub. Date Nov. 14, 1996In accordance with the invention, a multi−compact−sensor is provided with a sensor support for receiving different and exchangeable sensors, brackets and supports for assembly into existing and/or new processing machines at a ascending angle, a board which contains the evaluation circuitry and elements for connection with the sensors as well as, depending on intended use and objects to be tested, an exchangeable cover. The combining of a plurality of individual components, the inventive exchangeability of different sensors, the versatility of the possibilities of use and the handling of the sensors and evaluation electronics into a component of compact structure justify calling the inventive device a multi−compact−sensor.

0) US2002102963A – METHOD FOR USING APPLICATIONS IN A MOBILE STATI...

73) Family number: 30284669 (US2002102963A) © PatBase

Title: METHOD FOR USING APPLICATIONS IN A MOBILE STATION, A MOBILE STATION, AND A SYSTEM FOR EFFECTING PAYMENTS

Priority:

AU19960046247	19960209	AU19980078656	19980803	AU19980078657	19980803
US19980074864	19980508	US19960597845	19960207	EP19960901820	19960209
JP19960524688	19960209	JP19960524688T	19960209	FI19950000685	19950215
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Family:

Publication number	Publication date	Application number	Application date
AU199646247 A1	19960904	AU19960046247	19960209
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WO0211074 A3	20031106	WO2001US23611	20010727	
WO9625828 A1	19960822	WO1996FI00077	19960209	

Probable Assignee: NOKIA TECHNOLOGIES OY

Assignee(s):(std)**:** HEINONEN PETRI ; MARTTILA MATTI ; MARTTILA MATTI J ; NOKIA CORP ; NOKIA MOBILE PHONES LTD ; TERHO MIKKO ; RAUTIOLA MARKKU ; PENNINGTON MICHAEL C ; ZALEWSKI THOMAS W ; SHAW STEVEN A ; ROBERTS RANDY C

Assignee(s): NOKIA TECHNOLOGIES OY ; ESTEP RAYMOND J ; POND RUSSELL L ; ROBERTS RANDALL C ; NOKIA MOBILE PHONES LIMITED

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Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; READ MATTHEW CHARLES; JOHANSSON FOLKE ANDERS; TSURUTA JUNICHI; NISHIYAMA MASAYA; HIGUCHI SOTOJI; ISHIDA TAKASHI; AOKI ATSUSHI; STEVEN A SHAW NOKIA INC; PERMAN AND GREEN; PERMAN AND GREEN LLP; STEVEN A; ALSTON AND BIRD LLP; DITTHAVONG MORI AND STEINER PC; BANNER AND WITCOFF LTD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B67D7/14 G06E1/00 G06K17/00 G06K19/07 G06Q10/02 G06Q20/00 G06Q20/04 G06Q20/06 G06Q20/12 G06Q20/20 G06Q20/26 G06Q20/32 G06Q20/34 G06Q20/36 G06Q20/42 G06Q40/00 G07B15/02 G07D9/00 G07F17/24 G07F7/08 G07F7/10 G07F7/12 G07G1/12 H04B1/38 H04B7/26 H04M1/00 H04M1/725 H04M11/00 H04M15/00 H04M17/00 H04M17/02 H04M3/42 H04Q7/32 H04Q7/38 H04W24/00 H04W4/24 H04W88/02 (Advanced/Invention);
G06K17/00 G06K19/07 G06Q10/00 G06Q30/00 G07C9/00 H04M1/725 H04M15/00 H04W88/02 H04W92/18 (Advanced/Non–invention);
G07F7/08 G07F7/10 G07F7/12 H04M17/00 H04M3/42 H04Q7/32 (Core/Invention)

International class (IPC 1–7): G06F17/60 G06F19/00 G06F7/04 G06K17/00 G06K19/07 G06K5/00 G07B15/02 G07C7/00 G07D9/00 G07F19/00 G07F7/08 G07F7/10 G07F7/12 H04B1/38 H04M1/00 H04M11/00 H04M17/00 H04M3/42 H04Q7/20 H04Q7/22 H04Q7/24 H04Q7/32 H04Q7/38

CPC: G07G1/12 G06Q20/3226 G06Q20/3227 G06Q20/3229 G06Q20/341 G06Q20/3552 G06Q20/3576 G07F7/1008 H04M1/7253 H04M2250/14 G06Q10/02 G06Q20/3223 G06Q20/3278 G06Q20/349 G06Q20/425 B67D7/145 G06Q50/12 G07B15/02 G07C9/00904 G07C9/00944 H04M1/72575 H04M17/026 H04M2250/02 G06Q20/04 G06Q20/06 G06Q20/12 G06Q20/20 G06Q20/26 G06Q20/32 G06Q20/322 G06Q20/3255 G06Q20/327 G06Q20/363 G07F7/0866 G07F17/24 H04M1/72522 H04M15/00

H04M15/68 H04M17/00 H04M2215/0196 H04M2215/2026 H04M2215/32 H04W4/24 H04W88/02

European class: B67D7/14B G06Q10/02 G06Q20/04 G06Q20/06 G06Q20/12 G06Q20/20 G06Q20/26 G06Q20/32 G06Q20/322 G06Q20/3223 G06Q20/3226 G06Q20/3227 G06Q20/3229 G06Q20/3255 G06Q20/327 G06Q20/3278 G06Q20/341 G06Q20/349 G06Q20/3552 G06Q20/3576 G06Q20/363 G06Q20/425 G06Q50/12 G07B15/02 G07F17/24 G07F7/08C G07F7/10D G07G1/12 H04M1/725F1 H04M1/725F2H H04M15/00 H04M15/68 H04M17/00 H04M17/02C H04W4/24 H04W88/02 S07C9/00E20B S07C9/00E22 T04M1/725F1 T04M1/725F1B1 T04M15/00 T04M215/01V T04M215/20D T04M215/32 T04M250/02 T04M250/14 T04W88/02

US class: 235/380 340/10.51 340/5.61 340/5.92 340/572.1 342/31 455/403 455/405 455/406 455/407 455/408 455/41.2 455/414.1 455/426.1 455/550.1 455/552.1 455/556 455/556.1 455/557 455/558 455/575.1 455/90.3 705/15 705/16 705/5

Classification Explorer

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Abstract:
Source: US2002102963A The invention relates to a method for using an application (18) in a mobile station (1). The application has a first mode of operation and a second mode of operation, whereby the first mode of operation is passive, and in the second mode of operation the application controls the master control unit (MCU) of the mobile station. The invention also relates to a system for making payments, comprising at least one mobile station (1), which has an application (18), means for using the application (18), and the first means of data transfer (IR, 20, RF) for local data transfer. The system also comprises at least one cash register (21) or the like, which has the second means for data transfer (IR2), and the application (18) comprises means for transferring data between the first means for data transfer (IR) and the second means for data transfer (IR2).

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Title: SYSTEM AND METHOD FOR ELECTRONIC TRANSFER OF FUNDS USING AN AUTOMATED TELLER MACHINE TO DISPENSE THE TRANSFERRED FUNDS

Priority: RU19970115716 19960212 US19950392423 19950222 WO1996US01979 19960212

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Agent(s): FB RICE; FB RICE PTY LTD; KIRBY EADES GALE BAKER

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Abstract:
Source: US5650604A A system and method for fully automated electronic transfer of cash or cash equivalent between a sender and a recipient is shown, including an initiating terminal for receiving a designation of an amount of money to be electronically transferred, an account from which it is to be transferred, and a security code from the sender, a central terminal for storing the amount and the security code in a file in the central terminal, and a dispensing terminal for receiving from the recipient an entry corresponding to the designated amount of money to be transferred and the security code, for providing the entered amount of money and security code to the central terminal for comparison with the information stored in the central terminal's file, and for dispensing to the recipient funds equivalent to the designated amount of money without requiring the recipient to

have a card to activate the dispensing terminal.

0) DE19511679A1 – OPERATING METHOD FOR TIME CONTROLLED EQUIPMENT ...

75) Family number: 12188669 (DE19511679A1) © PatBase

Title: Operating method for time controlled equipment

Priority: DE19951011679 19950330

Family:

Publication number	Publication date	Application number	Application date
DE19511679 A1	19961002	DE19951011679	19950330
DE19511679 C2	20000803	DE19951011679	19950330

Probable Assignee: NAT REJECTORS GMBH

Assignee(s):(std)**:** NAT REJECTORS GMBH

Assignee(s): NATIONAL REJECTORS INC GMBH ; NATIONAL REJECTORS INC GMBH 21614 BUXTEHUDE DE

Inventor(s):(std)**:** HEUER BURKHARD ; NIZNIK THOMAS

Inventor(s): NIZNIK THOMAS 22589 HAMBURG DE ; HEUER BURKHARD 21709 HIMMELPFORTEN DE

International class (IPC 8–9): G07F15/12 G07F7/00 (Advanced/Invention); G07F15/00 G07F7/00 (Core/Invention)

International class (IPC 1–7): G07D5/00 G07F17/00 G07F3/02 G07F7/08

CPC: G06Q20/127 G07F15/12 G07F17/0014

European class: G06Q20/127 G07F15/12 G07F17/00C G07F7/00C

Classification Explorer

Cited documents: DE4305421 A1, DE4111417 C2, DE3146725 C2,

Forward Citations: WO0069388, WO0069388,

Abstract:
Source: DE19511679A1 The price per unit time of credit which is stored in an intermediate memory and which corresponds to the amount of money inserted into the equipment is converted into sections of time. The corresponding time credit is then stored in an intermediate memory. The time credit is decremented and monitored during the course of the function time interval. After a stop in the function time interval the remaining time credit is reconverted back to monetary credit for the repayment of coins or crediting chip cards.

0) US2002085745A – AUTOMATED DOCUMENT PROCESSING SYSTEM USING FULL...

76) Family number: 32098450 (US2002085745A) © PatBase

Title: AUTOMATED DOCUMENT PROCESSING SYSTEM USING FULL IMAGE SCANNING

Priority:

EP19980915542	19980413	US19950433920	19950502	US19960031604P	19961127
US19960664262	19960513	US19970814978	19970311	US20020037021	20020104
US19980059813	19980414	US19970043516P	19970414	US19970053606P	19970722
US20020040716	20020107	US20020042675	20020109	US20020041156	20020108
US20020042069	20020108	US20020042086	20020108	US20020073646	20020211
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US20020037339	20020104	US20020042404	20020109	US20020073440	20020211
US20050048416	20050201	WO1998US07443	19980413	WO1998US07443	19980413
US20050082573	20050316	US20030393867	20030320	WO1997US08000	19970509
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Family:

Publication number	Publication date	Application number	Application date
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US6654486 BB	20031125	US20020055322	20020123	
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WO9847100 A1	19981022	WO1998US07443	19980413	

Probable Assignee: CUMMINS ALLISON CORP

Assignee(s):(std)**:** JONES JOHN E ; JONES PAUL A ; JONES WILLIAM J ; MENNIE DOUGLAS U ; MUNRO MARK C ; CUMMINS ALLISON CORP

Assignee(s): CUMMINS ALLISON CORP891 FEEHANVILLE DRIVEMOUNT PROSPECTIL60056US ; GAFRON RONALD M ; CUMMINGS ALLISON CORP

Inventor(s):(std)**:** DOUGLAS U MENNIE ; GAFRON RONALD M ; JOHN E JONES ; JONES JOHN E ; JONES PAUL A ; JONES WILLIAM J ; MARK C MUNRO ; MUNRO MARK C ; PAUL A JONES ; RONALD M GAFRON ; WILLIAM J JONES ; MENNIE DOUGLAS U

Inventor(s): MENNIE DOUGLAS UUS ; MENNIE DOUGLAS ; JONES WILLIAM JUS ; JONES PAUL AUS ; JONES WILLIAM ; JONES JOHN EUS ; JONES PAUL ; JONES JOHN ; GAFRON RONALD

Agent(s): MARKS AND CLERK; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET; CUMMINS ALLISON CORP C O JENKENS AND GILCHRIST; JENKENS AND GILCHRIST A PROFESSIONAL CORP; JENKENS AND GILCHRIST PC; NIXON PEABODY LLP

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU

SD SE SG SI SK SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW

International class (IPC 8–9): G06K9/00 G06K9/72 G06K9/74 G06K9/78 G06Q20/00 G06Q20/04 G06Q20/10 G06Q20/18 G06Q40/02 G06T1/00 G07D11/00 G07D13/00 G07D3/14 G07D7/00 G07D7/06 G07D7/12 G07D7/20 G07F19/00 H04N1/04 (Advanced/Invention); G07D11/00 (Advanced/Non–invention); G06Q20/00 G07D11/00 G07D13/00 G07D3/00 G07D7/00 G07F19/00 (Core/Invention)

International class (IPC 1–7): B07C5/00 G06F17/60 G06K9/00 G06K9/78 G06T1/00 G07D11/00 G07D7/00 G07D7/06 G07D7/12 G07D7/20 G07F19/00 G07F7/04 G07F7/10 H04N1/00 H04N1/04

CPC: G06K9/186 G07D11/0003 G06T1/0007 G07D11/009 G07D3/14 G07D11/0066 G06K9/00979 G06K9/00993 G07D7/12 G06K9/033 G06K9/726 G06K2209/01 G06Q10/10 G06Q20/042 G06Q20/0425 G06Q20/10 G06Q20/105 G06Q20/108 G06Q20/1085 G06Q20/18 G06Q20/20 G06Q40/00 G06Q40/02 G06T1/00 G07D7/04 G07D7/06 G07D7/20 G07D11/0084 G07F7/04 G07F19/20 G07F19/202 G07F19/207 G07D7/1205

European class: G06K9/00Y1 G06K9/00Z G06K9/03A G06K9/18M G06K9/72S G06Q10/10 G06Q20/042 G06Q20/0425 G06Q20/10 G06Q20/105 G06Q20/108 G06Q20/1085 G06Q20/18 G06Q20/20 G06Q40/00 G06Q40/02 G06T1/00 G06T1/00A G07D11/00D G07D11/00F6 G07D11/00K G07D11/00M G07D3/14 G07D7/04 G07D7/06 G07D7/12 G07D7/12C G07D7/20 G07F19/00F G07F19/20 G07F19/202 G07F19/207 G07F7/04

US class: 194/206 209/534 235/379 356/71 382/100P 382/135 382/135P 382/136 382/137 382/137P 382/137S 382/138 382/139 382/139P 382/139S 382/140 382/282 382/311 382/318 705/39 705/42 705/43 705/45 705/45P 902/8

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Abstract:
Source: US2002085745A A document processing system comprises an input receptacle for receiving documents. A transport mechanism receives the documents from the input receptacle and transports the documents past a full image scanner and a discrimination unit. An output receptacle receives the documents from the transport mechanism after being transported past the full image scanner and the discrimination unit. The full image scanner includes means for obtaining a full video image of said documents, means for obtaining a image of a selected area of said documents, and means for obtaining information contained in said selected area of said document. The discrimination unit includes means for determining the authenticity of said document. A system controller directs the flows of documents over the transport mechanism.

0) US5815252A – BIOMETRIC IDENTIFICATION PROCESS AND SYSTEM UTI...

77) Family number: 9520548 (US5815252A) © PatBase

Title: Biometric identification process and system utilizing multiple parameter scans for reduction of false negatives

Priority: CA19962184540 19960830 US19950523328 19950905 US19950561323 19951121

Family:

Publication number	Publication date	Application number	Application date
CA2184540 AA	19970306	CA19962184540	19960830
CA2184540 C	20000718	CA19962184540	19960830
CN1164712 A	19971112	CN19961011258	19960830
EP0762340 A2	19970312	EP19960306267	19960829
EP0762340 A3	19980128	EP19960306267	19960829
JP9167231 A2	19970624	JP19960234574	19960905
US5815252 A	19980929	US19950561323	19951121

Probable Assignee: CANON KK

Assignee(s):(std): CANON KK ; CANON USA INC

Assignee(s): PRICE FRANCIS STEPHEN ; CANON INC ; CANON K K ; CANON KABUSHIKI KAISHA ; CANON USA ; CANON USA ONE CANON PLAZALAKE SUCCESS NEW YORK ; CANON U S A INC ; CANON U S A

Inventor(s):(std): PRICE FRANCIS STEPHEN

Inventor(s): STEPHEN PRICE FRANCIS ; SUTEFUAN PURAISU FURANSHISU

Agent(s): RIDOUT AND MAYBEE LLP

Designated states: DE FR GB IT NL

International class (IPC 8–9): A61B5/117 G06K9/00 G06T7/00 G07C9/00 (Advanced/Invention)

International class (IPC 1–7): A61B5/117 G06K9/00 G06K9/74 G06T7/00 G07C9/00 G07D7/00

CPC: G06K9/00006 G07C9/00087

European class: G06K9/00A G07C9/00B6D4

US class: 235/492 340/5.83 340/5.86 356/71 382/115 382/116 382/124

Classification Explorer

Cited documents: WO9502225 A1, US5581630 A, US5363453 A, US5337043 A, US5245329 A, US5239166 A, US5180901 A, US5144680 A, US5095194 A, US5054089 A, US4993068 A, US4983036 A, US4975969 A, US4876725 A, US4805223 A, US4582985 A, US4210899 A, US4202120 A, US4151512 A, FR2634570 A1, FR2585153 A1, EP0504616 A1, EP0010611 A1,

Forward Citations: WO9956250, WO11059496, WO04051457, WO03103211, WO03103211, WO03049043, WO02080088, WO0139133, WO0122353, WO0068898, WO0048124, WO0048123, WO0048122, WO0038118, USRE45416, USRE43157, USD677229, USD677228, USD660811, USD641749, USD638015, USD638014, USD599347, USD542291, USD466119, USD443614, US9684897, US9607189, US9594968, US9519894, US9454752, US9438633, US9430951, US9419951, US9398013, US9378648, US9336634, US9280907, US9280695, US9141951, US9042607, US9031880, US9024719, US9009798, US8938402, US8924310, US8918900, US8905302, US8904187, US8904181, US8776198, US8707388, US8706634, US8678273, US8600830, US8577697, US8548927, US8499165, US8499164, US8489513, US8485442, US8462994, US8444053, US8433658, US8429416, US8423476, US8360322, US8345316, US8311475, US8307207, US8294552, US8289136, US8284025, US8279042, US8264325, US8214299, US8209462, US8190901, US8160988, US8156562, US8145915, US8132226, US8099040, US8074889, US8073209, US8066182, US8064646, US8018635, US8016191, US8014570, US8005777, US8001054, US7988038, US7970722, US7921297, US7889052, US7886157, US7869635, US7814332, US7809951, US7793845, US7793109,

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Abstract:
Source: US5815252A A system for verifying that a card possessor is the authorized card owner compares scanned fingerprint data with fingerprint data encoded on an optical card. More than one of the person's fingerprints are encoded on the card, and the process of identification of the card possessor involves the random selection of separate fingerprints for scanning and comparison against the encoded fingerprints. A card reader/writer reads fingerprint characteristic information from an optical card inserted therein and a processing unit, connected to a fingerprint scanner and card reader/writer extracts from the scanned fingerprint certain well known indicators, and matches the recorded fingerprint characteristic data with the scanned fingerprint characteristics to establish identity therebetween.

0) US2002151352A – APPARATUS AND METHOD FOR DATA GATHERING IN GAME...

78) Family number: 30492994 (US2002151352A) © PatBase

Title: APPARATUS AND METHOD FOR DATA GATHERING IN GAMES OF CHANCE

Priority: AT19950001529 19950914 AT19950001820 19951103 AU19960068220 19960816 US19990281830 19990330 US19950573618 19951215 US19960631351 19960412 WO1996EP03612 19960816 AU19990044726 19990825

Family:

Publication number	Publication date	Application number	Application date
AT152995 A	19990615	AT19950001529	19950914
AT182095 A	20010815	AT19950001820	19951103
AT241183 E	20030615	AT19960928470T	19960816
AT406097 B	20000225	AT19950001529	19950914
AT408841 B	20020325	AT19950001820	19951103
AU199668220 A1	19970401	AU19960068220	19960816
AU199944726 A1	19991028	AU19990044726	19990825
AU711566 B2	19991014	AU19960068220	19960816
AU732402 B2	20010426	AU19990044726	19990825
CA2230534 AA	19980226	CA19962230534	19960816
CA2230534 C	20041019	CA19962230534	19960816
DE69628317 D1	20030626	DE19966028317	19960816
EP0852778 A1	19980715	EP19960928470	19960816
EP0852778 B1	20030521	EP19960928470	19960816
US2002151352 AA	20021017	US19990281830	19990330
US5755618 A	19980526	US19960631351	19960412
US5919090 A	19990706	US19950573618	19951215
US6629889 BB	20031007	US19990281830	19990330
WO9710577 A1	19970320	WO1996EP03612	19960816
ZA9607734 A	19970326	ZA19960007734	19960913

Probable Assignee: GTECH AUSTRIA GMBH

Assignee(s):(std): GRIPS ELECTRONIC GES M B H ; GRIPS ELECTRONIC GES MBH ; GRIPS ELECTRONICS GES MBH ; GRIPS ELECTRONIC GMBH ; MOTHWURF EWALD

Assignee(s): GRIPS ELECTRONICS GESMBH ; GRIPS ELECTRONICS GMBH ; SPIELO INT AUSTRIA GMBH ; GTECH AUSTRIA GMBH ; GTECH GERMANY GMBH ; GRIPS ELECTRONIC GESELLSCHAFT M B H ; GRIPS ELECTRONIC GESMBH ; GRIPS ELECTRONIC GES M B H GRAZ ; ATRONIC AUSTRIA GMBH ; ATRONIC SYSTEMS GMBH

Inventor(s):(std): EWALD MOTHWURF ; MOTHWURF EWALD

Agent(s): GRIFFITH HACK; SMART AND BIGGAR

Designated states: AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GR HU IE IL IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN

International class (IPC 8–9): A63F9/00 G06F19/00 G06M9/00 G07D9/00 G07D9/06 G07F17/32 G07F9/06 (Advanced/Invention); G06F G06M9/00 G07D9/00 G07D9/06 G07F9/06 (Core/Invention); G06F (Subclass/Invention)

International class (IPC 1–7): A63F9/00 A63F9/24 G06F G06F17/00 G06F19/00 G06M9/00 G07D9/00 G07D9/06 G07F17/32 G07F9/06

CPC: G07D9/06 G07F17/32

European class: G07D9/06 G07F17/32

US class: 273/309 453/17 453/58 463/11 463/12 463/25 463/25P

Classification Explorer

Cited documents: US5770533 A, US5651548 A, US5613912 A, US5605334 A, US5586936 A, US5393067 A, US5078405 A, US4774841 A, US4755941 A, US4614342 A, US4531187 A, US3605970 A, SU1140137 U, GB2269256 A1, EP0607823 A1, EP0416751 A2, EP0310761 A1, DE4439502 C1, DE4328792 C1, DE3939450 A1, DE3515890 A1, DE3436827, DE3436287 A1, DE3403018 A1, DE3137484 A1, DE3128094 A1, DE2651105 A1, CH573635,

Forward Citations: WO9946019, WO9941719, WO0062880, USRE45562, USRE44616, USRE42944, USD764599, USD705364, USD692068, USD692067, USD692066, USD688241, USD687829, USD687435, USD686208, USD680537, USD638480, USD633954, USD633953, USD633952, USD633951, USD633575, USD633574, USD633573, USD627006, US9687727, US9679603, US9659461, US9652934, US9633523, US9633508, US9623317, US9619964, US9616324, US9613487, US9600965, US9589407, US9582963, US9566501, US9564004, US9561426, US9539495, US9539494, US9536388, US9536379, US9536367, US9514610, US9511275, US9511274, US9504905, US9478099, US9474957, US9452349, US9452346, US9443377, US9424713, US9406194, US9387390, US9384616, US9378766, US9378622, US9370710, US9345952, US9345951, US9339723, US9333415, US9330516, US9320964, US9289677, US9266012, US9266011, US9259640, US9245416, US9233298, US9220972, US9220971, US9202171, US9196121, US9194688, US9174114, US9165420, US9162138, US9126103, US9123203, US9098975, US9092944, US9064375, US9058716, US8998692, US8998211, US8979630, US8961298, US8944904, US8931779, US8920236, US8919775, US8896444, US8870647, US8844931, US8784213, US8777710, US8757349, US8734245, US8721449, US8720891, US8702101, US8696444, US8678164, US8662500, US8651485, US8647191, US8636285, US8616552, US8613655, US8606002, US8597115, US8590896, US8579292, US8579289, US8567784, US8562424, US8556263, US8550464, US8544848, US8538155, US8512144, US8511684, US8500537, US8490973, US8485907, US8480484, US8475252, US8449370, US8423790, US8419521, US8408551, US8393942, US8388430, US8382584, US8382582, US8366542, US8366109, US8353513, US8342932, US8342533, US8342525, US8337296, US8336699, US8328641, US8298052, US8297513, US8292745, US8285034, US8277326, US8272958, US8272945, US8262090, US8210536, US8205884, US8192283, US8192277, US8191894, US8170323, US8167705, US8157643, US8152643, US8150158, US8150157, US8147318, US8142271, US8141875, US8130097, US8118305, US8104688, US8100753, US8092293, US8070574, US8052519, US8038153, US8029357, US8016663, US8016659, US8006847, US7992720, US7976023, US7967682, US7967294, US7950663, US7946586, US7938722, US7934980, US7933448, US7933444, US7922589, US7905784, US7904063, US7878896, US7878892, US7861868, US7845642, US7837549, US7822641, US7806763, US7794324, US7780512, US7775887, US7771272, US7771271, US7770893, US7769232, US7766332, US7764836, US7758411, US7753798, US7753781, US7753779, US7736236, US7719424, US7704144, US7699695, US7699694, US7699689, US7690996, US7686681, US7681708, US7661676, US7618321, US7607981, US7593544, US7575234, US7559839, US7556561, US7556266, US7549920, US7537216, US7524244, US7523937, US7510194, US7510186, US7491125, US7476153, US7448626, US7434805, US7427234, US7407438, US7404765, US7390256, US7367563, US7335100, US7316615, US7309065, US7267614, US7264241, US7255642, US7255351, US7222852, US7213812, US7195113, US7124947, US7124947, US7114718, US7048629, US7011309, US6991544, US6964612, US6905409, US6857961, US6848994, US6798990, US6758751, US6733388, US6722974, US6712696, US6688979, US6685568, US6676517, US6663490, US6652379, US6651985, US6638161, US6626750, US6626749, US6595857, US6579181, US6579180, US6568682, US6533662, US6533276, US6530837, US6530836, US6527271, US6520857, US6517436, US6517435, US6514140, US6460848, US6446864, US6425817, US6290049, US6270404, US6270404, US6267671, US6165069, US6126166, US6062370, US6050385, US5947257, US5839457, US2016093165, US2013292901, US2013271158, US2013099448, US2012080842, US2011227283, US2011207390, US2011198805, US2011105002, US2011052049, US2011018195, US2011006480, US2011001290, US2010304841, US2010285869, US2010279761, US2010230233, US2010222148, US2010213667, US2010178989, US2010130282, US2010121808, US2010120536, US2010090404, US2010041469, US2010019449, US2010013152, US2009309303, US2009289417, US2009275407, US2009273141, US2009267297, US2009253503, US2009224476, US2009140492, US2009124359, US2009121883, US2009093293, US2009091078, US2009082079, US2009017888, US2008300034, US2008268939, US2008268933, US2008234052, US2008214310, US2008180250, US2008165652, US2008146307, US2008113700, US2008108404, US2008076536, US2008076529, US2008053876, US2008045333, US2008006997, US2007293309, US2007238502,

US2007232391, US2007222147, US2007210515, US2007209975, US2007155462, US2007142113, US2007099553, US2007087843, US2007077997, US2007077977, US2007069462, US2007066399, US2007066388, US2007060313, US2007060311, US2007057469, US2007049369, US2007021171, US2007018389, US2007015561, US2006287078, US2006281537, US2006281520, US2006279040, US2006276245, US2006258442, US2006217186, US2006205472, US2006202422, US2006199649, US2006183540, US2006178182, US2006128472, US2006128462, US2006121984, US2006089188, US2006084506, US2006084502, US2006068878, US2006063586, US2006063577, US2006030404, US2006027970, US2006019739, US2006009275, US2005288086, US2005288085, US2005288084, US2005288083, US2005282622, US2005280212, US2005258597, US2005164781, US2005164762, US2005164759, US2005151927, US2005121852, US2005113166, US2005107024, US2005090310, US2005082750, US2005062227, US2005062226, US2005059479, US2005051955, US2005035548, US2005026682, US2005012270, US2004251630, US2004226802, US2004224777, US2004219975, US2004207156, US2004204246, US2004162135, US2004159590, US2004147327, US2004106449, US2004087362, US2004082372, US2004079615, US2004045787, US2004033832, US2004005920, US2003220136, US2003195025, US2003176209, US2003174864, US2003171143, US2003162590, US2003087694, US2003064798, US2003051970, US2003027632, US2002149810, US2002123376, GB2382034, EP2518705, EP1767255, EP1502632, BE1013283, AU2003266570, AU2003231629,

Abstract:
Source: US2002151352A A method and apparatus for determining the win or loss of individual participants in a game of chance, such as for example Black Jack, Poker or the like, wherein the bet and the winnings are represented by chips. A central chip depository (102) is provided for receiving the game inventory and the latter has means for determining its momentary content. At least one chip deposit area (110, 111) is provided per participant and has in each case at least one sensor (701) for the detection of chips lying on the deposit area (110, 111). The means for determining the momentary chip content and also the sensors (701) have their outputs connected to the inputs of a data processing system (104).

0) US5917421A – METHOD OF AUTHENTICATING AN APPLICATION PROGRAM...

79) Family number: 10821984 (US5917421A) © PatBase

Title: METHOD OF AUTHENTICATING AN APPLICATION PROGRAM AND A SYSTEM THEREFOR

Priority: GB19950023922 19951123

Family:

Publication number	Publication date	Application number	Application date
DE69634326 D1	20050317	DE19966034326	19961120
DE69634326 T2	20060126	DE19966034326T	19961120
EP0775992 A2	19970528	EP19960308389	19961120
EP0775992 A3	20000301	EP19960308389	19961120
EP0775992 B1	20050209	EP19960308389	19961120
ES2237761 T3	20050801	ES19960308389T	19961120
GB9523922 A0	19960124	GB19950023922	19951123
JP9218908 A2	19970819	JP19960310245	19961121
US5917421 A	19990629	US19960614791	19960306
US6202924 BA	20010320	US19990276979	19990326
ZA9609776 A	19970617	ZA19960009776	19961121

Probable Assignee: AT AND T GLOBAL INF SOLUTION

Assignee(s):(std)**:** AT AND T GLOBAL INF SOLUTION ; NCR CORP ; NCR INT INC

Assignee(s): AT AND T GLOBAL INFORMATION SOLUTIONS INT INC ; AT AND T GLOBAL INFORMATION SOLUTIONS INTERNATIONA ; JPMORGAN CHASE BANK NA ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; N C R INTERNATL INC

Inventor(s):(std)**:** KEISU EI SAUNDAAZU ; SAUNDERS KEITH A

Inventor(s): KEITH A SAUNDERS

Designated states: DE ES FR GB IT

International class (IPC 8–9)**:** G06F1/00 G06F12/14 G06F21/22 G06Q10/00 G06Q20/38 G06Q40/00 G07D9/00 G07F19/00 G07F7/10 (Advanced/Invention); G06F1/00 G06F12/14 G06F21/22 G06Q10/00 G06Q40/00 G07D9/00 G07F19/00 G07F7/10 (Core/Invention)

International class (IPC 1–7)**:** G06F1/00 G06F12/14 G06F15/00 G06F17/60 G06F19/00 G06F9/06 G06K G07D9/00 G07F G07F19/00 G07F7/10

CPC: G07F19/20 G06Q20/382 G07F19/201 G07F19/207

European class: G06Q20/382 G07F19/00F G07F19/20 G07F19/201 G07F19/207

US class: 235/375 235/379 235/380 235/382 235/382.5 340/5.41 340/5.74 340/5.8 340/825.31 340/825.34 380/23 380/25 380/30 380/4 705/64 713/187 902/14

Classification Explorer

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Forward Citations: WO11101249, WO11101249, USRE40576, US9460426, US9117096, US8899476, US8708231, US8701193, US8655844, US8632007, US8600890, US8600889, US8600888, US8600887, US8583522, US8571952, US8560451, US8554677, US8543507, US8499346, US8474038, US8132715, US8132714, US8100323, US8052048, US8052047, US8010947, US7860239, US7849326, US7793830, US7711951, US7699220, US7647639, US7526811, US7523856, US7493286, US7272570, US6986057, US6735696, US6543684, US6202924, US6042007, US2016048688, US2015248674, US2013062406, US2011154481, US2008067237, US2008067235, US2008065545, US2008065544, US2008065543, US2008065542, US2008065541, US2008065539, US2008065538, US2008065537, US2008065536, US2008061131, US2008061130, US2008061129, US2006136745, US2006021061, US2006016884, US2006004737, US2005154898, US2005154875, EP2541455,

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Abstract:
Source: US5917421A An unattended system, such as a self−service terminal or an automated teller machine, includes a memory unit which stores a number of application programs, and a register unit which stores a number of signatures associated with the application programs. The system further includes a processing unit which obtains a signature associated with a particular application program, compares the signature with the signatures stored in the register unit, and authenticates the application program only when the signature matches at least one of the signatures stored in the register unit.

0) US6039246A – NOTES ACCEPTING APPARATUS

80) Family number: 12139318 (US6039246A) © PatBase

Title: Notes accepting apparatus

Priority: JP19950320242 19951208 WO1996JP03589 19961206

Family:

Publication number	Publication date	Application number	Application date
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Assignee(s): FUJITSU LIMITED

Inventor(s):(std)**:** MASANORI MUKAI ; MUKAI MASANORI

Designated states: AT BE CH CN DE DK ES FI FR GB GR IE IT JP KR LU MC NL PT SE US

International class (IPC 8–9): G07D7/00 (Advanced/Invention)

International class (IPC 1–7): G06F17/60 G07D7/00

CPC: G07D7/00 G07D11/0066

European class: G07D11/00F6 G07D7/00

US class: 235/379

Classification Explorer

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Abstract:
Source: US6039246A PCT No. PCT/JP96/03589 Sec. 371 Date Aug. 5, 1997 Sec. 102(e) Date Aug. 5, 1997 PCT Filed Dec. 6, 1996 PCT Pub. No. WO97/22090 PCT Pub. Date Jun. 19, 1997Disclosed is a notes accepting apparatus capable of immediately notifying a management person of a forged notes being used. The notes accepting apparatus is constructed such that the notes inserted as those that should be accepted, are classified into first type notes having a high probability of being accepted, second notes having a high probability of being forged notes, and third notes having smaller probability of being accepted than the first type notes and a smaller probability of being the forged notes than the second type notes, and information purporting that the forge notes are inserted is outputted when a predetermined number of the second type notes are contained in the notes inserted.

0) US2002056605A – METHOD AND APPARATUS FOR DOCUMENT PROCESSING

81) Family number: 33173060 (US2002056605A) © PatBase

Title: METHOD AND APPARATUS FOR DOCUMENT PROCESSING

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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US2003121753 AA	20030703	US20020242573	20020912
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Probable Assignee: CUMMINS ALLISON CORP

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Agent(s): MARKS AND CLERK; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET; CUMMINS ALLISON CORP C O JENKENS AND GILCHRIST; JENKENS AND GILCHRIST; JENKINS AND GILCHRIST; NIXON PEABODY LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B07C1/00 B07C5/00 B65H29/20 B65H29/60 B65H3/06 C12Q1/25 C12Q1/37 G01N33/573 G06K7/00 G06K9/00 G06M7/06 G06Q20/00 G06Q20/18 G07D11/00 G07D7/00 G07D7/04 G07D7/12 G07D7/16 G07D7/20 G07F19/00 G07F7/04 (Advanced/Invention); B07C5/00 B65H3/06 C12Q1/25 C12Q1/37 G01N33/573 G06K7/00 G06K9/00 G06M7/00 G06Q20/00 G07D11/00 G07D7/00 G07F19/00 G07F7/00 (Core/Invention)

International class (IPC 1–7): B07C5/00 B65H29/20 B65H29/60 G06K7/00 G06K9/00 G06M3/00 G07D5/00 G07D7/00 G07D7/02 G07D7/20 G07F7/04

CPC: G06M7/06 G07D11/0036 G06K9/2018 G06K9/3216 B65H29/40 B65H29/46 B65H29/58 B65H31/10 B65H31/24 B65H33/08 B65H2301/33212 B65H2301/33224 B65H2301/42146

B65H2405/332 G07D7/003 G07D7/206 G07D7/1205 G07F19/202 C12Q1/25 C12Q1/37 G01N33/573 G01N2500/00 G07D11/00 G07D11/0054 G07D11/0003 G07D7/128 B65H3/063 B65H3/0638 B65H2301/541 B65H2511/212 B65H2553/51 B65H2557/514 B65H2701/1912 G06Q20/18 G07D7/00 G07D7/04 G07D7/12 G07D7/16 G07D7/162 G07D7/20 G07D11/0084 G07F7/04 G07F19/20

European class: B65H3/06F B65H3/06G C12Q1/25 C12Q1/37 G01N33/573 G06M7/06 G06Q20/18 G07D11/00 G07D11/00D G07D11/00E G07D11/00F2 G07D11/00K G07D7/00 G07D7/00V G07D7/04 G07D7/12 G07D7/12C G07D7/12P G07D7/12V G07D7/16 G07D7/16B G07D7/20 G07D7/20F8 G07F19/00F G07F19/20 G07F19/202 G07F7/04 L65H301/541 L65H354/100 L65H511/212 L65H553/510 L65H557/514 L65H701/1912 S01N500/00

US class: 194/206 194/207 194/215 194/328 209/534 209/546 209/548 377/8 382/135 382/318 382/321 902/7

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Abstract:
Source: US2002056605A A currency evaluation device for receiving a stack of currency bills and rapidly evaluating all the bills in the stack. The device comprises an input receptacle for receiving a stack of bills to be evaluated and a plurality of output receptacles for receiving the bills after they have been evaluated. A transport mechanism transports the bills, one at a time, from the input receptacle to one of the output receptacles along a transport path. A discriminating unit including a detector positioned along the transport path between the input receptacle and the output receptacle evaluates the bills. The discriminating unit counts and determines the denomination of the bills. A means for flagging bills meeting or failing to meet a certain criteria causes the transport mechanism to halt in response to a determination that a bill meets or fails to meet the criteria.

0) US2002041329A – IN CAMERA MESSAGING AND ADVERTISEMENT SYSTEM

82) Family number: 28637028 (US2002041329A) © PatBase

Title: IN CAMERA MESSAGING AND ADVERTISEMENT SYSTEM

Priority:

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Assignee(s): EPIX IMAGING SYSTEMS INC ; FOTONATION HOLDINGS LLC 137 GRA NV ; OBSIDIAN IMAGING ; ZING NETWORKS

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Agent(s): SCENERA RESEARCH LLC; SAWYER LAW GROUP LLP

Designated states: AT BE CA CH CY DE DK ES FI FR GB GR IE IT JP LI LU MC NL NO PT SE

International class(IPC 8–9)**:** G03B7/091 G06F1/00 G06F12/14 G06F17/00 G06F21/00 G06F21/24 G06F7/00 G06T1/00 G07C9/00 G09C1/00 G09C3/00 H04K1/00 H04L12/02 H04L12/28 H04L12/58 H04L9/00 H04L9/32 H04N1/00 H04N1/21 H04N1/32 H04N1/387 H04N1/44 H04N21/2389 H04N21/258 H04N21/61 H04N21/81 H04N21/8358 H04N5/225 H04N5/232 H04N5/76 H04N5/765 H04N5/77 H04N5/907 H04N5/91 H04N5/92 H04N7/14 H04N7/16 H04N7/167 H04N7/173 H04N7/18 (Advanced/Invention); G06F12/14 H04N1/34 H04N101/00 H04N5/77 H04N5/775 H04N5/907 (Advanced/Non–invention); G06F12/14 G06F21/00 G06T1/00 G09C1/00 G09C3/00 H04K1/00 H04L12/02 H04L12/28 H04L9/00 H04N1/00 H04N1/21 H04N1/32 H04N1/387 H04N1/44 H04N5/225 H04N5/232 H04N5/76 H04N5/765 H04N5/77 H04N5/907 H04N5/91 H04N5/92 H04N7/14 H04N7/167 (Core/Invention); H04N5/77 H04N5/775 (Core/Non–invention)

International class(IPC 1–7)**:** G03B13/36 G03B17/24 G03B7/00 G03G15/00 G06F11/30 G06F12/14 G06F7/04 G06K5/00 G06K9/00 G07D7/00 G09C1/00 G09C3/00 H04K1/00 H04L12/02 H04L12/28 H04L17/02 H04L9/00 H04L9/32 H04N1/00 H04N1/23 H04N1/32 H04N1/387 H04N1/44 H04N101/00 H04N11/00 H04N5/222 H04N5/225 H04N5/232 H04N5/238 H04N5/76 H04N5/765 H04N5/907 H04N5/91 H04N5/92 H04N7/00 H04N7/14 H04N7/16 H04N7/167 H04N7/18

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European class: G03B7/091 G06F1/00N1D1 G06F21/85 G06T1/00W2 G07C9/00C2B G07C9/00C2D H04L12/58 H04L12/58C H04N1/00 H04N1/00C H04N1/00C23 H04N1/00C3 H04N1/00C3G3 H04N1/00C7F H04N1/00V2 H04N1/00W1 H04N1/00W3 H04N1/21B3 H04N1/21B7 H04N1/32C H04N1/32C15D H04N1/32C17 H04N1/32C19 H04N1/32C19B3H H04N1/32C19B7 H04N1/32C20 H04N1/44 H04N1/44A2 H04N1/44A5 H04N1/44A7 H04N1/44A8 H04N1/44S2 H04N21/2389B H04N21/258U3 H04N21/4223 H04N21/426N H04N21/4788 H04N21/488M H04N21/61D4 H04N21/81C H04N21/8358 H04N5/232 H04N5/232C H04N5/232K H04N5/765 H04N5/77 H04N5/77B H04N7/167 H04N7/16E3 H04N7/173B2 H04N7/18D2 S03B217/24D2 S03B217/24D4 S06F12/14B S07C11/02 T04N1/00C3G T04N1/00C7 T04N1/00C7D T04N1/32C10 T04N1/32C16 T04N1/32C17 T04N1/32C4D T04N1/32C7 T04N1/32C9 T04N1/34 T04N101/00 T04N201/00C10 T04N201/00C11 T04N201/00C11T2 T04N201/00C11T3 T04N201/00C11V T04N201/00C16 T04N201/00C23 T04N201/00C7D T04N201/00J4 T04N201/32C17 T04N201/32C4D T04N201/32C4D2 T04N201/32C4D3 T04N201/32C9 T04N5/77 T04N5/775 T04N5/77B T04N5/907

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Abstract:
Source: US2002041329A A digital photography messaging and advertisement system wherein a message center maintains records of camera purchasers, and each corresponding camera identification (ID). The message center prepares and collects messages, putting them in categories including personal messages for a particular camera/user, messages for all users of a particular interest group, and generic messages which can be advertisements for al users with cameras configured according to the system. Each camera is equipped with a transceiver for receiving and sending data, and a display for observing the messages or listening to them. Each camera subscribes to its own personal messages. In addition, a camera user may subscribe to a single or multiple interest groups. When a user turns on the camera, the transceiver transmits a signal conveying the camera identification to the message center. In response, the center packages the messages that are identified for the particular camera/user and transmits them along with a code that assures reception only by the specific camera. Alternatively, the messaging and advertisement center continuously transmits generic and user interest group messages. The camera receives the messages, and places them on a display. Interactive messages remain on the display until the user responds through activation of a key or key sequence on a camera keypad. Alternatively, a key or key sequence is provided whereby a user can select to not receive messages, the activation of the key/sequence directing the camera processor to not initiate the signal transmission to the message center upon camera activation.

0) US2003075414A – METHOD AND APPARATUS FOR CONDITIONING COINS PRI...

83) Family number: 30127533 (US2003075414A) © PatBase

Title: Method and apparatus for conditioning coins prior to discrimination

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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Assignee(s): OUTERWALL INC ; JPMORGAN CHASE BANK AS ADMINISTRATIVE AGENT ; OUTERWALL INC A DELAWARE CORPORATION F K A COINSTAR INC ; OUTERWALL INC N K A COINSTAR LLC ; SCAN COIN IND ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT AS ; SCAN COIN IND AB ; COINSTAR LLC ; COINSTAR FUNDING LLC ; COINSTAR ASSET HOLDINGS LLC ; COINSTAR SPV GUARANTOR LLC ; IMP BANK ; BANK OF AMERICA NA IN ITS CAPACITY AS ; COINSTAR INC PO BOCX ; BANK OF AMERICA NA ; BANK OF AMERICA NA COLLATERAL AGENT AS ; BANK OF AMERICA NA IN IT S CAPACITY ADMINISTRATIVE ; BANK OF AMERICA NA IN IT S CAPACITY ADMINISTRATIVE AGENT FOR ITSELF LENDERS AND L C ISSUER EACH IS DEFINED IN ATTACHED SECURITY AGREEMENT AS ; BANK OF AMERICA NA IN ITS CAPACITY ADMINISTRATI AS ; BANK OF AMERICA NA IN ITS CAPACITY ADMINISTRATIVE ; BANK OF AMERICA NA IN ITS CAPACITY ADMINISTRATIVE AGENT FOR ITSELF LENDERS AND L C ISSUER EACH IS DEFINED IN ATTACHED SECURITY AGREEMENT AS ; BANK OF AMERICA NA IN IT'S CAPACITY ADMINISTRATIVE AGENT FOR ITSELF LENDERS AND L C ISSUER EACH IS DEFINED IN ATTACHED SECURITY AGREEMENT AS

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SCHERER ; SCHERER S ; SCHERER SCOTT ; SCOTT SCHERER ; SHANNON MARK ; STUART K NEUBARTH ; THOMAS HINTZ ; WAECHTER M ; WAECHTER MARK ; WAECHTER MARK L ; WAECHTER MARK LOUIS ; A FINCH ; AARON FINCH ; ALAN C PHILLIPS

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Designated states: BE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

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US class: 193/DIG.1 194/216 194/217 194/302 194/317 194/317.7 194/318 194/319 194/344 194/346 194/347 209/233 232/14 232/41 232/57 273/138.2 273/148B 273/148R 312/270.1 312/270.2 312/270.3 312/293.1 312/293.2 453/57 453/57.7 453/57S 453/63 463/29 463/46 463/47

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Abstract:
Source: US2003075414A A coin conditioner is provided for cleaning or otherwise conditioning coins in a coin discriminator apparatus prior to transfer to a coin sensor. Coins enter through a feed tray and move down the length of a perforated tumbler, preferably without the use of gravity, such as under screw force, mechanical or centrifugal force. The spinning tumbler is preferably rotated about its longitudinal axis by a motor. In one

embodiment, a blower or vacuum draws or moves air from one area to another, with the air preferably being filtered. As coins move through and down a tumbler, projections such as vanes, fins, ridges, dimples, spines or other raised features cause mechanical agitation and/or abrasion as coins are lifted and dropped while passing longitudinally through the tumbler. The coins are conditioned and non−coin matter is collected as it is separated and/or abraded from the coin surfaces. Tumbler perforations permit non−coin matter to pass through the perforations into a collection tray or other apparatus and/or are collected into filter media as a result of the air flow. In one embodiment, the air pressure system eliminates or reduces the occurrence of low density or light non−coin matter, such as hair or dust, and prevents these materials from settling or being carried through downstream portions of the coin processing system.

0) US6142285A – COIN TESTING APPARATUS AND METHOD

84) Family number: 31984148 (US6142285A) © PatBase

Title: Coin testing apparatus and method

Priority: EP19970918315 19970517 GB19960010603 19960521 WO1997IB00569 19970517

Family:

Publication number	Publication date	Application number	Application date
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Agent(s):	FB RICE; FB RICE PTY LTD; RIDOUT AND MAYBEE LLP
Designated states:	AL AM AT AU AZ BA BB BE BF BG BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN YU
International class (IPC 8–9):	G07D5/00 G07D5/02 G07D5/10 G07F5/10 (Advanced/Invention); G07F5/00 (Core/Invention); G07D5/02 (Core/Non–invention)
International class (IPC 1–7):	G02F3/02 G07D5/00 G07D5/02 G07D5/10 G07F3/02 G07F5/10 H04M17/02
CPC:	G07D5/005 G07D5/02 G07D5/10
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US class:	194/328 194/334
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Abstract:
Source: US6142285A A method of coin testing is provided in which a laser beam (13) is directed onto a face of a coin (4) and a laser detector (3) is used to detect where the laser beam is intercepted by the coin and where the laser beam is not intercepted by the coin, so as to obtain an indication of a characteristic of the face of the coin. The characteristic of the coin is used to identify the coin. The invention also relates to an apparatus for coin testing, which comprises a laser source (11) to direct a laser beam (13) on a face of a coin (4), a laser detector (3) for detecting where the laser is intercepted by the coin and where the laser is not intercepted by the coin, and a signal–processor (14) which obtains an indication, from an output of the laser detector (3), of a characteristic of the face of the coin which is used to identify the coin.

0) US2003179290A – TRANSACTION SYSTEM

85) Family number: 31019239 (US2003179290A) © PatBase

Title: TRANSACTION SYSTEM

Priority:

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Family:

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DIEBOLD SELF SERVICE SYSTEMS ; FRAZZITTA BARTHOLOMEW J ; MCINTYRE DANIEL C ; MEEK JAMES ; MCINTYRE DANIEL S ; MCCOY DONALD P ; JIANG CHANGNING ; SINGER IREK ; SHIMEK GREGORY ; SYMONDS ROBERT D ; ST GEORGE PETER ; KNOWLES EDITH ; GILL ROBERT BRADLEY ; KORAN KEN ; LEE ANTHONY ; PRAKASH ALOK ; KRAVITZ LEE ; REINART MARK ; O BOYLE MICHAEL ; HEMLICK WILLIAM ; GRAEF H THOMAS ; SMITH MARK D

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Designated states: AT BE BR CA CH CN CY CZ DE DK ES FI FR GB GR HU IE IT KR LI LU MC MX NL PL PT RU SE

International class(IPC 8–9)**:** B65G51/00 B65G51/06 B65G61/00 B66B9/04 E05G7/00 G06F17/60 G06F19/00 G06F7/04 G06F7/08 G06G1/12 G06K19/00 G06K19/06 G06K5/00 G06K7/00 G06K7/08 G06K9/60 G06Q20/00 G06Q20/10 G06Q30/00 G06Q30/02 G06Q40/00 G06Q40/02 G06Q50/00 G07B1/00 G07B5/00 G07D11/00 G07D9/00 G07F11/00 G07F19/00 G07F7/08 G07F9/02 G07G1/00 G07G1/14 H04M1/00 H04N7/14 H04N7/18 H04N9/47 (Advanced/Invention);
B65G61/00 B66B9/04 G06Q20/00 G06Q50/00 G07B1/00 G07B5/00 G07D9/00 H04N7/18 (Advanced/Non–invention);
B65G51/00 B65G61/00 B66B9/04 E05G7/00 G06F7/06 G06Q20/00 G06Q50/00 G07B1/00 G07B5/00 G07D9/00 G07F19/00 G07G1/00 H04N7/18 (Core/Invention);
E06B (Subclass/Invention)

International class(IPC 1–7)**:** B65G51/00 B65G51/06 B66B9/04 E05G7/00 E06B G06F17/60 G07B1/00 G07B5/00 G07D9/00 G07F19/00 H04M1/00 H04N7/18 H04Q

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European class: G06Q20/10 G06Q20/105 G06Q20/108 G06Q20/1085 G06Q20/20 G06Q20/382 G06Q20/40 G06Q20/401 G06Q30/02 G06Q30/0201 G06Q30/0207 G06Q30/0212 G06Q30/0235 G06Q30/0236 G06Q30/0239 G06Q30/0241 G06Q30/0242 G06Q30/0251 G06Q30/0255 G06Q30/0271 G06Q30/0277 G06Q40/02 G07F19/00F G07F19/20 G07F19/201 G07F19/211 H04N7/18

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Abstract:
Source: US2003179290A A system for carrying out transactions includes customer stations (118) and ATM stations (120) and a service provider station (114). The service provider station and customer stations are operated in a building (116) or other facility in which a service provider operates the service provider station in a secure room. Audio and video communications are established between the service provider and customers at the customer stations and ATM stations. Items can be exchanged between customer station customers and the service provider through carriers (26) transmitted through a pneumatic tube system (22). A video material presentation device (50) provides promotional or other video material which may be presented on displays at the customer stations. The video material may be presented to customers when the customer terminal is not in communication with the service provider terminal.

0) US6343745B – SECURITY DEVICE

86) Family number: 32652087 (US6343745B) © PatBase

Title: SECURITY DEVICE

Priority: DE19961000759 19961206 DE19961050759 19961206 EP19970952891 19971205 WO1997EP06825 19971205 EP20050019772 19971205 EP20050019772 20050912 EP20050019772 20050912

Family:

Publication number	Publication date	Application number	Application date
AT355573 E	20060315	AT19970952891T	19971205
AT545919 E	20120315	AT19970019772T	19971205
AU199856600 A1	19980629	AU19980056600	19971205
DE19650759 A1	19980610	DE19961050759	19961206
DE59712820 D1	20070412	DE19975012820	19971205
DE59713069 D1	20120412	DE19975013069	19971205
EP0961996 A1	19991208	EP19970952891	19971205
EP0961996 B1	20070228	EP19970952891	19971205
EP0961996 B9	20100407	EP19970952891	19971205
EP1630751 A2	20060301	EP20050019772	19971205
EP1630751 A3	20070103	EP20050019772	19971205
EP1630751 B1	20120215	EP20050019772	19971205
EP2273455 A2	20110112	EP20100011494	19971205
EP2273455 A3	20110316	EP20100011494	19971205
EP2273455 B1	20170329	EP20100011494	19971205
EP2273456 A2	20110112	EP20100011495	19971205
EP2273456 A3	20111214	EP20100011495	19971205
EP2273456 B1	20170329	EP20100011495	19971205
PL188250 B1	20050131	PL19970333891	19971205
RU2196357 C2	20030110	RU19990113943	19971205
RU99113943 A	20010610	RU19990113943	19971205
US6343745 BA	20020205	US19990308665	19990902
WO9825236 A1	19980611	WO1997EP06825	19971205

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** BOEHM MICHAEL ; BURCHARD THEO ; GIESECKE AND DEVRIENT GMBH ; GIZEKE U DEVRIENT GMBKH ; SCHMITZ CHRISTIAN

Assignee(s): GIZEKE UND DEVRIENT GMBKH ; GIESECKE AND DEVRIENT GMBH 81677 MUENCHEN DE

Inventor(s):(std)**:** BOHM MICHAEL ; BURCHARD THEO ; BURCHARD THEO DR ; BURCHARD THEODOR DR ; BURKHARD TEO ; CHRISTIAN SCHMITZ ; MICHAEL BOHM ; SCHMITZ CHRISTIAN ; SHMITTS KRISTIAN ; THEO BURCHARD ; BEM MIKHAEL ; BOEHM MICHAEL

Inventor(s): BOEHM MICHAEL 85551 KIRCHHEIM DE ; BEM MIKHAEL'

Agent(s): KLUNKER SCHMITT NILSON HIRSCH

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN YU ZW

International class (IPC 8–9)**:** B42D15/00 B42D25/355 B44F1/12 G06K19/06 G06K19/12 G07D7/00 G07D7/04 G07D7/12 (Advanced/Invention)

International class (IPC 1–7)**:** B42D15/00 G06K19/06 G06K19/12 G07D7/00

CPC: G06K19/06196 G06K19/12 G07D7/04 G07D7/12 B42D25/369 B42D25/355 B42D2033/16 G07D7/0032 G07D7/206

European class: B42D15/00C4 G06K19/06M2 G06K19/12 G07D7/00B2 G07D7/04 G07D7/12 G07D7/20F8 L42D33/16

US class: 235/493 235/494 283/84

Classification Explorer

Cited documents: WO9723357 A1, WO9635586 A1, WO9604143 A1, WO9211142 A1, WO9008367 A1, US6210777 BA, US6146773 A, US5808758 A, US5643686 A, US5614824 A, US5599047 A, US5545883 A, US5516153 A, US5432329 A, US5354099 A, US5111033 A, US4511616 A, US4180207 A, GB2250473 A1, GB1127043 A, EP0683471 A1, EP0659587 A1, EP0610917 A1, EP0516790 A1, EP0407550 A1, EP0330733 A1, EP0310707 A2, EP0310707 A1, DE4041025 A1, DE1696245 A1,

Forward Citations: WO16146551, WO14016782, WO13017865, WO12153106, WO11061495, WO11051682, WO11032671, WO11004190, WO09027771, WO08061707, WO08011108, WO04091930, WO03061980, WO02073250, WO02073250, US9552542, US9519856, US9336640, US9272564, US9129271, US8970943, US8927072, US8883273, US8740094, US8701857, US8652592, US8622435, US8550340, US8276826, US8189212, US8132830, US8123138, US8027093, US8009304, US7940403, US7931207, US7830627, US7758078, US7728931, US7703811, US7677455, US7667895, US7474439, US7243951, US7168868, US7131775, US7040663, US6843418, US6454166, US2017032232, US2012168515, US2011176177, US2010219245, US2010194092, US2010140916, US2010065639, US2010052307, US2010045027, US2010001509, US2009080958, US2009029123, US2008265040, US2008036197, US2006163371, US2006147236, US2006140699, US2006097512, US2006097511, US2006077496, US2005135856, US2005056702, US2005040641, US2004016797, US2002020603, RU2616448, FR3033735, FR2993819, EP2631085, EP2385503, EP2363296, EP2269837, EP2229286, EP2041695, EP2041695, EP1857295, EP1857295, EP1618006, EA5456, EA005456, DE102010019463, DE102009010770, DE102007025939, DE102006055169, DE102006040874, DE102006040874, CN103052896, CN103052896, AT501566, AT501566,

Abstract:
Source: US6343745B The invention relates to a security element for a security document such as a bank note, ID card or the like consisting of a translucent plastic layer having an opaque layer with gaps in the form of characters, patterns or the like recognizable in transmitted light. Additionally the security element has a magnetic layer in the form of spaced−apart magnetic areas forming a coding, the gaps recognizable in transmitted light being disposed in the magnetic layer−free intermediate areas of the coding.

0) US6522399B – SIGNATURE MARK RECOGNITION SYSTEMS

87) Family number: 28428809 (US6522399B)

© PatBase

Title: SIGNATURE MARK RECOGNITION SYSTEMS

Priority: CA19992280564 19990823 GB19970003822 19970224 WO1998GB00420 19980211

Family:

Publication number	Publication date	Application number	Application date
AU199869905 A1	19980909	AU19980069905	19980211
AU724227 B2	20000914	AU19980069905	19980211
CA2280564 AA	20010223	CA19992280564	19990823
CA2280564 C	20111025	CA19992280564	19990823
DE69809193 D1	20021212	DE19986009193	19980211
DE69809193 T2	20030724	DE19986009193T	19980211
EP0961990 A1	19991208	EP19980903189	19980211
EP0961990 B1	20021106	EP19980903189	19980211
ES2182266 T3	20030301	ES19980903189T	19980211
GB2322443 A1	19980826	GB19970003822	19970224
GB2336927 A1	19991103	GB19990018235	19980211
GB2336927 B2	20000524	GB19990018235	19980211
GB9703822 A0	19970416	GB19970003822	19970224
GB9918235 A0	19991006	GB19990018235	19980211
US6522399 BA	20030218	US19990367222	19990811
WO9837514 A1	19980827	WO1998GB00420	19980211

Probable Assignee: QINETIQ LTD

Assignee(s):(std)**:** LAWRENCE CHRISTOPHER ROBERT ; QINETIQ LTD ; SAMBLES JOHN ROY ; SECR DEFENCE ; THE SECRETARY OF STATE FOR DEFENCE

Assignee(s): SEC DEP FOR DEFENCE IVELY ROAD FARNBOROUGH DEFENSE ; SEC DEP FOR DEFENCE ; SECRETARY OF STATE FOR DEFENCE THE ; QINETIQ LTD LONDON ; QINETIQ LIMITED

Inventor(s):(std)**:** CHRISTOPHER ROBERT LAWRENCE ; JOHN ROY SAMBLES ; LAWRENCE CHRISTOPHER R ; LAWRENCE ROBERT ; SAMBLES JOHN R ; SAMBLES ROY THIN FILM PHOTONIC ; SAMBLES JOHN ROY ; LAWRENCE CHRISTOPHER ROBERT

Inventor(s): SAMBLES ROY THIN FILM PHOTONICS GROUP ; SAMBLES JOHN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO

Designated states: AT AU BE CH DE DK ES FI FR GB GR IE IT JP LI LU MC NL PT SE US

International class (IPC 8–9): B42D15/10 B44F1/02 G01N21/21 G06K19/16 G07D7/12 G07F7/08 (Advanced/Invention); G06K19/14 G07D7/00 G07F7/08 (Core/Invention)

International class (IPC 1–7): B42D15/10 B42D209/00 B44F1/02 G01N21/21 G06K19/06 G06K19/16 G06K5/00 G06K9/74

CPC: G07D7/0032 G07F7/086

European class: G07D7/00B2 G07F7/08B

US class: 250/556 356/71

Classification Explorer

Cited documents: WO9810324 A1, US5629070 A, US5621515 A, US5591527 A, US5497227 A, US5442433 A, US5003600 A, US4984824 A, US4662653 A, US4661983 A, EP0751480 A2, EP0552564 A1,

Forward Citations: WO16055342, WO03027952, US9522238, US8994382, US8771238, US8638108, US8608079, US8348904, US8197449, US8049519, US7922096, US6927885, US6533183, CN104331978,

Abstract:
Source: US6522399B A signature recognition system for identifying an article with a distinctive diffraction element (or elements) and verifying the presence of that element or elements comprising: an article with one or more diffraction gratings impressed thereon, the grating(s) exhibiting periodic wave surface profiles having a depth−to−pitch ratio delta of between 0.1 and 0.5, a source of polarized electromagnetic radiation of wavelength lambd such that the pitch G of the periodic wave surface profile of the grating(s) is comparable to an integer multiple n of that wavelength, a device for directing the source of polarized electromagnetic radiation to the surface of the grating(s) at a plane of incidence substantially normal to the plane of the surface of the diffraction grating and at an angle of approximately 45 degrees azimuth to the alignment of the grooves on the surface, and a device for detecting radiation reflected from the grating(s) surface which is oppositely polarized to the incident radiation.

0) DE19821113A1 – COIN MAGAZINE WITH OPTO–ELECTRONIC SENSORS MUE...

88) Family number: 18055845 (DE19821113A1) © PatBase

Title: Coin magazine with opto–electronic sensors

Priority: DE19981021113 19980506 DE19982010531U 19980608

Family:

Publication number	Publication date	Application number	Application date
DE19821113 A1	19991111	DE19981021113	19980506
DE19821113 B4	20040408	DE19981021113	19980506
DE29810531 U1	19980827	DE19982010531U	19980608

Probable Assignee: TRENNER D WH MUENZPRUEFER

Assignee(s):(std)**:** TRENNER D WH MUENZPRUEFER ; WALTER HANKE MECH WERKSTAETTEN

Assignee(s): WALTER HANKE MECHANISCHE WERKSTAETTEN GMBH AND CO ; WALTER HANKE MECHANISCHE WERKSTAETTEN GMBH AND CO KG ; WH MUENZPRUEFER DIETMAR TRENNER GMBH 14167 BERLIN ; WH MUENZPRUEFER DIETMAR TRENNER GMBH ; WH MUENZPRUEFER DIETMAR TRENNER GMBH 14167 BERLIN DE

International class (IPC 8–9): G07D3/00 G07D3/14 G07D9/00 G07F1/04 (Advanced/Invention)

International class (IPC 1–7): G07D13/00 G07D3/00 G07F1/04

CPC: G07D3/14 G07D5/00

European class: G07D3/14 G07D5/00

Classification Explorer

Cited documents: EP0520597 A2,

Forward Citations: WO03083790, WO03083790, US7516830,

Abstract:
The coin magazine unit is built into a coin operated machine and has a base module (2) that contains a sorting unit (24) and a coin checking unit (44). The face down side of the checking unit has a coupling plate (16) with lugs (17) that are locate in holes in the sorting unit with a snap action. Within the sorting unit a series of opto–electronic sensors are provided that detect the presence of coins (15). The sensors use signals which are reflected off the surface.

0) US2002164049A – EMULSION PRODUCTS AND IMAGERY EMPLOYING STEGANO...

89) Family number: 32396421 (US2002164049A) © PatBase

Title: EMULSION PRODUCTS AND IMAGERY EMPLOYING STEGANOGRAPHY

Priority:

GB20000023204	19990414	US19930154866	19931118	US19940215289	19940317
US19950436099	19950508	US19950436098	19950508	US19950436134	19950508
US19950436102	19950508	US19950438159	19950508	US19940327426	19941021
US19950508083	19950727	US19970967693	19971112	US19960614521	19960315
US19980071983P	19980120	US19960649419	19960416	US19980074034	19980506
US19960746613	19961112	US19980112955P	19981218	US19980082228P	19980416
US19960649419	19960516	US19960637531	19960425	US19950534005	19950925
US19980130624	19980806	US19980127502	19980731	US19990337590	19990621
US19990287940	19990407	US19990433104	19991103	US19990234780	19990120
US19990131005P	19990422	US19990408902	19990929	US19980185380	19981103
US19990134782P	19990519	US19990292569	19990415	US19990343104	19990629
US19990343101	19990629	US19990342971	19990629	US19990342689	19990629
US19990342688	19990629	US19990164619P	19991110	US19990163332P	19991103
US19990158015P	19991006	US19990151586P	19990830	US19990141468P	19990629
US19990314648	19990519	US19980186962	19981105	US19980169088	19981008
US20000597209	20000620	US20000660756	20000913	US20000515826	20000229
US20010811366	20010315	US20040792400	20040302	US20000498223	20000203
US20000553112	20000420	US20000562516	20000501	US20000562524	20000501
US20000619264	20000719	US20000633587	20000807	US20000689289	20001011
US20000567405	20000508	US20010803167	20010309	US20050051442	20050203
US20000679261	20001004	US20040914052	20040806	US20030367092	20030213
US20020274290	20021018	US20010761349	20010116	US20020165751	20020606
US20000503881	20000214	US20000482749	20000113	US20000612177	20000706
US19990465418	19991216	US19990476686	19991230	US20000183681P	20000219
US20000191778P	20000324	US20050058917	20050215	US20010915824	20010726
US20030717211	20031118	US20000636102	20000810	US20000220945P	20000726
US20000629401	20000801	US20000491534	20000126	US20000504239	20000215
US20000679262	20001004	US20050132031	20050517	US20000571422	20000515
US20000552998	20000419	US20000547664	20000412	US20000543125	20000405
US20000531076	20000318	US20000631409	20000803	US20020102026	20020319
US20000640806	20000817	US20030448544	20030529	US19990473396	19991228
WO1999US14532	19990624	WO2000US13798	20000518	WO1999US08252	19990414
WO1994US13366	19941116	WO1996US06618	19960507	WO2001US19254	20010615
WO2001US19254	20010615	WO2000US13333	20000515	WO2000US13333	20000515
WO2001US04812	20010214	WO2001US21268	20010705	WO2000US35038	20001221
WO2001US24114	20010801	US20050145515	20050603		

Family:

Publication number	Publication date	Application number	Application date
AU199948367 A1	20000221	AU19990048367	19990624
AU199948367 A5	20000221	AU19990048367	19990624
AU200048513 A5	20001205	AU20000048513	20000515
AU200051457 A5	20001205	AU20000051457	20000518
AU200125931 A5	20010709	AU20010025931	20001221
AU2001266949 AA	20020102	AU20010266949	20010615
AU2001273184 AA	20020213	AU20010273184	20010705
AU2001283073 AA	20020218	AU20010283073	20010801
CA2338618 AA	20010124	CA19992338618	19990624
CA2373208 AA	20011107	CA20002373208	20000518
CA2373511 AA	20011107	CA20002373511	20000515
CA2373511 C	20140708	CA20002373511	20000515
CN100364309 C	20080123	CN19998008918	19990624
CN1631030 A	20050622	CN19998008918	19990624
EP0981113 A2	20000223	EP19990113163	19990707
EP0981113 A3	20010314	EP19990113163	19990707
EP0981113 B1	20050914	EP19990113163	19990707
EP1054335 A2	20001122	EP20000110633	20000518

EP1054335 A3	20031217	EP20000110633	20000518	
EP1185967 A1	20020313	EP20000930749	20000515	
EP1185967 A4	20041103	EP20000930749	20000515	
EP1208499 A1	20020529	EP20000936096	20000518	
EP1208499 A4	20071107	EP20000936096	20000518	
EP1257921 A1	20021120	EP20010909242	20010214	
EP1257921 A4	20060920	EP20010909242	20010214	
EP1444823 A2	20040811	EP19990931962	19990624	
EP1444823 A4	20090527	EP19990931962	19990624	
GB200023204 A0	20001101	GB20000023204	19990414	
GB200219190 A0	20020925	GB20020019190	19990414	
JP2002544627 T2	20021224	JP20000618895T	20000518	
JP2002544637 T2	20021224	JP20000618954T	20000515	
JP2003518658 T2	20030610	JP20010549260T	20001221	
JP2003524911 T2	20030819	JP20000563056T	19990624	
JP4880159 B2	20120222	JP20010549260T	20001221	
US2002164049 AA	20021107	US20020102026	20020319	
US2003040957 AA	20030227	US19990342971	19990629	
US2003050961 AA	20030313	US19990314648	19990519	
US2003231785 AA	20031218	US20030367092	20030213	
US2005078088 AA	20050414	US20040914052	20040806	
US2005111047 AA	20050526	US20040792400	20040302	
US2005152578 AA	20050714	US20050051442	20050203	
US2005192933 AA	20050901	US20050058917	20050215	
US2005213790 AA	20050929	US20050132031	20050517	
US2005271305 AA	20051208	US20050145515	20050603	
US5850481 A	19981215	US19950438159	19950508	
US5850481 C1	20020716	US19950438159	19950508	
US6311214 BA	20011030	US19990342689	19990629	
US6324573 BA	20011127	US19980130624	19980806	
US6411725 BA	20020625	US20000597209	20000620	
US6522770 BA	20030218	US20000629401	20000801	
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US6917691 BB	20050712	US20030448544	20030529	
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US6965873 BA	20051115	US20000679262	20001004	
US6968057 BB	20051122	US20020102026	20020319	
US7164413 BB	20070116	US20040914052	20040806	
US7174031 BB	20070206	US20050132031	20050517	
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US9630443 BB	20170425	US20040792400	20040302	
WO0007356 A2	20000210	WO1999US14532	19990624	
WO0007356 A3	20060105	WO1999US14532	19990624	
WO0070523 A1	20001123	WO2000US13798	20000518	
WO0070523 C1	20011129	WO2000US13798	20000518	
WO0070585 A1	20001123	WO2000US13333	20000515	
WO0148682 A1	20010705	WO2000US35038	20001221	
WO0161508 A1	20010823	WO2001US04812	20010214	

WO0161508 C2	20021031	WO2001US04812	20010214	
WO0199325 A2	20011227	WO2001US19254	20010615	
WO0199325 A3	20031106	WO2001US19254	20010615	
WO0211056 A1	20020207	WO2001US21268	20010705	
WO0213094 A1	20020214	WO2001US24114	20010801	
ZA200100615 A	20030207	ZA20010000615	20010122	

Probable Assignee: DIGIMARC AN OREGON CORPORATION CORP

Assignee(s):(std)**:** CARR J S ; CARR J SCOTT ; BRUNDAGE TRENT J ; DIGIMARC CORP ; CONWELL WILLIAM Y ; DAVIS BRUCE L ; LEVY KENNETH L ; JONES KEVIN C ; GROSSI BRIAN J ; MCKINLEY TYLER J ; PERRY BURT W ; HEIN WILLIAM C III ; MACINTOSH BRIAN T ; KUMAR ARUNA B ; HANNIGAN BRETT T ; LIVERMORE MEGAN I ; EVANS DOUGLAS B ; RAMOS DANIEL O ; RODRIGUEZ TONY F ; SEDER PHILLIP A ; SEDER PHILLIP ANDREW ; WILLAM Y CONWELL ; RHOADS GEOFFREY B ; GRAHAM STANLEY E

Assignee(s): PINECONE IMAGING CORP ; DIGIMARC CORP WAS DMRC CORPORATION.. ; DMRC LLC9405 SW GEMINI DRIVEBEAVERTONOR97008US ; DMRC CORP9405 SW GEMINI DRIVEBEAVERTONOR97008US ; DIGIMARC CORP250–19801 SW 72ND AVENUETUALATINOR97062US ; DIGIMARC CORP WAS DMRC CORP ; DMRC CORP ; DMRC LLC ; DIGIMARC CORP SEDER PHILLIP ANDREW CARR J ; HEIN WILLIAM C ; DIGIMARC AN OREGON CORP CORP ; DIGIMARC A DELAWARE CORP CORP ; DIGIMARC (AN OREGON CORPORATION) CORP ; DIGIMARC AN OREGON CORPORATION CORP ; DIGIMARC (A DELAWARE CORPORATION) CORP ; DIGIMARC A DELAWARE CORPORATION CORP ; CARR JONATHAN SCOTT ; CARR J ; DIGIMARC CORP BRUNDAGE TRENT J HEIN WILLIAM C

Inventor(s):(std)**:** BRIAN J GROSSI ; BRIAN T MACINTOSH ; BRUCE L DAVIS ; CARR J S ; CARR J SCOTT ; CARR JONATHAN SCOTT ; BRUNDAGE TRENT J ; BURT W PERRY ; DAVIS BRUCE L ; GRAHAM STANLEY E ; GROSSI BRIAN J ; HANNIGAN BRETT T ; KUMAR ARUNA B ; LEVY KENNETH L ; LIVERMORE MEGAN I ; MACINTOSH BRIAN T ; MCKINLEY TYLER J ; PERRY BURT W ; PHILLIP A SEDER ; HEIN WILLIAM C ; HEIN WILLIAM C III ; J SCOTT CARR ; RODRIGUEZ TONY F ; RODRIQUEZ TONY F ; RHOADS GEOFFEY B ; SEDER PHILLIP A ; SEDER PHILLIP ANDREW ; TYLER J MCKINLEY ; WILLIAM C HEIN III ; TONY F RODRIGUEZ ; RHOADS GEOFREY B ; RHOADS GEOFFREY B ; RAMOS DANIEL O ; JONES KEVIN C ; GEOFFREY B RHOADS ; EVANS DOUGLAS B ; CONWELL WILLIAM Y

Inventor(s): CARR J SCOTTUS ; DOUGLAS B EVANS ; DAVIS BRUCE LUS ; DANIEL O RAMOS ; HEIN WILLIAM C IIIUS ; GROSSI BRIAN JUS ; KEVIN C JONES ; KENNETH L LEVY ; PERRY BURT WUS ; MCKINLEY TYLER JUS ; MACINTOSH BRIAN TUS ; LIVERMORE MEGAN ; RHOADS GEOFFREY BUS ; TRENT J BRUNDAGE ; WILLIAM Y CONWELL ; SEDER PHILLIP AUS ; RODRIGUEZ TONY FUS ; STANLEY E GRAHAM ; RHOADS GEOFFREY ; RODRIGUEZ TONY ; ROSENTHOL JOSHUA A ; SEDER PHILLIP ; KUMAR ARUNA ; PHILLIP ANDREW SEDER ; HEIN III WILLIAM C ; HEIN WILIAM C III ; HANNIGAN BRETT ; EVANS DOUGLAS ; CARR J ; CONWELL WILLIAM ; DAVIS BRUCE ; BRUNDAGE TRENT

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; OYEN WIGGS GREEN AND MUTALA LLP; BORDEN LADNER GERVAIS LLP; DIGIMARC CORP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class(IPC 8–9)**:** B29C45/14 B41J2/01 B41J29/393 B41J3/407 B41M3/10 B42D15/00 B42D15/10 B42D25/00 B42D25/29 B42D25/333 D21H21/40 G03G15/00 G06F1/00 G06F12/00 G06F13/00 G06F15/16 G06F17/00 G06F17/30 G06F21/00 G06F3/03 G06F3/12 G06K15/00 G06K19/06 G06K19/14 G06K19/18 G06K7/00 G06K7/14 G06K9/00 G06K9/20 G06K9/22 G06K9/36 G06K9/46 G06K9/54 G06Q10/00 G06Q10/10 G06Q20/34 G06Q20/40 G06Q30/00 G06Q30/02 G06Q30/06 G06Q40/00 G06Q40/02 G06Q50/00 G06T1/00 G06T7/00 G07C9/00 G07D7/00 G07D7/12 G07D7/20 G07F17/16 G07F17/26 G07F7/08 G07F7/10 G07F7/12 G09C1/00 G09C5/00 G09G5/08 G10L11/00 G10L19/00 G10L19/018 G11B20/00 G11B20/10 H04B1/66 H04K1/00 H04L12/16 H04L29/08 H04L9/00 H04L9/32 H04N1/00 H04N1/23 H04N1/32 H04N1/387 H04N1/40 H04N1/44 H04N5/91 H04N5/913 H04N7/08 H04N7/081 H04N7/16 H04N7/26 (Advanced/Invention); B29C45/14 B41M3/14 G06F12/00 G06F13/00 G06F17/00 G06F17/30 G06K17/00 G06K19/06 G06K7/00 G06K9/00 G06K9/18 G06K9/36 G06Q10/00 G06Q20/16 G06Q20/38 G06Q30/06 G06Q50/00 G06T1/00 G07C11/00 G09C5/00 G10L11/00 H04L9/32 H04N1/32 H04N1/387 H04N21/8358 H04N7/08 H04N7/081 H04N7/16

H04Q7/38 H04W76/02 H04W8/26 (Advanced/Non–invention);
B42D15/00 B42D15/10 G06F1/00 G06F12/00 G06F13/00 G06F17/00 G06F17/30 G06F21/00 G06F3/03 G06K19/06 G06K19/14 G06K19/18 G06K7/00 G06K9/00 G06K9/20 G06K9/22 G06K9/36 G06K9/46 G06Q10/00 G06Q30/00 G06Q40/00 G06Q50/00 G06T1/00 G06T7/00 G07C9/00 G07D7/00 G07F17/00 G07F7/08 G07F7/10 G07F7/12 G09C5/00 G10L11/00 G10L19/00 G11B20/00 H04B1/66 H04K1/00 H04L29/08 H04L9/00 H04L9/32 H04N1/00 H04N1/32 H04N1/387 H04N5/913 H04N7/08 H04N7/081 H04N7/16 H04N7/26 (Core/Invention);
B29C45/14 G06K17/00 H04Q7/38 (Core/Non–invention)

International class (IPC 1–7): B42D15/00 G06F12/00 G06F13/00 G06F15/16 G06F17/00 G06F17/30 G06F17/60 G06K19/06 G06K7/00 G06K9/00 G06K9/36 G06K9/54 G06T1/00 G07D7/00 G07D7/12 G09C5/00 G09G5/08 G10L11/00 H04J3/12 H04K1/00 H04L9/00 H04L9/32 H04N1/00 H04N1/32 H04N1/387 H04N1/40 H04N7/00 H04N7/08 H04N7/081 H04N7/16 H04N7/167

CPC: G06F17/30879 H04N1/00204 H04N1/00307 G06Q30/0603 G06Q30/0633 H04N19/00 Y10S428/916 Y10S707/99942 Y10S707/99945 Y10S283/901 G06F2221/074 G06K7/14 H04N2201/0039 H04N2201/3263 H04N2201/3264 H04N2201/3266 H04N2201/3267 H04N1/00244 H04N1/00859 G06T2201/0065 G11B20/00224 G11B20/00855 G11B20/00876 H04N1/00843 H04N1/00867 H04N1/0087 G06T1/0028 G06T2201/0053 H04N7/1675 H04N9/8205 H04N2201/3246 G06T1/0085 H04L67/2828 H04L67/2842 H04L67/2895 H04L67/322 H04L67/327 G06F17/30247 H04N2201/3235 G06F17/30023 G06F17/30867 G06Q20/20 G06Q30/0225 G06F21/10 G06F2221/2101 G06T7/0002 G06T2207/30144 G07D7/20 G11B20/00557 G11B20/0071 G11B20/00913 G11B20/00978 H04N1/00002 H04N1/00092 H04N1/00875 H04N1/32154 H04N1/32309 H04N21/23892 H04N21/8358 H04N2201/3284 B41J2/01 B41J3/407 B41J29/393 B41M3/10 B41M3/14 B42D15/0093 D21H21/40 G03G15/5029 G03G2215/00451 G06Q10/10 G06Q40/02 G06T1/0071 G06T7/001 G06T2201/0051 G06T2201/0061 G11B20/00413 H04N1/00726 H04N1/00968 H04N1/2307 H04N1/2323 H04N1/2369 G06F21/36 G06F21/608 G06F2221/2107 H04W8/26 H04W76/02 G03G15/6594 H04N19/467 H04N19/20 Y10T428/24802 G06F2221/0737 G06Q10/107 H04N1/00872 H04N1/00877 B42D25/333 G06F17/30861 G06F21/00 G06K7/1408 G06K7/1439 G06K9/00442 G06K9/46 G06Q20/40 H04N1/00846 H04N1/00864 B42D25/22 B42D25/30 G06F2221/2119 G06T1/0064 B29C45/1418 G06K7/1417 G06K7/1447 G06K19/14 G06K19/18 G06K2017/0064 G06K2019/06253 G07C2011/02 H04N1/32122 H04N1/3216 H04N1/32203 H04N1/32219 H04N1/32261 H04N1/32304 H04N1/32352 H04N2201/0082 H04N2201/3225 H04N2201/3239 H04N2201/3274 G06K19/06037 B42D25/00 G06F17/30876 G06K19/06046 B42D25/21 G07D7/0032 G07D7/0034 B42D25/29 G06T1/005 G06Q20/341 G06Q20/40145 G06T1/0057 G06T2201/0052 G07C9/00079 G07D7/004 G07F7/08 G07F7/086 G07F7/1008 G07F7/1016 G07F7/12 G07F17/16 G10L19/018 G11B20/00086 G11B20/00094 G11B20/00115 G11B20/00166 G11B20/00181 G11B20/0021 G11B20/00884 G11B20/00891 H04B1/665 H04N1/00079 H04N1/32149 H04N1/32208 H04N1/32251 H04N1/32288 H04N5/913 H04N2005/91321 H04N2005/91335 H04N2201/3205 H04N2201/3207 H04N2201/3226 H04N2201/3233 H04N2201/327 H04N2201/3271 H04N2201/328 G06F3/002 G07F17/26 H04N2201/3249 G06Q30/0213 G06Q30/02 G06T1/0021 H04N1/00005 H04N1/00037 H04N1/00973 H04N1/32144 H04N1/32229

European class: B41J2/01 B41J29/393 B41J3/407 B41M3/10 B42D15/00C B42D15/00H6 B42D15/10 D21H21/40 G03G15/50H G06F1/00N7A G06F1/00N7R2 G06F17/30G4 G06F17/30M1 G06F17/30W1F G06F17/30W5 G06F17/30W5B G06F17/60B2 G06F21/10 G06F21/36 G06F21/60C2 G06F3/00B G06K19/06C3 G06K19/06C5 G06K19/14 G06K19/18 G06K7/14 G06K7/14A2C G06K7/14A4C G06K9/00L G06K9/46 G06Q10/10 G06Q10/107 G06Q20/20 G06Q20/341 G06Q20/40145 G06Q30/02 G06Q30/0213 G06Q30/0225 G06Q30/0603 G06Q30/0633 G06Q30/06C G06Q40/02 G06T1/00W G06T1/00W2 G06T1/00W6 G06T1/00W6C G06T1/00W6G G06T1/00W6M G06T1/00W8 G06T7/00B G06T7/00B1P G06T7/00B1R G07C9/00B6D2 G07D7/00B2 G07D7/00B4 G07D7/00D G07D7/20 G07F17/16 G07F17/26 G07F7/08 G07F7/08B G07F7/10D G07F7/10E G07F7/12 G10L19/018 G11B20/00P G11B20/00P1 G11B20/00P10 G11B20/00P12 G11B20/00P14 G11B20/00P14A G11B20/00P14D G11B20/00P18 G11B20/00P1C G11B20/00P3 G11B20/00P3C G11B20/00P5 G11B20/00P5A2 G11B20/00P5A7 G11B20/00P5G5 H04B1/66M H04L29/08N27L H04L29/08N27S H04L29/08N27X9 H04L29/08N31Q H04L29/08N31Y H04N1/00A H04N1/00A1 H04N1/00A3E H04N1/00A4B9 H04N1/00A5 H04N1/00C H04N1/00C3K H04N1/00G2H H04N1/00P H04N1/00P2R H04N1/00P2R2 H04N1/00P3A H04N1/00P3M2 H04N1/00P3M2H H04N1/00P3P H04N1/00W2 H04N1/00W4 H04N1/23B H04N1/23B2 H04N1/23B8 H04N1/32C16 H04N1/32C19 H04N1/32C19B H04N1/32C19B2 H04N1/32C19B2B H04N1/32C19B3 H04N1/32C19B3B H04N1/32C19B3C H04N1/32C19B3E H04N1/32C19B3G H04N1/32C19B3J H04N1/32C19B6 H04N1/32C19B6D H04N1/32C19B7 H04N1/32C19C H04N21/2389B H04N21/8358 H04N5/913 H04N7/167D H04N7/26 H04N7/26E10 H04N7/26J L29C45/14D L41M3/14 S03G215/00G2B S06F221/07C4 S06F221/07C4T S06F221/2101 S06F221/2107 S06F221/2119 S06K17/00W18 S06K19/06W8 S06T201/0051 S06T201/0052 S06T201/0053 S06T201/0061 S06T201/0065 S06T207/30144 S07C11/02 S11B20/00P S11B20/00P13

S11B20/00P5 T04N1/00C3 T04N1/00C7D T04N1/32C15D T04N1/32C16 T04N201/00C11N1 T04N201/00C22 T04N201/00C7D T04N201/00J3 T04N201/32C12 T04N201/32C12D T04N201/32C2B T04N201/32C2C T04N201/32C4 T04N201/32C4B T04N201/32C4D T04N201/32C4D4 T04N201/32C4H T04N201/32C4L T04N201/32C5M T04N201/32C5S T04N201/32C5T T04N201/32C5V T04N201/32C6B T04N201/32C7 T04N201/32C9 T04N5/913A4 T04N5/913A7 T04N7/26 T04N9/82N T04W76/02 T04W8/26

US class: 1/1 1/1P 235/375 235/375S 283/72 345/158 345/163 345/163P 345/335 348/460 358/1.18 358/118 358/3.28 358/3.280P 358/3.280S 358/32.8 358/328 375/E07.026 375/E07.089 375/E7.026 375/E7.089 375/E70.26 375/E70.89 375/E70.89S 38/223.2 380/255 380/28 380/287 380/4 380/54 380/59 382/100 382/100P 382/100S 382/107 382/112 382/115 382/115S 382/181 382/232 382/306 382/306P 386/E05.004 386/E5.004 386/E50.04 386/E50.04S 455/556.1 455/566.1 704/E19.009 704/E19.009S 705/14 705/14.26 705/14.260P 705/26 705/26.8 705/27 707/2 707/999.002 707/999.002S 707/E17.02 707/E17.112 707/E17.112S 709/202 709/203 709/203P 709/217 709/217S 709/302 709/313 710/200 713/176 715/749 715/846 715/863 719/313 G9B/20.002

Classification Explorer

Cited documents: WO9959275, WO9957623 A2, WO9945705, WO9941900 A1, WO9936876, WO9934277, WO9934277, WO9904568, WO9851036 A1, WO9849813, WO9840823, WO9834216 A2, WO9826584 A1, WO9824050, WO9824050, WO9820642, WO9820642, WO9820411, WO9814887, WO9814863, WO9803923 A1, WO9743736 A1, WO9741690 A1, WO9740619 A1, WO9732262, WO9714087 A1, WO9702552, WO9702522 A1, WO9701137, WO9636163 A2, WO9636163, WO9636163, WO9629749, WO9627259 A1, WO9627259, WO96272259, WO9626494 A1, WO9619821, WO9619795, WO9616381, WO9603736, WO96036163, WO9601464, WO9520291 A1, WO9520291, WO9514289 A2, WO9514289, WO95114289, WO9510835, WO9510835, WO9510813, WO9504665 A1, WO9427228, WO9427228, WO9400842, WO9325038, WO9101067, WO8908915, WO8908915, WO0239719, WO0211446 A2, WO0211326 A2, WO0203385, WO0203321, WO0201379 A2, WO0197175 A1, WO0180169, WO0174053 A1, WO0115021, WO0108405, WO0070525, WO0044131, WO0036785 A1, WO0036605 A1, USRE40919 E, USRE38600 E, US841886 A, US7837094 BB, US7831062 BB, US7822225 BB, US7796826 BB, US7792325 BB, US7787653 BB, US7762468 BB, US7760905 BB, US7756290 BB, US7751596 BB, US7751588 BB, US7747038 BB, US7738673 BB, US7724919 BB, US7720255 BB, US7720249 BB, US7711564 BB, US7711143 BB, US7702511 BB, US7697719 BB, US7693300 BB, US7685426 BB, US7676059 BB, US7672477 BB, US7657064 BA, US7657058 BB, US7653210 BB, US7650009 BB, US7643649 BB, US7639837 BB, US7628320 BB, US7606390 BB, US7602978 BB, US7602977 BB, US7602940 BB, US7593576 BB, US7587602 BB, US7570784 BB, US7567686 BB, US7564992 BB, US7562393 BB, US7562392 BA, US7555139 BB, US7548643 BB, US7545952 BB, US7539325 BB, US7537170 BB, US7536555 BB, US7536034 BB, US7532741 BB, US7515733 BB, US7508955 BB, US7502759 BB, US7500007 BB, US7499564 BB, US7486799 BB, US7466840 BB, US7460726 BB, US7450734 BB, US7444392 BB, US7444353 BA, US7444000 BB, US7433491 BB, US7427030 BB, US7424132 BB, US7424131 BB, US7418111 BB, US7415129 BB, US7406214 BB, US7403299 BB, US7391880 BB, US7389420 BB, US7377421 BB, US7372976 BB, US7369678 BB, US7362781 BB, US7359528 BB, US7349552 BB, US7340076 BB, US7333957 BB, US7330564 BB, US7321667 BB, US7319775 BB, US7313253 BB, US7313251 BB, US7310629 BA, US7308485 BB, US7308110 BB, US7305117 BB, US7305104 BB, US7302574 BB, US7301652 BB, US7286684 BB, US7280248 BB, US7269275 BB, US7266217 BB, US7263203 BB, US7261612 BA, US7248717 BB, US7242790 BB, US7239734 BB, US7224995 BB, US7224819 BB, US7213757 BB, US7206820 BA, US7194106 BB, US7185201 BB, US7184570 BB, US7181022 BB, US7177443 BB, US7174031 BB, US7171018 BB, US7171016 BA, US7168083 BB, US7164780 BB, US7158654 BB, US7151854 BB, US7142689 BB, US7139408 BB, US7130087 BB, US7116781 BB, US7114750 BA, US7113615 BB, US7113614 BB, US7111170 BB, US7110338 BB, US7095871 BB, US7076084 BB, US7065559 BA, US7065228 BB, US7062069 BB, US7058697 BB, US7054465 BB, US7054463 BB, US7054462 BB, US7054461 BB, US7051086 BB, US7050603 BB, US7047413 BB, US7044395 BA, US7039214 BB, US7035427 BB, US7027614 BB, US7024016 BB, US7017043 BA, US7010144 BA, US7003731 BA, US7003132 BB, US6996252 BB, US6993152 BB, US6988202 BA, US6987862 BB, US6985600 BB, US6983051 BA, US6978036 BB, US6975746 BB, US6970573 BB, US6968057 BB, US6965873 BA, US6965683 BB, US6965682 BA, US6961442 BB, US6959386 BB, US6959100 BB, US6956564 BA, US6952485 BA, US6950519 BB, US6947571 BA, US6944298 BA, US6941275 BA, US6930803 BA, US6920232 BB, US6917724 BB, US6913366 BB, US6912295 BB, US6882738 BB, US6879701 BA, US6876460 BB, US6844871 BA, US6834308 BA, US6831752 BA, US6829368 BB, US6823075 BB, US6820062 BA, US6813366 BA, US6807676 BA, US6807534 BA, US6804379 BB, US6804377 BB, US6804376 BB, US6798894 BB, US6786397 BB, US6786397 BA, US6783069 BA, US6782115 BB, US6778682 BB, US6775392 BA, US6771820 BA, US6771796 BB, US6769061 BA, US6768809 BB, US6768808 BB, US6766363 BA, US6765688 BA, US6765553 BA, US6763123 BB, US6763121 BA, US6760463 BB,

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US6546113 BA, US6542927 BB, US6542927 BA, US6542620 BA, US6542618 BA, US6539095 BA, US6535618 BA, US6535617 BA, US6522771 BB, US6522770 BA, US6522767 BA, US6519352 BB, US6516356 BA, US6516079 BA, US6515755 BA, US6513717 BB, US6513717 BA, US6512837 BA, US6505779 BA, US6505160 BA, US6498628 BB, US6496591 BA, US6491217 BB, US6490681 BA, US6487421 BB, US6487301 BA, US6484198 BA, US6466329 BA, US6466198 BA, US6456393 BA, US6449379 BA, US6449378 BA, US6449377 BA, US6449367 BB, US6448979 BA, US6445468 BA, US6442285 BB, US6442284 BA, US6439465 BA, US6438393 BA, US6438251 BA, US6438231 BA, US6433793 BA, US6430302 BB, US6427140 BA, US6427020 BA, US6424725 BA, US6421070 BA, US6411725 BA, US6411392 BA, US6411275 BA, US6408331 BA, US6408187 BA, US6408082 BA, US6404898 BA, US6400827 BA, US6400376 BA, US6400272 BA, US6389538 BA, US6389151 BA, US6389055 BA, US6385329 BA, US6384935 BA, US6381341 BA, US6377986 BA, US6377610 BA, US6369904 BA, US6369794 BA, US6366685 BA, US6366680 BA, US6363159 BA, 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Abstract:
Source: US2002164049A Images are steganographically marked with codes that can be used, e.g., by reference to a remote registry, to identify the image proprietors. Some embodiments pre−mark blank emulsion film or paper products with such codes, so that images formed thereon can be traced back to their proprietors. A variety of other embodiments and technologies are also disclosed.

0) US2005035193A – AUTOMATED DOCUMENT CASHING SYSTEM

90) Family number: 20674360 (US2005035193A) © PatBase

Title: AUTOMATED DOCUMENT CASHING SYSTEM

Priority:

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Publication number	Publication date	Application number	Application date
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Assignee(s):(std)**:** CAPITAL SECURITY SYSTEMS INC ; PARK NAMSOO ; LIVINGSTON TROY W ; GUSTIN ROBIN HALEY ; SHEKOORY NABIL

Assignee(s): UTILX CORP ; ANDERSON AND ASSOCIATES LLC

Inventor(s):(std)**:** LIVINGSTON TROY W ; NABIL SHEKOORY ; NAMSOO PARK ; PARK NAMSOO ; PARK NAMSOO STEVE ; ROBIN HALEY GUSTIN ; SHEKOORY NABIL ; TROY W LIVINGSTON ; GUSTIN ROBIN H ; GUSTIN ROBIN HALEY ; GUSTIN ROBIN HAYLEY

Inventor(s): LIVINGSTON TROY ; GUSTIN ROBIN

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MACRAE AND CO; FITCH EVEN TABIN AND FLANNERY; HERSHKOVITZ AND ASSOCIATES LLC; ABRAHAM; MCCLURE QUALEY AND RODACK LLP

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZA ZW

International class (IPC 8–9): G06F3/048 G06F7/08 G06K5/00 G06K9/00 G06K9/46 G06K9/62 G06Q20/00 G06Q20/04 G06Q20/10 G06Q20/14 G06Q20/18 G06Q20/34 G06Q20/40 G06Q30/00 G06Q30/06 G06Q40/00 G07D13/00 G07D9/00 G07F19/00 G07F7/04 G07F7/10 G07F7/12 (Advanced/Invention); G06Q40/00 G07D9/00 G07F7/12 (Advanced/Non–invention); G06F7/06 G06K5/00 G06Q20/00 G06Q30/00 G06Q40/00 G07F19/00 G07F7/00 G07F7/10 G07F7/12 (Core/Invention)

International class (IPC 1–7): G06F17/60 G06F7/08 G07D9/00 G07F19/00 G07F7/08 H04L12/14 H04L29/06 H04M15/00

CPC: G06Q20/108 G07F7/08 G07F7/12 G07F19/00 G07F19/203 G06Q20/045 G06Q20/04 G06Q20/14 G06Q20/18 G06Q20/341 G06Q20/40 G06Q20/4014 G06Q30/06 G07F7/04 G07F7/1008 G07F19/20 G07F19/202 G07F19/209 G06Q20/102 G06Q20/1085 G06K9/00442 G06F3/048 G06K9/4604 G06K9/6202 G06Q20/042 G06Q20/10 G07F19/21

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US2005017067, US2005014299, US2005008132, US2005006459, US2004255354, US2004236653, US2004236631, US2004230610, US2004226493, US2004225604, US2004225377, US2004215574, US2004215558, US2004215557, US2004210518, US2004210515, US2004207707, US2004181484, US2004164141, US2004148049, US2004143553, US2004143552, US2004143357, US2004139000, US2004133516, US2004117302, US2004111368, US2004111361, US2004107165, US2004098335, US2004088261, US2004088252, US2004083021, US2004068464, US2004063224, US2004059672, US2004049452, US2004044961, US2004044606, US2004039702, US2004030657, US2004030647, US2004026500, US2004026499, US2004024701, US2004019543, US2004006537, US2003236749, US2003236728, US2003229578, US2003229541, US2003229539, US2003226890, US2003222136, US2003220863, US2003220858, US2003220843, US2003212620, US2003208421, US2003197055, US2003196936, US2003191722, US2003187792, US2003187789, US2003180972, US2003169055, US2003167228, US2003163415, US2003154164, US2003154153, US2003135752, US2003135459, US2003130907, US2003126083, US2003126036, US2003120571, US2003105725, US2003097332, US2003093367, US2003089768, US2003075596, US2003069856, US2003066876, US2003061155, US2003056100, US2003050889, US2003049390, US2003049376, US2003046219, US2003037090, US2003036815, US2003033252, US2003033251, US2003029383, US2003028481, US2003027424, US2003023555, US2003023553, US2003018567, US2003014368, US2003014145, US2002199082, US2002198839, US2002198806, US2002197745, US2002193902, US2002192966, US2002178025, US2002161702, US2002156548, US2002153414, US2002152176, US2002152170, US2002152168, US2002152166, US2002152165, US2002152164, US2002152160, US2002143706, US2002138423, US2002138363, US2002138321, US2002128735, US2002120562, US2002119817, US2002111908, US2002104878, US2002103866, US2002101626, US2002097715, US2002091635, US2002091603, US2002087467, US2002087463, US2002082962, US2002073022, US2002046049, US2002036159, US2002033359, US2002029190, US2002016767, US2002013711, US2002004781, US2001056401, US2001037300, US2001014879, US2001001321, NL1010872, KR101217529, JP2012238138, GB2394107, GB2394107, GB2351366, EP1627276, EP1148454, EP1095350, EP0969429, EP0969429, DE202010001413, DE202009001095, CN103473678, CN102855710, CN102855710, AU2008296592,

Abstract:
Source: US2005035193A An automated document cashing system is provided with an automated machine that cashes monetary transaction documents such as checks, money orders, and that makes deposit entries into the bank account of the user after validation of the user and monetary transaction document, without the aid of a bank teller. Validation of the identity of the user is performed with the use of a card associated with intelligence that identifies the user. A biometric device also may be used in identifying the validity of the user. Validation of the document involves one or more of: validating the presence of a signature; validating the amount of the monetary transaction document including a manual entry of the amount by the user; validating CAR against the LAR; and validating the banking system parameters and rules for the customer and/or the transaction. To assist in the automatic analysis of data on monetary transactional documents or on remittance documents, the user is prompted to provide a bounding box about the data. An image touch screen may be touched by the user to locate the bounding box and the user may magnify the data to fill the boundary box to exclude other data from this analysis. After document and person validation, the system will dispense money or transfer monies to a savings account, a checking account, a smart card, or the like. The system will also write money orders or wire transfer money. By supplying monies in the form of cash, credit card authorization, smart card balance, or the like to the machine, the user can pay bills such as a utility bill through the system or purchase items dispensed by the system.

0) US5864289A – COIN CARRIER

91) Family number: 28681612 (US5864289A) © PatBase

Title: Coin carrier

Priority: US19980079736 19980515

Family:

Publication number	Publication date	Application number	Application date
US5864289 A	19990126	US19980079736	19980515

Probable Assignee: TIEMANN KIMBERLY D

Assignee(s): TIEMANN KIMBERLY D

Inventor(s):(std)**:** TIEMANN KIMBERLY D

International class (IPC 8–9)**:** A45C1/00 G07D9/00 (Advanced/Invention); A45F3/02 (Advanced/Non–invention)

International class (IPC 1–7)**:** G08B13/14

CPC: A45C1/00 A45C2001/028 A45F3/02 G07D9/002

European class: A45C1/00 G07D9/00C K45C1/02R K45F3/02

US class: 224/236 224/610 340/568.7 340/571 340/692 340/693.5

Classification Explorer

Cited documents: US5622346 A, US5505353 A, US5454497 A, US5431319 A, US5407110 A, US5240158 A, US5172097 A, US4974761 A, US4972557 A, US4620555 A,

Forward Citations: USD780442, USD739683, USD585637, USD576433, US8342468, US7059477, US6559768, US6524288, US6405912, US6357640, US6209765, US2007210228, US2006057949, US2005155913,

Abstract:
Source: US5864289A A coin carrier that includes a cup holder member, a lid member including an audible open lid altering mechanism, and an adjustable length support strap assembly. The cup holder member includes a central coin cup receiving cavity that is accessible through a top receiving cavity opening, and a logo display area, a lid securing hook and pile fastener section, and at least one closable side pocket carried on an exterior sidewall thereof. The lid member is pivotally attached to the cup holder member with a flexible hinge strap. The lid member includes a securing tab that is securable to the lid securing hook and pile fastener section of the cup holder member. The audible open lid alerting mechanism includes an on/off switch, a battery connector, an activation switch, an audible signal generating circuit, and a speaker. The activation switch is positioned on a receiving cavity facing surface of the lid member at a location such that, when the lid member is positioned over and sealing the top receiving cavity opening, the activation switch is depressed sufficiently to reset the audible signal generating circuit, the audible open lid alerting mechanism being activated by opening the lid member.

0) IL118940A1 – METHOD AND MEANS FOR CHECKING DOCUMENTS HAVING ...

92) Family number: 14838957 (IL118940A1) © PatBase

Title: METHOD AND MEANS FOR CHECKING DOCUMENTS HAVING SAFETY MEANS

Priority: IL19960118940 19960724

Family:

Publication number	Publication date	Application number	Application date
IL118940 A0	19961031	IL19960118940	19960724
IL118940 A1	19990714	IL19960118940	19960724

Probable Assignee: WHD ELEKTRONISCHE PRUFTECHNIK

Assignee(s):(std)**:** WHD ELECTRONISCHE PRUFTECHNIK ; WHD ELEKTRONISCHE PRUFTECHNIK

Assignee(s): WHD ELEKTRONISCHE PRUFTECHNIK GMBH ; WHD ELECTRONISCHE PRUFTECHNIK GMBH

Agent(s): REINHOLD COHN AND PARTNERS; GE EHRLICH 1995 LTD

International class (IPC 8–9): G07D7/00 (Advanced/Invention); G07D7/00 (Core/Invention); G07D (Subclass/Invention)

International class (IPC 1–7): G07D G07D7/00

Classification Explorer

Abstract:
Source: IL118940A1 1. A process for the examination of security documents with electri– cally conductive security strips, bands, threads or two–dimensional security materials, by use of capacitive coupling between transmitter and receiver as well as electronic means of evaluation arranged subsequently thereto, wherein, within the area of optical and/or magnetic and/or format sensors, which correspond spatially to a test sensing mechanism in a processing machine and activate the test sensing mechanism, several antennas and/or electrodes in one or several planes, functioning as transmitter or receiver sensors, constitute one or several test fields, and wherein energy in the range of high and/or low frequency and/or DC voltage, overcoupling the antennas and/or electrodes, is conducted over the object under test, in a manner dependent on its geometry and/or conductivity, and wherein the conducted energy, in the same phase position or in a different position, is supplied by means of one or several antennas and/or electrodes to a subsequently switched selective amplifier, in order to reduce interference energy and to suppress the ground conductivity of objects under test, for example, banknotes, and wherein a phase comparator switched subsequently to selective amplifier, as well as special filters for suppression of interference and outside energies and an evaluation unit are so arranged as to implement a classification of electrically conductive security strips, bands, threads or two–dimensional objects under test, the object under test being located in an undefined lateral position, and being transported through the test field by means of restricted guidance during the test process.

0) US2003118228A – CUSTOMIZABLE INTERNATIONAL NOTE COUNTER

93) Family number: 31984789 (US2003118228A) © PatBase

Title: Customizable international note counter

Priority: US19980078269P 19980317 US19980179573 19981027 US20020259349 20020927 WO1999US04713 19990303

Family:

Publication number	Publication date	Application number	Application date
AU199928923 A1	19991011	AU19990028923	19990303
CA2324005 AA	20000914	CA19992324005	19990303
CA2324005 C	20061219	CA19992324005	19990303
EP1073986 A1	20010207	EP19990909798	19990303
EP1073986 A4	20020130	EP19990909798	19990303
EP1073986 B1	20080102	EP19990909798	19990303
US2003118228 AA	20030626	US20020259349	20020927
US6493461 BA	20021210	US19980179573	19981027
US6621919 BB	20030916	US20020259349	20020927
WO9948040 A1	19990923	WO1999US04713	19990303

Probable Assignee: CUMMINS ALLISON CORP

Assignee(s):(std)**:** CUMMINS ALLISON CORP

Assignee(s): MAZUR RICHARD A ; MENNIE DOUGLAS U ; VOGEL MATTHEW S ; WATTS GARY P ; WEGGESSER JOHN F

Inventor(s):(std)**:** DOUGLAS U MENNIE ; GARY P WATTS ; JOHN F WEGGESSER ; MATTHEW S VOGEL ; MAZUR RICHARD A ; MENNIE DOUGLAS U ; RICHARD A MAZUR ; VOGEL MATTHEW S ; WATTS GARY P ; WEGGESSER JOHN F

Agent(s): MARKS AND CLERK; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW

International class (IPC 8–9): G06K9/00 G06M7/00 G07D11/00 G07D7/00 G07D7/16 G07D7/20 G07D9/00 G07F19/00 (Advanced/Invention); G06K9/00 G06M7/00 G07D11/00 G07D7/00 G07D9/00 G07F19/00 (Core/Invention)

International class (IPC 1–7): G06K9/00 G07D7/00 G07D7/16 G07D7/20 G07D9/00

CPC: G07D7/162 G07D7/20 G07D11/0084 G07F19/20

European class: G07D11/00K G07D7/16B G07D7/20 G07F19/00F G07F19/20

US class: 382/135 382/135P 382/137

Classification Explorer

Cited documents: WO9610800, WO9524691 A1, WO9524691, WO9419773, WO9323824, WO9111778, WO9007165, WO5465301, WO5295196, WO5119025, WO4683508, WO4617458, WO4413296, WO4388662, WO4164770, WO3870629, WO3815021, USRE31692 E, USD369984, US852400, US800053, US72280896, US6721442, US6241069, US6237739, US6170822 BA, US6141069, US6104812 A, US6104812, US6073744 A, US6026175 A, US6026175, US6012565, US6012565, US5992601, US5943655 A, US5870487, US5867589, US5832104, US5822448, US5815592, US5806650, US5790697, US5790693 A, US5790693, US5751840, US5729623, US5727667 A, US5727667, US5724438, US5704491, US5692067, US5687963 A, US5687963, US5652802 A, US5652802, US5640463, US5640463, US5633949, US5633949, US5580311, US5542468, US5505834, US5493534, US5467406 A, US5467406, US5467405, US5465821, US5465301, US5457336, US5454727, US5448043 A, US5448043, US5430664 A, US5430664, US5367577, US5342213 A, US5342213, US5341408 A, US5317140, US5304813 A, US5297030, US5295196 A, US5261518 A,

US5256080 A, US5236072 A, US5231381, US5207788 A, US5201395 A, US5198976, US5184115, US5167411 A, US5167313 A, US5163672 A, US5151607, US5122754 A, US5105186, US5101184, US5068519 A, US5066992 A, US5055834 A, US5047871 A, US5027415 A, US4996604 A, US4992860 A, US4985614 A, US4973851 A, US4953086 A, US4931782, US4928094, US4908516 A, US4906988 A, US4881268 A, US4851616, US4841358, US4837426 A, US4825246, US4823393 A, US4817176 A, US4811004, US4806709, US4789345 A, US4782328, US4764725 A, US4761002 A, US4749087 A, US4747492 A, US4733308 A, US4716456, US4707843 A, US4700368 A, US4697071 A, US4694963 A, US4681229 A, US4677682 A, US46758595, US4658289, US4653647 A, US4645936 A, US4628194 A, US4592090 A, US4587434 A, US4587412 A, US4567370 A, US4563771 A, US4558224 A, US4556140 A, US4544266, US4539702 A, US4513439 A, US4503963 A, US4490846 A, US4487306 A, US4482058 A, US4480177 A, US4470496 A, US4464787 A, US4464786 A, US4461028 A, US4451521 A, US4442541 A, US4420153 A, US4416449 A, US4386432 A, US4381447 A, US4356473 A, US4355300 A, US4349111 A, US4348656 A, US4334619 A, US4313598 A, US4311914 A, US4302781 A, US4288781 A, US4283708 A, US4277774 A, US4255651 A, US4251867 A, US4236639, US4179685 A, US4147430 A, US4114804 A, US4096991 A, US4081131 A, US4041456 A, US3976198 A, US3966047, US3906449 A, US3870629 A, US3842281 A, US3815021, US3782543, US3778628 A, US3764899, US3679314 A, US3618765 A, US3612835 A, US3612834 A, US3509535 A, US3496370 A, US3480785 A, US3280974 A, US3246295 A, US3245534 A, JP9062894, JP64019495, JP61041439, JP61014557, JP56136689, JP54071674, JP54071673 A2, JP54071673, JP1019495 A2, GB2190996, EP325364, EP0718809, EP0700098, EP0690451, EP0487316, EP0342647, EP0338123, EP0101115, EP0077464, DE4310216,

Forward Citations: WO13023776, WO08050462, WO08001056, WO08001056, WO06040836, WO04038631, WO04038631, WO0167400, WO0161655, USRE44252, USD767668, USD767667, USD754786, USD726813, USD671164, USD669525, USD663765, USD657815, USD646711, USD644682, USD643871, USD590870, USD582471, USD562377, USD560711, US9679214, US9558418, US9530271, US9495808, US9477896, US9472040, US9430895, US9390574, US9355295, US9296573, US9245400, US9208632, US9208393, US9195889, US9189780, US9171412, US9142075, US9141876, US9129271, US9044785, US9004255, US8978864, US8973817, US8958626, US8950566, US8948490, US8944234, US8929640, US8899400, US8787652, US8781206, US8725289, US8714336, US8714335, US8701857, US8684157, US8655046, US8655045, US8644585, US8644584, US8644583, US8639015, US8627939, US8625875, US8600146, US8600145, US8594414, US8582862, US8559695, US8559694, US8544656, US8542904, US8538123, US8514379, US8478020, US8478019, US8467591, US8459436, US8453820, US8443958, US8442296, US8437532, US8437531, US8437530, US8437529, US8437528, US8433126, US8433123, US8428332, US8417017, US8417016, US8413888, US8401696, US8401268, US8396586, US8396278, US8391583, US8380573, US8371429, US8339589, US8331643, US8322505, US8297428, US8261901, US8249327, US8204293, US8169602, US8162125, US8126793, US8125624, US8118216, US8103084, US8100245, US8100243, US8094917, US8085972, US8052145, US8041098, US8027043, US8006898, US7980378, US7978899, US7946406, US7938245, US7934601, US7929749, US7912272, US7903863, US7882000, US7881519, US7873576, US7849994, US7817842, US7788633, US7786982, US7779982, US7778456, US7762380, US7753189, US7735621, US7726457, US7721952, US7686151, US7672499, US7650980, US7647275, US7635082, US7628326, US7620231, US7619721, US7602956, US7600626, US7599543, US7591428, US7590274, US7552864, US7551764, US7542598, US7536046, US7505831, US7391897, US7376257, US7366338, US7362891, US7349566, US7336265, US7292228, US7269279, US7248731, US7232024, US7222712, US7201320, US7197173, US7191657, US7187795, US7171032, US7158662, US7146245, US7103438, US7092560, US7082216, US7016767, US7014189, US6996263, US6994200, US6962247, US6959800, US6957733, US6955253, US6915893, US6913130, US6908029, US6896117, US6892242, US6889897, US6880692, US6866134, US6860375, US6810137, US6731786, US6724927, US6724926, US6628816, US2017004667, US2016245769, US2015262446, US2015221159, US2015154821, US2014231214, US2014086455, US2014019321, US2013044935, US2013034291, US2012284604, US2011290617, US2011276482, US2011042178, US2011004336, US2010320057, US2010104170, US2010030372, US2009268233, US2009260947, US2009257641, US2009242627, US2009183967, US2009090660, US2009033020, US2009028285, US2008273789, US2007296793, US2007122023, US2005281577, US2005276458, US2005173221, US2005173220, US2005117791, US2005087422, US2004211839, US2004211708, US2004211644, US2004149538, US2004085352, US2004050651, US2003168849, US2003127509, US2003108233, US2003062242, US2002026422, TWI378405, TWI372367, JP2003099837, EP2876612, EP2077535, EP2077535, EP1816614, EP1296291, EP1296291, EP1241637, CN102410779, AU2005331793,

Abstract:
Source: US2003118228A A document handling system is adapted to accommodate a plurality of different currency types. The system includes a sensor for counting the number of bills in a stack of bills. An operator interface panel includes a display for displaying information to an operator. An input device specifies the type of currency and the denomination of currency to be processed. The system may further include an authenticating unit for authenticating each of the bills based on one or more attributes detected from each bill. Based on the designated currency type and denomination, the system appropriately adjusts the display and/or selects which attributes are used to authenticate bills.

0) US6296182B – BANKNOTE–PROCESSING DEVICE WITH CARD READER/WRI...

94) Family number: 14131404 (US6296182B) © PatBase

Title: Banknote–processing device with card reader/writer function

Priority: JP19980056890 19980309 JP19980136919 19980519 JP19990148228 19990527 JP19980323740 19981113 JP19980137262 19980519

Family:

Publication number	Publication date	Application number	Application date
JP11259716 A2	19990924	JP19980056890	19980309
JP11328319 A2	19991130	JP19980137262	19980519
JP11328499 A2	19991130	JP19980136919	19980519
JP2000207610 A2	20000728	JP19990148228	19990527
JP3634616 B2	20050330	JP19980056890	19980309
JP3914333 B2	20070516	JP19980137262	19980519
JP4017052 B2	20071205	JP19980136919	19980519
US6296182 BA	20011002	US19990264100	19990308

Probable Assignee: AP6 CO LTD

Assignee(s):(std)**:** NIPPON CONLUX CO LTD

Assignee(s): AP6 CO LTD ; CITIBANK JAPAN LTD ; CITIBANK NA ; KABUSHIKI KAISHA NIPPON CONLUX ; NIPPON CONLUX KK

Inventor(s):(std)**:** OTA MICHIHIRO ; YOSHIDA HIROAKI

Agent(s): KIMURA TAKAHISA

International class (IPC 8–9)**:** G06F19/00 G06K13/06 G06K17/00 G06Q20/18 G06Q40/00 G06Q40/02 G07D7/00 G07D9/00 G07F19/00 G07F7/02 G07F7/04 G07F7/08 (Advanced/Invention); G06K13/06 G06K17/00 G07D7/00 G07F7/00 G07F7/08 (Core/Invention)

International class (IPC 1–7)**:** G06F17/60 G06F19/00 G06K13/06 G06K17/00 G06K19/06 G07D7/00 G07D9/00 G07F19/00 G07F7/08

CPC: G07F7/02 G07F7/04

European class: G07F7/02 G07F7/04

US class: 235/379 235/381 235/451 235/492

Classification Explorer

Cited documents: US6016954 A, US5929414 A, US5887695 A, US5709293 A, US5679945 A, US5635696 A, US5454332 A, US5195739 A, US4669596 A, JP63148393, JP3278197, JP2030089 U, JP1031774, JP10031774, JP03278197, JP02030089 U,

Forward Citations: WO16103927, WO08051999, WO08051999, USD525659, US9640011, US9064162, US8613392, US8573490, US8157167, US7188761, US7152783, US7100823, US7080782, US6869012, US2015254922, US2014203083, US2012168503, US2010116883, US2007138266, US2005189416, US2004262382, US2004208051, US2003094488, US2003014370, JP7236630, JP5969250, JP4904820, JP3898488, JP2771452, JP2013214202, JP2011044176, JP2009163381, JP2007188204, JP2003151015, JP2003051055, EP2141666, CN103400456,

Abstract:
Source: US6296182B To provide a banknote–processing device with an IC card reader/writer function, a card reader/writer which records and reproduces information to and from the IC recording area of an IC card is fitted within the front mask where the banknote insertion slot is formed, or within a front mask cover which serves to cover this front mask.

0) US2002099634A – TRANSACTION PROCESSING SYSTEMS

95) Family number: 30132501 (US2002099634A) © PatBase

Title: TRANSACTION PROCESSING SYSTEMS

Priority: GB19980008995 19980429 GB19980008997 19980429 GB19980016178 19980725 US19990229046 19990112 US20010884523 20010618 US19990229045 19990112

Family:

Publication number	Publication date	Application number	Application date
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GB9816178 A0	19980923	GB19980016178	19980725
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US2002099634 AA	20020725	US20010884523	20010618
US6311165 BA	20011030	US19990229045	19990112
US7545816 BA	20090609	US19990229046	19990112
US7912914 BB	20110322	US20010884523	20010618
ZA9902976 A	20001020	ZA19990002976	19990428
ZA9902977 A	20001030	ZA19990002977	19990428
ZA9904582 A	20010115	ZA19990004582	19990715

Probable Assignee: NCR CORP

Assignee(s):(std)**:** NCR CORP ; NCR INT INC

Assignee(s): NCR INTERNATL INC ; JPMORGAN CHASE BANK NA ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** MICHAEL G COUTTS ; LEE G DOVE ; MICHAEL COUTTS ; DOVE LEE G ; COUTTS MICHAEL G ; COUTTS MICHAEL

Agent(s): WELTE GREGORY A; GREGORY A; GATES AND COOPER LLP

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9)**:** G06F15/167 G06Q20/00 G06Q20/10 G06Q20/18 G06Q20/20 G06Q40/00 G06Q50/10 G07D9/00 G07F19/00 G07F5/18 H04L12/26 (Advanced/Invention); G06Q40/00 G07D9/00 G07F19/00 G07F5/00 H04L12/26 (Core/Invention); G06F G06K G07F H04L (Subclass/Invention)

International class (IPC 1–7)**:** G06F G06F17/60 G06F19/00 G06K G07D9/00 G07F G07F19/00 G07F7/10 G08F H04L H04L12/26 H04L29/06

CPC: G07F19/201 G07G1/14 G07G5/00 G06Q20/1085 G06Q20/202 G06Q40/00 G07F11/002 G07F5/18 G07F19/20 G07F19/207 G06Q20/18 G07F19/211

European class: G06Q20/1085 G06Q20/18 G06Q20/202 G06Q40/00 G07F11/00B G07F19/00F G07F19/20 G07F19/201 G07F19/207 G07F19/211 G07F5/18 G07G1/14 G07G5/00

US class: 235/375 235/379 370/400 705/21 705/35 705/35P 705/43 709/212 710/1 710/8

Cited documents: WO9602034 A1, US6691150 BA, US6578005 BA, US6512760 BA, US6505177 BA, US6473788 BA, US6318536 BA, US6308887 BA, US6305602 BA, US6269473 BA, US6196456 BA, US6195694 BA, US6152365 A, US6128376 A, US6115643 A, US6112259 A, US6108640 A, US6085976 A, US6085178 A, US6070194 A, US5984178 A, US5958014 A, US5958010 A, US5946372 A, US5943652 A, US5870699 A, US5737585 A, US5727184 A, US5673385 A, US5659801 A, US5655081 A, US5563805 A, US5553083 A, US5539877 A, US5537626 A, US5491791 A, US5408624 A, US5347646 A, US5323393 A, US5274795 A, US4922419 A, US4917792 A, US4823343 A, US4775931 A, US4660168 A, US4636947 A, US4621326 A, US4179735 A, US3882305 A, US2005094772 AA, US2003069797 AA, JP9261259 A2, JP9115222 A2, JP9091143 A2, JP7044242 A2, JP6110587 A2, JP5292091 A2, JP3246796 A2, JP3206538 A2, JP1231155 A2, JP10105503 A2, JP10055332 A2, EP0602787 A2,

Forward Citations: WO16154702, WO16018246, WO09046361, WO08014523, WO07073522, WO07073522, WO06092113, WO05116900, WO05020107, WO05020028, WO04038666, WO03083787, WO0247043, WO0247043, WO0247039, WO0247039, WO0219664, WO0219664, WO02097702, WO02095543, WO02095543, WO0154088, USRE45007, USRE41717, US9619806, US9615134, US9582954, US9569911, US9558316, US9547833, US9542661, US9531770, US9524368, US9495465, US9489691, US9470699, US9432455, US9412114, US9400998, US9390577, US9374405, US9369673, US9367826, US9354837, US9348822, US9338167, US9300705, US9286617, US9280763, US9269082, US9261950, US9258351, US9256867, US9246869, US9241034, US9237425, US9232368, US9232191, US9224146, US9208479, US9191357, US9191343, US9189781, US9177272, US9166883, US9143729, US9135609, US9135585, US9129279, US9124757, US9104990, US9076112, US9058572, US9047578, US9043236, US9041538, US9020886, US9015237, US9003080, US8996162, US8984050, US8967468, US8949855, US8949310, US8930248, US8924269, US8918506, US8902915, US8893962, US8885013, US8863147, US8840471, US8834278, US8818533, US8799463, US8799115, US8788302, US8775408, US8775280, US8768789, US8762454, US8762453, US8762293, US8756274, US8756135, US8751294, US8744937, US8732083, US8732024, US8725654, US8723804, US8719937, US8719328, US8712872, US8706630, US8694397, US8676672, US8675590, US8671064, US8671041, US8666845, US8655756, US8655309, US8620986, US8615451, US8606723, US8601490, US8588231, US8588196, US8583756, US8582571, US8582570, US8579191, US8577795, US8577760, US8571961, US8566240, US8566193, US8566185, US8561895, US8560621, US8560392, US8554637, US8554586, US8550335, US8544737, US8543982, US8543506, US8538581, US8521838, US8521621, US8515794, US8510224, US8498943, US8489742, US8489478, US8479985, US8469808, US8469172, US8468544, US8463864, US8463666, US8452695, US8448850, US8423418, US8417588, US8417380, US8413165, US8412603, US8412374, US8402473, US8396768, US8396751, US8392364, US8386344, US8376219, US8370272, US8370233, US8365985, US8364715, US8364608, US8332274, US8321311, US8301572, US8296440, US8290869, US8285805, US8281030, US8279886, US8266315, US8244683, US8231049, US8225990, US8220003, US8205002, US8204830, US8190530, US8185659, US8180051, US8175263, US8170945, US8160988, US8155784, US8146803, US8146802, US8135759, US8130111, US8126857, US8112452, US8112330, US8108726, US8103548, US8099513, US8099342, US8095597, US8069098, US8060247, US8042733, US8032593, US8032459, US8032416, US8028078, US8027926, US8027920, US8011580, US8005985, US8005777, US7996631, US7988049, US7984471, US7984125, US7979576, US7974921, US7970722, US7959072, US7933968, US7933803, US7926104, US7925780, US7921978, US7912961, US7912760, US7908467, US7904344, US7886364, US7883006, US7882088, US7870290, US7870189, US7864702, US7853494, US7853354, US7822829, US7819316, US7813814, US7810723, US7805334, US7797077, US7787987, US7774486, US7774001, US7770023, US7769646, US7748620, US7747346, US7739353, US7720616, US7717332, US7716362, US7716096, US7685415, US7685302, US7668093, US7650400, US7644170, US7636886, US7636788, US7631807, US7617982, US7611049, US7610227, US7604165, US7596786, US7590980, US7588183, US7584869, US7580859, US7571186, US7568015, US7558838, US7555461, US7548988, US7542944, US7536478, US7526775, US7523156, US7522916, US7522880, US7519653, US7506064, US7502752, US7499768, US7494054, US7490760, US7479946, US7472825, US7472824, US7472394, US7454371, US7451919, US7451917, US7451239, US7415399, US7401051, US7383227, US7382911, US7360682, US7346667, US7311245, US7308483, US7289975, US7280087, US7267265, US7251662, US7237104, US7232063, US7228341, US7206824, US7188154, US7172114, US7162394, US7155477, US7136906, US7121470, US7117280, US7103656, US7077312, US7051091, US7051087, US7032052, US6991159, US6975283, US6968321, US6959187, US6936833, US6914694, US6907564, US6889360,

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Abstract:
Source: US2002099634A A banking, retail or other transaction network can comprise a number of terminals, for example an ATM, where each terminal comprises a plurality of peripheral devices such as a user interface, card reader, receipt printer and cash dispenser. The applications software for the peripheral devices can be held in a central server located externally of the terminal and linked to the terminal through a communications link. The link can extend to the individual peripheral devices so that they are direct clients of the server. Additionally the individual peripheral devices can be connected to each other over the link to enable them to communicate directly with each other on a peer−to−peer basis. Each peripheral can have an independent control application. In use, the independent control applications may communicate with each other so that a peripheral operates in response to a signal generated by another peripheral. A peripheral for use in such a terminal, and a network of such terminals are also described. A mainframe or server computer accessing a banking or other information database (e.g., a legacy host) can be connected to the central server through an information signal connection.

0) US2002122568A – DIGITAL AUTHENTICATION WITH DIGITAL AND ANALOG ...

96) Family number: 30384039 (US2002122568A) © PatBase

Title: DIGITAL AUTHENTICATION WITH DIGITAL AND ANALOG DOCUMENTS

Priority:

JP20000547766	19990429	US19980070524	19980430	US19990133840P	19990512
US20000019827	20000512	US20000019828	20000512	US20020136172	20020501
US20010874490	20010605	US20020407929P	20020904	US19990133848P	19990512
WO2002US17700	20020605	WO2002US17700	20020605	US20030526843	20030904
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WO2003US27693	20030904	WO2000US13117	20000512	WO2000US13128	20000512
US20030654826	20030904				

Family:

Publication number	Publication date	Application number	Application date
AT235775 E	20030415	AT19990948578T	19990429
DE69906270 D1	20030430	DE19996006270	19990429
DE69906270 T2	20031211	DE19996006270T	19990429
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EP1405251 A4	20051005	EP20020737376	20020605
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US2004236951 AA	20041125	US20040867479	20040614
US2006026430 AA	20060202	US20030526843	20030904
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US6487301 BA	20021126	US20010874490	20010605
US6751336 BB	20040615	US20020136172	20020501
US7236610 BA	20070626	US20000019827	20000512
US7263722 BA	20070828	US20000019828	20000512
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US7877613 BB	20110125	US20030526843	20030904
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WO04023313 A1	20040318	WO2003US27693	20030904
WO9957885 A1	19991111	WO1999EP02928	19990429

Probable Assignee: FRAUNHOFER GESSELSHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG EV

Assignee(s):(std)**:** FRAUNHOFER CENTER FOR RESEARCH ; MEDIASEC TECHNOLOGIES LLC ; KOCH ECKHARD ; LUO CHENGHUI ; MEDIASEC TECHNOLOGIES GMBH ; FRAUNHOFER CRCG INC ; FRAUNHOFER CT FOR RES IN COMP ; MEDIASEC TECHNOLOGIES LLC PROV ; FRAUNHOFER GES FORSCHUNG ; FRAUNHOFER GESSELSCHAFT ; FRAUNHOFER GES ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E V ;

ZHAO JIAN ; THOMSON LICENSING

Assignee(s): AIR FORCE RESEARCH LABORATORY IFOJ ; FRAUNHOFER GES ZUR FOERDERUNG DER ANGEWANDTEN FORS ; FRAUNHOFER GESSELSHAFT ZUR FOERDERUNG DER ANGEWAND ; FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E V ; FRAUNHOFER GES ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG EV ; FRAUNHOFER GESSELSHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG EV ; FRAUNHOFER GESELLSCHAFT ; FRAUNHOFER GES ; MEDIASEC TECHNOLOGIES LLC A CORP ; MEDIASEC TECHNOLOGIES LLC PROVIDENCE ; FRAUNHOFER CENTER FOR RESEARCH IN COMPUTER GRAPHIC ; FRAUNHOFER CENTER FOR RESEARCH IN COMPUTER GRAPHICS INC ; FRAUNHOFER CENTER FOR RESEARCH IN COMPUTER GRAPHICS INC PROVIDENCE

Inventor(s):(std)**:** KOCH ECKHARD ; LUO CHENGHUI ; ZHAO JIAN

Agent(s): ZINKLER FRANZ; GORDON E NELSON, PATENT ATTORNEY; GORDON E NELSON PATENT ATTORNEY; GORDON E; NELSON GORDON E; GLENN PATENT GROUP; MICHAEL A

Designated states: AT BE BG CA CH CN CY CZ DE DK EE ES FI FR GB GR HU IE IT JP KR LI LU MC NL PT RO SE SI SK TR US

International class (IPC 8–9)**:** G06F1/00 G06F11/00 G06F11/30 G06F12/14 G06F12/16 G06F15/18 G06F17/30 G06F21/00 G06F21/14 G06F21/16 G06F21/20 G06F21/24 G06F7/04 G06F9/44 G06K9/00 G06K9/36 G06K9/46 G06T1/00 G07D7/00 G08B23/00 G09C5/00 H03M1/68 H04K1/00 H04L9/00 H04L9/32 H04N1/32 H04N1/387 H04N21/8358 H04N7/16 H04N7/167 (Advanced/Invention); G06F1/00 G06F9/44 G06F9/445 H04N1/32 (Advanced/Non–invention); G06F1/00 G06F12/14 G06F21/00 G06F9/44 H04L9/00 (Core/Invention)

International class (IPC 1–7)**:** G03G21/00 G06F12/14 G06F13/00 G06K9/00 G06K9/46 G07D7/00 G09C5/00 H04L9/00 H04L9/32 H04N1/32 H04N1/387 H04N7/167 H04N7/18

CPC: G06F21/14 G06F21/16 H04N21/435 H04N21/4424 H04N21/8173 G06T2201/0065 H04N21/8358 G06F21/10 G06F2221/0737 G06T1/0021 G06T1/005 G07D7/004 H04N1/32101 H04N1/32122 H04N1/32133 H04N1/32144 H04N1/32203 H04N1/32213 H04N1/32283 H04N7/1675 H04N2201/3225 H04N2201/3226 H04N2201/3233 H04N2201/3235 H04N2201/3236 H04N2201/3269 H04N2201/327 H04N2201/3271 H04N2201/3281 G06F21/125

European class: G06F1/00N7R G06F21/10 G06F21/12A4 G06F21/14 G06F21/16 G06F9/44G4M4 G06T1/00W G06T1/00W6 G07D7/00D H04N1/32C H04N1/32C16 H04N1/32C17B H04N1/32C19 H04N1/32C19B3 H04N1/32C19B3B3 H04N1/32C19B4D H04N21/435 H04N21/442S H04N21/81W1 H04N21/8358 H04N7/167D S06F1/00N7R2 S06F221/07C4 S06F221/2107 T04N1/32C15D T04N201/32C12B T04N201/32C4 T04N201/32C4B T04N201/32C4D T04N201/32C4D2 T04N201/32C4D3 T04N201/32C6 T04N201/32C6B T04N201/32C7

US class: 348/E05.006 348/E5.006 348/E7.056 348/E70.56S 380/277 382/100 382/100P 382/232 707/108 707/118 707/137 707/147 713/164 713/167 713/168 713/176 713/176P 713/179 713/179P 713/181 713/181S 713/187 713/188 713/189 713/189P 713/193 713/194 714/E11.207 717/108 717/118 717/137 717/147 717/171 717/176 726/22 726/26

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Abstract:
Source: US2002122568A Techniques for incorporating authentication information into digital representations of objects and using the authentication information to authenticate the objects. The authentication information may be made from information in one portion of the digital representation and incorporated into another portion of the digital representation that does not overlap the first portion. Where the digital representation is made into an analog form and that in turn is made into a digital representation and the second digital representation is verified, the two portions must further be non−overlapping in the analog form. The information from which the authentication information is made may exist at many levels: representations of physical effects produced by the object, representations of features of the object, codes that represent the object's contents, and representations of descriptions of the object. Also disclosed are a verification server and techniques for reducing errors by an OCR. The verification server verifies authenticated documents. When a document is verified, an identifier is associated with the document and the identifier is used to locate a key for the authentication information and in some cases a second copy of the authentication information. The verification process may also involve security patterns that are a physical part of the analog form. The error reduction techniques include an error code specifying characters in the object that are confusing to OCR devices, and the error code is used to correct the results of an OCR reading of an analog form.

97) Family number: 15766639 (US2005167495A) © PatBase

Title: METHOD AND APPARATUS FOR AUTHENTICATING A MAGNETIC FINGERPRINT SIGNAL USING A FILTER CAPABLE OF ISOLATING A REMANENT NOISE RELATED SIGNAL COMPONENT

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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: MAGTEK INC

Assignee(s):(std): ENGEL GEORGE L ; LIMTAO EMMANUEL C ; MAG TEK INC ; MORLEY ROBERT E JR ; RICHTER EDWARD J ; DELAND ROBERT S JR ; MAGTEK INC ; MORLEY JR ROBERT E ; UNIV ST LOUIS ; WOOD STEPHEN R ; UNIV WASHINGTON

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Agent(s): CHRISTIE PARKER AND HALE LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ

GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G06K17/00 G06K19/06 G06K19/10 G06K5/00 G06K7/08 G07D7/04 G07F7/08 G07F7/12 G11B20/10 G11B5/02 H03M1/12 H03M7/00 (Advanced/Invention)

International class (IPC 1–7): G06K17/00 G06K19/06 G06K19/10 G06K65/00 G06K7/08 G07D7/00 G07D7/04 G07D7/20 G07F7/08 G07F7/10 G11B19/02 G11B19/12 G11B20/10 G11B5/02

CPC: G06K7/084 G06Q20/347 G07D7/04 G07F7/08 G07F7/0813 G07F7/12 G06K7/087 G07F7/086 G07F7/125

European class: G06K7/08C2D G06K7/08C4 G06Q20/347 G07D7/04 G07F7/08 G07F7/08A2 G07F7/08B G07F7/12 G07F7/12B

US class: 235/380 235/435 235/449 235/449P 235/493

Classification Explorer

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Forward Citations: WO16141356, WO16141352, WO10129946, WO10059929, WO10059929, WO08070638, WO08063877, WO06014805, WO06014805, WO0180189, WO0180189, USD762651, US9659195, US9633236, US9619797, US9619741, US9595033, US9582795, US9576159, US9495677, US9495676, US9495675, US9460322, US9454866, US9449203, US9449192, US9443237, US9436955, US9361617, US9355285, US9324100, US9305314, US9286635, US9262777, US9262757, US9256770, US9256769, US9246899, US9230143, US9224142, US9213968, US9195454, US9141953, US9135618, US9123042, US9117126, US9104922, US9065643, US9047598, US9033222, US9027831, US9016572, US9004368, US9004356, US8972303, US8881254, US8876003, US8870071, US8870070, US8843417, US8840024, US8820650, US8769275, US8762279, US8756158, US8744958, US8737623, US8706621, US8701997, US8701996, US8678277, US8662389, US8657192, US8640953, US8636205, US8615445, US8612352, US8606700, US8602305, US8595490, US8589291, US8584956, US8573489, US8573487, US8573486, US8571989, US8534546, US8533123, US8533118, US8517268, US8500018, US8494968, US8489506, US8447991, US8424773, US8423415, US8413901, US8393547, US8387866, US8382000, US8375441, US8356759, US8355982, US8302872, US8302860, US8286876, US8281997, US8255971, US8251283, US8249993, US8235287, US8231055, US8210440, US8144940, US8121956, US8121942, US8118220, US8104677, US8087582, US8020775, US7984849, US7980462, US7967203, US7819322, US7818264, US7810165, US7761374, US7740173, US7740168, US7725726, US7703676, US7673799, US7543151, US7506812, US7478751, US7434732, US7416136, US7377433, US7309012, US7210627, US7163148, US6871784, US6752312, US6431445, US2013140364, US2013026218, US2012130903, US2012126007, US2012063601, US2011087596, US2011084147, US2011084140, US2011084139, US2011066516, US2011004526, US2010327060, US2010262546, US2010252623, US2010127079, US2010127072, US2010127071, US2010127065, US2010114776, US2010034434, US2009310778, US2009173790, US2009159702, US2009159701, US2009119764, US2009089213, US2009060199, US2009050699, US2009048953, US2008319869, US2008288403, US2008223932, US2008215887, US2008189214, US2008179401, US2008103982, US2008091944, US2008091617, US2008065553, US2008040276, US2008040271, US2008034221, US2008029593, US2007294182, US2007199699, US2007181671, US2007181670, US2007170240, US2007143226, US2007084921, US2007040019, US2006208078, US2006049256, US2006049255, US2006016879, US2005219728, US2005218229, US2005173530, US2005167496, US2005167495, US2005043997, GB2450378, AU2007261082,

Abstract:
Source: US2005167495A A system for verifying the authenticity of data contained in a magnetic medium using

the remanent noise characteristics of the magnetic medium. In one embodiment, the invention includes a sensing unit configured to generate a signal indicative of the magnetic field of the magnetic medium, an analog−to−digital converter (ADC) in communication with the sensing unit and configured to digitize the analog signal, a filter in communication with the ADC configured to enhance the component of the signal associated with the remanent noise characteristic, a data extraction unit, in communication with the ADC and the filter configured to measure at least bit duration and peak location and an authentication extraction unit, in communication with the filter and the data extraction unit configured to extract a set of scaled samples from the output of the filter representative of the remanent noise characteristic.

98) Family number: 15499551 (US6227446B)

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Title: Automated transaction machine note storage and delivery mechanism

Priority: EP19990962782 19991115 US19980109590 19981123 US19990313020 19990517 US19990313021 19990517 US19990155820P 19990923 US19980109590P 19981123 WO1999US27194 19991115 US19990313480 19990517 US19990313025 19990517 US19990313023 19990517 US19990313024 19990517 US20000664659 20000919

Family:

Publication number	Publication date	Application number	Application date
AR021367 AA	20020717	AR1999P105949	19991123
BRPI9914652 A	20010703	BR1999PI14652	19991115
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CA2343773 C	20060509	CA19992343773	19991115
CN100341026 C	20071003	CN20031057911	19991115
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EP1901242 A2	20080319	EP20070020476	19991115
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EP1901244 A2	20080319	EP20070020478	19991115
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US6367692 BA	20020409	US19990313025	19990517	
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WO0031670 A1	20000602	WO1999US27194	19991115	
ZA200101331 A	20010919	ZA20010001331	20010216	

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Agent(s): DIMOCK STRATTON LLP; CARLOS REINALDO OLARTE GARCIA; MELDRUM DAVID JAMES ET AL; MELDRUM DAVID JAMES

Designated states: AL AT BE BR CA CH CN CY DE DK ES FI FR GB GR IE IN IT LT LU LV MC MK MX NL PL PT RO RU SE SI ZA

International class (IPC 8–9): B65H29/16 G06F17/60 G06Q30/00 G06Q40/00 G07D11/00 G07F19/00 G07F5/00 G07F7/00 G07F7/04 (Advanced/Invention); B65H29/16 G06Q30/00 G06Q40/00 G07D11/00 G07F19/00 G07F5/00 G07F7/00 (Core/Invention); G06F (Subclass/Invention)

International class (IPC 1–7): B65H29/16 G06F17/60 G06F7/08 G06K 15/00 G06K15/00 G07D11/00 G07F19/00 G07F7/00

CPC: B65H29/006 B65H2301/4191 B65H2701/1912 G07D11/0057 G07D11/0081 G07F19/20 G07F19/203 G06Q20/042 G06Q20/1085 G07D11/0003

European class: B65H29/00E G06Q20/042 G06Q20/1085 G07D11/00D G07D11/00F2B G07D11/00H G07F19/00F G07F19/20 G07F19/203 L65H301/4191 L65H341/910 L65H701/1912

US class: 235/375 235/379 235/380 235/381 242/356.7 242/538 285/375 705/43 705/45 902/12

Classification Explorer

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Forward Citations:

WO09153330, WO09022955, WO07055641, WO06065169, WO06041887, WO04081739, WO03040909, WO03040909, WO0227626, US9697493, US9365805, US9311671, US9309490, US9309489, US9105145, US9014845, US8967389, US8945314, US8874937, US8853144, US8841246, US8795065, US8795064, US8771074, US8756158, US8740063, US8725297, US8708231, US8690052, US8679366, US8636918, US8632007, US8608060, US8600890, US8600889, US8600888, US8600887, US8583522, US8571952, US8560451, US8554677, US8543507, US8407119, US8282488, US8256603, US8136723, US8132718, US8109379, US8104706, US8100323, US8100250, US8092284, US8058374, US8052047, US8038527, US8032415, US7992775, US7934642, US7896148, US7851571, US7819308, US7810628, US7699155, US7681707, US7680710, US7658668, US7654442, US7611140, US7584883, US7559460, US7556259, US7536325, US7513417, US7500568, US7490823, US7460918, US7422095, US7366750, US7360683, US7340415, US7303117, US7175015, US7093751, US7066335, US7025255, US6983880, US6889897, US6848612, US6798899, US6786479, US6773009, US6427998, US2013186730, US2013134215, US2011209966, US2011190929, US2011134044, US2010181161, US2010164163, US2010131407, US2010100245, US2010100230, US2010082355, US2010070392, US2010069280, US2010010904, US2009204519, US2009120760, US2009118860, US2009108059, US2009051103, US2009050440, US2008149698, US2008149455, US2008128490, US2008128487, US2008082207, US2008067235, US2008065545, US2008065544, US2008065543, US2008065542, US2008065541, US2008065539, US2008065538, US2008065536, US2007240966, US2007216081, US2007187485, US2007151827, US2007102863, US2006283685, US2006259427, US2006225986, US2006208413, US2006186190, US2006148551, US2006118382, US2006086784, US2006038005, US2005275366, US2005194233, US2005167488, US2005131792, US2004222288, US2004212141, US2004192434, US2004127284, US2004064375, US2004010696, US2004010597, US2003229506, US2003172027, US2003158819, US2003156740, US2003141360, US2003139984, US2003131247, US2003127509, US2003074316, US2002198830, US2002194127, US2002194126, US2002093133, US2002085245, US2002053767, US2002053594, US2001020638, TWI308305, RU2510531, EP2763108, EP2176841, EP1734489, EP1659545, EP1577855, EP1510979, EP1344736, EP1344736, EA8554, EA008554, EA008094, DE10249997, CN102800162,

Abstract:
Source: US6227446B An automated transaction machine (10) includes a note receiving and dispensing mechanism (77). The mechanism includes a storage reel (66), a take−up reel (68) and a flexible web (70) extending between the reels. The note receiving and dispensing mechanism is housed within a note storage module (44). Notes are selectively passed into and out of the storage module to a passage area (92). The machine further includes a note inlet opening (30) and a note outlet opening (28). A note outlet transport (96) extends between the passage area and the note outlet opening. A note inlet transport (98) extends between the passage area and the note inlet opening. A note validator (58) extends adjacent to the note inlet transport for purposes of sensing the validity of notes inserted in the machine. The machine is selectively operative responsive to inputs to receive and deliver notes. The machine is further operative to enable replenishment of notes therein without accessing the interior of the housing.

0) US6527172B – AUTOMATED BANKING MACHINE ENCLOSURE

99) Family number: 30141401 (US6527172B) © PatBase

Title: Automated banking machine enclosure

Priority: US19980109779P 19981125 US19990441180 19991115 US20010830224 20010423 WO1999US27044 19991115

Family:

Publication number	Publication date	Application number	Application date
AR021368 AA	20020717	AR1999P105950	19991123
BRPI9914651 A	20010703	BR1999PI14651	19991115
CA2343785 AA	20010312	CA19992343785	19991115
CA2343785 C	20060509	CA19992343785	19991115
CN1367907 A	20020904	CN19998013544	19991115
CN1367907 B	20110831	CN19998013544	19991115
CO5021187 A1	20010327	CO19990073750	19991123
EP1145174 A2	20011017	EP19990960355	19991115
EP1145174 A4	20050223	EP19990960355	19991115
IN205171 B	20070622	IN2001MN00258	20010309
PL194682 B1	20070629	PL19990349766	19991115
PL349766 A1	20020909	PL19990349766	19991115
RU2001117201 A	20030710	RU20010117201	19991115
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US6527172 BA	20030304	US20010830224	20010423
US6550670 BA	20030422	US19990441180	19991115
WO0031694 A2	20000602	WO1999US27044	19991115
WO0031694 A3	20001116	WO1999US27044	19991115
ZA200101332 A	20011109	ZA20010001332	20010216

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD INC ; LEWIS KIM R ; LUTE RICHARD C JR

Assignee(s): LUTE RICHARD C

Inventor(s):(std)**:** KIM R LEWIS ; L JUIS KIM R ; L JUT RICHARD K ML ; LUTE RICHARD CJR ; RICHARD C LUTE ; LUTE JR RICHARD C ; LUTE RICHARD C JR ; LEWIS KIM R ; LUTE RICHARD C

Inventor(s): L'JUT RICHARD K. ML. ; L'JUIS KIM R. ; RICHARD C LUTE JR

Agent(s): DIMOCK STRATTON LLP; CARLOS REINALDO OLARTE GARCIA

Designated states: AT BE BR CA CH CN CY DE DK ES FI FR GB GR IE IN IT LU MC MX NL PL PT RU SE US ZA

International class (IPC 8–9)**:** A47B81/00 A47F10/00 E04B2/00 E04B2/02 G06F17/60 G07D11/00 G07D13/00 G07F19/00 G07F9/00 G07F9/06 G07F9/10 G07G5/00 (Advanced/Invention); A47B81/00 E04B2/02 G07D11/00 G07D13/00 G07F9/00 G07F9/10 G07G5/00 (Core/Invention)

International class (IPC 1–7)**:** A47B81/00 E04B2/02 G06F G06F1/16 G06F17/00 G06F17/60 G07D G07D11/00 G07D13/00 G07F19/00 G07F7/08 G07F9/00 G07F9/10 G07G5/00 G12B9/02

CPC: G07F19/20 G07F19/205

European class: G07F19/00F G07F19/20 G07F19/205

US class: 235/371 235/375 235/379 235/380 235/382 902/20 902/30 902/31 902/32 902/33 902/34 902/35 902/8

Classification Explorer

Cited documents: WO9808174 A1, USD386883 S1, USD360739 S1, USD332165 S1, USD291936 S1, USD283937 S1, USD272291 S1, US6196457 BA, US6082616 A, US6061666 A, US6024027 A, US6000806 A, US5984177 A, US5970890 A, US5937396 A, US5788348 A, US5752239 A, US5650605 A, US5642922 A, US5615623 A, US5592377 A, US5503088 A, US5483047 A, US5356212 A, US5202549 A, US4754126 A, US4649832 A, US4615280 A, US4593627 A, US4355369 A, JP8161587 A2, GB2225891 A1,

Forward Citations: WO04059419, WO03052700, WO03052700, USD781024, USD779774, USD779773, USD779772, USD779771, USD762040, USD724815, USD724811, USD711065, USD710065, USD677035, USD653421, USD652602, USD651784, USD651375, USD645223, USD629585, USD541505, USD540004, USD538505, USD532579, USD510170, USD500905, USD492081, USD481518, US9230460, US9022604, US8870063, US8708231, US8632007, US8600890, US8600889, US8600888, US8600887, US8583522, US8571952, US8560451, US8554677, US8543507, US8266042, US8214274, US8136723, US8100250, US8092284, US8055563, US7959067, US7917421, US7917420, US7896148, US7810628, US7783544, US7783543, US7783542, US7699155, US7693766, US7661584, US7658668, US7611045, US7593883, US7584134, US7584133, US7413118, US7367493, US7165767, US7152784, US7150392, US7150392, US7066335, US7063316, US7063316, US7063254, US7051927, US6945456, US6766943, US6739503, US6607124, US2010153303, US2010042552, US2009327161, US2009287612, US2009259581, US2008133430, US2008133429, US2008067235, US2008065545, US2008065544, US2008065543, US2008065542, US2008065541, US2008065539, US2008065538, US2008065537, US2008065536, US2008065521, US2007235521, US2006202026, US2006155628, US2006155627, US2005006464, US2004267666, US2004222296, US2004201472, US2004181484, US2004145109, US2004145106, US2004129774, US2004099727, US2004099726, JP2015028682, GB2486199, EP1986163, EP1683116, EP1466303, CN102651147, CN102651147, CN102473335,

Abstract:
Source: US6527172B An automated banking machine includes a chest portion (14). Transaction function devices such as an input device (18) and a display screen (24) are supported on the chest portion. A generally one−piece polymer body (28) is operatively engaged relative to the chest portion and extends in generally surrounding relation of the input device and display screen. The body includes at least one opening (30) such that the display screen is visible and the input device is accessible through the body.

0) US2003108074A – OPTICALLY–BASED METHODS AND APPARATUS FOR PERFO...

100) Family number: 29371937 (US2003108074A) © PatBase

Title: OPTICALLY–BASED METHODS AND APPARATUS FOR PERFORMING SORTING, CODING AND AUTHENTICATION USING A GAIN MEDIUM THAT PROVIDES A NARROWBAND EMISSION

Priority: EP20000902359 20000107 JP20000597751 20000107 US19990246818 19990208 US20020303298 20021125 WO2000US00412 20000107

Family:

Publication number	Publication date	Application number	Application date
AT502352 E	20110415	AT20000902359T	20000107
AU200024089 A5	20000825	AU20000024089	20000107
AU770214 B2	20040219	AU20000024089	20000107
BRPI0008085 A	20011106	BR2000PI08085	20000107
CA2361417 AA	20010801	CA20002361417	20000107
CA2361417 C	20091117	CA20002361417	20000107
CN1351731 A	20020529	CN20008005973	20000107
CY1111395 T1	20150805	CY20111100393T	20110418
DE1222616 T1	20030320	DE20000902359T	20000107
DE60045741 D1	20110428	DE20006045741	20000107
DK1222616 T3	20110606	DK20000902359T	20000107
EP1222616 A1	20020717	EP20000902359	20000107
EP1222616 A4	20050706	EP20000902359	20000107
EP1222616 B1	20110316	EP20000902359	20000107
ES2360033 T3	20110531	ES20000902359T	20000107
IL144791 A0	20020630	IL20000144791	20000107
JP2002536214 T2	20021029	JP20000597751T	20000107
JP2010267285 A2	20101125	JP20100147281	20100629
KR20010101808 A	20011114	KR20017009946	20010807
MXPA01008040 A1	20030714	MX2001PA08040	20000107
PT1222616 T	20110601	PT20000902359T	20000107
US2003108074 AA	20030612	US20020303298	20021125
US6552290 BA	20030422	US19990246818	19990208
US6832783 BB	20041221	US20020303298	20021125
WO0046742 A1	20000810	WO2000US00412	20000107
ZA200106400 A	20020903	ZA20010006400	20010803

Probable Assignee: SPECTRA SCIENCE CORP

Assignee(s):(std)**:** SPECTRA SCIENCE CORP ; SPECTRA SYSTEM CORP ; SPECTRA SYSTEMS ; SPECTRA SYSTEMS CORP

Assignee(s): SPECTRA SYSTEMS CORP PROVIDENCE ; LAWANDY NABIL M

Inventor(s):(std)**:** LAWANDY NABIL ; NM LAWANDY ; NABIL M LAWANDY ; LAWANDY M ; LAWANDY NABIL M ; LAWANDY N M

Inventor(s): N M LAWANDY

Agent(s): COLLISON AND CO; SIM AND MCBURNEY; MCGOWAN CATHRINE

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): B42D15/10 G06K19/06 G06K19/10 G06K9/74 G07D7/06 G07D7/12 (Advanced/Invention); B42D15/10 G06K19/06 G07D7/06 (Advanced/Non–invention);

B42D15/10 G06K19/06 G06K9/74 G07D7/00 (Core/Invention)

International class (IPC 1–7): B07C5/342 B42D15/10 G06K19/06 G06K9/74 G07D7/06 G07D7/12 H01S3/16

CPC: G07D7/1205 G07D7/06

European class: G07D7/12C

US class: 209/576 283/85 372/42 372/96

Classification Explorer

Cited documents: WO9845803 A1, WO9839163 A2, WO9006539 A1, US6692031 BB, US6578712 BB, US6552290 BA, US6488155 BB, US6384920 BA, US6296189 BA, US6259506 BA, US6234537 BA, US6100973 A, US6064476 A, US6047964 A, US5943354 A, US5903340 A, US5881886 A, US5825790 A, US5625456 A, US5486022 A, US5448582 A, US5448059 A, US5434878 A, US5307363 A, US5291267 A, US5093147 A, US5026141 A, US4791645 A, US4738901 A, US4710627 A, US4710614 A, US4678322 A, US4609207 A, US4598205 A, US4534398 A, US4533244 A, US4452843 A, US4451521 A, US4442170 A, US4437935 A, US3760292 A, US3068063 A, US2255696 A, US2208653 A, US2003142713 AA, US2002105654 AA, US2002021003 AA, JPS57500923, JP9510580 T2, JP57500923 T2, GB417488 A, EP0066854 B1, EP0066854 A1, DE4114732 A1, DE2037755 B2, DE2037755 A1, CH516196 A,

Forward Citations: WO07025740, WO06065285, WO06027112, WO06023233, US9651496, US9534313, US9443181, US9399365, US9365701, US9303153, US9239262, US9019078, US8927892, US8808080, US8796030, US8673107, US8460081, US8308162, US8262453, US8177136, US8137811, US8123134, US8109513, US8056900, US8037307, US8033905, US7874902, US7860293, US7837117, US7824257, US7820009, US7816616, US7788482, US7762468, US7726652, US7702416, US7699314, US7662038, US7654529, US7648074, US7631871, US7621814, US7615110, US7601059, US7485037, US7481431, US7429044, US7427030, US7410168, US7369917, US7364091, US7326871, US7252222, US7213811, US7213757, US7134959, US7028188, US6996252, US6912048, US6832783, US2014336061, US2011163854, US2011006667, US2010273548, US2010264371, US2010063208, US2009218805, US2009159510, US2008059871, US2008042424, US2008041542, US2007266869, US2007168078, US2007158245, US2007113280, US2007051868, US2007010311, US2006249897, US2006217181, US2006180673, US2006178194, US2006170951, US2006170153, US2006154716, US2006151944, US2006151943, US2006119034, US2006081710, US2006081510, US2006076734, US2006019751, US2005262338, US2005136486, US2005133584, US2005067489, US2005051635, US2005013463, US2004266514, US2004156044, US2003108074, KR101167291, FR2866460, FR2813134, EP2732270, EP2732270, EP2055493, EP2055493, EP1202225, EP1182048, EP1182048, DE102005041054,

Abstract:
Source: US2003108074A Disclosed are methods and apparatus for at least one of authenticating, sorting or counting documents, as well as to security structures contained within documents and to documents containing security structures. A security device or structure includes an optical gain medium and a structure having boundaries that impart an overall geometry to the structure that, in combination with at least one material property of the structure, supports an enhancement of electromagnetic radiation emitted from the gain medium for favoring, in one embodiment, the creation of at least one mode that enhances an emission of electromagnetic radiation within a narrow band of wavelengths. Suitable, but not limiting, shapes for the structure comprise elongated, generally cylindrical shapes such as filaments, a sphere shape, a partial–sphere shape, a toroidal shape, a cubical and other polyhedral shape, and a disk shape. The structure is preferably comprised of at least one of a monolithic structure or a multi–layered structure or an ordered structure that may provide for distributed optical feedback. In a preferred embodiment of this invention the security device forms a part of a currency, a passport, a lottery ticket, a negotiable security, a credit card or debit card, or any substrate or carrier which it is desired to at least one of authenticate, count, encode, sort or verify.

101) Family number: 31494452 (US2002042298A) © PatBase

Title: Method and apparatus for monitoring casinos and gaming

Priority:

AU20000049743	20000419	AU20030231629	20030805	AU20030231630	20030805
CA20002542908	20000419	CA20002543220	20000419	CA20002543221	20000419
CA20002534043	20000419	CA20002533855	20000419	CA20002370753	20000419
EP20000931937	20000419	US20010015364	20011213	US20010015327	20011213
US20010015324	20011213	US20010015507	20011213	US19990474858	19991230
CA20002543251	20000419	CA20062370753	20060519	CA20062370753	20060517
US19990130368P	19990421	CA20062370753	20060222	CA20062370753	20060223
US20040862222	20040607	US20050030609	20050105	US20060408862	20060421
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US20020075191	20020213	US20020075548	20020213	WO2000US10496	20000419

Family:

Publication number	Publication date	Application number	Application date
AT278444 E	20041015	AT20000931937T	20000419
AT384562 E	20080215	AT20000023701T	20000419
AT385010 E	20080215	AT20000023700T	20000419
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AU2003231630 AA	20030911	AU20030231630	20030805
AU2003231630 BB	20070927	AU20030231630	20030805
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CA2533855 AA	20001026	CA20002533855	20000419
CA2533855 C	20081007	CA20002533855	20000419
CA2534043 AA	20001026	CA20002534043	20000419
CA2534043 C	20080805	CA20002534043	20000419
CA2542908 AA	20001026	CA20002542908	20000419
CA2542908 C	20151103	CA20002542908	20000419
CA2543220 AA	20001026	CA20002543220	20000419
CA2543220 C	20140114	CA20002543220	20000419
CA2543221 AA	20001026	CA20002543221	20000419
CA2543221 C	20150929	CA20002543221	20000419
CA2543251 AA	20001026	CA20002543251	20000419
CA2543251 C	20101130	CA20002543251	20000419
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DE60014620 T2	20060223	DE20006014620T	20000419
DE60014620 T8	20060427	DE20006014620T	20000419
DE60037915 D1	20080313	DE20006037915	20000419
DE60037915 T2	20090115	DE20006037915T	20000419
DE60037916 D1	20080313	DE20006037916	20000419
DE60037916 T2	20090129	DE20006037916T	20000419
EP1173261 A2	20020123	EP20000931937	20000419
EP1173261 B1	20041006	EP20000931937	20000419
EP1173261 B9	20050112	EP20000931937	20000419

EP1502631 A1	20050202	EP20040023701	20000419	
EP1502631 B1	20080123	EP20040023701	20000419	
EP1502632 A1	20050202	EP20040023700	20000419	
EP1502632 B1	20080123	EP20040023700	20000419	
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US7011309 BB	20060314	US20040862222	20040607	
US7316615 BB	20080108	US20050030609	20050105	
WO0062880 A2	20001026	WO2000US10496	20000419	
WO0062880 A3	20010322	WO2000US10496	20000419	
ZA200109567 A	20030220	ZA20010009567	20011120	

Probable Assignee: WALKER DIGITAL TABLE SYSTEMS LLC

Assignee(s):(std)**:** HUIZINGA RICHARD ; MINDPLAY LLCC ; BALLY GAMING INT INC ; MINDPLAY LLC ; ALLIANCE GAMING CORP ; AVEREON RES LTD ; SOLTYS RICHARD

Assignee(s): WALKER DIGITAL TABLE SYSTEMS ; WALKER DIGITAL TABLE SYSTEMS LLC ; AVEREON RESEACH LTD ; AVEREON RESEARCH LTD ; ARCADE PLANET INC ; BALLY GAMING INTIONAL ; MINDPLAY LLC SUITE ; BALLY GAMING INT ; BALLY GAMING INC ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; BALLY TECHNOLOGIES INC ; SHFL ENTERTAINMENT INC ; SIERRA DESIGN GROUP

Inventor(s):(std)**:** RICHARD HUIZINGA ; RICHARD SOLTYS ; SOLTYS RICHARD ; HUIZINGA RICHARD

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; OYEN WIGGS GREEN AND MUTALA LLP; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET; SEED INTELLECTUAL PROPERTY LAW GROUP PLLC; SEED IP LAW GROUP PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): A63F1/06 A63F1/12 A63F1/14 A63F1/18 A63F13/00 A63F3/00 A63F5/00 A63F9/24 G06F19/00 G06F3/14 G06K7/10 G06Q50/00 G06Q50/34 G07D5/00 G07D9/00 G07F17/32 (Advanced/Invention);
A63F3/00 A63F9/24 G07F17/32 (Advanced/Non–invention);
A63F1/00 A63F3/00 G06F19/00 G06F3/14 G06K7/10 G07D5/00 G07D9/00 G07F17/32 (Core/Invention);
A63F3/00 G07F17/32 (Core/Non–invention);
A63F G06F G07D G07F (Subclass/Invention)

International class (IPC 1–7): A63F A63F1/14 A63F1/18 A63F13/00 A63F3/00 A63F5/00 A63F9/24 G06F G06F17/00 G06F19/00 G06F3/14 G07D G07D9/00 G07F G07F17/32 H04N7/18

CPC: A63F3/00157 A63F2009/242 G07F17/32 G07F17/3202 G07F17/322 G07F17/3237 G07F17/3241 G07F17/3251 G06Q10/0639 A63F1/18

European class: A63F1/18 A63F3/00W G06Q10/0639 G07F17/32 G07F17/32C G07F17/32C4D G07F17/32E6D G07F17/32H G07F17/32K6 K63F3/00A32 K63F9/24N2B1

US class: 209/547 273/138.2 273/139 273/143.00R 273/143R 273/148.00R 273/148R 273/149.00R 273/149R 273/309 348/135 348/143 348/151 348/159 453/58 463/1 463/148R 463/17 463/25 463/25.5 463/25P 463/26 463/27 463/29 463/29.9 463/29P 463/42 463/42.2 463/42S 463/47 463/47P 700/11 705/11 705/7.38

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Abstract:
Source: US2002042298A A system automatically monitors playing and wagering of a game. A card deck reader automatically reads a symbol identifying a rank and suit from each card in a deck of cards. A chip tray reader automatically images the contents of a chip tray, to periodically determine the number and value of chips in the chip tray, and to compare the change in contents of the chip tray to the outcome of game play for verifying that the proper amounts have been paid out and collected. A table monitor automatically images the activity occurring at a gaming table. Periodic comparison of the images identify wagering, as well as the appearance, removal and position of cards and other game objects on the gaming table. The system automatically determines the outcome of games, including losses and takes.

0) US2002020603A – SYSTEM AND METHOD FOR PROCESSING CURRENCY BILLS...

102) Family number: 30225447 (US2002020603A) © PatBase

Title: SYSTEM AND METHOD FOR PROCESSING CURRENCY BILLS AND SUBSTITUTE CURRENCY MEDIA IN A SINGLE DEVICE

Priority:

CA20012358234	20011003	US19990131635P	19990428	US20000502666	20000211
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US20090643740	20091221	WO2003US19790	20030623	US20110169307	20110627
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Family:

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Probable Assignee: CUMMINS ALLISON CORP

Assignee(s):(std)**:** KLEIN ROBERT J ; HALLOWELL CURTIS W ; JENRICK CHARLES P ; CUMMINS ALLISON CORP ; CUMMIN ALLISON CORP ; KNOLL JEFFREY G ; JAGIELINSKI TOMASZ M ; SEELENBINDER GEORGE T ; WATTS GARY P ; MENNIE DOUGLAS U ; ANDERSON MATTHEW L ; BLAKE JOHN R

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Agent(s): MARKS AND CLERK; CUMMINS ALLISON CORP C O JENKENS AND GILCHRIST; JENKENS AND GILCHRIST PC; CUMMINS ALLISON CORP C O NIXON PEABODY LLP; JENKENS AND GILCHRIST; NIXON PEABODY LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ

GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B07C5/00 B65G57/00 B65H1/02 B65H1/08 B65H1/26 B65H3/00 B65H7/02 G06F7/00 G06F9/00 G06K13/00 G06K5/00 G06K7/10 G06K9/00 G07D1/04 G07D11/00 G07D13/00 G07D3/00 G07D3/14 G07D7/00 G07D9/00 G07F1/04 G07F17/32 G07F19/00 G07F7/04 G07G1/00 (Advanced/Invention); B65H7/00 (Advanced/Non–invention); G06K13/00 G06K5/00 G06K7/10 G06K9/00 G07D11/00 G07D7/00 G07F17/32 G07F7/00 G07G1/00 (Core/Invention); B65H7/00 (Core/Non–invention)

International class (IPC 1–7): B07C5/00 B07C5/34 B07C5/342 B42B2/00 B65G57/00 B65H1/00 B65H1/02 B65H1/26 B65H1/30 B65H29/00 B65H31/20 G06F17/60 G06F9/00 G06K13/00 G06K5/00 G06K7/00 G06K7/10 G06K9/00 G07C3/00 G07D11/00 G07D13/00 G07D3/00 G07D7/00 G07F1/04 G07F7/04

CPC: G07D1/04 G07D3/14 G07D9/00 G07D11/0087 G07F19/20 G07F19/203 Y10S209/90 G07D11/0021 G07D11/009 G06K5/00 B65H2301/33212 B65H2301/33224 B65H2404/261 G06Q40/12 G07D3/125 G07D7/00 G07B11/02 G06Q10/087 G06Q20/18 G07D7/183 G07D7/0043 B65H2301/332 B65H2701/1912 G07D11/0003 G07D11/0012 G07D11/0018 G07D11/0051 G07F19/202 G07D7/162 G07D7/164 G07D7/185 G07D7/187 G07D7/2091 G07D11/0066 G07D11/0081 G07D11/0084 G07D11/0096 G07F7/04 G07F17/32 G07F17/3246 G07F17/3248 G07G1/0045

European class: G06Q40/10 G07D1/04 G07D11/00D G07D11/00D2D G07D11/00D4 G07D11/00F G07D11/00F6 G07D11/00H G07D11/00K G07D11/00L G07D11/00M G07D11/00M4 G07D3/14 G07D7/00 G07D7/00B6 G07D7/00D2 G07D7/16B G07D7/16C G07D7/16D G07D7/18C G07D7/18D G07D7/20H4 G07D9/00 G07F17/32 G07F17/32K2 G07F17/32K4 G07F19/00F G07F19/20 G07F19/202 G07F19/203 G07F7/04 G07G1/00C2 L65H301/332 L65H301/33212 L65H301/33224 L65H333/200 L65H333/212 L65H404/261 L65H701/1912

US class: 19/434.6 194/200 194/206 194/207 194/207S 194/210 194/211 194/212 194/216 194/346 209/534 209/540 209/541 209/542 209/545 209/900 221/242 235/375 235/379 235/379P 235/462.01 235/462.11 235/462.41 235/472.01 270/52.02 271/147 271/147S 271/158 271/18 271/180 271/181 271/185 271/186 271/186S 271/18S 271/256 271/256S 271/258.01 271/258.010P 271/65 382/135 382/135P 414/788 414/789 414/790 414/792.7 453/10 453/10S 700/213 700/213P 700/221 700/224 700/224P 705/30 705/30S

Classification Explorer

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Abstract:
Source: US2002020603A (21) Appl. No.: (22) Filed: 09/967,232 Sep. 28, 2001 Related U.S. Application Data (63) Continuation–in–part of application No. 09/502,666, filed on Feb. 11, 2000. Continuation–in–part of application No. 09/562,231, filed on Apr. 28, 2000, now Pat. No. 6,318,537. A document processing device having an evaluation region disposed along a transport path between an input and output receptacle capable of processing both currency bills and barcoded media. The evaluation region includes detectors for detecting predetermined characteristics of currency bills and a barcode reader for scanning the barcoded media. A controller coupled to the evaluation region controls the operation of the document processing device and receives input from and provides information to a user via a control unit. In some embodiments, the document processing device may have any number of output receptacles, and the control unit allows the user to specify which output receptacle receives which type of document. In some embodiments, an optional coin sorter may be coupled to the document processing device to allow document and coin processing. The document processing device may be coupled to a network to communicate information to devices linked to the network. Correspondence Address: Stephen G. Rudisill Jenkens Gilchrist 1445 Ross Avenue 3200 Fountain Place Dallas, TX 75202 (US) Patent Application Publication Feb. 21, 2002 Sheet 1 of 18 US 2002/0020603 Al I I I o4 twU '– j LL 0_– m cz 1 Patent Application Publication Feb. 21, 2002 Sheet 2 of 18 US 2002/0020603 Al I C.o Cn~ ' I I co –CI "3 I I I I I I –I I I I I I I I I I I I I I –I – J re –II –.J ––J z 0w –o (Co 00) c1;r Patent Application Publication Feb. 21, 2002 Sheet 3 of 18 (0 Cd LO (D CN US 2002/0020603 Al Patent Application Publication I t–M Feb. 21, 2002 CI 7' Sheet 4 of 18 US 2002/0020603 Al LL c' Patent Application Publication Feb. 21, 2002 Sheet 5 of 18 C1 il less than §7 US 2002/0020603 A1 Patent Application Publication "c.'J L Feb. 21, 2002 Sheet 6 of 18 'V US 2002/0020603 At –QV Patent Application Publication Feb. 21, 2002 Sheet 7 of 18 Fig. US 2002/0020603 A1 Patent Application Publication Feb. 21, 2002 Sheet 8 of 18 US 2002/0020603 Al C(0 Ln UDd Patent Application Publication Feb. 21, 2002 Sheet 9 of 18 708a Fig. 7a US 2002/0020603 A1 Patent Application Publication Feb. 21, 2002 Sheet 10 of 18 US 2002/0020603 Al Q6 Co rlPatent Application Publication 0o UL.I CY Feb. 21, 2002 Sheet 11 of 18 US 2002/0020603 A1 Patent Application Publication Feb. 21, 2002 Sheet 12 of 18 (r CO CO US 2002/0020603 A1 Patent Application Publication Feb. 21, 2002 Sheet 13 of 18 1008a Fig. lOa US 2002/0020603 A1 Patent Application Publication US 2002/0020603 Al 1008b DOCUMENT 1040 PROCESSING DOCUMENT MODULE DISPENSING MODULE 1044 o I 1,– 008a., COIN 10 8 F–CONTROLLER ~PROCESSING MODULE 1014.

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Assignee(s):(std)**:** KARA TECHNOLOGY INC

Assignee(s): WELLS FARGO BANK NATIONAL ASSOCIATION ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** KARA SALIM G

Inventor(s): SALIM G KARA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9)**:** G07B17/00 G07D7/00 G07F17/42 G07F7/12 H04N1/32 (Advanced/Invention); G07B17/00 G07D7/00 G07F17/00 G07F7/12 H04N1/32 (Core/Invention)

International class (IPC 1–7)**:** G06F17/60 H04L9/00

CPC: G09F2003/0254 G07D7/0047 H04N1/32133 G07B17/00508 G07B17/00661 G07B2017/00588 G07B2017/00717 G07F7/08 G07F7/12 G07F7/125 G07F17/42 H04N2201/3233 H04N2201/3235 H04N2201/3236 H04N2201/3269 H04N2201/3271

European class: G07B17/00F2 G07B17/00F3 G07D7/00B8 G07D7/00D4 G07F17/42 G07F7/08 G07F7/12 G07F7/12B H04N1/32C16 H04N1/32C17B S07B17/00F2B1A S07B17/00F3E1 T04N201/32C4D T04N201/32C4D2 T04N201/32C4D3 T04N201/32C6 T04N201/32C7

US class: 101/71 283/53 283/57 283/71 283/72 283/73 283/80 283/81 705/50

Classification Explorer

Cited documents: WO9714482 A1, WO0073954 A2, US6223166 BA, US6212504 BA, US6170744 BA, US611953 A, US6111953 A, US5953709 A, US5949042 A, US5935000 A, US5884277 A, US5873605 A, US5673320 A, US5671282 A, US5598477 A, US5489096 A, US5432506 A, US5398932 A, US5317135 A, US5010240 A, US4949256 A, US4872706 A, US4791281 A, US4723212 A, US4649266 A, US4108364 A, US3959624 A, US3890599 A, GB2318324 A1, EP0699327 B1, EP0699327 A1, EP0600646 A2,

Forward Citations: WO11153037, WO11153037, WO07077324, WO04104893, WO03050767, WO03044742, USRE43345, USD602078, USD602077, US9667627, US9491574, US9460572, US9460412, US9324043, US9262872, US9147196, US9123047, US9123044, US9117226, US9087204, US9082234, US8931080, US8818915, US8818904, US8805745, US8775223, US8762267, US8567674, US8548921, US8521653, US8505978, US8504473, US8418615, US8397989, US8392715, US8382164, US8360313, US8355937, US8336916, US8269989, US8255694, US8244561, US8239225, US8229774, US8219448, US8209267, US8201735, US8171297, US8122252, US8090952, US8085980, US8005764, US8005762, US7954709, US7937332, US7933845, US7933835, US7874593, US7828223, US7818269, US7778939, US7742996, US7577618, US7559466, US7542160, US7540415, US7427025, US7396048, US7333629, US7283274, US7199889, US7194957,

US7191158, US7118478, US7117363, US7117363, US7086591, US7085725, US7072868, US7069253, US7032813, US7016879, US6968783, US6779720, US6735575, US6505179, US2013221081, US2013015236, US2012224212, US2012144503, US2012102565, US2010131378, US2010127490, US2010100233, US2010040256, US2009278388, US2009255989, US2009219573, US2009210345, US2009164392, US2009097647, US2008296312, US2008243690, US2008172342, US2007250337, US2007204340, US2007203854, US2007083753, US2007043668, US2007021191, US2007011455, US2007007341, US2006259446, US2006122949, US2006122947, US2006087113, US2006066888, US2006031162, US2006008115, US2005278266, US2005240970, US2005240453, US2005231746, US2005144145, US2005133594, US2005125367, US2005071296, US2005055580, US2005015347, US2004262909, US2004249765, US2004128513, US2004112235, US2004070194, US2004064422, US2004058728, US2004054627, US2004035928, US2003183694, US2003141359, US2003110854, US2003105641, US2003081254, US2003074315, US2003046229, US2003037008, US2003029922, US2003024988, US2003014638, US2003002067, US2002111921, US2002087395, US2002073039, US2002046195, US2002040353, US2001044784, US2001042052, GB2501144, GB2430294, GB2406690, GB2406690, FR2895125, FR2887059, FR2886434, FR2833382, FR2833380, FR2832529, EP2634762, EP1762987, EP1736942, EP1729264, EP1521205, EP1521205, EP1416454, EP1410338, EP1333658, EP1333658, EP1316923, EP1276081, EP1276081, CN103500531, CN103500531,

Abstract:
Source: US6505179B Universally available preprinted forms are used in a general purpose printing device to allow for the subsequent verification of the authenticity of a printed document such as a ticket, stamp, check, or money order. In operation, the user accesses the seller of the goods/services and during an information exchange with the seller there is inputted at least a portion of the preprinted data from the form. The seller then uses this information to formulate a printable control indicia which is then printed on the form at the user's location. When the form is subsequently presented to the seller, for example when the user uses the form he/she printed, the preprinted portion of the form is used to obtain a decipher key which in turn is used to decipher the control indica. If desired, a special security marking may be associated with the form for additional security. Inability to decode the control indicia indicates that the printed material on the form may not be authentic. A vending machine is shown in one embodiment.

0) EP1149038A1 – MEDIA STORAGE AND RECYCLING SYSTEM FOR AUTOMATE...

104) Family number: 33465918 (EP1149038A1) © PatBase

Title: MEDIA STORAGE AND RECYCLING SYSTEM FOR AUTOMATED BANKING MACHINE

Priority: US19980100758P 19980917 WO1999US20443 19990907

Family:

Publication number	Publication date	Application number	Application date
AR038671 AB	20050126	AR2003P100323	20030203
BRPI9913845 A	20010612	BR1999PI13845	19990907
CA2343765 AA	20010312	CA19992343765	19990907
CA2343765 C	20060221	CA19992343765	19990907
CO4991016 A1	20001226	CO19990059226	19990917
DE69940913 D1	20090702	DE19996040913	19990907
DE69942376 D1	20100624	DE19996042376	19990907
EP1149038 A1	20011031	EP19990949600	19990907
EP1149038 A4	20060329	EP19990949600	19990907
EP1149038 B1	20090520	EP19990949600	19990907
ES2326052 T3	20090929	ES19990949600T	19990907
ES2342314 T3	20100705	ES20060022178T	19990907
IN00047MN2005 A	20051007	IN2005MN00047	20050117
IN204699 B	20070615	IN2001MN00259	20010309
IN206132 B	20071026	IN2005MN00047	20050117
PL195616 B1	20071031	PL19990346560	19990907
PL198179 B1	20080630	PL19990381085	19990907
PL346560 A1	20020211	PL19990346560	19990907
TH42415 A	20010110	TH19991003275	19990901

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD INC

Assignee(s): EASTMAN JEFFREY ; HARTY MICHAEL J ; PHELPS RICHARD J ; BESKITT WILLIAM D

Inventor(s):(std)**:** BESKITT WILLAIM D ; BESKITT WILLIAM D ; EASTMAN JEFFERY ; EASTMAN JEFFREY ; HARTY MICHAEL J ; PHELPS RICHARD ; PHELPS RICHARD J

Inventor(s): RICHARD J PHELPS ; RICHRD J PHELPS ; WILLIAM D BESKITT ; WILLIAM DANIEL BESKITT ; JEFFREY EASTMAN ; MICHAEL J HARTY

Agent(s): DIMOCK STRATTON LLP; CARLOS REINALDO OLARTE GARCIA; POTTER JULIAN MARK ET AL

Designated states: DE ES FR GB IT

International class (IPC 8–9): B65H29/06 B65H29/20 B65H29/38 B65H29/40 G07D11/00 G07D13/00 (Advanced/Invention)

International class (IPC 1–7): B05H29/38 B65H 39/10 B65H 5/22 B65H29/06 B65H29/38 B65H39/10 B65H5/22 G06F B65H29/00 G07D11/00 G07D13/00 G07F19/00

CPC: B65H29/06 B65H29/40 B65H83/025 B65H2301/42122 B65H2301/42142 B65H2301/42146 B65H2404/1114 B65H2404/651 B65H2404/655 B65H2404/657 B65H2701/1912 G07D11/0003 G07F19/202 G07F19/203

European class: B65H29/06 B65H29/40 B65H83/02C G07D11/00D G07F19/202 G07F19/203 L65H301/42122 L65H301/42142 L65H301/42146 L65H342/122 L65H404/1114 L65H404/651 L65H404/655 L65H404/657 L65H701/1912

Classification Explorer

Cited documents: US74926096, US5923413, US5803705 A, US5692740 A, JP7187468, JP7187468,

Abstract:
Source: EP1149038A1 A media storage system for an automated banking machine (10) inlcudes a flipper member (90, 178) which is rotationally movable to engage sheets. A gripper member (138, 182) is movably mounted relative to the flipper member. The flipper member further includes an arcuately extending slot (92, 180). The sheet extending in the slot is held in fixed engagement with the flipper member by the gripper member. Rotation of the flipper member to a releasing position causes the sheet to be engaged with a stop surface (160, 188) as the gripper member moves to release the sheet. Sheets released by the flipper member are positioned in a stack (94, 184). The flexible flap (160) engages each sheet after it has been released by the flipper member to conform the sheet to the stack. In alternative embodiments a flipper member (178) includes a picker portion (202). Picker portion is selectively operated to remove sheets from the stack.

0) WO0118745A3 – TRANSPARENT TRANSACTION CARD WITH INFRARED BLOC...

105) Family number: 33378789 (WO0118745A3) © PatBase

Title: TRANSPARENT TRANSACTION CARD WITH INFRARED BLOCKING LAYER

Priority: JP20010522486 20000905 JP20010522486T 20000905 US19990153112P 19990907 US19990160519P 19991020 US19990167405P 19991124 WO2000US24371 20000905

Family:

Publication number	Publication date	Application number	Application date
AT311634 E	20051215	AT20000961558T	20000905
AU200073498 A5	20010410	AU20000073498	20000905
AU781322 B2	20050519	AU20000073498	20000905
BRPI0014018 A	20020521	BR2000PI14018	20000905
CA2382882 AA	20020225	CA20002382882	20000905
CA2382882 C	20070424	CA20002382882	20000905
CN1235175 C	20060104	CN20008015251	20000905
CN1387660 A	20021225	CN20008015251	20000905
CZ20020776 A3	20020911	CZ20020000776	20000905
DE60024478 D1	20060105	DE20006024478	20000905
DE60024478 T2	20060817	DE20006024478T	20000905
DK1222620 T3	20060418	DK20000961558T	20000905
DK1222620 T5	20060703	DK20000961558T	20000905
EP1222620 A2	20020717	EP20000961558	20000905
EP1222620 B1	20051130	EP20000961558	20000905
ES2256037 T3	20060716	ES20000961558T	20000905
HK1047810 A1	20060811	HK20020109122	20021216
HR20020197 A2	20041031	HR20020000197	20020304
HU0202700 AB	20021228	HU20020002700	20000905
HU226649 B1	20090528	HU20020002700	20000905
IL148320 A0	20020912	IL20000148320	20000905
IL148320 A1	20080708	IL20000148320	20000905
JP2003509231 T2	20030311	JP20010522486T	20000905
JP2009076057 A2	20090409	JP20080192047	20080725
MXPA02002446 A1	20040910	MX2002PA02446	20000905
NO20021105 A	20020506	NO20020001105	20020306
NO20021105 A0	20020306	NO20020001105	20020306
NZ517720 A	20040326	NZ20000517720	20000905
PL354415 A1	20040112	PL20000354415	20000905
TR200201399 T2	20021121	TR20020001399T	20000905
TW504647 B	20021001	TW20000118283	20001123
WO0118745 A2	20010315	WO2000US24371	20000905
WO0118745 A3	20010913	WO2000US24371	20000905
WO0118745 C2	20020926	WO2000US24371	20000905

Probable Assignee: AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY

Assignee(s):(std)**:** AMERICAN EXPRESS TRAVEL RELATE ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COOMPANY ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY I

Assignee(s): AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COOMPANY INC ; VIGILETTI JUDY ; WEBB LISA ; LASCH ELLEN ; FAENZA WILLIAM J JR ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY

Inventor(s):(std): FAENZA J ; FAENZA JR WILLIAM J ; FAENZA WILLIAM J ; FAENZA WILLIAN J JR ; LISA WEBB ; WILLIAM J FAENZA JR ; WEBB W J FAENZA JR E LASCH L ; WEBB LISA ; WE LISA ; VILETTI JUDY ; VIGILETTI JUDY ; LASCH ELLEN ; LASCH E ; L WEBB ET AL S ; FAENZA WILLIAM J JR ; FAENZA W J ; ELLEN LASCH ; WEBB ; VIGILETTI ; LASCH ; JR WILLIAM J FAENZA ; JUDY VIGILETTI ; FAENZAJR

Inventor(s): W J FAENZA ; JR ; JR FAENZA ; E LASCH ; L WEBB ET AL ; W J FAENZA JR ; WILLIAN J FAENZA JR ; WJ FAENZA ; FAENZA WILLIAM JJR

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; MCCARTHY TETRAULT LLP; REINHOLD COHN AND PARTNERS; AKIMOTO YOSHIO; MASUI CHUJI; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO; ONO SHINJIRO

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): B42D15/10 C09D11/02 G06K13/08 G06K19/02 G06K19/06 G06K19/07 G06K19/077 G06K19/08 G06K19/10 G06K19/16 G07D7/12 G07D9/00 G07G1/12 (Advanced/Invention); C09D11/02 G06K19/06 G06K19/077 (Advanced/Non–invention); B42D15/10 C09D11/02 G06K13/02 G06K19/02 G06K19/06 G06K19/07 G06K19/077 G06K19/08 G06K19/10 G06K19/14 G07D7/00 G07D9/00 G07G1/12 (Core/Invention); G06K (Subclass/Invention)

International class (IPC 1–7): B42D15/10 C09D11/02 G06K G06K19/02 G06K19/06 G06K19/07 G06K19/077 G06K19/08 G06K19/16

CPC: B42D25/00 B42D25/369 B42D25/382 G06K13/08 G06K19/02 G06K19/07 G06K19/08 G06K19/16 B42D2033/04 B42D2033/06

European class: B42D15/10 G06K13/08 G06K19/02 G06K19/07 G06K19/08 G06K19/16 L42D33/04 L42D33/06 L42D35/38

Classification Explorer

Cited documents: USD406861 S1, US5928788 A, US5010243 A, US3955295 A, US3763356 A, US3536894 A, JP9123647 A2, JP9111091 A2, JP9077507 A2, JP7228081 A2, JP64004934, JP10003524 A2, GB2108906 A1, GB1371254 A, EP0343829 A2, EP0181770 A2, CH689680 A3, CH689680,

Forward Citations: WO09126536, WO09056352, WO07144657, WO07031609, WO06133512, WO06005396, WO04047018, WO04047018, WO03102713, WO03102713, WO0245008, WO0245008, USRE45416, USRE43157, US9454752, US9031880, US8548927, US8284025, US8266056, US8191788, US8066190, US8016191, US8001054, US7889052, US7886157, US7837118, US7837116, US7827106, US7793845, US7725427, US7705732, US7690577, US7668750, US7639116, US7637434, US7636193, US7607583, US7578448, US7543738, US7506819, US7494058, US7377443, US7306158, US7271951, US6919123, RU2543301, JP2006289879, JP2004280081, JP2002274087, FR2840430, ES2492592, EP1581846, EP1299856, DE102014007474, DE102008053582, DE102008012419, CN102637260, CN102197405, AU2006257720,

Abstract:
The present invention relates to a process for producing an opaque, transparent or translucent transaction card having multiple features, such as a holographic foil, integrated circuit chip, silver magnetic stripe with text on the magnetic stripe, opacity gradient, an invisible optically recognizable compound, a translucent signature field such that the signature on back of the card is visible from the front of the card and an active thru date on the front of the card. The invisible optically recognizable compound is an infrared ink and/or film, which can be detected by a sensor found in an ATM or card assembly line.

0) US6220954B – MULTIDENOMINATIONAL COIN OUTPUT HOPPER

106) Family number: 15032610 (US6220954B) © PatBase

Title: Multidenominational coin output hopper

Priority: US19970846796 19970430

Family:

Publication number	Publication date	Application number	Application date
US6220954 BA	20010424	US19970846796	19970430

Probable Assignee: I G T

Assignee(s):(std)**:** INT GAME TECH

Assignee(s): INT GAME TECHNOLOGY ; INTERNATIONAL GAME TECHNOLOGY ; I G T

Inventor(s):(std)**:** BEADELL JOHN LEAGH ; NGUYEN BINH ; WALLER DANIEL J

International class (IPC 8–9): G07D5/02 G07D9/00 G07F1/02 G07F5/20 (Advanced/Invention); G07D5/00 G07D9/00 G07F1/00 G07F5/20 (Core/Invention)

International class (IPC 1–7): G07D1/00

CPC: G07D5/02 G07D9/008 G07F1/02 G07F5/20

European class: G07D5/02 G07D9/00F G07F1/02 G07F5/20

US class: 453/57

Classification Explorer

Cited documents: US5711704 A, US5167571 A, US3698537 A,

Forward Citations: US8851988, US8721431, US8720665, US8597107, US8136723, US8092284, US7896148, US7810628, US7699155, US7658668, US7404765, US7144318, US7144318, US7066335, US7048623, US6579181, US6527271, US6383070, US2010112923, US2009275400, US2009108059, US2009051103, US2009050440, US2008149455, US2007187485, US2007062783, US2006040604, US2005183927, US2003220136, US2003111395, US2002111130, JP5716199, JP2012194830, EP2521102, EP2521102, EP1647943,

Abstract:
Source: US6220954B A coin output hopper capable of handling coins of different diameters and thicknesses is provided. A backplate is supported by a spring suspension to maintain the backplate substantially parallel to a rotating holeywheel/pinwheel despite misalignments, warping or other misshaping of the pinwheel. A coin guide is provided with a geometry to engage with different diameter coins so as to position the coins in the desired position within a coin pocket. A deflector is provided with a geometry which engages different diameter coins to accelerate coins along a knife edge exit path. The coins are forced along a path toward and along the knife edge by pins positioned such that excessive forces are avoided for any of a range of coin diameters.

0) EP1248241A1 – HOLDER FOR CHIP, THE CHIP BEING USED FOR UNLOCK...

107) Family number: 17027683 (EP1248241A1) © PatBase

Title: HOLDER FOR CHIP, THE CHIP BEING USED FOR UNLOCKING SHOPPING CARTS

Priority: DE20012006120U 20010406

Family:

Publication number	Publication date	Application number	Application date
DE20106120 U1	20010613	DE20012006120U	20010406
EP1248241 A1	20021009	EP20020006040	20020316

Probable Assignee: SPERBER GERHARD ELASTO FORM

Assignee(s):(std)**:** SPERBER GERHARD ELASTO FORM

Assignee(s): ELASTO FORM GERHARD SPERBER

Inventor(s):(std)**:** SPERBER GERHARD

Designated states: AT CH DE LI

International class (IPC 8–9)**:** G07F1/06 G07F7/06 (Advanced/Invention); G07F1/00 G07F7/00 (Core/Invention)

International class (IPC 1–7)**:** A44B15/00 G07D9/00 G07F1/06 G07F5/00 G07F7/06

CPC: G07F7/0672 G07F1/06

European class: G07F1/06 G07F7/06C G07F7/06C9

Classification Explorer

Cited documents: EP0854455 A1, DE4303391 A1, DE29609122 U1, DE29602241 U1, DE19532446 A1, DE19519837 A1,

Abstract:
The chip or token has a circular shape (2) and is fixed into a holder (1) when not in use. The holder is produced typically in plastic and has a recess with a spigot (18) that the token fits onto. The holder also has a hole for attaching to a key ring.

0) US2003032192A – SYNTHESIS OF NANOPARTICLES

108) Family number: 30008738 (US2003032192A) © PatBase

Title: SYNTHESIS OF NANOPARTICLES

Priority: DE20011011321 20010308 DE20015010243 20010907 EP20010976022 20010907 WO2000DE03130 20000908 WO2002DE00772 20020304 WO2001DE03433 20010907 WO2001DE003433 20010907 WO2002DE000772 20020304

Family:

Publication number	Publication date	Application number	Application date
AT331010 E	20060715	AT20010976022T	20010907
AT365565 E	20070715	AT20020726052T	20020304
AU200210036 A5	20020322	AU20020010036	20010907
AU2002256602 AA	20020924	AU20020256602	20020304
AU2002256602 BB	20050609	AU20020256602	20020304
AU782482 B2	20050804	AU20020010036	20010907
CA2388094 AA	20020418	CA20012388094	20010907
CA2388094 C	20111115	CA20012388094	20010907
CA2439381 AA	20030826	CA20022439381	20020304
CA2439381 C	20101005	CA20022439381	20020304
CN100489058 C	20090520	CN20018002666	20010907
CN1326570 C	20070718	CN20028005123	20020304
CN1388827 A	20030101	CN20018002666	20010907
CN1491118 A	20040421	CN20028005123	20020304
DE10111321 A1	20020523	DE20011011321	20010308
DE50110243 D1	20060803	DE20015010243	20010907
DE50210379 D1	20070809	DE20025010379	20020304
EP1232226 A1	20020821	EP20010976022	20010907
EP1232226 B1	20060621	EP20010976022	20010907
EP1368065 A1	20031210	EP20020726052	20020304
EP1368065 B1	20070627	EP20020726052	20020304
EP1707611 A2	20061004	EP20060009332	20010907
EP1707611 A3	20080528	EP20060009332	20010907
ES2269466 T3	20070401	ES20010976022T	20010907
ES2287273 T3	20071216	ES20020726052T	20020304
HK1064297 A1	20071018	HK20040107148	20040917
HK1064297 A3	20050128	HK20040107148	20040917
HK1097565 A3	20070629	HK20070103619	20070403
IL149172 A0	20021110	IL20010149172	20010907
IL157576 A0	20040328	IL20020157576	20020304
JP2004508215 T2	20040318	JP20020525704T	20010907
JP2004530616 T2	20041007	JP20020571112T	20020304
JP4732675 B2	20110727	JP20020571112	20020304
JP5241987 B2	20130717	JP20020525704T	20010907
US2003032192 AA	20030213	US20020129530	20020626
US2004156784 AA	20040812	US20040471302	20040129
US7241399 BB	20070710	US20020129530	20020626
US7241399 BB	20070710	US20010129530	20010907
US7241399 BB	20070710	US20020129530	20020626
US8088358 BB	20120103	US20020471302	20020304
WO02072154 A1	20020919	WO2002DE00772	20020304

WO0220695 A1	20020314	WO2000DE03130	20000908	
WO0220696 A1	20020314	WO2001DE03433	20010907	

Probable Assignee: CENTRUM FUR ANGEWANDTE NANOTECHNOLOGIE CAN

Assignee(s):(std)**:** HAUBOLD STEPHAN ; HAASE MARCUS ; HAASE MARKUS ; CT F ANGEWANDTE NANOTECHNOL ; CT FUER ANGEWANDTE NANOTECHNOL ; CT FUR ANGEWANDTE NANOTECHNOLO ; HAASSE MARKUS ; CT ANGEWANDTE NANOTECH CAN ; RIWOTZKY CARSTEN ; WELLER HORST ; MEYSAMY HEIKE ; IBARRA FERNANDO ; STOECKELHUBER BEATE ; NANOSOLUTIONS GMBH ; NANOSOLUTIONS CAN GMBH ; BOBBERT CORNELIUS ; CT FUR ANGEWANDTE NANOTECHNOLOGIE CAN GMBH

Assignee(s): CENTRUM FUR ANGEWANDTE NANOTECHNOLOGIE CAN ; CENTRUM F ANGEWANDTE NANOTECHNOLOGIE CAN GMBH ; CENTRUM F ANGEWANDTE NANOTECHNOLOGIE GMBH ; CENTRUM FUER ANGEWANDTE NANOTECHNOLOGIE CAN GMBH ; CENTRUM FUR ANGEWANDTE NANOTECHNOLOGIE ; CENTRUM FUR ANGEWANDTE NANOTECHNOLOGIE (CAN) ; CENTRUM FUR ANGEWANDTE NANOTECHNOLOGIE CAN GMBH ; CENTRUM FUR ANGEWANDTE NANOTECHNOLOGIE GMBH ; CENTRUM FUR ANGEWANDTE NANOTECHNOLOGIE (CAN) GMBH

Inventor(s):(std)**:** FERNANDO IBARRA ; HAASE M ; HAASE MARCUS ; HAASE MARKUS ; HAASSE MARKUS ; HAUBOLD S ; HAUBOLD STEPHAN ; HEIKE MEYSAMY ; HORST WELLER ; IBARRA FERNANDO ; M HAASE ; MARKUS HAASE ; MEYSAMMY HEIKE ; MEYSAMY HEIKE ; MEYSSAMY HEIKE ; RIWOTZKI KARSTEN ; RIWOTZKY CARSTEN ; S HAUBOLD ; STEPHAN HAUBOLD ; STOCECKELHUBER BEATE ; STOECKELHUBER BEATE ; STOECKELHUBER BEATE M ; WELLER HORST ; BOBBERT C ; BOBBERT CORNELIUS ; BOBBERT M HAASE S HAUBOLD C ; C BOBBERT ; CARSTEN RIWOTZKY

Inventor(s): CORNELIUS BOBBERT ; BEATE STOCECKELHUBER ; BEATE STOECKELHUBER ; M HAASE S HAUBOLD C BOBBERT

Agent(s): CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; KIRBY EADES GALE BAKER; HOFFMANN EITLE; GREENBLUM AND BERNSTEIN PLC; SCULLY SCOTT MURPHY AND PRESSER PC

Designated states: AT AU BE BY CA CH CN CY DE DK ES FI FR GB GR IE IL IT JP LI LU MC NL PT SE TR US

International class (IPC 8–9): A61B5/055 A61B5/117 A61K49/00 A61K49/18 B82B3/00 B82Y40/00 C01B25/26 C01B25/32 C01B25/37 C01B25/45 C01B33/20 C01B35/12 C01F11/46 C01F17/00 C01F7/16 C01G15/00 C01G28/00 C01G31/00 C01G35/00 C01G39/00 C01G41/00 C08K7/18 C09D11/00 C09D11/02 C09D11/50 C09D7/12 C09K11/02 C09K11/08 C09K11/54 C09K11/55 C09K11/56 C09K11/59 C09K11/61 C09K11/62 C09K11/63 C09K11/64 C09K11/66 C09K11/67 C09K11/68 C09K11/71 C09K11/74 C09K11/77 C09K11/78 C09K11/79 C09K11/80 C09K11/81 C09K11/82 C09K11/83 C09K11/84 C09K11/85 C09K11/86 C09K3/00 C30B29/14 C30B29/60 G01N21/64 G01N21/66 G01N21/76 G01N21/87 G01N21/91 G01R33/28 G07D7/00 (Advanced/Invention); A61K49/00 B42D15/10 B44F1/12 B82B3/00 C01F17/00 C01G15/00 C01G28/00 C01G31/00 C01G35/00 C01G39/00 C01G41/00 C09K11/54 C09K11/55 C09K11/56 C09K11/59 C09K11/61 C09K11/62 C09K11/63 C09K11/64 C09K11/66 C09K11/67 C09K11/74 C09K3/00 F21K2/00 G06K1/12 (Advanced/Non–invention); A61B5/055 A61K49/00 A61K49/06 B82B3/00 C01B25/00 C01B33/00 C01B35/00 C01F11/00 C01F17/00 C01F7/00 C01G15/00 C01G28/00 C01G31/00 C01G35/00 C01G39/00 C01G41/00 C09D11/00 C09D11/02 C09K11/02 C09K11/08 C09K11/54 C09K11/55 C09K11/56 C09K11/59 C09K11/61 C09K11/62 C09K11/63 C09K11/64 C09K11/66 C09K11/67 C09K11/70 C09K11/74 C09K11/77 C09K3/00 G01N21/64 G01N21/76 G01N21/88 G01R33/28 G07D7/00 (Core/Invention); A61K (Subclass/Invention)

International class (IPC 1–7): A61B5/055 A61B5/117 A61B51/17 A61K A61K049/18 A61K49/00 A61K49/18 B01J13/00 B82B3/00 C01B25/32 C01B25/37 C01B25/45 C01B33/20 C01B35/12 C01F11/46 C01F17/00 C01F7/16 C01G15/00 C01G28/00 C01G31/00 C01G35/00 C01G39/00 C01G41/00 C09D11/00 C09K11/08 C09K11/54 C09K11/55 C09K11/56 C09K11/59 C09K11/61 C09K11/62 C09K11/63 C09K11/64 C09K11/66 C09K11/67 C09K11/68 C09K11/71 C09K11/74 C09K11/78 C09K11/79 C09K11/80 C09K11/81 C09K11/82 C09K11/83 C09K11/84 C09K11/85 C09K11/86 C09K3/00 G01N21/76 G01N21/91 G01N33/00 G01R33/28 G01R33/58 G07D7/00 H01F1/44

CPC: C09K11/08 C09K11/574 C09K11/7766 C09K11/7776 G01N21/643 A61K49/1809 A61K49/1818 B82Y5/00 B82Y15/00 C09D11/03 B82Y20/00 B82Y30/00 C09D11/50 C09K11/025 C09K11/595 C09K11/621 C09K11/666 C09K11/684 C09K11/7727 C09K11/7734 C09K11/7736 C09K11/7738 C09K11/7741 C09K11/7755 C09K11/7769

C09K11/7772 C09K11/7774 C09K11/7777 C09K11/7792 C09K11/7794 C09K11/7797 C09K11/7798 G01N21/6428 G01N2021/6439 Y10T428/2991 Y10T436/13

European class: A61K49/18K4 A61K49/18P8 A61K49/18R B82Y15/00 B82Y20/00 B82Y30/00 B82Y5/00 C09D11/03 C09D11/50 C09K11/02B C09K11/08 C09K11/57B2 C09K11/59B2 C09K11/62B C09K11/66D C09K11/68B3 C09K11/77M14 C09K11/77N10B C09K11/77N14 C09K11/77N6 C09K11/77N8 C09K11/77P12 C09K11/77S C09K11/77S10 C09K11/77S2H C09K11/77S4 C09K11/77S6 C09K11/77S8 C09K11/77T12 C09K11/77T16 C09K11/77T6 C09K11/77T8 G01N21/64H G01N21/64H2 S01N21/64H7

US class: 106/401 252/301.40F 252/301.40H 252/301.40P 252/301.40R 252/301.40S 252/301.4F 252/301.4H 252/301.4P 252/301.4R 252/301.4S 252/301.5 252/301.60F 252/301.60P 252/301.60R 252/301.60S 252/301.6F 252/301.6P 252/301.6R 252/301.6S 356/243.1 356/433 356/951 423/263 423/263S 423/311 423/311S 423/592 424/9.1 424/9.32 424/9.320P 428/403 436/56 436/56P

Classification Explorer

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Forward Citations: WO13168622, WO12164024, WO12162858, WO12003988, WO10102820, WO10062267, WO08126446, WO08096280, WO08096279, WO07102094, WO07086606, WO07073879, WO07025107, WO06009810, WO06009124, WO05052068, WO05046733, WO05028094, WO04096944, WO04096943, WO04093203, WO04093203, WO04085571, WO04058914, WO04058780, WO04055833, US9453162, US9409434, US9334173, US9289750, US9114378, US9095270, US9079164, US8999650, US8975597, US8974767, US8890102, US8858833, US8822954, US8785866, US8709383, US8658213, US8647604, US8518307, US8506844, US8447379, US8425871, US8409525, US8405060, US8404876, US8337804, US8328102, US8257612, US8211388, US8139901, US8119321, US8092713, US8088358, US8036415, US7939560, US7938984, US7901593, US7892451, US7883641, US7780913, US7713624, US7704599, US7699456, US7667834, US7651771, US7625503, US7622163, US7607584, US7594961, US7550201, US7517564, US7422703, US7384576, US7344895, US7335808, US7282710, US7241399, US6982046, US2016059320, US2014011662, US2012273696, US2012161609, US2011210291, US2011147450, US2011114886, US2011024926, US2010227317, US2010119458, US2010111859, US2010102250, US2010047561, US2010019200, US2010012898, US2009298672, US2009256115, US2009226371, US2009155173, US2009137666, US2009129542, US2009116753, US2009087912, US2009087911, US2009014685, US2009007815, US2008297780, US2008217578, US2008206486, US2008176076, US2008159657, US2008128658, US2008032143, US2008032132, US2008025896, US2008024771, US2007295116, US2007274664, US2007251996, US2007218009, US2007166543, US2007148082, US2007144402, US2007131906, US2007111137, US2007108413, US2007054120, US2007048867, US2007024173, US2007014970, US2006273285, US2006222757, US2006063155, US2006003466, US2005112360, US2004156784, US2004014060, US2004007169, US2003032192, RU2574773, RU2471501, KR101363332, KR101014359, KR100913610, JP4652817, JP4614941, JP4593283, JP4516564, JP2014088351, JP2013233267, JP2011519816, JP2011046588, JP2010042966, JP2009516182, JP2008516876, JP2008037961, JP2008037856, JP2007523754, JP2007513045, JP2007511503, JP2007506934, JP2007197608, JP2007046022, JP2006524727, JP2006524623, JP2006514887, JP2006507203, JP2006213822, JP2006028354, JP2005290377, JP2005187314, JP2004530616, GB2413333, EP2835408, EP2570468, EP2475740, EP2120187, EP2038372, EP2038372, EP1990312, EP1986167, EP1939267, EP1935948, EP1898365, EP1887066, EP1884554, EP1764402, EP1728763, EP1715022, EP1696957, EP1694779, EP1495088, EP1473348, EP1473347, EP1431352, EP1431352, EP1368065, DE102015225457, DE102015205082, DE102013013108, DE102010026627, DE102009024685, DE102009012698, DE102007037807, DE102004033715, CN104312583, CN103842562, CN103842562, CN103601242, CN103502389, CN103502389, CN103394165, CN103394165, CN103097490, CN102994085, CN102834850, CN102834850, CN102735659, CN102517018, CN102433117, CN102368508, AU2011276102, AU2011276102,

Abstract:
Source: US2003032192A The present invention relates to methods for the preparation of inorganic nanoparticles capable of fluorescence, wherein the nanoparticles consist of a host material that comprises at least one dopant. The synthesis of the invention in organic solvents allows to gain a considerably higher yield compared to the prior art synthesis in water. All kinds of objects can advantageously be marked and reliably authenticated by using an automated method on the basis of a characteristic emission. Further, the size distribution of the prepared nanoparticles is narrower which renders a subsequent size−selected separation process superfluous.

0) US6752312B – GAMING MACHINE WITH HOPPER AND PRINTER

109) Family number: 20650478 (US6752312B) © PatBase

Title: Gaming machine with hopper and printer

Priority: US20000659924 20000912 WO2001US27555 20010906

Family:

Publication number	Publication date	Application number	Application date
AU2001288777 AA	20020326	AU20010288777	20010906
AU2001288777 BB	20050310	AU20010288777	20010906
AU200188777 A5	20020326	AU20010088777D	20010906
EP1317740 A2	20030611	EP20010968534	20010906
US6752312 BA	20040622	US20000659924	20000912
WO0223491 A2	20020321	WO2001US27555	20010906
WO0223491 A3	20020801	WO2001US27555	20010906
ZA200301959 A	20040701	ZA20030001959	20030311

Probable Assignee: IGT

Assignee(s):(std)**:** IGT RENO NEV ; INT GAME TECH ; IGT

Assignee(s): IGT 9 ; INTIONAL GAME TECHNOLOGY A NEVADA CORP ; INTERNATIONAL GAME TECHNOLOGY ; INT GAME TECHNOLOGY

Inventor(s):(std)**:** CHAMBERLAIN JOHN W ; HEDRICK JOSEPH R ; HOLLIBAUGH LARRY R ; SAFFARI ALI ; JOSEPH R HEDRICK ; JOHN W CHAMBERLAIN ; ALI SAFFARI

Inventor(s): LARRY R HOLLIBAUGH

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): G07F17/32 (Advanced/Invention); G07F17/32 (Core/Invention)

International class (IPC 1–7): G06F17/00 G07D1/00 G07F017/32 G07F17/32

CPC: G07F17/32 G07F17/3246 G07F17/3248 G07F17/3251 G07F17/3262

European class: G07F17/32 G07F17/32K2 G07F17/32K4 G07F17/32K6 G07F17/32M2

US class: 235/375 235/379

Classification Explorer

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US8870647, US8851988, US8834254, US8821268, US8819124, US8812709, US8784212, US8734245, US8721431, US8667457, US8662982, US8641532, US8631501, US8597107, US8568224, US8550464, US8523664, US8517827, US8500349, US8478833, US8469790, US8423790, US8412768, US8408551, US8382584, US8371919, US8366542, US8366109, US8348750, US8347303, US8347280, US8342944, US8342932, US8342533, US8287364, US8282465, US8275848, US8272945, US8266213, US8262090, US8251808, US8221223, US8216061, US8210759, US8201229, US8197334, US8195826, US8195825, US8192283, US8191121, US8131829, US8100753, US8070594, US8061913, US8057296, US8052519, US8016663, US7967682, US7934991, US7905775, US7819742, US7780517, US7771277, US7762888, US7758420, US7749079, US7686681, US7611407, US7510194, US7510186, US7494414, US7454363, US7448626, US7390256, US7318775, US7184168, US7147558, US7147558, US7063617, US6969319, US2010317424, US2009170593, US2009054136, US2009005176, US2008139302, US2007129136, US2005282627, US2005197183, US2005170885, US2005059479, US2004204233, US2004147309, US2004087360, US2004043813, US2004029635, US2004023721, US2003202684, US2003045354, GB2393015, GB2393015, GB2386733, GB2386733, GB2380591, GB2380591,

Abstract:
Source: US6752312B A gaming machine in which the form of pay out is selectable by the operator and/or user to provide a pay out with coins or by way of a ticket. The gaming machine incorporates both a hopper for coin operated play as well as a printer for cashless play. In accordance with one aspect of the machine, the system can automatically detect when one of the pay out systems is disabled or otherwise unavailable and automatically continue operation with the other pay out method to allow the machine to function in a limited state. The system thus helps the transition for players from coin operated machines to cashless gaming machines, and accommodates users with different cash out preferences. The gaming machine also accepts tickets, allowing users to easily move their credits from one gaming machine to another.

0) US6386323B – CASH DISPENSING METHOD AND SYSTEM FOR MERCHANDI...

110) Family number: 23351685 (US6386323B) © PatBase

Title: Cash dispensing method and system for merchandise delivery facility

Priority: US19980108340P 19981113 US19990438602 19991112 US19990440005 19991112 US20020125172 20020417 US20060603267 20061121 US19990439718 19991112 US20060831562P 20060717 US20060831504P 20060717 US20060603321 20061121 US20090384479 20090403

Family:

Publication number	Publication date	Application number	Application date
US6386323 BA	20020514	US19990440005	19991112
US6722473 BA	20040420	US20020125172	20020417
US6845907 BA	20050125	US19990438602	19991112
US7143065 BA	20061128	US19990439718	19991112
US7513419 BA	20090407	US20060603267	20061121
US7669757 BA	20100302	US20060603321	20061121
US7883007 BA	20110208	US20090384479	20090403

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD INC ; DIEBOLD SELF SERVICE SYS

Assignee(s): DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** CREWS TIM ; DAUGHERTY CYNTHIA S ; ENRIGHT JEFFERY M ; ENRIGHT JEFFREY M ; RAMACHANDRAN NATARAJAN

Agent(s): WALKER AND JOCKE; RALPH E; DANIEL D; JOCKE RALPH E; WASIL DANIEL D

International class (IPC 8–9)**:** E04H14/00 G06Q20/00 G06Q30/00 G06Q40/00 G07D11/00 G07F19/00 G07F7/00 (Advanced/Invention); E04H14/00 G06Q20/00 G07D11/00 G07F19/00 G07F7/00 (Core/Invention)

International class (IPC 1–7)**:** A47F9/00 E04H3/04 G06F7/08

CPC: G07F17/40 G07F19/20 G06Q20/20 G06Q50/12 G06Q20/18 G06Q30/0603 G07F13/025 G07F17/42 G07F19/203 G06Q20/042 G06Q20/10 G06Q20/102 G06Q20/105 G06Q20/108 G06Q20/1085 G06Q20/40 E04H14/00 G07F7/00 G07F19/202 G06Q30/00 G06Q30/0225 G06Q30/0238 G06Q30/0242

European class: E04H14/00 G06Q20/042 G06Q20/10 G06Q20/102 G06Q20/105 G06Q20/108 G06Q20/1085 G06Q20/18 G06Q20/20 G06Q20/40 G06Q30/00 G06Q30/0225 G06Q30/0238 G06Q30/0242 G06Q30/0603 G06Q30/06C G06Q50/12 G07F13/02B G07F17/40 G07F17/42 G07F19/00F G07F19/20 G07F19/202 G07F19/203 G07F7/00

US class: 186/36 186/37 186/53 235/375 235/379 235/380 235/381 235/385 235/478 235/487 235/493 705/14 705/14.26 705/14.38 705/14.41 705/15 705/16 705/39 705/40 705/41 705/42 705/43 705/44 705/45 902/8

Classification Explorer

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Abstract:
Source: US6386323B A system for providing cash to users in a merchandise delivery environment such as a fast food drive−through environment. The system includes a customer request station (212, 262, 288, 300, 322, 378) at which the customer is enabled to input a request for merchandise as well as an input corresponding to a request to receive cash. The customer is further enabled to input to the customer request station information corresponding to a source of monetary value which the customer may charge against for ordered merchandise or for the amount of cash requested. The customer may receive the cash directly at a customer request station. Alternatively, a computer may operate to correlate an identifying input associated with the customer or the transaction, and the request to receive the amount of cash. The customer may then move to a cash delivery station (216, 338). In response to the customer providing the identifying input at the cash delivery station, the customer receives a portion or all of the requested cash. The customer may then move to a merchandise delivery station (222, 292, 304, 316, 324, 342) at which the customer may receive the ordered merchandise. The customer may also receive the balance of any amount due such as coin, at the merchandise delivery station or other change delivery location.

111) Family number: 33123108 (US2002186844A) © PatBase

Title: USER–FRIENDLY RIGHTS MANAGEMENT SYSTEMS AND METHODS

Priority:

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Probable Assignee: DIGIMARC AN OREGON CORPORATION CORP

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Assignee(s): DMRC CORP ; DMRC LLC ; HIATT R ; DIGIMARC A DELAWARE CORP CORP ; DIGIMARC CORP TUALATIN ; DIGIMARC (AN OREGON CORPORATION) CORP ; DIGIMARC AN OREGON CORPORATION CORP ; DIGIMARC CORP WAS DMRC

CORPORATION.. ; DIGIMARC (A DELAWARE CORPORATION) CORP ; DIGIMARC A DELAWARE CORPORATION CORP ; DIGIMARC CORP WAS DMRC CORP ; DIGIMARC AN OREGON CORP CORP

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Agent(s): DIGIMARC CORP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

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H04N7/26 (Core/Non–invention);
H04N (Subclass/Invention)

International class (IPC 1–7): G06F17/30 G06F17/60 G06K9/00 H04L9/00 H04N1/00 H04N1/00 H04N1/32

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US2005120220, US2005114333, US2005111047, US2005094845, US2005089190, US2005086484, US2005086171, US2005078944, US2005075981, US2005062849,

US2005058319, US2005055476, US2005053235, US2005041954, US2005041835, US2005025336, US2005018871, US2005008225, US2004264733, US2004260662, US2004257977, US2004257625, US2004254883, US2004250080, US2004250078, US2004249943, US2004243634, US2004233471, US2004215570, US2004213408, US2004213113, US2004213112, US2004213111, US2004208321, US2004202324, US2004190462, US2004187027, US2004167856, US2004158724, US2004128514, US2004073798, US2004064380, US2004051885, US2004050936, US2004044894, US2004022444, US2004019667, US2004013285, US2003236066, US2003233660, US2003233155, US2003229501, US2003220877, US2003196114, US2003177446, US2003169762, US2003138127, US2003135623, US2003128861, US2003037010, US2003033321, US2003026589, US2003023640, US2003018709, US2003018588, US2003012548, US2002186844, US2002169963, US2002169721, US2002162118, US2002136430, US2002120849, US2002059221, TWI534651, TWI448979, TWI398829, TWI324732, RU2508602, KR101277601, KR100982166, JP4625695, JP2009524125, JP2008512887, JP2005526330, GB2537566, GB2465841, GB2425623, FR2899409, FR2875092, EP2944051, EP2913945, EP2681686, EP2681686, EP2550652, EP2487899, EP2487899, EP2373118, EP2373118, EP2312470, EP2250610, EP2212851, EP2212851, EP2135376, EP2134094, EP2086214, EP2065828, EP2040469, EP2036345, EP2027545, EP1963958, EP1963958, EP1934699, EP1934699, EP1896990, EP1607966, EP1599784, EP1599784, EP1593018, EP1580954, EP1580954, EP1489544, EA9793, EA009793, CN104885383, CN104782108, CN104471581, CN104010193, CN104010193, CN103794137, CN103492192, CN103492192, CN103324873, CN103164412, CN102982806, CN102982806, CN102682081, CN102549933, CN102549933, CN102473172, CN102414677, CN102413260, CN102237092, CN102013088,

Abstract:
Source: US2002186844A A method of performing digital asset management of content is provided. The content is identified with an identifier. The identifier can be identified with a digital watermark, header file, or both. The identifier is linked to usage rules to regulate usage and protect the content. The usage rules can be maintained on a remote or local database or server. Once extracted, an identifier is used to index the database to locate a corresponding usage rule, and can be used to override copy control information with proper purchase and subsequent protection. Content can be managed from such. In another embodiment, an identifier is used to track usage, such as amount of content viewed, time played, and copies made. In yet another embodiment, a content identifier is used to regulate content throughout a distribution chain, and a distributed set of databases with information relevant only to the owner of the database act as one database due to a central router.

0) CO5160402A – DETECTOR DE HOJAS DOBLES PARA CAJERO AUTOMATICO...

112) Family number: 43685920 (CO5160402A) © PatBase

Title: DETECTOR DE HOJAS DOBLES PARA CAJERO AUTOMATICO DOUBLE SHEET DETECTOR FOR ATM (Machine translation)

Priority: US19980107900P 19981110 US19990133613P 19990511 US19990375960 19990817 US19990376138 19990817

Family:

Publication number	Publication date	Application number	Application date
AR021079 AA	20020612	AR1999P105575	19991104
CO5160402 A1	20020530	CO19990070964	19991110

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD INC

Inventor(s):(std)**:** YECKLEY ALEXANDER J ; SONGTAO MA ; LASKOWSKI EDWARD L

Inventor(s): EDWARD L LASKOWSKI ; ALEXANDER J YECKLEY ; MA SONGTAO

Agent(s): CARLOS REINALDO OLARTE GARCIA

International class (IPC 8–9): B65H7/12 G07D13/00 G07D7/12 G07D7/16 (Advanced/Invention); B65H7/12 G07D13/00 G07D7/00 (Core/Invention)

International class (IPC 1–7): G07D13/00 G07D7/12 G07D7/16

CPC: G07D7/183 B65H7/125 G07D7/12

European class: B65H7/12C G07D7/12 G07D7/16D

Classification Explorer

Abstract:
Source: CO5160402A Una maquina de transacciones automatizadas incluye un aparato para distinguir entre hojas sencillas y hojas multiples en una trayectoria de hoja. El aparato incluye emisores de radiacion (14,34) y detectores de radiacion (20,40,42). Los emisores de radiacion son operados para emitir radiacion en intervalos periodicos. Los acondicionadores de senal (50) reciben las senales de los detectores de radiacion y generan salidas, en respuesta a las intensidades detectadas por los detectores, substancialmente solo durante los intervalos periodicos. Las salidas son combinadas, ponderadas y/o comparadas con umbrales para distinguir hojas sencillas de hojas multiples. El aparato permite una operacion confiable en ambientes electricamente ruidosos y con una amplia variedad de propiedades de hoja. An automated transaction machine includes a device to distinguish between single and multiple sheets in a leaf path. The appliance includes radiator emitters (14.34) and radiation detectors (20, 40,42). The radiator emitters are operated to emit radiation at regular intervals. Signal Conditioners (50) receive the signals of the radiation detectors and generate outputs, in response to the intensities detected by the detectors, substantially only during the periodic intervals. The outputs are combined, weighted and/or compared with thresholds to distinguish single sheets of multiple leaves. The unit allows reliable operation in electrically noisy environments with a wide variety of leaf properties.

0) US2004112962A – SECURITY, IDENTIFICAITON AND VERIFICATION SYSTE...

113) Family number: 13536994 (US2004112962A) © PatBase

Title: SECURITY, IDENTIFICAITON AND VERIFICATION SYSTEMS

Priority: EP20010989677 20011219 GB20000031016 20001220 WO2001GB05642 20011219

Family:

Publication number	Publication date	Application number	Application date
AT334458 E	20060815	AT20010989677T	20011219
AU2002228148 AA	20020701	AU20020228148	20011219
AU200228148 A5	20020701	AU20020028148	20011219
DE60121814 D1	20060907	DE20016021814	20011219
DE60121814 T2	20070222	DE20016021814T	20011219
DE60121814 T3	20120315	DE20016021814T	20011219
EP1354304 A1	20031022	EP20010989677	20011219
EP1354304 B1	20060726	EP20010989677	20011219
EP1354304 B2	20110323	EP20010989677	20011219
EP1354304 B8	20060913	EP20010989677	20011219
GB200031016 A0	20010131	GB20000031016	20001220
GB200130406 A0	20020206	GB20010030406	20011220
GB2374831 A1	20021030	GB20010030406	20011220
GB2374831 B2	20040714	GB20010030406	20011220
US2004112962 AA	20040617	US20030451602	20031110
US7353994 BB	20080408	US20010451602	20011219
WO0250790 A1	20020627	WO2001GB05642	20011219

Probable Assignee: ALPHAFOX SYSTEMS LTD

Assignee(s):(std)**:** ALPHAFOX SYSTEMS LTD ; BARFOOT KEITH MICHAEL ; FARRALL ANDREW JOHN

Assignee(s): ALPHAFOX SYSTEMS LIMITED

Inventor(s):(std)**:** BARFOOT KEITH ; BARFOOT KEITH MICHAEL ; BARFOOT MICHAEL ; FARRALL ANDREW ; FARRALL ANDREW JOHN ; FARRALL JOHN

Inventor(s): KEITH MICHAEL BARFOOT ; ANDREW JOHN FARRALL

Agent(s): ANDREWS MARTYN PETER; OSHA LIANG LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): G06K19/06 G06K7/10 G06K7/12 G07D7/12 G07D7/20 G07F7/08 G08B13/24 (Advanced/Invention); G06K19/06 G06K7/12 G07D7/00 G07F7/08 G08B13/24 (Core/Invention)

International class (IPC 1–7): B42D15/00 B42D15/10 G06K19/06 G06K19/14 G06K7/10 G07D7/12 G07D7/20 G08B13/24

CPC: G06K7/12 G06K9/00577 G06K19/06046 G06K19/086 G06K19/10 G07D7/128 G07D7/2033 G07D7/205 G07F7/086 G08B13/2437 G08B13/244 G08B13/2442 G08B13/2445

European class: G06K19/06C5 G06K19/08C2 G06K19/10 G06K7/12 G06K9/00R G07D7/12V G07D7/20F2 G07D7/20F6 G07F7/08B G08B13/24B3M G08B13/24B3M1 G08B13/24B3M2 G08B13/24B3M3

US class: 235/454 235/462.01 235/462.010P 235/491 235/494

Classification Explorer

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WO9112146 A2, WO0250790 A1, WO0157831 A1, WO0105783 A1, US6193156 BA, US6039255 A, US5974150 A, US5619025 A, US5602381 A, US5565667 A, US5434917 A, US5325167 A, US3636318 A, JP10221527 A2, GB2324065 A1, GB2304077 A1, GB1107341 A, FR2442719 A1, EP0989527 A2, EP0626275 A2, EP0161181 A1,

Forward Citations: WO16081152, WO15121841, WO15075726, WO15035705, WO15035704, WO15035701, WO14167103, WO12148937, WO12136902, WO12135346, WO12095370, WO10070347, WO10070345, WO10003585, WO09093057, WO09071445, WO09053756, WO08041411, WO07090437, WO07078935, WO07012821, WO07002873, WO06120643, WO06069815, WO06064448, WO06063817, WO06056830, WO06010559, WO05088533, WO05048179, WO04109591, WO04097730, WO04096573, WO04096573, US9684819, US9652703, US9646206, US9594994, US9582714, US9563831, US9562998, US9553582, US9443298, US9443180, US9397837, US9363083, US9361532, US9350552, US9349087, US9292761, US9292718, US9208369, US9152862, US9122971, US9082062, US9082032, US9058543, US9058535, US9058533, US9019567, US8985471, US8896885, US8892556, US8864037, US8856533, US8850198, US8844802, US8774455, US8766800, US8757493, US8750621, US8749386, US8746555, US8740076, US8730715, US8705805, US8699088, US8691358, US8682076, US8681004, US8672218, US8669847, US8639681, US8615475, US8596526, US8588506, US8579188, US8578509, US8558995, US8502668, US8497983, US8469282, US8459566, US8434675, US8421625, US8306319, US8300916, US8300217, US8300216, US8290301, US8281997, US8280817, US8267311, US8256688, US8223202, US8218924, US8194236, US8186573, US8155312, US8121386, US8103046, US8099335, US8079529, US8078875, US8073245, US8070063, US8045753, US8036480, US8026932, US8020764, US7975930, US7975929, US7969281, US7963563, US7950584, US7917443, US7898648, US7853792, US7812935, US7793837, US7773749, US7730797, US7684679, US7427020, US7380128, US7353994, US7337967, US7204421, US6996543, US2017053164, US2015317923, US2015261997, US2015060548, US2015048156, US2015036890, US2014372305, US2014177965, US2014119619, US2014032523, US2014001261, US2013306737, US2013265333, US2013256415, US2013153651, US2012246477, US2012241515, US2012177255, US2012168506, US2012153025, US2012125999, US2011248829, US2011225101, US2011188729, US2011036915, US2010330349, US2010268654, US2010202683, US2010179914, US2010161529, US2010158377, US2010127871, US2009307112, US2009283583, US2009266875, US2009245047, US2009244518, US2009231104, US2009218401, US2009033914, US2009016632, US2009016535, US2009008924, US2009007258, US2008303643, US2008294900, US2008283612, US2008256600, US2008240430, US2008231418, US2008181447, US2008128496, US2008099565, US2008074441, US2008061254, US2008044096, US2008025594, US2008002243, US2007242135, US2007170265, US2007165208, US2007164729, US2007086653, US2007053005, US2007028093, US2007027819, US2007025619, US2007023521, US2007023494, US2006294583, US2006086791, US2005276906, US2005187837, US2003113099, US2003014647, TWI448991, TWI375191, KR20140133860, KR101712167, KR101379420, JP2014501402, GB2440386, FR2973910, FR2957705, FR2896326, EP2790133, EP2710365, EP2710365, EP2637145, EP2581860, EP2495689, EP2248067, EP2248067, EP2128802, EP2096580, EP2081130, EP2071526, EP2068268, EP1965989, EP1965988, EP1965988, EP1965987, EP1965987, EP1908044, EP1906366, EP1761882, EP1761882, EP1687759, EP1675040, EP1631908, EP1477940, EP1477940, EP1475242, CN104463292, CN104463290, CN103534708, CN103503051, CN103218632, CH711866, AU2008240987, AU2006263553, AU2005220385,

Abstract:
Source: US2004112962A A method of operating a security system includes making a plurality of security tags, each of which includes a plurality of particles randomly distributed in a light–transmitting matrix, providing a reader which includes means for causing light of one or more wavelengths to impinge on a security tag and means for interpreting the light reflected and/or refracted and/or diffracted by the particles in the matrix, and presenting said tags to said reader.

0) TW506593Y – COIN IDENTIFICATION COUNTING STRUCTURE

114) Family number: 28887264 (TW506593Y) © PatBase

Title: Coin identification counting structure

Priority: TW20010209223U 20010605

Family:

Publication number	Publication date	Application number	Application date
TW506593 Y	20021011	TW20010209223U	20010605

Probable Assignee: SERENE ELECTRONIC IND CO LTD

Assignee(s):(std)**:** SERENE ELECTRONIC IND CO LTD

Assignee(s): SERENE ELECTRONIC INDUSTRIAL CO LTD

Inventor(s):(std)**:** LAI YI LANG

International class (IPC 8–9)**:** G07D9/00 (Advanced/Invention); G07D9/00 (Core/Invention)

International class (IPC 1–7)**:** G07D9/00

Classification Explorer

Abstract:
Source: TW506593Y

Machine translation: This creation is about one kind of money recognition counting structure, this structure is may establish in like saves money the tube, the parking charge throws on the coin machine, after Yu Toubi, uses a slide drawing spring to make a turntable rotation, is separated on the turntable card from the link supposes several detection holes, is equipped with the launcher and the receiver in the turntable both sides, the affiliation launcher and the receiver detection detection hole rotation position variation, gives a signal to the electric circuit board judgment investment currency value, carries on the recognition and the counting, has may distinguish the currency value and the counting merit automatically.

0) US2003014370A – COMBINED CARD READER AND BILL ACCEPTOR

115) Family number: 27989894 (US2003014370A) © PatBase

Title: COMBINED CARD READER AND BILL ACCEPTOR

Priority: US20010903322 20010710

Family:

Publication number	Publication date	Application number	Application date
US2003014370 AA	20030116	US20010903322	20010710
US7152783 BB	20061226	US20010903322	20010710

Probable Assignee: SMART CARD INTERGRATORS INC

Assignee(s):(std)**:** SMART CARD INTEGRATORS INC

Assignee(s): SMART CARD INTERGRATORS INC

Inventor(s):(std)**:** CHARRIN PHILIPPE A

Agent(s): IRELL AND MANELLA LLP

International class (IPC 8–9)**:** G06K7/00 G07D11/00 G07F19/00 G07F7/04 G07F7/08 (Advanced/Invention); G07D11/00 G07F7/00 G07F7/08 (Core/Invention)

International class (IPC 1–7)**:** G06F17/60 H04K1/00 H04L9/00

CPC: G07D11/0081 G07F7/04 G07F7/0866 G07F7/0873 G06Q20/367

European class: G06Q20/367 G07D11/00H G07F7/04 G07F7/08C G07F7/08G

US class: 235/379 235/439 235/440 705/65 705/65P 902/40

Classification Explorer

Cited documents: US6577733 BA, US6296182 BA, US5955718 A, US5919091 A, US5635696 A, US5630755 A, US5495098 A, US5450938 A, US5038022 A, US4808803 A,

Forward Citations: WO08051999, WO08051999, WO07148320, WO07148320, US9672686, US9666021, US9630096, US9626826, US9607474, US9602391, US9600976, US9600968, US9595161, US9576425, US9564018, US9533216, US9486704, US9486697, US9483901, US9466180, US9466179, US9361766, US9330530, US9325203, US9324209, US9317018, US9280879, US9275510, US9245411, US9235952, US9224266, US9218598, US9218557, US9202338, US9195926, US9177241, US9159200, US9129270, US9129199, US9123204, US9083565, US9005015, US8979657, US8974290, US8959028, US8876591, US8864586, US8864575, US8834254, US8814667, US8814648, US8801520, US8788418, US8727871, US8696470, US8696445, US8671055, US8641520, US8631093, US8628400, US8622814, US8622805, US8602875, US8597108, US8591313, US8591311, US8573490, US8562418, US8556710, US8506391, US8506390, US8463711, US8460086, US8449380, US8444480, US8443200, US8430747, US8408993, US8360851, US8353753, US8342956, US8328626, US8317587, US8303402, US8282474, US8267777, US8238095, US8210936, US8187089, US8182338, US8157167, US8147320, US8137180, US8128002, US8113947, US8069319, US8038528, US8016666, US8005425, US7988552, US7980938, US7963846, US7874915, US7850524, US7831786, US7780531, US7735742, US7666093, US7662040, US7510473, US7426595, US7419430, US7377184, US7270605, US2015122885, US2014370970, US2012091198, US2011218911, US2011201410, US2011130192, US2011114442, US2011098102, US2011098101, US2011092277, US2010304830, US2010291991, US2010267442, US2010252629, US2010227667, US2010197383, US2010116883, US2010113131, US2010016060, US2009305777, US2009247277, US2009149241, US2009131159, US2009124366, US2009117974, US2009042638, US2008243566, US2008207307, US2008139290, US2008081690, US2008070676, US2008045341, US2008020847, US2008015012, US2008011848, US2007260822, US2007259711, US2007213114, US2007202943, US2007167218, US2007138266, US2007135211, US2007066386, US2007060319, US2007060263, US2007026941, US2007021215, US2006135243, US2006111169, US2006035706, US2006009283, US2006003829, US2005201049, US2005165700, US2005054438, US2005009607, US2005003886, US2005003880, US2004242320, US2004043814, JP5851237, JP2013134662, GB2518277, GB2403664, EP2141666, EP2068498, EP2068498, DE102007000589, DE102007000589, CN102369559, CN102005083, CN102005083, AU2004202387,

Abstract:
Source: US2003014370A A combined bill acceptor and smart card reader (or other data unit reader) comprises a bill acceptor, a host interface, and a smart card reader interposed between the bill acceptor and the host interface. The smart card reader preferably permits unimpeded pass−through of cash transaction data from the bill acceptor to the host interface when currency is accepted by the bill acceptor, and transmits cashless transaction data to the host interface when a smart card is read by the card reader. The smart card reader may route the cash transaction data using a hardware connection, such as a relay, or a soft connection, such as by serial interface devices in communication with the bill acceptor and the host device. The smart card reader may provide secure storage of transaction history data, as well as advanced authentication and verification functions. The combined bill acceptor and card reader may interface with a central computer, either directly or indirectly, allowing multiple on−line machines to be connected in a network configuration.

0) US2003051971A – CASHLESS GAMING SYSTEM: APPARATUS AND METHOD

116) Family number: 30043960 (US2003051971A) © PatBase

Title: CASHLESS GAMING SYSTEM: APPARATUS AND METHOD

Priority: US19970908300 19970807 US20020205695 20020726 US20020308314 20021202 US20020308341 20021202 US20070753384 20070524 US20080134973 20080606 US20100698744 20100202 US20030349688 20030122 US20040996572 20041123 US20070753372 20070524

Family:

Publication number	Publication date	Application number	Application date
US2003051971 AA	20030320	US20020205695	20020726
US2003083127 AA	20030501	US20020308314	20021202
US2003087692 AA	20030508	US20020308341	20021202
US2003106769 AA	20030612	US20030349688	20030122
US2005090308 AA	20050428	US20040996572	20041123
US2007225068 AA	20070927	US20070753372	20070524
US2008015014 AA	20080117	US20070753384	20070524
US2008242403 AA	20081002	US20080134973	20080606
US2010203966 AA	20100812	US20100698744	20100202
US6511377 BA	20030128	US19970908300	19970807
US6890258 BB	20050510	US20020205695	20020726
US6896616 BB	20050524	US20030349688	20030122
US6997807 BB	20060214	US20020308341	20021202
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US8500547 BB	20130806	US20040996572	20041123
US8974291 BB	20150310	US20080134973	20080606

Probable Assignee: ARISTOCRAT TECHNOLOGIES INC

Assignee(s):(std)**:** ARISTOCRAT TECHNOLOGIES INC ; CASINO DATA SYS ; CASINO DATA SYSTEMS ; WEISS STEVEN A

Assignee(s): UBS STAMFORD BRANCH AG

Inventor(s):(std)**:** WEISS STEVEN A

Inventor(s): WEISS STEVEN

Agent(s): MCANDREWS HELD AND MALLOY LTD

International class (IPC 8–9): A63F13/00 A63F13/02 A63F13/12 A63F9/24 G06F19/00 G07F17/32 (Advanced/Invention)

International class (IPC 1–7): A63F13/00 A63F9/22 A63F9/24 G06F19/00 G07C3/00 G07D13/00 G07F17/34

CPC: G07F17/3225 G07F17/3251 G07F17/32 G07F17/3255 G07F17/3281

European class: G07F17/32 G07F17/32K10 G07F17/32K6 G07F17/32M8F

US class: 194/200 194/201 463/16 463/20 463/24 463/25 463/25P 463/25S 463/26 463/29 463/29S 463/31 463/31P 463/40 463/40S 463/42 463/42S 463/43 463/43S 902/23

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US2002142846, US2002142825, US2002103027, US2002099749, US2002068627, US2002065123, US2002039921, US2001032193, US2001027563,

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Abstract:
Source: US2003051971A An apparatus and method for cashless gaming wherein a player can access credits via a pin activated keypad located on the gaming machine. Real–time accounting allows the player to redeem credits and secure perquisites as a function of patronage.

0) US6520408B – METHOD FOR OPERATING AUTOMATED BANKING MACHINE ...

117) Family number: 33465842 (US6520408B) © PatBase

Title: Method for operating automated banking machine

Priority: US19970067319P 19971128 US19980094314P 19980727 US19980193016 19981117 US20000565415 20000505

Family:

Publication number	Publication date	Application number	Application date
US6520408 BA	20030218	US20000565415	20000505

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD INC

Assignee(s): JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** BOWSER ROBERT ; EASTMAN JEFFREY ; FORCE MATTHEW ; GRAEF H THOMAS ; HARTY MICHAEL ; JUNKINS ANDREW ; LINDROOS MICHAEL E ; LOONEY ALAN ; OWENS MARK ; RYAN MIKE ; SHIRAH ROY

International class (IPC 8–9): B65H29/58 B65H3/04 B65H5/22 B65H9/20 G06Q20/00 G07D11/00 G07F19/00 (Advanced/Invention)

International class (IPC 1–7): G06K15/00 G06K17/60

CPC: B65H3/047 B65H5/222 B65H9/002 B65H9/20 B65H29/58 B65H31/3027 B65H2301/331 B65H2301/422546 B65H2301/42262 B65H2511/13 B65H2701/1912 G06Q20/00 G07D11/0012 G07D11/0018 G07D11/0051 G07D11/0054 G07D11/0063 G07D11/0072 G07D11/0075 G07D11/0081 G07F19/00 G07F19/20 G07F19/201 G07F19/202 G07F19/203 G07F19/205 G06Q20/1085

European class: B65H29/58 B65H3/04T B65H31/30B B65H5/22B B65H9/00A B65H9/20 G06Q20/00 G06Q20/1085 G07D11/00D2D G07D11/00D4 G07D11/00F G07D11/00F2 G07D11/00F4 G07D11/00F8B G07D11/00F8D G07D11/00H G07F19/00 G07F19/00F G07F19/20 G07F19/201 G07F19/202 G07F19/203 G07F19/205 L65H301/331 L65H301/42254D L65H301/42262 L65H333/100 L65H342/254D L65H342/262 L65H511/130 L65H701/1912

US class: 235/379 235/380

Classification Explorer

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Forward Citations: WO17066281, WO06063556, US8814040, US8132718, US8128083, US7997418, US7988141, US7934642, US7747061, US7661583, US7644914, US7464921, US7216591, US7206544, US7011201, US6889898, US6823172, US6663001, US2015282679, US2012241282, US2011209966, US2009085274, US2008137939, US2008128490, US2008023905, US2007221469, US2006090983, US2005263585, US2004182677, US2004139000, US2004050649, US2003205618,

Abstract:
Source: US6520408B An automated banking machine (10) identifies and stores in storage areas documents such as currency bills deposited by a user. The machine selectively recovers such documents from storage areas and dispenses them. The machine includes a central transport (70) wherein documents deposited in a stack are unstacked, oriented and identified. Such documents are then routed to storage areas in canisters (92, 94, 96, 98). Documents in the storage areas are selectively picked therefrom and delivered to a user through an input/output area (50) of the machine. Each canister includes a memory (626) which holds information concerning the number and type of documents housed in the canister as well as other information concerning the hardware and software resident on the canister. The memory also includes data representative of individuals responsible for loading and transporting the canister. The machine conducts self–auditing activities to verify that the documents held in the storage areas corresponds to the information stored in memory and indicate discrepancies.

118) Family number: 30067455 (US2003063772A) © PatBase

Title: SYSTEM AND METHOD FOR AUTHENTICATION AND TRACKING OF A WORKPIECE THAT INCLUDES AN OPTICALLY ACTIVE MEDIUM

Priority: US20010317665P 20010906 US20020236697 20020906 US20020394914P 20020710 US20020394916P 20020710 WO2002US28350 20020906

Family:

Publication number	Publication date	Application number	Application date
AU2002336444 AA	20030414	AU20020336444	20020906
US2003063772 AA	20030403	US20020236697	20020906
WO03030105 A2	20030410	WO2002US28350	20020906
WO03030105 A3	20031127	WO2002US28350	20020906

Probable Assignee: ESCHER GROUP LTD

Assignee(s):(std): ESCHER GROUP LTD

Assignee(s): ESCHER GROUP LTD A MASSACHUSETTS CORP ; METOIS ERIC ; MURPHY MICHAEL J ; SMITH JOSHUA R ; THE ESCHER GROUP LTD ; ANGLO IRISH BANK CORP ; ANGLO IRISH BANK PLC LENDER AS CORP ; CAPITALSOURCE FINANCE LLC ; CITIZENS BANK OF MASSACHUSETTS

Inventor(s):(std): SMITH JOSHUA R ; MURPHY MICHAEL J ; METOIS ERIC

Inventor(s): JOSHUA R SMITH ; MICHAEL J MURPHY ; ERIC METOIS

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

International class (IPC 8–9): G07D7/00 G07D7/12 G07F7/08 G07F7/12 (Advanced/Invention); G06K17/00 G07B17/00 (Advanced/Non–invention); G07D7/00 G07F7/08 G07F7/12 (Core/Invention); G06K17/00 G07B17/00 (Core/Non–invention)

International class (IPC 1–7): G06K19/06 G06K9/00 G07B

CPC: G07B2017/00653 G07B2017/00766 G07D7/004 G07D7/12 G07F7/08 G07F7/0813 G07F7/0833 G07F7/12 G06K2017/0045

European class: G07D7/00D G07D7/12 G07F7/08 G07F7/08A2 G07F7/08A4 G07F7/12 S06K17/00W6 S07B17/00F2E S07B17/00G1B1

US class: 382/100 382/100P

Classification Explorer

Cited documents: US6749120 BB, US6575362 BA, US6390368 BA, US6366696 BA, US6145742 A, US6137590 A, US5970184 A, US5905251 A, US5781665 A, US5514860 A, US5461239 A, US4934846 A, US4423415 A, US2002069096 AA,

Forward Citations: WO16157172, WO06021083, WO06021083, USD523472, USD518099, US9664610, US9625371, US9544486, US9430868, US9367710, US9316581, US9113084, US9041920, US8988666, US8983117, US8957897, US8923550, US8905298, US8888207, US8886951, US8879833, US8842876, US8840020, US8788831, US8781153, US8704158, US8583394, US8473352, US8411899, US8368878, US8285510, US8281997, US8224018, US8215553, US8126203, US8081304, US8077905, US8076630, US8059860, US7996173, US7949148, US7898648, US7850077, US7760906, US7492920, US7345747, US7265370, US7162052, US2015271376, US2015161575, US2014375842, US2013200143, US2013089255, US2012138680, US2012074222, US2012017096, US2010332390, US2010327060, US2010250375, US2010246902, US2010122093, US2010005299, US2009244518, US2009112101, US2008133389, US2008112596, US2008041941, US2007288760, US2007214406, US2007211920, US2007138306, US2006243928, US2006163354, US2006147082, US2005203872, EP2395344, EP2293222, EP1798692, EP1589496, CN102378983,

Abstract:
Source: US2003063772A An inhomogeneous, optically active medium with optically active components, such as, an ink with reflective flakes or a gemstone dust, is included on or embedded in one or more portions of a workpiece. When the portions are illuminated with visible and/or ultraviolet light, the components, which are also anisotropic, provide readily detectable information that can be extracted for a string which is included on or associated with an indicium that is used to authenticate the workpiece. To verify the workpiece, the one or more portions that contain the optically active medium are again illuminated, and the string is then newly generated from various images of the appearances of the components. The newly generated string or, as appropriate, an indicium that is based on the string is then compared with a string or an indicium that is imprinted on or associated with the workpiece. If the previously and newly generated strings or indicium correspond, the workpiece is determined to be authentic. Otherwise, the workpiece is deemed to be a counterfeit.

119) Family number: 30755964 (US2004149818A) © PatBase

Title: CASH DISPENSING AUTOMATED BANKING MACHINE DIAGNOSTIC DEVICE

Priority:

US19960031956P 19961127 US19980077337 19980527 US19980091887 19980707
US20000207043 20000525 US20000207043P 20000525 US19980193637 19981117
US19980098907P 19980902 US19980095626P 19980807 US19980091887P 19980707
US20030721114 20031125 US20030721822 20031124 US20020429249P 20021125
US20020429250P 20021125 US20020429476P 20021126 US20020429521P 20021126
US20020429528P 20021126 US20030453370P 20030310 US20030465733P 20030425
US20010863911 20010523 US20010949283 20010907 US20020453370P 20020310
US20030722129 20031124 US20050193172 20050729 US20030722070 20031124
US20060504484 20060815 US20060505612 20060817 US20080006859 20080107
US20080006860 20080107 US20080070984 20080222 US20030722363 20031125
US20080075236 20080310 US20080220752 20080728 US20090378491 20090214
US20090583886 20090827 US20070881620 20070727 US20060834069P 20060728
US20060834070P 20060728 US20090460572 20090720 US20060504478 20060815
US20030722067 20031125 US20050429250P 20051125 US20090380019 20090220
US20060601556 20061117 WO1997US21422 19971125 WO2001US16775 20010523

Family:

Publication number	Publication date	Application number	Application date
AR028612 AA	20030514	AR2001P102447	20010523
BRPI0111112 A	20030415	BR2001PI11112	20010523
IN00824DE2005 A	20070427	IN2005DE00824	20050331
IN00825DE2005 A	20070223	IN2005DE00825	20050331
IN00826DE2005 A	20070223	IN2005DE00826	20050331
IN00827DE2005 A	20070302	IN2005DE00827	20050331
IN00828DE2005 A	20070427	IN2005DE00828	20050331
IN00829DE2005 A	20070223	IN2005DE00829	20050331
IN00830DE2005 A	20070126	IN2005DE00830	20050331
IN00831DE2005 A	20070302	IN2005DE00831	20050331
IN00832DE2005 A	20070126	IN2005DE00832	20050331
IN00833DE2005 A	20070126	IN2005DE00833	20050331
IN00834DE2005 A	20070511	IN2005DE00834	20050331
IN00835DE2005 A	20070126	IN2005DE00835	20050331
IN00836DE2005 A	20070126	IN2005DE00836	20050331
IN00914MN2005 A	20070706	IN2005MN00914	20050818
IN216933 B	20080331	IN2005DE00830	20050331
IN217300 B	20080411	IN2005DE00836	20050331
IN219390 B	20080620	IN2005DE00835	20050331
IN251095 B	20120224	IN2005DE00824	20050331
IN277655 B	20161202	IN2005DE00828	20050331
US2004149818 AA	20040805	US20030721114	20031125
US2004149819 AA	20040805	US20030722067	20031125
US2004153409 AA	20040805	US20030722129	20031124
US2005269397 AA	20051208	US20050193172	20050729
US2006273150 AA	20061207	US20060504484	20060815
US2006273151 AA	20061207	US20060505612	20060817
US2006273160 AA	20061207	US20060504478	20060815
US2007136196 AA	20070614	US20060601556	20061117
US2008110974 AA	20080515	US20080006859	20080107
US2008110975 AA	20080515	US20080006860	20080107
US2008156867 AA	20080703	US20080070984	20080222

US2008185428 AA	20080807	US20080075236	20080310	
US2009026258 AA	20090129	US20080220752	20080728	
US2009261159 AA	20091022	US20090378491	20090214	
US2010006644 AA	20100114	US20090583886	20090827	
US2010012718 AA	20100121	US20090460572	20090720	
US6953150 BB	20051011	US20030721114	20031125	
US7093749 BA	20060822	US20030721822	20031124	
US7093750 BA	20060822	US20030722070	20031124	
US7104441 BB	20060912	US20030722067	20031125	
US7316349 BB	20080108	US20060504484	20060815	
US7334723 BB	20080226	US20060504478	20060815	
US7341177 BB	20080311	US20010863911	20010523	
US7367492 BB	20080506	US20050193172	20050729	
US7404515 BA	20080729	US20030722363	20031125	
US7490762 BB	20090217	US20080075236	20080310	
US7494047 BB	20090224	US20030722129	20031124	
US7617971 BB	20091117	US20080070984	20080222	
US7717331 BB	20100518	US20080220752	20080728	
US7721953 BA	20100525	US20090380019	20090220	
US7726559 BB	20100601	US20080006860	20080107	
US7762454 BB	20100727	US20060505612	20060817	
US7891552 BB	20110222	US20080006859	20080107	
US7934644 BB	20110503	US20090378491	20090214	
US8123122 BB	20120228	US20090583886	20090827	
US8141773 BB	20120327	US20090460572	20090720	

Probable Assignee: DIEBOLD SELF SERVICE SYS

Assignee(s):(std)**:** DIEBOLD SELF SERVICE SYSTEMS D ; DIEBOLD INC ; DIEBOLD SELF SERVICE SYS ; DIEBOLD SELF SERVICE SYSTEMS ; DIEBOLD SELF SERVICE SYSTEMS A ; SHEPLEY STEVEN ; GRISWOLD GLENDA

Assignee(s): JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; DIEBOLD SELF SERVICE SYSTEMS A DIVISION OF DIEBOLD INC ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF ; DIEBOLD SELF SERVICE SYSTEMS DIVISON OF ; DIEBOLD SELF SERVICE SYSTEMS DIVISON OF DIEBOLD IN ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD I ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEHOLD I ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC ; DIEBOLD SELF SERVICE SYSTEMS DIVISON OF DIEBOLD INC ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INCORPORTED ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEHOLD INC ; DOEBOLD INC

Inventor(s):(std)**:** SHEPLEY STEVEN ; WEIS DAVID W ; MOALES MARK A ; ESS JOSEPH C ; DRUMMOND JAY P ; CICHON BOB A ; CHURCH JAMES ; BLACKSON DALE ; USNER ROBERT ; STEWART KRISTIN ; STEWART KRISTEN ; SOARES DE CASTRO MARCELO ; SMITH MARK D ; PELLEGRINI SERGIO ; REED BRYAN ; RAO AARTHI ; GRISWOLD GLENDA ; DRUMMOND JAY PAUL ; DRUMMOND JAN PAUL ; CWIKLA JOSEPH ; BLOCK JAMES ; ARNEY DEBORAH ; AMEY DEBORAH

Inventor(s): GLENDA GRISWORLD ; CICHON BOB ; BRYAN REED ; BRUCE G RICHARDS ; BRADRICK Q LEPPER ; BOB A CICHON ; DAVID W WEIS ; DALE BLACKSON ; DALE BALCKSON ; DRUMMOND JAY ; JAY PAUL DRUMMOND ; PHILLIPS S MOORE ; PHILLIP S MOORE ; OMAREL KAISSI ; OMAR EL KAISSI ; MOALES MARK ; MICHAEL E CALIFF JR ; MARK S COVERT ; MARK D SMITH ; MARK A MOALES ; LILEI CHEN ; JOSEPH CWIKLA ; JOSEPH C ESS ; JAN PAUL DRUMMOND ; JAMES CHURCH ; JAMES BLOCK ; GLENDA GRISWOLD ; ESS JOSEPH ; SMITH MARK ; SHAWN D JOYCE ; ROBERT USNER ; ROBERT J LEMLEY ; ROBERT E USNER ; STEVEN SHEPLEY ; STEVEN C SWINGLER ; WEIS DAVID

Agent(s): RALPH E JOCKE WALKER AND JOCKE LPA; WALKER AND JOCKE; JOCKE RALPH E; PARMELEE CHRISTOPHER L; CHRISTOPHER L; RALPH E; DANIEL D; WALKER AND JOCKE LPA

International class (IPC 8–9): G06F17/00 G06F17/30 G06F17/60 G06F19/00 G06F3/023 G06F3/048 G06F7/08 G06F9/44 G06F9/46 G06K5/00 G06Q20/00 G06Q40/00 G06Q90/00 G07D11/00 G07F19/00 H04L29/06 H04L29/08 (Advanced/Invention); G06F17/00 G06F19/00 G06F7/06 G06Q90/00 G07D11/00 G07F19/00 (Core/Invention)

International class (IPC 1–7): G06F G06F13/10 G06F17/50 G06F17/60 G06F9/44 G07F7/08 G0F17/60

CPC: G07F19/205 G07F19/207 H04L67/02 H04L67/12 H04L67/2819 H04L67/34 H04L69/32 H04L69/329 G06Q40/00 G06Q40/02 H04L63/0853 G06Q20/108 G07F19/209 G06F3/023 G06F3/04895 G06F9/465 G06F17/30861 G06Q20/00 G06Q20/042 G06Q20/18 G06Q30/06 G07F19/211 H04L29/06 H04L63/08 H04L63/12 G06Q20/1085 G07F19/201 G07F19/203 G07F19/20 G07F19/206 G07F19/21

European class: G06F17/30W G06F3/023 G06F3/0489G G06F9/46M G06Q20/00 G06Q20/042 G06Q20/108 G06Q20/1085 G06Q20/18 G06Q30/06 G06Q40/00 G06Q40/02 G07F19/00F G07F19/20 G07F19/201 G07F19/203 G07F19/205 G07F19/206 G07F19/207 G07F19/209 G07F19/210 G07F19/211 H04L29/06 H04L29/08A H04L29/08N1 H04L29/08N11 H04L29/08N33 H04L63/08 H04L63/08E H04L63/12 T04L29/08A7 T04L29/08N27E T04L29/08N33

US class: 235/375 235/375S 235/379 235/379P 235/379S 235/380 235/381 235/381P 235/381S 705/1 705/1.1 705/35S 705/42S 705/43 705/43P 707/E17.107 707/E17.107S 902/13 902/14 902/15 902/21 902/21S 902/22 902/38 902/39 902/8 902/8S 902/9

Classification Explorer

Cited documents: US7661583 BB, US7617971 BB, US7494047 BB, US7404515 BA, US7367492 BB, US7341177 BB, US7334723 BB, US7316349 BB, US7121460 BA, US7104441 BB, US7093750 BA, US7093749 BA, US7051096 BA, US7032245 BB, US6991156 BA, US6983879 BB, US6959187 BB, US6953150 BB, US6945457 BA, US6945456 BB, US6793133 BB, US6789730 BA, US6766943 BB, US6766943 BA, US6765593 BB, US6676018 BA, US6598023 BA, US6556950 BA, US6485135 BA, US6470288 BA, US6431439 BA, US6364697 BA, US6327579 BA, US6308887 BA, US6285991 BA, US6279826 BA, US6269082 BA, US6188414 BA, US6175922 BA, US6173311 BA, US6173311 B1, US6170055 BA, US6170055 B1, US6155604 A, US6138162 A, US6067028 A, US6047051 A, US6012050 A, US6005704 A, US5983197 A, US5974119 A, US5933816 A, US5861614 A, US5742845 A, US5729594 A, US5706442 A, US5563393 A, US5484993 A, US5473143 A, US5463766 A, US5410754 A, US5315711 A, US5265033 A, US5253167 A, US5220501 A, US5163131 A, US4369442 A, US4186871 A, US2010006644 AA, US2008110975 AA, US2008110974 AA, US2008093441 AA, US2008048020 AA, US2008046727 AA, US2007199984 AA, US2007145114 AA, US2006224942 AA, US2006112012 AA, US2005073584 AA, US2005029341 AA, US2004223031 AA, US2004178259 AA, US2004178258 AA, US2004153409 AA, US2004149818 AA, US2004129772 AA, US2004123772 AA, US2004099728 AA, US2004099727 AA, US2004010597 AA, US2003141360 AA, US2003055876 AA, US2003009374 AA, US2002156867 AA, US2002138446 AA, US2002138431 AA, US2002128969 AA, US2002069176 AA, US2002032655 AA, US2002024590 AA, US2001037301 AA, JP2004038771 A2, JP2002032571 A2,

Forward Citations: WO16040736, WO14172696, WO14087167, WO12027622, WO09085835, WO07055641, USRE44689, USD751325, USD722640, US9659465, US9659464, US9633500, US9540197, US9514011, US9508208, US9501885, US9470035, US9437069, US9430893, US9384637, US9355514, US9330515, US9208479, US9177449, US9177272, US9129271, US9092924, US9038892, US8998078, US8967463, US8960539, US8959029, US8924266, US8887995, US8868971, US8806275, US8794513, US8746551, US8738973, US8708226, US8701860, US8701857, US8684160, US8684159, US8602200, US8593971, US8559694, US8549512, US8545295, US8540145, US8534547, US8523641, US8495424, US8443958, US8413890, US8403205, US8397108, US8393455, US8353449, US8342396, US8328084, US8327995, US8251196, US8245912, US8245076, US8229821, US8214290, US8172134, US8172130, US8157162, US8157078, US8141773, US8130111, US8123122, US8109379, US8052043, US7946406, US7926712, US7891552, US7873726, US7870498, US7832629, US7819308, US7789299, US7789298, US7780072, US7740169, US7726559, US7721953, US7717331, US7717327, US7677447, US7617971, US7575160, US7520423, US7490764, US7490762, US7483848, US7445144, US7438220, US7367492, US7334723, US7316349, US7163144, US7104441, US6976622, US6929179, US2016300205, US2016132405, US2016012411, US2015326574, US2015186852, US2015180728, US2015095720, US2015052057, US2014208157, US2014148084, US2014147030, US2014107836, US2014105208, US2014063749, US2013254044, US2012276881, US2012190342, US2012160913, US2012042213, US2011272460, US2011215142, US2011125615, US2010287083, US2010264208, US2010258621, US2010225953, US2010187299, US2010162030, US2010161343, US2010042236, US2010012718, US2010006644, US2010001060, US2009313057, US2009218394, US2009160668,

US2009120760, US2009119221, US2009118860, US2009114719, US2009026258, US2008185428, US2008156867, US2008121692, US2008110975, US2008110974, US2008082207, US2008067232, US2008027873, US2007237311, US2007185991, US2007174194, US2007158406, US2007152034, US2007151827, US2007138258, US2007138250, US2007108267, US2007040023, US2007034680, US2006273160, US2006273150, US2006153065, US2006136889, US2006125797, US2006118624, US2006112012, US2006093149, US2005269397, US2005263584, US2005216888, US2005033543, US2004226993, US2004149819, US2004141059, TWI537816, TWI372368, TWI335553, EP2808848, EP2736022, EP2736022, EP2393070, EP2200293, EP2200293, EP2056267, EP1903518, EP1898374, EP1801761, EP1672461, EP1669957, EP1669956, EP1659548, DE102009032023, CN104183055, CN104183055, CN103914908, CN103765484, CN103329155,

Abstract:
Source: US2004149818A An automated banking machine (10) includes a lockable first fascia portion (20) which when unlocked enables access to a chest lock input device (104), inputs to which enable opening a chest door (18) of the machine. Opening the first fascia portion also enables access to an actuator (116) which enables moving a second fascia portion (22) for conducting service activities. A controller (72) in the machine selectively illuminates light emitting devices (118, 126) for purposes of facilitating user operation of the machine. Sensing devices (128) adjacent a card reader slot (28) on the machine enables the controller to detect the presence of unauthorized card reading devices. Servicing the machine is facilitated through use of a portable diagnostic article (98) which enables the controller to access diagnostic data stored in memory and which provides data indicative of the significance of the diagnostic data.

0) EP1573433A2 – AUTOMATED BANKING MACHINE CURRENCY TRACKING SYS...

120) Family number: 33465924 (EP1573433A2) © PatBase

Title: AUTOMATED BANKING MACHINE CURRENCY TRACKING SYSTEM AND METHOD

Priority: US20010338919P 20011105 US20010992357 20011113 US20010993070 20011113 US20020141425 20020507 US20020141798 20020507 WO2002US35325 20021104

Family:

Publication number	Publication date	Application number	Application date
AR037207 AA	20041027	AR2002P104209	20021105
AU2002354003 AA	20030519	AU20020354003	20021104
AU2002354003 AH	20051117	AU20020354003	20021104
CA2465116 AA	20040422	CA20022465116	20021104
CA2465116 C	20130219	CA20022465116	20021104
CO5570714 A2	20051031	CO20040040911	20040505
EP1573433 A2	20050914	EP20020789407	20021104
EP1573433 A3	20051012	EP20020789407	20021104
EP1573433 A4	20071024	EP20020789407	20021104
MXPA04003838 A1	20050217	MX2004PA03838	20021104

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD INC ; DIEBOLD INC INC

Assignee(s): EASTMAN JEFFREY ; GRAEF H THOMAS ; HARTY MICHAEL ; PHELPS RICHARD J ; LASKOWSKI EDWARD ; RAMACHANDRAN NATARAJAN ; BESKITT WILLIAM D

Inventor(s):(std)**:** RICHARD J PHELPS ; RAMACHANDRAN NATARAJAN ; PHELPS RICHARD J ; LASKOWSKI EDWARD ; HARTY MICHAEL ; GRAEF THOMAS H ; GRAEF H THOMAS ; EASTMAN JEFFREY ; BESKITT WILLIAM D ; LASKOWSKI EDWARD L

Inventor(s): MICHAEL HARTY ; NATARAJAN RAMACHANDRAN ; THOMAS H GRAEF ; WILLIAM D BESKITT ; EDWARD LASKOWSKI ; JEFFREY EASTMAN

Agent(s): DIMOCK STRATTON LLP; EISEN MARK B

Designated states: DE ES FR GB IT

International class (IPC 8–9): G06F1/00 G07D11/00 G07D7/12 G07D7/18 G07D7/20 G07F19/00 (Advanced/Invention); G06F1/00 G07D11/00 G07D7/00 G07F19/00 (Core/Invention)

International class (IPC 1–7): G06F0/00 G06F1/00 G06F17/60 G07F19/00

CPC: G06Q20/042 G07D11/0018 G07D11/0066 G07D11/0075 G07F19/20 G07F19/202 G07F19/203

European class: G06Q20/042 G07D11/00D4 G07D11/00F6 G07D11/00F8D G07F19/00F G07F19/20 G07F19/202 G07F19/203

Classification Explorer

Cited documents: WO9928870 A2, WO9928225 A1, WO0182219 A2, WO0015530 A1, US4653647 A, GB2135496 A1, EP0845763 A1, EP0653734 A2,

Abstract:
Source: EP1573433A2 An automated banking machine (10) includes a user interface (12) including an opening (20). Users of the machine deliver and receive individual sheets and stacks of sheets to and from the machine through the opening. Stacks of sheets may include sheets such as notes, checks or other documents. Stacks input to the machine may include mixtures of various types of sheets. The machine operates to receive notes, process checks and perform other operations. Notes received in the machine and assessed as valid may be recycled and dispensed to other users. Notes assessed by the machine as being of questionable validity may be marked with a removable mark and subjected to further analysis. Checks processed by the machine may be imaged by an imaging device, cancelled and stored in the machine or alternatively returned to a user. Documents produced by the machine such as receipts, checks or money orders as well as notes dispensed from the machine may be assembled into a stack within the machine and delivered from the machine through the opening.

0) US2005116048A – VALUABLE DOCUMENT OR SECURITY DOCUMENT COMPRISI...

121) Family number: 28830873 (US2005116048A) © PatBase

Title: VALUABLE DOCUMENT OR SECURITY DOCUMENT COMPRISING A SWITCH

Priority: DE20021014369 20020330 DE20021014370 20020330 WO2002EP14440 20021218 DE20025012457 20021218 DE20021014371 20020330 DE20022000358U 20020110 WO2002EP14455 20021218 WO2002EP14457 20021218 WO2002EP14441 20021218

Family:

Publication number	Publication date	Application number	Application date
AT399651 E	20080715	AT20020806021T	20021218
AU2002352256 AA	20030724	AU20020352256	20021218
AU2002356666 AA	20030724	AU20020356666	20021218
AU2002356667 AA	20030724	AU20020356667	20021218
AU2002361156 AA	20030724	AU20020361156	20021218
CN100425457 C	20081015	CN20028026977	20021218
CN1612814 A	20050504	CN20028026977	20021218
DE10214369 A1	20030731	DE20021014369	20020330
DE10214369 B4	20100617	DE20021014369	20020330
DE10214370 A1	20030731	DE20021014370	20020330
DE10214371 A1	20030731	DE20021014371	20020330
DE20200358 U1	20030522	DE20022000358U	20020110
DE50212457 D1	20080814	DE20025012457	20021218
EP1463637 A1	20041006	EP20020806021	20021218
EP1463637 B1	20080702	EP20020806021	20021218
HK1076617 A3	20060120	HK20050108581	20050929
US2005116048 AA	20050602	US20050500918	20050126
WO03057499 A1	20030717	WO2002EP14440	20021218
WO03057500 A1	20030717	WO2002EP14441	20021218
WO03057501 A1	20030717	WO2002EP14455	20021218
WO03057502 A1	20030717	WO2002EP14457	20021218

Probable Assignee: BUNDESDRUCKEREI GMBH

Assignee(s):(std)**:** POETSCHKE KONSTANTIN ; MUTH OLIVER ; GRAMMLICH DANIEL ; PAESCHKE MANFRED ; FRANZ BURGHOLZ ARNIM ; SAUTER DIETER ; FRANZ BURGHOLZ ARMIN ; AHLERS BENEDIKT ; BAILLEU ANETT ; BUNDESDRUCKEREI GMBH RECHTS UN ; BUNDESDRUCKEREI GMBH

Assignee(s): BUNDESDRUCKEREI GMBH RECHTS UND PATENTANGELEGENHEI ; BUNDESDRUCKEREI GMBH RECHTS U PATENTANGELEGENHEITEN ; BUNDESDRUCKEREI GMBH RECHTS UND PATENTANGELEGENHEITEN

Inventor(s):(std)**:** AHLERS BENEDIKT ; BAILLEU ANETT ; BAYGER ANNET ; BOCHIK CONSTANTINE ; FRANZ BURGHOLZ ARMIN ; FRANZ BURGHOLZ ARNIM ; GRAMMLICH DANIEL ; MUTH OLIVER ; PAESCHKE MANFRED ; POETSCHKE KONSTANTIN ; POTSCHKE KONSTANTIN ; SAUTER DIETER ; SOTER DITER ; OLIVER MUTH ; MANFRED PAESCHKE ; KONSTANTIN POTSCHKE ; DITER SOTER ; DIETER SAUTER ; DANIEL GRAMMLICH ; CONSTANTINE BOCHIK ; BENEDIKT AHLERS ; ARNIM FRANZ BURGHOLZ ; ANNET BAYGER ; ANETT BAILLEU

Agent(s): KEIL AND SCHAAFHAUSEN PATENTANWAELTE; ARENT FOX KINTNER PLOTKIN AND KAHN

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B42D15/00 D21H21/40 G06K19/073 G07D7/00 (Advanced/Invention); B42D15/00 D21H21/40 G06K19/073 G07D7/00 (Core/Invention)

International class (IPC 1–7): B42D15/00 D21H21/40 D21H27/40 G06K19/06 G07D7/00

CPC: B42D25/29 G06K19/07345

European class: B42D15/00C G06K19/073A4

US class: 235/492

Classification Explorer

Cited documents: WO8907836 A1, WO0007151 A1, US6414441 BA, US6310280 BA, US6274736 BA, US6068192 A, US5826915 A, US5710421 A, US5641164 A, US5597183 A, US5566982 A, US5403039 A, US5372387 A, US4763927 A, US4363081 A, US3554815 A, US2002114931 AA, JP2001236479, EP1148440 A1, EP1147912 A2, EP1134694 A1, EP0905657 A1, DE69509783 T2, DE6900274 U, DE4220762 A1, DE19818710 A1, DE19716343 A1,

Forward Citations: WO15135828, WO10012436, WO09062860, WO08135177, WO07020047, WO06056089, WO06056089, WO06029857, WO05064551, US9630442, US9579921, US8685835, US8662402, US8530335, US8387886, US8350259, US8315061, US8243356, US8202238, US8083153, US8058083, US7968386, US7950584, US7946499, US7940340, US7940159, US7927971, US7875338, US7857229, US7847695, US7846838, US7843342, US7842561, US7812343, US7786818, US7724550, US7632721, US7589553, US7566640, US7566010, US7436032, US2016243989, US2011212575, US2011115101, US2011089427, US2010124795, US2010059748, US2009289122, US2008169639, US2008099565, US2007196999, US2007166954, US2007161159, US2005146006, US2005133790, JP4819822, EP3035230, EP1827866, EP1813440, EP1813438, EP1736323, EP1609121, EP1548657, DE10344271, DE10336566, DE102015010458, DE102009017669, DE102008035969, DE102006049085, DE102004045211, DE102004045211, AU2005309224, AU2005284288,

Abstract:
Source: US2005116048A The invention is directed to a value or security document which includes a circuit 2, 3, 4, 5, 6 which is provided with a break adapted to be closed by a conducting element 8 and/or by forming the document along a folding line 7.

0) US2005107025A – COIN HANDLER

122) Family number: 15985811 (US2005107025A) © PatBase

Title: COIN HANDLER

Priority: GB20010027731 20011120 WO2002GB05197 20021118

Family:

Publication number	Publication date	Application number	Application date
AU2002365478 AA	20030610	AU20020365478	20021118
CN100357979 C	20071226	CN20028024263	20021118
CN1599919 A	20050323	CN20028024263	20021118
EP1446775 A2	20040818	EP20020803859	20021118
GB200127731 A0	20020109	GB20010027731	20011120
JP2005537527 T2	20051208	JP20030548195T	20021118
US2005107025 AA	20050519	US20040496436	20041103
US7249999 BB	20070731	US20020496436	20021118
WO03046844 A2	20030605	WO2002GB05197	20021118
WO03046844 A3	20040304	WO2002GB05197	20021118

Probable Assignee: COIN CONTROLS LTD

Assignee(s):(std): MALCOLM REGINALD HALLAS BELL ; MORRISON ANTHONY EDWARD ; MACLEOD IAN ; ASHFORD PAUL RICHARD ; COIN CONTROLS ; MALCOLM REGINALD H B

Assignee(s): MONEY CONTROLS LIMITED ; COIN CONTROLS LIMITED ; COIN CONTROLS LTD ; MALCOLM REGINALD HB ; MORRISON ANTHONY E ; ASHFORD PAUL R

Inventor(s):(std): ASHFORD PAUL R ; ASHFORD PAUL RICHARD ; BELL MALCOLM REGINALD HALLAS ; EDWARD MORRISON ANTHONY ; IAN MACLEOD ; MACLEOD IAN ; MALCOLM REGINALD H B ; MALCOLM REGINALD HALLAS BELL ; MORRISON ANTHONY E ; MORRISON ANTHONY EDWARD ; RICHARD ASHFORD PAUL

Inventor(s): ANTHONY EDWARD MORRISON ; PAUL RICHARD ASHFORD ; MALCOLM REGINALD HB

Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; MICHAEL BEST AND FRIEDRICH LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G07D1/00 G07D1/02 G07D9/00 G07F1/04 (Advanced/Invention); G07D1/00 G07D1/02 G07D9/00 G07F1/00 (Core/Invention)

International class (IPC 1–7): G07D1/00 G07D1/02 G07D9/00 G07F1/04

CPC: G07D1/00 G07F1/047

European class: G07D1/00 G07F1/04H

US class: 453/22 453/49

Classification Explorer

Cited documents: US5830902 A, US5770608 A, US5714496 A, US5691349 A, US5684597 A, US5654315 A, US5384462 A, US5227394 A, US4836825 A, US4360034 A, US3998237 A, US2848158 A, US2848158, EP0526421 A2, EP0496588 A1,

Forward Citations: WO06108696, WO06108696, TWI441097, ES2259271, EP1701310, CN103955986,

Abstract:
Source: US2005107025A There is provided a coin handling apparatus which can be employed in public telephones and other coin fed apparatus. In a preferred embodiment the coin handling apparatus comprises a pocketed disc (100) arranged, in use, to cooperate with an entry portal (506) for receiveing coins and an exit portal (507) for dispensing coins, and drive means arranged, in use, to cause rotation of the pocketed disc (100),

said drive means comprising a driving gear (200) and a driven gear (120) wherein the pocketed disc (100) comprises said driven gear (120), and the driving gear (200) is arranged such that it rotates the disc (100) in predetermined increments and rotation of the pocketed disc (100) can be paused between each incremental rotation.

0) US2005150740A – DEVICES AND METHOD FOR THE PRODUCTION OF SHEET ...

123) Family number: 28718264 (US2005150740A) © PatBase

Title: DEVICES AND METHOD FOR THE PRODUCTION OF SHEET MATERIAL

Priority: DE20011063266 20011221 DE20011063267 20011221 DE20021096058 20021219 WO2002EP14605 20021219 DE20021096102 20021219 DE20025014926 20021219 WO2002EP14606 20021219

Family:

Publication number	Publication date	Application number	Application date
AT499217 E	20110315	AT20020795246T	20021219
AU2002360063 AA	20030709	AU20020360063	20021219
AU2002360063 AH	20030709	AU20020360063	20021219
AU2002363889 AA	20030709	AU20020363889	20021219
AU2002363889 AH	20030709	AU20020363889	20021219
BRPI0215267 A	20041207	BR2002PI15267	20021219
BRPI0215271 A	20041019	BR2002PI15271	20021219
CA2471415 AA	20040621	CA20022471415	20021219
CN1589457 A	20050302	CN20028028282	20021219
CN1589457 B	20100512	CN20028028282	20021219
CN1615225 A	20050511	CN20028027137	20021219
DE10163266 A1	20030703	DE20011063266	20011221
DE10163267 A1	20030703	DE20011063267	20011221
DE10296058 D2	20041209	DE20021096058	20021219
DE10296102 D2	20041209	DE20021096102	20021219
DE50214926 D1	20110407	DE20025014926	20021219
EP1458576 A2	20040922	EP20020795246	20021219
EP1458576 B1	20110223	EP20020795246	20021219
EP1459267 A2	20040922	EP20020798353	20021219
HK1071462 A3	20050715	HK20050104239	20050520
HK1074821 A3	20051125	HK20050107145	20050817
HU0402519 AB	20050530	HU20040002519	20021219
IN00697KN2004 A	20060414	IN2004KN00697	20040525
IN00699KN2004 A	20090828	IN2004KN00699	20040525
JP2005526304 A2	20050902	JP20030555450	20021219
JP2005526304 T2	20050902	JP20030555450T	20021219
KR20040072672 A	20040818	KR20047009848	20021219
PL372119 A1	20050711	PL20020372119	20021219
RU2004122617 A	20060120	RU20040122617	20021219
RU2004122629 A	20060120	RU20040122629	20021219
RU2007139764 A	20090510	RU20070139764	20071029
RU2315698 C2	20080127	RU20040122629	20021219
RU2322695 C2	20080420	RU20040122617	20021219
RU2363986 C1	20090810	RU20070139764	20071029
RU2401459 C1	20101010	RU20090111011	20090326
US2005150740 AA	20050714	US20050499018	20050128
US2005161501 AA	20050728	US20050498779	20050323
US7849993 BB	20101214	US20050499018	20050128
WO03054807 A2	20030703	WO2002EP14605	20021219
WO03054807 A3	20031002	WO2002EP14605	20021219
WO03054808 A2	20030703	WO2002EP14606	20021219

WO03054808 A3	20040311	WO2002EP14606	20021219	
ZA200404064 A	20050407	ZA20040004064	20040525	

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** SCHMIDT ALFRED ; HOFFMANN LARS ; HOLL NORBERT ; KAULE WITTICH ; KRETSCHMAR FRIEDRICH ; KROMBHOLZ MARKUS ; LIEBLER RALF ; PILLO THORSTEN ; REINER HARALD ; SCHNEIDER WALTER ; SCHROEDER BERGEN ECKART ; SEYSEN MARTIN ; STEIN DIETER ; STEINKOGLER ALEXANDER ; VOELLMER CHRISTIAN ; SCHUETZMANN JUERGEN ; WUNDERER BERND ; BELLERSHEIM FABIOLA ; DICHTL MARIUS ; FINKENZELLER KLAUS ; GIESECKE AND DEVRIENT GMBH ; GIERING THOMAS ; HEIM MANFRED ; HILDEBRANDT THOMAS ; HOBMEIER RALF

Assignee(s): GIZEKE U DEVRIENT GMBKH ; GIZEKE UND DEVRIENT GMBKH

Inventor(s):(std)**:** BELLERSHEIM FABIOLA ; BELLERSKHAJM FABIOLA ; BERND WANDLER ; BERND WUNDERER ; CHRISTIAN VOELLMER ; CHRISTIAN VOLMO ; DICHTL MARIUS ; ALEXANDER STANKOGLER ; ALEXANDER STEINKOGLER ; ALFRED SCHMIDT ; DIETEL STAN ; DIETER STEIN ; DIKHTL MARIUS ; FINKENTSELLER KLAUS ; FINKENZELLER KLAUS ; FREDERIC KRAETZSCHMAR ; FRIEDRICH KRETSCHMAR ; GIERING THOMAS ; GIERING THOMAS DR ; GIRING TOMAS ; ECKARDT SHRODER BERGAN ; ECKART SCHRODER BERGEN ; ECKART SCHROEDER BERGEN ; FABIOLA BELLERSHEIM ; FAIBIOLLA BELERSIM ; FELL MER KRISTIAN ; HILDEBRANDT THOMAS ; HOBMEIER RALF ; HOFFMANN LARS ; HOLL NORBERT ; JUERGEN SCHUETZMANN ; JUERGEN SCHUTZMAN ; JURGEN SCHUTZMANN ; KAULE VITTIKH ; KAULE WITTICH ; KHAJM MANFRED ; KHIL DEBRANDT TOMAS ; HARALD REINER ; HEIM MANFRED ; KHOBMAJER RAL F ; KHOFFMANN LARS ; KHOLL NORBERT ; KLAUS FINKENZELLER ; KROMBHOLTZ MARKUS ; KROMBHOLZ MARKUS ; KROMBKHOL TS MARKUS ; KRECHMAR FRIDRIKH ; KRETSCHMAR FRIEDRICH ; LARS HOEFMAN ; LARS HOFFMANN ; LIEBLER RALF ; MANFRED HEIM ; MARCUS KROBHOLZ ; MARIUS DICHTL ; MARIUS DICKERTER ; MARKUS KROMBHOLTZ ; MARKUS KROMBHOLZ ; MARTIN SEYSEN ; MARTIN SISSON ; NORBERT HALL ; NORBERT HOLL ; PILLO THORSTEN ; PILLO TORSTEN ; RAHLF HOBOMEIER ; RAHLF LIBLER ; RAJNER KHARAL D ; RALF HOBMEIER ; RALF LIEBLER ; REINER HARALD ; SAULSTON PILLAU ; SCHMIDT ALFRED ; LIBLER RAL F ; SCHNEIDER WALTER ; SCHRODER BERGEN ECKART ; SCHUTZMANN JURGEN ; SEYSEN MARTIN ; SHJUTTSMANN JURGEN ; SCHROEDER BERGEN ECKART ; SCHUETZMANN JUERGEN ; SHNAJDER VAL TER ; SHTAJN DITER ; SHTAJNKOGLER ALEKSANDER ; SHREDER BERGEN EHKKART ; STEIN DIETER ; STEINKOGLER ALEXANDER ; THOMAS GIERING ; THOMAS HILDEBRANDT ; THORSTEN PILLO ; VOELLMER CHRISTIAN ; VUNDERER BERND ; WALT SCHNEIDER ; WALTER SCHNEIDER ; WITTICH KAUER ; WITTICH KAULE ; WUNDERER BERND ; ZEJZEN MARTIN

Inventor(s): WANDLER BERND ; VOLMO CHRISTIAN ; STEINKOGLERALEXANDER ; SHREDER–BERGEN EHKKART ; SHRODER BERGAN ECKARDT ; SISSON MARTIN ; STAN DIETEL ; STANKOGLER ALEXANDER ; SHNAJDER VAL'TER ; SCHUTZMAN JUERGEN ; SHMIDT AL'FRED ; SCHRODER–BERGEN ECKART ; LIBLER RAL'F ; SCHNEIDER WALT ; RAJNER KHARAL'D ; PILLAU SAULSTON ; LIBLER RAHLF ; KROBHOLZ MARCUS ; KROMBKHOL'TS MARKUS ; KRAETZSCHMAR FREDERIC ; KHOLL' NORBERT ; KHOBMAJER RAL'F ; HELM MANFRED ; KHIL'DEBRANDT TOMAS ; KAUER WITTICH ; HOBOMEIER RAHLF ; HOEFMAN LARS ; FELL'MER KRISTIAN ; HALL NORBERT ; DIKHTL' MARIUS ; BELERSIM FAIBIOLLA ; DICKERTER MARIUS

Agent(s): RIDOUT AND MAYBEE LLP; HOEHFELD JOCHEN; ROTHWELL FIGG ERNST AND MANBECK PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B42D15/00 B42D25/29 B44F1/12 G06K19/00 G07D11/00 G07D7/00 G07D7/01 G07D7/02 G07D7/04 G07D7/08 G07D7/12 G07F1/06 G07F13/00 G07F7/04 (Advanced/Invention); G07D7/00 G07D7/04 G07D7/08 (Advanced/Non–invention); B42D15/00 B44F1/00 G06K19/00 G07D7/00 G07F1/00 (Core/Invention)

International class (IPC 1–7): B42D15/00 B44F1/00 G06F17/60 G06K19/07 G06K7/00 G06K9/00 G07D11/00 G07D7/00 G07D7/02 G07D7/04 G07D7/08 G07D7/12 G07F7/04

CPC: G07D11/0066 B42D25/485 G07F1/06 B42D2033/46 G07D7/01 B42D25/29 G07D7/00 G07D7/04 G07D7/08

European class: B42D15/00C G07D11/00F6 G07D7/00D6 G07D7/00H G07F1/06 L42D33/46

US class: 194/205 194/206 194/207 194/210 194/211 194/212 194/213 235/379 340/5.8

Classification Explorer

Cited documents: WO0050249 A1, WO0007151 A1, USRE38663 E, US7309019 BB, US7249709 BB, US7040664 BB, US7032828 BB, US6991260 BB, US6955263 BB, US6830192 BA, US6732011 BA, US6697419 BA, US6659353 BA, US6659351 BA, US6648221 BB, US6547151 BA, US6514140 BA, US6473072 BA, US6402039 BA, US6360954 BA, US6325421 BA, US6303211 BA, US6122094 A, US6109530 A, US6068183 A, US5892239 A, US5818030 A, US5790897 A, US5712473 A, US5678863 A, US5595955 A, US5539819 A, US5530235 A, US5471044 A, US5316900 A, US5276311 A, US4995077 A, US4622543 A, US3462157 A, US2006004483 AA, US2004099580 AA, US2004012144 AA, US2003187798 AA, US2003023342 AA, US2003006121 AA, US2002158397 AA, US2002117845 AA, US2002040865 AA, US2001026220 AA, RU2170684 C1, EP1148440 A1, EP1139302 A1, EP1134694 A1, EP0905657 A1, DE3509160 C2, DE3203393 A1, DE29623930 U1, DE29623930 U, DE19926010 A1, DE19904686 A1, DE19827448 A1, DE19754860 C1, DE19619851 A1,

Forward Citations: WO16150877, WO16037895, WO15117770, WO15086712, WO11002514, WO10078113, WO10012436, WO10006805, WO10006805, WO09103973, WO09062869, WO09062810, WO09024409, WO08135177, WO08083922, WO08038672, WO08031584, WO07049669, WO07003249, WO07003237, WO07000336, WO06061171, WO06061171, WO05121450, WO05031983, WO05031983, WO05028211, WO05017841, US9633500, US9630442, US9558418, US9508208, US9505582, US9501885, US9495808, US9477896, US9437069, US9430893, US9421579, US9418321, US9390574, US9355295, US9341444, US9333787, US9330515, US9251456, US9195889, US9189780, US9142075, US9129271, US9128565, US9087423, US9082054, US9064367, US9027839, US8978864, US8959029, US8958626, US8948490, US8944234, US8932118, US8932061, US8929640, US8880890, US8873828, US8867134, US8855960, US8827152, US8807316, US8787652, US8783555, US8773763, US8755121, US8742760, US8725289, US8714336, US8702005, US8701857, US8684154, US8672360, US8655046, US8655045, US8644585, US8644584, US8644583, US8640259, US8639015, US8621224, US8594414, US8577117, US8570622, US8559695, US8542904, US8459540, US8452233, US8396586, US8387886, US8378978, US8374482, US8350259, US8330335, US8315061, US8281142, US8243356, US8099187, US8063878, US7959503, US7940340, US7940159, US7883019, US7865734, US7856555, US7849994, US7847695, US7846838, US7843342, US7832952, US7812343, US7795783, US7786818, US7774606, US7739510, US7724550, US7669245, US7643005, US7589553, US7533800, US7526956, US7520424, US7518517, US7458506, US7309017, US7152793, US7040663, US2017029233, US2015284212, US2015266063, US2015052057, US2015014422, US2014252098, US2014224882, US2014174995, US2013118861, US2013062156, US2013046407, US2013001039, US2012284604, US2012198937, US2012062232, US2011215161, US2011198191, US2011115101, US2011114442, US2011106681, US2011102143, US2011070943, US2011068169, US2011042178, US2011019900, US2011001397, US2010236892, US2010234985, US2010164216, US2010118378, US2010073711, US2009324084, US2009308935, US2009295740, US2009239459, US2009214804, US2009203314, US2009132195, US2009011390, US2009001661, US2008315311, US2008259416, US2008232883, US2008177420, US2008148396, US2008135373, US2008134324, US2008084024, US2008035736, US2007230103, US2007143621, US2007056027, US2007050072, US2006282903, US2006265744, US2006260394, US2006259773, US2006161977, US2006158406, US2006071925, US2006043167, US2005122221, US2005060059, US2004134994, RU2615324, RU2608357, RU2572126, RU2536748, RU2475841, KR101538464, KR101337067, KR101227247, KR101036587, KR100868176, KR100704989, JP5208103, JP5151983, JP5151983, JP2010538556, JP2010537226, JP2010537226, JP2010508794, JP2009535695, JP2009134398, JP2008523479, JP2008505418, EP2672431, EP2460667, EP2437204, EP2274731, EP2238578, EP2138322, EP2013856, EP2013856, EP1827865, EP1753915, EP1747903, EP1693802, EP1647944, EP1647944, EP1632909, EP1553526, EP1530170, DE10336566, DE10332524, DE10321687, DE10317257, DE102014018861, DE102009022254, DE102007000874, DE102006059444, DE102005030628, DE102005030289, DE102005030289, DE102004059465, DE102004045211, DE102004045211, DE102004031118, DE102004022887, DE102004016776, DE102004016776, DE102004003309, CN104732643, CN103843039, CN103843039, CN103700184, CN103700184, CN103456072, CN103456072, CN102956059, CN102956059, CN102855688, CN102692925, CN102692925, CN102653352, CN102653352, CN101816024, CN101523424,

Abstract:
Source: US2005150740A The invention relates to sheet material having an electrical circuit and to apparatuses and methods for processing said sheet material. The present invention describes sheet material having an

electrical circuit as well as apparatuses and methods for processing same, which reduce the effort required for processing the sheet material and/or facilitate processing and/or improve it and/or make it more reliable. For this purpose, the sheet material has at least one electrical circuit, with energy and/or data being transmitted from the apparatus to the electrical circuit and/or from the electrical circuit to the apparatus and at least part of the transmitted data being used for processing.

0) US2003155210A – GAMING TABLE VALIDATOR ASSEMBLY

124) Family number: 30065644 (US2003155210A) © PatBase

Title: GAMING TABLE VALIDATOR ASSEMBLY

Priority: AU20050284875 20050913 AU20110265569 20111223 US20020081756 20020220 US20040863059 20040607 US20040941316 20040914 WO2005US32798 20050913 WO2003US04916 20030219 US20040958946 20041004 US20040958958 20041004 US20040958959 20041004

Family:

Publication number	Publication date	Application number	Application date
AU2003216313 AA	20030909	AU20030216313	20030219
AU2003216313 BB	20090625	AU20030216313	20030219
AU2005284875 AA	20060323	AU20050284875	20050913
AU2011265569 AA	20120202	AU20110265569	20111223
CA2476678 AA	20040817	CA20032476678	20030219
CA2476678 C	20150203	CA20032476678	20030219
CA2579346 AA	20070306	CA20052579346	20050913
EP1485887 A2	20041215	EP20030742825	20030219
EP1810254 A2	20070725	EP20050801021	20050913
EP1810254 A4	20100331	EP20050801021	20050913
GB200704323 A0	20070411	GB20070004323	20050913
GB2433636 A1	20070627	GB20070004323	20050913
GB2433636 B2	20090506	GB20070004323	20050913
RU2004125488 A	20050527	RU20040125488	20030219
RU2344482 C2	20090120	RU20040125488	20030219
US2003155210 AA	20030821	US20020081756	20020220
US2004222061 AA	20041111	US20040863059	20040607
US2005040006 AA	20050224	US20040941316	20040914
US2005121286 AA	20050609	US20040958946	20041004
US2005126880 AA	20050616	US20040958958	20041004
US2005126881 AA	20050616	US20040958959	20041004
US6745887 BB	20040608	US20020081756	20020220
US6968787 BB	20051129	US20040863059	20040607
US7255215 BB	20070814	US20040958946	20041004
WO03071499 A2	20030828	WO2003US04916	20030219
WO03071499 A3	20031204	WO2003US04916	20030219
WO06031918 A2	20060323	WO2005US32798	20050913
WO06031918 A3	20090507	WO2005US32798	20050913
ZA200406631 A	20060628	ZA20040006631	20040819
ZA200701678 A	20090527	ZA20070001678	20070226

Probable Assignee: JCM AMERICAN CORP

Assignee(s):(std)**:** DZHEJ SI EHM AMERIKEHN KORPORE ; HEIDEL RAYMOND ; JCM AMERICAN CORP ; MATHIS GWEN D

Assignee(s): BULLOCK JAMES K ; KODELA PRASHANTH ; IANNELLO RICHARD J ; DZHEJ SI EHM AMERIKEHN KORPOREHJSHN ; HAND PETER ; HAND PETER E

Inventor(s):(std)**:** BULLOCK JAMES K ; GWEN D MATHIS ; HAND PETER ; HAND PETER E ; HEIDEL RAYMOND ; HEIDEL RAYMOND M G D ; KODELA PRASANTH ; KODELA PRASHANTH ; LANNELLO RICHARD J ; MATHIS GWEN D ; PRASHANTH KODELA ; RAYMOND HEIDEL ; IANNELLO RICHARD J ; MATIS GVEN D ; KHEIDEL RAJMOND

Inventor(s): JAMES K BULLOCK ; BULLOCK JAMES ; RICHARD J IANNELLO ; PETER E HAND ; MATHIS GWEN ; IANNELLO RICHARD

Agent(s): SPRUSON AND FERGUSON; GOWLING LAFLEUR HENDERSON LLP; DAVID B ABEL ESQ SQUIRE SANDERS AND DEMPSEY LLP; SQUIRE SANDERS AND DEMPSEY LLP; DLA PIPER US LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A63F1/18 A63F5/00 A63F9/24 G06F1/00 G07D13/00 G07D7/12 G07D7/20 G07F1/04 G07F17/32 G07F7/04 (Advanced/Invention);
A63F1/00 A63F9/24 G06F1/00 G07D13/00 G07F17/32 G07F7/00 (Core/Invention);
G07F (Subclass/Invention);
A63F G07D G07F (Subclass/Non–invention)

International class (IPC 1–7): A63F5/00 G06F1/00 G06K7/00 G06K9/00 G07D7/00 G07D7/12 G07D7/20 G07F17/32 G07F7/04

CPC: G07F17/322 G07F17/3232 G07F17/3241 G07F17/3246 G07F7/04 G07F17/32 G07F17/3234

European class: G07F17/32 G07F17/32C4D G07F17/32E6 G07F17/32E6B G07F17/32H G07F17/32K2 G07F7/04

US class: 104/206 194/206 194/207 194/302 194/344 194/350

Classification Explorer

Cited documents: WO9530944 A2, WO9416781 A1, WO03071499 A2, WO0191065 A1, USRE39666 E, US7168089 BB, US7140607 BB, US6745887 BB, US6712191 BB, US6695119 BB, US6561897 BA, US6530836 BB, US6435329 BA, US6398000 BA, US6382850 BA, US6346044 BA, US6264556 BA, US6048269 A, US6048259 A, US5967507 A, US5957776 A, US5934998 A, US5907141 A, US5836818 A, US5836577 A, US5823875 A, US5823675 A, US5779546 A, US5775993 A, US5737418 A, US5665981 A, US5662202 A, US5655961 A, US5613912 A, US5611730 A, US5588650 A, US558650 A, US5559312 A, US5470079 A, US5393067 A, US5332076 A, US5301618 A, US5290033 A, US5264556 A, US5186334 A, US5156250 A, US513990 A, US5129330 A, US5113990 A, US5112060 A, US5078405 A, US5076441 A, US4977583 A, US4976419 A, US4813675 A, US4746110 A, US4733765 A, US4619101 A, US4614642 A, US4614342 A, US4549661 A, US4510381 A, US4449050 A, US4398088 A, US4253016 A, US3964740 A, US3734261 A, US3608690 A, US3594549 A, US2288770 A, US2005040225 AA, US2004127277 AA, US2004002386 AA, US2003212584 AA, US2003003997 AA, US2002195773 AA, US2002042731 AA, US1813675 A, US1391129 A, GB2284913 A1, GB2230371 A1, GB2186412 A1, EP1004970 A2, EP0805408 A2, EP0581183 A1, DE4138261 A1, BE1012791 AH,

Forward Citations: WO14037913, WO13177286, WO13092559, WO13001802, WO08151036, WO07016283, WO07016283, WO05098767, WO05098767, USD595785, USD595784, USD526024, USD520567, US9697687, US9142092, US8705739, US8684155, US8668142, US8523664, US8500349, US8448773, US8276901, US8210759, US8197334, US8157652, US8070594, US8061913, US8057296, US7494414, US7491125, US7395965, US7004381, US6968787, US2016314662, US2015221157, US2015157925, US2011133395, US2011114442, US2011036681, US2011011778, US2010240446, US2010138308, US2009294243, US2009220078, US2009048017, US2008113767, US2007125841, US2007060313, US2007060307, US2007023500, US2006283934, US2006113162, US2005282627, US2005212203, US2005126881, US2005126880, US2005060231, US2005059482, US2005040006, US2004262380, US2004222061, US2004033832, US2003092491, KR20150132788, ITMI20121500, GB2433636, EP2608165, EP1810254, CN104757759, CN104011778, CN103890818,

Abstract:
Source: US2003155210A A bill acceptor assembly for accepting bills, vouchers, scrip, tickets and/or currency at a gaming table. The bill acceptor assembly includes a validator assembly capable of accepting a stack of individual notes in a receiving slot mounted to the gaming table, processing the notes one at a time, and passing valid notes through a hole in the gaming table or along the back edge of the gaming table to a cash box located below the gaming table.

0) EP1338215A1 – PURSE FOR THE SELECTIVE DISTRIBUTION OF COINS ...

125) Family number: 28899642 (EP1338215A1) © PatBase

Title: Purse for the selective distribution of coins

Priority: FR20020002125 20020220

Family:

Publication number	Publication date	Application number	Application date
AT393581 E	20080515	AT20030290395T	20030218
DE60320602 D1	20080612	DE20036020602	20030218
EP1338215 A1	20030827	EP20030290395	20030218
EP1338215 B1	20080430	EP20030290395	20030218
FR2836027 A1	20030822	FR20020002125	20020220
FR2836027 B1	20040423	FR20020002125	20020220
HK1059543 A1	20090911	HK20040101438	20040227
HK1059543 A3	20040709	HK20040101438	20040227

Probable Assignee: JOYAU JEAN CLAUDE

Assignee(s):(std)**:** JOYAU JEAN CLAUDE ; REGOTTAZ GUY

Assignee(s): GUY REGOTTAZ ; JEAN CLAUDE JOYAU

Inventor(s):(std)**:** JOYAU JEAN CLAUDE ; REGOTTAZ GUY

Inventor(s): GUY REGOTTAZ ; JEAN CLAUDE JOYAU

Agent(s): FOSSE DANIELE; BREMA LOYER

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

International class (IPC 8–9): A45C1/02 A45C1/10 (Advanced/Invention); A45C1/00 (Core/Invention); A45C (Subclass/Invention)

International class (IPC 1–7): A45C1/02 G07D3/02

CPC: A45C1/10 A45C2001/108

European class: A45C1/10 K45C1/10R6D

Classification Explorer

Cited documents: US3731695 A, US3592204 A, US3361142 A, US2334016 A, US1435834 A, FR1030263 A, EP1097653 A2, DE1532874 A1, CH582495,

Abstract:
The purse has a cylindrical coin support (3) which is capped by a coin retaining plate with cut–outs (5) for the coins and peripheral flanges (7). Each cut–out contains coins of the same size and coins of differing sizes are contained in different cut–outs. A lower plate (8) has springs (9) to retain the coins until use. The purse is held together and manipulated by a central bolt and washer fixing (6A)

126) Family number: 30466785 (US2005060405A) © PatBase

Title: DIGITAL DOWNLOADING JUKEBOX SYSTEM WITH CENTRAL AND LOCAL MUSIC SERVERS

Priority:

CA20062535470	20060207	CA20162535470	20160502	EP20050292362	20051108
CN200610005134	20060112	EP20150189333	20080326	EP20080005605	20080326
US20070902658	20070924	US20070727391	20070326	US20060358721	20060222
US20050222036	20050909	US20050185974	20050721	US20030661811	20030915
US20020410832P	20020916	EP20150189333	20151012	US20080078989	20080409
US20100805992	20100827	US20110336866	20111223	US20110308898	20111201
US20120673086	20121109	US20130887645	20130506	US20130048641	20131008
US20130139385	20131223	US20140222895	20140324	US20140245298	20140404
US20140311511	20140623	US20140555861	20141128	US20140555837	20141128
US20150685129	20150413	US20150684968	20150413	US20150854426	20150915
US20150857864	20150918	US20150883885	20151015	US20150918819	20151021

Family:

Publication number	Publication date	Application number	Application date
CA2535470 AA	20070121	CA20062535470	20060207
CA2535470 C	20160705	CA20062535470	20060207
CA2627173 AA	20090324	CA20082627173	20080325
CA2928142 AA	20070121	CA20062928142	20060207
CN101399732 A	20090401	CN200810100375	20080326
CN101399732 B	20140702	CN200810100375	20080326
CN102426726 A	20120425	CN201110379108	20060112
CN102496214 A	20120613	CN201110379130	20060112
CN102496214 B	20160914	CN201110379130	20060112
CN102521923 A	20120627	CN201110379142	20060112
CN104078072 A	20141001	CN201410270212	20080326
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EP1746548 A3	20070822	EP20050292362	20051108
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EP2048634 A3	20091111	EP20080005605	20080326
EP2161693 A2	20100310	EP20090012503	20051108
EP2161693 A3	20100804	EP20090012503	20051108
EP2879103 A1	20150603	EP20140196736	20051108
EP3070691 A1	20160921	EP20150194374	20080326
HK1212805 A1	20160617	HK20160100754	20160122
JP2007034253 A2	20070208	JP20050353051	20051207
JP2009075540 A2	20090409	JP20080079311	20080325
JP4880988 B2	20120222	JP20050353051	20051207
JP5795700 B2	20151014	JP20080079311	20080325
MX2008004032 A1	20090323	MX20080004032	20080326
MXPA05012999 A1	20070122	MX2005PA12999	20051201
TW200915813 A	20090401	TW20080110503	20080325
TWI499264 B	20150901	TW20080110503	20080325
US2005060405 AA	20050317	US20030661811	20030915
US2006018208 AA	20060126	US20050185974	20050721

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US2015220222 AA	20150806	US20150684968	20150413	
US2016005103 AA	20160107	US20150854426	20150915	
US2016007072 AA	20160107	US20150857864	20150918	
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US2016048273 AA	20160218	US20150918819	20151021	
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US8103589 BB	20120124	US20050185974	20050721	
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US9430797 BB	20160830	US20150854426	20150915	
US9436356 BB	20160906	US20150918819	20151021	
US9513774 BB	20161206	US20150857864	20150918	
US9646339 BB	20170509	US20030661811	20030915	

Probable Assignee: TOUCHTUNES MUSIC CORP

Assignee(s):(std)**:** NATHAN GUY ; MASTRONARDI TONY ; DION DOMINIQUE ; KHENFIR MOUNIR ; GRATTON LOIC ; BRILLON FRANCOIS ; TOUCHTUNES MUSIC CORP ; TOUCH TUNES MUSIC CORP

Assignee(s): ONICON INC ; TOUCHTONES MUSIC CORP ; NATIONAL BANK OF CANADA ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; CITIZENS BANK NATIONAL ASSOCIATION COLLATERAL AGENT AS ; CITIZENS BANK NA COLLATERAL AGENT FIRST LIEN AS ; CITIZENS BANK NA COLLATERAL AGENT SECOND LIEN AS ; GOLDMAN SACHS SPECIALTY LENDING GROUP LP ; GOLDMAN

SACHS SPECIALTY LENDING GROUP LP COLLATERA ; GOLDMAN SACHS SPECIALTY LENDING GROUP LP COLLATERAL AGENT AS

Inventor(s):(std)**:** BRILLON FRANCOIS ; DION DOMINIQUE ; DOMINIQUE DION ; DOMINIQUE NATHAN GUY DION ; FRANCOIS BRILLON ; GRATTON LOIC ; GUY NATHAN ; KHENFIR MOUNIR ; LOIC GRATTON ; MASTRONARDI TONY ; NATHAN GUY

Inventor(s): NATHAN GUY DION DOMINIQUE

Agent(s): GOUDREAU GAGE DUBUC; DEBAY YVES; HAGMANN SMITH MARTIN P; NIXON AND VANDERHYE PC

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR YU

International class (IPC 8–9)**:** G06F15/16 G06F15/173 G06F17/30 G06F19/00 G06F21/00 G06F3/00 G06F3/01 G06F3/041 G06F3/048 G06F3/0481 G06F3/0482 G06F3/0484 G06K7/10 G06Q10/00 G06Q10/06 G06Q20/00 G06Q20/08 G06Q20/10 G06Q20/12 G06Q20/18 G06Q20/22 G06Q30/00 G06Q30/02 G06Q30/06 G06Q99/00 G07C13/00 G07D13/00 G07F17/00 G07F17/16 G07F17/30 G07F7/00 G09G5/00 G10H7/00 G10K15/02 G10K15/04 G11B19/02 G11B21/08 G11B27/00 G11B27/034 G11B27/10 G11B27/11 G11B27/34 G11B31/00 G11B7/085 H04H1/00 H04H20/00 H04L12/16 H04L12/28 H04L5/00 H04M1/64 H04M3/42 H04N21/439 H04N21/441 H04N21/458 H04N21/472 H04N21/475 H04N21/4784 H04N21/482 H04N21/81 H04N7/16 H04N7/173 H04W4/00 (Advanced/Invention); G07F17/30 H04L12/28 (Advanced/Non–invention); G06F15/00 G06F15/16 G06F17/30 G06F3/00 G06F3/048 G06Q30/00 G06Q99/00 G07F17/00 G10K15/02 G10K15/04 G11B21/08 G11B27/00 G11B27/10 G11B27/11 G11B7/085 H04H1/00 H04L12/16 H04L12/28 H04N7/16 H04N7/173 (Core/Invention); G07F G11B (Subclass/Invention)

International class (IPC 1–7)**:** G06F15/173 G06F17/30 H04L29/06

CPC: G06F3/04842 G06Q30/02 G06Q30/0207 G06Q30/0235 G06Q30/06 G06Q20/3821 G06F3/0484 G06Q30/0603 G06Q30/0641 G06Q30/0643 G06Q30/0627 G11B19/025 H04W4/003 G06Q20/085 G06F3/0481 G06F17/30752 G06Q20/123 G06Q20/22 G07C13/00 H04N21/458 H04N21/47211 H04N21/4756 H04N21/4758 H04N21/4825 H04N21/441 H04N21/4784 H04N21/8113 G06Q20/18 G07F17/30 G07F17/305 G11B27/034 G11B27/34 G06F3/0482 H04N21/439 G06F17/30017 G06F17/30749 G06F17/30775 G06Q10/06315 G06Q20/10 G11B27/002 G11B27/105 G11B27/11

European class: G06F17/30E G06F17/30U2 G06F17/30U5 G06F3/0484A G06Q10/06315 G06Q20/10 G06Q20/123 G06Q20/3821 G06Q30/02 G06Q30/0207 G06Q30/0235 G06Q30/06 G06Q30/0603 G06Q30/06C G07F17/30 G07F17/30B G11B19/02A2 G11B27/00A G11B27/034 G11B27/10A1 G11B27/11 G11B27/34 H04L12/28H

US class: 1/1 194/353 194/353S 235/378 345/173 369/30.06 369/30.060P 379/88.17 455/414.1 455/426.1 705/1 705/1.1 705/1.100S 705/12 705/14 705/14.1 705/14.100P 705/14.35 705/14.350S 705/26.63 705/27.1 705/27.2 705/39 705/39P 705/39S 705/51 705/59 705/7 705/7.25 705/7.250P 705/7.32 705/76 705/7P 707/736 707/738 709/203 709/217 709/217S 709/219 709/223 709/225 709/225P 709/229 715/716 715/716P 715/716S 715/719 715/741 715/748 715/748P 715/811 725/23 725/24 725/25 725/38 725/61 G9B/27.001 G9B/27.019 G9B/27.021

Classification Explorer

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US6724974 BB, US6702585 BB, US6662231 BA, US6658090 BA, US6654801 BB, US6643690 BB, US6643620 BA, US6629318 BA, US6628939 BB, US6622307 BA, US6598230 BA, US6590838 BA, US6587403 BA, US6578051 BA, US6577735 BA, US6571282 BA, US6570507 BA, US6560651 BB, US6549719 BB, US6544122 BB, US6543052 BA, US6538558 BB, US6535911 BA, US6522707 BA, US6498855 BA, US6496927 BA, US6493871 BA, US6490570 BA, US6490432 BA, US6488508 BB, US6473794 BA, US6470496 BA, US6449688 BA, US6446130 BA, US6446080 BA, US6442549 BA, US6438450 BA, US6434678 BA, US6430738 BA, US6430537 BA, US6425125 BA, US6421651 BA, US6408437 BA, US6408435 BA, US6407987 BA, US6397189 BA, US6396480 BA, US6393584 BA, US6386451 BA, US6384737 BA, US6381575 BA, US6379187 BB, US6370580 BB, US6359661 BA, US6359616 BA, US6356971 BA, US6353820 BA, US6346951 BA, US6344962 BB, US6344862 BA, US6341166 BA, US6336219 BA, US6332025 BB, US6323911 BA, US6315572 BA, US6311214 BA, US6308204 BA, US6302793 BA, US6301710 BA, US6298373 BA, US6292443 BA, 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Abstract:
Source: US2005060405A A digital downloading jukebox system including a central server and a plurality of remote jukebox devices each provided with a local server that preferably mirrors the central server and enables selected songs to be immediately downloaded to the jukebox for reproduction. The local server and jukebox may also provide, through control of the central server, song download services to other jukebox devices, such as residential jukeboxes. The jukebox system may also act as a monitoring/management device for other coin operated equipment present in a location where the jukebox is located, thereby enabling the jukebox device to perform updates on other equipment under control of the central server.

127) Family number: 30499733 (US2004076310A) © PatBase

Title: AUTHENTICATION OF DOCUMENTS AND ARTICLES BY MOIRE PATTERNS

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Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; STIKEMAN ELLIOTT SENCRL SRL LLP; SMART AND BIGGAR; REUTELER RAYMOND WERNER; ROGER D HERSCH ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE; ROGER D HERSCH

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8−9): B41M3/14 B42D15/00 B42D15/10 B42D25/342 G06K19/16 G06K9/00 G06K9/36 G06K9/74 G06Q99/00 G07D7/02 G07D7/12 G07D7/128 G07D7/20 G07D7/207 G09B19/18 G09F19/12 G09F3/02 H04L9/32 H04N1/40 (Advanced/Invention); G06K9/00 G07D7/12 (Advanced/Non−invention); B41M3/14 B42D15/00 G06K19/14 G06K9/00 G06K9/36 G06K9/74 G06Q99/00 G07D7/00 G09B19/00 G09F19/12 G09F3/02 H04L9/32 H04N1/40 (Core/Invention); G06K G07D (Subclass/Invention)

International class (IPC 1−7): B42D15/00 G06K9/00 G07D0/00 G07D7/12 G07D7/20

CPC: G07D7/0032 G07D7/207 B42D25/342 G07D7/20 G04B19/10 G09F19/00

European class: B42D15/00C2 G04B19/10 G07D7/00B2 G07D7/20 G07D7/20F10 G09F19/00

US class: 283/94 356/71 358/3.28 358/3.280S 380/258 382/100 382/100P 382/135 382/137 382/276 382/286 434/110 705/50 713/155 713/176

Classification Explorer

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Forward Citations: WO17072566, WO16164499, WO16103129, WO16057550, WO15177765, WO15119636, WO14124298, WO14065704, WO13143006, WO12057459, WO12022463, WO11094221, WO11094221, WO10071993, WO09049866, WO09000530, WO08104025, WO08006094, WO08006094, WO06131831, WO06065285, WO06006063, US9651417, US9646296, US9638910, US9638908, US9633195, US9582889, US9531914, US9519771, US9495531, US9454722, US9445068, US9399366, US9390345, US9333787, US9330324, US9329771, US9304624, US9274647, US9269161, US9256618, US9250795, US9230201, US9208394, US9167138, US9157790, US9140834, US9131136, US9098931, US9066087, US9066084, US9030528, US9004540, US9001389, US8985634, US8983117, US8982231, US8982182, US8948509, US8923550, US8879859, US8878844, US8868902, US8867134, US8848971, US8846778, US8842876, US8833663, US8830227, US8808080, US8788333, US8786682, US8786521, US8773763, US8770627, US8755121, US8687915, US8685488, US8677503, US8676822, US8659831, US8659787, US8651272, US8632100, US8586285, US8537470, US8514492, US8494252, US8493496, US8462207, US8460081, US8459807, US8456517, US8453570, US8447143, US8447122, US8430301, US8428300, US8411899, US8400495, US8400494, US8397910, US8390821, US8382002, US8374397, US8351087, US8350847, US8323623, US8310760, US8308162, US8300925, US8300217, US8284492, US8275222, US8262453, US8259342, US8254030, US8194236, US8181884, US8177136, US8164675, US8147900, US8144399, US8120855, US8111463, US8111462, US8109513, US8094917, US8094869, US8085972, US8083152, US8077393, US8072649, US8072626, US8056900, US8045232, US8041107, US8037307, US8033905, US8009360, US7995278, US7992710, US7991186, US7983984, US7980596, US7931305, US7922209, US7916343, US7874902, US7837117, US7824257, US7824029, US7818245, US7815124, US7804982, US7800825, US7798413, US7796800, US7793846, US7789311, US7788482, US7763179, US7762591, US7751608, US7738175, US7728048, US7726652, US7721843, US7699314, US7694887, US7688474, US7662038, US7661600, US7654529, US7631871, US7621814, US7601059, US7537170, US7523435, US7485037, US7481431, US7468842, US7429044, US7410168, US7364091, US7333268, US7313253, US7252222, US7213811, US7207494, US7134959, US6995883, US2016161916, US2015245001, US2015241683, US2015241680, US2015121512, US2015019441, US2014380465, US2014368860, US2014339807, US2014339434, US2014226910, US2014175785, US2014133748, US2013287263, US2012243797, US2012243094, US2012237731, US2012189159, US2012182443, US2012174447, US2012174232, US2012146323, US2012038659, US2012008822, US2012002255, US2011256069, US2011211044, US2011208656, US2011193334, US2011192752, US2011182467, US2011158508, US2011158472, US2011157183, US2011130508, US2011121066, US2011109078, US2011064328, US2011045248, US2011025827, US2010317431, US2010314861, US2010307705, US2010290698, US2010290663, US2010284069, US2010273548, US2010265316, US2010260408, US2010246984, US2010225746, US2010208036, US2010205162, US2010201811, US2010194532, US2010182221, US2010177164, US2010177094, US2010143578, US2010118123, US2010108874, US2010103528, US2010043076, US2010026990, US2010020078, US2010007717, US2010002903, US2009268940, US2009236241, US2009185755, US2009124195, US2009122412, US2009096783, US2009021840, US2008212193, US2008212192, US2008159615, US2008137905, US2008130126, US2008121728, US2008067801, US2008037131, US2008036196, US2008024803, US2008019616, US2008018097, US2007273143, US2007271182, US2007258621, US2007242290, US2007211920, US2007183624, US2007143732, US2007121170, US2007113280, US2007110271, US2007097111, US2007047036, US2007010311, US2006249897, US2006217181, US2006180673, US2006178194, US2006170934, US2006170153, US2006154716, US2006151944, US2006151943, US2006119034, US2006081710, US2006076734, US2006019751, US2006003295, US2005262338, US2005156048, US2005133584, US2005094229, US2005041835, US2005001419, US2004011874, TWI447685, TWI382326, TWI372129, TWI361147, RU2503767, RU2484975, RU2476936, NL2007288, KR20170025856, JP2014151446, JP2011502811, JP2011093153, JP2010179581, JP2010030056, JP2007030967, FR3036310,

FR3012995, EP2759855, EP2568345, EP2542423, EP2071492, EP2071492, EP2008834, EP1894170, EP1845496, EP1843288, EP1780682, EP1765602, EA021157, EA018419, EA013296, DE102006037377, DE102004044459, DE102004044459, DE102004044458, DE102004044458, DE102004026557, CN105073440, CN104240068, CN103443828, CN103415801, CN103299323, CN103140881, CN102914810, CN102855515, CN102855515, CN102820971, CN102820971, CN102801528, CN102473434, BE1020247, AU2011291010, AU2008311894, AU2008267368,

Abstract:
Source: US2004076310A The present invention relies on the moire patterns generated when superposing a base layer made of base band patterns and a revealing line grating (revealing layer). The produced moire patterns comprise an enlargement and a transformation of the individual patterns located within the base bands. Base bands and revealing line gratings may be rectilinear or curvilinear. When translating or rotating the revealing line grating on top of the base layer, the produced moire patterns evolve smoothly, i.e. they may be smoothly shifted, sheared, and possibly be subject to further transformations. Base band patterns may incorporate any combination of shapes, intensities and colors, such as letter, digits, text, symbols, ornaments, logos, country emblems, etc... They therefore offer great possibilities for creating security documents and valuable articles taking advantage of the higher imaging capabilities of original imaging and printing systems, compared with the possibilities of the reproduction systems available to potential counterfeiters. Since the revealing line grating reflects a relatively high percentage of the incident light, the moire patterns are easily apparent in reflective mode and under normal illumination conditions. They may be used for the authentication of any kinds of documents (banknotes, identity documents, checks, diploma, travel documents, tickets) and valuable articles (optical disks, CDs, DVDs, CD−ROMs, packages for medical drugs, bottles, articles with affixed labels).

128) Family number: 30514085 (US2004079683A) © PatBase

Title: AUTOMATED BANKING MACHINE WHICH DISPENSES, RECEIVES AND STORES NOTES AND OTHER FINANCIAL INSTRUMENT SHEETS

Priority:

CA20032503338	20031017	CA20032680866	20031017	CA20032680875	20031017
US20030688619	20031017	US20030688621	20031017	EP20030779132	20031017
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WO2003US33138	20031017				

Family:

Publication number	Publication date	Application number	Application date
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AU2003285904 AH	20040504	AU20030285904	20031017
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ZA200503737 A	20060222	ZA20050003737	20050510	
ZA200603849 A	20070926	ZA20060003849	20060515	

Probable Assignee: DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC

Assignee(s):[std]**:** GRAEF THOMAS H ; UTZ ZACHARY ; SCHOEFFLER DANIEL P ; GRIGGY SHAWN ; RAMACHANDRAN NATARAJAN ; DIEBOLD SELF SERVICE SYS ; DIEBOLD SELF

SERVICE SYSTEMS ; DIEBOLD SELF SERVICE SYSTEMS A ; DIEBOLD SELF SERVICE SYSTEMS D ; DIEBOLD INC

Assignee(s): DIEBOLD INC NORTH CANTON ; DAJBOLD INKORPOREJTED ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD I ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF ; KLESSENS GERT ; RAMACHANDRAN NAT ; NEVEJANS PATRICK ; SCHOEFFLER DANIEL ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; DIEBOLD SELF SERVICES SYSTEMS DIVISION OF DIEBOLD ; GRAEF H THOMAS ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC ; DIEBOLD SELF SERVICE SYSTEMS DIVISON OF DIEBOLD INC ; DIEBOLD SELF SERVICE SYSTEMS A DIVISION OF DIEBOLD INC ; DIEBOLD SELF SERVICES SYSTEMS DIVISION OF DIEBOLD INC ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INCORPORATION

Inventor(s):(std)**:** DANIEL P SCHOEFFLER ; DANIEL SCHOEFFLER ; DUNLAP R MATTHEW ; GERT KLESSENS ; GRAEF H ; GRAEF H T ; GRAEF H THOMAS ; GRAEF THOMAS ; GRAEF THOMAS H ; GRIGGI SHON ; GRIGGY SHAWN ; H THOMAS GRAEF ; KLESSEN UTZ ZACHARY SCHOEFFLER ; KLESSENS GERT ; NAT RAMACHANDRAN ; NATARAJAN RAMACHANDRAN ; NEVEDZHANZ PATRIK ; NEVEJANS PATRICK ; PATRICK NEVEJANS ; RAMACHANDRAN NAT ; GREHF KH TOMAS ; RAMACHANDRAN NATARAJAN ; SCHOEFFLER DANIEL ; SCHOEFFLER DANIEL P ; SHAWN GRIGGY ; SHEFFLER DEHNIEL ; THOMAS UTZ ZACHARY SCHOEFFLER ; UTTS ZAKHARIJ ; UTZ ZACHARY ; THOMAS GRAEF H ; ZACHARY UTZ

Inventor(s): THOMAS H GRAEF ; UTZ ZACHARY NORTH CANTON ; UTZ ZACHARY SCHOEFFLER DANIEL GRIGGY SHAWN ; UTZ ZACHARY SCHOEFFLER DANIEL GRIGGY SHAWN RAMACHA ; UTZ ZACHARY SCHOEFFLER DANIEL GRIGGY SHAWN RAMACHANDRAN NAT GRAEF H THOMAS ; UTZ ZACHARY SCHOEFFLER DANIEL GRIGGY SHAWN RAMACHANDRAN NAT GRAEF H THOMAS NEVEJANS PATRICK KLESSENS GERT ; SHEFFLER DEHNIEL P. ; SCHOEFFLER DANIEL P TWINSBURG ; RAMACHANDRAN NATARAJAN UNIONTOWN ; RAMACHANDRAN NATARADZHAN ; NAT RAMCHANDRAN ; GRIGGY SHAWN NORTH CANTON ; H ; GRAEF THOMAS H BOLIVAR ; GRAF TOMAS KH. ; GRAEF HTHOMAS

Agent(s): DIMOCK STRATTON LLP; WSL PATENTANWAELTE PARTNERSCHAFT MBB; MELDRUM DAVID JAMES; RALPH E JOCKE WALKER AND JOCKE LPA; WALKER AND JOCKE; RALPH E; DANIEL D; JOCKE RALPH E; WASIL DANIEL D; MEDLEY MICHAEL J; MICHAEL J

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class(IPC 8–9)**:** B65H29/54 B65H3/02 B65H3/06 B65H3/52 B65H31/38 B65H5/00 B65H7/08 G06F17/00 G06F17/60 G06F19/00 G06K13/00 G06K5/00 G06Q40/00 G06Q40/02 G07D11/00 G07D13/00 G07D7/16 G07F19/00 G07F7/00 G07F7/08 G07F7/12 (Advanced/Invention); G07F19/00 (Advanced/Non–invention); B65H3/02 B65H3/06 B65H3/52 G06F19/00 G06K5/00 G06Q40/00 G07D11/00 G07D13/00 G07D7/00 G07F19/00 G07F7/00 (Core/Invention); G06F G07F (Subclass/Invention)

International class(IPC 1–7)**:** B05B9/00 B07C5/00 B65H3/52 B65H31/38 G06F G06F17/60 G06Q10/00 G07D11/00 G07F19/00 G07F7/00 G07F7/08

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European class: B65H29/00E B65H3/06F B65H3/52B B65H3/52B8B G06Q20/042 G06Q20/0425 G06Q20/1085 G06Q20/18 G06Q40/00 G07D11/00D G07D11/00D2 G07D11/00D4 G07D11/00H G07D11/00M G07D7/16C G07D7/16D G07F19/00F G07F19/20 G07F19/201 G07F19/202 G07F19/205 L65H301/4191 L65H404/1316 L65H404/1415 L65H404/5311 L65H511/130 L65H513/410 L65H701/1912

US class: 209/534 235/379 235/379P 235/380 235/381 235/475 235/486 239/379 239/379S 271/10.01 271/10.010P 271/10.010S 271/10.09 271/10.090P 271/10.14 271/10.140S 271/10.16 271/10.160S 271/109 271/109S 271/110 271/121 271/121P 271/122 271/124 271/125 271/18 271/18S 271/262 271/4.01 271/4.010S 705/35 705/43 705/43P 705/43S 902/13 902/14 902/15 902/8 902/9

Classification Explorer

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Forward Citations: WO16196167, WO16061088, WO16061088, WO16061086, WO16061084, WO14203178, WO14172696, WO12110584, WO12034751, WO08096427, WO08060480, WO08060480, WO08055220, WO08055220, WO07055641, WO07036915, WO06096857, USD722640, USD653424, USD653423, USD653422, USD653421, USD653420, USD653419, USD653418, USD653417, USD653014, USD653013, USD653012, USD652602, USD652601, US9533847, US9460370, US9384637, US9340381, US9248991, US9242815, US9230414, US9171413, US9159180, US9147301, US9114947, US9111409, US9047726, US9038892, US9016684, US8689962, US8605267, US8448933, US8393609, US8371573, US8358825, US8348162, US8328190, US8313019, US8296212, US8275691, US8274364, US8255312, US8157162, US8132718, US8109379, US8103580, US8087661, US8073751, US8061591, US8052041, US8025214, US8024249, US7992775, US7971781, US7934642, US7905484, US7896231, US7819308, US7798396, US7793832, US7793831, US7757951, US7747061, US7726643, US7722025, US7694797, US7654442, US7624977, US7611140, US7584890, US7556259, US7540490, US7537213, US7523934, US7520375, US7487874, US7464832, US7461777, US7455183, US7401043, US7255215, US7028888, US6969064, US6789682, US2016196708, US2016070993, US2015348352, US2015035222, US2014239063, US2014229002, US2014203494, US2014125008, US2013328260, US2013047869, US2012161389, US2012048932, US2012024659, US2012005073, US2011209966, US2011133394, US2011127712, US2011125652, US2011019901, US2010271619, US2010244429, US2010244363, US2010090393, US2010038842, US2010007075, US2009160119, US2009120760, US2009118860, US2009090769, US2009001158, US2008157458, US2008149698, US2008137939, US2008128491, US2008128490, US2008128488, US2008128487, US2008121695, US2008121693, US2008121570, US2008082207, US2008073834, US2008048393, US2008000963, US2007295812, US2007222135, US2007216081, US2007151827, US2007108267, US2007040029, US2007001383, US2007001367, US2006245777, US2006229979, US2006208413, US2006196926, US2006181001, US2006181000, US2006169770, US2006169764, US2006125173, US2005251467, US2005140084, US2005121286, US2005103844, US2005017428, US2004205025, US2004182678, US2003085271, US2003047861, TWI401609, RU2486592, RU2475856, RU2473129, JP4896997, JP4896997, JP2008096427, EP2400469, EP2400469, EP2261870, EP2261870, EP2251286, EP2251286, EP2211314, EP2110792, EP2110792, EP2093171, EP1736937, EP1654700, DE102011000794, DE102010052988, DE102010034445, CN103959351, CN103482397, CN103426233, CN103426233, CN102376122, CN102376122, CN102320488, CN102320488, AU2007200668,

Abstract:
Source: US2004079683A An ATM (10) includes a housing (46) including a generally L–shaped chest portion (48) and an upper housing portion (54). The ATM includes a fascia (12) which extends on the outside of a wall (14) and includes a user interface (15). Responsive to inputs of a user through the user interface the machine is operative to accept a stack of sheets (84) which are evaluated through operation of a sheet validator device (88) and which enables acceptable sheets to be stored within the chest portion. Unacceptable sheets are routed to a storage area (100). Provisions are made for reducing the risk of attack on the ATM by criminals and to facilitate servicing by authorized personnel.

0) US2004173434A – COIN–LIKE PRODUCTS, IDENTIFICATION METHOD THERE...

129) Family number: 31145794 (US2004173434A) © PatBase

Title: COIN–LIKE PRODUCTS, IDENTIFICATION METHOD THEREOF AND IDENTIFICATION DEVICE THEREOF

Priority: JP20030002927 20030109 JP20030003648 20030109

Family:

Publication number	Publication date	Application number	Application date
DE102004001464 A1	20040722	DE200410001464	20040108
GB200400454 A0	20040211	GB20040000454	20040109
GB2398161 A1	20040811	GB20040000454	20040109
GB2398161 B2	20060531	GB20040000454	20040109
JP2004220114 A2	20040805	JP20030003648	20030109
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US2004173434 AA	20040909	US20040754849	20040109
WO04063972 A1	20040729	WO2004US00449	20040109
WO04063972 B1	20050113	WO2004US00449	20040109

Probable Assignee: JAPAN MINT

Assignee(s):(std)**:** JAPAN MINT ; JAPAN MINT OSAKA ; MOLEX INC ; SASAO MASAMI ; TANAKA MIKIJI

Inventor(s):(std)**:** TANAKA MIKIJI ; YAMA YOSHINORI ; MORITA SHINICHI ; MORI HIDEAKI ; TANAKA KANJI ; SASAO MASAMI

Inventor(s): YOSHINORI YAMA ; SHINICHI MORITA ; HIDEAKI MORI

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G01N27/72 G06K13/06 G06K13/08 G06K17/00 G06K7/00 G07D5/08 G07F1/06 H01R12/18 H01R13/629 H01R13/64 H04B1/38 (Advanced/Invention); G01N27/72 G06K13/02 G06K13/06 G06K17/00 G06K7/00 G07D5/00 G07F1/00 H01R12/00 H01R13/629 H01R13/64 H04B1/38 (Core/Invention)

International class (IPC 1–7): F02M51/00 G01N27/72 G06K17/00 G06K7/00 G07D5/00 G07D5/08 G07F1/06 H01R12/18 H01R13/629 H01R13/64 H02K5/22 H04B1/38 H05K5/02

CPC: G07F1/06 G07D5/08 G06K13/0825 G06K7/0021 G06K13/06 G06K13/08 G06K13/0806 G06K19/07732 H01R13/64 H04B1/3816

European class: G06K13/06 G06K13/08 G06K13/08A G06K13/08A4 G06K19/077E7 G06K7/00K2 G07D5/08 G07F1/06 H01R13/64 H04B1/38C

US class: 194/320

Classification Explorer

Cited documents: US6511350 BA, US6123560 A, US5921792 A, US5451168 A, US5440448 A, US2002137386 AA, JP2001025280 A2, GB1399395 A, DE2644018 A1,

Forward Citations: WO14187880, WO13107715, WO13063700, WO10040037, WO07145952, WO07145952, WO06120304, WO06075479, US9447515, US9241548, US8517161, US7997913, US7670160, US7364820, US2014144751, US2012273361, US2011233028, TWI392142, RU2608290, JP6131262, JP5672142, JP5336900, JP5178243, JP4789654, JP2015516176, JP2014532563, JP2012242861, JP2010231705, JP2009211501, JP2008212342, JP2007234465, JP2007157524, EP1837953, EP1796227, DE102012006233, CN104779475, CN103958176, CN103928792, CN103633506,

Abstract:
Source: US2004173434A The present invention provides a new identification method. identification device of a coin–like product, and a coin–like product having a structure for identification that makes the identification method applicable. The coin–like product 1 of the present invention has a laminate structure formed by two or more kinds of metal layers 11 and 12. The first layer 11, which is a surface layer on one plate side of the laminate structure,

and the second layer 12, which is a surface layer on the other plate side of the laminate structure, have different electric conductivities, which makes it possible to identify the structure by a reflex electronic sensor. In the identification method and the identification device, a path is formed, through which a coin−like product 1 can pass, reflex electronic sensors 100 and 200 are disposed along the path so that the first layer and the second layer of the coin−like product 1 can come close to the sensors, and identification is performed based on the outputs of each magnetic sensor, which are specific to the metallic materials.

0) US2004222286A – CASH DISPENSING AUTOMATED BANKING MACHINE WITH ...

130) Family number: 30971643 (US2004222286A) © PatBase

Title: CASH DISPENSING AUTOMATED BANKING MACHINE WITH TILT OUT FASCIA

Priority:

CA20042517438	20040310	CA20042733113	20040310	CA20042733118	20040310
CA20042733195	20040310	CA20042733476	20040310	CA20042733303	20040310
CA20042733307	20040310	CA20042733308	20040310	CA20042733315	20040310
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US20040797634	20040310	US20040797656	20040310	EP20040719200	20040310
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US20040797929	20040310	US20040797658	20040310	US20050060697	20050217
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US20080126927	20080526	WO2004US07167	20040310	WO2006US07167	20040310

Family:

Publication number	Publication date	Application number	Application date
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BRPI0408291 B1	20170221	BR2004PI08291	20040310
CA2517438 AA	20050829	CA20042517438	20040310
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CA2733113 AA	20040923	CA20042733113	20040310
CA2733113 C	20141223	CA20042733113	20040310
CA2733118 AA	20040923	CA20042733118	20040310
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CA2733195 AA	20040923	CA20042733195	20040310
CA2733195 C	20141230	CA20042733195	20040310
CA2733303 AA	20040923	CA20042733303	20040310
CA2733303 C	20141223	CA20042733303	20040310
CA2733307 AA	20040923	CA20042733307	20040310
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WO04081739 A3	20060601	WO2004US07167	20040310	
ZA200507548 A	20060927	ZA20050007548	20050919	

Probable Assignee: DIEBOLD SELF SERVICE SYS

Assignee(s):(std)**:** BARKER DAVID A ; BARNETT ROBERT W ; BAUER THEODORE ; BESKITT WILLIAM D ; BOOTH JAMES ; DIEBOLD INC ; DIEBOLD SELF SERVICE SYSTEMS D ; DIEBOLD SELF SERVICE SYSTEMS ; DOUGLASS MARK ; DIEBOLD SELF SERVICE SYS ; GRAEF H THOMAS ; FOCKLER GREGORY ; KRAFT DAVE ; SCHOEFFLER DANIEL ; KANSA ROBERT ; KOVACS DOUGLAS A ; UTZ ZACHARY ; TULA PEDRO ; LUTE RICHARD C ; EASTMAN JEFFREY ; JENKINS RANDALL ; SZABAT WALTER J ; MLEZIVA ROY ; GRIGGY SHAWN ; WANG ZEN Y ; VAISHNAV DOLAR HARSHADRAI ; FELT DENNIS ; HOLLIFIELD DAVID ; MAGEE PAUL D ; TUROCY KENNETH ; WYMER MARK ; YOUNG JEFF ; WATSON TIMOTHY

Assignee(s): LUTE RICHARD C JR ; GRAEF THOMAS H ; FOCKLER GERGORY ; VAISHNAV DOLAR HARSHDRAI ; LUTE ROBERT C JR ; KOVACS DOUGLAS ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC ; DIEBOLD INC5995 MAYFAIR ROADNORTH CANTONOH44720US ; GRAEF H ; DIEBOLD SELF SERVICE DIVISION OF DIEBOLD INC ; DAJBOLD INKORPOREJTED ; DIEBOLD ; DIABOLD INC ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF ; BAKER DAVID ; BARKER DAVID ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD I

Inventor(s):(std)**:** ANDALL ; BARKER DAVID A ; BARNETT ROBERT W ; BAUER THEODORE ; BESKITT WILLIAM ; BESKITT WILLIAM D ; BOOTH JAMES ; ABAT WALTER MLEZIVA ROY WANG Z ; DAVID A BARKER ; DAVID HOLLIFIELD ; DENNIS FELT ; DOLAR HARSHADRAI VAISHNAV ; DOUGLASS MARK ; EASTMAN JEFFREY ; EASTMAN JEFFRY ; FELT DENNIS ; FOCKLER GREGORY ; GRAEF H THOMAS ; GRAEF THOMAS H ; GRIGGY SHAWN ; H THOMAS GRAEF ; HARSHADRAI VAISHNAV DOLAR ; HOLLIFIELD DAVID ; DOUGLAS A KOVACS ; DOUGLAS MARK ; JEFF YOUNG ; JENKINS RANDALL ; JENKINS RANDALL W ; KANSA ROBERT ; KOVACS DOUGLAS ; KOVACS DOUGLAS A ; KRAFT DAVE ; LUTE RICHARD ; LUTE RICHARD C ; MLEZIVA ROY ; PAUL D MAGEE ; RICHARD C LUTE ; ROBER GRIGGY SHAWN TUROCY KENN ; ROBERT W BARNETT ; ROY MLEZIVA ; SCHOEFFLER DANIEL ; SZABAT WALTER ; SZABAT WALTER J ; THEODORE BAUER ; MAGEE PAUL D ; THOMAS GRAEF H ; TIMOTHY WATSON ; TULA PEDRO ; TUROCY KENNETH ; UTZ ZACHARY ; UTZM ZACHARY ; VAISHNAV DOLAR HARSHADRAI ; WALTER J SZABAT ; WANG ZEN Y ; WATSON TIMOTHY ; WATSON TOMOTHY ; WILLIAM D BESKITT ; WYMER MARK ; YOUNG JEFF ; ZEN Y WANG ; ZACHARY UTZ ; SHAWN GRIGGY ; ROBERT KANSA ; RANDALL JENKINS ; PEDRO TULA ; MARK WYMER ; MARK DOUGLASS ; KENNETH TUROCY ; JEFFREY EASTMAN ; JAMES BOOTH ; GREGORY FOCKLER ; DAVE KRAFT ; DANIEL SCHOEFFLER ; BAKER DAVID ; VAN TSZEN JU ; VAJSHNAV DOLAR KHARSHADRAJ ; VAJMER MARK ; VAISHNAV DOLAR HARSHDRAI ; UTTS ZAKHARIJ ; T JUROSI KENNET ; SZABATWALTER J ; VATSON TIMOTI ; SHEFFLER DEHNIEL ; SHABAT UOLTER DZH ; RAMACHANDRAN NATARAJAN ; MLECHIVA ROJ ; MEHDZHI POL D ; LUTE ROBERT C JR ; LUTE RICHARD JR ; L JUT RICHARD K ; KRAFT DEJV ; KOVACH DUGLAS A ; KHOLLIFILD

DEHVID ; LUTE RICHARD C JR ; JUN DZHEFF ; GRIGZHI SHOUN ; ISTMEN DZHEFFRI ; GREHF KH TOMAS ; FOKLER GREGORI ; FOCKLER GERGORY ; DZHENKINS REHNDALL ; DUGLASS MARK ; DAVID BAKER ; BUT DZHEJMS ; FEHLT DEHNNIS ; BESKITT UILL JAM D ; BAUEHR TEODOR ; BARNETT ROBERT V ; BARKER DEHVID A ; BARKER DAVID ; LUTE JR RICHARD ; HOLLIFIELDDAVID

Inventor(s): BARKER DAVIDUS ; BARNETT ROBERT WUS ; BAUER THEODOREUS ; EASTMAN JEFFREYUS ; BOOTH JAMESUS ; BESKITT WILLIAM DUS ; BESKITT UILL'JAM D. ; DOUGLASS MARKUS ; FELT DENNISUS ; FOCKLER GREGORYUS ; FOCKLER GERGORYUS ; GRAEF THOMAS HUS ; HOLLIFIELD DAVIDUS ; GRIGGY SHAWNUS ; JENKINS RANDALLUS ; L'JUT RICHARD K. ; KANSA ROBERTUS ; KRAFT DAVEUS ; KOVACS DOUGLASUS ; KOVACS DOUGLAS AUS ; LUTE RICHARD C JRUS ; LUTE ROBERT C ; MAGEE PAUL DUS ; MLEZIVA ROYUS ; SCHOEFFLER DANIELUS ; VAN TSZEN' JU. ; SZABAT WALTER JUS ; TUROCY KENNETHUS ; TULA PEDROUS ; T'JUROSI KENNET ; VAISHNAV DOLAR HARSHADRAIUS ; UTZ ZACHARYUS ; VAISHNAV DOLAR HARSHDRAIUS ; YOUNG JEFFUS ; WYMER MARKUS ; WATSON TIMOTHYUS ; WANG ZEN YUS ; WILLILAM D BESKITT ; WILLLIAM D BESKITT ; VAISHNAV DOLAR ; TOMOTHY WATSON ; MARK DOUGLAS ; THEODORE BAULER ; MAGEE PAUL ; JEFFRY EASTMAN ; DOUGLASS A KOVACS ; JASON PAUL GARDNER ; GRIGGY SHAWN TUROCY KENNETH FOCKLER GREGORY ; GRIGGY SHAWN TUROCY KENNETH FOCKLER GREGORY GRAEFT ; GRIGGY SHAWN TUROCY KENNETH FOCKLER GREGORY GRAEFTHOMAS H ; GRAEF H ; DOLAR HARSHADRI VAISHNAV ; DAVID A BARNETT ; ABAT WALTER MLEZIVA ROY WANG ZEN Y ; DANIEL SCHOEFELER ; BENNIS FELT

Agent(s): DIMOCK STRATTON LLP; EISEN MARK B; GILBERTS LLP; MELDRUM DAVID JAMES; RALPH E JOCKE; RALPH E JOCKE WALKER AND JOCKE LPA; WALKER AND JOCKE; PARMELCE CHRISTOPHER L; JOCKE RALPH E; CHRISTOPHER L; RALPH E; DANIEL D; WALKER AND JOCKE LPA; PARMELEE CHRISTOPHER L

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D19/44 E05B65/52 E05D11/00 E05G1/024 E05G1/04 G06F1/00 G06F17/00 G06F17/60 G06F19/00 G06F7/08 G06K5/00 G06Q90/00 G07D11/00 G07F19/00 G07F9/00 G07F9/02 G07F9/10 G66F19/00 (Advanced/Invention); B65D19/38 E05G1/00 G06F17/00 G06F7/06 G06K5/00 G07F19/00 (Core/Invention); G06F (Subclass/Invention); G06F (Subclass/Non–invention)

International class (IPC 1–7): E05G7/00 G06F G06F0/00 G06F17/60 G06F7/08 G07D11/00 G07F19/00

CPC: G07D11/0081 G07F19/20 G07F19/201 G07F19/202 G07F19/205 G07F19/207 G06Q20/1085 G06Q40/00

European class: G06Q20/1085 G06Q40/00 G07D11/00H G07F19/00F G07F19/20 G07F19/201 G07F19/202 G07F19/205 G07F19/207

US class: 108/55.3 108/57.21 109/50 109/50S 109/52 109/58 109/73 235/379 235/379P 235/380 235/381 235/381P 235/384 705/35 705/43 902/13 902/14 902/17 902/18 902/30 902/32 902/8 902/9

Classification Explorer

Cited documents: WO8303317 A1, US7555879 BA, US7219609 BA, US7156296 BB, US6778693 BB, US6778693 BA, US6761308 BA, US6676015 BB, US6676015 BA, US6676015 B1, US6648220 BA, US6533238 BB, US6527172 BA, US6505774 BA, US6486464 BA, US6371687 BA, US6357657 BA, US6328206 BA, US6296079 BA, US6293207 BA, US6270010 BA, US6206284 BA, US6147485 A, US6101266 A, US6082616 A, US6042003, US6010065 A, US5944163 A, US5842672 A, US5676063 A, US5624098 A, US5553552 A, US5527054 A, US4961507 A, US4919058 A, US4723072 A, US4704970 A, US4615280 A, US4612864 A, US4497261 A, US4469150 A, US4088082 A, US4023011 A, US3868079 A, US3697729 A, US2004175221 AA, US2004118657 AA, US2004056084 AA, US2003121973 AA, US2003116478 AA, US2003037421 AA, US2002194793 AA, US2002139842 AA, US2002128970 AA, US2002074393 AA, US2002073032 AA, US2002060241 AA, US2002033359 AA, US2002022450 AA, US2001000644 AA, US1924365 A, GB2064111 A1, CN1347538, CN1205093,

Forward Citations: WO16061088, WO16061086, WO16061084, WO14172696, WO12025189, WO12010622, WO09065602, WO08152063, WO08113441, WO08113441, USD781024, USD779774, USD779773, USD779772, USD779771, USD762040, USD755649, USD748888,

USD748364, USD746015, USD742090, USD739639, USD739638, USD739637, USD735965, USD735964, USD735963, USD735440, USD735439, USD735438, USD735437, USD732790, USD722739, USD681717, USD679745, USD677714, USD663505, USD653422, USD653418, USD653013, USD652601, USD645223, USD631634, USD631097, USD629585, USD628764, USD625305, USD608016, USD602992, USD602818, USD596174, USD592825, USD592762, USD587817, USD584875, USD582058, USD581409, USD558425, US9683401, US9652921, US9645570, US9633350, US9530032, US9494922, US9443236, US9422083, US9406056, US9366377, US9299213, US9286500, US9285791, US9230384, US9218129, US9082114, US9053599, US8955742, US8910771, US8857707, US8827264, US8800863, US8757348, US8695397, US8690052, US8651372, US8620825, US8585303, US8584603, US8561886, US8517479, US8485433, US8485113, US8430303, US8419550, US8413786, US8393533, US8376220, US8353511, US8346640, US8342398, US8336878, US8335367, US8328084, US8317088, US8282206, US8255335, US8229816, US8224482, US8220707, US8175970, US8175832, US8127981, US8083131, US8052051, US8052043, US7896231, US7832629, US7810715, US7789299, US7789298, US7766224, US7747061, US7726558, US7717327, US7661584, US7611045, US7555879, US7513415, US7490764, US7413118, US7370792, US7306142, US7257246, US7219609, US7159767, US7156298, US7156297, US2016148473, US2015356834, US2014339388, US2014318425, US2014285349, US2014203163, US2014151520, US2014067668, US2013158702, US2013100291, US2013050088, US2013030998, US2013000227, US2012111706, US2012067946, US2012002353, US2012001524, US2011316395, US2011271879, US2011221321, US2011217108, US2011198802, US2011174051, US2011163644, US2010328867, US2010303333, US2010264208, US2010211471, US2010066796, US2010001060, US2009319215, US2009289104, US2009276320, US2009195993, US2009177316, US2009145961, US2009008857, US2008137939, US2008093437, US2007138250, US2007102509, US2007062782, US2007040023, US2007034680, US2006218063, US2006202026, US2005274732, US2005176509, US2005127170, US2005127159, US2005121509, RU2564617, ITRM20090613, ITMI20111659, FR2963146, EP2784758, EP2574579, EP2423888, EP2362365, EP2362364, EP2088565, EP2015259, EP1968369, EP1968369, DE102007056428, CN105214824, CN104077854, CN103155009, CN103155009, CN103150819, CN103150819, CN103030037, CN103030037, CN102473336, CN102473336, CN102189824, CN102189824, CN102189823, AU2011295443, AU2011295443,

Abstract:
Source: US2004222286A An automated banking machine (10) is provided. The automated banking machine may include a fascia (50) in operative connection with a frame (110). The machine may include a plurality of hardware devices which are accessible through the fascia. The hardware devices may include a cash dispenser (24), receipt printer (20), and a card reader (22). The fascia may include replaceable bezels (550,552) with apertures therein for providing access to hardware devices. The bezels may be operative to float with respect to the fascia and hardware devices to automatically align hardware devices with the bezels. In addition the hardware devices may include movable portions which are operative to automatically align with the bezels. The bezels may include ramps, ribs, or other angled surfaces which guide the hardware devices into alignment with the openings in the bezels.

0) US2004200690A – MACHINE AND METHOD FOR CASH RECYCLING AND CASH ...

131) Family number: 31059037 (US2004200690A) © PatBase

Title: MACHINE AND METHOD FOR CASH RECYCLING AND CASH SETTLEMENT

Priority: US20030411561 20030410 US20040821004 20040408 WO2005US08306 20050311 WO2004US11076 20040409

Family:

Publication number	Publication date	Application number	Application date
AT451674 E	20091215	AT20050725462T	20050311
CA2521868 AA	20051006	CA20042521868	20040409
CA2521868 C	20091006	CA20042521868	20040409
CA2562497 AA	20061005	CA20052562497	20050311
CA2562497 C	20130514	CA20052562497	20050311
CN1998027 A	20070711	CN200580015936	20050311
DE602005018183 D1	20100121	DE200560018183T	20050311
EP1611553 A2	20060104	EP20040759387	20040409
EP1735757 A1	20061227	EP20050725462	20050311
EP1735757 B1	20091209	EP20050725462	20050311
US2004200690 AA	20041014	US20030411561	20030410
US2004231956 AA	20041125	US20040821004	20040408
US6983836 BB	20060110	US20030411561	20030410
US7992699 BB	20110809	US20040821004	20040408
WO04093021 A2	20041028	WO2004US11076	20040409
WO04093021 A3	20041223	WO2004US11076	20040409
WO05104046 A1	20051103	WO2005US08306	20050311

Probable Assignee: TALARIS INC

Assignee(s):(std)**:** RUE CASH SYSTEMS INC DE ; TALARIS INC ; DE LA RUE CASH SYSTEMS INC

Assignee(s): FREDRICK ROBERT F ; GUNST ROBERT E ; HANUS JOSEPH P ; ADAMS THOMAS P ; STIEBER JON R ; LV ADMINISTRATIVE SERVICES INC ; LLG LLC ; SENTINEL CASH SYSTEMS LLC ; SENTINEL MANAGEMENT LLC ; SENTINEL TECHNOLOGIES INC ; TIDEL ENGINEERING LP (F K A SENTINEL OPERATING LP) ; TIDEL ENGINEERING LP F K A SENTINEL OPERATING LP ; ZWIEG ROBERT L

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Inventor(s): ADAMS THOMAS P GUNST ROBERT E ZWIEG ROBERT L FREDR

Agent(s): GOUDREAU GAGE DUBUC; SKONE JAMES ROBERT EDMUND; QUARLES AND BRADY LLP; BOYLE FREDRICKSON SC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G06F19/00 G06F7/00 G06F9/00 G07D11/00 G07D3/00 G07D3/16 G07D7/00 G07D9/00 G07D9/06 G07F5/24 G07F9/08 G07G1/00 (Advanced/Invention); G07D11/00 G07D3/00 G07D7/00 G07D9/00 G07F5/00 G07F9/08 (Core/Invention)

International class (IPC 1–7): G06F19/00 G06F7/00 G06F9/00 G07D3/16 G07D7/00 G07D9/00 G07D9/06 G07F19/00 G07F7/04 G07F9/08 G07G1/00

CPC: G07D1/04 G07D3/128 G07D9/00 G07D9/008 G07F5/24 G07F9/08 G07D3/00 G07D11/0084

European class:

G07D1/04 G07D11/00K G07D3/00 G07D3/12D G07D9/00 G07D9/00F G07F5/24 G07F9/08

US class: 194/215 194/217 194/302 194/344 194/350 453/10 453/12 453/16 453/49 453/57 453/6

Classification Explorer

Cited documents: WO9948058 A1, WO0247043 A2, WO0221460 A2, WO02071349 A2, WO0140907 A2, USRE37662 E, US7163454 BB, US7163454 B1, US7073707 BB, US7073707 B1, US6983836 BB, US6983836 B1, US6896177 BB, US6896177 B1, US6637576 BA, US6623349 BB, US6623349 B1, US6540601 BB, US6540601 B1, US6318537 BA, US6267662 BA, US6264545 BA, US6165064 A, US6109416 A, US6076649 A, US5997395 A, US5954576 A, US5830054 A, US5501633 A, US5400891 A, US5366404 A, US5230653 A, US5067928 A, US5056643 A, US5021026 A, US4383540 A, US4125195 A, US3682183 A, US2006106716 AA, US2004231956 AA, US2004188221 AA, US2004040820 AA, US2004004116 AA, US2004004115 AA, US2003111395 AA, US2002156734 AA, US2002152141 AA, US2002063035 AA, US2002030101 AA, US2001034203 AA, US2001013541 AA, JP2001043424 A2, EP1031950 A1, EP0744719 A2, DE3431205 A1,

Forward Citations: WO12114449, WO10002754, WO09127731, WO08024043, WO07146705, WO07146705, WO07035420, WO07035420, US9598191, US9396600, US9390594, US9367837, US9214049, US9153086, US9129493, US9129294, US9105145, US9064268, US8967362, US8936505, US8932118, US8928456, US8926412, US8925762, US8874467, US8812394, US8812366, US8756158, US8602200, US8600842, US8561885, US8523641, US8498736, US8430303, US8414227, US8387874, US8346640, US8332313, US8276810, US8251198, US8229851, US8229816, US8227936, US8214257, US8201680, US8196826, US8181854, US8175970, US8162124, US8157162, US8141772, US8109379, US8103586, US8033375, US8032415, US8025214, US8024272, US7992699, US7950512, US7865432, US7850076, US7819308, US7653599, US7635085, US7625272, US7575166, US7500568, US7429213, US7419042, US7341508, US7163454, US6983836, US2015302678, US2014297526, US2014290539, US2014058856, US2014031974, US2014030972, US2013205723, US2013052926, US2013001041, US2012012437, US2011308913, US2011172960, US2010312378, US2010280878, US2010235247, US2010234985, US2010198726, US2010198708, US2010174640, US2010082443, US2010070392, US2010062701, US2010059136, US2010025183, US2010017017, US2010010904, US2009184034, US2009178598, US2009120760, US2009118860, US2008149706, US2008108272, US2008082207, US2007287373, US2007210149, US2007151827, US2007125620, US2007108267, US2006283685, US2006207856, US2006151283, US2006131408, US2006090909, US2006070843, US2006069642, US2006064379, US2006054455, US2006037835, US2005277379, US2004231956, US2004231955, US2004200690, FR2875046, ES2569435, EP2728557, EP2690607, EP2690605, EP2690604, EP2395485, EP2395485, EP2249317, EP2249317, EP2175429, EP2062230, EP2062230, EP1934707, EP1688890, EP1673709, EP1635300, EP1526483, DE102011052575, CN103793994, CN101872506, CN101872506, AU2007336740, AU2007336740,

Abstract:
Source: US2004200690A A cash recycling machine (11) is connected in a network with a computer (10) and other recycling equipment (12), the cash recycling machine (11) having an input device (18) for receiving cash, a sorter (31) for sorting the cash into a plurality of hopper assemblies (26–29), a controller (21) responsive to inputs from a user in a first operating cycle of the machine to cause the hopper assemblies (26–29) to dispense an amount of sorted cash to a cash drawer and to store the amount of dispensed cash in memory in association with a user account number, the controller (21) being responsive to input of a batch of cash and the user account number in a second cycle to count the cash received, and to compare the amount of cash received with the amount of cash dispensed to determine a net amount of cash associated with the user. The controller (21) has the ability to track transactions of employees through the work shift for reconciliation at the end of the work shift and to report results to a central accounting computer.

0) US2006131425A – VALUE DOCUMENT COMPRISING A MACHINE–READABLE AU...

132) Family number: 31427992 (US2006131425A) © PatBase

Title: VALUE DOCUMENT COMPRISING A MACHINE–READABLE AUTHENTICITY MARK

Priority: DE20031026983 20030612 EP20040739618 20040604 WO2004EP06066 20040604

Family:

Publication number	Publication date	Application number	Application date
CN1799072 A	20060705	CN200480015554	20040604
DE10326983 A1	20041230	DE20031026983	20030612
DE502004014477 D1	20140213	DE200450014477T	20040604
EP1636765 A1	20060322	EP20040739618	20040604
EP1636765 B1	20131225	EP20040739618	20040604
IN02127KN2005 A	20070727	IN2005KN02127	20051026
IN237787 B	20100108	IN2005KN02127	20051026
RU2006100105 A	20070827	RU20060100105	20040604
RU2345419 C2	20090127	RU20060100105	20040604
US2006131425 AA	20060622	US20050560114	20051209
WO04111951 A1	20041223	WO2004EP06066	20040604

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** GIESECKE AND DEVRIENT GMBH ; KAULE WITTICH ; SCHWENK GERHARD ; STENZEL GERHARD

Assignee(s): GIESECKE ANDDEVRIENT GMBH ; GIZEKE U DEVRIENT GMBKH ; GIZEKE UND DEVRIENT GMBKH

Inventor(s):(std)**:** GERHARD STENZEL GERHARD KAULE ; KAULE VITTIKH ; KAULE WITTICH ; SCHWENK GERHARD ; SHTENTSEL GERKHARD ; SHVENK GERKHARD ; STENZEL GERHARD

Inventor(s): STENZEL GERHARD KAULE WITTICH SCHWENK GERHARD ; SHTENTSEL' GERKHARD

Agent(s): HOEHFELD JOCHEN; ROTHWELL FIGG ERNST AND MANBECK PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G06K19/06 G06K7/10 G07D7/00 G07D7/12 G07F19/00 (Advanced/Invention); G06K19/06 G06K7/10 G07D7/00 G07F19/00 (Core/Invention)

International class (IPC 1–7): B42D15/10 B44F1/12 G07D7/00 G07D7/12

CPC: G07D7/0043 G07D7/12

European class: G07D7/00B6 G07D7/00D2 G07D7/12

US class: 235/379 235/468 235/491

Classification Explorer

Cited documents: WO9938700 A1, WO0143082 A1, US6506476 BA, US4983817 A, US4202491 A, EP1182048 A1, EP1158469 A2, EP0854451 A1, EP0340898 A2, DE3900056 A1, DE3225485 A1, DE2745301 A1, DE10149265 A1,

Forward Citations: WO11084724, WO11084724, WO11082792, WO11073602, WO11064504, WO11043697, WO07025740, US8986967, US8915424, US8400509, US8328102, US7860293, US2011147450, US2008106415, US2006196945, US2004245343, NL1027283, GB2460716, GB2460716, FR2952852, EP2481009, EP2373485, CN106218261, CN105163952, CN105023505, CN102763141, CN102763141, CN102576187, AP3723,

Abstract:
Source: US2006131425A The invention relates to a value document having a machine−readable authenticity mark. According to the invention the authenticity mark comprises a luminescent marking substance and a marking substance absorbing in the infrared spectral range.

0) US2004262547A – SECURITY LABELLING

133) Family number: 28901645 (US2004262547A) © PatBase

Title: SECURITY LABELLING

Priority: GB20030014883 20030626 US20040016658 20041217 US20040822582 20040412 US20050265668 20051102 US20050265672 20051102 US20050265667 20051102 US20050265649 20051102 US20050265671 20051102 US20050265648 20051102 US20050265702 20051102 US20050265703 20051102 US20050265725 20051102 US20060388368 20060324 US20060516441 20060906

Family:

Publication number	Publication date	Application number	Application date
AT440731 E	20090915	AT20040252408T	20040424
DE602004022735 D1	20091008	DE200460022735T	20040424
EP1491350 A2	20041229	EP20040252408	20040424
EP1491350 A3	20050810	EP20040252408	20040424
EP1491350 B1	20090826	EP20040252408	20040424
GB200314883 A0	20030730	GB20030014883	20030626
US2004262547 AA	20041230	US20040822582	20040412
US2005143249 AA	20050630	US20040016658	20041217
US2006118738 AA	20060608	US20050265667	20051102
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US2006118740 AA	20060608	US20050265702	20051102
US2006118741 AA	20060608	US20050265703	20051102
US2006131517 AA	20060622	US20050265649	20051102
US2006131518 AA	20060622	US20050265725	20051102
US2006180792 AA	20060817	US20060388368	20060324
US2006219961 AA	20061005	US20050265648	20051102
US2007023715 AA	20070201	US20050265668	20051102
US2007089463 AA	20070426	US20060516441	20060906
US2009321623 AA	20091231	US20050265671	20051102
US7129506 BB	20061031	US20040822582	20040412
US7256398 BB	20070814	US20050265725	20051102
US7378675 BB	20080527	US20050265703	20051102
US7488954 BB	20090210	US20050265668	20051102
US7501646 BB	20090310	US20050265702	20051102
US7800088 BB	20100921	US20050265671	20051102

Probable Assignee: NCR CORP

Assignee(s):(std)**:** CEGALIS JEFFREY ; CLARK BARRIE ; FORREST SIMON J ; GREAVES WILLIAM J ; HUNTER CATHERINE ; JOHNSON GRAHAM I ; NCR INT INC ; NCR CORP ; ROSS GARY A ; VAN DEMARK MICHAEL J ; MCCOUAIG SIMON J ; MANEY CHARLES Q ; PRIME TECHNOLOGY LLC ; PRABHU GOPALA R ; POLLARD PATRICIA ; OFFICER SIMON

Assignee(s): JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; JPMORGAN CHASE BANK NA

Inventor(s):(std)**:** HUNTER CATHERINE ; OFFICER SIMON ; POLLARD PATRICIA ; PRABHU GOPALA RADHAKRISHNA ; ROSS GARY ALEXANDER ; VAN DEMARK MICHAEL J ; RICCI CHRISTOPHER P ; MCCOUAIG SIMON J ; ROSS GARY A ; PRABHU GOPALA R ; MANEY CHARLES Q ; JOHNSON GRAHAM I ; GREAVES WILLIAM J ; FORREST SIMON J ; CLARK BARRIE ; CEGALIS JEFFREY

Inventor(s): RICCI CHRISTOPHER ; FORREST SIMON ; GREAVES WILLIAM ; JOHNSON GRAHAM ; MANEY CHARLES ; ROSS GARY ; VAN DEMARK MICHAEL ; MCCOUAIG SIMON ; PRABHU GOPALA

Agent(s):

MACLEOD RODERICK WILLIAM; MICHAEL CHAN NCR CORP; CHRISTOPHER P RICCI; CHRISTOPHER P RICCI NCR CORP; CLAUDE M VANS EVERS; CHRISTOPHER P; MANEY CHARLES Q; CHARLES Q; RICCI CHRISTOPHER P

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

International class (IPC 8–9): B05B13/00 B05B5/00 B05D5/06 B41M3/14 C03B19/10 C03B37/075 C03C13/00 C09D11/00 C09D11/02 C09K11/02 G01J1/58 G01N21/64 G06K11/00 G06K19/14 G06K5/00 G06K7/10 G06K7/12 G07D7/12 (Advanced/Invention); B05D5/06 C03B37/075 G01J1/00 G01N21/64 G06K11/00 G06K5/00 G06K7/10 (Core/Invention)

International class (IPC 1–7): B41M3/14 C03C3/12 C09D11/00 C09D11/00 C09K11/02 G06K19/14 G06K5/00 G06K7/12 G07D7/12

CPC: C09D11/037 C09D11/16 C09D17/004 Y10T428/24802 C03C3/095 C03C3/091 C03C12/00 C09D11/03 G06K9/00577 G06K9/2018 G07C9/00007 C09K11/02 C09K11/7728 C09K11/7743

European class: C03C12/00 C03C3/091 C03C3/095 C09D11/03 C09D11/037 C09D11/16 C09D17/00J G06K9/00R G06K9/20C G07C9/00B

US class: 106/31.64 106/31.640S 194/207 222/631 250/271 250/271P 250/302 250/458.1 250/458.100S 250/459.1 250/461.1 250/483.1 250/484.4 250/486.1 250/492.1 250/556 250/556P 250/559.39 250/559.44 252/301.16 252/301.160P 252/301.34 252/301.35 252/301.350S 252/301.36 252/301.360S 252/301.40F 252/301.40FS 252/301.40R 252/301.40RS 252/301.4F 252/301.4R 283/72 283/74 283/87 283/92 356/71 427/157 427/157S 428/195.1 428/690 501/41 501/41P 65/17.1 65/17.100S 65/390 65/390P

Classification Explorer

Cited documents: WO9710307 A1, WO03105075 A1, WO0027645 A1, US7488954 BB, US7441704 BB, US7378675 BB, US7273328 BB, US7184073 BB, US7147153 BB, US7079230 BA, US6966998 BA, US6899827 BB, US6898299 BA, US6832139 BB, US6777948 BB, US6678577 BA, US6613137 BB, US6613137 BA, US6576155 BA, US6564687 BB, US6510237 BA, US6506476 BA, US6503603 BA, US6479133 BA, US6383618 BA, US6356196 BA, US6344261 BA, US6303929 BA, US6297508 BA, US6266211 BA, US6264107 BA, US6211526 BA, US6203725 BA, US6200628 BA, US6177029 BA, US6165592 A, US5895073 A, US5885483 A, US5837042 A, US5819124 A, US5786219 A, US5622236 A, US5605650 A, US5586787 A, US5502915 A, US5318722 A, US5213711 A, US5209513 A, US5111401 A, US5041722 A, US4867076 A, US4736425 A, US4707297 A, US4451521 A, US4215033 A, US4198307 A, US4197104 A, US4047033 A, US4013490 A, US4003445 A, US3970840 A, US3969709 A, US3816328 A, US3772099 A, US3743027 A, US3666946 A, US3652623 A, US3650400 A, US3582623 A, US3577711 A, US3522191 A, US3518205 A, US3473027 A, US3412245 A, US3105954 A, US2008116272 AA, US2007251996 AA, US2006086901 AA, US2005178841 AA, US2005173527 AA, US2005099475 AA, US2005067489 AA, US2004227112 AA, US2004171076 AA, US2004125988 AA, US2004084120 AA, US2004031931 AA, US2003163942 AA, US2003143426 AA, US2003081203 AA, US2003080193 AA, US2002124772 AA, US2002090112 AA, US2002055555 AA, US2001050753 AA, JP49099610 A2, JP49099609 A2, JP2001206959, JP20012006959, JP1182738 A2, GB2258659 A1, FR2556867 A1, EP1158459 A1, EP1117060 A1, EP1116775 A1, EP1116755 A1, EP0700980 A1,

Forward Citations: WO17002475, WO16030340, WO15185536, WO14138530, WO14138530, WO13144215, WO13095999, WO12049666, WO11098804, WO11084724, WO11084724, WO09149391, WO09093057, WO09081340, WO09081340, WO08137813, WO08113963, WO08113962, WO07071893, WO07068886, WO07002873, US9684006, US9651496, US9646206, US9600951, US9595024, US9582714, US9546966, US9488580, US9476826, US9443298, US9443181, US9406212, US9381545, US9361561, US9350552, US9280696, US9262902, US9256809, US9250183, US9244017, US9189949, US9165418, US9152862, US9143843, US9110434, US9097668, US9080987, US9073091, US9058543, US9053364, US9030832, US9028929, US9011607, US8945239, US8932061, US8927892, US8833691, US8822954, US8796030, US8774455, US8678290, US8673107, US8622242, US8619245, US8596526, US8579188, US8534543, US8517274, US8506844, US8497924, US8496185, US8493479, US8481976, US8458475, US8338800, US8330122, US8328102, US8267311, US8253115, US8247018, US8208681, US8207511, US8165716, US8137811, US8067142, US8034398, US7970328, US7963563, US7938984, US7901593, US7885429, US7874489, US7829162, US7796242, US7699230, US7607584, US7550745, US7517564, US7462840, US7441704, US7438378, US2016371704, US2015285601, US2015254919, US2015254533, US2015028219, US2014352818, US2014231511, US2013320237, US2013193249, US2013189455, US2013153789, US2013053098, US2012274819, US2012274789, US2012153184,

US2011304131, US2011253744, US2011210291, US2011210173, US2011147450, US2010102250, US2010063208, US2010025040, US2010006637, US2009327715, US2009302237, US2009224048, US2009179073, US2009177315, US2009162555, US2009161918, US2009141961, US2009137445, US2009130396, US2009130302, US2009129832, US2009101837, US2009084981, US2009029763, US2009011390, US2008274028, US2008217578, US2008206486, US2008128496, US2008103809, US2008087189, US2007286460, US2007251996, US2007187630, US2007160814, US2007147612, US2007145293, US2007132984, US2007108392, US2007012784, US2007012783, US2006144266, US2006118738, US2006044341, JP5622087, JP2012035549, GB2477741, GB2448604, GB2448604, EP2990390, EP2580689, EP2539850, EP2539850, EP2373485, EP1926063, EP1898365, EP1812884, EP1812884, EP1780041, CN104159995, CN104159995, CN102849955, CN102763141, CN102763141, CN102197262,

Abstract:
Source: US2004262547A An optically detectable security marker for emitting light at a pre−selected wavelength. The marker comprises a rare earth dopant and a carrier incorporating the rare earth dopant. The interaction of the carrier and the dopant is such that the fluorescent fingerprint of the marker is different from that of the rare earth dopant. The marker may be incorporated into a plurality of items, such as fluids, for example paint, fuel or ink, and laminar products such as paper or banknotes or credit cards.

0) US2006212372A – SYSTEM AND METHOD FOR PROCESSING UNITS OF VALUE...

134) Family number: 31480163 (US2006212372A) © PatBase

Title: SYSTEM AND METHOD FOR PROCESSING UNITS OF VALUE

Priority: DE20031029321 20030630 WO2004EP07001 20040628

Family:

Publication number	Publication date	Application number	Application date
BRPI0412181 A	20060822	BR2004PI12181	20040628
CN1839414 A	20060927	CN200480023955	20040628
DE10329321 A1	20050120	DE20031029321	20030630
DE112004001110 D2	20060608	DE200411001110	20040628
ES2285926 AA	20071116	ES20050050087	20040628
IN02680KN2005 A	20061027	IN2005KN02680	20051222
IN235903 B	20090904	IN2005KN02680	20051222
US2006212372 AA	20060921	US20060562861	20060411
US7487909 BB	20090210	US20060562861	20060411
WO05001779 A1	20050106	WO2004EP07001	20040628

Probable Assignee: GIESECKE AND DEVRLENT GMBH

Assignee(s):(std): EBERHARD JENS ; EBERHARDT JENS ; FIEDLER WERNER ; GEBLER HERMANN ; GESSLER HERMANN ; GIESECKE AND DEVRIENT GMBH ; KOCHBECK HEINZ ; NATTMANN HENNING ; SCHWARTZ UDO ; MARTIN THORBJOERNSON ; THORBJORNSON MARTIN ; GIESECKE AND DEVRLENT GMBH

Assignee(s): GIESECKE ANDDEVRIENT GMBH

Inventor(s):(std): GEBETALER HERMANN ; GEBLER HERMANN ; GESLER HERMANN ; GESSLER HERMANN ; HEINZ KOCHBECK ; HENNING NATTMANN ; HERMANN GESSLER ; JENS EBERHARDT ; KOCHBECK HEINZ ; MARTIN THORBJ RNSON ; MARTIN THORBJOERNSON ; EBERHARD JENS ; EBERHARDT JENS ; EBERHARDT JENS FIEDLER WERNER ; NATTMANN HENNING ; SCHWARTZ UDO ; THORBJOERNSON MARTIN ; THORBJORNSON MARTIN ; UDO SCHWARTZ ; WERNER FIEDLER ; FIEDLER WERNER

Inventor(s): GE BETA LER HERMANN ; EBERHARDT JENS FIEDLER WERNER GESSLER HERMANN ; EBERHARDT JENS FIEDLER WERNER GESSLER HERMANN KOCH ; EBERHARDT JENS FIEDLER WERNER GESSLER HERMANN KOCHBECK HEINZ NATTMANN HENNING SCHWARTZ UDO MARTIN THORBJOERNSON ; MARTIN THORBJORNSON

Agent(s): BACON AND THOMAS PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G06Q20/04 G06Q40/00 G07D11/00 G07D7/00 G07F19/00 G07F7/00 G07F7/04 (Advanced/Invention)

International class (IPC 1–7): G06F7/00 G07D11/00 G07D7/00 G07F7/00

CPC: G07D7/00 G07F7/04 G07D7/0047 G06Q40/00 G06Q20/042 G07D11/0081

European class: G06Q20/042 G06Q40/00 G07D11/00H G07D7/00 G07D7/00B8 G07D7/00D4 G07F7/04

US class: 235/375 235/379 235/487 705/35 705/35P 705/45

Classification Explorer

Cited documents: WOEP07001, WO9927488 A1, WO05001779 A1, WO03029913 A2, US7103438 BB, US6241069 BA, US6129273 A, US6012565 A, US5966456 A, US5937396 A, US5912982 A, US5905810 A, US5870487 A, US5247159 A, US4991008 A, US2006120560 AA, US2004225407 AA, US2003015395 AA, US2002063035 AA, US2002020603 AA,

EP0690423 A2, DE10049435 A1, DE10002641 A1,

Forward Citations: WO09130093, WO08125722, US9311671, US8181854, US7677443, US7487909, US2015052057, US2011162939, US2011042178, US2010131407, US2008197972, US2008135608, EP2711185, EP2341485, EP2341485, DE102012025084, CN104335256, CN104335256, CN103843039, CN103843039, CN103282947, CN103282947, CN102016934,

Abstract:
Source: US2006212372A The invention relates to a system and method for processing value units, such as bank notes, coins or checks. A system and method for processing deposits of value units are provided by which bank notes of the deposit are checked successively in two bank note processing machines, and the data of both the first and second checking operations are supplied to an evaluation device in order to perform an evaluation of the deposit on the basis of both the first and second checking operations. This two−stage processing provides the possibility of carrying out the processing of deposits in cash centers considerably more efficiently than with hitherto used methods.

0) FR2868582B – DETECTEUR D'ENCRE INVISIBLE PORTATIF

135) Family number: 32290448 (FR2868582B) © PatBase

Title: DETECTEUR D'ENCRE INVISIBLE PORTATIF

Priority: TW19930204799 20040330 TW20040204799U 20040330

Family:

Publication number	Publication date	Application number	Application date
DE202005000062 U1	20050317	DE200520000062U	20050104
FR2868582 A3	20051007	FR20050001088	20050203
FR2868582 B3	20060310	FR20050001088	20050203
TWM259264 Y	20050311	TW20040204799U	20040330

Probable Assignee: BILLGATE TECHNOLOGY CORP

Assignee(s):(std)**:** BILLGATE TECHNOLOGY CORP ; HSI SHIH JOU

Assignee(s): SIGNTECH CO LTD

Inventor(s):(std)**:** HSI SHIH JOU ; HSIA ELAN

International class (IPC 8–9)**:** G07D7/00 G07D7/12 (Advanced/Invention); G07D7/00 (Core/Invention)

International class (IPC 1–7)**:** G07D7/12

CPC: G07D7/128

European class: G07D7/00V G07D7/12V

Classification Explorer

Forward Citations: WO17013642,

Abstract:
Source: FR2868582B The detector has a longitudinal rod shaped housing (10) incorporating a power supply and control circuitry. A push button for controlling coupling of the control circuitry, an alarm device and a recognition button with a seat for IR emitter and IR receiver, are also provided. The IR beam sent and reflected from the document when the recognition button comes near or in contact with the document. The alarm device is disconnected when the IR receiver doesn't receive any reflected beam or when no invisible ink is detected on the surface of the document. The device sounds an acoustic signal when the invisible ink is detected. The detector has a clip (13) on outside of the ballpoint pen shaped housing (10) to enable attachment to a pocket of clothing.

136) Family number: 31933671 (US2005121527A) © PatBase

Title: IDENTIFICATION FUNCTION PAPER AND IDENTIFICATION CARD

Priority: JP20030389766 20031119 JP20040262567 20040909

Family:

Publication number	Publication date	Application number	Application date
EP1533134 A2	20050525	EP20040027013	20041112
EP1533134 A3	20050817	EP20040027013	20041112
JP2005171473 A2	20050630	JP20040262567	20040909
JP4641163 B2	20110302	JP20040262567	20040909
US2005121527 AA	20050609	US20040989508	20041117
US7322522 BB	20080129	US20040989508	20041117

Probable Assignee: EHIME PREFECTURAL GOVERNMENT

Assignee(s):(std)**:** EHIME PREFECTURAL GOVERNMENT ; EHIME PREFECTURE ; LINTEC CORP

Inventor(s):(std)**:** FUJIWARA KATSUHISA ; MATSUSHITA TAIGA ; MORIKAWA MASAAKI ; NAGASHIMA KOSAKU ; NAGASHIMA KOUSAKU ; SENBA TATSUO ; YAMAMOTO SATOSHI

Agent(s): BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

International class (IPC 8–9): B42D15/00 B42D15/10 D21H15/12 D21H21/48 G06K19/10 G06K7/08 G07D7/04 (Advanced/Invention) ; B42D15/00 B42D15/10 D21H15/00 D21H21/40 G06K19/10 G06K7/08 G07D7/00 (Core/Invention)

International class (IPC 1–7): B42D15/00 B42D15/10 D21H15/12 D21H21/48 D21H27/00 G06K19/06 G06K19/10 G06K7/08 G07D7/04

CPC: B42D25/00 B42D25/369 B42D25/355 D21H15/12 D21H21/48 B42D2033/16

European class: B42D15/10 D21H21/48 L42D33/16 N21H15/12

US class: 235/439 235/449 235/493

Classification Explorer

Cited documents: US6987868 BA, US6902116 BB, US6673465 BB, US6622913 BA, US6328342 BA, US6053406 A, US5975420 A, US5959289 A, US5949050 A, US5844230 A, US5830548 A, US5756220 A, US5717381 A, US5698839 A, US5143583 A, US5013900 A, US4671839 A, US4510020 A, US4114032 A, US2007080533 AA, US2005180020 AA, US2003194578 AA, JPS556577, JP6093564 A2, JP6028707 A2, JP55006577 A2, JP4012738 B4,

Forward Citations: JP2009064273, JP2008303508, JP2008196096, JP2008115485, JP2007303034, JP2007169842, JP2007015874,

Abstract:
Source: US2005121527A The present invention provides identification functional paper which allows secure measurement of a change in signal caused by a magnetic material and excels in waveform reproducibility when measuring a single specimen two or more times, and an identification card including the identification functional paper. The identification functional paper includes a magnetized fiber obtained by filling the fiber inner cavity with a magnetic material, and the identification card includes the identification functional paper.

137) Family number: 31970128 (US2005180020A) © PatBase

Title: MICRO–OPTIC SECURITY AND IMAGE PRESENTATION SYSTEM

Priority:

AU20040294182	20041122	AU20060246716	20060518	AU20100226869	20100930
AU20070272705	20070628	AU20130204869	20130412	AU20130204845	20130412
EP20040081194	20041122	CA20042546930	20041122	AU20130204903	20130412
AU20130204884	20130412	CA20042812971	20041122	CA20132546930	20130501
AU20150207918	20150730	CA20162546930	20160817	US20030524281	20031121
US20030524281P	20031121	US20040538392P	20040122	EP20040811944	20041122
EP20060784452	20060518	JP20060541650	20041122	EP20070840314	20070628
IN2006DN02894	20060522	IN2006DN02894	20060522	RU20060121097	20060616
EP20070072406	20070628	EP20110000713	20041122	EP20110003627	20060518
EP20110003630	20060518	RU20100142168	20101015	RU20100142167	20041122
US20040627234P	20041112	WO2004US39315	20041122	US20070770592	20070628
US20070771623	20070629	US20050682231	20050518	US20070932642	20071031
US20070932468	20071031	US20070932716	20071031	US20070932515	20071031
WO2007US72406	20070628	US20050682231P	20050518	US20050683037P	20050520
US20060438081	20060518	US20040995859	20041122	WO2006US19810	20060518
US20060817297P	20060628	US20080341702	20081222	US20100820320	20100622
US20090233264P	20090812	US20100855309	20100812	US20110045854	20110311
WO2010US45318	20100812	WO2011US41348	20110622	US20050683037	20050520

Family:

Publication number	Publication date	Application number	Application date
AU2004294182 AA	20050609	AU20040294182	20041122
AU2004294182 BB	20100701	AU20040294182	20041122
AU2004294182 CA	20140116	AU20040294182	20041122
AU2006246716 AA	20061123	AU20060246716	20060518
AU2006246716 BB	20111103	AU20060246716	20060518
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AU2010226869 AA	20101021	AU20100226869	20100930
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AU2010282484 AA	20110217	AU20100282484	20100812
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AU2013204903 AA	20130516	AU20130204903	20130412
AU2015207918 AA	20150820	AU20150207918	20150730
BR112012003071 A2	20160816	BR20121103071	20100812
BR112012033221 A2	20161116	BR20121133221	20110622
BRPI0610706 A2	20100720	BR2006PI10706	20060518
CA2546930 AA	20060523	CA20042546930	20041122
CA2608754 AA	20071116	CA20062608754	20060518
CA2656528 AA	20081224	CA20072656528	20070628
CA2656528 C	20150414	CA20072656528	20070628
CA2769301 AA	20120125	CA20102769301	20100812

CA2803857 AA	20121221	CA20112803857	20110622	
CA2812971 AA	20050609	CA20042812971	20041122	
CA2938784 AA	20050609	CA20042938784	20041122	
CL2007003350 A1	20090703	CL20070003350	20071123	
CN101379423 A	20090304	CN200680026431	20060518	
CN101379423 B	20160406	CN200680026431	20060518	
CN101563640 A	20091021	CN200780031597	20070628	
CN101563640 B	20111214	CN200780031597	20070628	
CN102497994 A	20120613	CN201080035671	20100812	
CN102497994 B	20151125	CN201080035671	20100812	
CN103097919 A	20130508	CN201180040538	20110622	
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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61B1/00 B23P11/00 B32B3/30 B32B7/06 B41M3/14 B42D B42D15/00 B42D15/10 B42D25/00 B42D25/20 B42D25/29 B42D25/30 B42D25/324 B42D25/328 B42D25/342 B42D25/355 B42D25/36 B42D25/40 B42D25/41 B42D25/425 B42D25/43 B42D25/45 B44F1/04 B44F1/06 B44F1/10 B44F1/12 B44F7/00 D21C9/10 D21H21/42 D21H21/44 G01B15/02 G01N23/02 G01N23/06 G02B G02B13/18 G02B27/00 G02B27/02 G02B27/06 G02B27/08 G02B27/10 G02B27/12 G02B27/14 G02B27/22 G02B3/00 G02B3/02 G02B3/04 G02B3/10 G02B5/08 G02B5/12 G02B5/18 G03H1/00 G03H1/02 G06K9/18 G07D7/12 G42D15/10 (Advanced/Invention); D21H21/44 G03H1/00 (Advanced/Non–invention); A61B1/00 B41M3/14 B42D15/00 B42D15/10 D21C9/10 G01B15/00 G02B1/00 G02B13/00

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A61B B42D G01B G01N G02B G03H G06K (Subclass/Invention)

International class (IPC 1–7): A61B1/00 G01B15/02 G02B0/00 G02B1/00 G02B13/18 G02B27/10

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European class: B42D15/00C B42D15/00C2 B42D15/00C4 B42D15/10 B44F1/06 B44F1/10 B44F7/00 D21H21/40 G02B27/06 G02B27/12L G02B27/22L G02B3/00A1R G02B3/00A3I G02B3/00A3S G02B3/00A3Z1 G02B3/00A5 G09F3/03B L42D33/24 L42D35/08 L42D35/20 L42D35/28 L42D35/44 N21H21/44 S02B27/22L S02B3/00A3S S03H1/02L5 S03H223/19

US class: 156/344 156/711 156/711S 156/712 156/712S 283/109 283/109P 283/72 283/72P 283/72S 29/428 29/428P 359/618 359/619 359/619P 359/619S 359/622 359/622P 359/622S 359/626 359/626P 359/626S 359/627 359/627S

Classification Explorer

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Abstract:
Source: US2005180020A A film material utilizing a regular two−dimensional array of non−cylindrical lenses to enlarge micro−images, called icons, to form a synthetically magnified image through the united performance of a multiplicity of individual lens/icon image systems. The synthetic magnification micro−optic system includes one or more optical spacers (5), a micro−image formed of a periodic planar array of a plurality of image icons (4) having an axis of symmetry about at least one of its planar axes and positioned on or next to the optical spacer (5), and a periodic planar array of image icon focusing elements (1) having an axis of symmetry about at least one of its planar axes, the axis of symmetry being the same planar axis as that of the micro−image planar array (4). A number of distinctive visual effects, such as three−dimensional and motion effects, can be provided by the present system.

138) Family number: 32030493 (US2005141256A) © PatBase

Title: PAPER MONEY, COIN, VALUABLE INSTRUMENT, CERTIFICATES, TAG, LABEL, CARD, PACKING CONTAINERS, DOCUMENTS, RESPECTIVELY INSTALLED WITH INTEGRATED CIRCUIT

Priority: JP20030433448 20031226 JP20040364434 20041216 US20040017791 20041222 US20110164797 20110621

Family:

Publication number	Publication date	Application number	Application date
JP2005209167 A2	20050804	JP20040364434	20041216
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US2011248089 AA	20111013	US20110164797	20110621
US7975926 BB	20110712	US20040017791	20041222
US8297518 BB	20121030	US20110164797	20110621

Probable Assignee: SEMICONDUCTOR ENERGY LAB

Assignee(s):(std)**:** ARAI YASUYUKI ; KANNO YOHEI ; SEMICONDUCTOR ENERGY LAB ; YAMAZAKI SHUNPEI

Assignee(s): SEMICONDUCTOR ENERGY LAB CO LTD ; SEMICONDUCTOR ENERGY LABORATORY CO ; SEMICONDUCTOR ENERGY LABORATORY CO LTD

Inventor(s):(std)**:** ARAI YASUYUKI ; JINNO YOHEI ; KANNO YOHEI ; YAMAZAKI SHUNPEI

Agent(s): ERIC ROBINSON; ERIC J; ROBINSON INTELLECTUAL PROPERTY LAW OFFICE PC

International class (IPC 8–9)**:** B42D15/10 G06F12/14 G06F21/02 G06K17/00 G06K19/00 G06K19/073 G06K19/077 G07D9/00 G07F7/10 G11C17/00 (Advanced/Invention); B42D15/10 G06F12/14 G06F21/00 G06K17/00 G06K19/00 G06K19/073 G06K19/077 G07D9/00 G07F7/10 G11C17/00 (Core/Invention)

International class (IPC 1–7)**:** B42D15/10 G06F12/14 G06K17/00 G06K19/00 G06K19/073 G07D9/00 G11C17/00

CPC: G06K19/07309 G06K19/07749 G06Q20/346 G07F7/1008

European class: G06K19/073A G06K19/077T G06Q20/346 G07F7/10D

US class: 235/492 235/492P 365/96 365/96P

Classification Explorer

Cited documents: US7647505 BB, US7566001 BB, US7518692 BB, US7271076 BB, US7271076 B1, US7240846 BB, US7230316 BB, US7230316 B1, US6819986 BB, US6819986 B1, US6814832 BB, US6811089 BB, US6811089 B1, US6772955 BB, US6772955 B1, US6694436 BA, US6488204 BA, US6317721 BA, US5286962 A, US5126541 A, US2004129450 AA, US2004035930 AA, US2003024635 AA, JP2004100166 A2, JP2003263623 A2, JP2003110458 A2,

Forward Citations: WO13090292, WO12164181, USD703208, USD702694, USD702240, USD701864, USD692005, USD691610, US9602165, US9508033, US9507975, US9407307, US9356656, US9344156, US9136585, US8950681, US8936199, US8649820, US8648439, US8432018, US8305213, US8278663, US8136735, US8039353, US7946497, US7879654, US7851886, US7806332, US7667310, US7577596, US2013140368, US2011101366, US2010126681, US2008234853, US2008149731, US2008103890, US2008012126, US2007296037, US2007159353, US2007029392, US2006175420, TWI407508, JP5864698, JP5165261, JP2015019431, JP2012024034, JP2008225667, JP2007512604, JP2007172814, JP2007112609, JP2007066301, FR2976105, EP2532098, CN102467720, CN102295132,

Abstract:
Source: US2005141256A Although a product having such the IC chip has been diffused, information on the product may be capable of being perceived, abstracted, falsified, or the like by a third person with his external device during distribution of the product or after purchase of the product. Further, privacy may be seriously infringed. Paper money, various products, and the like are disclosed according to the present invention with an integrated circuit device having a switching memory for controlling reading and writing of information (lock/unlock

of information) in order to protect the information recorded and stored in the integrated circuit such as an IC chip installed to the product or the like.

0) US2007152034A – SYSTEM CONSISTING OF BANK NOTE PROCESSING MACHI...

139) Family number: 32068712 (US2007152034A) © PatBase

Title: SYSTEM CONSISTING OF BANK NOTE PROCESSING MACHINES, BANK NOTE PROCESSING MACHINE AND ASSOCIATED OPERATING METHOD

Priority: DE20031060861 20031223 WO2004EP14508 20041220

Family:

Publication number	Publication date	Application number	Application date
AT394760 E	20080515	AT20040820829T	20041220
CN1922636 A	20070228	CN200480042056	20041220
CN1922636 B	20101215	CN200480042056	20041220
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DE502004007092 D1	20080619	DE200450007092T	20041220
EP1700277 A1	20060913	EP20040820829	20041220
EP1700277 B1	20080507	EP20040820829	20041220
IN01728KN2006 A	20070511	IN2006KN01728	20060621
IN245292 B	20110114	IN2006KN01728	20060621
RU2006126777 A	20080127	RU20060126777	20041220
RU2381561 C2	20100210	RU20060126777	20041220
US2007152034 AA	20070705	US20040584051	20041220
US8251196 BB	20120828	US20040584051	20041220
WO05064550 A1	20050714	WO2004EP14508	20041220

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** DIETZ JUERGEN ; DIETZ JURGEN ; GIESECKE AND DEVRIENT GMBH ; MAETZIG CHRISTOPH ; MATZIG CHRISTOPH

Assignee(s): GIZEKE U DEVRIENT GMBKH ; GIZEKE UND DEVRIENT GMBKH

Inventor(s):(std)**:** CHRISTOPH DIETZ JUERGEN MAETZI ; CHRISTOPH MAETZIG ; DIETZ JUERGEN ; DIETZ JURGEN ; DITTS JURGEN ; JUERGEN DIETZ ; MAETZIG CHRISTOPH ; MATZIG CHRISTOPH ; MEHTTSIG KRISTOF

Inventor(s): DIETZ JUERGEN MAETZIG CHRISTOPH

Agent(s): BACON AND THOMAS PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G06F17/00 G07D11/00 G07D13/00 G07D7/00 G07F19/00 G07F7/04 (Advanced/Invention); G07D11/00 G07D13/00 G07D7/00 G07F19/00 (Core/Invention)

International class (IPC 1–7): G06F17/60 G07D11/00 G07D13/00 G07D7/00 G07F19/00

CPC: G07D7/00 G07D11/00 G07F19/20 G07F19/211

European class: G07D11/00 G07D7/00 G07F19/00F G07F19/20 G07F19/211

US class: 194/206 235/379 235/379P

Classification Explorer

Cited documents: WO9923601 A1, WO9905688, WO0118754 A1, WO0005688 A1, US7404515 BA, US7395241 BA, US7092907 BB, US6640156 BA, US6508398 BA, US6430470 BA, US6363164 BA, US6026175 A, US5984178 A, US5847658 A, US5311562 A, US2008243915 AA, US2008220707 AA, US2008027659 AA, US2004164141 AA, US2003023325 AA, US2002091972 AA, US2002046061 AA, US2002035541 AA, US2001051884 AA, JP2003303367 A2, JP2001093025 A2, FR2841024 A1, EP1396821 A1, DE10107344 A1,

Forward Citations: WO13091861, WO08139209, WO08139209, WO07110276, US9613481, US9514011, US9443140, US9183690, US8857597, US8651378, US8177126, US2016350994, US2016132405, US2015262381, US2015098642, US2015052057, US2014325044, US2014208157, US2014027241, US2013317960, US2012267433, US2011196785, US2007208688, RU2608357, EP2633478, EP1898373, EP1746545, DE102011122247, DE102010049830, DE102010046664, DE102008023244, DE102007062117, CN104137159, CN104065739, CN103765484, CN103460260, CN103460260, CN103221980, CN103221980, CN102754134, CN102754134,

Abstract:
Source: US2007152034A A system of banknote processing machines, a banknote processing machine and a method for operating same are provided wherein data necessary for operation of the banknote processing machines are exchanged between the banknote processing machines and a service center.

0) US2007216975A – SECURITY DEVICE

140) Family number: 30390390 (US2007216975A) © PatBase

Title: SECURITY DEVICE

Priority: GB20040000681 20040113 WO2005GB00101 20050113

Family:

Publication number	Publication date	Application number	Application date
AU2005204754 AA	20050728	AU20050204754	20050113
AU2005204754 BB	20100211	AU20050204754	20050113
CA2553204 AA	20060711	CA20052553204	20050113
CN1910523 A	20070207	CN200580002351	20050113
CN1910523 B	20111207	CN200580002351	20050113
EA009686 B1	20080228	EA20060001314	20050113
EA200601314 A1	20070629	EA20060001314	20050113
EP1704447 A1	20060927	EP20050701869	20050113
GB200400681 A0	20040218	GB20040000681	20040113
UA88157 C2	20090925	UA20060008994	20050113
US2007216975 AA	20070920	US20050585189	20050113
US7839546 BB	20101123	US20050585189	20050113
WO05069085 A1	20050728	WO2005GB00101	20050113

Probable Assignee: DE LA RUE INT LTD

Assignee(s):(std)**:** HOLMES BRIAN W ; HOLMES BRIAN WILLIAM ; RUE DE INT LTD

Assignee(s): DE LA RUE INT ; DE LA RUE INT LTD ; DE LA RUE INTERNATIONAL LIMITED ; LA RUE INT DE LTD ; LA RUE INTERNATIONAL DE LIMITED

Inventor(s):(std)**:** HOLMES BRIAN W ; HOLMES BRIAN WILLIAM ; WILLIAM HOLMES BRIAN

Inventor(s): BRIAN WILLIAM HOLMES ; HOLMES BRIAN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; BORDEN LADNER GERVAIS LLP; OLIFF AND BERRIDGE PLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B42D15/00 B42D15/10 G03H1/00 G03H1/02 G03H1/04 G03H1/22 G07D7/12 (Advanced/Invention) ; B42D15/00 B42D15/10 G03H1/02 G03H1/04 G07D7/00 (Core/Invention)

International class (IPC 1–7): G03H1/04

CPC: G03H1/2249 G03H2210/20 G03H1/041 G03H1/0011 G03H1/0244 G03H1/0486 G03H2001/2236 G03H2001/2268 G03H2210/33 B42D25/328

European class: B42D15/10D G03H1/04A4 S03H1/00A1 S03H1/02H1 S03H1/04Q S03H1/22A3 S03H1/22H2R S03H210/33

US class: 283/86 359/2 359/2P 359/32 359/33

Classification Explorer

Cited documents: WO0073991 A1, US6765704 BB, US6369919 BA, US5694229 A, US5447335 A, US4568141 A, US2004121241 AA, US2003151786 AA,

Forward Citations: WO16074043, WO11138616, US9594345, US9523919, US9415539, US9092912, US8743459, US8665319, US8526085, US2013301092, US2012019625, US2011242280, US2009153967, JP2013532300, CN102933400, CN102933400, AU2014101368,

Abstract:
Source: US2007216975A A security device comprising a surface relief microstructure which, in response to incident radiation, replays a hologram viewable within a viewing zone, the hologram comprising at least a first, holographic image element in an image plane spaced from the surface of the microstructure. The device exhibits at least one further image in a plane spaced from said image plane of the first holographic element. The spacing between the first holographic element image plane and the plane of the further image is such that, on tilting the device, the first holographic image element exhibits apparent movement relative to the further image, the rate of movement being at least 6mm per radian of tilt, wherein, when expressed in radions, said rate of parallexe movement per radion equals the spacing between said phones and the product of the rate of movement and the included angle of the viewing zone defining a distance at least 20 percent of the dimension of the device in the direction of movement of the first holographic image element.

141) Family number: 31342808 (US2007192850A) © PatBase

Title: AUTHENTICITY VERIFICATION METHODS, PRODUCTS AND APPARATUSES

Priority:

EP20050717968	20050309	EP20050717984	20050309	EP20090158523	20050309
GB20040002524	20040915	GB20040018138	20040813	GB20040005641	20040312
GB20040020524	20040915	JP20070502400	20050309	JP20070502393	20050309
US20040601464P	20040813	US20050592554	20050309	US20050592593	20050309
US20040601463P	20040813	US20040610075P	20040915	US20060592554	20060912
US20100951884	20101122	US20100951889	20101122	US20100951879	20101122
US20070592593	20070815	RU20060136023	20061011	JP20110231713	20050309
WO2005GB00903	20050309	WO2005GB00922	20050309	US20100951898	20101122
WO2006GB00922	20060912	US20120368236	20120207	US20130945546	20130718
US20140188156	20140224				

Family:

Publication number	Publication date	Application number	Application date
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AR048090 AA	20060329	AR2005P100933	20050311
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AU2005220383 BB	20100506	AU20050220383	20050309
AU2005220385 AA	20050922	AU20050220385	20050309
AU2005220385 BB	20100715	AU20050220385	20050309
BRPI0508631 A	20070807	BR2005PI08631	20050309
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CA2559283 AA	20060911	CA20052559283	20050309
CA2559283 C	20140826	CA20052559283	20050309
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EP2081130 B1	20130724	EP20090158523	20050309
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EP2131310 A2	20091209	EP20090170993	20050309
EP2131310 A3	20110126	EP20090170993	20050309

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EP2131315 A3	20110126	EP20090170975	20050309	
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GB2411954 B2	20060809	GB20040005641	20040312	
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JP5654541 B2	20150114	JP20120230567	20121018	
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KR20070024511 A	20070302	KR20067021216	20050309	
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RU2006136023 A	20080420	RU20060136023	20050309	
RU2006136024 A	20080420	RU20060136024	20050309	
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US2011108618 AA	20110512	US20100951898	20101122	
US2011109428 AA	20110512	US20100951879	20101122	
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US2011109430 AA	20110512	US20100951889	20101122	
US2012170069 AA	20120705	US20120368236	20120207	
US2013301035 AA	20131114	US20130945546	20130718	
US2014168690 AA	20140619	US20140188156	20140224	
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US8421625 BB	20130416	US20100951884	20101122	
US8502668 BB	20130806	US20100951889	20101122	
US8699088 BB	20140415	US20120368236	20120207	
US8749386 BB	20140610	US20100951879	20101122	
US8757493 BB	20140624	US20100951898	20101122	
US8766800 BB	20140701	US20130945546	20130718	
US8896885 BB	20141125	US20050592593	20050309	
US9019567 BB	20150428	US20140188156	20140224	
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WO05088533 A1	20050922	WO2005GB00922	20050309	
ZA200607598 A	20100331	ZA20060007598	20060911	
ZA200607599 A	20100331	ZA20060007599	20060911	

Probable Assignee: INGENIA HOLDINGS LIMITED

Assignee(s):(std)**:** INGENIA HOLDINGS LTD ; INGENIA TECHNOLOGY LTD ; INGENIA TECHNOLOGY LIMITED ; INGENIA TECHNOLOGY LTD GB ; COWBURN RUSSELL PAUL ; ENGINEER TECHNOLOGY UK LTD ; INDZHENIA TEKNOLODZHI LTD

Assignee(s): INGENIA HOLDINGS LIMITED ; INDZHENIA TEKNOLODZHI LIMITED ; INGENIA HOLDINGS LTDSUITE 6MILL MALLWICKHAMS CAY 1PO BOX 3085TORTOLA ROAD TOWNVG ; INGENIA TECHNOLOGY LTDNEW GARDEN HOUSE78 HATTON GARDENEC1N 8JALONDONGB ; INGENIA HOLDINGS LTD ROAD TOWN

Inventor(s):(std)**:** COWBURN RUSSELL ; COWBURN RUSSELL PAUL ; RUSSELL PAUL COWBURN ; KAUBERN RASSELL POL ; PAUL COWBURN RUSSELL ; COWBURN RUSSELL P

Inventor(s): RUSSELL P COWBURN ; COWBURN RUSSELL PAUL LONDON ; COWBURN RUSSELL PAUL C O DEPARTMENT OF PHYSICS ; COWBURN RUSSELL PAULGB

Agent(s): SHELSTON IP PTY LTD; SHELSTON IP; RIDOUT AND MAYBEE LLP; D YOUNG AND CO LLP; MELDRUM DAVID JAMES ET AL; MELDRUM DAVID JAMES; SANFORD TCOLB AND CO; PATRICK MIRANDAH CO S PTE LTD; MCDONNELL BOEHNEN HULBERT AND BERGHOFF LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B41J27/00 B41J29/00 B41J29/38 B41J3/01 B41J3/44 B41M3/14 B42D15/00 B42D15/10 G01B11/30 G01N21/47 G01N21/84 G02B26/10 G02B5/00 G06F17/00 G06F17/30 G06F3/12 G06F7/04 G06K G06K15/00 G06K15/02 G06K19/06 G06K19/067 G06K19/10 G06K19/14 G06K5/00 G06K7/00 G06K7/10 G06K7/14 G06K9/00 G06K9/20 G06K9/46 G06K9/52 G06K9/60 G06K9/74 G06K9/80 G06K9/82 G06T1/00 G07D7/00 G07D7/12 G07D7/20 G07F7/08 G08B13/14 G09C5/00 H04L9/10 H04L9/32 H04N1/00 H04N1/024 H04N1/04 H04N1/23 H04N1/387 H04N1/44 (Advanced/Invention); B41M3/14 D21H21/48 G06F17/00 G06K19/10 G06K19/14 G06K7/10 G06K7/14 G07D7/00 G07D7/12 G07D7/20 (Advanced/Non–invention); B41J27/00 B41J29/00 B41J3/00 B41J3/44 B41M3/14 B42D15/00 B42D15/10 G06K19/06 G06K19/067 G06K19/14 G06K5/00 G06K7/00 G06K7/10 G06K7/14 G06K9/00 G06K9/52 G06K9/80 G07D7/00 G07F7/08 H04L9/32 H04N1/00 H04N1/04 (Core/Invention); B41M3/14 D21H21/40 (Core/Non–invention);

B41J G06K G07D G07F (Subclass/Invention)

International class (IPC 1–7): G02B26/10 G06F17/10 G06F17/40 G06K19/06 G06K19/067 G06K19/14 G06K5/00 G06K7/10 G06K7/14 G06K9/00 G06K9/60 G06K9/74 G06K9/82 G07D7/20 G07F7/08 H04L9/32

CPC: G01N21/84 G06K9/2036 G06K9/4604 H04N1/0087 H04N1/00278 G06K19/10 G07D7/121 G07D7/0047 G07D7/01 G07D7/202 G07D7/0043 G06K7/14 G06K19/14 G06K7/10762 G06K19/06 G07D7/12 G07D7/2075 B41M3/14 G07D7/2033 G06K9/00577 G06K9/52 G07D7/20

European class: G06K19/06 G06K19/10 G06K19/14 G06K7/10S4M G06K7/14 G06K9/00R G06K9/20E G06K9/46A G06K9/52 G07D7/00B6 G07D7/00B8 G07D7/00D2 G07D7/00D6 G07D7/00H G07D7/12 G07D7/12B G07D7/20 G07D7/20F G07D7/20F2 G07D7/20H L41M3/14

US class: 235/375 235/375P 235/454 235/462.1 235/462.32 235/470 235/494 340/5.8 340/5.800P 340/5.83 340/568.1 340/568.7 340/572.4 347/256 347/256S 356/337 356/445 356/600 356/71 358/1.13 358/1.130P 358/1.14 358/3.28 358/464 358/474 358/496 358/498 358/498P 382/100 382/100S 382/108 382/137 382/190 382/209 382/218 713/176 726/20 726/20P

Classification Explorer

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Abstract:
Source: US2007192850A A method and apparatus for determining a digital signature from an article made of paper, cardboard, plastic or many other material types. A coherent light source directs a beam to illuminate the article and a detector arrangement collects data points from light scattered from many different parts of the article to collect a large number of independent data points, typically 500 or more. By collecting a large number of independent signal contributions specific to many different parts of the article, a digital signature can be computed that is unique to the area of the article that has been scanned. This measurement can be repeated whenever required to test authenticity of the article. Using this method, it has been discovered that it is essentially pointless to go to the effort and expense of making specially prepared tokens, since unique characteristics are measurable a in a straightforward manner from a wide variety of every day articles.

0) US2005203847A – AUTOMATED BANKING MACHINE AND METHOD

142) Family number: 33378673 (US2005203847A) © PatBase

Title: AUTOMATED BANKING MACHINE AND METHOD

Priority: US19960031956P 19961127 US19980091887P 19980707 US19980095626P 19980807 US20050123654 20050506 US19980193638 19981117 WO1997US21422 19971125 US19980098907P 19980902 US19980193624 19981117

Family:

Publication number	Publication date	Application number	Application date
US2005203847 AA	20050915	US20050123654	20050506
US7405724 BB	20080729	US20050123654	20050506

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD INC

Assignee(s): JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** BLACKSON DALE ; CHURCH JAMES ; CICHON BOB ; CICHON BOB A ; DRUMMOND JAY P ; DRUMMOND JAY PAUL ; ESS JOSEPH C ; MOALES MARK A ; SMITH MARK D ; WEIS DAVID W

Inventor(s): WEIS DAVID ; SMITH MARK ; MOALES MARK ; ESS JOSEPH ; DRUMMOND JAY

Agent(s): RALPH E JOCKE WALKER AND JOCKE LPA; WALKER AND JOCKE LPA; JOCKE RALPH E; PARMELEE CHRISTOPHER L; RALPH E; CHRISTOPHER L

International class (IPC 8–9): G06F17/30 G06F3/023 G06F3/033 G06F3/041 G06F3/048 G06F9/44 G06Q20/00 G06Q40/00 G07D11/00 G07F19/00 G09G5/00 H04L29/06 H04L29/08 (Advanced/Invention); H04L29/08 (Advanced/Non–invention); H04L29/08 (Core/Non–invention)

International class (IPC 1–7): G06F17/60

CPC: H04L67/02 H04L67/12 H04L67/2814 H04L67/2823 H04L67/2842 H04L67/34 H04L69/329 H04L69/40 G06F3/023 G06F3/04895 G06F17/30861 G06Q20/00 G06Q20/042 G06Q20/108 G06Q20/1085 G06Q20/18 G06Q20/202 G06Q20/40 G06Q30/06 G06Q40/00 G07F19/20 G07F19/201 G07F19/206 G07F19/211 H04L29/06 H04L63/0853 H04L63/0861 H04L63/12

European class: G06F17/30W G06F3/023 G06F3/023A2 G06F3/0489G G06F9/44W G06Q20/00 G06Q20/042 G06Q20/108 G06Q20/1085 G06Q20/18 G06Q20/202 G06Q20/40 G06Q30/06 G06Q40/00 G07F19/00F G07F19/20 G07F19/201 G07F19/206 G07F19/211 H04L29/06 H04L29/06C6G H04L29/08N1 H04L29/08N11 H04L29/08N27D H04L29/08N27F H04L29/08N33 H04L29/14 H04L63/08E H04L63/08F H04L63/12 T04L29/06C6G T04L29/08A7 T04L29/08N27D T04L29/08N27F T04L29/08N27S

US class: 235/379 345/156 345/157 345/160 345/168 345/173 705/42 705/42S 705/43 705/43P 707/E17.107 707/E17.107S

Classification Explorer

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Abstract:
Source: US2005203847A An automated banking machine (**12**) is operative to conduct transactions in response to HTML documents and TCP/IP messages exchanged with a local computer system (**14**) through an intranet (**16**), as well as in response to messages exchanged with foreign servers (**20, 22, 24, 26, 28, 96**) in a wide area network (**18**). The banking machine includes a computer (**34**) having an HTML document handling portion (**76, 80, 82**). The HTML document handling portion is operative to communicate through a proxy server (**88**), with a home HTTP server (**90**) in the intranet or the foreign servers in the wide area network. The computer further includes a device application portion (**84**) which interfaces with the HTML document handling portion and dispatches

messages to operate devices (**36**) in the automated banking machine. The devices include a sheet dispenser mechanism (**42**) which dispenses currency as well as other transaction devices. The device application portion communicates with a device interfacing software portion (**64**) in the banking machine through a device server (**92**) in the intranet. The device server maintains local control over the devices in the banking machine including the sheet dispenser. The banking machine operates to read indicia on the user's card corresponding to a system address. The computer is operative to connect the banking machine to the home or foreign server corresponding to the system address, which connected server operates the banking machine until the completion of transactions by the user.

143) Family number: 32432261 (US2005258234A) © PatBase

Title: METHOD AND APPARATUS FOR SECURITY DOCUMENT TRACKING

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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WO05111926 A1	20051124	WO2005AU00066	20050124	

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61B5/00 A61J1/00 B41F33/00 B41M3/14 B42D15/10 G02B27/42 G02B5/18 G06F13/12 G06F15/00 G06F17/00 G06F17/30 G06F17/60 G06F19/00 G06F21/00 G06F21/24 G06F3/12 G06F7/04 G06F7/60 G06F9/44 G06F9/45 G06G7/58 G06K15/00 G06K17/00 G06K19/00 G06K19/05 G06K19/06 G06K19/10 G06K5/00 G06K7/00 G06K7/10 G06K7/12 G06K7/14 G06K9/00 G06K9/03 G06K9/22 G06Q10/00 G06Q20/00 G06Q30/00 G06Q40/00 G06Q50/00 G06Q90/00 G06Q99/00 G07D11/00 G07D7/00 G07D7/02 G07D7/12 G07F19/00 G09C1/00 G09C3/00 G09C5/00 H04L29/06 H04L9/00 H04L9/06 H04L9/28 H04L9/32 H04N1/387 H04N7/167 (Advanced/Invention); G06F15/00 G06F17/00 G06F21/00 G06F9/44 G06K17/00 G06K19/06 G06Q50/00F0 (Advanced/Non–invention); A61J1/00 B41F33/00 B41M3/14 B42D15/10 G02B27/42 G02B5/18 G06F13/12 G06F17/00 G06F17/30 G06F19/00 G06F21/00 G06F3/12 G06K15/00 G06K19/00 G06K19/06 G06K19/10 G06K5/00 G06K7/00 G06K7/10 G06K7/12 G06K9/00 G06K9/03 G06K9/22 G06Q10/00 G06Q20/00 G06Q30/00 G06Q40/00 G06Q50/00 G06Q90/00 G06Q99/00 G07D11/00 G07D7/00 G07F19/00 G09C1/00 G09C3/00 G09C5/00 H04L9/00 H04L9/06 H04L9/28 H04L9/32 (Core/Invention); G06F17/00 (Core/Non–invention); G06K (Subclass/Invention)

International class (IPC 1–7): A61J1/00 B41M3/14 G06F153/00 G06F159/00 G06F17/60 G06K19/00 G06K19/06 G06K19/10 G09C3/00 H04L9/00

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European class: G06Q10/087 G06Q20/105 G06Q20/367 G06Q20/3674 G06Q20/401 G06Q30/0185 G06Q40/08 G06Q40/10 G06Q50/00 G06Q50/22 G06Q50/24 G07D11/00F6 G07D11/00K G07D7/00 G07D7/00B8 G07D7/00D G07D7/00F G07D7/12 G09C5/00 H04L9/32 H04L9/32S

US class: 101/72 101/72S 235/294 235/375 235/375P 235/375S 235/379 235/379P 235/380 235/380P 235/380S 235/382 235/382.5 235/382S 235/383 235/385 235/385P 235/435 235/435P 235/435S 235/439 235/439P 235/439S 235/454 235/462.08 235/462.24 235/462.25 235/462.45 235/468 235/468S 235/472.01 235/487 235/487S 235/491 235/491P 235/494 235/494P 235/494S 283/17 283/74 340/5.8 340/5.800S 358/1.14 358/1.15 358/1.150P 358/1.18 358/1.180P 358/1.41 358/3.26 358/3.28 358/3.280P 359/2 359/558 380/232 380/243 380/243P 380/277 380/277S 380/28 380/28P 380/28S 380/51 380/51S 380/54 380/55 380/55P 380/55S 382/100 382/100P 382/135 382/135P 382/137 382/314 382/314S 700/231 700/231P 705/1 705/1.1 705/1.100S 705/2 705/28 705/28S 705/2P 705/2S 705/3 705/30 705/30S 705/318 705/318P 705/4 705/41 705/50 705/65 705/67 705/75 707/769 707/769S 707/E17.108 707/E17.108S 713/157 713/157P 713/165 713/173 713/176 713/176P 713/176S 713/177 713/179 713/179P 726/17 726/2 726/20 726/20S 726/21 726/21S 726/26 726/29 726/2P 726/2S

Classification Explorer

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Forward Citations: WO17083972, WO16174264, WO15102780, WO15077325, WO14104918, WO14085235, WO14045212, WO14045212, WO14014468, WO13064806, WO13033643, WO12138807, WO12138807, WO12095846, WO12079145, WO12040287, WO12035306, WO12011968, WO12011968, WO11158254, WO11158253, WO11134891, WO11084988, WO11058554, WO11025843, WO11021114, WO11021113, WO11021112, WO11021111, WO11021110, WO10140892, WO10106511, WO10086827, WO10086827, WO09148998, WO09148998, WO08115722, WO08064153, WO08064153, WO07146727, WO07146727, WO07091239, WO07078935, WO07078934, WO07078934, WO07078849, WO07078849, WO07076151, WO07076151, US9697448, US9686082, US9672678, US9669312, US9636588, US9636273, US9633325, US9619687, US9607185, US9602777, US9595108, US9589247, US9582644, US9576264, US9558418, US9544466, US9511945, US9511601, US9501674, US9495808, US9492690, US9491163, US9477896, US9473812, US9470801, US9460730, US9449296, US9436963, US9406184, US9398022, US9390574, US9370333, US9367665, US9363083, US9361775, US9357102, US9355421, US9355344, US9355295, US9336452, US9324118, US9319244, US9316743, US9313025, US9294728, US9282131, US9280699, US9275451, US9275258, US9268986, US9250116, US9247276, US9218235, US9217695, US9208243, US9196108, US9195889, US9189780, US9189728, US9183582, US9171280, US9151660, US9150119, US9147213, US9142075, US9141876, US9129271, US9122633, US9111343, US9106679, US9092707, US9083857, US9081988, US9076188, US9075958, US9058413, US9058412, US9053364, US9047499, US9047457, US9040016, US9037479, US9024722, US9017610, US9013266, US8991692, US8989387, US8976003, US8970375, US8959584, US8959182, US8958626, US8948490, US8944234, US8943562,

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TWI479870, TWI464712, RU2536670, KR101542335, KR100896342, JP2012504799, JP2012249293, JP2011508929, JP2011141856, JP2010503295, GB2496127, GB2435954, GB2435954, EP2619720, EP2355984, EA025111, DE102012017398, CN103748831, CN103400164, CN103150534, CN103116936, CN102882956, CN102834788, CN102696044, CN102571282, CN102326355, CN102043972, CN101957928, AU2008301206,

Abstract:
Source: US2005258234A A method of tracking a security document having disposed thereon or therein a number of coded data portions, each coded data portion being indicative of an identity of the security document. The method includes having a computer system receive indicating data from a sensing device, the sensing device being responsive to sensing of the coded data to generate indicating data indicative of the identity of the product item. The computer system uses the indicating data to update tracking data stored in a data store, the tracking data being indicative of the identity of the security document and tracking information.

0) US2005273628A – REGISTRATION AND VERIFICATION SYSTEM

144) Family number: 32477669 (US2005273628A) © PatBase

Title: REGISTRATION AND VERIFICATION SYSTEM

Priority:

CA20042469598	20040601	CA20042469598	20040704	CA20042470096	20040607
US20040521626P	20040607	US20050160003	20050604	CA20092688869	20091122
US20050161752	20050816	US20040521625P	20040607	CA20092688869	20091208
US20050163962	20051104	US20110007782	20110117	US20100860890	20100821
US20100793694	20100604	US20090475444	20090529	US20070765310	20070619
US20060555204	20061031	US20050908941	20050601	US20110007649	20110116
US20070738141	20070420	US20070627174	20070125	US20070735435	20070413
US20130898467	20130521	US20130016222	20130902	US20130138006	20131221
US20140201919	20140309	US20120592324	20120822	US20110033577	20110223
US20120591238	20120822	US20130938372	20130710	US20130916640	20130613
US20110081444	20110406	US20110170207	20110628	US20140301317	20140610

Family:

Publication number	Publication date	Application number	Application date
CA2470096 AA	20051207	CA20042470096	20040607
US2005273628 AA	20051208	US20050160003	20050604
US2006085843 AA	20060420	US20050163962	20051104
US2015012339 AA	20150108	US20140301317	20140610

Probable Assignee: WORLD PARK FOTO INC

Assignee(s):(std)**:** ONISCHUK DANIEL W ; WORLD PARK FOTO INC

Assignee(s): ONISCHUK DANIEL ; ONISCHUK DANIEL WILLIAM ; ONISCHUK THERESE ; ONISCHUK THERESE ANN

Inventor(s):(std)**:** ONISCHUK DANIEL W

Inventor(s): ONISCHUK DANIEL WILLIAM ; ONISCHUK DANIEL

Agent(s): NA; DAN ONISCHUK

International class (IPC 8–9)**:** G07C13/00 G07D11/00 G07D7/00 G07D7/004 G07D7/02 H04K1/00 H04L9/32 (Advanced/Invention); G07D11/00 G07D7/00 H04K1/00 H04L9/32 (Core/Invention)

International class (IPC 1–7)**:** G07D7/02 H04K1/00

CPC: G07D7/004 G07C13/00 G07D7/0047 G07D11/0066

European class: G07D11/00F6 G07D7/00B8 G07D7/00D G07D7/00D4

US class: 235/386 705/12 713/186 726/4

Classification Explorer

Forward Citations: WO08094593, US9685020, US9680846, US9613267, US9491192, US9325670, US9197693, US9183533, US9137258, US9111278, US8800061, US8138916, US7941833, US7702137, US7197170, US2017171174, US2016164890, US2016063322, US2016014109, US2015237017, US2015019440, US2010229248, US2009319788, US2008294530, US2007100849, US2006098010, US2005147283,

Abstract:
Source: US2005273628A One application of this invention is where, a cashier at a bank or business can use an optical barcode scanner to obtain and transmit a registered ID on any currency, transmit a verification request to a Registration Authority, and receive a reply to determine whether the RSID is genuine, under surveillance, or has been previously reported as being fraudulently reproduced (counterfeited). A computer system, is used to track unique identifiers of Items to reduce losses due to fraud. A unique identifier (RSID) is assigned to each Item. The RSID is used to authenticate the Item is valid for use. As counterfeit RSIDs are detected, they are added to a computer database, enabling comparison of an RSID to all of the already known and counterfeit Items RSID's. The RSID may further be used to identify the location of the Item. By identifying the location where the request for authentication occurred, any subsequent request for the same RSID is assessed by people or computers executing tracking and assessment software programs. The RSID requestor is compared to other recent requests for the same RSID. If the time and physical distance between locations are reasonable as per computer program models and data, then no action is taken; however, if a RSID is reported at nearly the same time in distant places, or outside a reasonable transportation time limit for the last known reported location of the Item, then an alert

message is sent to the requestor indicating the Item may be counterfeit, so that the requestor more closely inspects the Item(s).

0) US2007278138A – DOCUMENT SORTING MACHINE

145) Family number: 32482861 (US2007278138A) © PatBase

Title: DOCUMENT SORTING MACHINE

Priority:

CA20052569483	20050606	CA20052626247	20050606	CA20052626432	20050606
US20040576629P	20040604	EP20050747312	20050606	US20040576629	20040604
US20040576629	20040604	US20040576629	20040604	CA20052626466	20050606
US20040631160P	20041129	WO2005GB02190	20050606	US20050628200	20050606
US20070628200	20070124	US20070898029	20070907	US20070898030	20070907
US20070898027	20070907				

Family:

Publication number	Publication date	Application number	Application date
AT396943 E	20080615	AT20050747312T	20050606
AT439324 E	20090815	AT20050114995T	20050606
BRPI0511803 A	20080115	BR2005PI11803	20050606
CA2569483 AA	20061204	CA20052569483	20050606
CA2569483 C	20090512	CA20052569483	20050606
CA2626247 AA	20051215	CA20052626247	20050606
CA2626432 AA	20051215	CA20052626432	20050606
CA2626466 AA	20051215	CA20052626466	20050606
CN101056809 A	20071017	CN200580025591	20050606
CN101121472 A	20080213	CN200710145436	20050606
CN101121476 A	20080213	CN200710145437	20050606
CN101121477 A	20080213	CN200710145439	20050606
DE602005007210 D1	20080710	DE200560007210T	20050606
DE602005016025 D1	20090924	DE200560016025T	20050606
EP1751043 A2	20070214	EP20050747312	20050606
EP1751043 B1	20080528	EP20050747312	20050606
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EP1862414 A3	20071219	EP20070114993	20050606
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EP1864925 A3	20071219	EP20070114994	20050606
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EP1864926 B1	20090812	EP20070114995	20050606
IN07897DN2007 A	20071109	IN2007DN07897	20071012
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IN07899DN2007 A	20071109	IN2007DN07899	20071012
IN07921DN2006 A	20070803	IN2006DN07921	20061227
RU2006147306 A	20080727	RU20060147306	20050606
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US2008053875 AA	20080306	US20070898029	20070907
US2008054544 AA	20080306	US20070898030	20070907
US2008054545 AA	20080306	US20070898027	20070907
WO05118443 A2	20051215	WO2005GB02190	20050606
WO05118443 A3	20060914	WO2005GB02190	20050606

Probable Assignee: DE LA RUE INT LTD

Assignee(s):(std)**:** CALVERLEY SIMON ; RUE DE INT LTD ; SKINNER JOHN ALAN ; HOSKING STEVEN MICHAEL ; LEONARD ANTONY JOHN ; LJA RJU INTERNEHSHNL LTD DE

Assignee(s): LEONARD ANTONY ; DE LJA RJU INTERNEHSHNL LTD ; DE LA RUE INT ; DE LA RUE INT LTD ; DE LA RUE INTERNATIONAL LIMITED ; DE LA RUE INTERNATIONAL LTD ; DE LJA RJU INTERNEHSHNL LIMITED

Inventor(s):(std)**:** HOSKING STEVEN M ; HOSKING STEVEN MICHAEL ; LEONARD ANTONY J ; LEONARD ANTONY JOHN ; MICHAEL CALVERLEY SIMON LEONAR ; SKINNER JOHN A ; SKINNER JOHN ALAN ; SKINNER JOHN ; SKINNER DZHON ALAN ; SIMON CALVERLEY ; MICHAEL HOSKING STEVEN ; LEONARD EHNTONI DZHON ; KHOSKINGS STIVEN MAJKL ; KELVERLI SAJMON ; JOHN LEONARD ANTONY ; HOSKING STEVEN ; ALAN SKINNER JOHN ; CALVERLEY SIMON ; LEONARD ANTONY

Inventor(s): JOHN ALAN SKINNER ; ANTONY JOHN LEONARD ; CALVERLEY SIMON LEONARD ANTONY JOHN SKINNER ; STEVEN MICHAEL HOSKING

Agent(s): BORDEN LADNER GERVAIS LLP; SKONE JAMES ROBERT EDMUND; OLIFF AND BERRIDGE PLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B07C1/00 B07C3/14 B07C5/00 B07C5/02 B07C5/34 B07C5/342 B07C5/36 B65H1/06 B65H15/00 B65H29/58 B65H29/60 B65H3/06 B65H31/24 B65H33/14 B65H39/10 B65H43/00 B65H43/02 B65H5/00 B65H7/00 B65H7/14 G07D11/00 G07D7/00 (Advanced/Invention) ; B07C1/00 B07C3/10 B07C5/342 B07C5/36 B65H1/06 B65H15/00 B65H29/58 B65H29/60 B65H3/06 B65H31/24 B65H33/00 B65H39/10 B65H5/00 B65H7/00 B65H7/14 G07D11/00 (Core/Invention)

International class (IPC 1–7): B65H15/00 B65H33/14

CPC: B65H1/06 B65H3/063 B65H3/0669 B65H5/00 B65H7/00 B65H15/00 B65H29/60 B65H33/14 B65H39/10 B65H2301/16 B65H2301/33214 B65H2301/424 B65H2402/441 B65H2402/547 B65H2407/20 B65H2511/20 B65H2511/212 B65H2511/216 B65H2511/30 B65H2511/414 B65H2511/51 B65H2511/515 B65H2513/42 B65H2553/41 B65H2557/24 B65H2601/11 B65H2601/325 B65H2701/1912 G07D11/0084 B65H2301/33216 B65H2408/111 G07D7/00

European class: B65H1/06 B65H15/00 B65H29/60 B65H3/06F B65H3/06M B65H33/14 B65H39/10 B65H5/00 B65H7/00 G07D11/00K G07D7/00 L65H301/16 L65H301/33214 L65H301/33216 L65H301/424 L65H316/000 L65H333/214 L65H333/216 L65H342/400 L65H402/441 L65H402/547 L65H407/20 L65H408/111 L65H511/200 L65H511/212 L65H511/216 L65H511/300 L65H511/414 L65H511/510 L65H511/515 L65H513/420 L65H553/410 L65H555/250 L65H557/240 L65H601/11 L65H601/325 L65H611/000 L65H632/050 L65H701/1912

US class: 209/534 270/58.02 270/58.020P 270/58.04 270/58.040P 270/58.040S 270/58.34 270/58.340S

Classification Explorer

Cited documents: WO05013207 A1, WO03063098 A1, US6860375 BB, US6796557 BB, US6654486 BB, US6640156 BA, US6601687 BA, US6311819 BA, US6296123 BA, US6289261 BA, US6278795 BA, US5806650 A, US5687963 A, US5324921 A, US4968015 A, US4964517 A, US4830742 A, US4715594 A, US4675514 A, US4653647 A, US4542287 A, US4503976 A, US4444385 A, US4275293 A, US4251000 A, US4134672 A, US3668496 A, US2004099580 AA, US2003123886 AA, US2003121753 AA, US2003090715 AA, US2003038062 AA, US2002066637 AA, US2002043560 AA, US2002025065 AA, US2001015311 AA, JP8221543, JP8040623, JP6342487, JP5032339, JP2001247235, GB2132756 A1, EP1353302, EP1353301, EP1324289 A2, EP1221679, EP1204077 A2, EP1168252 A2, EP1158470 A2, EP0339936 A1, EP0334309 A2, DE10117822 A1,

Forward Citations: WO14206560, WO10116114, WO10112860, WO08139209, WO08139209, WO08001056, WO08001056, WO07044570, WO07044570, WO04111780, USD615110, US9449452, US9430895, US9292990, US9221642, US9210332, US9149843, US9129271, US9079730, US9053596, US9036136, US8978865, US8781176, US8780206,

US8749767, US8746695, US8733553, US8701857, US8682038, US8559694, US8509492, US8459632, US8433124, US8387496, US8290216, US8265346, US8225528, US8157254, US8052145, US7992853, US7978899, US7916892, US7735621, US7706914, US7537203, US2015291379, US2015187157, US2012201416, US2012193412, US2011164805, US2011164804, US2011052082, US2010139463, US2010128964, US2010038839, US2009083988, US2009020462, US2008257796, US2007110277, US2005103687, US2005065639, US2005018214, EP2672466, EP2672466, EP2128827, CN105324798, CN104919499, CN104217491, CN102637205, CN102637205, AU2010310297,

Abstract:
Source: US2007278138A A document feeder system (4) for use in a document sorting apparatus (1) is disclosed. The document feeder system (4) comprises upper (102) and lower (101) portions, each having respective feeder elements for feeding documents from a hopper (100), the upper and lower portions being movable relative to one another between a feeding position, in which the feeder elements of the upper and lower portions are engageable with a document to be fed, and a jam clearance position, in which a document between the feeder elements of the upper and lower portions may be retrieved, wherein the upper and lower portions are urged into the feeding position by a constant force spring (121).

146) Family number: 32578418 (US2006000891A) © PatBase

Title: SYSTEM FOR BIOMETRIC SECURITY USING A SMARTCARD

Priority:

US20040710307 20040701 US20040710308 20040701 US20040710309 20040701
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US20120728131 20121227

Family:

Publication number	Publication date	Application number	Application date
AU2005270228 AA	20060209	AU20050270228	20050602
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WO06014205 A3	20061130	WO2005US19388	20050602	
WO06014205 B1	20070125	WO2005US19388	20050602	

Probable Assignee: III HOLDINGS 1 LLC

Assignee(s):(std)**:** AMERICAN EXPRESS TRAVEL RELATE ; AMERICAN EXPRESSTRAVEL RELATED ; INC AMERICAN EXPRESS TRAVEL RELATED SERVICES CO ; INC AMERICAN EXPRESS TRAVEL RE ; BONALLE DAVID S ; SALOW GLEN ; WANDEL TOM

Assignee(s): AMERICAN EXPRESSTRAVEL RELATED SERVICES COMPANY INC ; INC AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY ; III HOLDINGS 1 LLC ; AMERICAN EXPRESS TRAVEL REALTED SERVICES CO INC ; INC AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPA ; AMERICAN EXPRESSTRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY I ; AMERICAN EXPRESS TRAVEL RELATED SERVICES COMPANY INC

Inventor(s):(std)**:** BONALLE DAVID S ; SALOW GLEN ; WANDEL TOM

Inventor(s): DAVID S BONALLE ; GLEN SALOW ; BONALLE DAVID

Agent(s):

FB RICE; FB RICE PTY LTD; GOWLING LAFLEUR HENDERSON LLP; SNELL AND WILMER, ONE ARIZONA CENTER; SNELL AND WILMER ONE ARIZONA CENTER; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC C O SNELL AND WILMER LLP; SNELL AND WILMER LLP AMEX; SNELL AND WILMER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B32B1/02 G05B19/00 G05B23/00 G06F17/30 G06F17/40 G06F17/60 G06F3/01 G06F7/00 G06F7/04 G06K19/00 G06K19/06 G06K19/07 G06K19/073 G06K19/16 G06K5/00 G06K9/00 G06Q20/00 G06Q20/34 G06Q20/40 G06Q40/00 G07C9/00 G07D11/00 G07F19/00 G07F7/10 G08B13/14 G08B29/00 G08C19/00 H04B1/00 H04K1/00 H04L9/00 H04L9/32 H04Q1/00 H04Q5/22 H04Q9/00 (Advanced/Invention); G06F17/30 G06F7/04 G06F7/58 H04L9/00 H04L9/32 H04N7/167 (Advanced/Non–invention); G05B19/00 G05B23/00 G06F17/30 G06F17/40 G06F3/01 G06F7/02 G06K19/00 G06K19/06 G06K19/07 G06K19/073 G06K5/00 G06K9/00 G06Q20/00 G06Q40/00 G06Q99/00 G07C9/00 G07D11/00 G07F19/00 G07F7/10 G08B13/14 H04L9/00 H04L9/32 H04Q1/00 H04Q5/00 (Core/Invention)

CPC: G06K7/0021 G06K19/0718 G06K19/073 G06Q20/3576 G06F21/32 G06K19/07 G06K19/0716 G06K19/0717 G06K9/00597 G06F21/34 G06F21/77 G06K19/07354 G06K5/00 G06K19/00 G08B13/14 G06Q20/341 G06Q20/105 G06Q20/367 G06Q20/3674 G06Q20/382 G06Q20/40 G06Q20/40145 G07C9/00103 G07F7/1008 G06K9/00375 G07C9/00087 G07C2009/00095 G10L17/00 A45C7/0077 A45C11/26 A45C2007/0013 B32B27/32 Y10T428/1334

European class: A45C11/26 A45C7/00D3 B32B27/32 G06F21/32 G06F21/34 G06F21/77 G06K19/00 G06K19/07 G06K19/073 G06K19/073A4A G06K19/077 G06K19/07E G06K19/07E2 G06K19/07E4 G06K5/00 G06K7/00K2 G06K9/00H2 G06K9/00S G06Q20/105 G06Q20/341 G06Q20/3576 G06Q20/367 G06Q20/3674 G06Q20/382 G06Q20/40 G06Q20/40145 G07C9/00B6D4 G07C9/00B8 G07F7/10D G07F7/10D6 G08B13/14 G10L17/00U K45C7/00A4 S07C9/00B6D4A

US class: 235/379 235/380 235/380P 235/380S 235/382 235/382S 235/487 235/487S 235/492 235/492S 235/493 340/10.1 340/5.1 340/5.4 340/5.52 340/5.6 340/5.82 340/5.820S 340/51 340/54 340/56 340/572.1 340/58.2 380/227 380/228 380/229 380/230 380/231 380/232 380/233 380/234 382/115 382/115P 382/119 382/119P 382/124 382/124P 428/35.2 428/35.200P 704/E17.003 704/E17.003S 705/1 705/1.1 705/41 705/41P 705/44 705/44P 705/64 705/64P 705/65 705/67 705/67P 713/182 713/183 713/184 713/185 713/186 713/186P 726/2 726/27 726/28 726/29 726/3 726/30 726/4 726/5

Classification Explorer

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Abstract:
Source: US2006000891A The present invention discloses a system and methods for biometric security using biometrics in a smartcard−reader system. The biometric security system also includes a biometric sensor that detects biometric samples and a device for verifying biometric samples. In one embodiment, the biometric security system includes a smartcard configured with a biometric sensor. In another embodiment, the system includes a reader configured with a biometric sensor. The device for verifying samples compares the biometric samples with information stored on databases.

0) US2006000887A – MULTIPLE SHEET DETECTOR APPARATUS AND METHOD

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Title: MULTIPLE SHEET DETECTOR APPARATUS AND METHOD

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RU2012100774 A	20130820	RU20120100774	20100609
RU2331102 C1	20080810	RU20070103833	20050630
US2006000887 AA	20060105	US20050171646	20050630
US2006000888 AA	20060105	US20050171647	20050630
US2006000889 AA	20060105	US20050171648	20050630
US2008224390 AA	20080918	US20080082755	20080414
US2010243729 AA	20100930	US20100802563	20100609
US2012138676 AA	20120607	US20110310858	20111205
US7290706 BB	20071106	US20050171648	20050630
US7293702 BB	20071113	US20050171646	20050630
US7357306 BB	20080415	US20050171647	20050630
US7810716 BB	20101012	US20080082755	20080414
US8387865 BB	20130305	US20100802563	20100609
US8573480 BB	20131105	US20110310858	20111205
WO06007513 A2	20060119	WO2005US23154	20050630
WO06007513 A3	20070412	WO2005US23154	20050630
WO10144526 A1	20101216	WO2010US37897	20100609
ZA200700894 A	20080730	ZA20070000894	20070131

Probable Assignee: DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD SELF SERVICE SYS ; DIEBOLD SELF SERVICE SYSTEMS ; DIEBOLD INC ; DIEBOLD SELF SERVICE SYSTEMS D ; KLEIN ERIC ; HARMON LARRY ; ENRIGHT JEFFREY M ; ENRIGHT JEFFERY M ; DIEBOLD SELF SERVICE SYTEMS DIVISION OF DIEBOLD INC ; MA SONGTAO ; LASKOWSKI EDWARD L ; RYAN MIKE R ; RUSSELL MICHAEL ; NEWTON KEVIN ; WELLBAUM WAYNE ; WELLBAUM WAYNE D ; VIDMAR DAVID ; RYAN MIKE P

Assignee(s): DAJBOLD INKORPOREJTED ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD I ; DIEBOLD INC CANTON ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF

Inventor(s):(std)**:** ENRIGHT JEFFERY M ; ENRIGHT JEFFREY M ; ERIC KLEIN ; HARMON LARRY ; KEVIN NEWTON ; KLEIN ERIC ; LARRY HARMON ; LASKOVSKI EHDVARD L ; MA SONGTAO ; MA SONGTAO LASKOWSKI EDWARD L ; LASKOWSKI EDWARD L ; MICHAEL RUSSELL ; NEWTON KEVIN ; RUSSEL MICHAEL ; RUSSELL MICHAEL ; RYAN MIKE P ; RYAN MIKE R ; SONGTAO MA ; VIDMAR DAVID ; WAYNE WELLBAUM ; WELLBAUM WAYNE ; WELLBAUM WAYNE D

Inventor(s): EDWARD L LASKOWSKI ; MIKE R RYAN ; LASKOWSKI EDWARD L SEVEN HILLS ; MA SONGTAO WADSWORTH ; MICHAEL RUSSEL ; LASKOWSKI EDWARD ; JEFFREY M ENRIGHT

Agent(s): DIMOCK STRATTON LLP; D YOUNG AND CO LLP; MELDRUM DAVID JAMES; PERAL DAVID; RALPH E JOCKE WALKER AND JOCKE LPA; RALPH E JOCKE WALKER AND JOCKE; RALPH E; CHRISTOPHER L; WALKER AND JOCKE LPA; PARMELEE CHRISTOPHER L; JOCKE RALPH E; WALKER AND JOCKE; BLACK MCCLUSKEY SOUERS AND ARBAUGH LPA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65H7/02 B65H7/12 G06F17/00 G06F17/60 G06F7/06 G06F7/08 G06Q40/00 G07D11/00 G07D7/00 G07D7/08 G07D7/12 G07D7/16 G07F19/00 (Advanced/Invention);
B65H7/12 G06F17/00 G06F7/06 G06Q40/00 G07D11/00 G07D7/00 G07F19/00 (Core/Invention);
G06F (Subclass/Invention)

International class (IPC 1–7): G06F17/60

CPC: B65H7/12 B65H2511/413 B65H2511/51 B65H2511/524 B65H2557/64 G06Q20/042 G07D7/12 G07D7/183 G07D7/08 B65H7/125 B65H2553/30 B65H2701/1912 G07F19/20 G07F19/201

European class: B65H7/12 B65H7/12C G06Q20/042 G07D7/08 G07D7/12 G07D7/16D G07F19/00F G07F19/20 G07F19/201 L65H511/413 L65H511/510 L65H511/524 L65H553/300 L65H557/640 L65H701/1912

US class: 235/375 235/379 235/379P 235/380 235/381 235/381P 235/381S 271/258.01 271/258.010P 705/1.1 705/17 902/11 902/12 902/7 902/8

Classification Explorer

Cited documents: WO09049221 A1, WO09040922 A1, WO08130111 A1, WO08128755 A1, WO07072026 A1, US7810716 BB, US7533805 BA, US7357306 BB, US7293702 BB, US7290706 BB, US7014105 BB, US6824047 BB, US6511064 BA, US6212130 BA, US5945602 A, US4462587 A, US4066969 A, US2007284813 AA, US2007122023 AA, US2004075213 AA, US2003006550 AA, EP0537513 A1, DE3620042 A1, DE19921217 A1,

DE102007019107 A1

CN1538353 A,

Forward Citations: WO13156401, WO13091857, WO13091856, WO13085950, WO13085950, WO13082232, WO10144526, USD781024, USD780809, USD779774, USD779773, USD779772, USD779771, USD762040, USD755649, USD748888, USD748364, USD746875, USD746015, USD742090, USD739639, USD739638, USD739637, USD735965, USD735964, USD735963, USD735440, USD735439, USD735438, USD735437, USD722739, USD718338, USD707012, USD700917, USD688275, USD688274,

USD684745, USD681717, USD681683, USD681682, USD681681, USD679745, USD677714, USD677284, USD667846, USD664997, USD663505, USD659748, USD655315, USD644405, USD643994, US9652921, US9600952, US9494922, US9418363, US9141232, US9039010, US8991820, US8966983, US8925921, US8840108, US8833763, US8827268, US8827266, US8820741, US8807561, US8783684, US8764010, US8730529, US8717637, US8585050, US8567777, US8387865, US8313096, US8266965, US8146801, US7810716, US7252224, US2015269564, US2015109259, US2014077446, US2014077445, US2013336086, US2013140766, US2013140760, US2013135688, US2010243729, US2008224390, US2007045394, US2007007721, EP2830024, EP2631881, CN103999131, CN103946137, CN103662903, CN103662903, CN102542656, AU2012359213,

Abstract:
Source: US2006000887A A detector for a deposit accepting apparatus of an automated banking machine or for another sheet handling system is provided. The detector includes an ultrasonic transmitter driven by a driving signal operative to cause the ultrasonic transmitter to transmit an ultrasonic sound signal through a sheet pathway of the detector. The detector also includes an ultrasonic receiver operative to generate a receiver signal responsive to the ultrasonic sound signal. The detector further includes first and second correlation filters. The first and second correlation filters are operative to generate first and second outputs responsive to the at least one receiver signal. At least one processor is operative responsive to the first and second outputs of the correlation filters to determine information associated with changes in phase of the ultrasonic sound signal and to distinguish between single and multiple sheets in the pathway responsive to the information associated with changes in phase.

148) Family number: 32560626 (US2007214054A) © PatBase

Title: DIRECT CURRENCY CONVERSION

Priority: AU20040903810 20040712 AU20050262257 20050706 NZ20040534045 20040712 NZ20050551529 20050706 US20070569958 20070213 US20100917379 20101101 WO2005AU00983 20050706

Family:

Publication number	Publication date	Application number	Application date
AP200703913 A0	20070228	AP20070003913	20050706
AP2239 A	20110527	AP20070003913	20050706
AU2005262257 AA	20060119	AU20050262257	20050706
AU2005262257 BB	20110324	AU20050262257	20050706
AU2005262257 BH	20110804	AU20050262257	20050706
BRPI0513236 A	20080429	BR2005PI13236	20050706
CA2573632 AA	20070112	CA20052573632	20050706
CN102737343 A	20121017	CN201210120541	20050706
CN1989519 A	20070627	CN200580021602	20050706
CR8836 A	20080820	CR20060008836	20061222
ECSP077168 A	20070329	EC2007SP07168	20070115
EG24651 A	20100406	EG20070000019	20070109
EP1774488 A1	20070418	EP20050759075	20050706
EP1774488 A4	20100519	EP20050759075	20050706
HK1104363 A3	20080111	HK20070109378	20070828
IL180253 A0	20070704	IL20060180253	20061221
IL180253 A1	20130829	IL20050180253	20050706
IN03778KN2006 A	20070615	IN2006KN03778	20061215
JP2008506202 T2	20080228	JP20070520615T	20050706
JP5095397 B2	20121212	JP20070520615T	20050706
KR101144762 B1	20120509	KR20077000851	20050706
KR20070034584 A	20070328	KR20077000851	20050706
MA28785 B1	20070801	MA20070029656	20070205
MXPA06015221 A1	20071109	MX2006PA15221	20050706
NI200700008 A	20080103	NI20070000008	20070112
NO20070772 A	20070209	NO20070000772	20070209
NZ551529 A	20081128	NZ20050551529	20050706
RU2007105108 A	20080820	RU20070105108	20050706
RU2408075 C2	20101227	RU20070105108	20050706
SG156615 A1	20091126	SG20090066143	20050706
SM200700001 A	20070207	SM20050000001	20050706
SM200700001 B	20070207	SM20050000001	20050706
SMAP200700001 A	20070207	SM20070000001T	20050706
SMP200700001 B	20070207	SM20070000001T	20050706
UA91833 C2	20100910	UA20070000629	20050706
US2007214054 AA	20070913	US20050569958	20050706
US2011047073 AA	20110224	US20100917379	20101101
US7953634 BB	20110531	US20050569958	20050706
US8671053 BB	20140311	US20100917379	20101101
VN13217 A1	20141027	VN20070000238	20050706
WO06005104 A1	20060119	WO2005AU00983	20050706

ZA200700063 A	20100630	ZA20070000063	20070102

Probable Assignee: FEXCO MERCHANT SERVICES UNLIMITED CO

Assignee(s):(std)**:** CHRIS O SULLIVAN ; CLEARY DENIS ; FEKSKO ; FEXCO ; SULLIVAN CHRIS O ; RING TIM ; FEXCO LTD ; FEXCO MERCHANT SERVICES

Assignee(s): FEXCO MERCHANT SERVICES UNLIMITED CO ; FEXCO LIMITED ; O SULLIVAN CHRIS

Inventor(s):(std)**:** CLIRY DENIS ; DENIS CLEARY ; KLIRI DENIS ; RING TEAM ; RING TIM ; TIM CLEARY DENIS RING ; TIM RING ; CLEARY DENIS

Inventor(s): CLEARY DENIS RING TIM

Agent(s): FB RICE PTY LTD; FB RICE; MCCARTHY TETRAULT LLP; SANFORD TCOLB AND CO; TOWNSEND AND TOWNSEND AND CREW LLP; KILPATRICK TOWNSEND AND STOCKTON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G06F17/00 G06F7/78 G06K5/00 G06Q20/00 G06Q20/34 G06Q30/00 G06Q40/00 G06Q40/00G0 G06Q40/02 G06Q40/04 G06Q99/00 G07D13/00 G07F19/00 G07F7/08 G07G1/12 (Advanced/Invention);
G06Q20/00 G06Q40/00 (Advanced/Non–invention);
G06Q30/00 G07F19/00 (Core/Invention);
G06F (Subclass/Invention)

International class (IPC 1–7): G06F17/60 G06Q20/00 G06Q30/00 G06Q40/00

CPC: G06Q20/381 G06Q20/04 G06Q20/10 G06Q20/102 G06Q20/20

European class: G06Q20/04 G06Q20/10 G06Q20/102 G06Q20/20 G06Q20/381

US class: 235/380 235/380S 705/16 705/16P 705/39 705/39P 705/40 709/247

Classification Explorer

Cited documents: WO9912136 A1, WO9905655 A1, WO9704411 A1, WO9636024 A1, WO9512169 A1, WO04044822 A2, WO04008399 A2, WO03014868 A2, WO0271194, WO0219275 A1, WO02095540 A2, WO02071194 A2, US7328188 BA, US7265692 BB, US7003504 BA, US6067574 A, US5914472 A, US5687323 A, US5659165 A, US5420405 A, US5386458 A, US4968873 A, US2006010058 AA, US2005154674 AA, US2005131806 AA, US2004210564 AA, US2004044739 AA, US2003225913 AA, US2003126113 AA, US2003024979 AA, US2002071194 AA, JP9305822 A2, JP6295313 A2, JP6203273 A2, JP54061598 A2, JP5189664 A2, JP2002150188 A2, JP2001273568 A2, JP2000222642 A2, JP2000212642 A2, JP2000048108 A2, JP11328539 A2, JP11242781 A2, JP11189664 A2, JP11134416 A2, JP11066208 A2, JP10269395 A2, GB2300742 A1, FR2818767 A1, EP1018711 B1, EP1018711 A1, EP0843292 A2, EP0251619 A2,

Forward Citations: WO10104797, WO10104797, WO09065257, WO07131285, US9064364, US9043225, US8990109, US8849713, US8523060, US7950576, US2014052710, US2012036063, US2012011008, US2010224681, US2005091524, JP2011513869, AU2015275305, AU2007100392,

Abstract:
Source: US2007214054A This invention concerns direct currency conversion, that is automatic currency conversion at point of payment for card transactions. In particular it concerns a method for operating equipment associated with a financial transaction. The method includes the steps of: Presenting a card related to a customer's account. Recording a card number from the card. Applying all or part of the card number to a tree structure, and automatically processing that number by the tree one bit at a time to arrive at an end node of the tree coded with information related to the currency of the customer's card account. Determining the currency of the customer's card account. Comparing the currency of the customer's card account with one or more currencies predetermined for the equipment. Where the comparison indicates different currencies, providing direct currency conversion services. In other aspects it concerns the equipment itself, and a method of preparing a tree structure for use by the equipment.

149) Family number: 33026167 (WO06053685A2) © PatBase

Title: VALUE DOCUMENTS PRODUCTION AND CHECKING OF VALUE DOCUMENTS

Priority: DE200410055761 20041118 DE200510032704 20050713 WO2005EP12116 20051111

Family:

Publication number	Publication date	Application number	Application date
DE102004055761 A1	20060524	DE200410055761	20041118
DE102005032704 A1	20070125	DE200510032704	20050713
EP1815443 A2	20070808	EP20050806432	20051111
WO06053685 A2	20060526	WO2005EP12116	20051111
WO06053685 A3	20060914	WO2005EP12116	20051111

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** GIERING THOMAS ; GIESECKE AND DEVRIENT GMBH ; MAYER KARLHEINZ ; PLASCHKA REINHARD ; SEIDEMANN WOLFRAM ; STEIN DIETER ; VATER HARALD

Inventor(s):(std)**:** GIERING THOMAS ; MAYER KARLHEINZ ; PLASCHKA REINHARD ; SEIDEMANN WOLFRAM ; STEIN DIETER ; VATER HARALD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G07D7/00 G07D7/12 G07D7/20 (Advanced/Invention); G07D7/00 (Core/Invention)

CPC: G07D7/0043 G07D7/1205 G07D7/0047 G07D7/005 G07D7/121 G07D7/20

European class: G07D7/00B6 G07D7/00B8 G07D7/00D2 G07D7/00D4 G07D7/00F G07D7/12B G07D7/12C G07D7/20

Classification Explorer

Cited documents: WO9724699 A1, WO03032243 A1, WO0038932 A1, WO0031675 A2, US6244508 BA, US5984366 A, US5974150 A, US2003138128 AA, US2001046294 AA, EP1202225 A2, EP0572989 A2, EP0340898 A2, DE2458705 A1,

Forward Citations: WO17108428, WO15043761, WO15043760, WO14005686, WO12045567, WO11086275, WO11082792, WO10040987, WO10006767, WO10006767, WO09093057, WO08142307, WO08142307, WO08113963, WO08113962, WO08040374, WO08034250, US9542788, US9540772, US9327542, US8792090, US8756707, US8596526, US8579188, US8542094, US8421046, US8392715, US8267311, US7441704, RU2615262, ITBO20090744, FR2955288, FR2915600, EP3185221, EP3059713, EP2590147, EP2590147, EP2102785, EP2102785, EA025707, DE102010041975, DE102008033693, DE102007037923, CN104411505, CN104411505, AT503961, AT503667,

Abstract:
The invention relates to sheet value documents with a machine–readable security feature and methods and devices for the production or checking of such value documents, whereby a sheet value document is provided with a code which may be read in the invisible spectral region, in particular, a barcode. The barcode is a codification of at least one measurable property of said value document and the barcode can thus be used as a signature particular to said banknote, when the encoded properties differentiate different banknotes or groups of banknotes. The use of a barcode which may be read in the invisible spectral region is a particularly good security against forgery, for example, in the form of colour copying.

150) Family number: 31520894 (US2008076985A) © PatBase

Title: RAMAN SPECTRAL ANALYSIS OF SUB–SURFACE TISSUES AND FLUIDS

Priority: EP20050808577 20051125 GB20040026993 20041209 GB20060016376 20060817 GB20060018635 20060921 GB20060006891 20051125 GB20060006891 20060405 US20050792701 20051125 US20050792684 20051125 WO2006GB04428 20061127 US20070792684 20070608 US20090637421 20091214 WO2005GB04535 20051125 US20050669880P 20050411 WO2005GB04529 20051125 WO2007GB01258 20070405 WO2007GB01249 20070405

Family:

Publication number	Publication date	Application number	Application date
AT505720 E	20110415	AT20050809242T	20051125
AT520974 E	20110915	AT20050808577T	20051125
AU2005313144 AA	20060615	AU20050313144	20051125
AU2005313145 AA	20060615	AU20050313145	20051125
AU2005313145 BB	20111006	AU20050313145	20051125
AU2007232350 AA	20071011	AU20070232350	20070405
AU2007232354 AA	20071011	AU20070232354	20070405
CA2591303 AA	20070607	CA20052591303	20051125
CA2591306 AA	20070607	CA20052591306	20051125
CA2647730 AA	20081003	CA20072647730	20070405
CA2648228 AA	20081002	CA20072648228	20070405
CN101115986 A	20080130	CN200580047024	20051125
CN101115986 B	20110831	CN200580047024	20051125
CN101115987 A	20080130	CN200580047040	20051125
CN101115987 B	20110831	CN200580047040	20051125
CN101460091 A	20090617	CN200780020709	20070405
CN101460091 B	20111214	CN200780020709	20070405
CN101460831 A	20090617	CN200780020790	20070405
DE602005027485 D1	20110526	DE200560027485T	20051125
DE602005029616 D1	20111020	DE200560029616T	20051125
EP1828753 A1	20070905	EP20050809242	20051125
EP1828753 B1	20110413	EP20050809242	20051125
EP1831673 A1	20070912	EP20050808577	20051125
EP1831673 B1	20110817	EP20050808577	20051125
EP1952129 A1	20080806	EP20060808690	20061127
EP2002243 A2	20081217	EP20070732297	20070405
EP2010042 A1	20090107	EP20070732306	20070405
GB200426993 A0	20050112	GB20040026993	20041209
GB200606891 A0	20060517	GB20060006891	20060405
GB200616376 A0	20060927	GB20060016376	20060817
GB200618635 A0	20061101	GB20060018635	20060921
GB2432661 A1	20070530	GB20060018635	20060921
IN05070DN2007 A	20070817	IN2007DN05070	20070702
IN05076DN2007 A	20070817	IN2007DN05076	20070702
IN08918DN2008 A	20090327	IN2008DN08918	20081023
IN08924DN2008 A	20090327	IN2008DN08924	20081023
JP2008522697 T2	20080703	JP20070544970T	20051125
JP2008523375 T2	20080703	JP20070544971T	20051125
JP2009536317 T2	20091008	JP20090503651T	20070405

JP2009538156 T2	20091105	JP20090503653T	20070405	
US2008076985 AA	20080327	US20050792701	20051125	
US2008129992 AA	20080605	US20050792684	20051125	
US2009141271 AA	20090604	US20060085346	20061127	
US2009238333 AA	20090924	US20070225928	20070405	
US2009244533 AA	20091001	US20070083073	20070405	
US2010091276 AA	20100415	US20090637421	20091214	
US7652763 BB	20100126	US20050792684	20051125	
US7911604 BB	20110322	US20060085346	20061127	
US8085396 BB	20111227	US20070083073	20070405	
US8159664 BB	20120417	US20090637421	20091214	
US8243269 BB	20120814	US20050792701	20051125	
US8259902 BB	20120904	US20070225928	20070405	
WO06061565 A1	20060615	WO2005GB04529	20051125	
WO06061566 A1	20060615	WO2005GB04535	20051125	
WO07060467 A1	20070531	WO2006GB04428	20061127	
WO07113566 A2	20071011	WO2007GB01249	20070405	
WO07113566 A3	20071129	WO2007GB01249	20070405	
WO07113570 A1	20071011	WO2007GB01258	20070405	
WO07113581 A1	20071011	WO2007GB01289	20070405	

Probable Assignee: STFC SCIENCE AND TECHNOLOGY

Assignee(s):(std)**:** ANDREWS DARREN ; COUNCIL CENT LAB RES COUNCILS ; MATOUSEK PAVEL ; PARKER ANTHONY WILLIAM ; STONE NICHOLAS ; SCIENCE AND TECHNOLOGY FACILITY ; STFC SCIENCE AND TECHNOLOGY

Assignee(s): COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS THE ; SCIENCE AND TECHNOLOGY FACILITIES COUNCIL DIDCOT ; THE SCIENCE AND TECHNOLOGY FACILITIES COUNCIL ; THE SCIENCE AND TECHNOLOGY FACILITIES COUNCIL DIDCOT ; THE COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS ; SCIENCE AND TECHNOLOGY FACILIT ; SCIENCE AND TECHNOLOGY FACILITES COUNCIL ; THE COUNCIL FOR THE CENTRAL LABORATORY OF THE RESE ; SCIENCE AND TECHNOLOGY FACILITIES COUNCIL ; COUNCIL FOR CENTRAL LABORATORY OF RESEARCH COUNCIL ; COUNCIL FOR CENTRAL LABORATORY OF RESEARCH COUNCILS ; COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH ; COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS

Inventor(s):(std)**:** MATOUSEK PAVEL ; NICHOLAS STONE ; PARKER ANTHONY ; PARKER ANTHONY W ; PARKER ANTHONY WILLIAM ; PAVEL MATOUSEK ; STONE NICHOLAS ; WILLIAM PARKER ANTHONY ; ANDREWS DARREN

Inventor(s): ANTHONY WILLIAM PARKER

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; WEICKMANN AND WEICKMANN PATENTANWAELTE RECHTSANWALT PARTMBB; PALMER JONATHAN R; PALMER JONATHAN R ET AL; FURUSAWA HIROSHI; SEMBA TSUKASA; TANAKA TATSUYA; YOSHIDA MINORU; BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61B10/00 A61B5/00 A61B5/103 A61B5/107 A61B5/1455 A61B5/1459 A61B6/00 A61B6/04 A61B6/12 G01B15/00 G01J3/44 G01N21/05 G01N21/47 G01N21/49 G01N21/65 G01N33/22 G07D7/12 (Advanced/Invention);
A61B6/00 (Advanced/Non–invention);
A61B10/00 A61B5/00 A61B5/103 A61B5/107 A61B5/145 A61B6/04 G01J3/44 G01N21/03 G01N21/47 G01N21/63 G01N33/22 G07D7/00 (Core/Invention);
A61B6/00 (Core/Non–invention)

International class (IPC 1–7): A61B5/00 G01N21/65

CPC: A61B5/0091 A61B5/4312 A61B5/0059 A61B5/0071 A61B5/0075 A61B5/441 A61B5/4504 G07D7/1205 G01N33/22 G01N21/65 A61B5/417 G01N2021/656

European class: A61B5/00P A61B5/00P12F A61B5/00P5 A61B5/00P7 A61B5/41J6 A61B5/43F2 G01N21/65 G01N33/22 G07D7/12C K61B5/44B K61B5/45B S01N21/65C3

US class: 250/221 250/339.11 250/341.2 356/237.4 356/301 356/301P 356/301S 356/326 359/539 359/613 378/37 378/37P 378/88 378/88S 378/90 600/310 600/310P 600/473

Classification Explorer

Cited documents: WO9955222 A1, WO9932872 A1, WO9800057 A1, WO9722872 A1, WO9629925 A2, WO9626431 A1, WO9606346 A1, WO9526676 A1, WO9215008 A1, WO9111492 A1, WO08024288 A2, WO07113570 A1, WO07060467 A1, WO07040589 A1, WO06091223 A2, WO06083316 A2, WO06061566 A1, WO06061565 A1, WO05060622 A2, WO05004714 A1, WO04294150, WO04111639 A1, WO04102186 A1, WO04097365 A2, WO04097365 A1, WO04078045 A1, WO04078044 A1, WO04051242 A1, WO04031749 A2, WO03088070 A1, WO03087793 A1, WO03073082 A1, WO03068070 A1, WO03041123 A3, WO03041123 A2, WO03023382 A1, WO0207585 A2, WO02061394 A1, WO0160503 A1, WO0157500 A1, WO0152739 A1, WO0139665 A3, WO0139665 A2, WO0122063 A1, WO0020843 A1, WO0016036 A1, WO0007705 A1, US7911604 BB, US7697576 BB, US7652763 BB, US7269245 BB, US7219568 BB, US7072700 BB, US6919556 BA, US6897951 BB, US6681133 BB, US6654118 BB, US6352502 BA, US6321111 BA, US6310686 BA, US6289230 BA, US5999836 A, US5935062 A, US5919140 A, US5873831 A, US5842995 A, US5819140 A, US5752519 A, US5660181 A, US5625458 A, US5615673 A, US5565982 A, US5506678 A, US5371368 A, US5371366 A, US5349961 A, US5261410 A, US5194913 A, US5139025 A, US4945239 A, US4799786 A, US4784486 A, US4714345 A, US4645340 A, US4570638 A, US4570533 A, US3770350 A, US3442591 A, US2010091276 AA, US2009177052 AA, US2008249423 AA, US2008051645 AA, US2007182959 AA, US2006249423 AA, US2006158645 AA, US2006121442 AA, US2005283058 AA, US2005206892 AA, US2005172058 AA, US2005010130 AA, US2004263843 AA, US2004263643 AA, US2004186383 AA, US2004161760 AA, US2004133251 AA, US2004092804 AA, US2004063214 AA, US2004054270 AA, US2004051867 AA, US2003220549 AA, US2003120137 AA, US2003116436 AA, US2003085348 AA, US2003018272 AA, US2003004419 AA, US2002025490 AA, JP9135825 A2, JP9127001 A2, JP8075652 A2, JP56022938 A2, JP508033 A2, JP3068070 A2, JP2006513773 T2, JP2006214899 A2, JP2005522293 T2, JP2005070009 A2, JP2004529321 T2, JP2004294150 A2, JP2004271220 A2, JP2004248849 A2, JP2003534087 T2, JP2003521707 T2, JP2003102672 A2, JP2003010189 A2, JP2002512830 T2, JP2002500908 T2, JP2002136469 A2, JP2002085385 A2, JP2001178708 A2, JP2000227421 A2, JP2000206118 A2, JP2000065696 A2, JP11508033 T2, JP11344442 A2, JP10500323 T2, GB2311854 A1, GB2244329 A1, GB1510827 A, GB1171689 A, EP1533607 A2, EP1475037 A1, EP1324257 A1, EP0806460 A1, EP0781990 A1, CN1584555 A,

Forward Citations: WO17066399, WO17001847, WO17001811, WO16054609, WO15013270, WO14178199, WO13087656, WO12159138, WO12143185, WO11037299, WO09090118, WO07119005, WO07119005, US9607377, US9606209, US9606062, US9380942, US9305365, US9295420, US9289130, US9277866, US9261404, US9220412, US9186065, US9155473, US9138175, US9076212, US9042967, US9020581, US8892192, US8692990, US8688199, US8325337, US8259902, US8243269, US8159664, US8085396, US8054463, US7911604, US7742166, US7729749, US2015201840, US2015201839, US2015164336, US2015041656, US2013253338, US2013237853, US2013237852, US2013237851, US2013090537, US2013006116, US2012092663, US2011261354, US2011149278, US2011124988, US2010234740, US2010198025, US2010145200, US2009281536, US2009238333, US2009219523, US2009141271, US2008076985, US2007285655, US2007049808, US2004248731, JP5697726, JP2016168471, JP2015507984, JP2015500492, JP2014178199, JP2014025943, JP2011097991, JP2009508571, JP2008241640, JP2007007267, GB2541515, GB2448546, GB2448546, GB2447497, FR3032527, EP3054281, EP2081017, EP2010874, DE102016008084, CN105358946, CN105163663, CN104749158, CN104730060, CN104115002, CN103743717, CN102792150, CN102792150, CN101949840, CN101773396,

Abstract:
Source: US2008076985A Apparatus and methods for determining, in−vivo, characteristics of sub−surface tissues or fluids in the human or animal body are disclosed. Incident radiation is supplied at one or more entry regions on a surface, and light is collected from one or more collection regions spaced from the entry regions. Raman features are detected in the collected light and depth related information derived therefrom.

0) US2009095663A – METHOD AND DEVICE FOR ACCEPTING BANKNOTES

151) Family number: 33081323 (US2009095663A) © PatBase

Title: METHOD AND DEVICE FOR ACCEPTING BANKNOTES

Priority: DE200410060316 20041215 WO2005EP13295 20051212

Family:

Publication number	Publication date	Application number	Application date
CN101080750 A	20071128	CN200580043014	20051212
CN101080750 B	20110420	CN200580043014	20051212
DE102004060316 A1	20060622	DE200410060316	20041215
EP1831848 A1	20070912	EP20050820635	20051212
IN02316KN2007 A	20070817	IN2007KN02316	20070622
RU2007126975 A	20090127	RU20070126975	20051212
RU2388055 C2	20100427	RU20070126975	20051212
US2009095663 AA	20090416	US20050792414	20051212
US7886889 BB	20110215	US20050792414	20051212
WO06063761 A1	20060622	WO2005EP13295	20051212

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** GIESECKE AND DEVRIENT GMBH ; STEIN DIETER

Assignee(s): GIZEKE U DEVRIENT GMBKH ; GIZEKE UND DEVRIENT GMBKH

Inventor(s):(std)**:** DIETER STEIN ; SHTAJN DITER ; STEIN DIETER

Agent(s): BACON AND THOMAS PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G06K9/00 G07D11/00 G07D7/00 G07F19/00 (Advanced/Invention); G07D11/00 G07D7/00 G07F19/00 (Core/Invention)

International class (IPC 1–7): G07D11/00

CPC: G07D11/009 G07F19/20 G07F19/202

European class: G07D11/00M G07F19/00F G07F19/20 G07F19/202

US class: 194/207 209/534

Classification Explorer

Cited documents: US7201340 BB, US7152744 BB, US6778693 BB, US5247159 A, US4166945 A, US2004026498 AA, US2004012144 AA, US2003132281 AA, EP1467327 A2, EP1418549 A1, DE2760269 C2, DE10050486 A1, DE10030221 A1,

Forward Citations: WO11131276, US9396602, US9058711,

Abstract:
Source: US2009095663A The present invention concerns a method and an apparatus for accepting bank notes. In accepting bank notes by means of an apparatus for accepting bank notes it is assumed that the bank notes are inserted in an input pocket, the bank notes are singled by means of a singling device and transported by means of a transportation device, in order to check the individual bank notes by means of a sensor device, and, in dependence on the checking, store them in at least one storage container or return them in the case that it is impossible to check them, wherein returned bank notes can be inserted in the input pocket again, and an instruction to accept and store the returned bank notes is inputted, whereupon these are accepted and stored in the at least one storage container.

0) US2008210757A – IDENTIFICATION TAG, OBJECT ADAPTED TO BE IDENTI...

152) Family number: 40797289 (US2008210757A) © PatBase

Title: IDENTIFICATION TAG, OBJECT ADAPTED TO BE IDENTIFIED, AND RELATED METHODS, DEVICES, AND SYSTEMS

Priority: EP20050704832 20050119 WO2005SG00012 20050119

Family:

Publication number	Publication date	Application number	Application date
CN101142598 A	20080312	CN200580049163	20050119
CN101142598 B	20121003	CN200580049163	20050119
EP1851732 A1	20071107	EP20050704832	20050119
EP1851732 A4	20100804	EP20050704832	20050119
JP2008527578 T2	20080724	JP20070552093T	20050119
JP4685112 B2	20110518	JP20070552093T	20050119
MY142337 A	20101115	MY20060000022	20060104
US2008210757 AA	20080904	US20050795658	20050119
US7891567 BB	20110222	US20050795658	20050119
WO06078220 A1	20060727	WO2005SG00012	20050119
WO06078220 C1	20061019	WO2005SG00012	20050119

Probable Assignee: AGENCY FOR SCIENCE TECHNOLOGY AND RESEARCH

Assignee(s):(std)**:** AGENCY SCIENCE TECH AND RES ; BURDEN ADRIAN PAUL ; KONG YEN PENG ; MORAN PETER MALCOLM ; ZHAO YAN

Assignee(s): AGENCY FOR SCIENCE TECHNOLOGY AND RESEARCH

Inventor(s):(std)**:** BURDEN A P ; BURDEN ADRIAN PAUL ; KONG YEN PENG ; MORAN P M ; MORAN PETER MALCOLM ; MORAN PETER MALCOM ; PENG KONG YEN ; YAN ZHAO ; YEN PENG KONG ; ZHAO YAN

Inventor(s): PETER MALCOM MORAN ; A P BURDEN ; ADRIAN PAUL BURDEN ; P M MORAN

Agent(s): THELEN REID BROWN RAYSMAN AND STEINER LLP; FOLEY AND LARDNER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B23P11/00 B24D15/10 B32B5/16 B42D15/10 G06K17/00 G06K19/06 G06K7/08 G07D7/00 G07D7/04 G07D7/12 G07D7/20 G11B5/62 (Advanced/Invention); B23P11/00 B24D15/00 B32B5/16 B42D15/10 G06K17/00 G06K19/06 G06K7/08 G07D7/00 G11B5/62 (Core/Invention)

CPC: Y10T29/49826 Y10T428/24372 G07D7/02 G07D7/04 G07D7/2033

European class: G07D7/02 G07D7/04 G07D7/20F2

US class: 235/449 235/449P 235/493 235/493S 29/428 29/428S 428/143 428/143S 428/800 428/800S

Classification Explorer

Cited documents: WO8706041 A1, WO8701845 A1, WO04013735 A2, WO03052701 A2, WO03017192 A1, US6582138 BA, US6254002 BA, US5988500 A, US5430279 A, US5139884 A, US5035960 A, US4682794 A, US4557550 A, US4395628 A, US4238674 A, US2005047593 AA, US2002145050 AA, US2001010333 AA, JP9297938 A2, JP9297938, JP9277767 A2, JP9277767, JP9259243 A2, JP9259243, JP8287454 A2, JP8287454, JP2003291568 A2, JP2003291568, JP10317300 A2, JP10317300, JP10124643 A2, JP10124643, JP10112077 A2, JP10112077, GB2324065 A1, GB2099756 A1, EP1182608 A1, EP1031115 B1, EP0824242 A2, EP0820031 B1, EP0696779 A1, EP0583709 B1, EP0226365 B1, EP0226365 A2,

Forward Citations:

WO17060124, WO17060123, WO15051640, WO15035911, WO13017500, WO12082075, WO12033467, US9643926, US9567688, US9507992, US9449201, US9442695, US9292717, US9273004, US9175398, US9104922, US9010638, US8983117, US8923550, US8842876, US8746555, US8708241, US8672218, US8342402, US8281997, US8226002, US8224018, US8215553, US8186573, US8077905, US7862434, US7856554, US2017102668, US2016354801, US2014014715, US2011284636, US2011084148, US2011062236, US2010327060, US2010200649, US2010127823, US2010033297, US2009184168, US2008121708, US2008112596, US2007211920, US2007187505, US2007184898, US2007181671, US2007022294, RU2505862, EP2637145, DE102016218545, DE102015219400, DE102015219399, DE102015219397, DE102015219396, DE102015219395, DE102015219394, DE102015219393, DE102015219392, DE102015219388, DE102015219385, DE102014207323, DE102014207318, CN106250803, CN103910498, CN103593905, CN103108566, CN103108566, CN103098101, CN103098101,

Abstract:
Source: US2008210757A Disclosed is an object (200) such as a credit card, bank note, document, label, etc which carries an identification layer (103) which contains readable information. The identification layer can include randomly distributed conductive/magnetisable particles (303), semiconductive particle, optically active particles and the like. The identification layer is sandwiched between an upper layer (105) and lower layer (104) to form the object. At least some of the particles are exposed along one edge (102) of the object and can be read by a read head (201) which moves along the edge.

0) US2007012763A – APPARATUS AND METHOD FOR INTEGRATED PAYMENT AND...

153) Family number: 34105856 (US2007012763A) © PatBase

Title: APPARATUS AND METHOD FOR INTEGRATED PAYMENT AND ELECTRONIC MERCHANDISE TRANSFER

Priority:

US20050699015P 20050713 US20060478185 20060629 US20080102472 20080414
US20090173471P 20090428 US20100701998 20100208 US20090258759P 20091106
US20100769395 20100428 US20100769245 20100428 US20100769383 20100428
US20100915550 20101029 US20100915603 20101029 US20130754419 20130130
US20130076193 20131109 US20140227433 20140327 WO2006US26917 20060711
WO2010US32760 20100428 WO2010US32778 20100428 US20150973215 20151217

Family:

Publication number	Publication date	Application number	Application date
AU2006268199 AA	20070118	AU20060268199	20060711
AU2006268199 BB	20110630	AU20060268199	20060711
CA2614339 AA	20080104	CA20062614339	20060711
CL2006001831 A1	20070409	CL20060001831	20060713
CL46404 B	20100222	CL20060001831	20060713
CN101258509 A	20080903	CN200680032270	20060711
EP1907975 A2	20080409	EP20060774632	20060711
EP1907975 A4	20121205	EP20060774632	20060711
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HK1118924 A3	20090220	HK20080112611	20081119
JP2009501395 T2	20090115	JP20080521536T	20060711
KR20080026209 A	20080324	KR20087003090	20060711
RU2008104045 A	20090820	RU20080104045	20060711
RU2427915 C2	20110827	RU20080104045	20060711
TH83247 A	20070222	TH20061003255	20060712
TW200713132 A	20070401	TW20060125508	20060712
TWI428858 B	20140301	TW20060125508	20060712
US2007012763 AA	20070118	US20060478185	20060629
US2008251580 AA	20081016	US20080102472	20080414
US2010252624 AA	20101007	US20100701998	20100208
US2010274712 AA	20101028	US20100769395	20100428
US2010274722 AA	20101028	US20100769245	20100428
US2010325039 AA	20101223	US20100769383	20100428
US2011112918 AA	20110512	US20100915550	20101029
US2011112920 AA	20110512	US20100915603	20101029
US2013246269 AA	20130919	US20130754419	20130130
US2014067685 AA	20140306	US20130076193	20131109
US2014209672 AA	20140731	US20140227433	20140327
US2016104147 AA	20160414	US20150973215	20151217
US7374082 BB	20080520	US20060478185	20060629
US7681788 BB	20100323	US20080102472	20080414
US8196818 BB	20120612	US20100701998	20100208
US8370258 BB	20130205	US20100769245	20100428
US8401964 BB	20130319	US20100769383	20100428
US8583561 BB	20131112	US20100769395	20100428

US8706556 BB	20140422	US20100915603	20101029	
US9240005 BB	20160119	US20100915550	20101029	
WO07008915 A2	20070118	WO2006US26917	20060711	
WO07008915 A3	20071011	WO2006US26917	20060711	
WO10126994 A1	20101104	WO2010US32747	20100428	
WO10127000 A1	20101104	WO2010US32760	20100428	
WO10127003 A1	20101104	WO2010US32769	20100428	
WO10127012 A1	20101104	WO2010US32778	20100428	
WO11056745 A1	20110512	WO2010US54945	20101101	
ZA200800148 A	20090930	ZA20080000148	20060711	

Probable Assignee: MASTERCARD INT INC

Assignee(s):(std)**:** VAN DE VELDE EDDY L H ; SMETS PATRIK ; ROBERTS DAVID A ; RANS JEAN PAUL ; RADU CRISTIAN ; MESTRE PATRICK ; VANNESTE PAUL ; PHILLIPS SIMON ; CARTER RONALD D ; GARRETT DUNCAN ; INC MASTERCARD INT ; MASTERCARD INT INC ; MASTERKARD INTERNEJSHNL INKORPOREJTED

Assignee(s): VAN DE VELDE EDDY LH

Inventor(s):(std)**:** CARTER RONALD D ; DE VELDE EDDY L H VAN ; GARRETT DUNCAN ; MESTRE PATRICK ; PATRIK SMETS ; PHILLIPS SIMON ; RADU CRISTIAN ; RANS JEAN PAUL ; ROBERTS DAVID A ; ROBERTS DEHVID A ; SMETS PATRIK ; VAN DE VEL DE EHDDI L KH ; VAN DE VELDE EDDY L H ; VANNESTE PAUL ; VELDE EDDY L H VAN DE

Inventor(s): VAN DE VELDE EDDY LH ; VAN DE VEL'DE EHDDI L. KH. ; VAN DE VELDE EDDY ; ROBERTS DAVID ; EDDY L H VAN DE VELDE ; DAVID A ROBERTS

Agent(s): SPRUSON AND FERGUSON; PIASETZKI AND NENNIGER LLP; CLARKE; WILLIAMS DAVID JOHN; KATO NOBUAKI; OCHI TAKAO; OKABE MASAO; ASAHI NOBUMITSU; USUI SHINICHI; OKABE YUZURU; RYAN MASON AND LEWIS LLP; OTTERSTEDT ELLENBOGEN AND KAMMER LLP; RENNA LEONARDO; OTTERSTEDT PAUL J; PAUL J; LEONARDO; RYAN MASON LEWIS LLP; BUCKLEY MASCHOFF AND TALWALKAR LLC; MASON KEVIN M ET AL; OTTERSTEDT PAUL J ET AL; LEVIN NATHANIEL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G06F17/30 G06F19/00 G06F7/00 G06K19/073 G06K19/077 G06K5/00 G06Q10/02 G06Q20/00 G06Q20/04 G06Q20/10 G06Q20/16 G06Q20/18 G06Q20/20 G06Q20/28 G06Q20/32 G06Q20/34 G06Q20/38 G06Q20/40 G06Q30/00 G06Q40/00 G06Q40/08 G06Q50/30 G07B15/00 G07D11/00 G07F19/00 G07F7/08 G07F7/10 H04M11/00 (Advanced/Invention); G06Q20/00 G06Q20/04 G06Q20/22 G06Q40/00 (Advanced/Non–invention); G06Q20/00 G07F7/02 (Core/Invention); G06K (Subclass/Invention)

International class (IPC 1–7): G06Q20/00 G07F7/02

CPC: G06Q20/38 G06Q20/382 G07F7/1008 G07F7/12 G06Q40/08 G06Q30/00 G06K19/07749 G06K19/07769 G06Q20/10 G06Q20/327 G06Q20/341 G06Q20/352 G06Q20/357 G07F7/0873 G06Q20/20 G06Q20/204 G06Q20/32 G06Q20/40 G06Q20/4016 G07F7/1025 G06Q20/4012 G06Q20/3433 G06Q20/409 G06Q20/28 G06Q20/349 G06Q20/381 G06Q20/3278 G06Q20/16 G06Q20/3827 G06Q20/401 G06Q2240/00 G06Q20/35765 G06Q20/35785 G06Q20/045 G06Q20/18 G06Q30/0601 G07B5/04

European class: G06K19/077T G06K19/077T4C G06Q20/045 G06Q20/10 G06Q20/18 G06Q20/20 G06Q20/204 G06Q20/32 G06Q20/327 G06Q20/3278 G06Q20/341 G06Q20/352 G06Q20/357 G06Q20/38 G06Q20/382 G06Q20/40 G06Q20/4016 G06Q30/00 G06Q40/08 G07F7/08G G07F7/10D G07F7/10P G07F7/12

US class: 1/1 235/379 235/380 235/380P 235/380S 235/381 235/382 235/382P 235/382S 235/492 235/492S 455/406 455/406S 705/1.1 705/16 705/16P 705/17 705/17P 705/35 705/39 705/39P 705/39S 705/41 705/44 705/44P 705/44S 705/53 705/64 705/65 705/66 705/67 705/71 705/72 726/30 726/30S

Classification Explorer

Cited documents: WO9938129 A1, WO9852161 A2, WO12037971 A1, WO07030480 A2, WO03081832 A2, WO0254195, WO02054195 A2, WO0169475 A1, US8467766 BB, US8286875 BB, US8256666 BB, US8225386 BA, US8201747 BB, US8152074 BA, US8127982 BA, US8109444 BB, US8108307 BA, US7967196 BA, US7797248 BA, US7707113 BA, US7681788 BB, US7657486 BB, US7438236 BB, US7374082 BB, US7349871 BB, US7309007 BB, US7287695 BB, US7246750 BB, US7225465 BB, US7103575 BA, US7080259 BA, US6902107 BB, US6880084 BA, US6761319 BB, US6742120 BA, US6588673 BA, US6549912 BA, US6490367 BA, US6402038 BA, US6402028 BA, US6398110 BA, US6398110, US6375084 BA, US6367011 BA, US6317832 BA, US6298336 BA, US6273335 BA, US6199762 BA, US6196459 BA, US6119945 A, US6119945, US6101477 A, US6021397 A, US6005942 A, US5991749 A, US5889941 A, US5850218 A, US5442165 A, US5378884 A, US4874935 A, US4855578 A, US4851644 A, US4825054 A, US2012011070 AA, US2012011062 AA, US2011140841 AA, US2011022521 AA, US2010325039 AA, US2010274722 AA, US2010274712 AA, US2010248779 AA, US2010211504 AA, US2010179891 AA, US2010163614 AA, US2010094754 AA, US2010051685 AA, US2010044433 AA, US2010038424 AA, US2010006655 AA, US2009307132 AA, US2009289112 AA, US2009289106 AA, US2009255988 AA, US2009204545 AA, US2009192937 AA, US2009192912 AA, US2009191811 AA, US2009164381 AA, US2009144197 AA, US2009103730 AA, US2009098825 AA, US2009065325 AA, US2009063333 AA, US2009043647 AA, US2009041626 AA, US2009039149 AA, US2009013190 AA, US2008301056 AA, US2008251580 AA, US2008235144 AA, US2008203151 AA, US2008201264 AA, US2008195549 AA, US2008190784 AA, US2008179403 AA, US2008167017 AA, US2008165006 AA, US2008128513 AA, US2008126398 AA, US2008082452 AA, US2008010192 AA, US2008010191 AA, US2008006685 AA, US2008005567 AA, US2008005559 AA, US2007278291 AA, US2007250925 AA, US2007228158 AA, US2007225038 AA, US2007215697 AA, US2007168260 AA, US2007143227 AA, US2007118474 AA, US2007012763 AA, US2007010330 AA, US2006287964 AA, US2006196931 AA, US2006165060 AA, US2006122902 AA, US2006049258 AA, US2006032927 AA, US2005165864 AA, US2005156026 AA, US2005119978 AA, US2005033688 AA, US2004256451 AA, US2004250066 AA, US2004238624 AA, US2004238624, US2004236819 AA, US2004236680 AA, US2004230535 AA, US2004210519 AA, US2004164142 AA, US2004139021 AA, US2004127256 AA, US2004117302 AA, US2004069853 AA, US2004030601 AA, US2003236748 AA, US2003177353 AA, US2003172090 AA, US2003154169 AA, US2003111528 AA, US2003097344 AA, US2003047613 AA, US2002147907 AA, US2002117542 AA, US2002112156 AA, US2002040936 AA, US2002004783 AA, US2001042785 AA, US2001027441 AA, US2001018660 AA, TW580630, TW492559, TW200519673, NL9301902 A, KR20050006131 A, JPNO11120391, JP2004287805 A2, JP2004227463 A2, JP2002024464 A2, JP11120391 A2, GB2443489 A1, EP1050027 A1, EP0944879 A1, EP0911762 A2,

Forward Citations: WO17083961, WO17051240, WO15065561, WO14133796, WO14076686, WO14076686, WO13140196, WO13062438, WO13062438, WO13033388, WO13016327, WO13016327, WO11153379, WO10127012, WO10127003, WO10127000, WO10126994, WO08094890, USRE45767, USRE43680, USD774539, US9684892, US9668096, US9654923, US9646299, US9646294, US9613350, US9607183, US9600811, US9595030, US9576286, US9519551, US9508068, US9503897, US9483761, US9477557, US9472971, US9472043, US9436561, US9418362, US9417974, US9384480, US9361620, US9331495, US9330383, US9317845, US9311766, US9311643, US9304555, US9293927, US9256875, US9240702, US9240005, US9225718, US9208485, US9195931, US9189786, US9177331, US9160416, US9152911, US9152831, US9106647, US9098843, US9098842, US9064251, US9053478, US9047594, US9026461, US9026459, US9016589, US9010633, US9003496, US8973818, US8960540, US8925827, US8924297, US8915447, US8799086, US8781622, US8776189, US8756282, US8746553, US8714439, US8701983, US8660897, US8633616, US8627080, US8616441, US8583561, US8548540, US8527415, US8490878, US8469268, US8430325, US8413896, US8401964, US8392259, US8381999, US8380259, US8370258, US8360322, US8356754, US8346670, US8341083, US8320962, US8317109, US8272567, US8255688, US8196818, US8190221, US8127987, US8109444, US8083134, US8070057, US8061597, US8041030, US8016191, US7994752, US7988058, US7941197, US7909246, US7681788, US7617972, US7614549, US7578438, US7344074, US7299988, US2016078425, US2015332271, US2015310420, US2015262165, US2015222663, US2015149270, US2015142542, US2015032524, US2014330626, US2014324635, US2014297432, US2014279309, US2014222545, US2014164157, US2014158759, US2014151451, US2014114853, US2013304648, US2013303084, US2013282581, US2013275245, US2013262298, US2013226717, US2013191789, US2013191232, US2013185167, US2013103514, US2013103513, US2013103512, US2013103511, US2013097083, US2013065668, US2013054337, US2013046645, US2012303960, US2012239514, US2012221468, US2011244799, US2011212735, US2011181238, US2011166995, US2011161229, US2011155800, US2011125642, US2011112918, US2011089894, US2011031928, US2011010755, US2010325039,

US2010312698, US2010311466, US2010287083, US2010280958, US2010280910, US2010274722, US2010274712, US2010252624, US2010145855, US2010131347, US2009204672, US2009185687, US2009171842, US2009171830, US2009159679, US2009138390, US2009132706, US2009103730, US2009043647, US2008259193, US2008183565, US2008179403, US2008165951, US2008110980, US2006049259, US2003189096, RU2482538, JP2015531093, GB2476233, EP3002722, EP2989603, EP2902959, EP2858023, EP2802116, EP2513848, EP2430600, EP2182489, EP2081140, DE102007055281, CN104573764, CN104205785, CN102804214, AU2014268144, AU2013201076, AU2013201076,

Abstract:
Source: US2007012763A Payment transactions using a payment infrastructure are efficiently combined with e−merchandise transactions using an e−merchandise infrastructure, while allowing each infrastructure to concentrate on its primary function. An electronic payment device configured according to the payment infrastructure is interrogated by a payment module (also configured according to the payment infrastructure) of a first terminal to obtain financial data. Electronic merchandise−related information is generated by an electronic merchandise module (configured according to the electronic merchandise infrastructure) of the first terminal, and such information is transferred to the electronic payment device within a transaction conducted in accordance with the financial data and the payment infrastructure.

0) US2008219503A – MEANS FOR USING MICROSTRUCTURE OF MATERIALS SUR...

154) Family number: 34299170 (US2008219503A) © PatBase

Title: MEANS FOR USING MICROSTRUCTURE OF MATERIALS SURFACE AS A UNIQUE IDENTIFIER

Priority: EP20050108123 20050905 EP20060793252 20060905 US20080041790 20080304 US20120471185 20120514 EP20150178070 20060905 US20150959803 20151204 WO2006EP66043 20060905 US20160193769 20160627

Family:

Publication number	Publication date	Application number	Application date
DE602006047176 D1	20151217	DE200660047176T	20060905
DK2024899 T3	20160215	DK20060793252T	20060905
EP2024899 A1	20090218	EP20060793252	20060905
EP2024899 B1	20151104	EP20060793252	20060905
EP2960830 A1	20151230	EP20150178070	20060905
ES2561058 T3	20160224	ES20060793252T	20060905
HK1122887 A1	20160520	HK20090102325	20090311
HK1122887 A3	20090529	HK20090102325	20090311
TR201601440 T4	20160222	TR20160001440T	20060905
US2008219503 AA	20080911	US20080041790	20080304
US2012243797 AA	20120927	US20120471185	20120514
US2016140420 AA	20160519	US20150959803	20151204
US2016379358 AA	20161229	US20160193769	20160627
US8180174 BB	20120515	US20080041790	20080304
US9208394 BB	20151208	US20120471185	20120514
US9390345 BB	20160712	US20150959803	20151204
WO07028799 A1	20070315	WO2006EP66043	20060905

Probable Assignee: ALPVISION S A

Assignee(s):(std)**:** ALPVISION S A ; ALPVISION SA ; DI VENUTO CELINE ; DI VENUTO DAYER CELINE ; KUTTER MARTIN ; JORDAN FREDERIC

Inventor(s):(std)**:** DI VENUTO DAYER CELINE ; DI VENUTO DAYER V CELINE ; KUTTER MARTIN ; JORDAN FREDERIC ; DI VENUTO CELINE

Inventor(s): FREDERIC JORDAN

Agent(s): LEMAN CONSULTING SA; TOMAS TESIFONTE ENRIQUE; ZEKAI SARIKAYA ATATUERK BULVARI NO 105 708 KIZILAY ANKARA; DLA PIPER US LLP, ATTN: PATENT GROUP; DLA PIPER US LLP ATTN PATENT GROUP; DLA PIPER LLP US; DLA PIPER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G06K9/00 G06K9/32 G06K9/46 G06K9/62 G06K9/64 G06K9/68 G06K9/78 G06T7/00 G07D7/12 G07D7/20 H04N5/225 (Advanced/Invention); G06K9/00 G07D7/00 (Core/Invention); G06K G07D (Subclass/Invention)

CPC: G07D7/20 G06K9/00577 G06K9/6203 G06K9/6857 G07D7/121 G07D7/2033 H04N5/2256 G06K9/4604 G06K9/00093 G06K9/78 G06K2009/6213 G06K9/3208 G06T7/0004 G06K9/46 G06K9/685 G06T2207/30176 G04B47/00 G06K9/6204

European class: G06K9/00R G06K9/32E G06K9/62A1A G06K9/68B1 G07D7/12B G07D7/20 G07D7/20F2

US class: 1/1 382/103 382/103P 382/141 382/162 382/209 382/218 382/276

Classification Explorer

Cited documents: WO9215965 A1, WO06078651 A1, WO05122100 A1, WO05088533 A1, WO05088517 A1, WO0143086 A1, US8180174 BB, US7546114 BA, US6922687 BB, US6920437 BB, US6869015 BB, US6776341 BA, US6706314 BB, US6629061 BA, US6584214 BA, US6565000 BB, US6547137 BA, US6546125 BA, US6504948 BA, US6461987 BA, US6459175 BA, US6384409 BA, US6030657 A, US5975581 A, US5454045 A, US5159647 A, US4490849 A, US4371866 A, US2007291988 AA, US2006013486 AA, US2005075984 AA, US2005053259 AA, US2004079800 AA, US2004076310 AA, US2003219145 AA, US2003076989 AA, US2003014647 AA, US2002146153 AA, GB2426100 A1, GB2417707 A1, GB2417592 A1, GB2417074 A1, GB2221870 A1, GB2005000922, GB2005000903, GB0509635, GB0418178, GB0418173, GB0418138, EP0578875 A1, BY9900011,

Forward Citations: WO17083841, WO16087202, WO15132191, WO15089346, WO15067725, WO14166837, WO14072021, WO11018523, WO10070345, WO10004101, US9681020, US9659362, US9646373, US9646206, US9635378, US9594993, US9582714, US9552641, US9443298, US9390345, US9384452, US9350552, US9224087, US9208394, US9152862, US9076027, US9058543, US9031281, US9019567, US9014428, US8995793, US8983231, US8896885, US8892556, US8774455, US8766800, US8763894, US8757493, US8749386, US8699088, US8682076, US8649440, US8630489, US8615475, US8526743, US8520888, US8502668, US8497983, US8477992, US8421625, US8290205, US8103046, US8078875, US7853792, US7812935, US2017083731, US2016086001, US2016072980, US2015339569, US2015302255, US2015078518, US2014267671, US2014233787, US2014140570, US2013343612, US2013287267, US2013142396, US2013043301, US2012230555, US2010329575, US2009273677, TWI575230, JP2011525617, ITTO20120275, GB2462409, GB2461971, GB2461971, FR3018131, FR2932588, EP2921989, EP1986131, EP1942443, DE102012017398, DE102009037626, CN102119394,

Abstract:
Source: US2008219503A A method and apparatus for the visual identification of materials for tracking an object comprises parameter setting, acquisition and identification phases. The parameter setting phase comprises the steps of defining acquisition parameters for the objects. The acquisition phase comprises the steps of digitally acquiring two−dimensional template image of an object, applying a flattening function and generating downsampled template version of the flattened template and storing it in a reference database with the flattened template. The identification phase comprises the steps of digitally acquiring a snapshot image, applying the flattening function and generating one downsampled version, cross−correlating the downsampled version of the flattened snapshot with the corresponding downsampled templates of the reference database, and selecting templates according to the value of the signal to noise ratio, for the selected templates, cross−correlating the flattened snapshot image with the reference flattened template, and identifying the object by finding the best corresponding template.

0) US2007280698A – WRITING AND READING DATA SYSTEM, STARTING FROM ...

155) Family number: 40865580 (US2007280698A) © PatBase

Title: WRITING AND READING DATA SYSTEM, STARTING FROM A CHROMATIC PRINTED INFORMATION THAT MODIFIES PATTERNS EMITED BY AN ELECTROMAGNETIC WAVES SOURCE, INTRODUCING BIASES THAT CONFORM NEW PATTERNS, GIVING PLACE TO NEW DATA CATEGORIES MATCHED TO A CODE

Priority: AR2006P102275 20060531 EP20070010736 20070530 US20070749324 20070516 US20100788415 20100527

Family:

Publication number	Publication date	Application number	Application date
AR053508 AA	20070509	AR2006P102275	20060531
BRPI0705154 A	20080429	BR2007PI05154	20070530
DE602007035985 D1	20140522	DE200760035985T	20070530
EP1862326 A2	20071205	EP20070010736	20070530
EP1862326 A3	20090408	EP20070010736	20070530
EP1862326 B1	20140409	EP20070010736	20070530
ES2477321 T3	20140716	ES20070010736T	20070530
MX2007006177 A1	20081209	MX20070006177	20070523
US2007280698 AA	20071206	US20070749324	20070516
US2007280699 AA	20071206	US20070749341	20070516
US2010288840 AA	20101118	US20100788415	20100527
US8500020 BB	20130806	US20070749324	20070516
US8550358 BB	20131008	US20100788415	20100527

Probable Assignee: PEREZ AGUSTIN JOSE LUIS

Assignee(s):(std)**:** PEREZ AGUSTIN J L ; PEREZ AGUSTIN JOSE LUIS

Assignee(s): AGUSTIN JOSE LUIS PEREZ

Inventor(s):(std)**:** PEREZ AGUSTIN J L ; PEREZ AGUSTIN JOSE LUIS

Inventor(s): PEREZ AGUSTIN JL ; AGUSTIN JOSE LUIS PEREZ

Agent(s): EBNER VON ESCHENBACH JENNIFER ET AL; RICHARDS JOHN; DE ELZABURU ALBERTO; LADAS AND PARRY; LADAS AND PARRY LLP

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL PL PT RO RS SE SI SK TR

International class (IPC 8–9)**:** B41M3/14 B42D15/00 G06K13/107 G06K19/02 G06K19/06 G06K7/10 G06K7/12 G06K7/14 G07D7/10 G07D7/12 G11B11/10 H04B10/04 H04B10/12 (Advanced/Invention); B41M3/14 B42D15/00 G06K19/06 G06K7/14 G07D7/00 G11B11/00 H04B10/04 H04B10/12 (Core/Invention); B41M3/00 B41M3/14 B42D15/00 (Core/Non–invention)

International class (IPC 1–7)**:** G06K9/00

CPC: B42D25/00 G06K19/06037 B42D25/328 B42D25/41 B41M3/14 G06K7/14 G06K2019/06225

European class: B41M3/14 B42D15/10 G06K19/06C3 G06K7/14 L41M3/14 L42D31/04 S06K19/06W2

US class: 235/380 235/439 235/439S 235/454 235/454P 235/487 235/488 235/488S 235/491 235/494 235/494S 398/182

Classification Explorer

Cited documents: WO9623274 A1, WO9000980 A1, WO05035271 A2, WO02070279 A1, US6877666 BB, US6242733 BA, US6193156 BA, US6173514 BA, US6042004 A, US5522623 A, US4926031 A, US4464786 A, US4446204 A, US3798423 A, US2010208955 AA, US2007194129 AA, US2007171492 AA, US2005279248 AA, US2005067489 AA, US2002057852 AA, GB2372232 A1, GB2272861 A1, GB2121959 A1, GB1534403 A, GB1424442 A, GB1371254 A, EP1457916 A1,

Forward Citations: US8985471, US8469282, US2013306737, US2012241515,

Abstract:
Source: US2007280698A The present invention allows setting information into a support (paper, cardboard, plastics, etc.) by printing process or different kinds of chromatic settings (like chemical reactions),which could be read and decoded in controlled and repetitive conditions, matching with a known code. The process makes it possible the production of a low cost and high security level data support, due to the impossibility of visual access to the information. At the time, the system presents strong barrier for going through the information by means of other technological resources (of optical nature, for example) due to the impossibility of knowing the chromatic parameters settings involved in the scanning procedure for each cluster, which can change from one bit to another one. At the same time, the physical access results also impossible because of the destruction of the support that would be done in the will of doing it. The data clusters are characterized by the particular bias introduced at the constitutive patterns of the electromagnetic waves projected through the chromatic deposits at the molecular level of the support, which read by a proper scanner are after processed and assigned to data categories. Those inputs categories, finally produce outputs for interfaces and external requirements

156) Family number: 40809142 (US2009179418A) © PatBase

Title: OPTICALLY EFFECTIVE SURFACE RELIEF MICROSTRUCTURES AND METHOD OF MAKING THEM

Priority: CN200780017326 20070507 EP20060113901 20060512 EP20070720124 20070507 EP20120191370 20070507 US20080297126 20081014 US20130108453 20131217 WO2007CH00227 20070507

Family:

Publication number	Publication date	Application number	Application date
BRPI0711415 A2	20111101	BR2007PI11415	20070507
CN101443681 A	20090527	CN200780017326	20070507
CN101443681 B	20120111	CN200780017326	20070507
CN102495525 A	20120613	CN201110362663	20070507
CN102495525 B	20150909	CN201110362663	20070507
DE602007037546 D1	20140821	DE200760037546T	20070507
EP1855127 A1	20071114	EP20060113901	20060512
EP2021837 A1	20090211	EP20070720124	20070507
EP2021837 B1	20140709	EP20070720124	20070507
EP2565686 A1	20130306	EP20120191370	20070507
ES2510515 T3	20141021	ES20070720124T	20070507
IN06163CN2008 A	20090403	IN2008CN06163	20081112
JP2009536883 T2	20091022	JP20090508082T	20070507
JP5570210 B2	20140813	JP20090508082T	20070507
RU2008148828 A	20100810	RU20080148828	20070507
RU2428724 C2	20110910	RU20080148828	20070507
TW200745620 A	20071216	TW20070116736	20070511
TWI437276 B	20140511	TW20070116736	20070511
US2009179418 AA	20090716	US20070297126	20070507
US2014106091 AA	20140417	US20130108453	20131217
US8632102 BB	20140121	US20070297126	20070507
US8840146 BB	20140923	US20070297126	20070507
WO07131375 A1	20071122	WO2007CH00227	20070507

Probable Assignee: ROLIC AG

Assignee(s):(std)**:** ROLIC AG ; ROLIK AG ; STALDER MARTIN

Inventor(s):(std)**:** MARTIN STALDER ; SHTAL DER MARTIN ; STALDER MARTIN

Inventor(s): SHTAL'DER MARTIN

Agent(s): GODEMEYER BLUM LENZE PATENTANWAELTE PARTNERSCHAFT MBB; VEENSTRA EVA; CARVAJAL Y ISABEL; SUGHRUE MION PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B05D5/06 B29C41/00 B29D11/00 B42D15/00 B42D15/10 B42D25/00 B44F1/12 G02B5/02 G03F1/68 G03F1/80 G03F7/00 G03F7/20 G07D7/12 G09F3/02 (Advanced/Invention); G09F19/14 (Advanced/Non–invention);
B05D5/06 B29C41/00 B42D15/00 B42D15/10 B44F1/00 G02B5/02 G07D7/00 G09F3/02 (Core/Invention);
G09F19/12 (Core/Non–invention)

G02B5/02

International class (IPC 1–7):

CPC: B29D11/00865 G02B5/0221 G02B5/0257 G02B5/0263 G02B5/0268 G02B5/0284 B42D25/29 B42D25/324 B42D25/328 B42D25/445

European class: B42D15/00C G02B5/02D10 G02B5/02D2N G02B5/02D8 G02B5/02F G02B5/02U4

US class: 283/85 283/85P 359/599 359/599S 427/162 427/162S 428/29

Classification Explorer

Cited documents: WO06007742 A1, WO04027500 A1, WO0129148 A1, US6958207 BA, US6686042 BA, US6322938 BA, US6322638 BA, US6322638, US5389698 A, US5084351 A, US4329410 A, US2009179418 AA, US2005287445 AA, US2005219353 AA, US2005219353, US2005215642 AA, US2005215642, US2005094277 AA, US2005094277, US2004076795 AA, US2004067449 AA, US2003072412 AA, US2003072412, US2003072412, US2003011870 AA, US2003011870, US2003011870, US2002034710 AA, US2001019802 AA, TW200407666, KR20030082295 A, JP2005316393 A2, JP2005316393, JP2005215642 A2, JP2003075987 A2, JP2003075987, EP0766103 A1,

DE102004003984 A1

DE102004003984, CN1938164, CN1392443, CN1377399,

Forward Citations: WO17025336, WO16166044, WO13073462, WO12143426, WO12123303, WO12063117, WO12048809, WO10094441, US9676156, US9618839, US9550390, US9387720, US9383648, US8982465, US8957761, US8928978, US8840146, US8632102, US8573790, US2015084327, US2014237817, US2012236415, US2012027998, US2011049864, US2010315714, US2010254007, US2008272883, TWI515702, RU2591770, RU2540092, RU2535655, JP6033778, JP5598613, JP2015092268, JP2014515834, JP2013541102, JP2013541102, JP2013182269, JP2012517919, JP2012517919, JP2012078447, JP2011510339, ITBA20100046, EP3040747, EP3040746, EP2927714, EP2635006, EP2508922, EP2508922, EP2441593, EP2264488, EP2264488, CN104136944, CN103930283, CN103930283, CN103561963, CN103561963, CN102770787, CN102770787, CN102455592, CN102326102, AU2010327762, AU2010214906, AT515845, AT515845,

Abstract:
Source: US2009179418A The present invention relates to an element comprising a surface area with a specific, optically effective surface relief microstructure (12). The surface relief microstructure has a surface modulation of top regions (13) and bottom regions (14), wherein in a first lateral direction of the surface area there is in average at least one transition from a top to a bottom region or vice versa within every 20 micrometer, and in a second lateral direction of the mask, which is perpendicular to the first direction, there is in average at least one transition from a first to a second zone or vice versa within every 200 micrometer. In the microstructure, (i) in the first direction the lateral arrangement of the transitions is non−periodic, and (ii) the top regions substantially lie in the same top relief plateau (15) and the bottom regions substantially lie in the same bottom relief plateau (16). Through scattering effects, the surface relief microstructures are suitable to display images with a positive−negative image flip, which advantageously have a distinct and saturated color appearance but at the same time do not show any rainbow colors. The invention also relates to methods for making such elements as well as to security devices comprising such elements

0) US2008023539A – CHECK ACCEPTING AND CASH DISPENSING AUTOMATED B...

157) Family number: 41151969 (US2008023539A)

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Title: CHECK ACCEPTING AND CASH DISPENSING AUTOMATED BANKING MACHINE SYSTEM AND METHOD

Priority:

US20050659994P 20050309 US20050660128P 20050309 US20050677805P 20050503
US20050677804P 20050503 US20050677846P 20050503 US20050677767P 20050503
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US20050677891P 20050504 US20050678102P 20050504 US20050678094P 20050504
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Family:

Publication number	Publication date	Application number	Application date
US2008023539 AA	20080131	US20070881044	20070725
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US2008121694 AA	20080529	US20070983433	20071108
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US2009145961 AA	20090611	US20080291688	20081112
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US8061591 BB	20111122	US20070983410	20071108
US8083131 BB	20111227	US20080291688	20081112
WO08060480 A2	20080522	WO2007US23674	20071109
WO08060480 A3	20081211	WO2007US23674	20071109

Probable Assignee: DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC

Assignee(s):(std): BESKITT WILLIAM D ; BLACKFORD DAMON J ; DIEBOLD INC ; DIEBOLD SELF SERVICE SYS ; DIEBOLD SELF SERVICE SYSTEMS ; DIEBOLD SELF SERVICE SYSTEMS D ; PETERS DAVID A ; VANKIRK THOMAS A ; MA SONGTAO ; DIEBOLD SELF SERVICE SYSTEMS A DIVISION OF DIEBOLD INC ; STONE STEPHEN ; RYAN MIKE R

Assignee(s): JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD I ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC

Inventor(s):(std):

BESKITT WILLIAM D ; BLACKFORD DAMON J ; BLACKSON DALE H ; CARPENTER KEITH ; CHAPMAN DALE ; CREWS TIM ; DOMINICK DOUGLAS T ; GRAEF H THOMAS ; GRAEF HARRY THOMAS ; JONES BRIAN ; LIGHTNER BRADLEY ; LUCAS BRIAN E ; MA SONGTAO ; PETERS DAVID A ; RAO AARTHI ; RYAN MIKE P ; RYAN MIKE R ; SMOLK JASEN J ; STEWART KRISTEN ; STONE STEPHEN ; TOEPKE ERIC ; TUROCY KENNETH ; VANKIRK THOMAS A ; WASHINGTON JON E

Agent(s): RALPH E JOCKE WALKER AND JOCKE LPA; RALPH E JOCKE WALKER AND JOCKE; WALKER AND JOCKE; RALPH E; DANIEL D; JOCKE RALPH E

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65H39/10 B65H7/12 G06F17/00 G06F17/60 G06K5/00 G06K7/01 G06K7/08 G06Q20/00 G06Q40/00 G06Q90/00 G07D11/00 G07D7/04 G07F19/00 (Advanced/Invention); B65H7/12 G06K7/01 G06K7/08 G06Q40/00 G06Q90/00 G07F19/00 (Core/Invention)

CPC: G07F19/207 G07D11/006 G07F7/04 G06Q20/042 G06Q20/40 G07F7/0873 G07F19/205 G06Q20/382 G06K13/08 G06Q40/00 B65H31/3027 G07D11/0006 B65H1/22 B65H3/04 B65H7/14 B65H2404/2614 B65H2408/13 B65H2511/12 B65H2511/20 B65H2511/51 B65H2515/71 B65H2551/10 B65H2553/414 B65H2553/44 B65H2557/52 B65H2701/1912 G06Q20/1085 G07D7/04 G07D11/0018 B65H29/46 B65H31/06 B65H31/24 Y10T428/11 Y10T428/1179 G07D7/00 G07D11/0096 G07F19/202 G07D11/0027 G07F19/20 B65H43/04 B65H1/02 B65H1/28 B65H7/06

European class: B65H1/22 B65H3/04 B65H7/14 G06K13/08 G06Q20/042 G06Q20/1085 G06Q20/382 G06Q20/40 G06Q40/00 G07D11/00D2 G07D11/00D4 G07D11/00D6D G07D11/00F2D G07D7/00 G07D7/04 G07F19/00F G07F19/20 G07F19/202 G07F19/205 G07F19/207 G07F7/04 G07F7/08G L65H404/2614 L65H408/13 L65H511/120 L65H511/200 L65H511/510 L65H515/710 L65H551/100 L65H553/414 L65H553/440 L65H557/520 L65H701/1912

US class: 221/13 235/375 235/379 235/379P 235/380 235/381 235/382 235/439 235/439P 235/449 235/449S 235/483 235/483S 271/228 271/262 271/303 271/305 369/13.11 382/137 382/139 428/810 428/815.1 705/43 705/44 705/45 705/73 902/11 902/12 902/15 902/8

Classification Explorer

Cited documents: US7896228 BA, US7891546 BA, US7793831 BB, US7793831 B1, US7467744 BA, US7461773 BB, US7284695 BA, US7229071 BB, US7229071 B1, US7207493 BB, US7195152 BB, US7191936 BB, US7175077 BB, US7150394 BB, US7128260 BA, US7051928 BB, US7051928 B1, US6978927 BB, US6966485 BB, US6966485 B1, US6874682 BB, US6874682 B1, US6805508 BB, US6758395 BB, US6749111 BB, US6739503 BA, US6702280 BB, US6682068 BA, US6626357 BA, US6607124 BA, US6607081 BB, US6565274 BA, US6554185 BA, US6536662 BA, US6520408 BA, US6491216 BA, US6478221 BA, US6302393 BA, US6290070 BA, US6279826 BA, US6270010 BA, US6264101 BA, US6257783 BA, US6241244 BA, US6227446 BA, US6164638 A, US6131809 A, US6109522 A, US6059185 A, US6027025 A, US6012633 A, US6006989 A, US5984177 A, US5957598 A, US5927469 A, US5850075 A, US5697608 A, US5597996 A, US5577719 A, US5563393 A, US5251893 A, US5140166 A, US5136144 A, US4820909 A, US4703162 A, US4450978 A, US4176941 A, US3889056 A, US2011024494 A9, US2010074510 AA, US2009159659 AA, US2009145960 AA, US2008128489 AA, US2008121694 AA, US2008110976 AA, US2008023539 AA, US2007187485 AA, US2007138255 AA, US2007108265 AA, US2007076941 AA, US2007076940 AA, US2006289630 AA, US2006273159 AA, US2006244193 AA, US2006208413 AA, US2006202016 AA, US2006202015 AA, US2006202014 AA, US2006202013 AA, US2006157918 AA, US2006144923 AA, US2006131421 AA, US2006080252 AA, US2006054690 AA, US2005263582 AA, US2005205661 AA, US2005127161 AA, US2005040225 AA, US2005038748 AA, US2005038746 AA, US2005035191 AA, US2005023341 AA, US2005006458 AA, US2004245333 AA, US2004232217 AA, US2004226991 AA, US2004225407 AA, US2004181484 AA, US2004178561 AA, US2004169846 AA, US2004129773 AA, US2004124240 AA, US2004118910 AA, US2004118657 AA, US2004099729 AA, US2004099727 AA, US2004089712 AA, US2004084521 AA, US2004083176 AA, US2004016796 AA, US2003201318 AA, US2002134835 AA, US2002113160 AA, US2002011431 AA, US2001013541 AA,

Forward Citations: WO14172696, US9691163, US9396366, US9342761, US9256864, US9230339, US9208581, US9117101, US9038892, US9004350, US8995012, US8903173, US8870066, US8839940, US8800866, US8573405, US8417629, US8146801, US8083131, US8000514, US7978900, US7971781, US7837096, US7832631,

US7690561, US2015261981, US2015144455, US2015122888, US2015006379, US2014191032, US2013163846, US2013153654, US2012325904, US2012192771, US2011243421, US2011231313, US2011202173, US2011049020, US2010177251, US2010032442, US2010019027, US2009185738, US2009185737, US2009145961, US2008128489, US2008121695, US2008121694, EP2863370, EP2355057, DE102010004582, CN104574643, CN102411816, CN102411815,

Abstract:
Source: US2008023539A An automated banking−machine that is actuated responsive to data read from user cards, accepts checks and dispenses cash to users. The banking machine is operated to acquire image and magnetic data from deposited checks to determine the genuineness of checks and the authority of a user to receive cash for such checks. Cash may be dispensed to the user from the automated banking machine in exchange for a deposited check. The automated banking machine dispenses cash responsive to communications with a transaction host.

0) US2010054551A – USE OF FINGERPRINT RECOGNITION EQUIPMENT FOR TH...

158) Family number: 41844633 (US2010054551A) © PatBase

Title: USE OF FINGERPRINT RECOGNITION EQUIPMENT FOR THE AUTHENTICATION OF SHEET−LIKE ITEMS

Priority: EP20070848923 20071122 WO2006IB03324 20061123 WO2007IB03580 20071122

Family:

Publication number	Publication date	Application number	Application date
CN101583977 A	20091118	CN200780050191	20071122
CN101583977 B	20111116	CN200780050191	20071122
CN102236926 A	20111109	CN201110206540	20071122
DE602007038935 D1	20141127	DE200760038935T	20071122
EA016635 B1	20120629	EA20090070464	20071122
EA200970464 A1	20091230	EA20090070464	20071122
EP2102827 A1	20090923	EP20070848923	20071122
EP2102827 B1	20141015	EP20070848923	20071122
HK1138670 A1	20120914	HK20100104149	20100428
JP2010510108 T2	20100402	JP20090537712T	20071122
JP5113851 B2	20130109	JP20090537712T	20071122
US2010054551 AA	20100304	US20070312698	20071122
WO08062287 A1	20080529	WO2007IB03580	20071122

Probable Assignee: SICPA HOLDING SA

Assignee(s):(std)**:** DECOUX ERIC ; SICPA HOLDING SA

Assignee(s): SICPA HOLDING S A

Inventor(s):(std)**:** DECOUX ERIC ; ERIC DECOUX

Agent(s): BUBLAK WOLFGANG; HOFFMANN EITLE; SUZUKI MAMORU; TANAKA REIKO; MORITA KOJI; OHNO SEIJI; FOLEY AND LARDNER LLP; MUELLER EDGAR

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B42D15/10 G06K9/00 G07D7/00 G07D7/06 G07D7/12 G07D7/20 G09F3/00 (Advanced/Invention); B42D15/10 G06K9/00 G07D7/00 (Core/Invention); G07D (Subclass/Invention)

CPC: G07D7/0034 G07D7/206 G07D7/207 G07D7/00 G07D7/06 G07D7/128

European class: G07D7/00 G07D7/00B4 G07D7/06 G07D7/12V G07D7/20F10 G07D7/20F8

US class: 382/124 382/124P

Classification Explorer

Cited documents: WO9618978 A1, WO03073751 A1, US6665427 BA, US6373965 BA, US5854673 A, US5732148 A, US5732148, US5689576 A, US2008112460 AA, US2005169511 AA, US2005169511, US20050169511, JP7282184 A2, JP7282184, JP2008123525 A2, JP2008123525, JP2003141595 A2, JP2003141595, JP1083470, JP10083470 A2, JP10083470, FR2870376 A1, ER1251448, EP1923843 A1, EP1251448 A1, EP1251448, EP1207503 A2, EP1134704 A1, DE4447705 C2,

Forward Citations: WO17100952, US9594982, US9443367, US9036890, US9022841, US2016321830, US2015235107, US2013322730, DE202014010426, CN103098101, CN103098101,

Abstract:
Source: US2010054551A The invention discloses the use of biometric fingerprint sensing equipment and corresponding data processing algorithms for the authentication of printed documents or products, in particular

intaglio printed indicia on banknotes, value, or identity documents. A corresponding authentication device is also disclosed.

0) US2010001508A – SECURITY DOCUMENT

159) Family number: 42081186 (US2010001508A) © PatBase

Title: SECURITY DOCUMENT

Priority: DE200710005884 20070207 DE200710039996 20070823 DE200710057658 20071128 WO2008EP00926 20080207 WO2008EP00924 20080207 EP20080707598 20080207 US20090449366 20091028 US20160158037 20160518 EP20080707587 20080207 WO2008EP00941 20080207

Family:

Publication number	Publication date	Application number	Application date
AT502773 E	20110415	AT20080707586T	20080207
AT502774 E	20110415	AT20080707598T	20080207
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AU2008213377 AA	20080814	AU20080213377	20080207
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CA2677056 AA	20090730	CA20082677056	20080207
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CA2677153 AA	20090731	CA20082677153	20080207
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DE502008002943 D1	20110505	DE200850002943T	20080207
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WO08095698 A1	20080814	WO2008EP00926	20080207	
WO08095706 A1	20080814	WO2008EP00941	20080207	

Probable Assignee: LEONHARD KURZ STIFTUNG AND CO KG

Assignee(s):(std)**:** LEONHARD KURZ STIFTYNG AND CO KG ; SCHILLING ANDREAS ; STAUB RENE ; LEONHARD KURZ STIFUNG AND CO KG ; TOMPKIN WAYNE ROBERT ; WEBER KLAUS ; LEONKHARD KURTS SHTIFTUNG UND KO KG ; LEONKHARD KURTS SHTIFTUNG U KO KG ; ATTNER JURI ; LEONHARD KURZ STIFTUNG AND CO KG

Assignee(s): LEONHARD KURZ STIFTUNG AND COKG ; LEONHARD KURZ STIFTUNG CO KG

Inventor(s):(std)**:** ANDREAS SCHILLING ; ATTNER JURI ; JURI ATTNER ; KLAUS WEBER ; RENE STAUB ; ROBERT TOMPKIN WAYNE ; SCHILLING ANDREAS ; SHILLING ANDREAS ; SHTAUB RENE ; STAUB RENE ; TOMPKIN UEHJN ROBERT ; TOMPKIN WAYNE ; TOMPKIN WAYNE ROBERT ; VEBER KLAUS ; WEBER KLAUS

Inventor(s): WAYNE ROBERT TOMPKIN

Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY CALLINANS; FISHER ADAMS KELLY PTY LTD; GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; ZINSINGER NORBERT; SALVA JOAN; TUGBA GUENDEMIR; HOFFMANN AND BARON LLP; HOFFMAN AND BARON LLP; ZINSINGER NORBERT ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B29D7/01 B32B29/00 B41M3/14 B42D15/00 B42D15/10 B42D25/29 B42D25/324 B42D25/328 B42D25/351 B42D25/355 B42D25/364 B42D25/373 B42D25/382 B42D25/387 B44F1/12 D21H21/40 D21H21/44 G02B5/08 G02B5/18 G02B5/32 G03F7/00 G07D7/12 G07D7/20 (Advanced/Invention);
G02B5/32 (Advanced/Non–invention);
B29D7/00 B32B29/00 B41M3/14 B42D15/00 B42D15/10 B44F1/00 B44F1/12 D21H21/00 D21H21/40 G02B5/08 G02B5/18 G02B5/32 G03F7/00 G07D7/00 (Core/Invention);
G02B5/32 (Core/Non–invention)

International class (IPC 1–7): B44F1/12

CPC: B42D25/00 B32B29/06 B42D25/36 G03F7/0035 B42D25/355 B42D25/373 B42D25/324 B42D25/351 B42D25/364 B42D25/382 B42D25/387 D21H21/40 B42D25/23 B42D25/24 B42D25/45 B42D25/21 B42D25/333 B42D25/29 D21H21/44 B32B15/08 B42D25/328 D21H21/42 B42D2035/16 B42D2033/06 B42D2035/20 B42D2035/36

European class: B32B15/08 B32B29/06 B42D15/00C B42D15/10 D21H21/40 D21H21/42 D21H21/44 L42D33/06 L42D35/16 L42D35/20 L42D35/22 L42D35/33 L42D35/36

US class: 216/47 264/1.34 264/1.340S 283/109 283/110 283/113 283/72 283/72P 283/74 283/82 283/83 283/85 283/85P 283/85S 283/91 283/91P 283/94 283/98 427/7 427/7S 430/321 430/321S

Classification Explorer

Cited documents: WO9913157 A1, WO9719820 A1, WO08095696 A1, WO06087138 A1, WO06084685 A2, WO06061586 A2, WO06029609 A2, WO05106118 A1, WO05053968 A1, WO05038136 A1, WO0200445 A1, WO0006118, US7823928 BB, US6491324 BA, US6461544 BA, US5786910 A, US5573639 A, US5449200 A, US5443579 A, US5128779 A, US5074596 A, US5044707 A, US4033059 A, US2010295289 AA, US2009243279 AA, US2009136721 AA, US2009061159 AA, US2008310025 AA, US2008160226 AA, US2008143095 AA, US2008094713 AA, US2007085337 AA, US2006202469 AA, US2006163361 AA, US2006114530 AA, US2006097511 AA, US2005104364 AA, US2004265552 AA, US2004239099 AA, US2004096635 AA, US2004036272 AA, US2004007625 AA, US2003137145 AA, US2002030360 AA, US2002027361 AA, US2001043396 AA, US2001041307 AA, JP8295073 A2, JP2006306085 A2, JP2006276090 A2, JP2006251784 A2, JP2005512859 T2, JP2005512859 A2, JP2004117682 A2, JP2003255115 A2, FR2901812 A1, EP1674286 A1, EP1291827 A1, EP0659936 A2, EP0628408 A1, DE4334847 A1, DE19739193 A1, DE10256832 A1, DE10226114 A1,

DE102005049891 A1

DE102005017169 A1

DE102004042136 A1

DE1020004042136, DE10154051 A1, DE10047450 A1,

Forward Citations: WO17092864, WO16166044, WO15183243, WO15181289, WO15088387, WO15084872, WO14054974, WO14049108, WO14012657, WO13160880, WO13138486, WO13034476, WO12076547, WO11154112, WO11079347, WO11044973, WO11003558, WO11000877, WO10115936, WO10091518, US9676156, US9459385, US9297941, US9248689, US9176266, US8403368, US8221586, US2016152065, US2015125660, US2014319819, US2014183855, US2013300101, US2013285361, US2013106092, US2012319395, US2012074682, US2012001411, US2011115212, US2010006248, RU2561413, RU2557565, RU2506168, JP6049028, JP6033778, JP5979506, JP2014517937, JP2014517937, JP2014515834, JP2014515834, JP2014500811, JP2014500811, JP2014071442, JP2014021445, JP2013541102, JP2013541102, JP2013532300, JP2011002491, JP2010271653, JP2010083053, GB2541823, GB2541823, GB2536769, GB2536769, GB2523888, GB2523888, GB2510499, GB2510381, GB2510381, FR3021583, FR2996338, FR2979641, FR2968239, EP2974879, EP2825391, EP2465700, EP2465700, EP2311646, EP2239150, EA018164, DE102011100979, DE102010054760, DE102010050031, DE102008046511, CN106163822, CN104470727, CN104025160, CN104025160, CN103827391, CN103328213, CN103180763, CN103180763, CN103068584, CN103068584, CN102903298, CN102903298, CN102712207, CN102712207, CN102463768, CN102463768, AU2012306521,

Abstract:
Source: US2010001508A The invention concerns a security document comprising a translucent carrier substrate, in particular of paper and/or plastic material, and at least one security element which is applied to the carrier substrate or embedded in the carrier substrate and which presents at least one image when viewed in the transillumination mode from at least a first side of the security document and simulates a presence of at least a first watermark in the carrier substrate, wherein the security element has at least region−wise at least one layer which simulates the first watermark, wherein the at least one layer of the security element, that simulates the first watermark, imparts thereto unexpected optical effects in relation to security elements with conventional watermarks.

0) US2008238682A – RFID TAG READER

160) Family number: 42169789 (US2008238682A) © PatBase

Title: RFID TAG READER

Priority: JP20070071998 20070320 JP20070078874 20070326

Family:

Publication number	Publication date	Application number	Application date
CN101276397 A	20081001	CN200810087023	20080326
CN101286258 A	20081015	CN200810109223	20080320
EP1973056 A2	20080924	EP20080102635	20080314
EP1973056 A3	20090715	EP20080102635	20080314
EP1973083 A2	20080924	EP20080102633	20080314
EP1973083 A3	20090415	EP20080102633	20080314
JP2008234252 A2	20081002	JP20070071998	20070320
JP2008244569 A2	20081009	JP20070078874	20070326
US2008238682 AA	20081002	US20080051426	20080319
US2008302868 AA	20081211	US20080051263	20080319
US8028895 BB	20111004	US20080051263	20080319

Probable Assignee: SANDEN CORP

Assignee(s):(std)**:** SANDEN CORP

Inventor(s):(std)**:** MASAAKI SATOU ; MASARU TABATA ; MATSUMOTO NAOHITO ; MATSUMOTO NAOTO ; NAKAJIMA YASUNARI ; NAOTO MATSUMOTO ; GAKU SHIMAMOTO ; KUWAKO YUJI ; SATO SHOSUKE ; SATOU MASAAKI ; SHIMAMOTO GAKU ; SHIMAMOTO TAKESHI ; TABATA MASARU ; YASUNARI NAKAJIMA ; YUJI KUWAKO

Inventor(s): TABATA MASARU C O SANDEN CORPORATION ; SHIMAMOTO GAKU C O SANDEN CORPORATION ; SATOU MASAAKI C O SANDEN CORPORATION ; KUWAKO YUJI C O SANDEN CORPORATION ; NAOTO MATSUMOTO C O SANDEN CORPORATION

Agent(s): HALEY STEPHEN; BANNER AND WITCOFF LTD

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

International class (IPC 8–9): G06K17/00 G06K7/00 G06Q20/00 G06Q20/06 G06Q20/40 G06Q20/42 G06Q40/00 G07D11/00 G07F19/00 G07F7/08 G07F9/10 G07G1/12 G08B13/22 H01Q21/00 H01Q7/00 H04B1/59 H04B5/02 H04W24/00 H04W92/16 (Advanced/Invention); G06K17/00 G06Q40/00 G07G1/12 G08B13/22 H01Q21/00 H01Q7/00 H04B1/59 H04B5/02 (Core/Invention)

CPC: G06K7/0008 G06K7/10316 H01Q1/2216 H01Q7/00 G07F19/207 G06Q20/10 G06Q20/102 G06Q20/105 G06Q20/108 G06Q20/1085 G06Q20/352 G06Q20/363 G07F19/20

European class: G06K7/00E G06K7/10A8 G06Q20/10 G06Q20/102 G06Q20/105 G06Q20/108 G06Q20/1085 G06Q20/352 G06Q20/363 G07F19/00F G07F19/20 G07F19/207 H01Q1/22C2 H01Q7/00

US class: 235/375 235/379 235/379P 235/380 235/383 340/572.4 705/39 705/40 705/41 705/42 705/43

Classification Explorer

Cited documents: US7664534 BA, US6650227 BA, US6427913 BA, US6353406 BA, US6118379 A, US5854581 A, US4975680 A, US2006118617 AA, US2004009778 AA, US2003174099 AA, US2003084119 AA, US2002118099 AA, JP2004185328 A2, JP2004005149 A2, JP2003036466 A2, JP2002344228 A2, JP2002041811 A2, JP2001238372 A2, JP2001118037 A2, JP2000268240 A2, GB2218081 A1, EP1528513 A1, EP0580297 A2, DE4135767 A1, DE20102477 U1, DE20102477,

Forward Citations: US9418267, US9284769, US9171448, US7757947, US2017012599, US2014016583, US2012229258, US2007215700, TWI466041, JP5959945, JP5889595, JP5526383, JP2013254289, JP2013088903, JP2011091500, JP2011008452, JP2010212906, EP2683090, DE102009049598, CN104077617, CN103728925, CN103679097, CN103679097, CN102750789, CN102436570, CN102419812, CN102122407,

Abstract:
Source: US2008238682A A control unit of a reader superimposes a control signal for antenna switching on a high frequency signal outputted into an antenna unit from a high frequency circuit. The antenna unit includes: separators for separating the superimposed signals into high frequency signals and control signals; a switch circuit for switching loop antennas; and a control circuit for controlling the switch circuit based on the control signal separated by the separator.

161) Family number: 42453864 (US2009000905A) © PatBase

Title: APPARATUS FOR RECEIVING AND DISPENSING DOCUMENTS OF VALUE

Priority: DE200710020752 20070503 EP20080749304 20080502 US20070924598P 20070522 US20080149480 20080502 WO2008EP03562 20080502

Family:

Publication number	Publication date	Application number	Application date
CA2684704 AA	20081113	CA20082684704	20080502
DE102007020752 A1	20081106	DE200710020752	20070503
DE502008009130 D1	20130314	DE200850009130T	20080502
EP2156417 A2	20100224	EP20080749304	20080502
EP2156417 B1	20130116	EP20080749304	20080502
US2009000905 AA	20090101	US20080149480	20080502
US8172066 BB	20120508	US20080149480	20080502
WO08135244 A2	20081113	WO2008EP03562	20080502
WO08135244 A3	20090115	WO2008EP03562	20080502

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** GIESECKE AND DEVRIENT GMBH ; STAPFER MICHAEL

Inventor(s):(std)**:** STAPFER MICHAEL

Agent(s): BACON AND THOMAS PLLC; KLUNKERSCHMITT NILSONHIRSCH

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G07D11/00 G07D13/00 G07D7/00 (Advanced/Invention); G07D11/00 G07D7/00 (Core/Invention)

CPC: B65H29/006 G07D11/0081 G07D11/0084

European class: B65H29/00E G07D11/00H G07D11/00K

US class: 194/205 194/207 194/344

Classification Explorer

Cited documents: WO9910847 A1, WO06063555 A1, US7753189 BB, US7677546 BB, US7335903 BA, US7278527 BB, US7240780 BB, US7225911 BB, US6457586 BB, US6311819 BA, US5836577 A, US5657846 A, US5505289 A, US4884698 A, US4017004 A, US2008061127 AA, US2006202019 AA, US2006202018 AA, US2006076213 AA, US2005077215 AA, US2003116400 AA, US2003038062 AA, EP0644511 A2, DE4005291 A1, DE19958017 A1,

Abstract:
Source: US2009000905A An apparatus for accepting and for outputting documents of value is provided with a checking device for checking the authenticity of fed documents of value, an entrance transport device for transporting documents of value along a transport path past the checking device or through it, which has a first and a second part, which in operation are located opposite each other and between each other form the transport path, a storage unit, which comprises at least two storages for storing at least two different types of documents of value, so that a document of value of each of the two types, independently of the order of input of the documents of value into the storage unit, can optionally be outputted from the storage unit, as well as a system for transporting documents of value for the transport of checked documents of value to the storage unit or from said storage unit to a device for outputting documents of value, at least the first part of the entrance transport device being held at the apparatus swiveling around a first swivel axis between an operating position, in which a transport of documents of value can be effected, and an open position, in which the transport path is accessible.

0) US2009038909A – APPARATUS FOR RECEIVING AND DISPENSING DOCUMENT...

162) Family number: 42453899 (US2009038909A) © PatBase

Title: APPARATUS FOR RECEIVING AND DISPENSING DOCUMENTS OF VALUE

Priority: DE200710020753 20070503 US20070924597P 20070522 US20080149479 20080502 WO2008EP03560 20080502

Family:

Publication number	Publication date	Application number	Application date
CA2686041 AA	20081113	CA20082686041	20080502
DE102007020753 A1	20081106	DE200710020753	20070503
EP2147418 A1	20100127	EP20080749302	20080502
US2009038909 AA	20090212	US20080149479	20080502
US8100244 BB	20120124	US20080149479	20080502
WO08135242 A1	20081113	WO2008EP03560	20080502

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** GIESECKE AND DEVRIENT GMBH ; STAPFER MICHAEL

Inventor(s):(std)**:** STAPFER MICHAEL

Agent(s): BACON AND THOMAS PLLC; KLUNKERSCHMITT NILSONHIRSCH

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G07B11/00 G07D11/00 G07F7/04 (Advanced/Invention); G07D11/00 G07F7/00 (Core/Invention)

CPC: B65H29/006 G07D11/0081

European class: B65H29/00E G07D11/00H

US class: 194/206 194/350

Classification Explorer

Cited documents: US7422118 BB, US6786479 BB, US6371473 BA, US6062369 A, US6036089 A, US5019249 A, US4884698 A, US4858743 A, US4017004 A, US2006076213 AA, US2005183928 AA, US2003116400 AA, US2003038062 AA, US2002023954 AA, EP0820042 A2, EP0644511 A2, CA2339722 AA,

Forward Citations: WO12150029, US9159180, US8976420, US2011199649,

Abstract:
Source: US2009038909A An apparatus for accepting and for outputting documents of value is provided with a checking device for checking the authenticity of fed documents of value, a storage unit, which comprises at least two storages for storing at least two different types of documents of value, so that a document of value of each of the two types, independently of the order of input of the documents of value into the storage unit, can optionally be outputted from the storage unit, a temporary storage unit for a, preferably singled, temporary storage of at least one, preferably at least two checked documents of value, and a transport system, with the help of which documents of value coming from the checking device can be transported to the storage unit, wherein the storage unit is held in a rotatable and/or swiveling fashion between an operating position and an open position in such a way, that in an operating position receiving and/or outputting documents of value is possible, and in the open position the portion of the transport system kept away from a manual access by the storage unit during the operating position is exposed.

0) US2009000904A – APPARATUS FOR RECEIVING AND DISPENSING DOCUMENT...

163) Family number: 42453895 (US2009000904A) © PatBase

Title: APPARATUS FOR RECEIVING AND DISPENSING DOCUMENTS OF VALUE

Priority: DE200710020776 20070503 US20070924596P 20070522 US20080149478 20080502 WO2008EP03559 20080502

Family:

Publication number	Publication date	Application number	Application date
CA2684675 AA	20081113	CA20082684675	20080502
DE102007020776 A1	20081106	DE200710020776	20070503
EP2147417 A1	20100127	EP20080749301	20080502
US2009000904 AA	20090101	US20080149478	20080502
WO08135241 A1	20081113	WO2008EP03559	20080502

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** GIESECKE AND DEVRIENT GMBH ; STAPFER MICHAEL

Inventor(s):(std)**:** STAPFER MICHAEL

Agent(s): BACON AND THOMAS PLLC; KLUNKER SCHMITT–NILSON HIRSCH

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G07D11/00 G07D7/00 (Advanced/Invention); G07D11/00 G07D7/00 (Core/Invention)

CPC: B65H29/006 G07D11/0015 G07D11/0081

European class: B65H29/00E G07D11/00D2F G07D11/00H

US class: 194/207

Classification Explorer

Cited documents: WO0211079 A1, US7779982 BB, US7278527 BB, US6036089 A, US6014649 A, US5593149 A, US5152512 A, US5019249 A, US4884698 A, US4017004 A, US2006076212 AA, US2003116400 AA, US2003038062 AA, US2002023954 AA, US2001022258 AA, DE29919073 U1, DE19626981 A1,

Abstract:
Source: US2009000904A An apparatus for accepting and outputting documents of value is provided with a checking device for checking the authenticity of fed documents of value, a storage unit, which comprises at least two storages for storing at least two different types of documents of value, so that a document of value of each of the two types, independently of the order of input of the documents of value into the storage unit, can optionally be outputted from the storage unit, a temporary storage unit for the singled temporary storage of at least two checked documents of value, which can be displaced between at least one accepting position, in which documents of value transported from the checking device can be temporarily stored in the temporary storage unit, and the storing positions associated to the storages, in which at least some of the documents of value temporarily stored in the temporary storage unit can be transported from the temporary storage unit into the respective storage, and a transport system, with the help of which the temporary storage unit is movable between the accepting position and the storing positions.

164) Family number: 42462058 (EP1990781A2) © PatBase

Title: Reloading system in a coin return machine

Priority: IT2007VI00129 20070507

Family:

Publication number	Publication date	Application number	Application date
EP1990781 A2	20081112	EP20080103735	20080428
EP1990781 A3	20090211	EP20080103735	20080428
ITVI20070129 A1	20081108	IT2007VI00129	20070507

Probable Assignee: COGES S P A

Assignee(s):(std)**:** COGES S P A

Assignee(s): COGES SPA

Inventor(s):(std)**:** ADRIANI MARCO

Agent(s): BETTELLO PIETRO

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

International class (IPC 8–9): G07D1/02 G07F5/00 (Advanced/Invention); G07D1/02 G07F5/00 (Core/Invention)

CPC: G07D1/06 G07D9/00 G07D11/0057 G07F5/24

European class: G07D1/06 G07D11/00F2B G07D9/00 G07F5/24

Classification Explorer

Cited documents: US2003163388 AA, EP1327964 A2, EP1220169 A1, EP1071047 A1, EP0387972 A1,

Forward Citations: EP2884471,

Abstract:
Source: EP1990781A2 The invention is a coin replenishment system for a coin return device of the type mounted with specific containers foreseen in a number that can vary, in which coins are stored in a specific order inside each single container, conceived so that they contain exclusively coins of a single value, so that in a similar specific order they are distributed as change during a successive coin return stage. Such a system is characterised in that the replenishment operations for the containers are performed in an "assisted" manner, using two devices normally present in (vending) machines, such as a microcontroller that regulates the device operating functions and a reader system for cashless payment, or alternatively a programming keyboard.

165) Family number: 43212179 (US2010260985A)

© PatBase

Title: POLYMER LAYER COMPOSITE FOR A SECURITY AND/OR VALUABLE DOCUMENT

Priority:

AU20080333700	20081208	AU20150207834	20150728	DE200720018393U	20071031
DE200710059747	20071207	DE200710059746	20071207	DE200710052947	20071031
EP20080843750	20081031	DE200810012422	20080229	DE200810012423	20080229
DE200810012424	20080229	DE200810012419	20080229	DE200720018394U	20071207
DE200720018398U	20071207	DE200810012426	20080229	US20100746637	20100804
US20130799430	20130313	EP20080844396	20081031	JP20100530271	20081029
EP20080857770	20081208	WO2008DE002013	20081208	WO2008DE001751	20081029
US20150662651	20150319	WO2008DE002014	20081208	JP20100530271T	20081029
EP20080856485	20081208	US20100740523	20100429	US20150959356	20151204
WO2008DE01751	20081029	EP20130185058	20081031	US20170412218	20170123
WO2008EP09333	20081031	WO2008EP09336	20081031	WO2008EP09337	20081031

Family:

Publication number	Publication date	Application number	Application date
AT502091 E	20110415	AT20080845973T	20081029
AU2008317836 AA	20090507	AU20080317836	20081031
AU2008317836 BB	20130912	AU20080317836	20081031
AU2008317836 BI	20140116	AU20080317836	20081031
AU2008317837 AA	20090507	AU20080317837	20081031
AU2008317837 BB	20120705	AU20080317837	20081031
AU2008333700 AA	20090611	AU20080333700	20081208
AU2015207834 AA	20150820	AU20150207834	20150728
AU2015207834 BB	20170601	AU20150207834	20150728
BRPI0818479 A2	20170502	BR2008PI18479	20081031
BRPI0818838 A2	20150422	BR2008PI18838	20081029
CA2703722 AA	20100426	CA20082703722	20081029
CA2703722 C	20150505	CA20082703722	20081029
CA2703749 AA	20100426	CA20082703749	20081031
CA2703749 C	20160112	CA20082703749	20081031
CN101842448 A	20100922	CN200880113758	20081029
CN101842448 B	20140827	CN200880113758	20081029
CN101888932 A	20101117	CN200880119637	20081208
CN101888932 B	20130529	CN200880119637	20081208
CN101918224 A	20101215	CN200880123471	20081031
CN101918224 B	20150603	CN200880123471	20081031
CN101932455 A	20101229	CN200880119638	20081208
CN101932455 B	20131113	CN200880119638	20081208
CN101980875 A	20110223	CN200880113843	20081031
CN101980875 B	20150610	CN200880113843	20081031
DE102007052947 A1	20090507	DE200710052947	20071031
DE102007059746 A1	20090610	DE200710059746	20071207
DE102007059747 A1	20090610	DE200710059747	20071207
DE102008012419 A1	20090507	DE200810012419	20080229
DE102008012422 A1	20090507	DE200810012422	20080229
DE102008012423 A1	20090507	DE200810012423	20080229
DE102008012424 A1	20090507	DE200810012424	20080229
DE102008012426 A1	20090507	DE200810012426	20080229
DE502008002911 D1	20110428	DE200850002911T	20081029
DE502008011690 D1	20140612	DE200850011690T	20081031

DE502008011738 D1	20140618	DE200850011738T	20081031	
DE502008012714 D1	20150409	DE200850012714T	20081208	
DE502008013614 D1	20160107	DE200850013614T	20081208	
DE502008014641 D1	20161027	DE200850014641T	20081031	
EP2205686 A1	20100714	EP20080845973	20081029	
EP2205686 B1	20110316	EP20080845973	20081029	
EP2207686 A1	20100721	EP20080843750	20081031	
EP2207686 B1	20140507	EP20080843750	20081031	
EP2209653 A1	20100728	EP20080844396	20081031	
EP2209653 B1	20140430	EP20080844396	20081031	
EP2212122 A1	20100804	EP20080843738	20081031	
EP2214912 A2	20100811	EP20080856485	20081208	
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Probable Assignee: COVESTRO DEUTSCHLAND AG

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B23K26/00 B29C45/00 B29C45/16 B32B27/00 B32B27/06 B32B27/08 B32B27/18 B32B27/20 B32B27/36 B32B3/00 B32B3/02 B32B3/10 B32B37/00 B32B37/06 B32B37/14 B32B38/00 B32B38/14 B32B5/00 B32B7/00 B41J2/01 B41J29/00 B41J5/30 B41M3/00 B41M3/10 B41M3/14 B41M5/00 B41M5/24 B41M5/50 B41M5/52 B42D15/00 B42D15/10 B42D25/00 B42D25/29 B42D25/30 B42D25/305 B42D25/309 B42D25/333 B42D25/351 B42D25/36 B42D25/378 B42D25/40 B42D25/405 B42D25/41 B42D25/435 B42D25/45 B42D25/455 B42D25/47 B42D25/48 B44F1/10 B44F1/12 C08G64/16 C08J5/12 C08L69/00 C09B67/20 C09D11/00 C09D11/02 C09D11/10 C09D11/102 C09D11/30 C09D11/36 C09D169/00 G03G7/00 G06K19/02 G06K19/067 G06K19/10 G06K9/54 G06T1/00 G06T7/00 G07D7/00 G07F7/12 G6K19/067 H04N1/387 H04N1/44 (Advanced/Invention); B29C45/16 B32B27/00 B41M3/10 B41M3/14 B42D15/10 C08G64/16 C09D11/10 G06K19/067 G07D7/00 (Advanced/Non–invention); B29C45/16 B32B27/00 B32B27/18 B41M3/00 B41M3/14 B42D15/10 B44F1/00 C08G64/00 C08J5/12 C08L69/00 C09D11/00 C09D11/10 G06K19/067 G07D7/00 (Core/Invention); B41M3/00 B42D15/10 C08J5/12 C08L69/00 C09D11/10 (Core/Non–invention)

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Abstract:
Source: US2010260985A The invention relates to a method for producing a polymer layer composite that comprises a plurality of polymer layers and at least one polymer layer contains a laser−sensitive component, said method consisting of the following steps: A) first personalised information is applied to at least one of the polymer layers by means of an inkjet printing method as a coloured inkjet printed layer, B) the polymer layer with the coloured inkjet printed layer is then joined to the other polymer layers, the polymer layer with the coloured inkjet printed layer being arranged between two other polymer layers, C) second personalised information is inscribed

into the polymer layer composite obtained in step B) by means of laser engraving. The invention also relates to a thus obtained polymer layer composite, a security and/or valuable document comprising a polymer layer composite of said type and to a method for producing a security and/or valuable document of said type.

166) Family number: 43430368 (US2009159663A) © PatBase

Title: PAYMENT CARDS AND DEVICES OPERABLE TO RECEIVE POINT–OF–SALE ACTIONS BEFORE POINT–OF–SALE AND FORWARD ACTIONS AT POINT–OF–SALE

Priority:

AU20080340226	20081224	AU20140200516	20140130	US20070016491	20071224
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AU2014200516 AA	20140220	AU20140200516	20140130
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WO09082760 A3	20091230	WO2008US88321	20081224	

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Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; FREEHILLS PATENT ATTORNEY S; FPA PATENT ATTORNEYS PTY LTD; BARNFATHER KARL JON; JEFFREY D MULLEN;

ALDRIDGE JEFFREY C ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G06F17/00 G06F3/0488 G06K19/00 G06K19/02 G06K19/06 G06K19/07 G06K19/073 G06K19/077 G06K5/00 G06K7/00 G06K7/08 G06Q20/18 G06Q20/20 G06Q20/34 G06Q20/38 G06Q30/00 G06Q30/02 G06Q30/06 G06Q40/00 G07D11/00 G07F19/00 G07F7/08 G07F7/10 H04Q5/22 (Advanced/Invention); G06K19/00 G06K19/06 G06K5/00 G06K7/08 G07F19/00 H04Q5/00 (Core/Invention)

CPC: G06Q20/341 G06K19/07 G06K19/07703 G06Q20/18 G06Q20/20 G06Q20/3415 G06Q20/352 G06Q20/385 G06Q30/0222 G06Q30/0241 G06Q30/0277 G06Q30/0641 G07F7/0806 G07F7/1008 G06K19/07707 G06K19/07705 G06K19/07749 G06Q20/34 G06K19/0725 G06K19/06187 G06K19/07766 G06K7/087 G06K19/0775 G06K19/0704 G06K19/0723 G06K19/07345 G06K7/084 G06K7/0004 G06F3/0488 G06K19/07769 G06K19/07773 G06K19/07709 G06K19/06206

European class: G06K19/06M4 G06K19/07 G06K19/077A2 G06Q20/18 G06Q20/20 G06Q20/3415 G06Q20/352 G06Q20/385 G06Q30/0222 G06Q30/0241 G06Q30/0277 G06Q30/0641 G07F7/08A G07F7/10D

US class: 1/1 235/375 235/379 235/379P 235/380 235/380P 235/380S 235/441 235/449 235/449P 235/449S 235/451 235/487 235/487P 235/487S 235/488 235/488P 235/492 235/492P 235/493 235/493P 235/493S 235/494 340/10.1 340/10.100P 705/14.23 705/14.23 705/14.230P 705/14.4 705/14.400S 705/14.73 705/14.730P 705/27.1 705/27.100P 705/41

Classification Explorer

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Abstract:
Source: US2009159663A A payment card or other device (e.g., mobile telephone) is provided with a magnetic emulator operable to communicate data to a magnetic stripe read−head. A user can utilize buttons located on the card to perform activities that would otherwise be performed at an ATM, payment card reader, or by a waitress. A user can provide instructions on a card to accelerate a transaction. The information a user enters can be communicated to a point−of−sale device. For example, a user can enter into his/her card that the user desires $100 withdrawal from a checking account. The user can also enter his/her PIN into the card. The user can swipe his/her card into an ATM and instantly be provided with the desired $100.

167) Family number: 43649271 (US2010327060A) © PatBase

Title: READING DEVICE FOR IDENTIFYING A TAG OR AN OBJECT ADAPTED TO BE IDENTIFIED, RELATED METHODS AND SYSTEMS

Priority: US20080029597 20080219 US20080029597P 20080219 US20090867902 20090219 WO2009SG00056 20090219 US20100867902 20100817 US20120646987 20121008

Family:

Publication number	Publication date	Application number	Application date
CN101999127 A	20110330	CN200980112773	20090219
CN101999127 B	20141015	CN200980112773	20090219
EP2248067 A1	20101110	EP20090713482	20090219
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US8281997 BB	20121009	US20090867902	20090219
US8763903 BB	20140701	US20120646987	20121008
WO09105040 A1	20090827	WO2009SG00056	20090219

Probable Assignee: BILCARE TECHNOLOGIES SINGAPORE PTE LTD

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Assignee(s): BILCARE TECHNOLOGIES SINGAPORE PTELTD

Inventor(s):(std)**:** BURDEN ADRIAN PAUL ; MALCOLM MORAN PETER ; MORAN PETER MALCOLM ; PAUL BURDEN ADRIAN

Agent(s): VIERING JENTSCHURA AND PARTNER; MCLAUGHLIN IP PTE LTD; PILLSBURY WINTHROP SHAW PITTMAN LLP; SCHIWECK WOLFRAM

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G06K17/00 G06K19/06 G06K19/08 G06K19/10 G06K19/12 G06K7/00 G06K7/01 G06K7/015 G06K7/08 G06K7/10 G07D7/20 (Advanced/Invention); G06K7/01 G06K7/08 G06K7/10 (Core/Invention)

CPC: G06K7/0004 G06K7/10475 G06K19/08 G06K19/086 G06K19/12 G07D7/04 G07D7/128 G07D7/2033 G07D7/0043

European class: G06K19/08 G06K19/08C2 G06K19/12 G06K7/00C G06K7/10A9G G07D7/00B6 G07D7/04 G07D7/12V G07D7/20F2

US class: 235/440 235/440P 235/449 235/451 235/491 235/493

Classification Explorer

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Forward Citations: WO16169656, WO15009979, WO13126753, WO12128724, WO12033467, US9686584, US9652775, US9652108, US9618461, US9596500, US9571888, US9563831, US9552546, US9501046, US9500663, US9449201, US9436909, US9412041, US9405975, US9367669, US9361532, US9329966, US9323960, US9311594, US9292718, US9280515, US9275326, US9239985, US9235499, US9224090, US9218563, US9186793, US9183493, US9148686, US9129181, US9123127, US9122994, US9122971, US9117149, US9111226, US9092830, US9082062, US9070039, US9010638, US8976432, US8931031, US8891872, US8886172, US8875173, US8864037, US8856853, US8833640, US8827150, US8786410, US8763903, US8746554, US8740086, US8640956, US8553146, US8550334, US8534540, US8511540, US8468610, US8443407, US2017091502, US2017083731, US2016026836, US2015339569, US2015302287, US2015036872, US2014263604, US2014219497, US2014217173, US2014205153, US2014105368, US2013256415, US2012273564, US2012218471, US2012181329, JP2014516176, ITTO20120911, ITPV20110002, EP2614469, EP2614469, EP2488990, EP2452290, CN104914051, CN103534708, CN102193480, CN102073855,

Abstract:
Source: US2010327060A A reading device for identifying a tag or an object adapted to be identified is disclosed. The reading device includes a first reading element for reading a first set of identification features located in the tag or the object adapted to be identified, wherein the first reading element is a magneto−optical reading element; and a second reading element for reading a second set of identification features located in the tag or the object adapted to be identified; wherein the reading device is configured such that a first signal generated from reading the first set of identification features and a second signal generated from reading the second set of identification features are independently used to derive a first signature and a second signature for identifying the tag or object.

0) DE102008014604A1 – BANKNOTE TAKING DEVICE FOR USE IN VENDING MACHI...

168) Family number: 43961766 (DE102008014604A1) © PatBase

Title: BANKNOTE TAKING DEVICE FOR USE IN VENDING MACHINE IN E.G. RAILWAY STATION, HAS FRONT PLATE INCLUDING SENSOR ZONE FOR SENSING CHIP CARD BY RADIO WAVES, AND ACTUATION KEYS FOR DATA ENTRY AND VIDEO DISPLAY FOR DISPLAYING DATA

Priority: DE200810014604 20080317

Family:

Publication number	Publication date	Application number	Application date
DE102008014604 A1	20091112	DE200810014604	20080317

Probable Assignee: INT CURRENCY TECH

Assignee(s):(std)**:** INT CURRENCY TECH

Assignee(s): INT CURRENCY TECHNOLOGIES CORP

Inventor(s):(std)**:** CHIEN TIEN YUAN ; HUANG RUEI JIA ; LIN SUNG CHING ; SHEN SHIH MING

International class (IPC 8–9): G07D13/00 (Advanced/Invention)

CPC: G07F7/04 G07F7/0893

European class: G07F7/04 G07F7/08G4

Classification Explorer

Cited documents: US7284692 BA,

Abstract:
The device has a primary unit (3) and a front plate (1) at a side of the primary unit. The front plate is provided with a banknote insertion slot (12) for inserting a banknote. The primary unit has a unit for verifying authenticity and values of the inserted banknote. The front plate has a sensor zone (11) for sensing a radio frequency identification (RFID) chip card by radio waves. A set of actuation keys (13) is provided for data entry and a video display (14) is provided for displaying operating notification and data. A control circuit arrangement is arranged in the primary unit.

0) US2010056260A – CURRENCY VALUE CHANGING APPARATUS ENABLING PLAY...

169) Family number: 44321678 (US2010056260A) © PatBase

Title: CURRENCY VALUE CHANGING APPARATUS ENABLING PLAYER TO PLAY GAME USING VARIOUS CURRENCIES, GAMING SYSTEM WHERE PLAYER CAN PLAY GAME USING VARIOUS CURRENCIES, INDIVIDUAL TRACKING APPARATUS, AND INDIVIDUAL TRACKING SYSTEM

Priority: JP20080193648 20080728 JP20090131897 20090601 US20080093091P 20080829 US20080093096P 20080829 US20080093098P 20080829 JP20100522675 20090716 US20080093120P 20080829 US20090511224 20090729 WO2009JP62884 20090716 US20090054951 20090716 WO2009JP63399 20090728 US20150751731 20150626

Family:

Publication number	Publication date	Application number	Application date
AU2009277649 AA	20100204	AU20090277649	20090716
CN102105912 A	20110622	CN200980129158	20090728
CN102123770 A	20110713	CN200980129803	20090716
JP2010013600 A1	20120112	JP20100522675T	20090716
JP2013242903 A2	20131205	JP20130152745	20130723
JP5329543 B1	20131030	JP20100522675T	20090716
JP5329543 B2	20131030	JP20100522675T	20090716
JP5603980 B2	20141008	JP20130152745	20130723
US2010056260 AA	20100304	US20090511224	20090729
US2011124405 AA	20110526	US20090054951	20090716
US2011128122 AA	20110602	US20090056212	20090728
US2015356825 AA	20151210	US20150751731	20150626
US8522949 BB	20130903	US20090056212	20090728
US9105141 BB	20150811	US20090054951	20090716
US9547951 BB	20170117	US20090511224	20090729
US9646446 BB	20170509	US20150751731	20150626
WO10013600 A1	20100204	WO2009JP62884	20090716
WO10013697 A1	20100204	WO2009JP63399	20090728

Probable Assignee: UNIVERSAL ENTERTAINMENT CORP

Assignee(s):(std)**:** KUKITA NORITOSHI ; NIREKI TAKAO ; OKADA KAZUO ; MANABE KUNIHIRO ; YOSHIOKA KAZUEI ; UNIVERSAL ENTERTAINMENT CORP ; ARUZE CORP ; FUJIMOTO JUN

Assignee(s): KUKITA NORITOSHI ; FUJIMOTO JUN ; NIREKI TAKAO ; MANABE KUNIHIRO ; OKADA KAZUO ; YOSHIOKA KAZUEI

Inventor(s):(std)**:** FUJIMOTO ATSUSHI ; FUJIMOTO JUN ; KAZUO OKADA ; KUKIDA YOSHITOSHI ; KUKITA NORITOSHI ; KUNIHIRO MANABE ; MANABE KUNIHIRO ; NIREKI TAKAO ; NORITOSHI KUKITA ; OKADA KAZUO ; TAKAO NIREKI ; YOSHIOKA KAZUEI

Inventor(s): FUJIMOTO JUN ; YOSHIOKA KAZUEI ; OKADA KAZUO ; NIREKI TAKAO ; MANABE KUNIHIRO ; KUKITA NORITOSHI ; JUN FUJIMOTO

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT LLP; LEXYOUME IP MEISTER PLLC; KENNETH M; S PETER; KMF PATENT SERVICES PLLC; LEX IP MEISTER PLLC; KANEKI AKIO; AIKAWA TOSHIHIKO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F5/04 A63F7/02 A63F9/00 A63F9/24 G05B19/00 G06F17/00 G06Q20/38 G07D1/04 G07D7/00 G07D7/06 G07D7/12 G07D7/20 G07F17/00 G07F17/32 (Advanced/Invention);

A63F5/04 A63F7/02 A63F9/00 A63F9/24 G07D7/00 (Core/Invention)

CPC: G07F17/3239 G07F17/3246 G07F17/3272 G07F17/3223 G07F17/3211 G06Q20/381 G07F17/32 G07F17/3244 G07F17/3258 G07D7/0034 G07D7/206 G07D7/12 G07D7/002

European class: G06Q20/381 G07D7/00B4 G07D7/12 G07D7/20F8 G07F17/32 G07F17/32C2F G07F17/32E6D2 G07F17/32K2

US class: 1/1 194/207 250/559.11 340/5.86 340/5.860P 463/25 463/25P 463/43 463/43S

Classification Explorer

Cited documents: US7892089 BB, US7887411 BB, US7428985 BA, US7406184 BB, US7142697 BB, US7127087 BB, US7095879 BB, US7094149 BB, US6975750 BB, US6944319 BA, US6852029 BB, US6846238 BB, US6040584 A, US5628685 A, US5577959 A, US5496032 A, US2011210503 AA, US2010303333 AA, US2009192938 AA, US2009054149 AA, US2008242391 AA, US2008167117 AA, US2007178970 AA, US2006205481 AA, US2006149561 AA, US2006115138 AA, US2004152511 AA, US2004009811 AA, US2003195037 AA, US2003032479 AA, US2003022719 AA, US2002041069 AA, JP973573, JP9073573 A2, JP7129812 A2, JP7012812 A2, JP660242, JP6060242 A2, JP3191495 A2, JP3191495, JP2007179323 A2, JP2007179323, JP2006202075 A2, JP200093637, JP2000099811 A2, JP2000099811, JP2000093637 A2, JP2000093637, JP1169590 A2, JP105418, JP10005418 A2, JP10005418, JP03191495,

Forward Citations: WO14025940, WO12146927, US9691226, US9691225, US9691224, US9691223, US9691220, US9685037, US9672698, US9672690, US9659438, US9646460, US9640032, US9626836, US9607480, US9600960, US9595170, US9589421, US9576427, US9576424, US9569929, US9564008, US9558624, US9536386, US9536375, US9530275, US9520019, US9495837, US9489797, US9483165, US9478103, US9478096, US9472055, US9466175, US9449466, US9443387, US9384631, US9384630, US9384623, US9361758, US9355529, US9349249, US9349247, US9330533, US9305420, US9302175, US9286745, US9251657, US9230404, US9218714, US9177435, US9135776, US9092933, US9058723, US9039508, US9005008, US8998707, US8986117, US8986110, US8986097, US8974294, US8951113, US8949396, US8944899, US8845420, US8821270, US8808086, US8721447, US8388429, US8265336, US8225996, US2017010386, US2015371491, US2015339880, US2012224043, US2011114442, US2011019872, US2010304853, US2010140350, US2010093442, US2008139319, US2008076533, CN102262799, CN102063763, CN101894416, CN101833829,

Abstract:
Source: US2010056260A The currency−value converter according to the present invention transmits amount−of−converted−currency data indicating the amount of basic currency identified based on the type of this currency, the amount of the currency and the exchange rate, to a controller installed in a gaming machine, when the type of currency accepted through a currency validator is not the basic currency. The exchange rate is a rate in which a correspondence relationship between an amount of the basic currency and an amount of another type of currency other than the basic currency is set for each type of currency other than the basic currency. Then, a game is played at the gaming machine based on the transmitted amount−of−converted currency.

0) CN201402491Y – MULTIFUNCTIONAL COMMONWEAL ENQUIRY MACHINE

170) Family number: 44363475 (CN201402491Y) © PatBase

Title: Multifunctional commonweal enquiry machine

Priority: CN200920068818U 20090313

Family:

Publication number	Publication date	Application number	Application date
CN201402491 Y	20100210	CN200920068818U	20090313

Probable Assignee: SHANGHAI URBAN CULTURE MEDIA MAN CO LTD

Assignee(s):(std)**:** SHANGHAI URBAN CULTURE MEDIA MAN CO LTD

Assignee(s): SHANGHAI URBAN CULTURE MEDIA MANAGEMENT CO

Inventor(s):(std)**:** SHIFANG SUN

Inventor(s): SUN SHIFANG

International class (IPC 8–9): G07D11/00 G07F17/00 G07F17/42 G07F9/10 G09F23/00 H04N7/18 (Advanced/Invention)

Classification Explorer

Forward Citations: CN105469504, CN104732665, CN102354417, CN102306416,

Abstract:
Source: CN201402491Y The utility model discloses a commonweal enquiry machine with inquiring, adverting, money raising and value increasing functions and the like, and overcomes the defects in the prior art and ensures that a user can inquiry latest information at all times and places and can enjoy preferential value–added services widely. The commonweal enquiry machine comprises a box body, wherein an advertising lamp box, a touch display screen, a coin slot, a card reading port, a certificate printing outlet as well as a donation–collecting money box with a coin slot are arranged on the front side of the box body; a central processing unit and a circuit unit are arranged in the interior of the box body; and a touch display screen interface, a coin selector interface, a card reader interface, a printer interface as well as a network interface are arranged on the central processing unit. The commonweal enquiry machine is characterized in that the central processing unit comprises a free information unit and a value–added service information unit, and the signal output end of the value–added service information unit is bi–directionally connected with the coin selector and/or the card reader as well as aprinter. The commonweal enquiry machine can be widely arranged in different public places, and has wide popularization and commerce values.

171) Family number: 47433410 (US2010270924A) © PatBase

Title: FLEXIBLE LIGHT EMITTING/CHARGE STORAGE DEVICE AND SYSTEM

Priority: CN201080027154 20100422 US20090386789 20090422 US20090628106 20091130 US20100762263 20100416 US20100954614 20101125 US20100265871 20100422 WO2010CA00577 20100422 WO2010CA00578 20100422 US20150845176 20150903

Family:

Publication number	Publication date	Application number	Application date
AU2010239111 AA	20101028	AU20100239111	20100422
AU2010239111 BB	20150723	AU20100239111	20100422
CA2759680 AA	20111021	CA20102759680	20100422
CA2759703 AA	20111021	CA20102759703	20100422
CN102460618 A	20120516	CN201080027153	20100422
CN102460618 B	20160914	CN201080027153	20100422
CN102598027 A	20120718	CN201080027154	20100422
CN102598027 B	20150819	CN201080027154	20100422
CN105172418 A	20151223	CN201510427100	20100422
EP2422299 A1	20120229	EP20100766548	20100422
EP2422349 A1	20120229	EP20100766549	20100422
IN08578CN2011 A	20130517	IN2011CN08578	20111121
IN08579CN2011 A	20130517	IN2011CN08579	20111121
US2010270924 AA	20101028	US20100762263	20100416
US2010271174 AA	20101028	US20090386789	20090422
US2010271755 AA	20101028	US20090628106	20091130
US2011127508 AA	20110602	US20100954614	20101125
US2012038463 AA	20120216	US20100265871	20100422
US2016056380 AA	20160225	US20150845176	20150903
US8212473 BB	20120703	US20100762263	20100416
US8253536 BB	20120828	US20090386789	20090422
US8749950 BB	20140610	US20090628106	20091130
US9013272 BB	20150421	US20100265871	20100422
WO10121362 A1	20101028	WO2010CA00577	20100422
WO10121363 A1	20101028	WO2010CA00578	20100422
WO12068690 A1	20120531	WO2011CA50736	20111125

Probable Assignee: UNIV FRASER SIMON

Assignee(s):(std)**:** CHUO YINDAR ; IDIT 5 ; IDIT TECHNOLOGIES CORP ; IDIT TECHNOLOGY CORP ; LANDROCK CLINTON K ; KAMINSKA BOZENA ; OMRANE BADR ; UNIV FRASER SIMON

Assignee(s): SIMON FRASER UNIV ; SIMON FRASER UNIVERSITY

Inventor(s):(std)**:** BOZENA KAMINSKA ; CHUO YINDAR ; KAMINSKA BOZENA ; LANDROCK CLINTON K ; OMRANE BADR

Agent(s): A J PARK; AJ PARK; PALMER DEAN A; PALMER IP INC; EVANS HUW DAVID DUNCAN; LAURENCE C BONAR; LAURENCE C; DEAN PALMER IP LAW IPROPERTY INC; PALMER IP; PALMER DEAN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B32B27/00 B32B9/00 B42D15/10 B42D25/29 B42D25/305 G05B19/00 G06K19/06 G06K19/067 G06K19/07 G06K19/14 G07D7/12 G07D7/20 H01G4/002 H01G4/005 H01G4/08 H01G4/14 H01G4/18 H01G4/252 H01G4/33 H01G7/00 H01G9/00 H01G9/15 H01J1/62 H01J7/44 H01L51/00 H01L51/05 H01L51/30 H01L51/42 H01L51/44 H01L51/48 H01L51/50 H01L51/52 H01L51/56 H01M10/0565 H01M4/02 H01M4/04 H01M6/18 H04Q5/22 H05B33/00 (Advanced/Invention)

CPC: Y02E10/549 H01L27/3225 A61N5/0614 A61N5/0616 A61N5/0621 A61N2005/0653 H01M6/40 H01M10/488 B42D25/29 Y10S977/834 Y10T29/435 Y10T428/3154 H01G4/18 H01G4/005 H01G4/008 Y02P70/521 H01L51/0021 H01L51/5056 H01L51/5012 H01L51/56 H01G9/15 H01M6/181 H01M10/0565 H01L2251/558 H01L2251/301 H01M2300/0091 H01M2300/0082 H01G4/14 H01L51/441 H01L51/5221

European class: B42D15/00C H01G4/005 H01G4/008 H01G4/14 H01G4/18 H01L27/32I H01L51/44B H01L51/52B4 H01M10/48F K61N5/06C1 K61N5/06C2 K61N5/06C9 K61N5/06T2P T01M6/40 Y02E10/50 Y02E60/12

US class: 235/491 235/491S 235/492 235/492S 235/494 235/494S 257/40 257/40P 257/98 257/98S 257/E51.018 257/E51.018S 257/E51.024 257/E51.024S 283/107 283/91 283/94 29/25.42 29/25.420S 313/504 313/506 315/51 315/51P 340/10.1 340/10.100P 340/5.86 340/5.860P 356/433 356/448 361/323 361/323P 361/502 361/524 382/214 427/58 427/79 428/421 428/690 429/122 438/46 438/46S 438/82 977/700 977/700S 977/701 977/834 977/952

Classification Explorer

Cited documents: WO10121362 A1, WO08135502 A1, WO08112583 A1, WO08040056 A1, WO04056583 A1, US8537457 BA, US8530863 BB, US7982375 BB, US7835136 BB, US7749037 BB, US7696687 BB, US7682523 BB, US7351588 BB, US7347917 BB, US7304201 BB, US7301682 BA, US7265375 BB, US6946674 BB, US6896693 BB, US6882100 BB, US6872220 BB, US6724511 BB, US6667572 BB, US6596016 BA, US6586859 BB, US6476409 BB, US6107734 A, US6107452 A, US5881196 A, US5566982 A, US5136474 A, US4728591 A, US4539507 A, US3969197 A, US3419760 A, US2012061471 AA, US2012021954 AA, US2011127508 AA, US2011001905 AA, US2010277441 AA, US2010271755 AA, US2010271174 AA, US2010224236 AA, US2010198305 AA, US2010195916 AA, US2010148050 AA, US2010127287 AA, US2010118378 AA, US2010109595 AA, US2010084850 AA, US2009321620 AA, US2009308532 AA, US2009050878 AA, US2009034055 AA, US2009030490 AA, US2009027833 AA, US2008278728 AA, US2008277631 AA, US2008212102 AA, US2008180881 AA, US2008171192 AA, US2008117362 AA, US2008107906 AA, US2008035736 AA, US2008024866 AA, US2007283883 AA, US2007264481 AA, US2007263285 AA, US2007229817 AA, US2007223940 AA, US2007208397 AA, US2007208396 AA, US2007146971 AA, US2007129613 AA, US2006275947 AA, US2006266642 AA, US2006240543 AA, US2006224217 AA, US2006217787 AA, US2006202125 AA, US2006196945 AA, US2006138394 AA, US2006055933 AA, US2006030908 AA, US2005275343 AA, US2005208554 AA, US2005191927 AA, US2005179026 AA, US2005161589 AA, US2005128029 AA, US2005113892 AA, US2005012450 AA, US2004230090 AA, US2004111132 AA, US2004054031 AA, US2004033339 AA, US2004025639 AA, US2002110732 AA, TWI276536 B, EP1813440 A1, EP1736323 A1, EP1431062 B1, EP1431062 A1, CN1729316 A, CN101381866 A, CN101370858 A, CN101351856 A, CN101100156 A, CN101087695 A, CN101022959 A, CA2369744 AA, CA2337787 AA,

Forward Citations: WO17030436, WO17015748, WO16037895, WO15179035, WO15162308, WO15021544, WO14018103, WO13114244, WO13086640, WO12068690, US9696468, US9646448, US9627434, US9604072, US9568421, US9558544, US9460665, US9360436, US9312314, US9292990, US9053596, US9013272, US8984954, US8659391, US8508108, US8479583, US7982371, US2016036012, US2016035500, US2015228143, US2015042702, US2014303692, US2014260653, US2014191113, US2014159016, US2014037196, US2013153861, US2012245658, US2011043331, KR101370408, JP5758331, JP2013186980, EP2948930, EP2743863, CN104094437, CN103493109, CN103493109, CN102887003,

Abstract:
Source: US2010270924A A light emitting/charge storage device is disclosed. The light emitting/charge storage device includes an organic light emitting diode (OLED) portion and at least one charge storage portion electrically and physically connected therewith. The OLED portion includes a first anode layer, a first cathode layer, and an electroluminescent layer disposed at least partially between the first anode layer and the first cathode layer. The at least one charge storage portion includes a second anode layer, a second cathode layer, and an ionic polymer dielectric layer disposed at least partially between the second anode layer and the second cathode layer, and/or a thin film battery layer. A light emitting/charge storage system is also disclosed. Certain embodiments of the device and system of the invention may provide integrated illumination and charge storage in a unitary stacked layered structure with flexible mechanical characteristics.

172) Family number: 49742346 (US2011251892A) © PatBase

Title: MOBILE PHONE PAYMENT PROCESSING METHODS AND SYSTEMS

Priority:

JP20130503978	20110408	JP20130503978T	20110408	US20100322477P	20100409
US20100362567P	20100708	US20100846911	20100730	US20100426731P	20101223
US20120731348	20121231	US20110582010P	20111230	US20120651177P	20120524
US20120646523P	20120514	US20110336574	20111223	US20130758543P	20130130
US20130140165	20131224	US20120561177P	20120524	WO2011US31696	20110408
US20130768156	20130215	US20130893978	20130514	US20140169067	20140130
US20140158240	20140117	WO2013US40953	20130514	US20150632949	20150226
US20140944987P	20140226	WO2014US13955	20140130	US20150928690	20151030
WO2011US67197	20111223	US20160057093	20160229	US20160090575	20160404
WO2015US17823	20150226	US20160219134	20160725		

Family:

Publication number	Publication date	Application number	Application date
AU2011237387 AA	20111013	AU20110237387	20110408
AU2011237387 BB	20140807	AU20110237387	20110408
AU2011348061 AA	20120628	AU20110348061	20111223
AU2011348061 BB	20151210	AU20110348061	20111223
AU2014219386 AA	20140828	AU20140219386	20140130
AU2014219386 BB	20170316	AU20140219386	20140130
AU2015222943 AA	20150903	AU20150222943	20150226
AU2017204113 AA	20170706	AU20170204113	20170616
BR112012025649 A2	20160628	BR20121125649	20110408
CA2795766 AA	20121005	CA20112795766	20110408
CA2819696 AA	20130531	CA20112819696	20111223
CA2898205 AA	20150714	CA20142898205	20140130
CN102934132 A	20130213	CN201180028666	20110408
CN103282929 A	20130904	CN201180062535	20111223
CN104641388 A	20150520	CN201380037487	20130514
CN105164708 A	20151216	CN201480006517	20140130
EP2556477 A2	20130213	EP20110766781	20110408
EP2556477 A4	20140430	EP20110766781	20110408
EP2656292 A2	20131030	EP20110851732	20111223
EP2656292 A4	20140702	EP20110851732	20111223
EP2850572 A1	20150325	EP20130791465	20130514
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Probable Assignee: PAYPAL INC

Assignee(s):(std)**:** LARACEY KEVIN ; PAYDIANT INC ; PAYPAL INC

Assignee(s): PAYDIANT LLC

Inventor(s):(std)**:** KEVIN LARACEY ; LARACEY KEVIN

Agent(s): KING AND WOOD MALLESONS; MINTER ELLISON; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; SMART AND BIGGAR; Finnie Peter John; FINNIE PETER JOHN; NORDMEYER PHILIPP WERNER; OHNUKI SHINSUKE; ITOH TADAHIKO; ITOH TADASHIGE; OSUGA AND ASSOCIATES; OSUGA YOSHIYUKI; BUCKLEY MASCHOFF AND TALWALKAR LLC; HAYNES AND BOONE LLP; MASCHOFF KURT M; CHEN TOM

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G06F21/33 G06F21/35 G06F21/36 G06F21/43 G06K17/00 G06K9/18 G06Q20/00 G06Q20/06 G06Q20/10 G06Q20/12 G06Q20/18 G06Q20/20 G06Q20/32 G06Q20/34

G06Q20/36 G06Q20/38 G06Q20/40 G06Q20/42 G06Q30/00 G06Q30/02 G06Q30/06 G06Q40/02 G07D13/00 G07F19/00 G07G1/00 G07G1/12 H04B5/02 H04L29/06 H04M11/00 H04M3/42 H04N5/225 H04W12/06 (Advanced/Invention)

CPC: G06Q20/3278 G06Q20/32 G06Q20/12 G06Q20/36 G06Q20/385 G06Q20/4037 G06Q20/42 G06Q40/02 G06F21/335 G06F21/35 G06F21/36 G06F21/43 G06F2221/2101 G06F2221/2111 G06F2221/2117 G06F2221/2119 G06Q20/327 H04L63/18 H04W12/06 G06Q20/34 G06Q20/40 G06Q30/0226 G06Q30/0241 G06Q20/382 G06Q20/3674 G06Q20/401 G06Q20/40145 G07F19/203 G06Q20/108 G06Q20/20 G06Q20/3276 G06Q30/0253 G06Q30/06 G06Q20/204 G06Q20/3227 G06Q20/1085 G06Q20/3223 G07F19/20 G07F19/211 G06Q20/102 G06Q20/3274 G06Q20/3821 G06Q30/0609 G06Q20/322

European class: G06Q20/108 G06Q20/1085 G06Q20/20 G06Q20/327 G06Q20/3276 G06Q30/0253 G06Q30/06 G07F19/20

US class: 1/1 235/379 235/379P 348/207.99 348/207.990S 348/E5.024 348/E50.24S 370/259 455/414.1 705/14.51 705/14.510P 705/16 705/16S 705/21 705/40 705/41 705/42 705/42S 705/43 705/44 705/67

Classification Explorer

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Abstract:
Source: US2011251892A Embodiments provide systems, methods, processes, computer program code and means for using mobile devices to conduct payment transactions at merchant locations including brick and mortar locations and remote locations as well as for person to person transactions.

0) WO11138007A1 – DATA CARRIER COMPRISING POLYMER SUBSTRATE WITH ...

173) Family number: 49899651 (WO11138007A1) © PatBase

Title: DATA CARRIER COMPRISING POLYMER SUBSTRATE WITH MOTIF REGION

Priority: DE201010019194 20100504 DE201010024459 20100622 WO2011EP02197 20110503 EP20110718298 20110503 EP20110003595 20110503

Family:

Publication number	Publication date	Application number	Application date
DE102010019194 A1	20111110	DE201010019194	20100504
DE102010024459 A1	20111222	DE201010024459	20100622
DE502011000549 D1	20130529	DE201150000549T	20110503
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RU2525793 C2	20140820	RU20110117069	20110503
WO11138007 A1	20111110	WO2011EP02197	20110503

Probable Assignee: GIESECKE AND DEVRIENT GMBH

Assignee(s):(std)**:** DOMKE JAN ; GIESECKE AND DEVRIENT GMBH ; GREGAREK ANDRE ; RENNER PATRICK

Assignee(s): GIZEKE U DEVRIENT GMBKH

Inventor(s):(std)**:** DOMKE JAN ; GREGAREK ANDRE ; HOFFMUELLER WINFRIED ; HOFFMUELLER WINFRIED DR ; KHOFFMJULLER VINFRID ; KROMBHOLZ MARKUS ; KROMBHOLZ MARKUS DR ; KROMBKHOL TS MARKUS ; LIBLER RAL F ; LIEBLER RALF ; LIEBLER RALF DR ; RENNER PATRICK ; RENNER PATRICK DR ; RENNER PATRIK

Agent(s): DURAN LUIS ALFONSO; GIESECKE AND DEVRIENT GMBH

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B42D15/00 B42D15/10 B42D25/00 B42D25/29 B44F1/00 B44F1/12 G07D7/00 (Advanced/Invention)

CPC: B42D25/41 B42D25/00 B42D25/351 B42D25/346 B42D25/23 B42D25/435 B42D25/47 B42D25/45 B42D25/333 B42D25/43 B42D25/29 B42D2033/04 B42D2033/06 B42D2033/22 B42D2033/24 B42D2033/30 B42D2035/36 B42D2035/20

European class: B42D15/00C B42D15/10 L42D31/08 L42D31/16 L42D31/28 L42D33/04 L42D33/06 L42D33/22 L42D33/24 L42D33/30 L42D35/20 L42D35/33 L42D35/36

Classification Explorer

Cited documents: WO9936271 A1, WO9718092 A1, WO9210608 A1, WO8300659 A1, WO10005810 A2, WO08031170 A1, WO05095118 A2, WO03097937 A2, WO03054297 A2, WO03029003 A1, WO0220280 A1, WO0100418 A1, WO0039391 A1, WO0000697 A1, US6471247 BA, US6030691 A, US5492370 A, US2008036197 AA, US2006249042 AA, US2004229022 AA, US2002030360 AA, GB2385298 A1, EP1545902 A2, EP1398174 A1, EP1122089 A2, EP0723501 B1, EP0659936 A2, EP0070172 A1, DE4041025 A1, DE2856833 A1, DE19934434 A1, DE19646331 A1, DE19537177 A1, DE10247591 A1, DE10226114 A1, DE102010024459, DE102010019194,

DE102008053582 B3

DE102008033716 B3

DE102006051524 A1

DE102006034854 A1

DE10064616 C2, DE10053264 A1, AU488652 B2,

Forward Citations: WO17055824, WO17055823, WO13143008, WO11138007, RU2561413, EP3095615, DE102014220289,

Abstract:
The invention relates to a data carrier, more particularly a valuable document, such as a banknote, identity card and the like, comprising a substrate (20) composed of a polymeric material, which has a motif region (12) having a visual impression that is altered in reflected light and/or transmitted light, wherein the motif region (12) has partial or complete perforations (22) in the substrate which can be registered in tactile fashion, wherein the motif region (12) is designed in the form of a pattern, characters or a coding, and wherein the substrate (20) is covered in each case by a polymeric covering layer (30) on both sides at least in the motif region.

0) US2013166686A – DATA TRANSMISSION SECURITY IMPROVEMENTS

174) Family number: 46696128 (US2013166686A) © PatBase

Title: DATA TRANSMISSION SECURITY IMPROVEMENTS

Priority:

GB20100010735 20100625	GB20100014254 20100826	GB20100020604 20101206
JP20130516052T 20110624	JP20150160613 20150817	US20130806385 20130131
WO2011IB52799 20110624	WO2011IB52800 20110624	US20150812684 20150729

Family:

Publication number	Publication date	Application number	Application date
AU2011268514 AA	20111229	AU20110268514	20110624
AU2011268515 AA	20111229	AU20110268515	20110624
AU2011268515 BB	20160331	AU20110268515	20110624
CA2803543 AA	20121220	CA20112803543	20110624
CA2803798 AA	20121221	CA20112803798	20110624
CL2012003650 A1	20131018	CL20120003650	20121221
CL2012003652 A1	20131018	CL20120003652	20121221
CN103003825 A	20130327	CN201180030888	20110624
CN103004177 A	20130327	CN201180031544	20110624
CN103004177 B	20160629	CN201180031544	20110624
DE212011100113 U1	20130326	DE201121100113U	20110624
EA201291464 A1	20131129	EA20120091464	20110624
EA201291465 A1	20140130	EA20120091465	20110624
EP2585973 A2	20130501	EP20110797723	20110624
EP2586247 A2	20130501	EP20110797722	20110624
GB201010735 A0	20100811	GB20100010735	20100625
GB201020604 A0	20110119	GB20100020604	20101206
IN00170KN2013 A	20130712	IN2013KN00170	20130121
IN11434DN2012 A	20141017	IN2012DN11434	20121231
JP2013531948 T2	20130808	JP20130516052T	20110624
JP2013541431 A2	20131114	JP20130516053	20110624
JP2013541431 T2	20131114	JP20130516053T	20110624
JP2016021758 A2	20160204	JP20150160613	20150817
KR20130034664 A	20130405	KR20137004661	20110624
KR20130036353 A	20130411	KR20137004659	20110624
KR20130036354 A	20130411	KR20137004660	20110624
KR20130040230 A	20130423	KR20137002130	20110624
KR20130086204 A	20130731	KR20137002030	20110624
MA34394 B1	20130703	MA20130035589	20130123
MX2013000119 A1	20130613	MX20130000119	20110624
SG186202 A1	20130130	SG20120089678	20110624
SG186331 A1	20130130	SG20120091773	20110624
TH127304 A	20130920	TH20121006632	20110624
TH130026 A	20131211	TH20121006657	20110624
TR201215253 B	20160523	TR20120015253	20110624
TR201500529 T1	20161221	TR20150000529T	20110624
TW201217186 A	20120501	TW20110122116	20110624
US2013166686 AA	20130627	US20110806385	20110624
US2013200606 AA	20130808	US20110805303	20110624
US2016164843 AA	20160609	US20150812684	20150729
UY33466 A1	20111230	UY20110033466	20110624

WO11161660 A2	20111229	WO2011IB52799	20110624	
WO11161660 A3	20120216	WO2011IB52799	20110624	
WO11161661 A2	20111229	WO2011IB52800	20110624	
WO11161661 A3	20120510	WO2011IB52800	20110624	
ZA201300051 A	20140528	ZA20130000051	20130103	
ZA201300056 A	20140528	ZA20130000056	20130103	

Probable Assignee: OMARCO NETWORK SOLUTIONS LTD

Assignee(s):(std)**:** OMAR RALPH M ; OMAR RALPH MAHMOUD ; OMARCO NETWORK SOLUTIONS LTD

Assignee(s): OMARCO NETWORK SOLUTIONS LIMITED

Inventor(s):(std)**:** MAHMOUD RALPH ; OMAR RALPH MAHMOUD ; RALPH MAHMOUD OMAR ; MAHMOUD OMAR RALPH

Inventor(s): RALPH MAHMOUD

Agent(s): ALLENS PATENT AND TRADE MARK ATTORNEYS; ARMOUR IP; BORDEN LADNER GERVAIS LLP; BEUCHAT BARROS AND PFENNIGER; BEUCHAT BARROS AND PFENNIGER DOS SA; AHMAD SHEIKH SHAKEEL; OKTAY SIMSEK; YESIM METIN; AHMAD SHEIKH ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B41F23/04 B41J2/435 B41M3/14 B42D15/00 B42D15/10 C09D11/02 D21H27/00 G06K1/12 G06K19/10 G06K7/00 G06K7/10 G06K7/14 G06K9/00 G06K9/18 G07B11/02 G07D11/00 G07D7/00 G07D7/04 G07D7/12 G07D7/20 G6K7/10 G6K7/14 H04L12/22 H04L29/06 H04L29/08 H04L9/08 H04L9/14 H04L9/28 H04L9/32 H04N1/44 H04W40/22 H4N1/44 (Advanced/Invention);
A63F3/06 (Advanced/Non–invention);
G06K7/10 G06K7/14 H04N1/44 (Core/Invention);
G06K H04W (Subclass/Invention)

CPC: G06K9/00442 A63F3/0655 A63F3/0665 A63F3/069 B41J2/435 B41M3/14 B42D15/00 B42D15/025 G07D7/128 G07F17/42 G07G5/00 G03F7/12 H04L63/0442 H04L63/1441 B42D25/415 B42D25/42 B42D25/43 B42D25/29 B42D25/346 B42D25/382 H04L9/083 H04L63/0428 H04L67/02 H04N1/44 B42D25/328 B42D25/41 B42D2033/04 B42D2033/10 B42D2033/14 B42D2033/16 B42D2033/20 B42D2033/22 G07D7/0047

European class: B41M3/14 B42D15/00C B42D15/02D B42D15/10D G07D7/00B8 G07D7/12V G07F17/42 G07G5/00 H04L9/08F2H K63F3/06F1 K63F3/06F2 K63F3/06F6 L42D31/08 L42D31/10 L42D31/12 L42D31/16 L42D33/04 L42D33/10 L42D33/14 L42D33/16 L42D33/20 L42D33/22 L42D35/32 L42D35/38 T04L29/06S14D T04L29/06S4B2 T04L63/04B2 T04L63/14D

US class: 283/74 347/200 382/100 382/115 382/135 709/217 713/168

Classification Explorer

Cited documents: WO10086827 A2, WO09019612 A2, WO0219569 A1, US7756290 BB, US7646882 BB, US7532741 BB, US7369678 BB, US7113615 BB, US5762378 A, US5354099 A, US3613101 A, US2010293106 AA, US2010244429 AA, US2010187805 AA, US2010090455 AA, US2009200791 AA, US2009072526 AA, US2009008926 AA, US2008279287 AA, US2007012770 AA, US2005001422 AA, US2005000375 AA, US2004242201 AA, US2004240588 AA, US2004098348 AA, US2004084893 AA, US2003110512 AA, JP4137932 A2, JP2010512009 T2, JP2010512009 A2, JP2008502501 T2, JP2008502501 A2, CN1611060 A, CN101277194 A, CN101227270 A,

Forward Citations: WO15121828, WO15121746, WO14182963, WO14090797, WO14080232, WO14080231, WO14045212, WO14045212, US9676220, US9616699, US9495844, US9400928, US9126434, US9028317, US8917903, US2015279156, US2015202892, US2013324212, US2013136314, JP2015529578, JP2015529578, EP2904594, EP2881919, EP2740608, EP2626215, DE212013000203, CN104442019, CN103280016, CN103280016,

Abstract:
Source: US2013166686A This disclosure provides for a method of securely transmitting communication information from a first terminal operating in a first coordinate measurement domain to a second remotely–located terminal operating in a second coordinate measurement domain. The method includes combining the

communication information with extraneous information to create a data signal, determining a value of an identification variable expressed with respect to the first coordinate measurement domain, where the identification variable value enables the location of the communication information concealed within the data signal to be determined, using a coordinate transform function to calculate a value of the received identification variable expressed with respect to the second coordinate measurement domain, and extracting the information from the received data signal using the calculated identification variable value to distinguish the communication information from the extraneous information.

0) US2013182300A – SECURITY ELEMENT WITH ACHROMATIC FEATURES

175) Family number: 50932530 (US2013182300A) © PatBase

Title: SECURITY ELEMENT WITH ACHROMATIC FEATURES

Priority: EP20100001358 20101013 EP20100013580 20101013 WO2011EP04955 20111005

Family:

Publication number	Publication date	Application number	Application date
CA2810738 AA	20130307	CA20112810738	20111005
EP2441593 A1	20120418	EP20100013580	20101013
JP2013541102 A2	20131107	JP20130533109	20111005
JP2013541102 T2	20131107	JP20130533109T	20111005
JP6033778 B2	20161130	JP20130533109T	20111005
RU2013121668 A	20141210	RU20130121668	20111005
RU2591770 C2	20160720	RU20130121668	20111005
TH129149 A	20131114	TH20131001853	20111005
UA111069 C2	20160325	UA20130005882	20111005
US2013182300 AA	20130718	US20110824607	20111005
WO12048809 A1	20120419	WO2011EP04955	20111005

Probable Assignee: HUECK FOLIEN GESMBH

Assignee(s):(std)**:** DE BRUIN SANDER ; DE GOOIJER BART ; DE GOOIJER BERT ; HUECK FOLIEN GMBH ; TRASSL STEPHAN ; SCHMIDEGG KLAUS ; MUELLER MATTHIAS ; KHUEK FOLIEN GEZ M B KH

Assignee(s): KHUEK FOLIEN GEZMBKH ; HUECK FOLIEN GES M B H ; HUECK FOLIEN GESMBH

Inventor(s):(std)**:** DE BREJN SANDER ; DE BRUIN SANDER ; DE GOJER BERT ; DE GOOIJER BART ; DE GOOIJER BERT ; MUELLER MATTHIAS ; MYULLER MATTIAS ; SCHMIDEGG KLAUS ; SHMIDEGG KLAUS ; TRASL STEPHAN ; TRASSL SHTEFAN ; TRASSL STEPHAN ; MULLER MATTHIAS

Agent(s): RICHES MCKENZIE AND HERBERT LLP; LANDGRAF ELVIRA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** B41F9/00 B41M3/14 B42D25/30 B42D25/328 B42D25/425 B44F1/00 B44F1/12 B81B1/00 G03H1/00 G06K19/06 G06K19/10 G07D7/20 (Advanced/Invention);
A44C21/00 (Advanced/Non–invention);
A44C21/00 B44F1/00 B44F1/12 (Core/Invention)

CPC: B42D25/324 Y10T156/1039 B42D25/425 B42D25/333 B42D25/373 B42D25/47 B42D25/29 G03H1/0011 B42D2035/20 B42D2035/26 B42D2035/50

European class: B42D15/00C L42D35/20 L42D35/26 L42D35/28 L42D35/50

US class: 156/219 359/2 427/355

Classification Explorer

Cited documents: WO9913195 A1, WO09126030 A1, WO09080263 A2, WO08151398 A1, WO08104277 A1, WO07131375 A1, WO07131375, WO07027122 A1, WO06133863 A2, WO05077674 A2, WO05071444 A2, WO04077468 A2, WO03022597 A1, WO0170516 A2, US5310222 A, US2010308570 AA, US2010172000 AA, US20100308570, US2008259456 AA, US20080259456, US2004136038 AA, US05310222, JP2010518432 T2, JP2010518432 A2, JP2010518432, JP201044267, JP2010202985 A2, JP2010202985, JP2010044267 A2, JP2009109871 A2, JP2009109871, JP2006251784 A2, JP2006251784, JP2003326876 A2, JP2003326876, JP2002154262 A2, JP2002154262, EP1310381 A2, EP0330738 A1,

DE102007020026 A1

DE102006003900 A1

Forward Citations: WO16054329, US2014227486, RU2509652, EP2860043, CN106313934, CN106313934, AT515845, AT515845,

Abstract:
Source: US2013182300A The invention relates to an achromatic security element for value documents, such as banknotes, cards, ID documents and the like comprising a thermoplastic or a radiation−curable polymer layer, characterised in that the layer is embossed with diffusely reflecting microstructures having sizes in the order of 1−100 mum, a method for producing such security elements, value documents comprising said security elements and a currency system comprising said security elements.

176) Family number: 52370593 (US2014091566A) © PatBase

Title: METHOD FOR VERIFYING THE AUTHENTICITY OF SECURITIES AND DEVICE FOR ITS REALIZATION

Priority: MD20110000043 20110512 WO2012MD00003 20120511

Family:

Publication number	Publication date	Application number	Application date
CN103650007 A	20140319	CN201280034209	20120511
EA024521 B1	20160930	EA20110001102	20110728
EA201101102 A1	20130130	EA20110001102	20110728
EP2707857 A1	20140319	EP20120726243	20120511
IN09783CN2013 A	20141031	IN2013CN09783	20131209
MD20110043 A2	20121130	MD20110000043	20110512
MD4195 B1	20130131	MD20110000043	20110512
MD4195 C1	20130831	MD20110000043	20110512
US2014091566 AA	20140403	US20120115652	20120511
WO12154017 A1	20121115	WO2012MD00003	20120511
WO12154017 A9	20140103	WO2012MD00003	20120511

Probable Assignee: VASILYEV SERGEY

Assignee(s):(std)**:** VASILIEV SERGHEI ; VASILYEV SERGEY

Inventor(s):(std)**:** VASILIEV SERGHEI ; VASILYEV SERGEY

Agent(s): BECK AND ROESSIG EUROPEAN PATENT ATTORNEYS; GLAZACEVA GALINA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B42D15/00 G06K9/18 G07D7/12 G07D7/20 H04M1/21 (Advanced/Invention)

CPC: G07D7/2041 B42D25/29

European class: G07D7/20F4

US class: 283/67 283/85

Classification Explorer

Cited documents: WO09066970 A1, WO08127144 A1, WO03049022 A1, US6438362 BA, US6438262 BA, US5719939 A, US2009002415 AA, RU2385492 C2, RU2208519 C1, RU2103740 C1, RU2007113953 A, DE10155780 A1, CN1957381 A, CN1932852 A, CN1797481 A, CN1457209 A, CN1374625 A, CN1332431 A,

Forward Citations: DE102015104512,

Abstract:
Source: US2014091566A The present invention relates to methods and devices for verifying the authenticity of various securities and may be used for determining the authenticity of banknotes, financial documents, identity cards and other important documents. The method consists in that the security is transilluminated with a light flux passing from a light source to a receiver, is registered the feature of paper, is compared the registration result with the reference feature, obtained during the control test and stored in a database of reference features, the coincidence of signs confirming the authenticity of the security. As a protective element is used an image in the form of a projection on the receiver of patterns, formed by its nearest 1–6 layers of fibers inside the texture of paper, of the preselected control site, the dimensions of which exceed the transverse dimensions of the paper fibers at least twice. It is carried out the identification of security with the ability to locate the control area defined by the coordinates and/or typographical feature, the security is transilluminated with a light flux on the control area, is registered the control area image with a resolution of at least 1200 pixels per inch. In the alternative embodiment of the device for realization of the method for verifying the authenticity of securities, which is a mobile phone, the light source and the receiver being aligned in different parts of the body, the receiver is made in the

form of a flat photosensor having a resolution of at least 1200 pixels per inch. In another alternative embodiment the light source is located by the circuit of the photosensor, at the same time the device is equipped with a means for security pressing to the photosensor, reflecting the luminous flux, emitted by the source, on the photosensor. At the same time in both alternative embodiments of the device the protective layer of the photosensor is made in the form of a light–guiding plate with photoconductive elements, which transmit the luminous flux to the surface of the photosensitive layer. The result, achieved at the realization of the present invention, consists in providing the simplicity, high reliability and validity of authentification of securities.

0) US2012328852A – SUBSTRATE WITH A MODIFIED LIQUID CRYSTAL POLYME...

177) Family number: 52534793 (US2012328852A) © PatBase

Title: SUBSTRATE WITH A MODIFIED LIQUID CRYSTAL POLYMER MARKING

Priority: EP20110016853 20110601 EP20110168536 20110601 US20110490949P 20110527 US20110492171P 20110601 US20120479913 20120524 EP20120723479 20120524 WO2012EP59663 20120524

Family:

Publication number	Publication date	Application number	Application date
AR086508 AA	20131218	AR2012P101796	20120521
CA2834719 AA	20131030	CA20122834719	20120524
CL2013003269 A1	20140530	CL20130003269	20131114
CN103582569 A	20140212	CN201280025718	20120524
CN103582569 B	20170405	CN201280025718	20120524
CO6811874 A2	20131216	CO20130274199	20131121
EP2714412 A1	20140409	EP20120723479	20120524
IL229224 A0	20140130	IL20120229224	20120524
IN08554DN2013 A	20141219	IN2013DN08554	20131001
JP2014524846 A2	20140925	JP20140511866	20120524
JP2014524846 T2	20140925	JP20140511866T	20120524
JP5764812 B2	20150819	JP20140511866T	20120524
KR20140033385 A	20140318	KR20137032141	20120524
MA35127 B1	20140502	MA20130036440	20131115
MX2013013894 A1	20140124	MX20130013894	20120524
RU2013158145 A	20150710	RU20130158145	20120524
SG194961 A1	20131230	SG20130084421	20120524
TW201302990 A	20130116	TW20120118693	20120525
US2012328852 AA	20121227	US20120479913	20120524
US8821756 BB	20140902	US20120479913	20120524
UY34087 A1	20121130	UY20120034087	20120522
WO12163778 A1	20121206	WO2012EP59663	20120524

Probable Assignee: SICPA HOLDING SA

Assignee(s):(std)**:** CALLEGARI ANDREA ; GREMAUD FREDERIC ; JAUZEIN TRISTAN ; KERKAR BRAHIM ; TILLER THOMAS ; SICPA HOLDING SA ; ROZUMEK OLIVIER

Inventor(s):(std)**:** CALLEGARI ANDREA ; FREDERIC GREMAUD ; GREMAUD FREDERIC ; JAUZEIN TRISTAN ; KERKAR BRAHIM ; ROZUMEK OLIVIER ; TILLER THOMAS

Inventor(s): TRISTAN JAUZEIN ; THOMAS TILLER ; OLIVIER ROZUMEK ; ANDREA CALLEGARI ; BRAHIM KERKAR ; GREMAUD FREDRIC

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; OSLER HOSKIN AND HARCOURT LLP; JOHANSSON AND LANGLOIS; SILVANA MARIA LOPEZ DIAZ; CASALONGA; GREENBLUM AND BERNSTEIN PLC; DOSSMANN GERARD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B05D5/00 B05D5/06 B32B33/00 B41M B41M3/00 B41M3/14 B41M5/28 B42D15/00 B42D25/364 B42D25/405 C09D11/02 C09D11/30 C09K19/00 C09K19/20 C09K19/36 C09K19/54 C09K19/58 G02F1/13 G07D7/12 G07D7/20 (Advanced/Invention); C09K19/04 C09K19/34 (Advanced/Non–invention); B41M (Subclass/Invention)

CPC:

B41M3/14 B41M5/281 C09K19/586 C09K2019/0448 C09K2019/3408 C09K2219/03 Y10T428/24802 Y10T428/24835 B42D25/364 B42D25/23 B42D25/24 B42D25/25 B42D25/29 C09K19/588 B42D2033/26 B42D2035/20

European class: B41M3/14 B41M5/28B B42D15/00C C09K19/58B L42D33/26 L42D35/20 M09K19/04D2 M09K19/34A2A M09K219/03

US class: 235/454 235/462.01 252/299.01 252/299.5 283/72 283/74 347/110 427/256 427/7 428/195.1 428/199

Classification Explorer

Cited documents: WO9700600 A2, WO9522586 A1, WO9322397 A1, WO08127950 A2, WO05019916 A1, WO02085642 A2, WO0124106 A1, US8426014 BB, US8426013 BB, US8426012 BB, US8426011 BB, US78308810, US78308110, US78307810, US78306810, US7742136 BB, US7033653 BB, US6589445 BB, US6207240 BA, US6136225 A, US5723066 A, US5678863 A, US42058210 P, US42058010 P, US2011135890 AA, US2011135889 AA, US2011135853 AA, US2011133445 AA, US2010025641 AA, US2009059158 AA, US2008252066 AA, US2007224341 AA, US2006257633 AA, JP2011033791 A2, JP2011033791, JP2011031574 A2, JP2011031574, JP2009541047 T2, JP2009541047 A2, JP2009541047, JP2009300662 A2, JP2004523798 T2, JP2004523798 A2, JP2004523798, GB2330139 A1, EP1681586 A1, EP1381520 A2, EP0847432 B1, EP0847432 A2, EP0216712 A1, CN1881077, CN1853120, CN1839338, CN102046391, CN101988974, CN101970246, CN101401013,

Forward Citations: WO15059076, WO15030572, NL1040357, CN105398252,

Abstract:
Source: US2012328852A The present invention relates to a marking on an item or substrate, which marking is based on a chiral nematic (also called cholesteric) liquid crystal precursor composition. Prior to curing the chiral liquid crystal precursor composition in the chiral liquid crystal state at least one optical property exhibited by the composition is modified by two modifying agents of different types in at least one area of the item or substrate.

178) Family number: 52591211 (US2014103226A) © PatBase

Title: USE OF LUMINESCENT NANOSYSTEMS FOR AUTHENTICATING SECURITY DOCUMENTS

Priority: EP20110382200 20110615 EP20120729488 20120614 US20110524290P 20110816 WO2012EP61353 20120614 US20120125938 20120614

Family:

Publication number	Publication date	Application number	Application date
AR086941 AA	20140205	AR2012P102121	20120615
BR112013031878 A2	20161213	BR20131131878	20120614
CL2013003578 A1	20140704	CL20130003578	20131213
CN103597355 A	20140219	CN201280029281	20120614
CN103597355 B	20160323	CN201280029281	20120614
CO6821929 A2	20131231	CO20130298102	20131220
EP2721414 A1	20140423	EP20120729488	20120614
IN10409DN2013 A	20141226	IN2013DN10409	20131203
JP2014529321 A2	20141106	JP20140515194	20120614
JP2014529321 T2	20141106	JP20140515194T	20120614
JP5989769 B2	20160907	JP20140515194T	20120614
KR20140117339 A	20141007	KR20147000568	20120614
MA35409 B1	20140901	MA20140036670	20140110
MX2013014670 A1	20140327	MX20130014670	20120614
US2014103226 AA	20140417	US20120125938	20120614
WO12172018 A1	20121220	WO2012EP61353	20120614

Probable Assignee: NACIONAL DE MONEDA Y TIMBRE REAL CASA DE LA MONEDA FAB

Assignee(s):(std)**:** GARCIA JUEZ VICENTE ; LOPEZ QUINTELA MANUEL ARTURO ; NAC DE MONEDA Y TIMBRE FAB ; NAC DE MONEDA Y TIMBRE REAL CASA DE LA MONEDA FAB ; NANOGAP SUB NM POWDER SA ; FAB NAC MONEDA Y TIMBRE ES ; NAC DE MONEDA Y TIMBRE REEAL CASA DE LA MONEDA FAB ; NANOGAP SUB NM POWER SA

Assignee(s): NANOGAP SUB NM POWER SOC ANONIMA ; NACIONAL DE MONEDA Y TIMBRE REEAL CASA DELA MONEDA FAB ; NACIONAL DE MONEDA Y TIMBRE FAB ; FABRICA NACIONAL DE MONEDA Y TIMBRE REAL CASA DE LA MONEDA ; NACIONAL DE MONEDA Y TIMBRE REAL CASA DE LA MONEDA FAB ; NACIONAL DE MONEDA Y TIMBRE REEAL CASA DE LA MONEDA FAB ; NANOGAP SUB NM POWDER SOC ANONIMA ; NANOGAP SUB NM POWDER SOCIEDAD ANONIMA

Inventor(s):(std)**:** GARCIA JUEZ VICENTE ; JUEZ VICENTE GARCIA ; LOPEZ QUINTELA MANUEL ARTURO ; QUINTELA MANUEL ARTURO LOPEZ

Inventor(s): VICENTE GARCIA JUEZ ; MANUEL ARTURO LOPEZ QUINTELA

Agent(s): JOHANSSON AND LANGLOIS LTDA; JUAN PABLO CADENA SARMIENTO; ABG PATENTES SL; ARIAS SANZ JUAN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21C3/00 B24D15/00 B32B15/08 B41M3/14 B42D15/00 B42D25/36 B42D25/373 B42D25/378 B42D25/405 B82Y15/00 C09D11/50 C09D5/22 C09K11/02 D21H21/48 G01N21/64 G01N33/58 G06K19/14 G06K7/10 G07D7/06 G07D7/12 G07D7/14 G21K5/00 (Advanced/Invention)

CPC: G01N21/64 C09K11/025 B41M3/144 B42D25/29 B42D25/382 B42D25/387 B82Y15/00 C09D5/22 C09K11/02 C09K11/58 D21H19/02 D21H21/48 D21H21/52 D21H21/54 G06K19/14 G07D7/12 B42D25/373 B42D25/21 B42D25/23 B42D25/328 B42D25/333

B42D25/355 B42D25/378 B42D2033/10 B42D2033/32 B42D2035/34 G21K5/00 G07D7/1205

US class: 250/216 250/458.1 250/459.1 252/301.36 283/85 427/157

Classification Explorer

Cited documents: WO12090034 A1, US4598205 A, US4463970 A, US4452843 A, US2010215766 AA, US2005001038 AA, JP2009508226 T2, JP2009508226 A2, JP2009508226, JP2008519108 T2, JP2008519108 A2, JP2008519108, CN1112359 A, CN101398950 A, CN101313316 A, CN101248003 A,

Forward Citations: WO17068440, WO16005020, WO14090867, WO14090867, US9302523, JP2014523932, EP2743329, EP2662488, CN104870606, CN104870606, CN104400005,

Abstract:
Source: US2014103226A The present invention relates to the use of nanosystems as non deactivable security markers comprising metal atomic quantum clusters (AQCs) of at least two different size distributions encapsulated in a cavity with an inner diameter less than or equal to approximately 10 nm. These nanosystems are luminescence, particularly fluorescence after external excitation. The invention also relates to security documents, articles or elements incorporating these markers as well as to a method and a system for detecting the same.

179) Family number: 54627767 (US2015036872A) © PatBase

Title: AUDIBLE DOCUMENT IDENTIFICATION FOR VISUALLY IMPAIRED PEOPLE

Priority: EP20120000121 20120223 EP20120001217 20120223 WO2013EP52404 20130207 EP20130702657 20130207

Family:

Publication number	Publication date	Application number	Application date
AR090101 AA	20141022	AR2013P100513	20130221
AU2013224304 AA	20130829	AU20130224304	20130207
AU2013224304 BB	20151029	AU20130224304	20130207
CA2860254 AA	20140623	CA20132860254	20130207
CN104160430 A	20141119	CN201380010689	20130207
EP2817789 A1	20141231	EP20130702657	20130207
EP2817789 B1	20170405	EP20130702657	20130207
HK1199535 A1	20150703	HK20140113136	20141231
IN04595DN2014 A	20150508	IN2014DN04595	20140606
JP2015513481 T2	20150514	JP20140558056T	20130207
KR20140130105 A	20141107	KR20147019249	20130207
MA35922 B1	20141201	MA20140037320	20140904
MX2014009402 A1	20141110	MX20140009402	20130207
PH2014501539 A	20140922	PH20140501539	20140703
RU2014138222 A	20160410	RU20140138222	20130207
SG11201404511T A1	20140926	SG20141104511	20130207
TH149597 A	20160504	TH20141004820	20130207
TW201342310 A	20131016	TW20130105994	20130221
US2015036872 AA	20150205	US20130380443	20130207
WO13124160 A1	20130829	WO2013EP52404	20130207

Probable Assignee: SICPA HOLDING SA

Assignee(s):(std)**:** SICPA HOLDING SA

Assignee(s): SICPA HOLDING SAAVENUE DE FLORISSANT 41CH–1008PRILLYCH ; MULLER EDGAR

Inventor(s):(std)**:** EDGAR MULLER ; MUELLER EDGAR ; MULLER EDGAR

Inventor(s): MULLER EDGARCH

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; OSLER HOSKIN AND HARCOURT LLP; HOFFMANN EITLE; SCHOEN ANNE ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B42D25/23 B42D25/29 B42D25/30 B42D25/305 B42D25/333 B42D25/346 B42D25/369 B42D25/378 B42D25/41 B42D25/42 B42D25/435 G06K9/00 G06K9/20 G06T1/00 G07D7/00 G07D7/08 G07D7/20 G10L21/12 (Advanced/Invention); G07D7/08 (Core/Invention); G07D (Subclass/Invention)

CPC: G10L21/12 G06T1/0085 G06K9/00463 G06K9/2018 B42D25/30 G06T2201/0052 G06T2201/0062 G06T2201/0065 G07D7/08

US class: 283/82 358/3.28 382/100

Cited documents: WO9730415 A1, WO9718092 A1, WO11012520 A2, WO09050733 A2, WO08046702 A1, WO06097900 A1, WO05002866 A1, WO03101755 A1, WO02073250 A2, US6718306 BA, US5692068 A, US4838648 A, US3906449 A, US2013064379 AA, US2012174737 AA, US2010327060 AA, US2010164216 AA, US2009304551 AA, US2009085873 AA, US2009008926 AA, US2008295983 AA, US2008164689 AA, US2008134849 AA, US2008130980 AA, US2007287490 AA, US2007274559 AA, US2007221731 AA, US2007172261 AA, US2004008871 AA, US2003183012 AA, EP1741564 A1, EP1667073 A1, EP0730014 A1, EP0721531 A1, DE4325027 A1, DE19706966 A1, CN1492372 A, CN1482569 A, CN1404009 A, CN101827256 A, CN101345054 A,

Forward Citations: US9307073,

Abstract:
Source: US2015036872A Disclosed is a document or article carrying information for the audible authentication of said document or article, wherein the information is present in or on said document or article in the form of a frequency−versus−time spectral density function (spectrogram), the spectrogram being embodied using document security means. Disclosed are further a method for producing said document or article; a reader device for displaying audible authentication information from said document or article, a method for authenticating said document or article and the use of a spectrogram for document authentication purposes.

0) US2015298482A – MULTILAYER BODY AND METHOD FOR PRODUCING A SECU...

180) Family number: 56387533 (US2015298482A) © PatBase

Title: MULTILAYER BODY AND METHOD FOR PRODUCING A SECURITY ELEMENT

Priority: DE201210110630 20121106 WO2013EP73193 20131106

Family:

Publication number	Publication date	Application number	Application date
AU2013343637 AA	20140515	AU20130343637	20131106
AU2013343637 BB	20170518	AU20130343637	20131106
CA2889569 AA	20150424	CA20132889569	20131106
CN104884265 A	20150902	CN201380068328	20131106
CN104884265 B	20170412	CN201380068328	20131106
DE102012110630 A1	20140508	DE201210110630	20121106
EP2917041 A1	20150916	EP20130788969	20131106
ID201605354 A	20160930	ID2015P0003327	20131106
IN01670KN2015 A	20160122	IN2015KN01670	20150602
JP2016503356 T2	20160204	JP20150540175T	20131106
KR20150083102 A	20150716	KR20157014603	20131106
MX2015005612 A1	20150820	MX20150005612	20131106
PH2015501012 A	20150727	PH20150501012	20150506
US2015298482 AA	20151022	US20130439526	20131106
WO14072358 A1	20140515	WO2013EP73193	20131106

Probable Assignee: OVD KINEGRAM

Assignee(s):(std)**:** OVD KINEGRAM AG

Assignee(s): TOMPKIN WAYNE ROBERT DECEASED ; WALTER HARALD ; OVD KINEGRAM

Inventor(s):(std)**:** HARALD WALTER ; ROBERT TOMPKIN WAYNE ; TOMPKIN WAYNE ROBERT ; WALTER HARALD

Inventor(s): WAYNE ROBERT TOMPKIN ; TOMPKIN WAYNE ROBERT DECEASED

Agent(s): FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; GOWLING LAFLEUR HENDERSON LLP; LOUIS POEHLAU LOHRENTZ; NY OLGA K SANTOSO BSC SH LLM; ZINSINGER NORBERT

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B41F19/02 B42D15/00 B42D25/23 B42D25/29 B42D25/30 B42D25/324 B42D25/328 B42D25/36 B42D25/40 B42D25/45 G02B5/00 G02B5/18 G03H1/00 G03H1/02 G06K19/16 G07D7/12 (Advanced/Invention)

CPC: G02B5/1842 B42D25/30 B42D25/40 B41F19/02 G02B5/1861 B42D25/328 G02B5/1819 G03H1/0244 G03H1/0011 G02B5/1852 B42D25/29 G02B5/008 B42D25/324 B42D25/342 B42D25/36 B42D25/373 B42D25/378 B42D2035/24

US class: 101/32 359/572

Classification Explorer

Cited documents: WO12136777 A1, WO11104551 A1, WO03059643 A1, US7974010 BB, US5714231 A, US5007709 A, US2011012337 AA, US2010307705 AA, US2007273142 AA, US2007081246 AA, DE10308327 A1, DE10308305 A1,

DE102010034085 A1

DE102009056933 A1

DE102007061979 A1

CN102725148 A, CN102083632 A,

Forward Citations: WO16125843, US9598821, US2015376841, KR101740891, FR3017231, DE102014118366,

Abstract:
Source: US2015298482A A multilayer body (1, 2, 3) and a method for producing a security element are described. The multilayer body has a metal layer (21). An optically active surface relief is molded at least in areas in a first surface of the metal layer (21) facing the upper side of the multilayer body or forming the upper side of the multilayer body and/or in a second surface of the metal layer (21) facing the underside of the multilayer body or forming the underside of the multilayer body. In at least one first area (31 to 39) of the multilayer body the surface relief is formed by a first relief structure (61). In at least one direction (617) determined by an allocated azimuth angle, the first relief structure (61) has a sequence of elevations (612) and depressions (614), the elevations (612) of which follow on from each other with a period P which is smaller than a wavelength of visible light, wherein the minima of the depressions (614) lie on a base surface and the first relief structure (61) has a relief depth t which is determined by the spacing of the maxima of the elevations (612) of the first relief structure (61) from the base surface in a direction perpendicular to the base surface. The profile shape and/or the relief depth t of the first relief structure (61) is chosen such that the colored appearance of the light (52, 53) incident on the first area (31 to 39) at least at a first angle of incidence and directly reflected by the metal layer (21) in the first area or directly transmitted through the metal layer is modified, in particular is modified by plasmon resonance of the metal layer with the incident light.

0) US2016307035A – METHOD FOR AUTHENTICATING A SECURITY ELEMENT, A...

181) Family number: 59402583 (US2016307035A) © PatBase

Title: METHOD FOR AUTHENTICATING A SECURITY ELEMENT, AND OPTICALLY VARIABLE SECURITY ELEMENT

Priority: DE201310113340 20131202 DE201410110103 20140718 WO2014EP75909 20141128

Family:

Publication number	Publication date	Application number	Application date
CN105934779 A	20160907	CN201480072986	20141128
DE102013113340 A1	20150603	DE201310113340	20131202
EP3078004 A1	20161012	EP20140812151	20141128
TW201531958 A	20150816	TW20140141841	20141202
US2016307035 AA	20161020	US20140100769	20141128
WO15082332 A1	20150611	WO2014EP75909	20141128
WO15082332 A8	20151223	WO2014EP75909	20141128

Probable Assignee: ADORSYS GMBH AND CO KG

Assignee(s):(std)**:** ADORSYS GMBH AND CO KG ; LEONHARD KURZ STIFTUNG AND CO KG ; OVD KINEGRAM AG

Inventor(s):(std)**:** FRIESER UWE ; GUGEL ALEXANDER ; METZGER JUERGEN ; METZGER JURGEN ; SCHILLING ANDREAS ; SCHMITZER BENNO ; TOMPKIN WAYNE ROBERT ; WONDRATSCHEK RALF ; WRONDRATSCHEK RALF

Agent(s): LOUIS POEHLAU LOHRENTZ; NORBERT ZINSINGER ET AL PATENTANWAELTE LOUIS POEHLAU LOHRENTZ

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** B42D25/23 B42D25/24 B42D25/29 B42D25/30 B42D25/324 B42D25/328 B42D25/342 B42D25/351 B42D25/369 B42D25/373 B42D25/378 G06K19/14 G06K19/16 G06K9/00 G06K9/22 G06K9/46 G06K9/62 G06T5/00 G06T5/20 G06T7/00 G07D7/00 G07D7/12 G07D7/1205 G07D7/20 G07D7/206 (Advanced/Invention); B42D25/30 (Advanced/Non–invention)

CPC: G07D7/12 G07D7/2083 G06K9/00483 B42D25/328 B42D25/324 B42D25/342 B42D25/369 B42D25/373 B42D25/378 B42D25/351 B42D25/29 B42D25/23 B42D25/24 G06K9/6256 G06K9/4604 G06T5/002 G06T5/20 G06K9/22 G06T2207/20021 G06T2207/20081 G06T2207/30176 B42D25/30 G07D7/128 G06T7/13 G07D7/005 G07D7/1205 G07D7/206 G07D7/003

US class: 382/135

Classification Explorer

Cited documents: US2013223674 AA, US2007279515 AA, US2005161512 AA,

DE102011121566 A1

DE102011082028 A1

DE102011077904 A1

DE102004056007 A1

Forward Citations: DE102015219426,

Abstract:
Source: US2016307035A The invention relates to a method for authenticating an optically variable security element (**1**), in particular a diffractive security element, with the steps:

•

- a) capturing an image sequence with at least one individual image of the security element (**1**) by means of a sensor (**31**), in particular a hand–held device (**3**), preferably a smartphone, tablet or a PDA;
- b) checking whether at least one predetermined item of optical information is present in at least one individual image of the image sequence.

0) BR202014010055U – DISPOSICAO CONSTRUTIVA INTRODUZIDA EM PORTA–MOE...

182) Family number: 61602510 (BR202014010055U) © PatBase

Title: DISPOSICAO CONSTRUTIVA INTRODUZIDA EM PORTA–MOEDA COM CONJUNTO DE ALVEOLOS ESCALONADOS, COM DISTINTOS FORMATOS DE ACORDO COM CADA VALOR Constructive disposal INTRODUCED IN PORT–CURRENCY WITH STAGED alveoli SET WITH SEPARATE AGREEMENT FORMATS WITH EACH VALUE (Machine translation)

Priority: BR20142010055U 20140426

Family:

Publication number	Publication date	Application number	Application date
BR202014010055 U2	20151222	BR20142010055U	20140426

Probable Assignee: GUEDES JOSE RUBENS

Assignee(s):(std)**:** GUEDES JOSE RUBENS

Assignee(s): JOSE RUBENS GUEDES

Inventor(s):(std)**:** GUEDES JOSE RUBENS

Inventor(s): JOSE RUBENS GUEDES

International class (IPC 8–9): G07D3/00 (Advanced/Invention)

CPC: G07D3/00

Classification Explorer

Abstract:
Source: BR202014010055U resumo disposicao construtiva introduzida em porta–moeda com conjunto de alveolos escalonados, com distintos formatos de acordo com cada valor, que compreende um porta–moedas configurado por um conjunto de alveolos escalonados com distintos formatos no diametro de cada alveolo para acondicionar os valores de moedas utilizados no brasil. apresenta–se no formato de um receptaculo alongado no sentido longitudinal, de formato preferencialmente cilindrico com um compartimento central (2a) de secao semicircular de cujas bordas laterais longitudinais (3) se desenvolvem abas laterais (2b e 2c), onde sao praticados vincos longitudinais (3) conformando o fechamento por meio de mecanismo macho femea; na superficie da aba lateral (2c) cria–se um espaco para a aplicacao de adesivos ou impressoes graficas de publicidade (6); na superficie externa do compartimento central cria–se um espaco para identificacao dos valores da moeda em linguagem braile (4); as abas laterais, com a funcao de fechamento, contemplam porcao abaulada onde sao previstas multiplas deformacoes oblongas (7) de forma a configurar travas do tipo macho e femea conformando o meio de fechamento duplo; ao longo do compartimento principal (2a) e distribuida uma pluralidade de alveolos escalonados (2a.a), equeidistantes entre si, conformado multiplos espacos no referido compartimento principal (2a), espacos estes com diametros para acondicionar os valores de moedas existentes no meio circulante do brasil (r$ 0,01; r$ 0,05;r$ 0,10;r$ 0,25; r$ 0,50 e r$ 1,00). 1/1 Summary constructive disposition introduced in door–currency set of staggered alveoli with different formats according to each value comprising a purse configured by a set of alveoli staggered with different shapes in the diameter of each well to accommodate the currency values used in Brazil. It is presented in an elongated receptacle shape in the longitudinal direction, of preferably cylindrical shape with a central compartment (2a) section semicircular of whose longitudinal lateral edges (3) develop side flaps (2b, 2c), which are practiced longitudinal creases (3) shaping the closure by female male mechanism; on the surface of the side flap (2c) creates a space for the application of adhesives or impressions graphical advertising (6); the outer surface of the central compartment creates a space for identification of currency values braille language (4); the side flaps, with the function of closing, include Porcao bulged where they are provided for multiple deformations oblong (7) to set up male type of locks and female shaping the means of double closing; along the main compartment (2a) and a plurality of distributed staggered alveoli (2a.a) equeidistantes each other, multiple spaces formed in said main compartment (2a), these spaces with different diameters to accommodate the values of coins in existing circulating medium of Brazil (r $ 0.01; r $ 0.05, r $ 0.10, r $ 0.25, r $ 0.50 and $ 1.00). 1/1

0) DE102015006008A1 – VERFAHREN ZUR KONTROLLE DER ECHTHEIT VON SICHER...

183) Family number: 63988716 (DE102015006008A1) © PatBase

Title: VERFAHREN ZUR KONTROLLE DER ECHTHEIT VON SICHERHEITSMERKMALEN AN WERTOBJEKTEN PROCEDURES FOR CONTROLLING THE AUTHENTICITY OF SECURITY FEATURES TO VALUE OBJECTS (Machine translation)

Priority: DE201510006008 20150513

Family:

Publication number	Publication date	Application number	Application date
DE102015006008 A1	20161117	DE201510006008	20150513

Probable Assignee: BEYER WOLFGANG

Assignee(s):(std)**:** BEYER WOLFGANG ; MISSING JUERGEN

Inventor(s):(std)**:** BEYER WOLFGANG ; MISSING JUERGEN ; POKRZYWNICKI PETER VON

International class (IPC 8–9): G07D7/12 (Advanced/Invention)

CPC: G07D7/12 G07D7/003 G07D7/0047

Classification Explorer

Cited documents: WO15010881 A1, WO14190961 A2, DE2237911 A1, DE19946536 A1,

DE102013101587 A1

DE102012024175 A1

DE102011121566 A1

Abstract:
Source: DE102015006008A1 Die Erfindung betrifft ein Verfahren zur Kontrolle der Echtheit von Sicherheitsmerkmalen an gedruckten und/oder dreidimensionalen Wertobjekten, insbesondere der Sicherheitsmerkmale von Banknoten, Muenzen und Dokumenten (z. B. Schecks, Coupons, Gutscheine, Urkunden, Ausweise). Ausgehend vom Stand der Technik besteht die Aufgabe der Erfindung in der Schaffung eines Verfahrens zur Kontrolle der Echtheit von Sicherheitsmerkmalen an Wertobjekten mit dem die Sicherheit der Erkennung von Faelschungen der Wertobjekte gegenueber den bekannten Verfahren wesentlich erhoeht wird. Geloest wird diese Aufgabe, indem nach einer vorhergehenden Auswahl und Erfassung der die Art und Wertkategorie des Wertobjektes repraesentierenden Darstellungselemente mittels der Kamera einer Computereinrichtung eine datentechnische Zuordnung der abgespeicherter Vergleichswerte der Sicherheitsmerkmale des echten Wertobjektes erfolgt. Danach wird eine Erfassung vorgegebener in der Gesamtdarstellung des Wertobjektes eingebrachter zwei– und dreidimensionaler Sicherheitsmerkmale mittels der Kamera durchgefuehrt. Es erfolgt dann eine signaltechnische uebermittlung der erfassten Werte zu einer Vergleichsstation. In dieser wird ein Vergleich der erfassten mit den zugeordneten abgespeicherten Werten des echten Wertobjektes durchgefuehrt und das Vergleichsergebnis an die Computereinrichtung gesendet, die daraufhin das Vergleichsergebnis optisch und/oder akustisch signalisiert. Das Verfahren ist fuer im Umlauf befindliche sowie fuer herzustellende Wertobjekte anwendbar. Vorteilhaft wird insbesondere bei der Herstellung neuer Banknoten jeder Banknote ein individueller Code zugeordnet und in mindestens einem dreidimensionalen Sicherheitsmerkmal untergebracht. Die fuer den Vergleich erforderliche Abspeicherung erfolgt in Verbindung mit der zugehoerigen Seriennummer. Vor der datentechnischen uebertragung wird der jeweils erfasste Code mittels einer Hash–Funktion verschluesselt. The invention relates to a process for controlling the authenticity of security characteristics on printed and/or three–dimensional value objects, in particular the security features of banknotes, coins and documents (such as cheques, coupons, vouchers, certificates, cards). Starting from the State of the art of the invention in a procedure significantly increases the security detecting counterfeits of the value objects compared to the known methods for controlling the authenticity of security characteristics on value objects task. This task is solved by after a previous selection and acquisition of presentation elements representing the type and value category of the value object using the camera of a computer facility, a data mapping of the stored comparison values of the security features of genuine value object is carried out. After a recording is performed given in the overall presentation of the value object of inserted two – and three–dimensional security features using the camera. It is then a signal technical practice identifying the collected values to a comparison station. In this, carried out a comparison of collected with the associated stored values of the real object of value and the comparison result to the computer equipment sent that affiliated optical and/or acoustic signals the comparison result. The procedure is in circulation as well as applicable for dial value objects. Beneficial, particularly in the manufacture of new banknotes of each banknote associated with an individual code and housed in at least a three dimensional safety feature. The storage required for the comparison is carried out in conjunction with the corresponding serial number. Before transferring data of each captured code using a hash function is encrypted.

- **search:** SS6 FT=coin* and (hold* or identif* or differ*) and (blind* or braille* or visual disab*) and hole* and (pocket* or wallet* or card) (Results 194)
- List: SS6 1–50 (FT=coin* and (hold* or identif* or differ*) and (blind* or braille* or visual disab*) and hole* and (pocket* or wallet* or card)) (Results 194)

0) US1757428A – CAR–RETARDER SYSTEM

1) Family number: 19537596 (US1757428A) © PatBase

Title: CAR–RETARDER SYSTEM

Priority: US19250070599 19251121 US19260115562 19260612

Family:

Publication number	Publication date	Application number	Application date
BE337782 A	00000000		00000000
DE483360 A	19291007	DE1926G068699D	19261119
FR624897 A	19270728		19261120
US1748916 A	19300225	US19260115562	19260612
US1757428 A	19300506	US19250070599	19251121

Probable Assignee: GEN RAILWAY SIGNAL CO

Assignee(s):(std)**:** GEN RAILWAY SIGNAL CO

Assignee(s): GENERAL RAILWAY SIGNAL CO ; GENERAL RAILWAY SIGNAL COMPANY

Inventor(s):(std)**:** HOWE WINTHROP K

International class (IPC 8–9)**:** B61K7/04 B61K7/06 B61K7/12 (Advanced/Invention); B61K7/00 (Core/Invention)

International class (IPC 1–7)**:** B61K7/02

CPC: B61K7/04 B61K7/12 B61K7/06

European class: B61K7/04 B61K7/06 B61K7/12

US class: 188/62

Classification Explorer

Forward Citations: US2801711,

Abstract:
Source: DE483360A 1. Gleisbremse, bei der lngs der Schiene sich erstreckende Bremsschienen aufdieSeitenflaechen der Raeder eines ber die Schienen'laufenden Wagens zwecks Bremsung einwirken und bei der hinter einander eine Mehrzahl von Bremsschienen zu jeder Seite der Schiene liegt, dadurch gekennzeichnet, dass die aneinander an grenzenden Enden der Bremsschienen so miteinander verbunden sind, da~ ein ge lenkiger Anschluss entsteht, der eine relative Bewegung um eine lotrechte Achse derart gestattet, dass die Bremsschienen eine durchlaufende, elastisch nachgiebige Brems flaeche bilden. 1 Rail brake, in the LNG rail extending brake rails aufdieSeitenflaechen the wheels of about the Schienen'laufenden carriage for the purpose of braking to act and wherein a plurality of behind each other of the braking rail on each side of the rail, characterized in, that the each other at adjacent ends of the brake rails are joined together as a ~ ge lenkiger connection is formed which allows such a relative movement about a vertical axis, in that the brake rails form a continuous, elastically flexible brake surface.

0) GB265999A – AN IMPROVED MACHINE FOR THE PRODUCTION OF YARNS...

2) Family number: 18308325 (GB265999A) © PatBase

Title: AN IMPROVED MACHINE FOR THE PRODUCTION OF YARNS OR THREADS OR OF WADDING

Priority: GB19270004089 19270214

Family:

Publication number	Publication date	Application number	Application date
GB265999 A	19280308	GB19270004089	19270214

Probable Assignee: OSKAR NAUPERT

Assignee(s):(std): OSKAR NAUPERT

International class (IPC 8–9): D01G15/10 (Advanced/Invention); D01G15/00 (Core/Invention)

International class (IPC 1–7): D01G21/00

CPC: D01G15/10

European class: D01G15/10

Classification Explorer

Forward Citations: WO17075675,

Abstract:
Source: GB265999A 265,999. Naupert, O. Feb. 14, 1927. Fibrous material is placed in a hopper feeder and fed therefrom automatically through a series of devices including an opening device, a carding–engine, a sliver dividing device, a drawing and twisting arrangement, a sliver condensing device, and a drawing–head to a ring spinning frame. The whole machine is mounted in a single frame and driven from the one shaft. By putting certain sections of the device out of operation the machine may be used for winding the fleece delivered from the doffer of the carding–engine into a lap, or for twisting and doubling on the ring spinning frame. The machine may be used for spinning fine or coarse counts. Feeding openers, carding–engines, and c. – The hopper feeder A, Figs. 1 and 5, comprises a travelling, card–covered band 21, the lower roller of which is adjustable to alter the inclination of the band, a travelling band 19 at the bottom, and a rear wall 20, mounted on the axle of a roller 23 and pressed forward against the material by a counterweight 25. The roller 23 rests on the belt 19 and the rear wall 20 is thus moved forward as the material is withdrawn from the hopper by the band 21. Openers and c.–The opening device B, Figs. 1 and 6, to which the material is fed from the hopper feeder A by card covered cylinders 27, 28, 29 comprises pairs of travelling card covered bands 30, 31, 35, 36 the elements of which travel in the same direction but at different speeds. The clothing on the bands 30, 35 is in sections spaced apart at equal intervals. The material is passed from one pair to the other by a belt 32 and rollers 33, 34. The number of pairs of belts may be increased. Carding–engines; sliver–rubbing apparatus; openers, etc.; drawing–frames. – The carding– engine C, Figs. 1 and 6, comprises a taker–in 37, which transfers the material from the opening–device B, and two cylinders 38, 39, rotating in opposite directions and provided with workers 41, 44, and strippers 40, 43, round the greater part of their circumferences. Each cylinder is provided with fancies 41, 45, the fleece being transferred from one cylinder to the other by a roller 42. The fleece 4 is finally delivered by a doffer 2 and comb 3 to a sliver–dividing device D, Figs. 1 and 8. The dividing belts 49, 50, which pass round the grooved rollers. 48, 47 and guide pulleys 51, 53, are kept taut by guide pulleys 52, 54 mounted in slotted guides and controlled by springs. The slivers 5 are taken off by pairs of rollers 55, 57, 56, 58 and passed through twist tubes 6 to drawing rollers 59 and thence to sliver–rubbing belts 8. The rovings 7 are delivered to rollers 61, 62, and are then passed through other twist tubes 6, Fig. 1, and rollers 61a, 62a to the drawing–heads 9 of the spinning frame E. The cylinders of the carding–engine C and of the opener and c, B are mounted on axially movable spindles 183, Fig. 25, supported in bushes 182 and engaging bushes 184 in the end plates 185 of the cylinder. Studs 186 on the bushes 184 engage bayonet grooves 187 in the spindles 183, or vice versa, and relative rotation of the cylinder and the spindles frees the spindles so that they can be withdrawn and the cylinder removed. The spindle bushes 182 are supported in brackets 188 secured to the frame so as to be adjustable in all directions. An intermediate bush 190 is held in the bracket 188 by two diametrically opposite screws, and carries screws 189, displaced through 90‹, which engage the bush 182. The card clothing 192 is secured to the cylinder by eyes 193 passing through coincident holes in the clothing and the cylinder 191 and the flange 194 of the end plate. At one end a flanged metal ring 194 is superposed and secured by additional eyes 195 passed through the eyes 193. In the opening and c. device, and in the hopper feeder, the carding–bands comprise card clothing secured to a backing by eyes 193, Fig. 27, which are engaged by studs 197 on the conveying rollers 196. Lap–forming apparatus.–When, it is desired to wind the fleece delivered from the doffer 2 of the carding–engine C, Fig. 1, into a lap for the manufacture of wadding a lap roller 14, Fig. 19, is mounted in open bearings 130 in brackets 13 adjustably secured to the main frame. A pressure roller 15 rests on the lap as it is wound and its spindle 134 rests against an adjustable slide 125 secured to the bracket 13. The slide 125 is set so that when the desired thickness of lap has been wound on the roller 14, the roller 15 rises over the top of the slide 125 and rolls along a hooked extension 129. The machine, which may

be driven by a motor, or by a treadle mechanism or by a combination of the two, is operated from a main shaft 198, Fig. 28, through a series of hand–controlled gear boxes, whereby the speed of the driven shaft may be augmented or decreased, or the shaft may be put out of action. By these means certain sections of the machine may be put out of action as desired. The main shaft through spur gearing drives the clutch box 202, this drives a clutch box 209 controlling the hopper feed A, and by a chain 220 the opening device B. The shaft 198 also drives through a chain 224 a clutch box 227, through which the various elements of the carding–engine C are driven. A further clutch box 244 is driven from the box 227 and controls the sliver–dividing device D and the sliver–rubbing device 8. A further drive from the shaft 198 working through a clutch box 275 operates the tin rollers 281 driving the spindles of the spinning frame E. The roller head is driven from a shaft in the sliverrubbing device 8. Provision is made for the introduction of change gears at suitable places.

0) GB298197A – IMPROVEMENTS IN OIL FILTERS

3) Family number: 18564708 (GB298197A) © PatBase

Title:	IMPROVEMENTS IN OIL FILTERS
Priority:	GB19280028414 19281003

Family:

Publication number	Publication date	Application number	Application date
GB298197 A	19290110	GB19280028414	19281003

Probable Assignee:	TECALEMIT LTD
Assignee(s):(std):	TECALEMIT LTD
Assignee(s):	TECALEMIT LIMITED
International class (IPC 8–9):	B01D29/00 (Advanced/Invention); B01D29/00 (Core/Invention)
International class (IPC 1–7):	B01D29/10
CPC:	B01D29/54 B01D29/232
European class:	B01D29/00A10K B01D29/00A10K14 B01D29/00A10M6 B01D29/12 B01D29/12+/14+/26

Classification Explorer

Abstract:
Source: GB298197A 298,197. Tecalemit, Ltd., (Assignees of Soc. Anon. des Etablissements TUcalUmit). Oct. 5, 1927, [Convention date]. Filters having sheet filtering–materials.–A number of filter pockets are arranged with central supply apertures surrounding a vertical member s, Fig. 1, and with their ends o<1> turned vertically within an outer gauze l, the body so formed being placed in a tank or reservoir. The central aperture of each pocket is provided with eyelets p, q, Fig. 2, the eyelets q having portions q<2>, Fig. 3, which serve to keep apart the sides of the pocket. The pockets are clamped together with intermediate packing r by a nut t screwing on the end of the member s, which is provided with lateral channels through which the oil to be purified is distributed to the pockets.

0) GB558650A – IMPROVEMENTS IN OR RELATING TO PORTABLE MOTOR D...

4) Family number: 29692254 (GB558650A) © PatBase

Title: Improvements in or relating to portable motor driven nibblers

Priority: GB19410015609 19411203

Family:

Publication number	Publication date	Application number	Application date
GB558650 A	19440114	GB19410015609	19411203

Probable Assignee: INDEPENDENT PNEUMATIC TOOL CO

Assignee(s):(std)**:** INDEPENDENT PNEUMATIC TOOL CO

Assignee(s): INDEPENDENT PNEUMATIC TOOL COMPANY

International class (IPC 8–9)**:** B23D27/00 B23D49/16 B23D69/00 (Advanced/Invention)

CPC: B23D27/00 B23D49/16 B23D69/00

European class: 49C18B B23D27/00 B23D49/16 B23D69/00

Classification Explorer

Forward Citations: DE1013144,

Abstract:
Source: GB558650A 558,650. Shearing. STEVENS, A. H. (Independent Pneumatic Tool Co.). Dec. 3, 1941, No. 15609. [Class 83 (iv)] [Also in Group XXIII] A portable motor–driven nibbling machine has the cutting element in the head reversible and is arranged to cut on the up stroke. The electric or fluid pressure driving motor and reduction gearing are mounted in a casing having an extended part 25, Fig. 2, with its axis parallel to that of the driven shaft 14 which has an eccentric 32 carrying a ball race mounted on a transverse slideway 31 in a ram 26 sliding in a cylindrical bore but prevented from rotating by a guide pin 28. The nibbling cutter 38 is rotatably secured in the ram betwen screw plugs 77, 78 the latter having a set screw 79 bearing on the head 82, to limit the play to that necessary to permit rotation, and acting in conjunction with a divided marker 83. Adjustment of both plugs enables the position of the cutting edge 67 to be adjusted. A closure cap 84 is hollowed to form a lubricant container replenished through an oiler 85. The lower part of the punch 38 is polygonal and is guided in a head 35 adjusted at 74 75 in the casing 25 and in a bore of the ram. Three screws 39 selectively engage a series of holes on the face 36 to permit the head 35 being located at various angles to the motor casing which serves as handle. The lateral guides for the punch are formed by side plates 55, 56, Fig. 3, secured by cross–pins 88, and the guideway is closed by the stationary cutter plate 59 grooved on both sides at 63, 64 to fit the punch so that in addition to the cutting edge 65 a second edge 66 may be brought into operation by removing and reversing the plate. The cutting edge 67 of the punch is backed off at 67a, Fig. 2a, and clearance 68 is provided at a corresponding angle to allow the edge to be ground and permit the free passage of cuttings for discharge through an opening 69 in the cutter plate 59 and in a cover plate 70 having a projection 74 that serves both as an indicator –for guiding the nibbler along a marked iine on the work 'and for deflecting the cuttings laterally so that they neither obscure the line nor pass again to the cutting edges. An adjustable screw 46 serves as nipper and holddown and is maintained in adjusted position by a spring pressed ball 49 engaging grooves 51 in the head. The cutting edge.of the punch is curved at 67, Fig. 10, with short flat portions C at each extremity. The punch is cut away at 87 to match the tapered neck 86 of the frame to permit the machine to be passed along a curved line of cut.

0) GB565062A – IMPROVEMENTS RELATING TO GLASSWARE FORMING MACH...

5) Family number: 19133630 (GB565062A) © PatBase

Title: Improvements relating to glassware forming machine

Priority: GB19430000053 19430101

Family:

Publication number	Publication date	Application number	Application date
GB565062 A	19441025	GB19430000053	19430101

Probable Assignee: WILLIAM EDWARD EVANS

Assignee(s):(std)**:** WILLIAM EDWARD EVANS

International class (IPC 8–9)**:** C03B9/18 (Advanced/Invention); C03B9/00 (Core/Invention)

International class (IPC 1–7)**:** C03B9/18

CPC: C03B9/18

European class: C03B9/18

Classification Explorer

Abstract:
Source: GB565062A 53. [Class 56] Relates to a glassware forming machine of the kind in which two mould tables arranged side–by–side, are rotated step by step or intermittently in unison with one another and in opposite directions. The parisons are transferred from one table to the other and blown to shape on finishing moulds. According to the present invention, transfer of a parison takes place when the mould tables are moving at or near the lowest speed while moulds .are charged and the finished article removed at a complete stop in the intermittent motion. The mould tables 30, 199, Figs. 1 and 11, are geared together and rotated step–by–step by a mechanism, such as that described in Specification 557,064. At each table step a blank mould 35 arrives at the charging station as shown in Fig. 1a, in its inverted position and receives the charge of glass from a suitable feeder. The charge as it enters the mould is compacted into a ring mould 38 by suction and by compressed air. Suction is applied to the ring mould by a hollow arm 96 which is swung in a vertical plane about a hollow shaft 97, is connected by a suction valve 102 and the compressed air by a valve 100, both of which are operated by stationary cams, the times of operation being adjustable. These cams are so shaped that at appropriate times suction is applied to the mould to compact the glass about the mouth forming mandrel 88 and then compressed air is supplied to expand the glass in the mould 35 to form the parison. The compacting of the glass by suction is assisted by compressed air and a baffle plate 133 which is bought down on to the open end of the mould 35 to close the mould during the expansion of the charge to form the parison. The mould 35 consists of two parts hinged together and carried by a turnover drum 43 which is journalled in a bearing member 44 having its longitudinal axis arranged radially to the axis of the mould table. The flange 45 on the drum carries a series of rollers 46 which engage notches or recesses 47 formed on a stationary part 49 of the frame. The mould is opened and closed by stationary cams as the table rotates and the ring member 39 is opened against the action of a spring by a spreader head 76 which is rocked periodically by the stationary cams. After the mould is charged with glass, movement of the moulds past stationary cams causes the arm 96 and the baffle 133 to be moved away from the mould and the mould is then reverted and opened as it approaches the transfer position bearing the parison suspended by the ring mould 38, as shown in Fig. 1b. Just before the tables stop and while the movement is at a relatively low speed, the parison is transferred to the finishing mould 207, Fig. 11, the parison mould and the finishing mould move in closed paths which intersect at the transfer point and just before each pair of moulds reaches the point the parison mould is opened, leaving the parison suspended by the neck ring and the blow mould then closes around the suspended parison. The ring mould is then opened so that it releases the parison as the finishing mould closes. The transfers are all effected before the tables come to rest. During subsequent movement of the tables, the parison is blown to shape by air supplied through a blow head 246 which is swung downwards on to the mould and finally the mould opens and the finished article is removed by a take–out mechanism which may be of the kind described in U.S.A. Specification 1,537,963. The supply of compressed air for blowing the ware is controlled by a valve 257, one of which is provided for each mould. Each valve is opened at the appropriate times by a fixed cam, the contour of which is adjustable to enable the time of operation of the valve to be controlled. In addition, a manual control to each valve is provided to advance or delay the admission of air to blow the ware to finished form.

0) FR907704A – BLOC–CROISEE

6) Family number: 19971214 (FR907704A) © PatBase

Title: BLOC–CROISEE

Priority: 19441109 19450111 19450730

Family:

Publication number	Publication date	Application number	Application date
BE458504 A	19450531		19450412
BE470502 A	19470228		19470113
FR53962 E	19470114		00000000
FR54011 E	19470327		19450111
FR55972 E	19520910		00000000
FR56349 E	19520922		19450730
FR907704 A	19460320		19441109

Inventor(s):(std)**:** ANGELI EUNO ; CROIZAT JOANNES ; PAUL ROGER ANTOINE EUGENE ; PERLIER ROSAIRE JOSEPH RAOUL L

Inventor(s): PERLIER ROSAIRE JOSEPH RAOUL LE

International class (IPC 8–9)**:** B03B1/02 C22B1/02 C22B1/14 E04B1/16 E04C3/02 E04F21/00 E04G15/02 E04G17/14 E04G21/16 E06B1/24 H01T13/54 (Advanced/Invention); E04B2/86 (Advanced/Non–invention); B03B1/00 C22B1/00 C22B1/14 E04B1/16 E04C3/02 E04F21/00 E04G15/00 E04G17/14 E04G21/16 E06B1/04 H01T13/00 (Core/Invention); E04B2/86 (Core/Non–invention)

CPC: E04G17/14 E04G21/16 E04B1/163 E04B2/8605 E04B2002/8688 E04G15/02 H01T13/54 B03B1/02 C22B1/02 C22B1/14 E04F21/0015 E06B1/24 E04C3/02 E04C2003/023

European class: B03B1/02 C22B1/02 C22B1/14 E04B1/16B E04C3/02 E04F21/00B E04G15/02 E04G17/14 E04G21/16 E06B1/24 H01T13/54 P04B2/86D P04B2/86S P04C3/02A

Classification Explorer

Forward Citations: WO0188318, US4304078, US3230676, US3157098, US3122861, FR2636090, EP0358549,

Abstract:
Source: BE458504A [Source: Claim 1] 1.

0) GB600565A – IMPROVEMENTS IN OR RELATING TO YARN OR LIKE WIN...

7) Family number: 44932882 (GB600565A) © PatBase

Title: Improvements in or relating to yarn or like winding machines

Family:

Publication number	Publication date	Application number	Application date
GB600565 A	19480413	GB19440021996	19441108

Probable Assignee: UXIVERSAL WINDING COMPANY

Assignee(s):(std)**:** UXIVERSAL WINDING COMPANY

International class (IPC 8–9): B65H54/22 B65H67/08 (Advanced/Invention)

CPC: B65H54/22 B65H67/081 B65H2701/31

European class: B65H54/22 B65H67/08B L65H701/31

Classification Explorer

Abstract:
Source: GB600565A 600,565. Winding yarn and c. ABBEY, A. (Universal Winding Co.). Nov. 8, 1944, No. 21996. [Class 120(ii)] A yarn and c. winding machine of the type having packagesupporting means, driving means, preferably a driving drum, for rotating the package to wind on yarn from supply, end–finding means for finding an end of yarn prior to its being united to the yarn on the package and detector means for detecting breakage or exhaustion of the yarn, includes a composite structure comprising the end–finding means and a knotting means, the structure being controlled by the detector means to retrieve the yarn end and unite it automatically to the end of the yarn on the package, the composite structure being stationary in relation to the package–supporting means. Yarn y from a main supply bobbin s is led through a notch 240 in a guide plate 241, thence between tensioning discs 238, 239 and through a detection and reserve yarn supplying device 244, 288 to the opening of a slub–catcher 250. From the slub–catcher it is led under a guide wire 258 and beneath a bar 102 of a weighted yarn–breakage or exhaustion–detecting device 103. From this latter detector, the yarn is led by way of the traversing grooves 11, 12 of a package driving drum 10 to the cop tube C to which it is attached by any means, the tube C being carried by an arm 14 which may be swung upwardly away from the drum 10. A reserve yarn y<SP>1</SP>, to be used when the yarn y becomes exhausted, from a supply s<SP>1</SP>, is led over the limbs of a guide wire 263 and its end attached to a transfer arm 290 where it is held by a gripper 291, the end of the yarn y<SP>1</SP> being severed by a knife 295. The arm 290 is held in an inoperative position by a finger 283 on a shaft 280 engaging a detent on the arm 290, the amount of rotation of this shaft 280 being determined by fingers 288 which either grip the broken end lying on the top of the plate 244, or pass through gaps therein when the yarn y fails so to bring the reserve y<SP>1</SP> into position for connection to the package yarn. To begin a wind, a handle 206 is depressed to remove a detent pin 194 from an adjustable package measuring device 185 and allow the arm 14 to swing downwardly, under gravity, and the cop tube C to contact the drum 10. At the same time, an arm 134 on a member 122 is moved within the path of a stud 168 revolving with a shaft 65 to move a clutch–operating member 78 to remove a brake shoe 90 from the clutch member 22 and to engage the clutch 40 to cause the drum to be rotated from the drive shaft 16 at a relatively high speed. The turning of the member 122 about its carrying rod 110 moves an arm 115 to rock a member 107 so to swing the detector 103 downwardly and cause a bail–wire 272 connected thereto to engage the yarn y and draw it downwardly to take up slack therein (Fig. 3). The release of the handle 206 allows the arm 134 of the member 122 to engage a lug 138 on the clutch shifter 78 and the member 107 rocks to allow the detector 103 to engage the strand y and the bail wire 272 to resume its inoperative position. When a slub wedges between the plates 247, 248 of the slub catcher 250, the yarn y is broken. The detector 103 then swings upwardly under the weight 112 and the member 107 is rocked to position the wedge–shaped head 120 of an arm 116 on the member 107 against a collar 68 and sleeve 74 rotating with the drive shaft 65. Abutments 70, 75 on the members 68, 74 then co–operate with the arm 116 to move the clutch shifter 78 to disengage the clutch members 22, 40 and so disconnect the drive from the shaft 16 to the drum 10. At the same time, the member 107 is moved and, through the arm 115, moves the member 122, the brake shoe 90 being applied to the clutch member 22 to bring the drum 10 to rest. Continued movement of the sleeve 74 brings a rotating member 85 thereon into driving contact with the clutch member 22, to rotate the drum 10 in the reverse direction so that the package P is rotated in an unwinding sense, the brake shoe 90 having been released by a co–operating stud and cam–like slot. As the shaft 65 continues its rotation a lug 153 on the collar 68 thereon contacts the arm 116 to tilt the frame 107 backwardly to be held in that position by a latch 158 engaging a finger 111 thereon. The abutment 75 also contacts the arm of a bellcrank lever 435 which is rocked and through a link 438 swings a valve member to open suction to a hose 355 leading to the end–finding tube 325 and nozzle 326, the valve being maintained open by a detent 445. The end–finding tube 325, which also removes lint and dust from the slubcatcher and c., is attached to a carriage 328 connectable, when the yarn ends are to be retrieved, to a shaft 329 reciprocated longitudinally and oscillated about its axis by cam grooves 342. 346 cut in the periphery and end face of a rotating drum 335. With the movement of the clutch–shifter 78 a cam cage 389 thereon moves a detent 383 to permit a spring–urged latching–pin 370 on the carriage 328 to enter a recess in the shaft 329 to connect the carriage 328 thereto and so partake of its motions. The end finder 325, in its movement to the left (Fig. 2) first locates a pinion 357 thereon opposite a rack bar 367. The shaft 329 is then

oscillated to bring the rack and pinion into mesh and further movement of the carriage 328 then rotates the endfinder 325 to a position adjacent the slubcatcher 250. This rotation of the endfinder brings an ear 501 on the suction nozzle 326 to rock a detent lever allowing the shaft 280 to rotate and bring the detector fingers 288 to engage the yarn end lying on the plate 244. Further rotation of the end finder 325 brings the nozzle 326 into contact with a re−setting mechanism to raise the fingers 288 above the yarn y and at the same time, through a hooked member 319 to lift the upper tension disc 238 away from the lower disc 239, and relieve the tension in the yarn. Simultaneously the re−setting frame rocks the upper blade 247 of the slub−catcher 250 to enable the nozzle 326 to withdraw the yarn end therefrom, an arm 315 on the frame moving upwardly to contact the yarn y and bring it towards the nozzle. The cam grooves 342, 346 now reverse the operation of the carriage 328 to bring the end−finder 325 back to its starting position but carrying the yarn end from the slubcatcher with it. During this motion the nozzle 326 is rotated towards and drawn along the surface of the package P, which it engages resiliently at all diameters by reason of the flexible armouring of the hose 325, so that it retrieves also the broken end at the package; the slubcatching blade 247 and the upper tension disc 238 being returned to their. operative positions. The end−finder 325, carrying the two yarn ends, is now moved across the length of the package towards a knotter 296 and, during this movement, the clutch shifter 78 is slid to disengage the clutch members 22, 85 and apply the brake shoe 90 to bring to an end the unwinding rotation of the package. As the nozzle 326 approaches the knotter 396, it engages a pivoted spring − urged "anti − stitch" member 467, which, upon the nozzle 326 being swung away from the package P, pivots back and engages the yarn y to prevent " stitches " being drawn over the end of the package. The nozzle 326 now moves beyond the knotter 396 and draws the two yarn ends between tension plates on the knotter. An abutment on the carriage 328 now engages a gear segment 400 to initiate the operation of the knotter and the latching pin 370 is partly withdrawn to uncouple the carriage 328 from its operating shaft 329 so far as longitudinal motion is concerned. The nozzle 326 is now rocked, the yarn ends knotted and the projecting ends severed. The shaft 329 is now moved towards the right (Fig. 2), the catch pin 370 is again projected into the shaft 329, the carriage 328 and nozzle 326 moving therewith, and the knotter is re−set. Suction to the nozzle 326 is now cut off. Further motion towards. the right moves the yarn y, by engagement therewith of a hook 480 on the carriage 328, towards the centre of the traverse drum 10 so that it may be picked up later by the grooves 11, 12. The clutch shifter 78 is now operated to re−engage the clutch members 22, 40 and remove the brake shoe 90 to permit normal winding to beginagain. The detector 103 is now moved raising the bail 272 to engage the yarn y to take up slack therein and cause it to slide under the yarn guide wire and between the blades 247, 248 of the slubcatcher. The hook 480 is then moved to release the yarn and the latch pin 370 is withdrawn to uncouple the carriage 328 from its driving shaft 329. Upon failure of the yarn y, the detector 103 moves, as above described, to cause the end−finder 325 to swing towards the slub−catcher 250 and the shaft 280 is unlatched to allow the detector fingers 288 to move towards the plate 244 and, since there is no yarn end thereon, the fingers 288 will pass through gaps in the plate. The frame 285 is thus released and the reserve strand y<SP>1</SP> will be dropped into a position where it can be picked up by the nozzle 326 and knotted, as above described, to the package yarn, the reserve holding arm 290 being returned to its original position. The exhausted supply bobbin s is then replaced manually by a fresh supply. Winding continues until the adjustable sizing−member 185 rides off the knock−off member 190 which then rocks to cause its end to engage the abutments 69, 75, to move the clutch shifter 78 to disengage the clutch members 22, 40 and apply the brake shoe 90 to assist winding, the wound package still resting on the driving and traversing drum 10. Doffing is then effected manually. In a multiple unit machine, the above mechanisms are repeated for each unit except that a single reciprocating and oscillating shaft 329 moved by a single cam 335, grooved at 342, 346, actuates the mechanisms of each unit. Specificatio

0) CH261936A – MEUBLE PLIANT. FOLDING STAND. (MACHINE TRANS...

8) Family number: 25562639 (CH261936A) © PatBase

Title: MEUBLE PLIANT. FOLDING STAND. (Machine translation)

Priority: 19460123

Family:

Publication number	Publication date	Application number	Application date
CH261936 A	19490615		19470118

Probable Assignee: PEYRON GEORGES

Assignee(s):(std)**:** PEYRON GEORGES ; VERITE DANIEL

Inventor(s):(std)**:** DANIEL VERITE ; GEORGES PEYRON

Inventor(s): PEYRON GEORGES ; VERITE DANIEL

International class (IPC 8–9)**:** A47C17/66 (Advanced/Invention); A47C17/00 (Core/Invention)

International class (IPC 1–7)**:** A47C17/70

CPC: A47C17/66

European class: A47C17/66

Classification Explorer

Forward Citations: US6564400, US6513178, US3045257, US2708276,

Abstract:
Source: CH261936A (Claim 1) 1. Meuble pliant selon la revendication, caracterise en ce que les differents elements mobiles sont susceptibles de se rabattre sepa rement sur l'une des deux faces de l'element rigide, par rotation autour d'articulations multiples.

Machine translation: (Claim 1) 1. Folding furniture according to claim, characterized in that the various moving elements are likely to bind with separately on one of the two faces of the rigid element, by rotation about multiple joints.

0) GB661187A – IMPROVEMENTS IN OR RELATING TO WASHING–UP MACHI...

9) Family number: 19370620 (GB661187A) © PatBase

Title: Improvements in or relating to washing–up machines

Priority: GB19490000255 19490105

Family:

Publication number	Publication date	Application number	Application date
GB661187 A	19511121	GB19490000255	19490105

Probable Assignee: GEORGE BERIC PARKIN

Assignee(s):(std): GEORGE BERIC PARKIN

International class (IPC 8–9): A47L15/46 (Advanced/Invention); A47L15/46 (Core/Invention)

International class (IPC 1–7): A47L15/46

CPC: A47L15/46

European class: A47L15/46

Classification Explorer

Forward Citations: US3217721,

Abstract:
Source: GB661187A 255/49. Class 138 (i). A dish–washing machine having an automatic cycle of operations, comprises at least one dish containing and washing chamber, first and second liquid reservoirs, a first two–position selector cock connected separately to discharge means of both reservoirs, to supply means of the washing chamber and to a waste means, and a second two–position selector cock connected separately to discharge means of the washing chamber and to return supply means of both reservoirs the cocks being, arranged for setting in timed sequence so that, liquid from the first reservoir is supplied to the washing chamber and returned to the first reservoir and finally discharged, to waste therefrom., liquid from the second reservoir is then supplied to the washing chamber and returned to the second reservoir and is finally discharged to waste from the first reservoir, the cocks then being reset ready for the next cycle of operations. General features.–The machine, Figs. 1 and 2, which automatically effects the operations of washing, rinsing and drying the dishes comprises upper and lower dish cabinets having floors 122 and 123 respectively and upper and lower pairs of doors 128, 129, and 13Q, 131 respectively; upper and lower spray tubes 120, 121, a common drainage duct 3 connected at 4 with a twoposition selector cock 5 connected to the tops of the reservoirs 124, 125, for washing and rinsing liquid respectively, a two–position selector cock 7 connected with the bottoms of the reservoirs and also to waste, and a pump 9 driven by a motor 127. The motor drives a cam through a reduction gearing to operate in sequence trips, which in turn operate the cocks 5 and 7, and finally open the upper doors of the cabinets, and a shaft 15 to effect a back and forth sliding movement to the spray–tubes through the medium of a crank 14 and rod 13. The cock 5 is operated to return liquid from the washing chamber either to reservoir 124 or 125, and also houses an inlet valve for connecting a hot water supply pipe 134 with both reservoirs, which supply is cut off when the correct level of liquid is obtained in the reservoir by a float 26. The cock 7 is operated either to connect reservoir 124 or 125 with the pump 9 by a pipe 8 and to connect 124 to waste by a pipe 23 when 125 is connected to the pump. The reservoirs are provided with an overflow 24 connected to the waste pipe.23. The pump is connected by a pipe 10 to the spray tubes of which 121 is controlled by a valve 22. Control rods 16 and 20 operable at 132, a lever 19, Fig. 9, operable at 133 and an indicator lamp 21 are provided on the front of the machine. The rod 16 causes the upper doors to open so that the lower doors may then be opened by hand. The rod 20 opens the liquid supply valve and causes an immersion heater to be switched into circuit so that in time thermal switch energizes the motor. The lever 19 can be locked in two positions so as to cause only the spray tube 120 to function or both 120, 121 to function. It also controls the liquid level in the reservoirs and the setting of two of the actuating trip bearing pins viz. 157, 158, Fig. 11, according as to whether one or both spray tubes are in operation. Reduction, gearing, trip mechanism and controls.–The motor shaft drives a pulley connected by a belt to a pulley 58, Fig. 9. A pinion on 58 drives gear 177 which drives a pinion and the shaft 15. The latter pinion drives a gear 176 which drives a pinion to drive a gear 174. The gear wheel to pinion P.C.D. ratio e.g. 13: 1 is such that the gear 174 is driven very slowly. The gear wheels and pinions with the exception of 174 are mounted between plates 12 and 126, Fig. 1. Attached to the gear 174, Fig. 11, is a cam 56 which operates in turn trips 151–156, pivoted on bearing pins 157–162. The trip 151 operates the selector cock 7 through a rod, latch plate 164 and a spindle 61, Fig. 10, and prepares the trip 155. The trip 152 next operates the selector cock 5 through a rod, crank, plate 163 and spindle 60 and also prepares the trip 153. The trip 153 is then moved by the cam 56 to its original position to again operate the cock 5 so as to connect with reservoir 124 and thus to the drain to waste and resets trip 152. Trip 154 opens the doors 128, 129, through a rod, latch plate 32, lever 31 and rod 30, the doors opening simultaneously through a connecting rod 29, Fig. 2. Trip 155 is then returned to its original position to reset 151 and the selector cock 7. Trip 156 operates a switch lever 165 to stop the motor and machine. The door control 16 is connected to the latch plate 32 and the control rod 20 operates a cam 69, Fig. 10, on a shaft 75

by means of a crank 76 to open the liquid inlet valve embodied in the selector cock 5. The rod 20 also rotates a shaft 80, Fig. 9, by shaft 75, a crank 77, rod 78 and crank 79 to move a crank 81, Fig. 11, and actuate switch 165 to energize the immersion heater which in time operates a thermal switch to energize the motor. The lever 19 operates valve 22 through spindle 63, crank 64, rod 172, lever 74 and rod 73 which moves a slide connected to the valve. This lever also sets the position of the trip bearing pin 157 relative to pin 158 as previously mentioned. Finally the lever 19 sets the position of a pin 171, Fig. 10, of a crank 65 which co−operates with an arm on a gate control for the liquid supply valve so as to control in co−operation with the arm 27, Fig. 1, of the float 26, the level of the liquid in the reservoirs according to the number of cabinets in use. Operation.−The lever 19 is set say for double cabinet working. The rod 16 is depressed so that the doors 128, 129 are opened and to allow for the hand opening of doors 130, 131. Dishes are then inserted into the cabinets and all doors closed by hand. The rod 20 is then depressed to actuate the liquid supply valve to fill the reservoirs. At the same time the switch 165 is made to energize the immersion heater and as the water is raised to the requisite temperature, the thermal switch operates to energize the motor, Washing liquid is then drawn from reservoir 124 through the valve 7 by the pump and supplied to both sprays which are moved back and forth by the mechanism previously described. The water drains back into the reservoir 124 and is recirculated to perform the washing operation. The trip 151 then actuates the cock 7 so that the returning washing liquid is discarded to waste from the reservoir 124. At the same time rinsing liquid from reservoir 125 is pumped to the sprays but before it can drain into 124 and to waste trip 152 is operated to change over the selector cock 5 so that the rinsing liquid is returned to reservoir 125 and is recirculated to perform the rinsing operation. The trip 153 then resets the cock 5 so that the rinsing liquid is returned to reservoir 124 whence it flows to waste. The upper doors 128, 129 are then opened by actuation of trip 154 so that the dishes may dry and trip 155 then resets trip 151 and the cock 7 in readiness for the next cycle of operations. Finally the trip 156 opens the switch 165 to shut down the machine.

0) LU31669A –

10) Family number: 34913254 (LU31669A) © PatBase

Family:	Publication number	Publication date	Application number	Application date
	LU31669 A	19530922		00000000

International class (IPC 8–9): A61J1/03 B65D83/04 (Advanced/Invention)

CPC: A61J1/03 B65D83/0409 B65D83/0445 B65D83/0454 B65D83/0481 B65D2583/0418 B65D2583/0431 B65D2583/0454

European class: A61J1/03 B65D83/04A B65D83/04C B65D83/04C1 B65D83/04D L65D583/04M3 L65D583/04N L65D583/04S2

Classification Explorer

Abstract:
Source: LU31669A [Source: Claim 1] 1) Il comprend un ou plusieurs rubans sans fin, tendus et appliques sur au moins l'une des faces du cadre et dans le sens de l'axe longitudinal du ruban, ledit ruban etant pourvu d'au moins une ouverture distributrice, correspondant a l'ob– jet a debiter. [Source: Claim 1] 1) includes one or more endless, outstretched ribbons and appliques on at least one of the sides of the frame and in the direction of the longitudinal axis of the Ribbon, the ob – jet a debit the Ribbon being provided at least an opening dispenser, corresponding said.

11) Family number: 30996538 (US3962248A) © PatBase

Title: PROCESS FOR MAKING 11–PIPERAZINO–DIAZEPINES, OXAZEPINES, THIAZEPINES AND AZEPINES

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: HOOGOVENS GROEP BV

Assignee(s):[(std)]**:** GUTEHOFFNUNGSHU TTE OBERHAUSEN ; GUTEHOFFNUNGSHU TTE STERKRADE ; GUTEHOFFNUNGSHUTTE OBERHAUSEN ; GUTEHOFFNUNGSHUETTE STERKRADE ; SANDOZ AG ; HOOGOVENS GROEP BV ; WANDER AG BERN ; WANDER AG CH ; WANDER SA CH ; WANDER A G TE BERN ZWITSERLAND ; WANDER AG ; WANDER SA ; WANDER AG DR A ; WANDER LTD ; WANDER S A BERNE SUISSE ; GUTEHOFFNUNGSHUETTE OBERHAUSEN ; WANDER DR A AG

Assignee(s): SANDOZ INC ; BUTTER JOHANNES AM ; GUTEHOFFNUNGSHUTTE OBERHAUSEN AKTIENGESELLSCHAFT ; GUTEHOFFNUNGSHUETTE STERKRADE AKTIENGESELLSCHAFT ; GUTEHOFFNUNGSHUETTE OBERHAUSEN AKTIENGESELLSCHAFT ; GUTEHOFFNUNGSHU TTE STERKRADE AKTIENGESELLSCHAFT ; HOOGOVENS GROEP B V ; HOOGOBENSU GURUUPU BV ; HOOGOVENS GROEP B V TE IJMUIDEN ; WANDER S A ; SCHNEIDER JOSEF ; PLOEGAERT HENDRIKUS T ; MOLENAAR RONALD N ; WANDER BERN AG ; WANDER CH SA ; WANDER S A BERNE ; WANDER TE BERN ZWITSERLAND AG ; HOOGOVENS GROEP TE IJMUIDEN BV ; WANDER CH AG ; GUTEHOFFNUNGSHUETTE OBERHAUSEN AG ; GUTEHOFFNUNGSHUETTE STERKRADE AG ; GUTEHOFFNUNGSHU TTE STERKRADE AG ;

GUTEHOFFNUNGSHUTTE OBERHAUSEN AG ; GUTEHOFFNUNGSHU TTE OBERHAUSEN AG ; GUTEHOFFNUNGSHU TTE OBERHAUSEN AKTIENGESELLSCHAFT

Inventor(s):(std): J SCHNEIDER ; BUTTER JOHANNES ADRIANUS MARIA ; YOHANESU ADORIANUSU MARIA BUTSUTAA ; RONALD NICOLAAS MOLENAAR TE HEEMSKERK ; JOHANNES ADRIANUS MARIA BUTTER TE UITGEEST ; HENDRIKUS THEOPHIEL PLOEGAERT TE CASTRICUM ; HENDORIKUSU TEOFUIIRU PUREGERUTO ; BUTTER JOHANNES AM ; SCHNEIDER JOSEF ; SCHNEIDER J ; SCHENIDER JOSEF ; MUELLER OTMAR ; JOSEF SCHENIDER ; JACOBI DR ING OSKAR ; GEHLEN THEODOR ; YOHANESU ADORIANUSU MARIA BUTS ; YOZEFU SHUNAIDAA ; SCHNEIDER JOSEF MINUSIO ; SCHNEIDER JOSEF CH ; PLOEGAERT HENDRIKUS THEOPHIEL ; OTMAR MULLER ; OSKAR JACOBI ; BUTTER JOHANNES A M ; HENDORIKUSU TEOFUIIRU PUREGERU ; MOLENAAR RONALD N ; PLOEGAERT HENDRIKUS T ; RONARUDO NIKORAASU MORENAARU ; MOLENAAR RONALD NICOLAAS ; MOLENAAR RONALD NICLAAS

Inventor(s): JACOBI OSKAR ; SCHNEIDER JOSEF MINUSIO SCHWEIZ ; MULLER OTMAR ; JOSEF SCHNEIDER

Agent(s): RIDOUT AND MAYBEE LLP; REINHOLD COHN AND PARTNERS

Designated states: AT BE DE FR GB IT LU SE

International class (IPC 8–9): A61K31/55 B01J21/00 B01J31/00 C07B61/00 C07D223/20 C07D243/38 C07D267/20 C07D281/16 C07D295/02 C07D295/03 C07D295/04 C07D333/20 C07D333/22 C07D333/32 C07D403/04 C07D413/04 C07D417/04 C07D495/04 C07D498/04 C07D513/04 C21B7/24 E21D17/01 E21D17/086 F27D1/00 F27D21/04 G01B17/02 G01N29/00 G01N29/04 (Advanced/Invention); C07D295/02 (Advanced/Non–invention); A61K31/55 C07D C07D403/00 C07D413/00 C07D417/00 C21B7/24 F27D1/00 G01B17/02 G01N29/00 (Core/Invention); C07D (Subclass/Invention)

International class (IPC 1–7): A61K27/00 A61K27/00 A61K31/33 A61K31/495 A61K31/55 B01J27/10 C07C143/80 C07D223/00 C07D223/16 C07D223/20 C07D223/22 C07D223/26 C07D241/04 C07D243/00 C07D243/06 C07D243/38 C07D267/00 C07D267/12 C07D267/14 C07D267/20 C07D279/00 C07D281/00 C07D281/08 C07D281/10 C07D281/16 C07D295/02 C07D295/04 C07D295/12 C07D333/00 C07D333/20 C07D333/22 C07D333/32 C07D403/04 C07D41/08 C07D413/04 C07D417/04 C07D495/04 C07D51/70 C07D513/04 C07D53/02 C07D57/00 C07D57/00 C07D87/54 C07D93/42 C07D99/02 C07D99/02 C07D99/04 C07D99/06 C07D99/10 C21B7/24 F27D1/00 F27D21/00 F27D21/04 G01B17/02 G01N29/00 G01N29/04 G01N33/38

CPC: C07D295/03 C07D333/20 C07D333/32 C07D513/04 G01B17/02 Y10T292/1022 E21D17/086 E21D17/01

European class: 124BG12C2H 124HC1B41A+B7C1 124HC1B45A+B7C1 C07D295/03 C07D333/20 C07D333/32 C07D513/04 E21D17/01 E21D17/086 G01B17/02

US class: 248/351 260/268TR 292/145 299/11 405/288 540/548 540/551 540/557 540/587 73/597 73/86

Classification Explorer

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Forward Citations: WO9917106, WO9618622, WO15191154, WO09154563, US9476689, US8653257, US8158618, US7622461, US7550454, US7517871, US7491715, US7174787, US6887876, US6490927, US6455521, US5975754, US5968478, US5961214, US5944421, US5890805, US5700445, US5607929, US5176034, US5016474, US4907454, US4881853, US4879288, US4872345, US4711120, US4649749, US4492699, US4431589, US4308207, US4218094, US4192803, US3217498, US3163011, US3097829, US2009318415, US2009018119, US2007197502, US2007105836, US2006199798, US2006194784, US2006186585, US2005282800, US2005250767, US2005192268, US2005085463, US2004224942, US2004177692, JP63008378, JP58180471, JP51135089, JP2007534656, JP1302104, FR2222102, EP0001401, DE4022461, DE1122915, DE10244826, DE102007008882, CN104457307, AU615996, AU2009260905,

Abstract:
Source: US3962248A This invention concerns a novel process for the preparation of 6–piperazinyl derivatives of morphantridine and corresponding ring–substituted and hereto analogues thereof, comprising reacting a compound of the formula: ##SPC1## Wherein A is benzene or thiophene, and X is ––CH2 –– or a hetero atom or group, with a complex comprising titanium, zirconium, hafnium or vanadium and a corresponding piperazinyl derivative. The end products are in general known and useful as neuroleptics.

0) GB700095A – IMPROVEMENTS IN AND RELATING TO EDUCATIONAL APP...

12) Family number: 20587751 (GB700095A) © PatBase

Title: Improvements in and relating to educational apparatus

Priority: GB19500011072 19500504

Family:

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Abstract:
Source: GB700095A 700,095. Educational appliances; books. DUNN, R. M. July 27, 1951 [May 4, 1950], No. 11072/50. Classes 16 and 146(2) A device for teaching letters, numerals and words, and applicable for teaching the blind, comprises a number of basic–shape building elements 1...6 to be fitted into letteror numeral–shaped recesses or openings 8 in a form board 7. The elements, e.g. semi–circular of three different curvatures 1, 2, 3 and straight of three different lengths 4, 5, 6, may be of rectangular or other cross–section and may be coloured on one or both faces, or all over, in different colours, all like elements being of the same colour; they are an easy fit in the openings 8 and lie proud of the surface of the board 7. If the form board is recessed the bottoms of the recesses may be coloured, e.g. correspondingly to the elements 1...6 6 to be fitted therein. In the case of an apertured board a background 10 having coloured letters and c. corresponding to the openings 8 may be registered beneath the board 7 by bringing the edges into coincidence, by engaging pins 11 in holes 12 in the corners of the board 7, or by locating one part within a raised margin on the other part; in this case circumscribed letter portions may be supported by strips 9 in the board 7 or may be provided on the background 10. The alphabet and nine numerals may be accommodated on two large form boards, or small boards may be provided each carrying a word, e.g. illustrated by a picture; the small boards may be assembled to make sentences printed on guide cards, and may have co–operating projections and openings differing between each pair of boards to ensure assembly in the correct order. The boards may be made up into loose leaf or bound books to form sentences or stories and may be interleaved with sheets of pictures; transfers may be provided to be' applied by the user to the boards or sheets; a cover or one of the boards may form a shallow box for the elements 1...6. According to the Provisional Specification the shapes 8 may be formed or filled in by dots and dashes and the filling elements may be of only one basic shape, e.g. of different colours.

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Cited documents: US914821, US719459, US2474843, US2338576, US2338575, US1738997, US1372857, US1356947, US1344898, US1344841, US1306195,

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Abstract:
Source: US2685406A The functio3., of the fixed and hinged baile as– se,_i–ib'_y is to preven'Ll –1_le removpl of unregisteiecl coins froin the fare box by inverting it. The lower edg–es of eL4,ch of the hinged bpffle rrembers i,, sa_v _',(,,othcd as shown q–t 86 in Figure 2. A pair o._ screws, only one of which is shown at B"g _ii F–).gure 2, i)ass through '_he annular plate 74 and are threaded into the coin receiving membe–c 83, to secu.,e a–_id el–amp meniber 83 to the tc–p of the ring , '7 and to the plate 74. li,i orcier to r–revent the entrance of sILigs, eks, o–, coins che too large in di–ameter to be handled by the fare box, a gauge disc 88 (Figare 2) ig secured to t_he bolutom surface of member 33 as by a pqir of scfews, only one of wh–ich is shown at 60. This d,'_se 88 has a rect_,ngular slot 92 in 35 al,ignr,ient with the slot 09 of member 83 anci. t'–k,le 'length of the slot is pr–determined by the diameter of the largest coin intended to be haiidled by fare box. For exarD–Dle if ti–,e fare box is not intended to ha–,idle quarters, a disc h,,ivii,g a _lot tco short to pass quarters ,i7ill be usecl. –_hu.– i–F a qiiprter, half doll–ar etc. is deposited in the rpeiliber 83 it will not be able to ge_ post the gauge disn, 88 and into the fai–c box to jam it. instead, it –vvill remain in member 6.5 82 from which it ecin be removed by hand. The ga,,ige d;sc 88 may be chan.–ed for any other disc, depe.,–ading u–oon the maximum d,.a–met.–r coin –.nteiid.–_d to be hand,ed by the fare box. The cyl–'knftica't wiiidovv fO is retairi–ed –in pos,'_tion ag,,),In,4t t,'_ie chantie'l 72 by a retaining ring S,3 9,–qd gask,,–t _i, se.,_ured the lower edge of _vinclov–i as by ccrews c_'5. The c–,in_ 1–,b.at pass inside the window 6E–. are retaine_–it the–_ei.,i for insdect–ton by the operatoi:, 5,5 P..,r,d fi)r dur–.kp;iig therefro–,n ir–l_–o the fai_e box for re–7,Ste,_–4–,lg and soi:ting, by a –_lechai _ now to be described. P,eft,rrin,., tc_ Figi).re 2,,q–n actuating i,o,,i er sha–ft 96 is',ioui_l;all,–d f–Dr 7ong–.'Ltidinal slidi–Tig moije.– 6U ment iD. ,i p2_ir Pf be__r–ings c_"i mounted –In ti–ie, slop,–iT–I,– top i–iaj.l o_' the –ab,'_net, and iT–i a fixed i,nembei, r,8 sui–tal3ly secured as by s–,i_e,,vs or the like to the ,pposite s–ide of the sloping cabinet klop 1,7ioli. The shgft 9C has a reduced sect,'OTi (;3 90 upon ivhich is r–qounted a compression coil IPg thsb resi_.i.,,:_–utly urges the sl–iaft Sr the I.e,'_t o_s vi,_wed in Tligure 2. A push knob or lian,,I'le, '_' – _:,3 is riaotinted on left end of the shafi– 96 ivhere i'__ protrudes beyot–id the top out ' _, ca,bij:iet vvall. Thus the shaft 96 can be pushed to '.he right, but Lns soon as the handle 103 is released. it –vv,.11 move back to the left end of its stroke under the influence of spring A shaft 104 (Figures 1 and 2) is mounted above the actuating shaft 96 for pivotal movement in a vertica! plane Pbout a pivot 105 carried by the f–ixed member 98. The norm–al position of shaf_ 104 is horizoiatal as seen in Figure 2, but as will be e.,,,–olained, pushiiig in on the handle 103 will raise the sha4_'t 104 in a vert–ical plane, wliile pivoting about 105, to a i:aised posi–tion indicated i_n dotted lines at I 66 in !,,igures 1 and 2. Two bell cranks 107, oiily one of N_Thich is shown in Figure 2, have their aijexes pivotally connected to the actu_tting shaft 96 by a through pin 108, thcie being one bell crank on each opposite side of fhe shaft 96. The longer le_ 109 of each bell crai,.tk 107 is p,'_vot_illy connected by a thro,,igh pin 112 to the _:haft !04. The arrpngement is such that when t_ie actuating sha,4.t 96 is pushed t__ the r;ght the shaft I_IP ivill p"_Vot clocl_:Nvise eb,,_i–it ;,ts uivot pin IC,–) 1 r) a r,,,ised position –ndicatc–d at I On_. The a_tuot–ing rod 9r) and the sha__t 104 coorer–ate to qctupte a coin dumping mechanism qs will now be explained. Re'erring to Figures 1, 2 and 23 a pair of seinil circular plates II,:; and II 4 are disposed as best sho–_,vn in Figures 1 al.Ld 2 i a plane ad4acent the –n bottoria of the cylindr4cal windoN_7 F9. They have mati iig edges aloiag a di a–neter indc._ted at 1 1 5 in Figure 23, disposed vertically above the shaft The d_ameter of t._ie vssembled plates 113 and 1, 1,_' is such that _uhey make a horizontal cl.osure ?_djacent the bo'Ltoin of the 68, for _u,–3port–l,.ig coiyis or tokens for inspectio–_i. A pa_lr of n_ng'–, e iiiembers I I 6 have their hori zontal legs aff–,ced, as by spotwelding, 'tlo the uiiccerqide of LI.ate 113 aa–jgcent its diar–netrical edge, _Lnd –heir vertical '_egs pivc)tally moi' , –nted upon shaft 104, so '_'f,,at the plate 113 –iF,' P,I–,/ot2.lly mounted for r.,–tation obout shoft 10_'. Si–.iiiia_,.–ly the other plate 114 hos 2.. pair of angle bT–P,–kets I _ 7 with their hol._,'_zort?.,I legs secured to i.ts bottom surf qpe and i Ls verti–.al legs p.–Voto,ily mo,,tnted iipon sha–rt 10,1. The arrongement i.s E–uch that, without further the outer or rou_–ided ed,_.,s of plates I! 3 and I I C– vvoiil d drop, witii sha–'t 10e, as the pivot, P–.ad there 1,Niould be a substanti–al_ gai) along the d;_ameter 115 of tile p–.ates. The plates are –rnointained in horizo–,ital position by a pair of elongated studs or sui)p–ortling arms !13 and 119 rigidly –zec,,ired to the s"lorter and upwardly exteiiding ar,_i–is I r_tj 2) of he pa–ir of be! I cranks 1 0 7, the ar.,cas I I 8 and I ID e,,.'_, endi–i–ig hor–'_zontal',y and outwp–rd–iy i_roii the pip–l'ies of the bell cranks I Cr7. V,_Then the kr_ob I C–3 is pushed in by the operltor, the shaft I t4 is r_lised to the pofition indicated in dot–dosh I nes at 106 in F;_gur_–s I and 2. The

pivot pin I I wi–11 be raised ,,_ith Yespect to the tv_To supportinf,, arms II 8 nnd I i 9 aiid the plat.–_3 113 and II 4 v;ill be i:aised so that their diameter I I 5 wi j.1 be parallel with the liew position of shaft I 0 _i at I 0 _. Th' s _,vi7,1 result in the piates i i r4 –,nd I!–$ pivot–'Ing about shaft iO4 as indicated by their dot–da–h Iiiae positions inclicated at 153a ai:id I _ia 'n –tigure 1 vvhile at the'saine tiriie they wi.11 slop–,'iTi o., direction corregponcling to the slope of shaft 104 v,,hen ra,– Ised to the position sho,_i7n e,,t 196. Thiiseachplate lisard l_4s,.opesintvvodi–i–ectioiis away frotn the hori.zontal, so that the coins which h_–,d be,,_ii re–oaiiae.–i –for inspec_bio,_i through the w'lrdow 69 ,,,re duziioed iiito the –_lare box singl'_,ig, register–.rig and sort–Ing mechanism, as will be described. Each of t!7 e tvio plates i and II 4 is recess,–d along iLs mating edge oii the diameter If as in– dicated at 123 and 124 in Fig. 23. An elongated plate 125 is secured as by spot welding to the top surface of plate i 14 and completely bridges the gap formed by the recesses _23 and 124 when the Plates 113 and 914 are in their normal or horizontal position. As best shown in Fi.–ure 1, this Plate 125 also assures that when the plates 113 and II 4 are in the4_r raised position the coi–ns will sli–de either to the ri,–ht or left, and ,vill not remain sui.3ported by the diametricol edges of –olates 113 and 114, or fall_ between them, into the mechanism that raises or loivers them. Wherl– the knob 103 is released, the spring 100 will return the actijatin_ rod 9–3 to the 1.–ft to i.,',s normal position, whereu;on shgft 104 will resiii–rie its horizontal position and the supporting arms I I 8 and I i 9 will again support the plates I 1 3 and 114 i–n ho2izonl_–al position. It will be i–I.–aderstood that even in the raised Dosition of shaft _OfA these supporting arrrs II 3 and II 9 limit the __ivotal moveme,_it of the plates II 3 and II 0, about shaft 104. As described in 'Llhe copending appl4_eation Serial No. 186,054 f–iled September 21, 1950 by Fount F. Do,tigherty for Fare Box with Grab F_andle the four equally spaced handles R6 provide P,_rips for passengers who are standing or for those viho r.lay be passing the fare box v7hen the 17ehi_Cle starts. A light bulb 129 mounted within a reflector 132 secured to the top portion of the cabinet 1.0 illutninate–q the tiltoble plates I IS apd 14 PT–ld a–(iy coins that are resting thereon. Figure 2 shoN_Ts three windows 133, 135 –_nd _35 in the side of the calinet 50, throlgh which are visible the numeral wheels of three coilnter assemblies indicated generally by the numerals 136, 137 and 138. These counter assemblies are actuated autoiratically by the fare box, as will be explained, to regi–,ter respectively the totals of small tokens, coins and large tokens. A plpte i39 carries legends i–qdicating the specific items registered by the coiinter assemblies. T–be front of the cabinet Ui'l has an elongatec' window 142 through which are visi–ble two counter assemblies 143 and 144 (see also Fig. 3) which are selecti–vely actuated by the manual depression of either of a pair of levers 145 and 146 protruding froin the front of the cabinet. These counters o.nd actuators are o'L any conventional type wherein the single depression of a !ever actuates its respective counter to add a single qunierol to the previous totlql. A plate 147 is secured to the frame of the rd–achine as by screws 140 (Fig. 4) a–iid masks all of the dl:scs and numbers of the counters –xceDt for one row number of each, which rovis are visible through the a__loresaid window 142. Protruding frorn the bottom uortion of the front wall of 'Lb–e cabinet' '–A is a change maker identified generally by the numeral 149. The particular construction of t–be chonge maker is unimportant as long as it has one vertical coi,n receiv–lng barrel for each diameter of coin or token that may be handled, registered and sorted by the fare box. The change maker receives the sorted coins from the fare box, and stores thern for the use of the vehicle operator or conduc(_or. Theparticular change maker illustrated in the drawings is similar to that shown in the U. S. Patent 2,338,576 issued January 4, 1944 to Fount P. Daugherty, and need not be further described here, except that in the present instance there are six coin receiving barrels 152–157 (Fig. 1) instead of four as shown in the Patent As best shown in Fig. 14, and also LTi Fig. I the upper ends of the barrels 152– _57 are received in an elong4ted casting _58. This casting has a pair of downwardly inclined surfaces _ 59 and 160 (F–i–g. 14) extendi–ng across the upper ends of the bgrrels 152–157 and serving to –uide coins to the open top ends of the barrels after they have bee–,–i discharged from the sorter mechanism. The msting 158 is secured to the machine frame as by screws lO 8 (Fig. 14) and has side walls 164 and "GU of the don–figuration shown in Fig. 14 with tra_–isverse recesses 166 along its upper edge. Be– twee–.q the side walls 164 and 165 are a seri–es of dividinwalls IST (Fig. 1) all having the same confguration as the side walls 160, and 165, and havirg the function of guiding the sorted coins to their proper barrel after they have been dropped fr,3in the _sorter, es will be underste.)od. The casting 159 has a forwardly and upwardly flaring fron'u wall 168 providing another series of chutes by vihi_–h coi– .qs r–iay be deposited into their oroper barrels by hand, as after the operator has made chel.–Yige or 'uhe like. A cover plate 169 is hinged at i–ts ends to the casting I 5 8 by screws _' 7 0 (Fig. 14), the recesses 166 in the top edges of the side and di–vi–din,– walls providing clearance for the upper edge of the cover plate _ 6 9 when it is raised. The –ove_– plate is provided Nvith a series of coin slots ITS directly over each of the barrels _ 52–157 so that the operator may deposit coins or tokens into th–,ir proper barrels, each of the slots 173 being of proper length to pass the prope.– coit–i. The cover 1)late also has an elongated NviT–idow 17,.q through which the operator may watch the coins sorted by the fare box pass dovvnixiardly to their proper barrels. 4:0 As will be explained, pushing in the knob 103, besides act_iating the mechanisra to dump the coins frorp the plates I IS and I i 4, tlso serves to initiate operation of the –rqotor that aetuates th6 fare box. A riia;.n sivitch 175 (Figs. 5, 7 ard 10) is seevred as by screws 176 to a vertico.1 leg I 'T inte– gral with and extending downwardly f,.–oill., an inverted pyrar–qidal coin hopper _478. The switch has an actliating pin 179 (F–ig. 7) that is normally urged olitwardly by an internal spring (not shown) to close the swi–tch. The switch is opened by pushing in the pi.n #79 again..,3t the action of the internal spring. A leaf spring 182 is suitably seciired at i_ts lower end to the body of the switch 97_ so that the soring 482 extends substantially vertically upwards, in cont–act with the outer end of the actuatng pin 179 and through a re_–tangular opening 183 in the wall of the coir hopper ITO, to a point above the upper erjge of tl–ie hopper where its free upper end bears ag–ainst a stud 9 84 (Fig. 2) carried by and extending downwardly from the actuating rod 96. The internal spring in the switch 175 is _,trong eqough to push the leaf sprinf,_ away from the swi,tch to (,–lose the switch vihen the rod 96 is raoved to the right in Fig. 2, consequently carrying the stu–_l 184 +.o the right. 1–_owever, the retur_–i spring 109 on rod 96 moves the rod 96 back to the left when the knob 1,33 is released, and the stud I BA, will ptish the leaf spring 182 back to overcome the internal spring in swi'uch 17 '_,, push the pin _ 7 9 in–, and open the switch. Care raust be taken, when placing the cab–inet L_0 i–ipon the fare box fran–ie, +_hat the k–n6b IGO is pushed in while lowering the cabinet, to assure that the stud 184 –,_7ill lie to the right of the leaf spring 182 as viewed in Figure 2. The top wall of the hopper is recessed as shown at 185 in

Figs. 3 and 6 to assure clearance for rod The aforesaid inverted pyramidal hopper is disposed directly beneath the coin reception and inspection receptacle formed by the cylin– _ical Nvindow 69 and the plates 113 and 114. The upper edge of the hopper v;ill lie closely adjacent the inner surface of the frusto–pyramidal tbp of the cabiiiet, aiid an endless g_Lsket (not shown) –s advantageously secured as by cement, to the i inner surface of the cabinet top Nall to seal the space between that wall and the top edge oll the hopper. On one si,de, the hopper has means foriiiing a fare passage or discharge chute formed partly by a bottom wall 186 (Figs. 3, 6 and 8) that is in effect a partial cortinuation of the oppositely disposed hopper wall 187. The chute has side walls 1 800 and i 99 sufficic–j–itly spaced so as to allow large co–ins, such as ciiiarters, to pass down the _hute to the coin singling aiid gaging device which will be described later. The chute side aiid bottom walls terminate ab their bottoms in an inte._ral membei, forming a platform 19 2 which when secured to the machine _L5 frame, holds the hopper in place by means of screws l__13, 194 and 195. These screws, besides passing through the platform 192, pass through spaced guide plates 196 and 197 (Fig. 13), through a coin plate I 90 (Figs. 5 and 13) and through spac4iig viashers 20,2, 203 and 204, and are thread.ed iiito a horizontal member 205 of the internal frame 51, the spacing washers serving to posi–tion the coin Dlate 198, the guide plates, and the 'Llopper 178 at the proper elevation with re– spect to the internal frame. The sloping walls of the hODper direct coins to theaforesaidehute,aswillbeunderstood. Means are provided to agitate the coins in the hor)pel, so that they will fall into the cliute, the same means serving to reject f–rom the chute those articles i_,hich exceed a prede'uermined thickness, such as a button, or a coin which is bent or deforr_ied to such a, degree that it rqight jani the coin singling and so,–ting apparatus. This agitating and 41–, rejecting means, in the illustrated – embodiment, is in the form of a rubber wheel 208 having a r,air of spaced toothed sections 206 and 207. The ,vheel is secured to a rotatin,_, shaft 209 by a set screw (riot shown). As best shown in Figs. and 8 the peripheries of the two toothed sections 20–3 and 2ui are but slightly sdaced from the bottom wall I 86 of the chute, and are driven at high speed in a counter–clockwise direction as ,,_iewed –in i_ ig. 6. The cl_earaiice between the sec– t4ons 206 and 207 and the bottom wall 186 is such that bent coins, buttons, slugs or other articles that are so thick as to jam the sorting mechanism, will iiot be able to pass the wheel 208, but instead w;lll be thrown back up into the hopper. Also, st,acked coins c,,tnnot pass i–n'uhe wheel because the thi,_kness of two of even the thinnest coins w–ill be too great for passage beneath the wheel, and the i:tp,cer one will be thrown back up il'ito the hopper. A i_hield 2 i 2 covers the udper end of the coin chii'Le above the r,,ibber wheel 208, to _Lorm a continuat–lor. of the hopper wall 213 (Fig. 3), The shield has a ti,,,,,er 214 thal p,2oiec's into '_he spa.–e betweer, _'he toothed sect–ions of the rubber wheel. –ht:ts the shield 2i2 with its finger 214 assure that co_ins will iiot drop into the coin chute without first falling into the hopper ar d then passing bcneath the rubber wheel_ 208. As each coin Dasses beneath the rubber wheel 208 it is arrested momentarily by a contact 215 (Fig. 6) that protrudes vertically thiough a hole 216 in the chute bottom wall 186. This contact is automat"_cally depressed with eve_–y coin singling stroke of the mechanism shown in Fig. '_3, thereby releasin., the coin that is arrested by the contact. The motor and drive shaft The fare box is powered by an electric motor 218 (Fig. 19) su,.tably secured to the bottom of the inter–nal frame r. 1. The motor has a reduction gear box which journals the lower end of a vertical output shaft 221 (Fi_,. 20) wh–ich passes through a housing 222 and carries adjacent its u,–)per et–id a triple tool_hed circular ratchet 223 (Fig. 20). A di–iven shaft 224 is mounted coaxially above the motor output sholft 221, being jolirnalled in a pair of horizontal ini.ernal frame r7jemL–ers 225 and 226. The driven shaft 224 is releasably connected to the motor shaft 221 by a clutch _nechanisiq now to be described. Secured to but rotatable upon the lower end of the driven shaft 224, where it adjoins the upper eiad of shaft 221 and the ratchc–t 223, is a plate 227, best shown in Figs. 20 and 21, havina a spiral periphery that includes one radial lip or notch 228 formin.– a stop. A sem,'_–eircularly curved P'late 229 (Fia_. 20) is secured to the bottori of the plate 227 1)y a pivot pin 232 so that the curved plat,., lie., against the under surface of plate 227 ar_d can zotate about pin 232. This rot,–itional –;.iovement is limited by a P;,n 233 fixed to the upper plate 221 ,iiid protruding throL,.,_h a short slot 234 in the Pi–voted plp–te 229. The free end of pivoted plate 229 is thereby lin–.ited to a, movement betw,–en its full line Position shown in Fig. 20 and the Cotted line position sho–_vn at 229a. The pivoted plate 229 has at i–ts free end a radial lip 235, which when the plate 229 is in its dotted line position 229a, is coplanar v%Tith the radial lip 2 2 8 of the plate 2 2 7. A bell–crank shaped pa_,vl hav–'.–ng le.–s 236 and 23–i is pivotally secured to the botton, of plate 227 by a pin 233. A tension spring 239, secured to the pin 233 and to a pin 242 on the pavil, il–rges the paNNil counl_er–clocknvise as viewed __n Figure 20 so that the outer end of its le_ 235 is in the path of the teeth on the ratchet 2_3. The spring 239 is suf–flciently strong to cause '_he leg 237 of 'Uhe pawl to exert a cammirg action on the free el)–d portion of plate 229 to normaily inaintain the plate 229 in its fulil lipe position 2hown in F–ig. 20. It will be apparent that under these conditions there is a positive drive coii–qection Let,_kreep– tl–ie motor shaft 221 and the plate 22T. This drive can be d–isconnected by rotating the plate 229 counter–clockwise as view,,d in Fig. 20 so that by a camming act–"on it overconies the aettion of the spring 239 ,lnd iota:,.es the pawl clockwise, thereby moving its leg 1"6 to the dotted line position 236a wherc– it is out of the path of the teeth on the ratchet 2 2 3. Referring to Fig. 19 a bell –,rank having legs 243 and 244 is pivotally _–ecured to a member 245 of the internal frame by a pivot 2r4C. A tension spring 247 ui,ges the bell crank clockwise as viewed in Fig. 19, egainst a stop member 248 secured to the frame as by a screw 249. As shown in Fig. 20, the end of the crank arm 243 lies in a vertical plane in the path of the radial lip 235 on curved plate 229 and the rat._ial L,p 228 or stop on the plate 227, when the cranl, arm 243 is in the fully raised position shown in Fig. 19. Tl–j–,.is, assuming that the ratchet and pa–,_,.l are in driving enaagement, in thei_– clockwise rota– tion as vie_ved in Fig. 20, first the lip 235 will hit the arm 243 to disengage the ratchet and pawl w.echp,nism and theil the lip or stop 228 on the plate 227 will hit the arm 223, thus stopping the plal'e and entirely discontinuing the transfer of power to the driven elements of the fare box, allowing 'Lhe motor to coast to a stop if it has been deenergized at the same time. 1 The motor shaft 221 has affixed thereto for rotation therewith a dis–. 252 (Fi_u. 19) having a series of three cams depending downwardly from its periphery. The bell crank arm 243 has a, pin 254 protruding therefrom, which when the arm 243 is in the raised position of Fig. 19, hes in the path of the eams 253. In Mg. 19 one of the cams is shown about to engage the pin 254. Upon energization of the motor 218 rotation of the ca.,n 253 will depress bell crank arm 243 ag–qinst the action of spring 247 and the arm 243 ,A7ill release the lips 235 and 228. Spring 239 will thereupon engage the pawl leg 236 with the ra–tchet 223 so that

the plate 227 will be positively dr,'Lven through one revolution, whereupon the bell crank arm 243 will again disengage the positive ratchet and panvl clutch mechanism. Figs. 21 and 22 show an overload release clutch ri).echanism which prevents damage to the machine in the event of a jam therein. In Fig. 21 is shown a pair of curved lever arms 255 and 256 pivotally secured to the top of the pla–te 227 by a pair of screws 257 and 258. A teiision spring 259 urges their free ends together. Counterclockwise rotation of lever 255 is limited by a stop screw 262 passing through a stud 263 fixed to the plate 227. The other lever 256 carries a roller 264 free to rotate on a, pin 265, The roller 264 bears against the periphery of a cam disc 266 above the mechanism shown in Flg. 21 and fixedly secured to the driven shaft 224, and norinally is seated in a depression 267 in the periphery, being resi–liently held therein by the spring 2o'B, with a force sufficient to transmit normal forces to the disc 266. In the event of a jam in the machine the roller will merely ride up out of the depression 267 thereby c–,asing to transr.–lit rotation. The roller can circle the plate 266, riding into and out of the depression 267 thereby ceasing to transmitrotation. The roller can circle the plate 266, riding into and out of the depression 267 until the motor 218 is deenergized. Above the cam disc 266 is –Qxedly secured to the shaft 224 a bevel gear 268 which drives the coin and token counter mechanism through a bevel pinion 270 (Fig. 29). This counter mechanism wiU be described later. Secured to the shaft 224 for rotation therewith, above the frame member 225, is an elongated cam 269 having a profile as shov,7n iti Figure 22a, and a funettion to be described later. Suitably afrxed to the top of the driven shaft 224 for rotation therewith is a gear 272 that has a stud 273 protruding from its upper surface which serves as a crank–pin for driving a connecting rod 274 that in turn is connected by a pin 275 (Figure 13) to a coin ram 276 that is guided for rectilinear motion by the guide pla'ues 196 and 197 (Figure 13). The coin ram is confine,l against vertical movement by the bottom surface of the platform 19 2 and the top surface of the coi–n plate 198 (14'igure 5), and the underside of the platform 192 has a central recess 277 (dotted in Figure 5) to provide clearance for the pin 275. The coin plate 198 is also recessed as shown at 278 (Figure 12) to provide clearance for the pin 275 and the rlght or forward eild of the connecting rod 274 when at the forward end of its stroke. Figure 12 shows the coin rarn 276 at the full end of i.ts working stroke, and in its normal zero or withdrawn position, which it occupies when the clutch mechanism is as shown in Fig–are 19, the stud or crank pin 273 is 180 degrees away from the position shown in Figure 12. Secured to the driven shaft 224 below the gear 2i2, but above the frame member 226 is a plate cam,270 having a profile best shown in Figures 12 and 16. A cam follower 282 is carried by a lever 2OU3 pivoted to the internal frame 51 by a pin 284 and urged clockwise by a tension spring 285. Thecam2l9hasafirstdepression286which by means of the cam follower 282 and spring 285 resiliently holds the shaft 224 in such position that the stud or crank pin 273 is in its zero or withdrawn position shown in Figure 16. The fol– lower 282 thus assists in holding the driven shaft 2'24 in the position that it occupies before a rotation cycle or series of Gycles. The cam 2'p 9 has a second depression 287 separated from depression 286 by a rise 288' (Figure 16). The action of the plate cam 2–gS is such that after rotation of shaft 224 is initiated by the motor, further rotation beyond the rise 288 is assisted by the slope of the cam profile toward the second depression 287. This occurs during a portion of the cycle where– in the load on the motor is relatively high, and theadditional torque provided by the action of the spring pressed cam follower 282 at this point smootbs out the motor load. A vertical bracket having two walls 289 and 290 (Figures 3 and 5) is secured to the top of the horizontal frame member 205 as by three screws 293 (Figure 3) passing through horizontal legs 294 and 295 at the bottom of the vertical bracket. A vertical shaft '296 (Figures 3 and 5) is jour–nalled for rotation in bearings in the frame raember 205 and in a horizontal lip 297 protruding inwardly from the bracket wall 290. Adi4acent its bottom the shaft 296 has a pinion gear 298 (Figure 3) that iiieshes with the gear 212, thereby driving shaft 296 at a much greater speed than the driven shaft 224. Adjacent the top of shaft 296 is a bevel gear 299 (Figure 5) that meshes with a mating bevel gear 300 fixed to a short shaft journalled in vertical wall 290. The same shaft has affixed to it a gear 303 that drives a gear 304 on shaft 209 through an idler gear 305 (Figure 3) inounted on stub shaft 306. Bevel gears 299, 300, gear 303, idler 305 and .–ear 304 thus provide the rotative power for shaft 209 that dr;.Ves the –rubber wheel 208 in the hopper discharge chute. Also secured to the shaft 296 but below the bevel gear 299 is a worm 307 (Figure 5) which rneshes with a worm wheel 303 (Figure 3) upon a shaft 309 fixedly secured to the bracket wall 289. Suitably keyed to worm wheel 208 is a hard rt_ober or Bakelite cam 30,0 havir_g a circular profile except for a singledepression 'Q II (Figure 3a. An electr–le swi–tch 3f,4 –is suitably se– cured to the bracket vertical wall 289. This switch has a plunger 315 that when pressed inwardly against the force of an internal spring, closes the circuit in which the sivitch is located. A lever 316 is pivotally secured to the switch 7o body at a pivot 317, and at its other end carries a cam follower roller 3 1 8 that rides on the periphery of the card– 3 1 0, being resiliently pressed thereagainst by the switch plunger .0.1 5. In the position shown in Figure 3a the plunger 315 is pushed in and the switch 3 14 is closed. The cam 310 rotates counter–clockwise once for every 13 revolli.tions of the large gear 272 that actuates the coinram 276 andthe function of the cam 310 a–rid sv7itch 311_' is to assure that the power circuit to the ir_otor, once closed, will operate the 5 coin ra:,–, 27G at least 13 t–imes, before the depressi ' on ol–'–ovvs the cam follower 3 1 8 and lever 61 _P, to r_elease pluiiger 315 a–nd oper– the switch Si 4. If afte,. these 13 operations of the coin ram the motor eirei:ii_ is still energized by another 'I 0 will be rotated again p,iraliel,– then cam _L–ad_ again open the switch 14 after 13 op–,ra_– tions,.of the c–ni–,i rai–ii. It iray be explained at this time that the raotor is initially energized by push_ng in the knob 103 15 to dump the coiiis i–qto the hopper, because this actio ' n closes the rnain switch 1.15 (Figure 7) as prev–Lously explained. Switch 314 is in parallel with the main switch 175 and thus maintains _l holding circuit to energize the motor while the 20 coin ram 276 makes 13 ope,:ations. If all of the coins dumped into the hopper have been disc_liarged from the hopper chute then the motor –,vill become deenergized at this time. Hoivever, i–s – etaincd in tne coin chute by the o; c_intoet 2 _ 5 of Figure 6 then the motor circuit will be again closed through contact of the coid – _,7it,h the chute bottom i86 and –_vith the contact 2 The holding eircui–t established by the sv_Titch 8 I _, aiid cam 3 1 0 will thus again cause "3 0 the –.,iiotor to dr,',Ve the coin ram through 13 opt4 era icins. C–peratiol–i of the protruding contaet 215 is as follov_,s, Feferrir_., to Figure 9, the contact 215 is inouiited ii–oon o,,ie leg of a bell crank 319 piv– ailtached to –qn elem–ent of the coin chute by nscrew 322. A tension spring 3__3 ur,,es the bell –,rqTh,, 319 counter–clockwise 'uo its norriial posi–tion where–in +he contact 215 prc)trudes above the –floor igg of the chute to prevent passa.–e of a coin there–oast. A bottom ver'uical lip or edge 324 o_–i the bell crank 319 engages one e–rld 325

of a horizontal lever pivotally ir_ouiated upon a pin 326 (Figure 7) for rotary reciprocati –ng movement witilin a slot 327 in the underside of the ' platform i22, so that the lever operates in a plane just above the top of the coin raiia 278 and w–ith the other end 328 of the lever i–n +he path of th,– pin 275 (Figures 12 aiid 13). The a–loresp–Id lever is urged clockwise, as vic–wed in ;_ligure 7, by the ac'uion of the spring 323 9,nd the bell cranl_ carryiyig the contact 2 1 5, so that its norr.–ial pos–i'_ion is as shown in Figure 7, with tli.e '–imit o_' the clockwise mover–yient of arm 320 ostablished _Dy the left v_all of the slot 327,. The lever is –o lo;–,ated along the path of the aforesaid pin 27.3 that the pin strikes the arm 328 j L,.st before the pi–i'i reaches the end of its st–,,oke (towa–rds the r3ght as viewed in Figure 12), and the pin 273 wi.11 thjs riove the lever arm 32k,, cou–iiter–clocl,–,_vi'se (!,'igure 7) to rotate the bell crei,nk 3 i 9 (Figure 9) clockwise a,–;ainst the tensioii ol_ s–critig 323, aiid thus pull –the contoet bellow the '–.loor of the coin cl–l–Lite to perr_,iit the next coiii tr, slide to the bottoiii o–f the chute. The contg.,–;t 2 i 5 i__ insula–ted from the bell crank S(O that car.__ies i–u, and a wire 329 leads fi:om the cotitact bo orie side of the motor circuit, the otl,er –side of the rrotor circuit beiiig grounded. 7o Co–_'n sing_'i7,.g and gaging mechanism .z ,ks each coin 'i–s ieleas–.d by the depression of contact 2_5, it sli–des the remaining way do–wn coin ran– 276, whi–ch i–s a_u this time at the full end of its working s'Lroke, as viewed i–n Figure 12. The bottom of the coin chute wall 18 9 (iligure 3) jlist clears the top of the mm 276, and during the ret,,irn stroke of the ra–m the coin will be ,T.7iped otT– the top of the ram by this wa–11 I S9, o_nd drop onto the elongated coin Dla–te 198 where it now lies in the path o–f the next working stroke of luhe ram 278. As showp– in Fi–.–ures and 13 the left or discharge end o_L 'uhe ccin plate 198 curves downwardly at 332 to perr;.iit the coins to drop vertically throti_h a slot 333 i–i the horizc–.ntal fra–,_–1–_ rfier_iber 205. During the worki,g of –Lhe rair 276 the coin restirg upon the coin plate ,Tiill th–us be pushed to the left iintil it drops into 'Uhe slot 333 and enteis the sortitig i–ne–hanis__n in a vertical plane. During this –noveli'lent the coin is pushed be_vveeri a Exed roller 33.1 mourited upot–i a stud 335 and a, iyiovable s'u–Ud 339, to be described, the roller for–.Tii_ng a fi_.ed ga.–i_ig elei–ient. On the other side of the path of the coii–is is a niovable gag;_ng elemenlu in the forl–D of –ri, bell crank 336 (Figure 12) pivotally mounted upon a _lixed stud 337 sc–cured to the fra,–r_ie rpeir.–ber 205. One arin 'QSC has the previo,,:tsly mentioned stud 339 dependiii.– therefoor, (,'_–igures 15 and 18) so that the stud is in the path of the coilis being pushed by 'lie coin ra–r–,i tc),j..,ard the slot 3_'3, a–_id it will be –a–opare,nt that the clockwise –noverilent of the aging element 336 v,,ill in each instonce be de?oendent ,lpon the dipimeter of the pai__icular coin being gaged be"–ween the fixed ro'iler 334 and the I' stud 339 on the b,,Il crank 336. It tal_es ec)psiderable force to push –) coin between the statioiia.– cy al'id ri–iovable gaging elements, ar–d althou–h –the pusl).ing end of the coi–a ram is fi,,it there is the possibility that a c__in would coel_,, out o4 il–s ho–,,izot–ltn–l position. Also, it must be assured that only a singlf– coin at a t–'lne is pushed through the ga–ing e7iersients by the rani 276. For that –,eason, a vertictlly movable gate 342 (F,;gi_,res 3, 5, 7 aild 11) is Tirovided. The gate 342 lie–,s transvelse of the pa_th of the coilis that are be"ng pushed through the co4n gaging –Iemei–its by the coin ro_ni tnd coiriprises a blo–k of Ine'bai havin., verti_,al slats SC,3 a_ld 344 (Figure 11) e,– tch of I . ivnich has protr,,_,ding tiiereinto a Pa–ir of studs 345 and 340 respectively. As best shown in Figure 11, these stuc–)s are adjustable through the wall.– 188 ar–ld '._q9 of 'he ch–Litc–, and are secured by loc?,uiuts afl_er the s_u.ds are adjlisted to provide a free vei:_,ical movemeiit for the gate 3,2. As I)est showii '_n Figure 7, the face '_D4–3 o–f t_he gate toward the i–am i–s in the foi'm of a of ',I cylinder, which at its lower ed,_e is iiiidercut i–il a si–).ooth cu–,–ve to–_Tiard the OT)TDosite vertical face of the –Pte 392 to ;)rovide a cairni;r–,–; surfac_3 t',–iat calises '_lie _ate to be liitc–d _vhen a coin Is forced against its curved –'cqce 343. adjacen_ the botton_ +_hereof. The gate 3L–_,2 iests upo–,,! the coi–n –olate I P3 and –is spring pres,,ed therea–ainst by a pa–r of co–'! springs 35i and I So'R (F–igure 11) seated in blind bo_–es in the –ate 342, and vjith thei,– upper end_, beal–,lng agailist a hor4 zontal leg " i 1 _53 o–f n_n L shaned hoild down bracket that –is secured by its vertical leg 3,q4 and a pair of screws 355 (Figure 5) to the fi–oiat I_ace.– 138 alid 180 of the coin chute. As shown in Figure 11 tl–iere is a clear–ance space bet,_,.–7een –the top of the ga–te L'42 and the leg of th,hold down braeket, to permit the gate to rise whel'i a coin paqses bereath it. Besides preventthe coin chute and falls upon the top of the 75 ing the cocking of a coin the gate 342 also pro– vides a singling device that prevents the rarnming of rnore than the lowermost coin if there be two or more coins resting upon the coin plate 198. In order to ass–ore that a coin passes the coin gate, the leadiiig edge of the ra–.m 276 in its ramming action, also passes b–,ne,,tth the coin gate, thus preventing the holding of a, coin bell–eath the gate as a result of the acti–on of the springs 351 and 352. Coin sorting mecha?iism Among the mecbanisrrs controlled by the clockwise movement oil the coin ,ag,:D.– elemel–it 336 is the coin sorting mechanisin which receives the coins or tokens passing vertically –through the slot 333, sorts them according to diameter, and delivers the–,D to the proper barrel 152–157 in the change rnaker 149. The mecha–yiism for controlling the sorter will first be described. Referring particularly to Figs. 16 and 17, a gear 356 is affixed to a horizontal sha–.Lt 357 journalled for rotation in spaced elements of the frame 51 below and supportin– the horizo–,ital frame rnember 205. This gear a56 does not rotate through a large angle, and adj–'acert its top it carries a st,,id 358 upon Vi,'_ch is rnounted o–iie end of a connecti.ng rod 359 that is adjustable Li length. The connecting rod 359 includes an elongated nut 362 _vhich threadedly receives one el–id of an eye bolt elei–Dent 363 the other end of v,7hiih is pivotal'y inounted upon stud 358. Another element 364 has one end threadedly received ir– the other end of the elongated nut 362, the other end havin.– an elongated slot 365 which passes a stud 366 whj'.ch is carried by the vertical leg of an angle brae7zet 367 that is rigidly secured t(_gt; the top of frar–ne –niei–qber 205 as by rivets 368. Thus the egnnecting rod.z59 has a pivotal mouii_uing upon gear 356 at one end a–Tid a sliding mountin,g upon stud 366 adjace–lit the other erd, –v,,h–ich said other end li–es 4_n the path of tt_e mover_ient of the other leg 369 of the bell crank oi– gaging element 336. Loelz nuts 372 upon the threaded secti–Ons of connect;_ng rod elements 363 a_lid 364 assure the niaintaining of the Droper adjusted length of the connect4ng rod, it being utiderstood that the internal tbxeacls –iii– the ep–ds of elonga'6ad nut 862 are of opposite haiid whereby the length o.f the conp–ecting rod can be adjusted by turning the nut 302 a–fter the locl,.iiuts 272 have :Prst been loosened. '_t w4ll be adparent that whenevej: the gaging element 33C ;_S rotated clockwise (F–ig. 16) di–iriiig the gaging of a coin, the gear 356 Nvill be ro'–Uated counter–clockwise (Fig. 17) through a comniensurate angle. Return mo_rement of these ele,,iients to their initial positions 1,5 spring in,–iuenced, as vii–11– be described. S.'Liowii in enlorged detail in Fdgs. 25 and 26 is an asseiibly that is moudted in the intei–

_ial fraine 5! ef _Lhe macljine for reciprocating vertical move−rnent under the infiuence of the gear 3BG and a return sprir_g 373 (Figs. 14 and 17). This asserqbly includes an elongated square rod 37−4 having rack tee−_h 375 oii the upper portion of its length, which teeth are in engagement with the teeth of gear 306. It is pointed out now that in order to show iiiore clearly the elements carried by rod 374, 'uhe posi.Itlions of the rod 374 and the elements carried thereby are viewed from an opposite diree−tiOn in F−igs. 25, 26 and 27 than in Figs. 14 and 17. Securely fastened to one side of the rod 374 and at the to,,o thereof as by rivets 377, is a cam plate 376 that is shoivn in still larger detail in Fig. 27. Along one edge the cam plate 376 has 9, series of notches of varying de−Dths and haviilo horizontal lands 370−383 iiliclusive, oiae fcr each size of coin or token to be handled by the fare box, as will be appare−,it later. At its lower end the rod 374 is round in section, and o,−uided by ,. holle ira horizontal flange 3 8,') at the bolutom end of a vertical flat plate 330 that is secured to a vertical meraber of the internal fi−ame 51 as by screws 386 and 387 (Figs. 14 and 17). 'n,,e up− per elid, of assembly 37P_ s_−nd 376 is guided by a se'b of tb−ree rollers 388, 339 and 390 (Figs. 14 and 17) that are carried by parallel sp,_xed frame nierilbers 393 and 39,'_' (F−ig. 16) secured to internal frame 51 and whi.−h also act as side guides for the top of the rod−plate assenibly 374, 376. The coiled coinpression spring 3'3 oia the round section of rod 374 bears agair−st t'he flange 384 and against the bottom of the square section of rod 374 to urge the rod upwardly. Thiis whe_,l t'−Qe coin gaging eieri−ient 'e.6 acts to ,,otate gear 356 counter−clockwise (F;z−. 17) and lo lower the rod 374 through the rac_ 375 thi−s m"ove,.iient is resisted by spring 373. Each coin or token of difereiit diar_ieter op−era+_es the gaging elenlent 336 lo lower the rod 374 by varying amourts that are_ dependent upon the coin or token diariieter. Sho_,vn best in Fig. 24 is a lever 395 pivoted for movement in the ho.−izontal plane about a pi−vot 398 carri.ed by the horizontal frame member 203. The lever SeB has a projecting arm 397 (see also !,−,ig. 27) that '6erminates in a chisc−I end 398 that is squared at its end to avoid a sharp and r−,lat−'.Ve−ly poi,nt. The undersi.de of the end 398 is horizontal. The lever 395 is urged clor−kwise (Fig. 24) into, engagemen' w'th the serra−Lled ed.−e o4− the cai−q plate 376 (see 'Flig. 27) by a tenS4 on spring Q'99 (Fi_,24), so that as the carn plate' 37C is dep−ressed by bbe action of the ga.,_g elemen− 320 the chisel 4o end 398 of the projection will e_ter the notches of the cam plate. As the dep,,− ession of the cam plate 37 6 depends upon the coin d_ameter the vert_,"c_al spacing of t−lie lands of the notches in the c−.t nlate is comme,_asurate with the coin cliai−qe−ter. −As shown in Fig. 27 +,'−'le notches have canisurfaces above each land 3',18−383, so that the s'pring urged projee−tion 39'1 v−7ill ride over the successive notches until the calm plate has r−lached the maximum depression according to t..b−e coin that has been gaged, vjhereupon tl−ie eiad 398 of the projection 397_ being spring pressed to, the 1−e.−'t (Fi,,P−. 27) will engage the part;cular land corresponding to the gaged coin, and hold tl−.e cam plate 376 and the rod 374 in that depressed coiidition until released for rel'urn to initial position under the id−qilence of si3ring The viithdxawal of the pro−jection _'oB'g' 'Lroin the n6tch, and the refurn of 'Lhe rod 374 to iii−'Ltial position is not accompl−ished unt−.',I the _ue6o ceeding ramming Gycle of the coin rarq 2'16, because after the rod 374 has been depressed according to the co−in diameter it is the flnction of the lever 395 and its spring 399 to hold the rod 374 depressed until the gaged coin has beep− sorted a−nd delivered to its proper coin barrel in the cl_iange i−nal,,er 149, an−' un' il the value of the coi−n or token has been entered in the register visible through t−he windo_vs IS3−135 of Fig. 2. T−_iis withdrawal of the − oroiect−lon 397 from the iiotches, and the conseauent return of rod 374 to initial position is accorriplished at the start of the next coin singling and gaging cycle by the action of a stud 409 (E−lig. 5) __hat is se,−i−ired to the gear 272 and protrudes downwardly there− 7,5 from so that it engages a cam surface 403 on the end of the lever 395. As seen in Fig. 12, when the ram 276 is in its initial position, beiore th'e beginning of a worl_cing s_roke, the stud 400 is but slightly −pace,,' from the cam surface , 403, so that as soon as tbe ge_−r 2T2 rotates o7−aly a few degrees the stud 400 Nvill'enga._e the cani surface 403 to r__,iease the proje,,_t−lon 397 from the nol.−cl−,e,_ and allow the foci 3 1. 11 t.− −,eturn to its uppermost positior,., after ivhich it −viill be depressed a._ai−ii as tb−e iiext coi.ii pu!shed by the rai−n 276 pass−s between the gagi−n.− elements 334 and 339. As each coin is gaged and is pushed to the elid of the coin plate 198 to enter fhe 333 _n vertical positi.on, it enters a space bet,,veen a pair of para'ilel spaced vertica−l walls kID4 and 405 5, 12, 14 etc.). As best sholvn ir_ Figs. 4, aiid 18, these walls 404 arl−d 405 have trans'verse parallel _loill ,ng slots 406 therethrough. A sorter leaf platePO7 (seeolsoFig.2−3) passestlarougnthese slots to forrd− a slopin_−3− floor 408 between tl−ie afo.resai.,,l vertical walls 404 and 405. This slop_ng fioor is reciprocable, by means to be described tlaroul,h P,. range of positions betwe . en Nvhich a st−ial_l tok_lii will− drop into barrel 157 to a posit_on where a qi:tarte−,, −_vill drop into the barrel 152. These posilions occur as the floor 408 Is:' s]7_ifted from its ,nitial posit−loli to tl−ie ri._ht (ir, −P',ig. 12) until it reacl−i.−s its maximum deflection whereupon a au,,,,rter will roll alo−ng tlie floor u−,iuil it drops ofL the end 409 thereof (F−ig. 28) iiito ihe quarter borrel 152. As perhaps best ohowri ,.n 15 9,p−d 28, the floor is stepped so '.hat a'ong its '−,ength it has various widths,,and at the lowermost end of each of the stepped ividths it is provi O'eJ, −_vith vertica,'−_ stops 4 i 1−4 i iiist, abova eac' i o−l_ tne div'ding walls 167 in the casting I 5 8, tile walls 404 and 41,".; being provided with spaced −ot,,−_ 41 6 (Fig. 15) so lbat the _.to '41 1 veltic,,Ll s'_ Ds 4! 8 cat−i move transverseiy 'chrough the wal_is 4.9 4 and 405. 'rhe actioii of the sorter leaf plate 407 is such ._bg,t, for example N_7hela a nickel has been gaged, the plate w−'−!! −rp−ove to t_ie (Fig−. 1,2) or doiinward (Fig. 28) until the stop 4.iB b'Locks the sloping passageway bet,_veen 'Lhe vertical.walls,40 4 and eG5 while the stepped ,'loor 40 0 is. discortinued just above the space leading to tl−ie nic'_el barrel 153. The move_−iients of the sorter leaf plate,4.07, which delivers each coi−n to the coin barr,els 152 15T in acco−,.dance with their dia,,−aeter.−, is controiled by the ga.− in_,− element 336, the adj−'ustable connect,ing rod 359, tb−e iilovemeiits of gear−.356, o,nd the earn plate 376 of the assembly, shown, in Figs. 25 and 26. As best shown in Figs. 25 and 27, one edge of the carn plate 376 has a working pro.tie which in tl,_e illustrated embodiment has three differently sl_oping sections 417, 1418 and 419. 'rhese slopilig −ections, wlil:ch constitute the wo−el−,ing profile, are continuously enga.− e,d by a protrusion 422 (Fig. 17) on a lever 423 that is pivoied for free rota−tion about the saine shaft,3,57 as _ tiae gear 3 5 6. A reciprocable rod 42 4 (Figs. 14 and 17) is journalled for horizontal sliding movement within an elenent 425 of the iliternal frame 51. At its rightmost end,in Figs.11,1.and −424 is threaded into 9, tbielieiied abut− 17 the rod ment 426 (Fig. 28) thet, is integral with the sorter leaf plate 407. A locknut, 427 (Figs. 17 and 28) secures the adii_sted position of the rod 424 with respect to the,abutment 426 and the sorter pla−te 407. At its other end _iie rod 424 has an.'e'nlarged head 428, (−Figs. IA4 and 17) that is received .Within,,a bifurcated

saddle 429. thats is pi–votally secured, as by a pin 432 to the lower end,of_–tlie lever 423. A coi–ic–d compression sr–r–iv–ig 433 (Figs. 14 and 17) on the .,od 0,24 iirges the rod '_–o the left, With its enlarged head A2'01 ir, engagei–ient –,viih tl–.e lo,_ier end of the le,,Ter f–,23. T'–rie sadj.'.e d 29 serves to gu–'– de the eild o–_' –"Od an_, to keep it from_ slipping sidev;oys frc)iy,– _,vic n _–he 16–_ver end of the le–ver a'AB. Thus by means of the spriiig 433 the rod k_2,4' t–,4–ia_ 4–_ r,"gj.dly conr,–ect,ed to the slortt–r plalu,– 40__ is res_l,"e–iitly urged 1(to t–lie lc–ft (Figg. 14 and 17) into at iLI s _nlarged head 428, with tlie lower end o–, t_ie 'levei: coi,.s–.o,,,iently i–irging the proLYusion 422 into erga–gement v_ith the work,',ng rjrofile sectiol–is 417–,llg of the cain pl_ate B_r tiiis coiistr_Lic_,u–io.,i the gag,ng elen–i–,nt :'_3S con(–,rols the roqit–lon of the catn sorter plate 407 in icco3.–donc–.– ivith _he –cin diameter, during –1– sortl__–.hbuldbeLir_derstoodthatwhen the qol–'ter plate is posit–tored in accordance w–it–_i the diameter of a coin measured b,y the gdgi hg elei–i,_–,it 336 – it rem ain in that gaged p6si tion by resson of the e,,igagei–aent of projecti6n 197 on lever 395 until the next cy3le of operation of the rilachine, Nvhereupon the proj'e_–.– tior_ 39T ,vi–ii be disengaged from the notches 378383 by the action of the stud 40_l, o_,i gear 272 and Sp–riiigs 373 and Po33 _,iill retu–.–_n earn plate 376 and sorter 1–ilate 407 to their initial or zero positions bef6re they are again po._itior–ed to sort the next _'C_ coin accordiiig to its diameter. Coin and token registering –niechanisi7i Se–ure,–l to the squere rod 374 as by rivets 434 (Fig. 26) is 9, brae'f_et mem– ber 435 'That includes –,.L verti–,ai e,emen . t 439 i_rc)riiv_hich protrude a pair ol L soaced parallel horizontal legs 437 ai–id 433 (Fil–gs. ',.7 and 25) trirbugh which Passes a vertical Pin _,39 that provides a pivot for a lever 4__2. Another lever hav;,ng legs 443 and 40,4 (F4_g. 22a) is pivoted about a –vertical shaft 445 and is also vert4caly slidable upon the shaft 445. The lever 442 ond bhe left 444 of the other lever are conr,–ected by a tension spring 4,.16 that resilielitly urges both said elerlents against the ca_–n 2G9, at poily6s spaced s–LiasI.antially 180 idegrees apart, as best shown in F4_g. 22a. The breeket iderr_ber 435, secured to 'u–he square rod 374, iiioves vertically –wlith the aforesaid rod in ac,–ordance with the diamelver o,–' the coin being gaged. The _lt;)ther –0 lever, s.Lidable on shaft 445 i–no–ves vertically with the sq_iare rod a!7cj by :eason of the fact that its leg 443 is engaged in a horizontal slot 447 'in the ve_–tical elernent 436 o–f the bracket meiliber The norr–yial position of th6 lever 442 and of the lever on shaft 445 is as sho–vvn in Fig. 22a, this position occui:ring before a cycle ol_ operation of thegear272andthecoinram2',G. ThecamA68, carried by the driven shaft 224 rotates counterclockwise as viewed in Figure 22a, and as a edn– (io secuence it first r,ot.a,tes lever 4P2 clockviis–, and then 'lever leg _.44 counterclockl,,7,se, against (,he force of spring 4 46, di–,ring one revolution of tb–e driven shaft 22i. This viill occur no matter vihat the vertical position of the square rod 374 be– cauze the cara 269 is elongated along the axis of the driven,shaft 224– as best sho– ,vii in Fig. 19. The outer end of lever 442, on the opposite edge from that engaging the earn 269, is narrowed to provide a lip I 40 that selectively engages and depresses one of six levers 451–4r,,'u (Fig. 3i,l o'L the register ,iiechan.is.–n to effect the totalizaltion of either coins, tokens or the like that are being gaged and sorted. Levers 451, 452 and 454 are pivoted upon an elongated pin 457. The lever 45,3_ effects the registration of: pennies into the r,entral or coin counter 458 (Fig. _9) visible through iT,7indow 13Z through the medium of an integral leg 459 (Fig. 32) at right angles to lever 45'0, and having a pivotal connection 602 (F–ig. 32) to a spring (P,83) pressed pawl Pi64 the free end of which engages the teeth of a circular ratchet 0,C5 that drives the uilits wheel 466 of the coin counter 458. Return to the right (Fig. 32) of the pavvl 464 is by a spring 4,' 7 connected by pin 468 to the lever leg 459. A convenbional carry–over n,iechanism rotates the tens wheel 469 one tenth of a revolution for every complete revolution of the units wheel 46'6. A spring (c_72 Fig. 3,_^,) pressed detent lever Pi73 having roller 474 engages serrations in a stop wheel 475 to hold the units wheel 466 irhile the pawl 464 rides backward over the teeth of the ratchet wheel 465, and also holds the said units wheel against rotatio–n except by the influence of pawl 464. The upper lever 451 when depressed, actuates the upper, or sniall token register S76 in the sa,,rne manner to register and add s_,nall tokens, the lever 451 being connected to a right ,tngled leg 477 by an integral_ tube 478 mounted upon the elongated pin _,57. In a similar manner, tube 4'1–3, on pin C57 is integral with leg 481 and when lever 454 is depressed by the lip f_40 on lever 442, the leg 48_ actuates the lower or large token reg4ister VIBO to total the large tokens that are gaged and sorted. The registration of din–ies, nickels and quarters into the coin counter 458 is accorr_p'_ished as follows by the selective depression of levers P,52, 455 _r 456, all pivoted upon a si,.igle pin 47E–,2, in combiiiatio–q w4_th the rotation of b–vel gear 2'_O, driven by the large bevel gear 268 on the driven sha'Lt 22–4. Since the 1–arge gear 268 will rotate througl–i one revolution for each rotation of the driven shaft 22,1, '_he snall gear 27_3 Will– rotate t greater number of revolutions. __he srnall gear 270 is on a shaft 48fj liournalled in the side walls 480 and 4OP4 of the register frame. Five spacer bars 485 (Fig. 39,) separate these side walls. ' A drive gear 46'1 i–S ir_ounted u–oon the sha–ft 636 adjacent the inside of side wall 483 (Fig. 29). It is in conti,–Liuous driving engagement wit'_l a freely rotating gear 488 (Fig. 34) upon a shaft 489, the gear 468 having an integral collar 490 that has an integral pair of diametrically spaced and axially extending clutch teeth C_91 either of –vvhich may engage and drive a single axial tooth 992 upon a sleeve journalled for rotating and sliding movement upon the shaft 489. Normally, the 'Lleeth 491 and 692 are disengaged by reason of a spring 41_ll (Fig. 34) surrounding the sliaft 489 between the collar 490 and the sleeve 493, but when sleeve 493 is moved to the le–ft by t–liedepression of levers 432, 455 or 450 the clutch teeth 491 and 492 are engaged so that sleeve 493 will be rotated until the proper sun–i, five cents, ten cents or twenILy cents isregistered into the coin counter 458, Nvhere,,ipon the te6th 491 and 492 will disengage. Each o–_' the levers 452, 455 and '_56 has a protuberan,–e 495, 498 or 497 (Fig. 31) on its eiid, which e.,Ligages respectively a sleeve 498, 493 or 500 to move the sleeve 493 to the left (Fig. 34) to engage the clutch teeth 491 and 492 to drive the sleeve 493 until the proper surn has been added into the coin counter 453. The details of construction Of the mechanis_–n by ivhich this is accomplished are wehl knoi7_n as exemplified for exar–riple in Fig. 6 of the aforesaid Daugherty Patelit 2,338,575 and for that reason the details need not be explained here, it being sufficient to explain coin is gaged and sorted its value is added to the total previ. ouslyregistered by the coin counter 01.8, just as in the aforesaid Pacent 2,338,575. It should be apparent that the complete deuression of the selected le–ver 451–456 by the cam 269 and the lever l_42 (Fig. 22a) occurs approxin_ ately during the i–irst _80 degree rotation of the driveii shaft 224. As the shaft 224 continues the rerriainder of its 360 degree rotati.on to return the com 209 to the position shown in –Pig. 22a, the carii 269 moves the lever 444 counfer–clockwise to the liinit of its rpover–qent and the–Ti re'_ease_– '_t to srpp back to its initio–I positio–n u?–ider the influence of spring 446. Th–is happens

irre– 1.5 spective of the height of the lever 444 at the time, as determined by the diameter of the coin or token that has just been gaged, sorted and registered. As shown in Fig. 14 there are four nested bells or gongs identified lay the reference iiumbers 503, 504, 505 nnd 5CS, that are sounded respective'ly by the clappers 507, 508, 509 and 'Ihese clappers are attached to similar legs of bell cranks 513, 515 and 5_6 (Fig. 19) that are connected by pins to the lower ends of vertical pull rods 517–520 (Fig. 19) secured at their –Lipper ends to bell cranks 1,;23–526 moving ill– vert;Acal planes about a common horizontal pivot shaft 534 (Fig. 19). As shown in Figs. 19 and 19a t"iiere are seven bell cranks 527–533 pivoted about a vertical shaft 535. As viewed in Fig. 19 the left legs of the bell cranks are all of the same length., and in the path of movement of a projeeting lip 536 (Fig. 22a) on 33 the leg 444 of the vertical shiftable bell crank on shaft 445. Depending upon the vertical position of (_he bell crank leg 444 resulting from coin gaging, ihe projecting lip 53G move one or more of the bell cranks 527–,N33 counterclockwise and –10 then release it, causing selected clappers 507–510 to strike the bells 503–506 under the irl–fluence of springs 537, one for each clapper. It is the function of the bells 503 to 506 to indicate by their sound, either siiagly or incombinatio–ti, as when two or rnore are simultaneously struck, the value of a coin or token that has just been gaged, sorted and registered. As viill be best apparent from Fig. 19a movement of the bell crank 532 by the lip 536, and the subsequent release of the crank, will cause the simultaneous striking of all four bells, which will produce a particular tone denoting the gaging and sorting of a quarter, which is the largest diameter coin or token normally handled by the illustrated fare box. The lower– most and seventh bell crank 533 would only ring the large bell 503, but sinc– the illustrated fare box handles only six different diameter coins, tokens or the like as. determined by the six lands 378–383 in the cam plate 376, the aforesaid bell crank 533 is supefluous in the illustrated embodiment and will normally be used only when the fare box is enlarged to handle coins, tokens or the like of seven different diamete_–s. Takin,another example, if a penny is gaged and sorted, it being the third from the smallest coin or toke–n handled, the bell crank element 444 v7ill be depressed three steps so that it engages and releases the bell crank 529 (Figs. 19 and 19a) to simultaneously ring the two srlaller bells 505 and 506. Thus, as will be apparent from the various lengths of the bell cranks 527–523 and 523–526 of Fig. 19a, the particular bell or combination of bells that is rung will depend upon the diameter of the coin or token that has been gaged and sorted. Prom the foregoing deserli_tion, it will be appo,rent to those skilled in the art that our gaging, registering and totalizing mechanism may be readily adapted for various other uses in gaging and sorting. Locking arrangement One of the features of the illustrated fare box is a key controlled arrangement by which the operator can turn a key to place the fare box in operating condition, to turn it off so that the motor will not operate, and to lock it so that neither the motor nor the change maker will operate, thereby locking the change maker so that no one can remove coins from it, as when the operator is absent from the vehicle. The lock is indicated in Fig. 1 at 540, with a key 541. In the illustrated position the lock is "on" so that the motor and change maker will operate normally. A cam plate 542 is mounted on the lock inside the casing, and rotates with the key 541 from the normal position shown at 542 (Fig. 1) to a second position 543 and to a thi–rd position. In the "on" position Pt 542 the cam plate raises the lever 545 (Fig. 15) of the switch arm of a main switch 546 to close the sv_itch and condition the fare box for motor operation upon actuation of the plunger 103. By rotating the key 541 (and thus the cam plate 542) counter–clockxvise the swi–tch 546 is opened, thus preventing energization of the fare box operating motor 218. During its counter–clockwise rotation through 180 degrees the cam plate 542 will pass through the "off" positiov–i at 543 and finally to the "lock" position at 544. During 'uhe last degrees portion of this movement it will depress a platform 547 (Fig. 15) that is integral with an upwardly extending member 548 (Fig. 35) and a downwardly extending element 549 that has a camming connection with a longitudinally movable locking plate 552 having vertical projections 553 that when pulled to the left as in Fig. 35 will positively secure or lock the keys 554 against depression, so that they cannot be operated to remove coins from the coin barrels. Thus the main motor switch 546 is open, and the change maker is locked when the key 541 is turned to make the cam 542 occupy the position shown at 544 in Fig. 1. When the key is turned to rotate the com plate back to the initial position at 542 the locking plate 552 may be returned to the right (Fig. 35) to its unlocked position by manually pushing on a knob 555 that is secured to said plate. For a description of the locking of the change maker by the locking plate 552 reference may be had to the Daughterty patent 2,338,576. The member 548 extending upwardly from the platform 547 has a pin 556 that passes between a pair of toggle levers mounted upon pins 560 and 561 (Fig. 15) that have legs 562 and 563, which whei–i the platform 547 is depressed as in Fig. 15, underlie the levers i45 and 146 and prevent their depression to actuate the counter assemblies 143 and 144 (Fig. 1). Raising of the platform and of the pin 556 rotates the toggle lovers so that their legs 562 and 563 clear the levers 145 and 146. In the appended claims the term "fare" is used to define coins, tokens or the like used in the payment of fares, and other objects which it may be desired to register or count and sort with our improved mechanism. The invention may be embodied in other spe– essential characteristics thereof. The preselit embodiment is therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein. What is claimed and desired to be secured by United States Letters Patent is: 1. In a mechanism of the class described a coin receiving hopper, a fare handling device; means forming a fare passage between said hopper and i,_) said handling device; rotary electric motor means operable to drive said handling device; and electric circuit for energizing said motor includin.a a first switch; means for closing said switch; a second switch in said circuit operable to be closed by a, fare in said passage including a movable contact mounted for reciprocating movement between a first position where it blocks said passage and engages a fare in the chute to close the circuit, and a second position removed from said passageway; a third switch in said circuit; means driven by said motor means to keep said third switch closed until a predeterriained number of hancuing cycles have been com–oleted following the closing of either said flrst–or second switches; and means driven by said motor during each handling cycle for reciprocating the movable contact of said second switch between its first qnd se_–ond positions. 2. In a fare box, a hopper; a fare singling and gaging device; means forming a fare passage between said hopper and said device; a motor drive for said fare si–ngling and gaging device; rejecting Means preventing the passage of mutilated fares and objects larger than fares through said fare passage; a connection between said motor drive and said rejecting means to

operate said rejecting means frorn said mol_or dr–1ve; and overload clutch between said motor drive and said coin singling and Paging device, operable to per– 4,–, mit operation of said motor drive –Ln the event of stoppage of the singling and gaging device. 3. In a fare box, a fare receiving hopper; a coin Singling and gaging mechanism including a reciprocable ram; a passageway between said hop– _,5 0 Per and singling and gaging mechanism terminating at a point in the path of the working face of the ram; a rotating motor; a connection between the motor and ram including a crank Pin and connecting rod for converting rotary mo– tion of the motor to reciprocating motion of the ram; an electric circuit including a motor starting switch and a holding switch in parallel, operative to energize the motor through at least one cycle of operation of the ram; clutch means in said connection between the motor and ram; a fixed stop operative to disengage said clutch at the end of one full revolution of said crank pin; and means effective in response to movement of said motor to engage said clutch means. 4. In a fare box, a fare singling and gaging mechanism including a reciprocable ram; a rotating motor; a connection between the motor and ram operative to convert rotary motion to reciprocating motion; and electric circuit in– eluding a motor starting switch and a holding switch in parallel, operative to energize said motor through at least one cycle of operation of the ram; clutch means in said connection between the motor and ram; means operative to disenei,–ic forms without departing from the spirit or 75 gage said clutch at the end of one full revolu. _t!On of said crank pin; and spring pressed detent means effective to hold the ram at the beginning of a working stroke upon disengagement of said clutch. 5. In a fare sorting and re._istering mecha– nism; a gaging element, a fare sorting device op– –erable to direct fares along different ppths according to their diameters; a gear driven in clie direction by saild ga.aing element; a rack driven .by said gear; a cam on said rack connected to control said sorting device; a plurality of registers for totaling coins of different diameters; a .second cam on said rack for selecting a register according to coin diameter; and means cooperating with said second cam to actuate the selected register. 6. In a fare box, coin and token singling and gaging means; a sorter mechanism responsive to said gaging means and operable to receive coins and tokens; a hopper for Teceiving coins and 2.0 tokens having a passage therefor leading to said singling means; a change maker positioned to re– .ceive coins from said sorter mechanisr–,i; an electric motor connected to drive said singling and gaging means; an electric circuit for e,_iergizing said motor and including a first switch for initiauy closing said circuit; a second switch in ,parallel with said first switch and driven by said motor to hold said circuit closed for a predetermined nuinber of operatiori–s of said singling ,means; a third switch in parallel in said circuit and responsive to engagement by a coin or token in said passage to close said circuit; a fourth switch in series with said circuit; and xneans for opening said fourth switch. 7. In a fare box, a fare singling mechanism; a hopper opening into sa,'_d singling mechanism; a rotating motor; a drive connection between the motor and singling mechanism; an electric circuit including a motor starting switch and a hold– ing switch in parallel, operative to energize the motor through a predetermined number of cycles of operation of the singling m–echanisrn; clutch means in said conilection between the motor and singling mechanism; a fixed stop operative to periodically disengage said electric motor –'Lrorn said singling mechanism and means responsive to .–Movernent of said rnotor to engage said clutch means to produce a periodic and momentary interruption in the drive to said singling mechanism. 8. In a fare box; a fare singl,_ng mechanism; a rotating inotor; a connection between the motor and singling mechanism operative to drive said singling mechanism; an electric circuit in,–luding a motor starting switch and holding switch in para7LIel, operative to energize said motor through a predetermined number of cycles of operation of said siii–gling mechanism; clutch means in said connection between the motor and singling mechanism; means operative to disengage said clutch at the end of one cycle of operatiori of said singling mechanism; and spring pressecl detent _–neans effective to hold the singling i–nechanism at the beginning of a cycle upon disengagement of said clutch. 9. In a fare box, a fare singling and gauging device; a hopper openiilp,_ into said singiing and gauging device; a motor drive for said fare singling and gauging device; rejecting means preventing the passage of niultilated fares to said gauging device; an overload clutch between said niotor drive and said coin singling device, operable to permit operation of said motor drive in the event of stoppage of the singling and gauging device.

0) US2825875A – RADIO FREQUENCY TRANSDUCER

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Title: RADIO FREQUENCY TRANSDUCER

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B07C3/00 C07D261/00 C07D317/00 G05D16/04 G05D23/01 G09F7/00 H01B7/00 H01F7/02 H01J23/00 H01J23/02 H01J25/00 H01J29/10 H01J29/58 H01J3/00 H01P1/02 H01P1/18 H01P1/20 H01P3/08 H01P5/02 H01P5/08 H01P5/10 H01P5/12 H01P5/16 H01Q1/24 H01Q9/04 H03L7/02 (Core/Invention)

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CPC: B07C3/006 H01P1/184 H01P1/20363 H01P1/20381 H01P1/209 H01P3/085 H01P5/02 H01P5/08 H01P5/107 H01P5/12 H01P5/187 H01Q1/247 H01Q9/065 H03L7/04 H01B7/00

H01P1/02 H01P1/18 H01P3/08 H01P5/22 H01P5/225 H01P3/081 H01P5/085 C07D261/18 C07D317/66 G09F7/00 H01F7/02 H01F7/0278 H01J3/029 H01J23/00 H01J23/065 H01J23/087 H01J23/0873 H01J23/42 H01J25/38 H01J29/38 H01P5/185 H01P3/088 H01P1/2039 H01P5/184 H01J29/64 F16B13/068 H01P1/203

European class: 124BG12B3G4D4B4/G2C 124BG5G2C1 B07C3/00C3 C07D261/18 C07D317/66 F16B13/06D4B G05D16/06C G05D23/12D G09F7/00 H01B7/00 H01F7/02 H01F7/02C1 H01J23/00 H01J23/065 H01J23/087 H01J23/087B H01J23/42 H01J25/38 H01J29/38 H01J29/64 H01J3/02AB H01J3/02T H01P1/02 H01P1/18 H01P1/18E H01P1/203 H01P1/203C2B H01P1/203C2D H01P1/203D H01P1/209 H01P3/08 H01P3/08B H01P3/08C H01P3/08D H01P5/02 H01P5/08 H01P5/08C H01P5/107 H01P5/12 H01P5/18D H01P5/18D1 H01P5/18D2 H01P5/22 H01P5/22C H01Q1/24D H01Q9/06B H03L7/04

US class: 313/45 315/3.5 315/39.3 315/5.35 315/5.46 333/116 333/120 333/204 333/205 333/21R 333/236 333/238 333/246 333/24R 333/33 333/34 333/35 335/210 335/211 343/781R 343/818 343/846 455/259 455/263 455/281 455/325 455/327 455/328 455/338

Classification Explorer

Cited documents: USRE23131 E, US2836758 A, US2812467 A, US2809321 A, US2808533 A, US2806170 A, US2803770 A, US2802136 A, US2797353 A, US2792518 A, US2791711 A, US2790105 A, US2789210 A, US2784381 A, US2774046 A, US2774006 A, US2773213 A, US2760169 A, US2758244 A, US2751558 A, US2749521 A, US2749472 A, US2741718 A, US2734170 A, US2730649 A, US2721312 A, US2721309 A, US2710946 A, US2710917 A, US2692351 A, US2672571 A, US2661441 A, US2658393 A, US2640162 A, US2639325 A, US2637813 A, US2637775 A, US2636948 A, US2632130 A, US2629066 A, US2619611 A, US2611822 A, US2611102 A, US2611040 A, US2608668 A, US2602856 A, US2602148 A, US2593120 A, US2587590 A, US2579324 A, US2578434 A, US2568090 A, US2563612 A, US2562281 A, US2543425 A, US2540488 A, US2521873 A, US2479673 A, US2479537 A, US2468151 A, US2452202 A, US2445895 A, US2435804 A, US2433368 A, US2424982 A, US2411555 A, US2411534 A, US2410387 A, US2406945 A, US2405174 A, US2402624 A, US2402540 A, US2344884 A, US2305884 A, US2300052 A, US2297266 A, US2274346 A, US2259531 A, US2238438 A, US2200039 A, US2144836 A, GB674758 A, GB670405 A, GB665803 A, GB655803 A, GB608494 A, GB584153 A, GB579782 A, GB530097 A, FR964835 A, FR950844 A, FR899350 A, FR1075546 A, DE958396 A, DE871324 A, DE866061 A, DE836057 A, DE821035 A,

Forward Citations: WO9811621, WO15105605, WO13017846, WO12015495, WO07100324, USRE29911, US9570809, US9203132, US8427382, US8134515, US7873329, US7616058, US7057568, US6535079, US6265950, US5552753, US5499001, US5432489, US5334961, US5237294, US5093640, US4994771, US4937585, US4816838, US4692720, US4618838, US4610032, US4603311, US4472690, US4426649, US4420839, US4342969, US4316160, US4110712, US4035807, US4031472, US3921177, US3909755, US3818386, US3784933, US3729644, US3688225, US3686594, US3668569, US3623112, US3605045, US3558952, US3548344, US3518583, US3512091, US3471812, US3460074, US3437935, US3417352, US3412352, US3359513, US3345589, US3324337, US3310748, US3309629, US3267395, US3267394, US3259859, US3235820, US3228030, US3211947, US3166723, US3164791, US3156880, US3155930, US3153209, US3141144, US3136946, US3117379, US3111634, US3104362, US3095544, US3095521, US3092745, US3076116, US3062983, US3059156, US3059142, US3047822, US3032677, US3021458, US3013172, US3011009, US2988659, US2984802, US2983884, US2978649, US2977484, US2976498, US2971113, US2964718, US2962716, US2960622, US2954468, US2942141, US2940020, US2940007, US2923783, US2915716, US2900557, US2895066, US2882439, US2011181375, GB2430307, GB2408153, GB2189652, GB2189652, GB2153155, FR2857165, FR2625373, FR2612697, FR2589650, FR2531575, FR2494942, FR2460049, EP1494316, EP1098384, EP1098384, EP0925617, EP0669671, EP0560503, EP0283396, EP0154496, EP0092874, EP0068345, EP0037421, EP0028403, EP0021523, DE3022692, DE2949013, DE2742779, DE2418506, DE2151478, DE1297719, DE1244257, DE1230141, DE1170034, DE1136425, DE1134429, AU573692,

Abstract:
Source: US2825875A 767,612. Waveguides; impedance matching. STANDARD TELEPHONES and CABLES, Ltd. July 16, 1954 [July 22, 1953], No. 20749/54. Class 40 (8). The inner and outer conductors 7, 5 of a coaxial guide are connected to a transducer comprising conductors 1, 2 separated by dielectric 3, the transducer being connected to a single or double conductor transmission line. As shown in Fig. 1, the conductor 2 has a tapered end 2c and is replaced by a conductor 2a on the same side of the dielectric 3 as the conductor 1, whilst the conductor 1 is continued to form a conductor 1a of a transmission line comprising conductors 1a, 2a. In a modification, Fig. 11, the coaxial guide 25 is coupled to a single conductor 21a by terminating the conductor 22 in a slot 24. In a further modification, Fig. 4, the conductors 11, 12 are tapered at 11a, 12a where they are connected to the tapered parts of conductors 14, 15. The conductors 11, 12 may overlap the conductors 14, 15 (see Fig. 7,

not shown). The conductors 14, 15 may be wholly or partly embedded in dielectric material (see Figs. 8 to 10, not shown). Specification 761,764 is referred to.

0) GB741288A – IMPROVEMENTS IN OR RELATING TO A DEVICE FOR CON...

15) Family number: 20139017 (GB741288A) © PatBase

Title: Improvements in or relating to a device for conversing with the deaf–blind

Priority: GB19520014734 19520611

Family:

Publication number	Publication date	Application number	Application date
GB741288 A	19551130	GB19520014734	19520611

Probable Assignee: NAT INST FOR THE DEAF

Assignee(s):(std)**:** NAT INST FOR THE DEAF

Assignee(s): THE NATIONAL INSTITUTE FOR THE DEAF ; NAT INST FOR DEAF

Inventor(s):(std)**:** COOPER ANDREW RAMSDEN

International class (IPC 8–9): G09B21/04 (Advanced/Invention); G09B21/00 (Core/Invention)

CPC: G09B21/04

European class: G09B21/04

Classification Explorer

Forward Citations: US4445871, US4215490, US3831296,

Abstract:
Source: GB741288A 741,288. Printing Braille. NATIONAL INSTITUTE FOR THE DEAF. June 10, 1953 [June 11, 1952], No. 14734/52. Class 100 (4). [Also in Group XV] A machine for printing Braille comprises a rectangular box 10 with a removable lid 11 upon which is mounted a series of charactermarked keys 14 operating a series of levers and bars 20, 29 (see Group XV) to raise corresponding plungers 34 of a set of six arranged in the significant placings of a Braille character, extending through apertures 18 in a housing 15 to form the corresponding character: A printing unit is fitted on to the housing 15 by keyways, 13 and includes a step–by–step paperfeeding mechanism actuated by a key, e.g. one of the keys 14. Alternatively, the keyways 13 may accommodate a device for electrically transmitting the Braille symbols from the housing 15 to remote printing units. In a modification, the keys 14 may be slidable, having appropriate projections for engaging the appropriate bars which operate the plungers 34. (For Figures see next page).

0) GB794591A – A GAMING WHEEL

16) Family number: 19731052 (GB794591A) © PatBase

Title: A gaming wheel

Priority: GB19550023439 19550815

Family:

Publication number	Publication date	Application number	Application date
GB794591 A	19580507	GB19550023439	19550815

Probable Assignee: PETER JAMES PRICE

Assignee(s):(std)**:** PETER JAMES PRICE

International class (IPC 8–9)**:** A63F5/04 (Advanced/Invention)

International class (IPC 1–7)**:** A63F5/02

CPC: A63F3/0615 A63F5/00 A63F5/0088 A63F2007/3677

European class: A63F5/00 A63F5/00P K63F3/06A6 K63F7/36T1

Classification Explorer

Forward Citations: EP3138613,

Abstract:
Source: GB794591A 794,591. Roulette. PRICE, P. J. Nov. 14, 1956 [Aug. 15, 1955], No. 23439/55. Class 132(2) In roulette apparatus comprising a wheel 5 having designated peripheral pockets 6 and an operating knob 10 projecting through a transparent cover 16, the wheel being surrounded by an upwardly inclined surface 4, an arcuate magazine 11 for balls 12 is located at the top of the surface and is occluded by a slide 14 so that by moving the slide the appropriate distance, any desired number of balls can be discharged down the surface 4. The balls are separated from each other by pins 13 moulded with the base of the magazine.

0) GB798670A – APPARATUS FOR DE–CODING RECORD CARD AND LIKE EL...

17) Family number: 19877275 (GB798670A) © PatBase

Title: Apparatus for de–coding record card and like elements

Priority: GB19530032881 19531126

Family:

Publication number	Publication date	Application number	Application date
GB798670 A	19580723	GB19530032881	19531126

Probable Assignee: VICKERS ELECTRICAL CO LTD

Assignee(s):(std)**:** VICKERS ELECTRICAL CO LTD

Assignee(s): METROPOLITAN VICKERS ELECTRICAL COMPANY LIMITED

Inventor(s):(std)**:** PEDLEY DAVID

International class (IPC 8–9)**:** G02B27/02 (Advanced/Invention); G02B27/02 (Core/Invention)

International class (IPC 1–7)**:** G06C11/04

CPC: G02B27/024

European class: G02B27/02C2

Classification Explorer

Abstract:
Source: GB798670A 798,670. Optical apparatus. METROPOLITAN–VICKERS ELECTRICAL CO., Ltd., Nov. 22 1954 [Nov. 26, 1953], No. 32881/53. Class 97(1) A reading apparatus for punched cards comprises a container 1 having a shoot 3 in which record cards 4 are placed one at a time so that the card portion to be read lies between transparent partitions 7, 8. The partition 8 is provided with data markings identical with the required data for comparison with the cards, these reference markings being illuminated by light transmitted directly from a lamp 13 through the partition edge. The cards are read through a lens 16 and illuminated from below by the lamp 13 and reflector 12. The invention is described with particular reference to punched electricity reading records as described in Specification 756,663 [Group XXXVI]

0) GB821340A – IMPROVEMENTS IN OR RELATING TO FOUNTAIN OR RESE...

18) Family number: 20588198 (GB821340A) © PatBase

Title: Improvements in or relating to fountain or reservoir pens

Priority: GB19560029805 19561001

Family:

Publication number	Publication date	Application number	Application date
GB821340 A	19591007	GB19560029805	19561001

Probable Assignee: JOSEPH CZERWINSKI

Assignee(s):(std)**:** JOSEPH CZERWINSKI

International class (IPC 8–9)**:** B43K5/04 (Advanced/Invention); B43K5/00 (Core/Invention)

International class (IPC 1–7)**:** B43K5/04

CPC: B43K5/04

European class: B43K5/04

Classification Explorer

Abstract:
Source: GB821340A 821,340. Clips. CZERWINSKI, J. Nov. 12, 1957 [Oct. 1, 1956], No. 29805/56. Class 44 [Also in Group XV] The pocket clip of a fountain pen is pivoted at the closed end of the point protecting cap and constitutes a part of the self–filling mechanism of the pen. The clip 42 is pivoted at 52 and, when the cap 35 is positioned on the rear end of the pen, can be swung to the position shown so as to force downwards a tubular compression member 40 which is slidable in the cap against the bias of a spring 39, thereby actuating the self–filling mechanism (see Group XV). When the cap 35 is positioned over the nib of the pen the lower end 30 of the member 40 engages the nib section thereby locking the clip 42 in a position adjacent to and parallel to the side of the cap 35.

0) GB854061A – IMPROVEMENTS IN, OR RELATING TO APPLIANCES FOR ...

19) Family number: 20508883 (GB854061A) © PatBase

Title: Improvements in, or relating to appliances for use in the slaughtering of animals

Priority: GB19580014391 19580506

Family:

Publication number	Publication date	Application number	Application date
GB854061 A	19601116	GB19580014391	19580506

Probable Assignee: ACCLES AND SHELVOKE LTD

Assignee(s):(std)**:** ACCLES AND SHELVOKE LTD

Assignee(s): ACCLES AND SHELVOKE LIMITED

Inventor(s):(std)**:** ARROWSMITH JOHN BASIL

International class (IPC 8–9)**:** A22B3/02 (Advanced/Invention); A22B3/00 (Core/Invention)

International class (IPC 1–7)**:** A22B3/02

CPC: A22B3/02

European class: A22B3/02

Classification Explorer

Forward Citations: US9681673,

Abstract:
Source: GB854061A 854,061. Slaughtering pistols. ACCLES and SHELVOKE Ltd. Aug. 6, 1959 [May 6, 1958], No. 14391/58. Class 119. In a slaughtering pistol of the captive–bolt type, the barrel 14, Fig. 1, is assembled to a body 10 to which a handle 60 is also assembled, a firing pin 63 and its spring 52 are accommodated within the body 10 and a manually operable cocking lever 68a is mounted on the handle for stressing the spring 52 in preparation for firing. When the lever 68a is pulled towards the handle 60, a trip rod 57 is pulled down against the action of a spring 71, taking with it one arm 55 of the torsion spring 52, the other arm 54 of which engages in a recess 62 in the firing pin 63 and is thus stressed. Movement of the firing pin 63 is prevented by its engagement in one end of a slot 78a in a sear rod 78 urged forwardly by a spring 84 and protruding forwardly of the body 10 at 82. The slot 78a and firing pin 63 are so shaped that on rearward movement of the sear rod 78, the firing pin is released to pass through the slot and fire a cartridge in a radial cartridge chamber 86 formed in a cylindrical breech block member 17 and opening into a space 39 in the barrel and breech block assembly behind the piston 28. A spring–urged contact rod 45 is slidably mounted in a cylindrical guide 43 secured to the barrel 14. On swinging the muzzle end of the pistol towards the animal's head, the head 50 of the contact rod 45 engages the head of the animal and the rod 45 is pressed rearwardly. A tapered end 49 of the rod thus engages a recess 83 in the head 82 of the sear rod to move it rearwardly and thus release the firing pin. The breech block 17 is secured to the barrel 14 by a screw–threaded extension 18 and the assembly is rotatably mounted in the body 10 so as to provide access to the chamber 86 for loading a fresh cartridge. A cartridge extractor 87, Fig. 2 is located in the breech block and is so arranged that on rotation of the barrel and breech block in the body 10 after firing, a projecting nose 90 of the extractor engages a cam groove 89 in the body 10 to move the extractor outwardly and eject the spent cartridge. In another embodiment, Fig. 5 (not shown), no contact rod is provided, the sear rod 78 being operated by a bell crank lever 115 so arranged that on pressing the handle lever the spring 52 is first stressed and then the arm 117 of the lever 115 moves the sear rod 78 rearwardly to release the firing pin.

0) GB888432A – IMPROVEMENTS IN, OR RELATING TO, COMBINED PUMPS...

20) Family number: 20822178 (GB888432A) © PatBase

Title: Improvements in, or relating to, combined pumps and fuel–flow control fittings for internal combustion engines

Priority: GB19570002993 19570128

Family:

Publication number	Publication date	Application number	Application date
GB888432 A	19620131	GB19570002993	19570128

Probable Assignee: KIGASS LTD

Assignee(s):(std)**:** KIGASS LTD

Assignee(s): KIGASS LIMITED

Inventor(s):(std)**:** CURRAN PAUL HENRY

International class (IPC 8–9)**:** F02M1/16 F02M37/16 F02M59/42 (Advanced/Invention); F02M1/00 F02M37/04 F02M59/00 (Core/Invention)

International class (IPC 1–7)**:** F02M1/16

CPC: F02M1/16 F02M37/16 F02M59/42

European class: F02M1/16 F02M37/16 F02M59/42

Classification Explorer

Forward Citations: US4679534, DE202008007721,

Abstract:
Source: GB888432A 888,432. Priming; fuel injection systems. KIGASS Ltd. Jan. 28, 1958 [Jan. 28, 1957], No. 2993/57. Classes, 7(3) and 7(5). In a combined pump and fuel flow control fitting for internal–combustion engines, the fitting comprises a body to which the pump is assembled, the body having a transfer passage into which at least one inlet passage.opens and from which a primary discharge passage extends, a manually–operable valve being installed in the transfer passage to control, flow from the inlet passage or passages to the primary discharge passage and to a branch passage communicating with the valve controlled intake of the pump, and a secondary discharge passage in the body communicates with the valve controlled outlet of the pump. As shown the body member 1 consisting of a die casting has two inlet passages 2 and 3 which open into and are perpendicular to the innermost end of the transfer passage 4 and two discharge passages 5, 6. A pipe (not shown) connected into the tapped outer end of the primary discharge passage 5 is connected to the fuel injection pump of the engine and another pipe also (not shown) connected into the tapped outer end of the secondary discharge passage 6 is connected to an atomizer or atomizers in the induction manifold of the engine. Provided that the nose 12d of the needle valve is seated upon and is closing the adjacent end of the restricted passage 8 no fuel is able to flow from the tank through either of the inlet passages. However, upon rotating the needle valve by the handle 12c in the direction which causes the valve to move axially away from the restricted passage the valve nose is unseated to allow fuel to flow from the tank into the transfer and restricted passages. As soon as the fuel has access to the restricted passage it may flow to and through the primary discharge passage to the fuel injection pump of the engine and/or through the branch passage 7 and intake passage 27 to the interior of the diaphragm. If the level of fuel in the tank should be allowed to fall to the top of the pipe 10 it is necessary in order to maintain the flow of fuel to the injection pump to rotate the needle valve in the direction which withdraws its nose 12d from the restricted passage a distance sufficient to take the sealing ring 16 into the larger diameter portion 4b of the passage. Fig. 4 is an exploded perspective view showing the flexible valve plate 26.

0) US3284154A – VISUAL FIELD TEST APPARATUS WITH FLASH TUBE ILL...

21) Family number: 30913181 (US3284154A) © PatBase

Title: Visual field test apparatus with flash tube illuminator

Priority: FR19620886611 19620201 ZA19610000404 19610201

Family:

Publication number	Publication date	Application number	Application date
AT240072 B	19650510	AT19620000575	19620124
CH377122 A	19640430	CH19620001239	19620201
DE1184114 B	19641223	DE1962F035891	19620131
DE1184114 C	19641223	DE1962F035891	19620131
FR1313468 A	19621228	FR19620886611	19620201
GB925066 A	19630501	GB19620001932	19620118
US3284154 A	19661108	US19620169384	19620129

Probable Assignee: FRIEDMANN ALLAN ISADORE

Assignee(s):(std)**:** ALLAN ISADORE FRIEDMANN ; FRIEDMANN ALLAN ISADORE ; ISADORE FRIEDMANN ALLAN

Inventor(s):(std)**:** ALLAN ISADORE FRIEDMANN ; FRIEDMANN ALLAN ISADORE ; ISADORE FRIEDMANN ALLAN

International class (IPC 8–9): A61B3/024 (Advanced/Invention); A61B3/02 (Core/Invention)

CPC: A61B3/024

European class: A61B3/024

US class: 351/224 351/243

Classification Explorer

Cited documents: US886772 A, US2835162 A, US2779235 A, US2564794 A, FR463877 A, FR1192716 A, DE926748 A,

Forward Citations: US4421392, US4045130, US3469903, US3419323, US3416857, GB2264366, EP0058516,

Abstract:
Source: GB925066A 925,066. Sight–testing apparatus. A. J. FRIEDMANN. Jan. 18, 1962 [Feb. 1, 1961], No. 1932/62. Class 97 (1). For testing the field of vision, a housing has means for accommodating a perforated screen means and a light source for momentarily illuminating the perforations, means being provided for changing the position or pattern of perforations and for identifying the pattern in use at any instant. As shown in Fig. 1, the housing 1 contains an electronic flash tube 3 for illuminating perforations in a screen 5, which is slidably inserted in guides 1a and has a central pivot 7 on which a perforated shutter 6 is rotatable between angular positions defined by a spring 9 and arcuate detent 8. For each angular position of the shutter 6, a different group of perforations are lit up by operating the flash tube 3. By using a scale 11 and index 10 the blind spots in the patient's field of vision can be plotted; scale 11 may indicate not only which perforation group is exposed but also the number of perforations in that group. Instead of using an electronic flash tube, the source may be flickering or continuous, a shutter being interposed in the light path to the screen in the latter case. In a modification, Fig. 5, a perforated circular screen 17 is rotatable and has rotatably secured thereto at 7 a shutter 6 which is also perforated. The scale and index 11, 10 are again provided and, in addition, there is an index mark 41 co–operating with a scale 42 to indicate the angular position of screen 17. This modified instrument allows additional tests to be performed using the same group of perforations at different angular orientations. In other forms, the rotatable and circular screen is provided with a series of perforations along one radius only and the shutter has an arcuate set of holes or an arcuate slit so that only one perforation is exposed at a time. In yet another modification, Fig. 9, a number of perforated cards 43 are locatable in the guides la, each card having a group of perforations 45 and a pattern identifying mark 46.

22) Family number: 24865477 (US3270256A) © PatBase

Title: CONTINUOUSLY GRADED ELECTRODE OF TWO METALS FOR SEMICONDUCTOR DEVICES

Priority:

DE1962ST19973 19621109	DE1965ST23232 19650121	FR19630931635 19630416
FR19640984543 19640807	FR19640986227 19640826	FR19630948183 19630920
FR19630958398 19631224	FR19630953110 19631108	FR19630935770 19630522
FR19650038528 19651116	FR19640989359 19640925	GB19630035120 19630905
GB19620014602 19620416	GB19630031322 19630808	GB19630033754 19630826
FR19650003688 19650129	GB19620048863 19621228	GB19620036013 19620921
GB19620020201 19620525	GB19620039650 19621019	FR19650008137 19650305
GB19630037716 19630925	GB19640003785 19640129	GB19640006100 19640213
GB19640003786 19640129	GB19640009636 19640306	

Family:

Publication number	Publication date	Application number	Application date
AU2949663 A1	19641015	AU19630029496	19630411
AU3457363 A1	19650225	AU19630034573	19630823
AU4878864 A1	19660303	AU19640048788	19640901
AU5418865 A1	19660721	AU19650054188	19650121
AU5520965 A1	19660818	AU19650055209	19650216
BE631066 A	00000000		00000000
BE632739 A	00000000		00000000
BE637621 A	00000000		00000000
BE639640 A	00000000		00000000
BE651446 A	19650208		19640806
BE652660 A	19650304		19640904
BE653537 A	19650325		19640925
BE659001 A	19650729		19650129
BE659002 A	19650729		19650129
BE659624 A	19650812		19650212
BE660746 A	19650908		19650308
CH422927 A	19661031	CH19630006307	19630520
CH423995 A	19661115	CH19630004521	19630409
CH424889 A	19661130	CH19630013576	19631105
CH468719 A	19690215	CH19630012568	19631014
CH471468 A	19690415	CH19640012502	19640925
DE1179280 B	19641008	DE1962ST19973	19621109
DE1282188 B	19681107	DE1963J023535	19630411
DE1287696 B	00000000		00000000
DE1288174 B	19690130	DE1963I023747	19630521
DE1292758 B	19690417	DE1964ST22571	19640821
DE1292761 B	19690417	DE1964ST22635	19640905
DE1298637 B	19690703	DE1965ST23468	19650306
DE1302005 B	19750807	DE1963J024586	19631018
DE1302005 C2	19750807	DE1963J024586	19631018
DE1439529 A1	19681031	DE19641439529	19640812
DE1439529 B2	19741017	DE19641439529	19640812
DE1514736 A1	19690220	DE19651514736	19650121
DE1514736 B2	19750320	DE19651514736	19650121
DE1514736 C3	19751030	DE19651514736	19650121
DE1514739 A1	19690731	DE19651514739	19650127

DE1514742 A1	19690814	DE19651514742	19650206	
DE1892316 U	19640506	DE1963J011969U	19630903	
FR1354552 A	19640306	FR19630931635	19630416	
FR1363491 A	19640612	FR19630935770	19630522	
FR1427264 A	19660204	FR19650003688	19650129	
FR84370 E	19650129	FR19630948183	19630920	
FR85051 E	19650604	FR19630953110	19631108	
FR85314 E	19650723	FR19630958398	19631224	
FR86320 E	19660124	FR19640984543	19640807	
FR86819 E	19660422	FR19640986227	19640826	
FR86957 E	19660520	FR19640989359	19640925	
FR87924 E	19661104	FR19650008137	19650305	
FR89051 E	19670505	FR19650038528	19651116	
GB1001150 A	19650811	GB19630035120	19630905	
GB1010111 A	19651117	GB19620020201	19620525	
GB1015532 A	19660105	GB19620014602	19620416	
GB1015588 A	19660105	GB19630037716	19630925	
GB1022366 A	19660309	GB19630033754	19630826	
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NL6501141 A	19650730	NL19650001141	19650129	
NL6501142 A	19650730	NL19650001142	19650129	
NL6501745 A	19650816	NL19650001745	19650212	
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US3270256 A	19660830	US19630312930	19631001	
US3324357 A	19670606	US19640421178	19641228	
US3440717 A	19690429	US19670632874	19670316	

Probable Assignee: STANDARD ELEKTRIK LORENZ AG

Assignee(s):(std)**:** HILL JOHN ; INT STANDARD ELECTRIC CORP ; ITT ; ITT IND GMBH DEUTSCHE ; ITT IND DEUTSCHE GMBH ; STANDARD ELEKTRIK LORENZ AG ; STANDARD TELEPHON AND RADIO AG ; STANDARD TELEPHONES CABLES LTD

Assignee(s): ITT IND INC ; STANDARD TELEPHONES AND CABLES PTY LTD ; STANDARD TELEPHON U RADIO AG ; DEUTSCHE ITT IND GMBH ; DEUTSCHE ITT IND GMBH 7800 FREIBURG ; DEUTSCHE ITT INDUSTRIE GMBH ; STANDARD TELEPHONES AND CABLES LTD ; JOHN HILL

Inventor(s):(std)**:**

ROGER CULLIS ; PETER SANDBANK CARL ; PAYNE ROLAND FRANCIS ; MILLS BERNARD DOUGLAS ; LAUCKNER HANS EUGEN ; LAUCKNER H ; LAUCKNER DR HANS EUGEN ; JOHN HILL ; WARD ERIC ; STANLEY GERALD AYLING ; SHAW BRIAN HERBERT ; SCARR ROBERT WALTER ALISTER ; HILL JOHN ; HERBERT SHAW BRIAN ; HEAD BRIAN ERNEST ; HANS EUGEN DR LAUCKNER ; GERALD AYLING STANLEY ; FRANCIS PAYNE ROLAND ; ERNEST HEAD BRIAN ; DOUGLAS MILLS BERNARD ; DONNER ARNO STEN ; BROMLEY HILL JOHN ; AYLING STANLEY GERALD ; SANDBANK CARL PETER ; CULLIS ROGER ; CARL PETER SANDBANK ; ROLAND FRANCIS PAYNE ; BERNARD DOUGLAS MILLS

Inventor(s): CULLIS ROGER MEOPHAM KENT ; CARL PETER SANDBACK AND ROGER COLLE ; CARL PETER SANDBACK ; EUGEN DR LAUCKNER HANS ; SANDBANK CARL PETER BROMLEY ; HILL JOHN BROMLEY KENT GROSSBRITANNIEN

International class (IPC 8–9): B23K1/00 C03C17/40 C23C14/02 F16D3/32 H01B1/00 H01L21/00 H01L21/288 H01L21/304 H01L21/316 H01L21/52 H01L21/56 H01L21/58 H01L21/60 H01L21/70 H01L21/74 H01L21/98 H01L23/04 H01L23/14 H01L23/29 H01L23/31 H01L23/48 H01L23/485 H01L23/488 H01L23/498 H01L23/522 H01L25/04 H01L25/16 H01L27/07 H01L29/00 H01L29/08 H01L29/10 H01L29/72 H01L49/02 H01R13/719 H01R4/02 H05K5/00 (Advanced/Invention);
B23K1/00 C03C17/36 C23C14/02 F16D3/16 H01B1/00 H01L21/00 H01L21/02 H01L21/70 H01L23/02 H01L23/28 H01L23/48 H01L23/52 H01L25/16 H01L27/07 H01L29/00 H01L29/66 H01L49/02 H01R13/719 H01R4/02 (Core/Invention)

International class (IPC 1–7): B23K11/20 C03B13/12 C07D295/18 C23C11/02 C23C13/02 C23C17/00 H01B5/14 H01L1/10 H01L1/14 H01L21/18 H01L21/22 H01L21/24 H01L21/48 H01L21/52 H01L21/56 H01L21/60 H01L21/88 H01L21/92 H01L23/08 H01L23/10 H01L23/12 H01L23/14 H01L23/28 H01L23/30 H01L23/48 H01L23/50 H01L23/54 H01L23/56 H01L27/04 H01L27/06 H01L27/08 H01L27/12 H01L29/02 H01L29/06 H01L29/40 H01L29/72 H01L29/78 H01L5/00 H01L7/02 H01L7/64 H05K1/04 H05K3/02 H05K3/22

CPC: F16D3/32 H01L21/707 H01L2924/0132 H01L2224/24011 H01L2924/01004 H01L2924/01052 H01L2924/01057 H01L2924/15787 H01L2924/19105 H01L2924/30107 H01L24/26 H01L24/24 H01L24/25 H01L24/82 H01L2224/16225 H01L2224/24225 H01L2224/24226 H01L2224/24227 H01L2224/4917 H01L2924/15153 H01L2924/15165 H01L2924/00014 H01L2924/01088 H01L24/49 B23K1/00 C23C14/02 H01L21/563 H01L24/33 H01L24/83 H01L49/02 H01L2224/04042 H01L2224/05644 H01L2224/05671 H01L2224/06181 H01L2224/45139 H01L2224/4847 H01L2224/4918 H01L2224/73203 H01L2224/8319 H01L2224/8385 H01L2924/01021 H01L2924/01025 H01L2924/01029 H01L2924/01058 H01L2924/01068 H01L2924/01073 H01L2924/01075 H01L2924/01083 H01L2924/04953 H01L2924/07802 H01L2924/30105 H01L2924/3025 H01R4/02 H01L25/16 C03C17/40 C23C14/027 H01B1/00 H01L2224/45124 H01L2224/48599 H01L2924/10253 H01L2224/16 H01L2924/01042 H01L2924/0105 H01L2924/19042 H01L2224/16227 H01L2924/0002 H01L29/0821 H01L2924/3011 H01L21/02238 H01L21/02255 H01L23/3121 H01L24/02 H01L2224/02379 H01L2224/04026 H01L21/288 H01L21/31662 H01L23/041 H01L2924/01005 H01L2924/0103 H01L2924/01032 H01L23/488 Y10T29/49179 Y10T29/53261 Y10T29/49169 H01L24/05 H01L24/06 H01L24/45 H01L24/48 H01L2224/05624 H01L2224/0603 H01L2224/45144 H01L2224/48091 H01L2224/48624 H01L2924/01014 H01L2924/01015 H01L2924/01019 H01L2924/01023 H01L2924/01039 H01L2924/01074 H01L2924/01078 H01L2924/09701 H01L2924/19043 H01L2924/01322 H01L2924/181 H01L24/80 H01L21/00 H01L21/56 H01L21/74 H01L23/291 H01L23/485 H01L23/49861 H01L23/522 H01L24/81 H01L27/0761 H01L29/00 H01L29/72 H01L2224/81801 H01L2924/01006 H01L2924/01013 H01L2924/01024 H01L2924/01047 H01L2924/01079 H01L2924/014 H01L2924/14 H01R13/719 H01L2224/05553 H01L2924/19041 H01L2924/10161

European class: 90QC2M3B B23K1/00 C03C17/40 C23C14/02 C23C14/02D F16D3/32 H01B1/00 H01L21/00 H01L21/02K2E2B2B2 H01L21/02K2E2J H01L21/288 H01L21/316C2B2 H01L21/56 H01L21/56F H01L21/60C4B H01L21/70B3 H01L21/74 H01L23/04B H01L23/29C H01L23/31H2 H01L23/485 H01L23/488 H01L23/498L H01L23/522 H01L24/05 H01L24/06 H01L24/18 H01L24/24 H01L24/25 H01L24/26 H01L24/33 H01L24/48 H01L24/49 H01L24/80 H01L24/81 H01L24/82 H01L24/83 H01L25/16 H01L27/07T2C2 H01L29/00 H01L29/08C H01L29/72 H01L49/02 H01R13/719 H01R4/02 T01L224/04042 T01L224/05599 T01L224/05624 T01L224/05644 T01L224/05671 T01L224/06030 T01L224/06181 T01L224/16 T01L224/16225 T01L224/24011 T01L224/24225 T01L224/24226 T01L224/24227 T01L224/45099 T01L224/45139 T01L224/45144 T01L224/48 T01L224/48091 T01L224/48470 T01L224/48624 T01L224/49170 T01L224/49180 T01L224/73203 T01L224/81801 T01L224/83190 T01L224/83850 T01L224/85399 T01L24/45 T01L924/01002 T01L924/01004 T01L924/01005 T01L924/01006 T01L924/01013 T01L924/01014 T01L924/01015 T01L924/01025 T01L924/01029 T01L924/01039 T01L924/01042 T01L924/01047 T01L924/01057 T01L924/01058 T01L924/01073 T01L924/01074 T01L924/01075 T01L924/01078 T01L924/01079 T01L924/01083 T01L924/04953 T01L924/07802 T01L924/14000 T01L924/15153 T01L924/15165 T01L924/15787 T01L924/19041

T01L924/19042 T01L924/19043 T01L924/19105 T01L924/30105 T01L924/30107 T01L924/30110 T01L924/30250

US class: 174/52.4 174/521 228/180.21 257/620 257/623 257/688 257/692 257/696 257/733 257/753 257/765 257/766 257/778 257/782 257/788 257/E21.174 257/E21.285 257/E21.502 257/E21.503 257/E21.505 257/E21.509 257/E21.537 257/E23.066 257/E23.125 257/E23.182 257/E25.029 257/E27.039 29/588 29/759 29/854 29/860 331/108R 438/126 438/6 438/614 438/654

Classification Explorer

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Forward Citations: WO13114009, USRE35069, US9671627, US7038290, US6849918, US5696402, US5677564, US5149958, US4992843, US4042954, US3909319, US3840982, US3811183, US3786318, US3768150, US3659160, US3650826, US3636619, US3633076, US3597665, US3591838, US3504430, US3496513, US3490142, US3480841, US3477123, US3474358, US3469017, US3460003, US3450956, US3444441, US3437883, US3436809, US3387190, US3374537, US2015160480, US2004144999, GB2202673, GB2202673, FR2986372, FR2547112, FR2545653, FR2416811, FR2170846, FR2170846, FR2048036, FR2048035, EP2190015, EP2190015, EP1038316, EP1038316, EP0560058, EP0271599, EP0128799, DE2810523, DE2807350, DE2753236, DE2238121, DE1764668, DE1665768, DE1591186, DE1296265, DE1281035, DE1261916,

Abstract:
Source: US3270256A 1,023,531. Semi−conductor devices. STANDARD TELEPHONES and CABLES Ltd. Oct. 18, 1963 [Oct. 19, 1962], No. 39650/62. Addition to 1,010,111. Heading H1K. Contacts to zones of a planar diffused junction device exposed through apertures in a surface oxide layer comprise bi−metallic films extending over the layer into the apertures. The upper surface of each film consists of a solderable metal and the lower surface of a different metal which adheres well to the oxide. A typical device, a silicon transistor, Fig. 6 (not shown), is formed by successive diffusions through an oxide mask to form base and emitter zones in a high resistivity N−type layer epitaxially grown on a heavily doped N−wafer. After selectively etching to expose areas of these zones contacts are made thereto by vapour depositing aluminium over the entire surface and then etching it from the coated areas. After heating to alloy the aluminium to the silicon a layer grading from chromium or chromium−copper below to gold above, or from manganese to silver is evaporated over the entire surface as described in the parent Specification and then selectively etched to leave strips 11, 12 extending to the emitter and base contacts respectively. Alternatively the strips are obtained directly by evaporation through a mask. The graded layer can also be applied without the intermediary of aluminium if the exposed surface of the base zone is heavily doped beforehand by acceptor diffusion. The back face of the wafer may be friction alloyed to a header, or coated with a graded chromiumgold film and soldered to a header constituting the collector electrode or to a similar graded film on a glass substrate. Alternatively the collector electrode may be formed in the same way as the emitter and base electrodes on the oxide coated surface. The invention is also applicable to planar diodes and solid circuits and to germanium planar devices with silicon oxide masking layers.

0) US3233792A – VALVE STRUCTURE FOR PRESSURIZED SPRAY PACKAGE

23) Family number: 26150870 (US3233792A) © PatBase

Title: VALVE STRUCTURE FOR PRESSURIZED SPRAY PACKAGE

Priority: FR19630957925 19631220 US19630298946 19630731

Family:

Publication number	Publication date	Application number	Application date
AT244218 B	19651227	AT19630009181	19631118
AU3773863 A1	19650520	AU19630037738	19631118
BE640195 A	19640520	BE19630640195	19631120
CH428599 A	19670115	CH19630013991	19631114
DE1400720 A1	19681024	DE19631400720	19631122
DK113070 B	19690210	DK19630005881	19631217
ES293619 A1	19640401	ES19630293619	19631119
FI40375 B	19680902	FI19640001494	19640713
FR1386542 A	19650122	FR19630957925	19631220
GB1058777 A	19670215	GB19630045286	19631115
NL302173 A	19651011		00000000
NO116499 B	19690331	NO19640153945	19640708
US3233792 A	19660208	US19630298946	19630731

Probable Assignee: GREEN EDWARD HOWARD

Assignee(s):(std)**:** GREEN EDWARD HOWARD

Assignee(s): HOWARD GREEN EDWARD ; EDWARD HOWARD GREEN ; GREEN E

Inventor(s):(std)**:** GREEN EDWARD HOWARD

Inventor(s): HOWARD GREEN EDWARD ; GREEN EDWARD H ; GREEN E ; EDWARD HOWARD GREEN

International class (IPC 8–9): B65D83/14 F16K1/30 (Advanced/Invention); B65D83/14 (Core/Invention)

International class (IPC 1–7): B05B1/00 B65D83/14

CPC: B65D83/48

European class: B65D83/48

US class: 222/402.24

Classification Explorer

Cited documents: US2913154 A, US2862648 A, US2806739 A, US2777735 A,

Forward Citations: US5027985, US3827608, US3348743,

Abstract:
Source: GB1058777A 1,058,777. Forcing liquids by gaseous pressure. E. H. GREEN. Nov.15, 1963 [July 31, 1963], No.45286/63. Heading F1R. An aerosol dispersing valve includes a reciprocable valve plunger 62, Fig. 4 having a blind socket 72 surrounded at its top by a gallery 86, the floor 89 of which is perpendicular to the socket axis. A slot 88 in the stem 80 of the spray head 36, Fig. 2 (not shown) is so dimensioned that its upper edge 90 is below a resilient annular gasket 52 and above floor 89. When the spray head is depressed the valve seat 87 is unseated and the contents pass along dip tube 34, past seat 87 and out via expansion chamber 82 and atomizer 84. In another embodiment the axial depth of the gallery is increased whereby a bulge 98, Fig. 5 (not shown), of the resilient gasket 52 is trapped between the seat 87 and the stem 80. Reference has been directed by the Comptroller to Specification 908, 909.

0) US3341960A – TRANSPARENCY FRAME

24) Family number: 25863189 (US3341960A) © PatBase

Title: Transparency frame

Priority: DE19631269820 19630709 DE1963G037799 19630521 DE1963G038133 19630709

Family:

Publication number	Publication date	Application number	Application date
AT258603 B	19671211	AT19640004318	19640519
AT273532 B	19690811	AT19670000072	19640519
BE648247 A	19640916		19640521
CH445147 A	19671015	CH19640006454	19640516
DE1214898 B	19660421	DE1963G037799	19630521
DE1269820 B	19680606	DE19631269820	19630709
GB1071402 A	19670607	GB19640020829	19640520
US3341960 A	19670919	US19640367528	19640514

Probable Assignee: GEIMUPLAST MUNDT PETER KG

Assignee(s):(std)**:** GEIMUPLAST MUNDT KG PETER ; GEIMUPLAST MUNDT PETER KG

Assignee(s): GEIMUPLAST PETER MUNDT K G ; GEIMUPLAST PETER MUNDT KG

Inventor(s):(std)**:** FLORJANCIC PETER ; MUNDT PETER ; PETER FLORJANCIC ; PETER MUNDT

International class (IPC 8–9)**:** G03B21/64 (Advanced/Invention); G03B21/54 (Core/Invention)

International class (IPC 1–7)**:** G03B21/64

CPC: G03B21/64

European class: G03B21/64

US class: 40/709 40/710 53/284.2

Classification Explorer

Cited documents: US654147 A, US3035364 A, US2535265 A, US2532776 A, US2390053 A, FR1311727 A, FR1162510 A, DE1838499 U, DE1812462 U, DE1109408 B,

Forward Citations: US6502341, US6370804, US6065235, US5470757, US5392548, US4738040, US4678525, US4607442, US4543771, US4477991, US4415282, US4395144, US4394094, US4391082, US4355748, US4331260, US4250641, US3952434, US3530608, US3478456, US3477160, EP0386223, EP0158342, EP0083151, DE3932774, DE3932774, DE3414021,

Abstract:
Source: GB1071402A 1,71,402. Transparency mounts. GEIMUPLAST PETER MUNDT KOMM GES. May 20, 1964 [May 21, 1963; July 9, 1963], No.20829/64. Heading G2C. A unitary transparency frame of plastics material includes a receiving slot 4, the two halves of the frame being adapted to be spread apart near the receiving slot to facilitate the insertion of a transparency. The transparency is locked in position by means of a deformation in at least one half of the frame. In the embodiment of Fig. 3 a limiting cam 6 or (6') is provided in each frame half 5 or (5') to register with a corresponding groove (7') or 7 in the other half. The two halves of the frame are spread apart by applying oppositely directed forces on the side edges of the frame adjacent the slot 4 in order to separate the cams 6, (6'). Each frame half 5, (5') may be provided with two bores adjacent the slot 4 so that the halves may be spread apart by mandrels passing through these bores to engage the inside surface of the opposing frame half. These bores are arranged in the halves 5 (5') so that the mandrels act as guide pins for the transparency. In the embodiment of Figs. 12 and 13 (not shown) the boundary (35) of the receiving pocket (36) is continued into the receiving slot (34) by means of webs (37), (38). When pressure is applied as shown in Fig. 13 the webs provide a lever action so that the receiving slot is widened. The frame may be provided with two receiving slots at opposite ends thereof. In a further embodiment the transparency is locked in position by means of central dead–ended holes adjacent the receiving slot to which are applied punches in order to weld the two halves together or merely to deform the frame.

25) Family number: 20815740 (US3308450A) © PatBase

Title: MAGNETIC TRANSDUCER HEAD ASSEMBLY WITH SPRING BIASING HEAD ASSEMBLY AWAY FROM DRUM

Priority: US19630312583 19630930

Family:

Publication number	Publication date	Application number	Application date
DE1208768 B	19660113	DE1964E027805	19640919
FR1414094 A	19651015	FR19640988906	19640922
GB1031977 A	19660602	GB19640038367	19640921
US3308450 A	19670307	US19630312583	19630930

Probable Assignee: EX CELL O CORP

Assignee(s):(std)**:** EX CELL O CORP

Inventor(s):(std)**:** JUN JOHN STENCEL ; MOORE DONN F ; NAMETH ALEX ; QUICK LLOYD S ; RIPLEY MERTON L ; STENCEL JR JOHN ; ALEX NAMETH ; BOURDON JOSEPH J

Inventor(s): JR JOHN STENCEL

International class (IPC 8–9)**:** G11B5/56 G11B5/60 (Advanced/Invention); G11B5/56 G11B5/60 (Core/Invention)

International class (IPC 1–7)**:** G11B5/004 G11B5/02 G11B5/27 G11B5/54

CPC: G11B5/6005 G11B5/56

European class: G11B5/56 G11B5/60D

US class: 360/230 G9B/5.201 G9B/5.229

Classification Explorer

Cited documents: US3245063 A, US3055987 A, US3039102 A, GB763780 A,

Forward Citations: US5003422, US4314296, US4212043, US4034412, US3775571, US3747081, US3678211, US3670112, US3668666, US3577133, US3548392, US3480936, US3368210, JP51117606, EP0084123, DE2353127, DE102012016089, DE102012016089,

Abstract:
Source: US3308450A 1,031,977. Supporting magnetic heads. EXCELL–O CORPORATION. Sept. 21, 1964 [Sept. 30, 1963], No. 38367/64. Heading G5R. A transducing head 10 of the type which rests on a fluid bearing produced by movement of the surface of the record 12 is held in a shoe 28 supported by resilient means 30 from a support 32 which is adjustable only in a plane parallel to the transducing gap 18. The support 32 fits slidably in a slot 56 of a mounting bar 54 to which it is clamped by a screw 64 after adjustment to the optimum position by an adjusting tool 70 which can move the support towards the record against the bias of a compression spring 68. The shoe 28 may comprise a potting compound in which the head 10 and its magnetic shield 20 is embedded, and is provided with a bearing surface 29 flush with the surface of the head. The support members 30 comprise a pair of flat resilient reeds of metal or plastic preferably formed of a single piece of material bent as shown. An arm 42 of the support 32 carries a connector 44 for the leads to the head. In a modification, Figs. 4–6 (not shown), the support 32 is bent away from the head so that the plane of the gap 18 coincides with the plane of the locating face of slot 56, and the compression spring biasing the support away from the record is arranged obliquely so that the support is also located against a side face of the slot 56.

0) FR1431611A – TOLE DE SUPPORT POUR COMPRESSEURS FRIGORIFIQUES...

26) Family number: 21393368 (FR1431611A) © PatBase

Title: TOLE DE SUPPORT POUR COMPRESSEURS FRIGORIFIQUES SUPPORT PLATE FOR REFRIGERATION COMPRESSORS (Machine translation)

Priority: FR19650014863 19650427

Family:

Publication number	Publication date	Application number	Application date
FR1431611 A	19660311	FR19650014863	19650427

Probable Assignee: LICENTIA GMBH

Assignee(s):(std)**:** LICENTIA GMBH

Assignee(s): LICENTIA PATENT VERWALTUNGS G M B H ; LICENTIA PATENT VERWALTUNGS GMBH

International class (IPC 8–9)**:** F25D23/00 (Advanced/Invention); F25D23/00 (Core/Invention)

International class (IPC 1–7)**:** F25B31/02

CPC: F25D23/006

European class: F25D23/00C

Classification Explorer

Abstract:
Source: FR1431611A [Source: Claim 1] 1 La tole de support est un profile de tole de forme ondulee et de faible epaisseur, dans lequel sont menagees des poches plates, ouvertes d'un cote, de forme triangulaire, le cote ouvert des poches faisant un angle avec l'axe longitudinal de la tole de support et la tole de base du blindage du compresseur est inseree a travers l'ouverture des poches et appliquee rigidement contre leurs parois; [Source: Claim 1] 1 The carrier sheet metal is a form of corrugated sheet metal and profile of low thickness, in which are formed flat pockets, open on one side, triangular in shape with the open side pockets forming an angle with the longitudinal axis of the support plate and the compressor shield base plate is inserted through the pocket opening and rigidly applied against the walls thereof;

0) US3241511A – BOAT HULLS, MOTOR–PROPELLER UNITS AND HYDROFOIL...

27) Family number: 22308132 (US3241511A) © PatBase

Title: BOAT HULLS, MOTOR–PROPELLER UNITS AND HYDROFOIL COMBINATIONS

Priority: US19640347645 19640220

Family:

Publication number	Publication date	Application number	Application date
US3241511 A	19660322	US19640347645	19640220

Probable Assignee: DRTINA OTTO V

Assignee(s):(std)**:** DRTINA OTTO V

Inventor(s):(std)**:** DRTINA OTTO V

International class (IPC 8–9)**:** B63B1/28 B63B1/30 B63B35/73 B63H20/04 B63H20/10 B63H20/34 B63H5/125 (Advanced/Invention); B63H20/12 (Advanced/Non–invention); B63B1/16 B63B35/73 B63H20/00 B63H5/00 (Core/Invention)

International class (IPC 1–7)**:** B63B35/72

CPC: B63B1/28 B63B1/30 B63H5/125 B63H20/04 B63H20/106 B63H20/12 B63H20/34

European class: B63B1/28 B63B1/30 B63H20/04 B63H20/10D B63H20/34 B63H5/125 B63H5/13 L63H20/12

US class: 114/279 114/282 440/63 D12/309

Classification Explorer

Cited documents: US3121414 A, US3075490 A, US3016864 A, US2975750 A, US2955559 A, US2929346 A, US2795202 A, US2748400 A, US2720180 A, US2633817 A, US1344903 A, DE517518 A,

Forward Citations: WO16034814, WO16009409, WO13152778, WO13152778, WO05090150, WO04050476, US9296456, US8826845, US4056074, US2014349530, US2012028517, US2005287882, EP0503206,

Abstract:
Source: US3241511A 1. I claim: ll. An improved boat hull, suitable for ordinary, hydrofoil and submersible hydrofoil navigation, having ar» ranged in its bottom part, from amidship to the stern, an air–tight and water–tight bell–like elongated structure secured along the keel to the boat–hull, said bell–like structure being open to the Water–side and large enough to accommodate the propeller part of a motor–propeller unit and to allow its movements therein, said bcll~like struc~ ture ‘having a top flanged opening above the water level when the boat is afloat, said flanged opening being large cnough to insert through some said propeller part of a motor–propeller unit to extend into the Witter; un exhaust line from the engine exhaust manifold directed into the space of said bell–like structure and capable of iilling said space completely with exhaust gases which, when the motor is in operation, has a boat–lifting ability, and a hydroskimming effect at cruising speed; a prefabricated rigid frame, adapted for the mounting thereon of the motor–propeller unit and hydrofoils including resilient mounts to lessen shocks from active hydrofoils and adapted for the mounting thereon of means for retracting the hydrofoils, said frame comprising of a reinforced longitudinal beam located along the keel and bifurcated to bypass the elongated bell–like structure and extending the full length of the boat, said frame being inserted into a prefabricated hull and fastened thereto in at least three points, this frame being adapted for the mounting of brackets for securing the hydrofoils, said hydrofoils being arranged as a pair at one end of the hull and singly at the –other end of the hull and being symmetrical to the keel to form a 3–point hydrofoil suspension, said frame having a saddle located on the bottom of the hull in the keel in front of the bell–like structure to accommodate a stationary inboard motor; the above–mentioned frame having a front curved upright portion for reinforcing the 'hull’s bow and an upwardly directed mounting plate located in the stern and secured to the hull to form a Compact transom; a couple of cross–members for holding each hydrofoil unit, said cross–members being secured to the frame and extending out of the hull and being sealed to be water–tight and having mounted thereon the retractable hydrofoils sccurcd by parallelogram suspension mounlings in such a way, that the boat–hull is free from any strain resulting from the operation of the niotorpropeller unit and the hydrofoils.

28) Family number: 21032736 (US3491397A) © PatBase

Title: CLEANING DEVICE HAVING SPONGE–LIKE CLEANING BLOCK

Priority: CH19650010717 19650731 CH19660009232 19660626 CH19660010422 19660718 FR19660071304 19660728 CH19670002872 19670223 CH19670013048 19670915 CH19660015832 19661031

Family:

Publication number	Publication date	Application number	Application date
AT283654 B	19700810	AT19680008829	19680911
AU206843390 A1	19700326	AU19680043390	19680916
BE684815 A	19670130		19660729
BE705569 A	19680301		19671024
CH439623 A	19670715	CH19650010717	19650731
CH494016 A	19700731	CH19670013048	19670915
DE1782541 A1	19710916	DE19681782541	19680913
DE1782541 B2	19761104	DE19681782541	19680913
DE1782541 C3	19770623	DE19671782541	19680913
DE1973063 U	19671123	DE1966H056188U	19660728
DE6600894 U	19690227	DE19660000894U	19670623
DE6600897 U	19690220	DE19660000897U	19680913
DK117856 B	19700608	DK19680004430	19680913
ES141515 Y	19690816	ES19680141515U	19680913
ES340144 A1	19680616	ES19670340144	19670505
FR1487987 A	19670707	FR19660071304	19660728
FR93536 E	19690411	FR19670125970	19671026
GB1156161 A	19690625	GB19660033500	19660726
GB1199486 A	19700722	GB19670048099	19671023
GR33183 B	19671115	GR19670133183	19670614
IL30672 A0	19681127	IL19680030672	19680908
NL6708895 A	19671227	NL19670008895	19670626
NL6813092 A	19690318	NL19680013092	19680912
NO120947 B	19701228	NO19680003636	19680914
US3491397 A	19700127	US19660571128	19660801
US3533122 A	19701013	US19680758302	19680909

Probable Assignee: HESENER

Assignee(s):(std)**:** HESENER ; HESENER W ; HESENER WALTER ; HESENER WALTER ING ; HESENER WALTER MEYRIN GENF SCHWEIZ

Assignee(s): ING WALTER HESENER ; WALTER BESEMER ; WALTER HESENER

Inventor(s):(std)**:** WALTER HESENER ; HESENER WALTER MEYRIN GENF ; HESENER W ; HESENER WALTER

Inventor(s): WALTER BESEMER

International class (IPC 8–9)**:** A47L13/20 A47L13/24 A47L13/257 A47L17/00 A47L17/04 (Advanced/Invention); A47L13/46 (Advanced/Non–invention); A47L13/20 A47L17/00 (Core/Invention); A47L13/10 (Core/Non–invention); A47L B25G (Subclass/Invention)

International class (IPC 1–7)**:** A46B5/02 A47L13/10 A47L13/257 A47L13/42 A47L13/46 A47L17/00

CPC: Y10T403/32591 Y10T403/32951 A47L17/00 A47L13/24 A47L13/257

European class: A47L13/24 A47L13/257 A47L17/00

US class: 15/118 15/144.1 15/147.1 15/147.2 15/244.2 403/117 403/161

Classification Explorer

Cited documents: US723462 A, US686984 A, US580003 A, US546893 A, US3389418 A, US3353203 A, US3225375 A, US2998614 A, US2501289 A, US2446183 A, US2171308 A, US2138010 A, US1683871 A, US1302457 A, US1291131 A, US1120812 A, GB893496 A, GB285667 A, FR654901 A, FR1381838 A, FR1153007 A, FR1016589 A, AT220782 B,

Forward Citations: WO9704701, WO9216138, WO11067158, WO07042128, USD634088, USD590558, USD579614, USD479377, USD473343, USD467396, USD449909, US9408522, US8850651, US7739770, US7383602, US7343638, US6926678, US6675427, US6571419, US6349443, US6216307, US6052858, US5953784, US5842488, US5649781, US5593460, US5548862, US5435040, US5402550, US5361447, US5095574, US5058233, US5010615, US4970750, US4451164, US4299005, US4190922, US4135690, US4097017, US3846862, US3753267, US3704480, US3704479, US3484888, US2009241280, US2009217473, US2008222826, US2007240254, US2006171767, US2005283933, US2004074520, GB2452907, GB2445139, GB2445139, GB2411345, GB2217977, EP1395162, EP0841870, EP0568110, DE9415002, DE4318792, DE19622265, DE19622265, DE10200340, AU742654, AU713841, AU2006211531,

Abstract:
Source: US3491397A ABSTRACT OF THE DISCLOSURE A washing−up mop has a combined handle and core member. The core member is adapted to be anchored within a sponge having one scouring face. The core member is pivoted to the handle for swinging from one side to the other to present either the scouring face of the sponge or the sponge face to the surface to be washed. 2o The pressure on said surface operates said pivotal movement. The sponge is retained on the core member by integral projections on the core member. These projections take various shapes and designs from pin−like projections to triangular projections including barb−like teeth.

0) DE1554464A1 – KUECHENEINRICHTUNG KITCHEN EQUIPMENT (MACHINE...

29) Family number: 536541 (DE1554464A1) © PatBase

Title: KUECHENEINRICHTUNG Kitchen equipment (Machine translation)

Priority: DE1965SC39013 19650925 DE1965SC39013U 19650925 DE1966SC39013 19660520 DE1968SC41968 19680213

Family:

Publication number	Publication date	Application number	Application date
CH440174 A	19670715	CH19660012605	19660831
DE1554464 A1	19710909	DE1965SC39013	19650925
DE1554464 B2	19780223	DE1965SC39013	19650925
DE1554464 C3	19781026	DE1965SC39013	19650925
DE1654722 A1	19720615	DE19681654722	19680213

Probable Assignee: SCHAFFITZEL HELMUT

Assignee(s):(std)**:** SCHAFFITZEL HELMUT ; SCHLENK GEORG DIPL ING ; SCHWARTZ AND CO G

Assignee(s): SCHAFFITZEL HELMUT 7170 SCHWAEBISCH HALL ; G SCHWARTZ AND CO

Inventor(s):(std)**:** ALBRECHT PEIFFER ; SCHLENK GEORG DIPL ING

Inventor(s): PEIFFER ALBRECHT

International class (IPC 8–9): A47B77/00 B25G3/14 B25G3/28 E06B3/38 E06B5/00 E06B9/11 (Advanced/Invention); A47B77/00 B25G3/00 E06B3/32 E06B5/00 E06B9/11 (Core/Invention)

International class (IPC 1–7): A47B77/02 B25G3/28 E05D15/16 E06B3/48

CPC: E06B3/482 A47B49/004 A47B51/00 B25G3/28 A47B77/00 B25G3/14 E06B3/385 E06B5/006 E06B9/115

European class: A47B77/00 B25G3/14 B25G3/28 E06B3/38F E06B5/00F E06B9/11F P06B9/11F

Classification Explorer

Forward Citations: WO9712731, US6209405, FR2495986, EP1172048, EP0818282, EP0650679, EP0508972, DE3731869, DE202006006184,

Abstract:
Source: DE1554464A1 (Claim 1) P a t e n t a n 9 p r Ue o'h e l) KUcheneinrichtung, bei welcher entlang einer oder mehrerer KUchenwaende neben Unterschraenken zssB. eine Spuele, ein Bord, ein Kuehlschrank und vielleicht noch eine Geschirr spuelmaschine und eine Waschmaschine aufgestellt sind und darilber Obernahraenke haengen@ dadurch gekenntzeichnet, normaler Unterschraenke und daso mindestens in einem Teil den dadurch entstehenden Zwischenra=ea mit Faechern versehene" auf – und abschiebbare Regale unterge bracht sind fuer die Aufnahme von zesse elektrischen Kuechen– maschineng Elektrogeraeteng KUchengeraetenp Toepfen# Geschirr, Vorraeten1.

Machine translation: (Claim 1) P atentan 9 Ue O'H el pr) cake facility, along with which one or more KUchenwaende next Unterschraenken z ss B. one sink, one board, a fridge and maybe dishwasher one dish and a washing machine are set up and Waymarked darilber Obernahraenke hang @ by normal Unterschraenke and Daso at least in part the resulting Zwischenra = ea with shelves bearing "on – and be deported Shelves accommodated are introduced for the admission processes of electric cooking pots maschineng Elektrogeraeteng KUchengeraetenp # crockery, Vorraeten1.

0) US3436477A – AUTOMATIC DIALER

30) Family number: 861064 (US3436477A) © PatBase

Title: AUTOMATIC DIALER

Priority: US19650517545 19651230

Family:

Publication number	Publication date	Application number	Application date
GB1135960 A	19681211	GB19660057380	19661222
US3436477 A	19690401	US19650517545	19651230

Probable Assignee: WESTERN UNION TELEGRAPH CO

Assignee(s):(std)**:** INT STANDARD ELECTRIC CORP ; WESTERN UNION TELEGRAPH CO

Inventor(s):(std)**:** GHIRINGHELLI ROBERT J

Inventor(s): ROBERT J GHIRINGHELLI

International class (IPC 8–9)**:** H04L12/02 H04M1/278 (Advanced/Invention); H04L12/02 H04M1/278 (Core/Invention)

International class (IPC 1–7)**:** H04L11/02 H04L15/24 H04L15/34 H04M1/272

CPC: H04L12/02 H04M1/278

European class: H04L12/02 H04M1/278

US class: 178/17.5 178/26 178/26.1 178/3 341/1 341/100 379/108.01

Classification Explorer

Cited documents: US3301957 A, US3038030 A, US2982818 A, US2678965 A,

Forward Citations: US4252994, US4000363, US3689708, US3651463, US3624292,

Abstract:
Source: US3436477A ABSTRACT OF THE DISCLOSURE Code conversion means for converting simultaneous permutation tape code into sequential dial pulse code, includes a binary counter to convert the tape code into binary code potentials; a binary counter stores the potentials as a binary number; a readout means includes a clock pulse generator and a shift register to read out the stored count sequentially. The binary counter comprises a scale of sixteen counter.

0) US3639035A – SYNTHETIC RESIN STRUCTURES FOR LIGHT CONDUCTION...

31) Family number: 105415 (US3639035A) © PatBase

Title: SYNTHETIC RESIN STRUCTURES FOR LIGHT CONDUCTION AND PRODUCTION THEREOF

Priority: JP19690004957 19690123

Family:

Publication number	Publication date	Application number	Application date
BE744767 A1	19700701	BE19700744767	19700122
DE2002514 A1	19700730	DE19702002514	19700121
DE2002514 B2	19720210	DE19702002514	19700121
FR2028951 A1	19701016	FR19700002088	19700121
GB1268331 A	19720329		19700112
NL7000702 A	19700727	NL19700000702	19700119
US3639035 A	19720201	US19700002669	19700113

Probable Assignee: NIPPON SELFOC CO LTD

Assignee(s):(std)**:** NIPPON SELFOC CO LTD ; P SUHR

Assignee(s): NIPPON SELFOC K K ; NIPPON SELFOC K K NIPPON SELFOC CY LTD ; NIPPON SELFOC K K NIPPON SELFOC CY LTD 7 15 5 C ; NIPPON SELFOC K K NIPPON SELFOC CY LTD 7 15 5 CHOME SHIBA MINATO KU TOKYO TO JAPON ; NIPPON SELFOC KK

Inventor(s):(std)**:** IRIE MASANORI

Inventor(s): MASANORI IRIE

International class(IPC 8–9)**:** C08F8/44 G02B6/028 (Advanced/Invention); C08F8/00 G02B6/02 (Core/Invention)

International class(IPC 1–7)**:** B29D11/00 C03C25/00 C08F47/00 C08F8/42 G02B1/00 G02B1/04 G02B5/00 G02B5/14

CPC: C08F8/44 G02B6/02038

European class: C08F8/44 G02B6/02B2 G02B6/16B G02B6/18

US class: 350/175GN 350/178 350/320 350/96R 385/124 385/143

Classification Explorer

Cited documents: US3495511 A, US3485556 A, US3434774 A, US3320114 A, US3212401 A, JP39006810 A2,

Forward Citations: US9128220, US8931710, US4593975, US3999834, FR2682969, FR2203837, EP0575882, EP0145392, DE2353086,

Abstract:
Source: US3639035A A polymer in the form of a transparent bar or fiber having bridges due to ionic bonding of carboxylic groups and metals and having a compositional distribution wherein the concentrations of at least two of the metals vary progressively from the central axis toward the outer surface of the bar or fiber, whereby the refractive index thereof varies progressively in directions transverse to the axis. A bar or fiber of this character can be produced by immersing a polymer bar or fiber having bridges due to ionic bonding of carboxylic groups and metals in a medium containing ions of at least one other metal different from any of the first–mentioned metals to cause ions of the metals originally in the resin body to be substituted by ions of the other metal.

0) US3779674A – HIGH–PRESSURE GEAR PUMP

32) Family number: 1681352 (US3779674A) © PatBase

Title: HIGH–PRESSURE GEAR PUMP

Priority: DE19702035575 19700717 GB19710033214 19710715

Family:

Publication number	Publication date	Application number	Application date
DE2035575 A1	19720127	DE19702035575	19700717
DE2035575 C2	19870806	DE19702035575	19700717
DE2231386 A1	19730125	DE19722231386	19720627
FR2101659 A5	19720331	FR19710025680	19710713
GB1346474 A	19740213	GB19710033214	19710715
JP55022633 B4	19800618	JP19710052847	19710717
US3779674 A	19731218	US19710163750	19710719

Probable Assignee: ECKERLE OTTO 7502 MALSCH DE

Assignee(s):(std)**:** ECKERLE O ; ECKERLE OTTO ; JUNG R

Assignee(s): JUNG R DT ; ECKERLE OTTO 7502 MALSCH ; ECKERLE OTTO 7502 MALSCH DE ; ECKERLE O DT

Inventor(s):(std)**:** ECKERLE O ; ECKERLE OTTO ; JUNG R ; JUNG ROBERT

Inventor(s): JUNG ROBERT 7502 MALSCH DE ; JUNG R DT ; ECKERLE O DT

International class (IPC 8–9)**:** F04C15/00 F04C2/10 (Advanced/Invention); F04C15/00 F04C2/00 (Core/Invention)

International class (IPC 1–7)**:** F01C21/00 F03C3/00 F04C1/00 F04C1/06 F04C2/10

CPC: F04C2/101 F04C15/0019 F04C15/0026

European class: F04C15/00B2D F04C15/00B4B F04C2/10C

US class: 418/102 418/109 418/133 418/170 418/71

Classification Explorer

Cited documents: US3676027 A, US3315608 A, US3188969 A, US3034447 A, US2132813 A, US1970146 A, US1719640 A, JP44023861 A2, JP39020420 A2, JP37013832 A2, GB1233376 A, FR1576441 A, FR1278136 A, DE572631 A, DE1801825 A1, DE1703984 A1, DE1653871 B2, DE1653871 A1, DE1403923 A1, DE1293600 B, DE1266134 B, CH469901 A, CH216223 A, AT242519 B,

Forward Citations: US9657734, US9334862, US7413424, US5197869, US5032069, US4132514, US3912427, US2015267702, US2013071267, US2006193741, FR2973452, EP2211059, EP2211059, EP0987437, EP0351996, DE19861412, DE19847082,

Abstract:
Source: US3779674A A high–pressure gear pump with a drive pinion, internal gear ring, and filler wedge, where both the axial thrust and radial thrust are substantially compensated; a deflecting axial thrust plate cooperates with an O–ring to define an axial compensation pressure field; a pair of transverse sealing members, either elastic or radially sliding in grooves, cooperates with the adjacent faces of the periphery of the internal gear assembly and of the housing bore to define a radial compensation pressure field. A bearing ring around the internal gear, together with means for directionally restricting the displacements of the internal gear assembly, allow maintenance of a fixed gear center distance and backlash.

0) FR2142658A – SEALING RODS IN ANODES – AUTOMATIC APPTS REDUCE...

33) Family number: 2841809 (FR2142658A) © PatBase

Title: SEALING RODS IN ANODES – AUTOMATIC APPTS REDUCES PRODN TIME

Priority: FR19710022747 19710622

Family:

Publication number	Publication date	Application number	Application date
FR2142658 A3	19730202	FR19710022747	19710622
FR2142658 B3	19730810	FR19710022747	19710622

Probable Assignee: SYSTEMES PROCEDES IND MO

Assignee(s):(std)**:** SYSTEMES PROCEDES IND MO

International class (IPC 8–9)**:** B22D19/00 (Advanced/Invention); B22D19/00 (Core/Invention)

International class (IPC 1–7)**:** B01K3/00 B22D19/00 B22D47/00

CPC: B22D19/00

European class: 31C28 B22D19/00

Classification Explorer

Abstract:
Source: FR2142658A (Claim 1) 1. Installation pour le scellement des tiges metalliques sur des blocs d'anodesprecuits a l'aide d'un metal en fusion verse dans l'espace compris entre la paroi d'un trou menage dans un bloc d'anode et l'extremite de la tige metallique correspondante engagee dans ce trou, installation du type comportant un certain nombre de postes de travail montes en serie et comprenant chacun une table de support mobile, d'une part, en rotation autour de son axe central et, d'autre part, en translation parallelement audit axe, un transporteur aerien pour l'amenee des tiges et un transporteur pour l'amenee des blocs d'anodes munis d'au moins un trou borgne vers le premier poste de travail, des moyens de centrage et de blocage de la tige par rapport au poste de travail correspondant, une poche de coulee associee a au moins un poste de travail et assurant le versement d'un metal de–scellement dans l'espace entre l'extremite de la tige et le trou du bloc d'anode ainsi qu'un transporteur aerien pour l'evacuation des tiges scellees aux blocs d'anodes, caracterisee en ce que les differents postes de travail sont montes mobiles le long d'un circuit ferme et que sur le parcours de ce circuit sont disposes un poste de chargement en blocs d'anods et en tiges metalliques, un poste de coulee. comportant au moins une poche, au moins un poste de solidification et un poste d'evacuation des blocs d'anod scelles a leur tige. Appts. for sealing metal rods (I) into anode blocks (II) by means of molten metal poured into the space between the wall of a hole in a (II) and the end of a (I) comprises a number of identical work stations (III) mounted in series and each comprising a support table mounted to move in rotation about its central axis and in translation parallel to it; an aerial (I) transporter and a (II) transporter; means for centering and holding (I) relatively to (III); a casting ladle for pouring molten metal into the holes in (II); and an aerial transporter for evaculating the sealed (I) and a (II) from (III). The various (II) are mobile around a closed circuit around which are arranged a (I) and a (II) charging stations, a casting station with greater than or equal to1 ladle, greater than or equal to1 solidification station and a station for evacuating the sealed (I) and (II).

0) US3718386A – AUTOMATIC VISUAL FIELD EXAMINATION INCLUDING FI...

34) Family number: 1156761 (US3718386A) © PatBase

Title: AUTOMATIC VISUAL FIELD EXAMINATION INCLUDING FIXATION MONITORING AND COMPENSATION

Priority: US19710181538 19710917 US19730335572 19730226

Family:

Publication number	Publication date	Application number	Application date
AU197246792 A1	19740328	AU19720046792	19720918
AU197465938 A1	19750828	AU19740065938	19740225
CA1009074 A1	19770426	CA19740193449	19740225
CA983748 A1	19760217	CA19720151864	19720915
DE2245247 A1	19730329	DE19722245247	19720915
DE2409614 A1	19740905	DE19742409614	19740226
GB1405482 A	19750910	GB19720042915	19720915
GB1465561 A	19770223	GB19740008588	19740226
JP50025091 A2	19750317	JP19740022725	19740226
US3718386 A	19730227		19710917
US3883235 A	19750513	US19730335572	19730226

Probable Assignee: OCULOMETRICS

Assignee(s):(std)**:** LYNN J ; LYNN JOHN R ; OCULOMETRICS ; TATE JR GEORGE W ; TATE G

Assignee(s): TATE G US ; OCULOMETRICS INC DALLAS TEX V ST A ; TATE GEORGE W ; OCULOMETRICS INC ; LYNN J US

Inventor(s):(std)**:** LYNN J ; TATE G ; TATE JR GEORGE W ; TATE JUN GEORGE W DR ; TATE GEORGE W JR ; LYNN JOHN R ; TATE GEORGE W JR DR ; TATE GEORGE W ; LYNN JOHN R DR

Inventor(s): DR JOHN R LYNN ; DR GEORGE W TATE JR ; TATE JUN ; TATE GEORGE W FARMERS BRANCH ; LYNN JOHN R DR DALLAS ; TATE G US ; LYNN J US

International class (IPC 8–9): A61B3/00 A61B3/02 A61B3/024 (Advanced/Invention) ; A61B3/00 A61B3/02 (Core/Invention)

International class (IPC 1–7): A61B3/00 A61B3/02 A61B3/10

CPC: A61B3/024

European class: A61B3/024

US class: 351/224 351/246 351/39

Classification Explorer

Cited documents: US3718386 A, US3664732 A, US3450466 A, US3421498 A, US3416857 A, US3317268 A, US2374854 A, US1942850 A,

Forward Citations: WO16095062, WO14131860, WO11041505, WO09059400, WO08058699, WO0205704, USRE45114, USRE45062, US9681985, US9649022, US9477939, US9320426, US9215979, US9179833, US8990336, US8945009, US8931904, US8870762, US8851678, US8764192, US8684529, US8655259, US8617065, US8616895, US8608653, US8568393, US8521546, US8500278, US8489428, US8419636, US8407063, US8353827, US8260630, US8249894, US8140663, US8095340, US8078431, US8078407, US8027809, US8024201, US8019618, US8015030, US8015025, US8005690, US7987100, US7979284, US7972267, US7959284, US7941327, US7941323, US7925522, US7921186, US7877276, US7871376, US7870249, US7869852, US7867165, US7862506, US7853455, US7840420, US7822625, US7814143, US7778845, US7769605, US7765112, US7761312, US7753526, US7753524, US7748846, US7734718, US7730177, US7726811, US7724278, US7707270, US7699471, US7689440, US7684999, US7682021, US7665847, US7643971, US7642990, US7636667, US7624028, US7613621, US7613590, US7594728, US7590549, US7587469, US7584108, US7555436, US7533171, US7516192, US7452081, US7452080, US7439940, US7399276,

US7392167, US7367671, US7320030, US7310668, US7305348, US7264591, US7260480, US7258666, US7252636, US7223236, US7223235, US7167818, US6798443, US6736511, US6690338, US6578965, US6511181, US6494578, US6411266, US6381339, US6307589, US6260022, US6181371, US6094182, US6025829, US5986675, US5984476, US5888074, US5734421, US5644324, US5459536, US5422653, US5363154, US5319398, US5309185, US5270750, US5121981, US5046835, US4846567, US4685784, US4634243, US4421393, US4392725, US4346968, US4334739, US4334738, US4255023, US4239351, US4146311, US4109145, US3984156, US3969020, US3905688, US3883235, US2010149488, US2008319427, US2008242949, US2008049188, US2008046268, US2008037135, US2007258046, US2007195264, US2007129709, US2007121070, US2005288745, US2005286019, US2005041100, US2002047991, JP61144516, JP59120127, JP59012320, JP58121937, JP56128139, JP54044382, JP2006280665, JP2002272685, JP1158932, FR2471769, FR2417969, FR2402436, EP2449957, EP1301116, EP1201181, EP0838193, EP0428604, EP0363610, EP0242723, EP0242723, DE4120037, DE3212853, DE3043511, DE19505399, CH677599,

Abstract:
Source: US3718386A ABSTRACT OF THE DISCLOSURE Visual fields have, in the past, been displayed by the An illustrative embodiment of the present invention in– us,e is0Pter linf or)ines of constant visual sensitivity eludes method and apparatus for determining the thresh– 15 which are drawn from die results of a manually conducted old value of visual stimuli presented at selected locations test Manual testing which has been conducted in the prior in the visual field of a subject. A programmed automatic art ,has, usTual'y £een of two types, the kinetic and static data processing system is utilized together with a subject methods. In both types the steady gaze of the subject at response device in a unique two–way feedback system to a fixation point, generally located in the center of the test select location, brightness and spot size of stimuli (spots 20 field, has been required. In the kinetic method, spota or of light) to be presented and to present these stimuli on stimEh degrees f a ,known] s'ze and b"8htness. are moved ina test screen at locations which are unpredictable to the wardly from beyond the edge of the peripheral vision of subject, with the term stimuli including test spots which the P^ent until the subject signals m some manner to the are perceived and those which are not perceived. The examiner that he sees them. This method, while relatively subject communicates with the data processing equip– 25 fast, introduces a source of inaccuracy because of the reacment via the subject response device and the system inter– tl0 degrees ss!me. jaS be™een the subi®ct s ,see!nS the stimulus prêts the responses to alter the stimulus presentation re– and h!s sl«nfss t0^e exa™ner; Kmetic visual field testing gime dynamically while communicating feedback to the can a.lso fal1 f detect relatively small blind areas within subject of correct or incorrect perception of each stimu– tue visual fteid. lus. Eye movement of the subject is monitored and com– 30 The buee method of manual visual field testing has pensated for in the presentation of the spots of light by "tl!jfd stauepnaiy stimuli displayed at fixed points relative other system apparatus which also communicates with £ the fixation point of the subject m the visual fie d. the data processing equipment to center the test field rela– ?tartmg and remaining at such a point, and initially utikztive to the direction of gaze of the subject which is not ^ imperceptible stimulus value, the size and/or bnght–necessaritly the center of the test screen or a fixed point. 35 ness of tie stimuh are increased m steps with intervening v rtailCAD until tha cllhiofí Plímule tho «orconíiArt nf tka mnnt pauses until the subject signals the perception of the most ————–recent brightest stimulus. This establishes a threshold B

0) US3848494A – PRESS ADAPTER SYSTEM FOR STANDARDIZING DIE USE ...

35) Family number: 1137351 (US3848494A) © PatBase

Title: PRESS ADAPTER SYSTEM FOR STANDARDIZING DIE USE

Priority: US19720250947 19720508 US19720313163 19721207 US19740499268 19740821

Family:

Publication number	Publication date	Application number	Application date
AU197355416 A1	19741114	AU19730055416	19730508
CA983325 A1	19760210	CA19730168189	19730409
DE2323208 A1	19731129	DE19732323208	19730508
ES414490 A1	19760601	ES19730414490	19730507
FR2183939 A1	19731221	FR19730016532	19730508
FR2183939 B1	19780526	FR19730016532	19730508
GB1433225 A	19760422	GB19730021929	19730508
IL42017 A0	19730629	IL19730042017	19730412
IT1057866 A	19820330	IT19730050133	19730522
JP49041991 A2	19740419	JP19730050551	19730507
US3848494 A	19741119	US19720313163	19721207
US3908500 A	19750930	US19740499268	19740821

Probable Assignee: DAYTON PROGRESS CORP

Assignee(s):(std)**:** DAYTON PROGRESS CORP

Assignee(s): DAYTON PROGRESS CORP DAYTON OHIO V ST A ; DAYTON PROGRESS CORP US ; DAYTON PROGRESS INT CORP ; GARGRAVE ROBERT J ; HOLIGA LUDOMIL A ; PCS CO ; WACHOVIA BANK NATIONAL ASSOCIATION ADMINISTRATI AS ; WACHOVIA BANK NATIONAL ASSOCIATION ADMINISTRATIVE ; WACHOVIA BANK NATIONAL ASSOCIATION ADMINISTRATIVE AGENT AS ; WACHOVIA BANK NATIONAL ASSOCIATION AS ADMINISTRATI

Inventor(s):(std)**:** GARGRAVE ROBERT J ; HOLIGA LUDOMIL A ; HOLIGA L ; GARGRAVE R

Inventor(s): GARGRAVE R US ; HOLIGA LUDOMIL A DAYTON OHIO V ST A ; ROBERT J GARGRAVE ; LUDOMIL A HOLIGA ; HOLIGA L US

International class (IPC 8–9): B21D37/02 B21D37/04 B21D37/14 B26F1/00 B30B15/02 (Advanced/Invention); B21D37/00 B21D37/04 B21D37/14 B26F1/00 B30B15/02 (Core/Invention)

International class (IPC 1–7): B21D37/02 B21D37/04 B21D37/14 B26D7/06 B26D7/26 B26F B30B15/02 B30B15/04

CPC: Y10S100/918 B30B15/028 B21D37/14 B30B15/02 Y10T83/2092 Y10T83/8748 Y10T83/9473 Y10T83/97 Y10T83/9486

European class: B21D37/14 B30B15/02 B30B15/02D

US class: 100/18 100/918 206/349 206/386 76/107.8 83/10.9 83/109 83/563 83/698.71 83/699.41 83/700 83/701

Classification Explorer

Cited documents: US3554060 A, US3495495 A, US3327575 A, US3296905 A, US3281343 A, US3062083 A, US2504642 A, US2395083 A, US1801490 A, JP46007668 A2,

Forward Citations: WO16054731, WO11030022, WO09030699, US9414704, US8820200, US8496458, US7980162, US7980112, US7914729, US7171883, US7024910, US6848290, US6532783, US6269723, US6134938, US6058758, US5365767, US5261264, US5001922, US4790739, US4698894, US4611483, US4587830, US4371369, US4143574, US4086837, US3948129, US2015089989, US2010189536, US2010183757, US2008210068, US2008202190, US2008105098, US2005097938, US2004069041, US2001008099, KR101044927, FR2949712, FR2949691, FR2948887, EP2033722, EP1162009, EP1162009, EP0648618, EP0437978, EP0111570, DE4010747, DE3432671, DE2544711, DE20216772, DE19612242, DE102008049043, CZ303237, CN105599044, CN104943049, CN104552459, CN104128496, CN104128496, CN103737964, CN102497976, CN102497976, AU571538, AU2007317791,

Abstract:
Source: US3848494A Apparatus equipping a press for a standardized use of die sets and having the following distinctive characteristics. Adapter elements simplify installation and setting up of die sets in a press and include an interchangeable platen replaceable in the press in lieu of replacing bolsters or a variety of rail spacers. Preferred embodiments of the invention feature the use of a single thrust plate which is capable of receiving all standard die sizes for a press. Novel centering structure effects a precision location of the die and precludes relative movement thereof, including rotary or angular turning motion. Preassembled dies are contemplated, substituted as a unit in a press. Handler devices associated with the die set have an alternative use as a means to aid maneuvering of the die set and as a means to lock it against opening and closing movements during storage and handling.

0) DE7420791U – BUREAU

36) Family number: 17081138 (DE7420791U) © PatBase

Title: BUREAU

Priority: DE19740011293U 19740330 DE19740020791U 19740619

Family:

Publication number	Publication date	Application number	Application date
AT221375 A	19770615	AT19750002213	19750321
AT341709 B	19780227	AT19750002213	19750321
BE827233 A1	19750716	BE19756044967	19750326
CH597793 A	19780414	CH19750003951	19750327
DE7411293 U	19740822	DE19740111293U	19740330
DE7420791 U	19741010	DE19740020791U	19740619
DK127175 A	19751001	DK19750001271	19750325
FR2265301 A1	19751024	FR19750010186	19750325
FR2265301 B3	19771216	FR19750010186	19750325
LU72166 A	19750820	LU19750072166	19750328
NL7503142 A	19751002	NL19750003142	19750317

Probable Assignee: MOLL H AND K OHG

Assignee(s):(std)**:** H AND K MOLL OHG FABRIK FUER BUE ; MOLL FABRIK BURO WOHNMOBEL ; H AND K MOLL OHG FABRIK FUR BURO ; H AND K MOLL OHG FABRIK FUR BURO U WOHNMOBEL ; MOLL H AND K FABRIK F BUERO U ; MOLL H AND K OHG ; MOLL H AND K FABRIK F BUERO U WOHNMOEBEL ; H AND K MOLL OHG FABRIK F BUE ; H AND K MOLL OHG FABRIK F BUERO U WOHNMOEB ; MOLL H AND K FABRIK FUER BUERO U

Assignee(s): H AND K MOLL OHG FABRIK F BUERO U WOHNMOEBEL TE GRUIBINGEN BONDSREPUBLIEK DUITSLAND ; MOLL H AND K FABRIK FUER BUERO UND WOHNMOEBEL ; H AND K MOLL OHG FABRIK FUR BURO UND WOHNMOBEL ; H AND K MOLL OHG FABRIK FUER BUERO UND WOHNMOEBE ; MOLL H AND K ; MOLL FABRIK BURO WOHNMOBEL DT ; H AND K MOLL OHG FABRIK FUER BUERO UND WOHNMOEBEL TE GRUIBINGEN BONDSREPUBLIEK DUITSLAND

Inventor(s):(std)**:** HELLMUTH MOLL ; MOLL H ; MOLL HELLMUTH

International class (IPC 8–9)**:** A47B17/00 A47B17/02 A47B41/02 A47B88/20 (Advanced/Invention); A47B17/00 A47B41/00 A47B88/00 (Core/Invention)

International class (IPC 1–7)**:** A47B17/00 A47B17/03 A47B17/06 A47B21/00 A47B41/00 A47B41/02

CPC: A47B88/90 A47B17/00 A47B17/02 A47B2200/0043

European class: A47B17/00 A47B17/02 A47B88/20 K47B200/00C20C

Classification Explorer

Forward Citations: US7520816, FR2514237, EP0116374, EP0116374, DE3828788,

Abstract:
Source: DE7420791U (Claim 1) 1. Schreibtisch mit zwei in Abstand zueinander angeordneten Fussteilen, zwischen denen ein an ihnen angebrachter Korpus angeordnet ist, der in eine eine Schreibpl and tte aufweisende und ueber seine gesamte Laenge verlaufende Vorderpartie und in eine sich an die Vorderpartie nach hinten anschliessende Hinterpartie unterteilt ist, die mindestens ein Fach auf– weist, dem eine in mehreren Stellungen feststellbare Mehrzweckplatte zugeordnet ist, die in ihrer Schliessstellung die Oberseite des Faches verschliesst, dadurch gekennzeichnet, dass die Hinterpartie (9) des Korpus (3) ein an seiner der Vorderpartie (8) abgewandten Rueckseite offenes Fach besitzt, dessen Mehrzweckplatte sowohl an der Rueckseite des Faches zum teilweisen Verschliessen der Rueckseite mittels einer Halteeinrichtung feststellbar ist als auch mittels einer Schraegstelleinrichtung an der oberseite des Faches, wie 4 an sich bekannt, in einer Schraegstellung feststellbar ist, in der die Mehrzweckplatte mic der Schrsibplette einen Winkel zum Anlegen von Gegenstaenden bildet, oder dass die Hinterpartie (9) zwei jeweils an ihrer Rueckseite (14 bzw. 15) offene Faecher (lo bzw. 11) besitzt, von seven dom als Taschenfach ausgebildeten ersten Fach (0) eine erste Mebrzweckplatte (12 zugeordnet ist, dit mittels der Halteeinrichtung an der Rueckseite (4) des ersten Faches (lao) feststellbar ist und von denen dem als Ablagefach ausgebildeten zweiter Fach (11) eine zweite Mehrzweckplatte c2– (13) zugeordnet ist, die mittels der

Schraegstelleinrichtung in einer Schraegstellung feststellbar ist.

0) US4114619A – AUTOMATIC INJECTING APPARATUS

37) Family number: 2533863 (US4114619A) © PatBase

Title: Automatic injecting apparatus

Priority: AU19750086930 19751125 DE19762609287 19760304 DE19803019589 19800520 GB19740056007 19750530 IN1978CA01237 19781116 IN1976CA00223 19760207 US19820405559 19820806 US19820405560 19820806 US19770793951 19770505 US19780933136 19780814 US19750634741 19751121 IN1978CA01238 19781116 US19810241378 19810226

Family:

Publication number	Publication date	Application number	Application date
AU197586930 A1	19770707	AU19750086930	19751125
AU510272 B2	19800619	AU19750086930	19751125
BE835626 A1	19760316	BE19750835626	19751117
DD123057 C	19761120	DD19750189500	19751117
DE2551991 A1	19760729	DE19752551991	19751117
DE2551992 A1	19760805	DE19752551992	19751117
DE2551993 A1	19760715	DE19752551993	19751117
DE2609287 A1	19770915	DE19762609287	19760304
DE3019589 A1	19810115	DE19803019589	19800520
DE3205827 A1	19830707	DE19823205827	19820215
ES443934 A1	19771216	ES19750443934	19751229
FR2291772 A3	19760618	FR19750035891	19751120
FR2291772 B3	19761210	FR19750035891	19751120
FR2292488 A1	19760625	FR19750035892	19751120
GB1494324 A	19771207	GB19740049990	19741119
GB1494646 A	19771207	GB19740049989	19741119
GB1517289 A	19780712	GB19740056007	19750530
IN146063 A	19790217	IN1976CA00223	19760207
IN146064 A	19790217	IN1976CA00225	19760207
IN148331 A	19810117	IN1978CA01237	19781116
IN148332 A	19810117	IN1978CA01238	19781116
JP1360005 C3	19870130	JP19750139689	19751119
JP51073790 A2	19760625	JP19750139689	19751119
JP61025383 B4	19860616	JP19750139689	19751119
SE410705 B	19791029	SE19750012940	19751118
SE410705 C	19800207	SE19750012940	19751118
SE7512940 A	19760520	SE19750012940	19751118
SE7512941 A	19760520	SE19750012941	19751118
SE7512941 L	19760520	SE19750012941	19751118
US4114619 A	19780919	US19770793951	19770505
US4169474 A	19791002	US19770813494	19770707
US4284077 A	19810818	US19790093615	19791109
US4393870 A	19830719	US19810241378	19810226
US4573970 A	19860304	US19820405560	19820806
US4600403 A	19860715	US19820405559	19820806
ZA7507265 A	19761124	ZA19750007265	19751119

Probable Assignee: WAGNER W DR

Assignee(s):(std)**:** WAGNER W ; WAGNER W DR ; WAGNER WOLFGANG ; WAGNER WOLFGANG DR MED

Assignee(s):	W WAGNER ; WAGNER WOLFGANG DR ; WAGNER WOLGANG ; WOLFGANG WAGNER ; WAGNER WOLFGANG DRMED ; WAGNER DR MED WOLFGANG ; DR MED WOLGANG WAGNER ; BORUFUGANGU BAAGUNAA ; BORUFUGANGU UAAGUNAA ; DR MED WAGNER WOLGANG ; DR MED WOLFGANG WAGNER
Inventor(s):(std)	WAGNER WOLFGANG DR ; WAGNER W ; WAGNER WOLFGANG ; WAGNER WOLFGANG DR MED ; WOLFGANG WAGNER
Inventor(s):	WAGNER WOLFGANG DRMED ; WOLGANG WAGNER ; DR MED WAGNER WOLGANG ; WAGNER DR MED WOLFGANG ; W WAGNER ; UORUFUGANGU UAAGUNAA ; DR WOLFGANG WAGNER ; DR MED WOLFGANG WAGNER ; BORUFUGANGU UAAGUNAA
Agent(s):	CL
International class (IPC 8–9):	A61J1/00 A61J1/05 A61J3/00 A61M1/00 A61M31/00 A61M5/00 A61M5/148 A61M5/178 A61M5/20 A61M5/315 A61M5/32 A61M5/42 (Advanced/Invention) ; A61M5/00 A61M5/20 A61M5/42 (Advanced/Non–invention) ; A61J1/00 A61J1/05 A61J3/00 A61M1/00 A61M31/00 A61M5/00 A61M5/145 A61M5/178 A61M5/20 A61M5/315 A61M5/32 A61M5/42 (Core/Invention) ; A61M5/00 A61M5/20 A61M5/42 (Core/Non–invention)
International class (IPC 1–7):	A61B17/34 A61J1/00 A61J3/00 A61J7/00 A61M1/00 A61M37/00 A61M5/00 A61M5/14 A61M5/18 A61M5/20 A61M5/32 G01F11/02
CPC:	A61M5/002 A61M5/2033 A61M5/14236 A61M5/14526 A61M5/1454 A61M5/14593 A61M5/16827 A61M5/3287 A61M5/204 A61M5/31525 A61M5/31548 A61M5/31555 A61M5/3156 A61M5/3158 A61M5/31591 A61M2005/31506 A61M5/24 A61M5/31553 A61J1/05 A61M5/1486 A61M5/20 A61M5/425
European class:	A61J1/00T A61J1/05 A61M5/142G10 A61M5/145B2 A61M5/145B4 A61M5/145D2 A61M5/148B2 A61M5/168A11 A61M5/20 A61M5/20D A61M5/315D A61M5/315E2B4 A61M5/315F2A1 A61M5/315F3A A61M5/32E A61M5/42C K61M5/00P K61M5/20C K61M5/315B1C2 K61M5/315E2B K61M5/315E2B2 K61M5/42C
US class:	128/215 128/272.3 604/115 604/117 604/135 604/137 604/186 604/208 604/407 D25/016 D25/16
Classification Explorer	
Cited documents:	US4393870 A, US4299219 A, US4284077 A, US4139008 A, US4114619 A, US3949746 A, US3865274 A, US3850348 A, US3841160 A, US3727614 A, US3521633 A, US3433224 A, US3353537 A, US3122138 A, US2960087 A, US2821195 A, US2743723 A, US2632445 A, US1934046 A, GB1335797 A, GB1198214 A, GB1005869 A, DE7411480 U, DE7026636 U, DE596981 A, DE352141 A, DE2442689 A1, DE1795815 U, DE1791094 A1, DE1700899 U, DE1566635 A1, DE1491840 A1, DE1274282 B, DE1213958 B, DE1099132 B, DE1081193 B, DE1080267 B, DE1058222 B,
Forward Citations:	WO9921511, WO9515783, WO9423777, WO9215348, WO8400895, WO8202835, WO17088066, WO15153900, WO12008842, WO10077596, WO10016635, WO08131440, WO07015247, WO07015247, WO03097118, WO03097118, WO0187389, WO0141864, US9586003, US9550030, US9517307, US9474869, US9474865, US9452268, US9327086, US9089655, US9044544, US9022022, US8986243, US8939943, US8934207, US8911109, US8876764, US8795229, US8764702, US8758300, US8627816, US8597230, US8571648, US8556861, US8556855, US8556854, US8480621, US8469545, US8376998, US8353874, US8323186, US8257299, US8197087, US8157761, US8083709, US7985216, US7842029, US7833170, US7771374, US7762965, US7762964, US7740651, US7740600, US7736328, US7297152, US7124987, US7124987, US7060054, US7018356, US6994691, US6971999, US6932789, US6824526, US6817988, US6817986, US6755220, US6699176, US6689092, US6641527, US6613011, US6613010, US6565533, US6500239, US6478656, US6349232, US6048337, US5931814, US5925021, US5820602, US5728074, US5688243, US5593390, US5545144, US5300079, US5277334, US5269754, US5071412, US4941883, US4723940, US4664651, US4600403, US4541829, US4421508, US4403609, US4393870, US4384579, US4284077, US2015335397, US2013215546, US2011230833, US2011224609, US2010229366, US2010137831, US2010130920, US2010044538, US2009259143, US2009198181, US2009171162, US2009093864, US2009069795, US2009012459, US2009012458, US2009012455, US2009012451, US2009012434, US2007179482, US2006189964, US2006129065, US2005251118, US2005251117, US2005192530, US2005103808, US2004260324, US2004147901, US2003229312, US2003171716, US2003100861, US2003093032, US2002188419, US2002065479, KR100627249, JP63020764, JP62101226, GB2438518, GB2438518, FR2672803, EP2907535, EP2650033, EP1516679, EP1354609, EP1329235, EP1161961, EP0844857, EP0841035, EP0838232, EP0709104, EP0477562, EP0282143, EP0148692, EP0103664, DE4230774, DE3713846, DE2852073, DE19519281, DE10101932,

CZ301175, CN105670906, CN104165583, CN101869734, BG65012, AU782964, AU782610, AU680075,

Abstract:
Source: US4114619A An automatic injecting apparatus has a housing formed with a recess having an annular rim and provided with a hypodermic−holding case in which a hypodermic syringe can be held, with the needle tip of the syringe projecting into the recess and lying just inward of the rim thereof. The housing is formed with a suction chamber having a piston and connected via a passage to the recess. A spring urges this piston away from the passage so as normally to aspirate air from the recess and, when the rim is snugly engaged against the skin of a person to be injected, to pull the skin of a person to be injected into piercing contact with the needle tip. Similarly a spring−loaded mechanism is provided for pushing the plunger down. Neither the spring−operated mechanism for the syringe plunger nor the piston can be displaced, however, until detecting means provided around the rim ascertains that the rim is firmly seated against the skin of the person to be injected. Only then can the device automatically function to perform a hypodermic injection.

0) US3996457A – ELECTRONIC ANALOG COMPUTERS

38) Family number: 1349460 (US3996457A) © PatBase

Title:	Electronic analog computers
Priority:	US19740525511 19741120

Family:

Publication number	Publication date	Application number	Application date
US3996457 A	19761207	US19740525511	19741120

Probable Assignee:	GABRIEL EDWIN Z
Assignee(s):(std)	GABRIEL EDWIN Z
Inventor(s):(std)	GABRIEL EDWIN Z
International class (IPC 8–9)	G06G7/06 (Advanced/Invention); G06G7/00 (Core/Invention)
International class (IPC 1–7)	G06G7/06 G06G7/48 G09B23/02
CPC:	G06G7/06
European class:	G06G7/06
US class:	235/184 708/800 708/804
Classification Explorer	
Cited documents:	US3728534 A, US3587055 A, US3540135 A, US3309793 A, US3278736 A,
Forward Citations:	WO12066110, US8824515, US6818984, US4734879, US4315320, US4217702, US4158234, US2004119160, CN103209799, CN103209799,

Abstract:
Source: US3996457A A compact, self–contained, light–weight, easily programmable, desk–top analog computer, capable of being perpetually updated as new components and improved circuits are available. Unlike other such computers, the program panel is a combination patching, switching and electronic module board and includes all of the coefficient–setting potentiometers, voltmeters, function and mode control switches, and spare terminal strips for additional passive and active analog and digital logic circuits. Because of its small size and low cost, it could be more readily used as an aid to motivate high school and college students to study high mathematics, physics, electronics and automatic control systems. Unlike the pocket–sized digital computers, this computer provides both transient and steady–state solutions to differential equations which can be observed on an oscilloscope or graphically plotted on an x–y recorder receiving signals from computer modules. The reduction in size and weight is accomplished with the aid of integrated linear and nonlinear circuits and other subminiature components. Thus, the analog computing circuits for integrating, summing, differentiation, limiting, multiplication and division are simplified. Simplification in programming a differential equation and/or implementation by direct simulation from a functional block diagram is accomplished through a novel arrangement of parts, components, switches, jacks and diagrams to enable even the beginner to make interconnections rapidly and without the confusion sometimes associated with other analog and hybrid computers. Amplifiers may be zeroed for null voltage offset as on other analog computers. The mode controls include reset, hold, and compute as on other analog computers. Opportunity exists for introducing passive compensation or filter circuits for enhancing the stability of a control system more quickly and without tying up any operational amplifiers. This is not easily done on other analog computers. To further expedite implementing a problem on the computer panel, the user has a choice between using patch cords, toggle switches or a combination of the two, a feature not found on other analog computers. A feature worthy of merit is that none of the components need be soldered. Therefore, each is easily replaceable by others. In addition, the final preferred embodiment has been so designed that even a blind person can program a problem easily by feel. Because of the combination of visual and audio sound effects, solutions to differential equations will have added meaning to the student in mathematics, electronics and physics, contributing to his retention of objectives and purposes of the study.

0) US4142784A – PAD FOR SPECTACLE FRAMES

39) Family number: 2466263 (US4142784A) © PatBase

Title: Pad for spectacle frames

Priority: DE19752545683 19751011 DE19762613151 19760327 GB19760041962 19761008 JP19770037288U 19770326

Family:

Publication number	Publication date	Application number	Application date
DE2545683 A1	19770421	DE19752545683	19751011
DE2545683 C2	19920206	DE19752545683	19751011
DE2545683 C3	19920206	DE19752545683	19751011
DE2613151 A1	19771006	DE19762613151	19760327
DE2613151 C2	19840112	DE19762613151	19760327
FR2335863 A1	19770715	FR19760029812	19761004
FR2335863 B1	19820702	FR19760029812	19761004
FR2345740 A2	19771021	FR19770008994	19770325
FR2345740 B2	19820827	FR19770008994	19770325
GB1525186 A	19780920	GB19760041962	19761008
GB1537602 A	19790104	GB19770011396	19770317
HK54581 A	19811113	HK19810000545	19811105
IT1107390 A	19851125	IT19760083458	19761008
IT1117745 A	19860217	IT19770083355	19770325
JP52052954 U1	19770415	JP19750180609U	19751230
JP52131037 U1	19771005	JP19770037288U	19770326
JP57028162 Y1	19820619	JP19770037288U	19770326
JP57028162 Y2	19820619	JP19770037288U	19770326
US4142784 A	19790306	US19770781791	19770328

Probable Assignee: MARWITZ AND HAUSNER

Assignee(s):(std)**:** BONONI WALTER H ; MARWITZ AND HAUSNER

Assignee(s): MARWITZ ET HAUSER ; REID PLASTICS INC ; MARWITZ AND HAUSER ; MARWITZ AND HAUSER 7000 STUTTGART DE ; MARWITZ AND HAUSER GMBH ; MARWITZ AND HAUSER GMBH 7000 STUTTGART 1 DORNHALDE

Inventor(s):(std)**:** BONONI WALTER H

Inventor(s): H BONONI WALTER ; WALTER H BONONI

International class (IPC 8–9)**:** G02C5/12 (Advanced/Invention)

International class (IPC 1–7)**:** G02C5/00 G02C5/12

CPC: G02C5/126

European class: G02C5/12B4 G02C5/12H

US class: 351/136 351/87

Classification Explorer

Cited documents: US3584939 A, US3476468 A, US3233956 A, US3189913 A, US2991694 A, US2774279 A, US2561403 A, US2370802 A, US2259081 A, JP50007056 B4, JP48091949 B4, JP35023353 Y1, JP35018964 Y1, JP30009853 Y1, JP25001617 Y1, GB518938 A, GB511004 A, FR872209 A, FR1112947 A, DE6908277 U, DE1943653 U, DE1846012 U, DE1795953 U, DE1127108 B, DE1122736 B,

Forward Citations: US5345616, US5266978, US4802754, US4783163, US4688272, US4302080, US4243306, FR2812091, FR2568383, FR2547069, FR2527347, FR2458378, FR2435061, FR2419526, EP0285684, EP0240790, EP0179187, EP0179187,

DE4019085, DE3609352, DE3439299, DE3345992, DE3319827, DE3212686, DE2819141, DE2738777,

Abstract:
Source: US4142784A A pad of homogeneous material has a closed, substantially smooth surface. It is age−resistant, wear−resistant and agreeable on the skin. It can be permanently connected to the material used for spectacle frames, made of transparent to opaque material and made with a lustrous surface. It has a Shore D hardness of 10 to 30 measured in accordance with DIN 53 505 and can be manufactured by injection molding.

0) FR2332430A – ROTARY FUEL INJECTION PUMP – HAS AUTOMATIC PUMP...

40) Family number: 2355150 (FR2332430A) © PatBase

Title: ROTARY FUEL INJECTION PUMP – HAS AUTOMATIC PUMP PRESSURE DEPENDANT COLD START WITH ADDITIONAL FUEL VOL. DEPENDANT ON FUEL VISCOSITY

Priority: GB19750047736 19751120

Family:

Publication number	Publication date	Application number	Application date
BR7604389 A	19780117	BR19760004389	19760705
DE2630385 A1	19770526	DE19762630385	19760706
ES450972 A1	19770916	ES19760450972	19760825
FR2332430 A1	19770617	FR19760020592	19760706
IT1067060 A	19850312	IT19760025034	19760705
JP52064530 A2	19770528	JP19760080321	19760706

Probable Assignee: LUCAS INDUSTRIES LTD

Assignee(s):(std)**:** LUCAS IND LTD ; LUCAS INDUSTRIES LTD

Assignee(s): LUCAS INDUSTRIES LIMITED

Inventor(s):(std)**:** ADEY A ; ADEY ANTHONY JOHN ; ANTONII JIYON ADEII ; DORIAN FUAARAA MOOBUREE ; MORIWAKI SABURO ; MOWBRAY D ; MOWBRAY DORIAN FARRAR

Inventor(s): FARRAR MOWBRAY DORIAN ; JOHN ADEY ANTHONY

International class (IPC 8–9): F02M41/14 (Advanced/Invention); F02M41/08 (Core/Invention)

International class (IPC 1–7): F02D1/02 F02M41/06 F02M41/14 F02M59/00 F02M59/42

CPC: F02M41/1411

European class: F02M41/14B2

Classification Explorer

Forward Citations: US4896645, US4275865, JP56020756, FR2462570, FR2432618,

Abstract:
Source: FR2332430A (Claim 1) 1.– Appareil de pompage de combustible pour l'rlimentation en combustible de moteurs a combustion interne du type comportant une pompe a injection comprenant un plongeur anime d'un mouvement alternatif a l'interieur d'un alesage, une came qui actionne le plongeur dans une direction pour refouler le combustible de l'alesage a travers un orifice de sortie, des moyens pour introduire le combustible dans ledit alesage quand le plongeur est deplace dans l'autre direction, une butee limitant la course du plongeur dans ladite autre direction et limitant ainsi la quantite maximale de combustible qui peut etre refoulee dudit alesage au moyen de passages communiquant avec ledit orifice de sortie, appareil caracterise par le fait qui il comprend un deuxieme plongeur situe dans un autre alesage, ledit deuxieme plongeur etant actionne par ladite came, un passage faisant communiquer lesdits alesages entre eux et une soupape regulant ltecon– lement du combustible a travers ledit passage, ladite soupape pouvant prendre une position telle qu' elle permet 1' ecoulement du combustible entre lesdits alesages quand il est necessaire de fournir audit orifice de sortie une quantite de combustible plus grande que celle qui peut etre refoulee par ledit premier plongeur. The rotary distributor fuel pump has tow pump plungers moved towards each other by a cam ring when the rotor is turned. To provide an over rich fuel injection for cold start purposes a second cross bore contains an additional pair of plungers, actuated by the same shoes (29) as the main plungers. The plunger cross bore are joined or separated by a sprung valve dependent upon delivery pump pressure. When the engine is stationary, the valve permits fuel flow to both plunger sets. An increase in engine speed causes the valve spring pressure to be overcome to interrupt the additional fuel injection. In order to limit the additional fuel injection when the engine is already warm, the auxiliary plungers (37) have a greater diametrical play than the main plungers.

0) US4086640A – PARTITIONABLE PORTABLE FLEXIBLE DISK PACK

41) Family number: 30026714 (US4086640A) © PatBase

Title: Partitionable portable flexible disk pack

Priority:

GB19770028033 19770705 US19760711628 19760804 US19760711647 19760804
US19760720905 19760907 US19770864011 19771223 US19760720910 19760907
US19770792592 19770502 US19780922026 19780705 US19770792589 19770502
US19770766288 19770207 US19780922024 19780705 US19780890799 19780327
US19790049553 19790618 US19800124750 19800226 US19780960267 19781106
US19800147253 19800506 US19810274791 19810618 US19820447816 19821208
US19780947555 19781002 US19790045718 19790605 US19810228058 19810126
US19820433180 19821006 US19810292072 19810812 US19790092728 19791109
US19800155366 19800602

Family:

Publication number	Publication date	Application number	Application date
AU197842350 A1	19790628	AU19780042350	19781208
AU512038 B1	19800918	AU19790045017	19790313
BE874823 A1	19790702	BE19790194004	19790314
BR7808234 A	19790814	BR19780008234	19781214
BR7901575 A	19791016	BR19790001575	19790314
DE2853933 A1	19790628	DE19782853933	19781214
DE2910400 A1	19791011	DE19792910400	19790316
FR2412904 A1	19790720	FR19780033759	19781129
FR2421437 A1	19791026	FR19790005805	19790306
GB1569851 A	19800625	GB19770028033	19770705
GB1569852 A	19800625	GB19770028048	19770705
GB1569857 A	19800625	GB19770033443	19770705
GB1569858 A	19800625	GB19770033444	19770705
GB2011695 A1	19790711	GB19780046351	19781128
GB2011695 B2	19820324	GB19780046351	19781128
GB2017378 A1	19791003	GB19790006983	19790228
GB2017378 B2	19820623	GB19790006983	19790228
IT1101636 A	19851007	IT19780030660	19781206
IT1110401 A	19851223	IT19790020834	19790308
IT7830660 A0	19781206	IT19780030660	19781206
IT7920834 A0	19790308	IT19790020834	19790308
JP54116909 A2	19790911	JP19780152990	19781209
JP54131911 A2	19791013	JP19790029834	19790313
NL7812440 A	19790626	NL19780012440	19781221
NL7901743 A	19791001	NL19790001743	19790305
PL214140 A1	19800102	PL19790214140	19790315
SE7812679 A	19790624	SE19780012679	19781208
SE7812679 L	19790624	SE19780012679	19781208
US4086640 A	19780425	US19760711647	19760804
US4086641 A	19780425	US19770766288	19770207
US4129891 A	19781212	US19770792589	19770502
US4134143 A	19790109	US19760711628	19760804
US4136368 A	19790123	US19760720905	19760907
US4152739 A	19790501	US19780922024	19780705
US4167029 A	19790904	US19780890799	19780327
US4214286 A	19800722	US19780947555	19781002

US4291349 A	19810922	US19790045718	19790605	
US4425592 A	19840110	US19810228058	19810126	
US4458277 A	19840703	US19810292072	19810812	
US4514778 A	19850430	US19820433180	19821006	
US4568991 A	19860204	US19820447816	19821208	
US4670803 A	19870602	US19800155366	19800602	
US4713705 A	19871215	US19810274791	19810618	

Probable Assignee: UNISYS CORP

Assignee(s):(std)**:** BURROUGHS CORP ; BURROUGHS CORP US ; UNISYS CORP ; BURROUGHS TE DETROIT MICHIGAN VER ST V CORP

Assignee(s): BURROUGHS TE DETROIT MICHIGAN VER ST V AM CORP ; CASE CORP

Inventor(s):(std)**:** UNDERWOOD RAGLE H ; RAGLE HERBERT UNDERWOOD ; RAGLE HERBERT U ; RAGLE H UNDERWOOD ; RAGLE H U ; RAGLE H ; HU RAGLE ; HERBERT UNDERWOOD RAGLE ; HAABAATO ANDAAUTSUDO REEGURU ; HAABAADO ANDAAUTSUDO REIGURU ; H U RAGLE ; DEMOSS DEAN US ; DEMOSS DEAN ; DEMOSS D ; DEIN DEMOSU ; DEIIN ERU DEIMOSU ; DEAN DEMOSS ; D DEMOSS ; DEMOSS DEAN L

Inventor(s): H UNDERWOOD RAGLE ; UNDERWOOD RAGLE HERBERT

International class (IPC 8–9): G11B17/02 G11B17/028 G11B17/03 G11B17/038 G11B17/30 G11B17/32 G11B23/033 G11B23/50 G11B5/54 G11B5/55 G11B5/82 (Advanced/Invention); G11B17/22 (Advanced/Non–invention); G11B17/02 G11B17/028 G11B17/32 G11B23/033 G11B23/50 G11B5/54 G11B5/55 G11B5/82 (Core/Invention)

International class (IPC 1–7): B03B4/00 B65H G06K G11B17/00 G11B17/02 G11B17/26 G11B17/32 G11B19/00 G11B23/02 G11B23/04 G11B25/04 G11B5/012 G11B5/016 G11B5/105 G11B5/54 G11B5/80 G11B5/82 G11B5/84

CPC: G11B5/54 G11B17/021 G11B17/0287 G11B17/038 G11B17/30 G11B5/5521 G11B23/0335 G11B23/505 G11B17/03 G11B17/32

European class: G11B17/028F G11B17/02D G11B17/03 G11B17/038 G11B17/30 G11B17/32 G11B23/033P G11B23/50D G11B5/54 G11B5/55D

US class: 209/613 360/128 360/130.2 360/130.34 360/133 360/137 360/98.02 360/98.03 360/99 G9B/005.181 G9B/017.006 G9B/017.008 G9B/017.009 G9B/017.012 G9B/017.060 G9B/17.006 G9B/17.008 G9B/17.009 G9B/17.012 G9B/17.06 G9B/17.061 G9B/23.023 G9B/23.098 G9B/5.181 G9B/5.187

Classification Explorer

Cited documents: US4191981 A, US4185311 A, US4167029 A, US4136368 A, US4134144 A, US4134143 A, US4129891 A, US4118746 A, US4086641 A, US4086640 A, US4085428 A, US4051541 A, US4019204 A, US4011591 A, US3994017 A, US3990109 A, US3969767 A, US3964104 A, US3961656 A, US3947885 A, US3940794 A, US3936880 A, US3931644 A, US3931640 A, US3867723 A, US3810243 A, US1360617 A, JP44020190 B4, FR2332591 A1, FR2331119 A1, FR2277408 A1, FR2277403 A1, DE2443985 A1,

Forward Citations: WO8806790, WO8101070, WO12076913, WO0058034, USRE35670, US9169085, US8351150, US7440232, US7133238, US7133238, US6341119, US6283303, US6018512, US5548454, US5189574, US4980818, US4823215, US4787006, US4769733, US4713705, US4707752, US4688127, US4670803, US4661875, US4652959, US4614984, US4568991, US4558386, US4549922, US4542426, US4514778, US4477889, US4475179, US4425592, US4417289, US4396964, US4389688, US4370688, US4352135, US4345285, US4330803, US4327386, US4315293, US4315290, US4306258, US4274119, US4250529, US4229774, US4208117, US4208116, US4151572, US2014158501, US2011128650, US2008130167, US2007158996, US2006041899, US2006039083, US2005095325, US2004205804, US2004184180, FR2681173, FR2421437, FR2412904,

Abstract:
Source: US4086640A Improved flexible disk storage media comprising a pack of flexible recording disks adapted for compact stacking in superposed registration. Each disk is hole–encoded to permit associated disk partitioning apparatus to provide automatic selective partitioning of the pack for selecting a desired disk for the performance of a recording and/or reproducing operation with respect to a surface thereof. Each multiple disk pack is removably contained in a protective jacket during partitioning and transducing operations. The jacket cooperates with automatic jacket–opening means so as to provide for convenient insertion and withdrawal of a disk pack while

permitting selective partitioning of the pack while contained in the jacket for the performance of a transducing operation on a selected disk in the pack.

0) DE2714386A1 – ANLAGE ZUR AUSGABE VON GELD UND WERTSACHEN MIT ...

42) Family number: 1643759 (DE2714386A1) © PatBase

Title: ANLAGE ZUR AUSGABE VON GELD UND WERTSACHEN MIT WERTSICHERUNG SAFE DEPOSIT SYSTEM FOR CURRENCY AND SMALL VALUABLES – HAS FULLY INTERLOCKED MECHANISM TO PROVIDE MAX. ACCESS SECURITY OF CONTENTS

Priority: DE19772714386 19770329

Family:

Publication number	Publication date	Application number	Application date
DE2714386 A1	19781005	DE19772714386	19770329
DE2714386 C2	19881222	DE19772714386	19770329

Probable Assignee: HIRSCHSON RICHARD

Assignee(s):(std)**:** HIRSCHSON RICHARD

Assignee(s): HIRSCHSON RICHARD 1000 BERLIN DE

Inventor(s):(std)**:** HIRSCHSON RICHARD

Inventor(s): HIRSCHSON RICHARD 1000 BERLIN DE

International class (IPC 8–9): G07D11/00 (Advanced/Invention); G07D11/00 (Core/Invention)

International class (IPC 1–7): E05G1/04 G07D1/00

CPC: G07D11/0003

European class: G07D11/00D

Classification Explorer

Cited documents: DE2512353, DE2246192,

Forward Citations: US7206763,

Abstract:
Source: DE2714386A1 P a t e n t a n s p r ue c h e 1 Anlage zur Ausgabe von Geld und ertsachen, welche in einer Vielzahl von Teilmengen in einer Vielzahl von abgeschlossenen Aufbewahrungsraeumen im Innern der Anlage gelagert sind, welche entweder in eine oeffnungslage bewegbar(z3. A high security system is designed for the storage of currency and other small valuables within safe deposit boxes within a secured area of a bank. The individual segments of a security box are built into a general housing that has a general lock mechanism running the length of the unit. Individual security devices are located in the region of the front cover. Interlocks to control access are provided by timers controlling the rotation of individual mechanical stops.

0) US4134144A – CARTRIDGE FOR MULTI–DISK PACK

43) Family number: 3876360 (US4134144A) © PatBase

Title: Cartridge for multi–disk pack

Priority: US19760711579 19760804 US19790001978 19790108 US19810230217 19810202

Family:

Publication number	Publication date	Application number	Application date
GB1569853 A	19800625	GB19770028968	19770711
GB1569863 A	19800625	GB19780047486	19770711
US4134144 A	19790109	US19760711579	19760804
US4417289 A	19831122	US19810230217	19810202

Probable Assignee: UNISYS CORP

Assignee(s):(std)**:** BURROUGHS CORP

Assignee(s): UNISYS CORP

Inventor(s):(std)**:** DEMOSS DEAN ; RAGLE HERBERT U ; DEMOSS DEAN L

International class(IPC 8–9)**:** G11B17/02 G11B17/03 G11B23/033 (Advanced/Invention); G11B17/02 G11B17/03 G11B23/033 (Core/Invention)

International class(IPC 1–7)**:** G11B23/02 G11B23/04 G11B25/04 G11B5/012

CPC: G11B17/021 G11B17/03 G11B23/0335

European class: G11B17/02D G11B17/03 G11B23/033P

US class: 360/133 360/98 360/98.02 360/98.03 360/99 G9B/17.008 G9B/17.009 G9B/23.023

Classification Explorer

Cited documents: US4152739 A, US4134144 A, US4134143 A, US3931644 A, US3931640 A, US3843967 A, US3668658 A, US1360617 A, DE2443985 A1,

Forward Citations: US7911776, US6658714, US6600312, US4823213, US4713705, US4539613, US4417289, US4208116, US2009073649,

Abstract:
Source: US4134144A An improved cartridge is described comprising a jacket especially adapted for containing a pack of flexible disks compactly stacked in superposed registration. Each disk is "hole–encoded" and the jacket cooperates with the pack to permit convenient insertion and withdrawal of a disk pack while also permitting selective partitioning of the pack as well as the performance of a transducing operation on a selected disk, all while contained within the jacket.

0) DE2930112A1 – VORRICHTUNG ZUR HERSTELLUNG VON VORHANGLAMELLEN...

44) Family number: 1779164 (DE2930112A1) © PatBase

Title:	VORRICHTUNG ZUR HERSTELLUNG VON VORHANGLAMELLEN VERTICAL WINDOW BLIND MFR. – CUTTING AND FOLDING WIDE AND NARROW POCKET AT ENDS OF PLASTIC STRIPS
Priority:	DE19792930112 19790725

Family:

Publication number	Publication date	Application number	Application date
DE2930112 A1	19800911	DE19792930112	19790725

Probable Assignee:	MFB NEUWERK MECH FENSTER
Assignee(s):(std):	MFB NEUWERK MECH FENSTER
Assignee(s):	MFB NEUWERK MECHANISCHE FENSTERBEHAENGE GMBH
Inventor(s):(std):	BENTHIN JOHANNES ; FRERS EHLERT
International class (IPC 8–9):	B26D7/27 E06B9/266 E06B9/36 (Advanced/Invention); B26D7/00 E06B9/26 (Core/Invention)
International class (IPC 1–7):	B29C24/00
CPC:	B26D7/27 E06B9/266 E06B9/36 E06B9/367
European class:	B26D7/27 E06B9/266 E06B9/36 E06B9/36F

Classification Explorer

Abstract:
Source: DE2930112A1 Patentanspriiche Vorrichtung zur Herstellung von Vorhanglamellen aus Bahnen eines flexiblen Materials, welche ein bewegliches Trennwerkzeug, Niederhalter fiir die Lamellenenden und Werkzeuge zur Bildung von Schlaufentaschen an den Lamellenenden aufweist, dadurch gekennzeichnet, dass die Werkzeuge zur Bildung der ScIllaufen– taschen aus zwei in einander entgegengesetztem Drehsinn schwenkbaren Faltbacken (13114)1 von denen eine (13) in Laengsrichtung der flahn (10) vor und eine (14) hinter dem Trennwerkzeug (11,12) angeordnet ist, wobei deren quer zur Laengsrich tung der Bahn (10) liegende Schwenk achsen (15,16) von der Trennlinie des Trennwerkzeuges (11112) einen Abstand aufweisen, der der Hoehe der Schlaufentaschen (2,3) etwa entspricht, 2 aus zwei Falischwertern (19,4), von denen je eines einer der beiden Falt backen (13,14) zugeordnet ist und mit seiner Faltkante in der Faltstellung unmittelbar an der Schwenkachse (15,16 greater than der Faltbacke (13,14) einen die Lamelle einschliessenden Spalt bildet, 3 und aus Werkzeugen zur Verbindung des zunickgefalteten Bahnendes mit der Bahn(10) 2. Window blinds of the vertical louvre type are produced from side strips of plastic material in a machine which completes a small loop fold at one end for the suspension hook and a large loop fold at the other end to act as a pocket for a weight. The machine produces a cut by a moving top cutter and a stationary bottom cutter. A wide fold–over jaw forms a loop over a withdrawable wide blade on one side of the cutters, and a narrow jaw forms a loop over a narrow blade on the other side. A welding then closes both folds into pockets. This provides a fully automatic mfr. of such blinds.

0) DE2950138A1 – ZU SELBSTTRAGENDEN, RAEUMLICHEN ODER FLAECHIGEN...

45) Family number: 1842333 (DE2950138A1) © PatBase

Title: ZU SELBSTTRAGENDEN, RAEUMLICHEN ODER FLAECHIGEN GEBILDEN ZUSAMMENFUEGBARE PLATTEN EINES PLATTENSYSTEMS CONSTRUCTIONAL PLATE SET FOR TRANSPORT CONTAINER – HAS PLATES IN DIFFERENT STANDARD SIZES WITH RECESSES IN EDGES FOR COUPLING MEMBERS

Priority: DE19792950138 19791213

Family:

Publication number	Publication date	Application number	Application date
DE2950138 A1	19810619	DE19792950138	19791213
DE2950138 C2	19851219	DE19792950138	19791213

Probable Assignee: KESSEL BERNHARD

Assignee(s):(std)**:** KESSEL BERNHARD

Assignee(s): KESSEL BERNHARD 8071 LENTING DE

Inventor(s):(std)**:** KESSEL BERNHARD

Inventor(s): KESSEL BERNHARD 8071 LENTING DE

International class(IPC 8–9)**:** B65D6/26 B65D88/52 (Advanced/Invention); B65D6/16 B65D88/00 (Core/Invention)

International class(IPC 1–7)**:** B65D6/00 B65D6/16 B65D7/24 F16S1/00

CPC: B65D88/528

European class: B65D88/52C1

Classification Explorer

Cited documents: DE2613784 A1, DE2102284 A1, DE1935072 A1, DE1803365 A1,

Forward Citations: US9693040, US9684078, US9671221, US9618620, US9602811, US6085477, DE4327504, DE4206498, DE3901515, DE3432860, DE19529929,

Abstract:
Source: DE2950138A1 Zu selbsttragenden, raeumlichen oder flaechigen Gebilden zusammenfuegbare Platten eines Plattensystems Paten tansprtlche Zu Zu selbsttragenden, raeumlichen oder flaechigen Gebilden zusammenfUgbare Platten eines Plattensystems, wobei die Platten mittels Kupplungselementen fuer aneinanderstossende Plattenrinder verbindbar sind, g e k e n n z e i c h n e t durch zu flaechigen Elementen wahlweiser Groesse ver bindbare Platten A, B, C und gegebenenfalls D in mindestens drei, vorzugsweise vier aufeinander abgestimmten, unter schiedlichen Abmessungen, wobei die Seitenlaengen der Plat ten A, B, C und D nach den Verhaeltnissen 1: 1, 2: 1, 2: 2 und 2: 3 gestaffelt sind, ausgehend von dar Seitenlaenge S der kleinsten quadratischen Platte A, durch in den Platten seitenraendern (6) in gleichmaessigen und auf die Seitenlaenge S der kleinsten quadratischen Platte A abgestimmten Zwi schenabstaenden versenkt ausgebildete Aufnahmevertiefungen (3, 3') fUr die darin formschlUssig festlegbaren Kupplungs elemente (9, 9', 11, 18, 18', 19) und durch langgestreckte Winkelstosselementen (13) fuer Winkelkupplungselemente (11,19), mit denen rechtwinklig aneinanderstossende flaechige Elemente zu quader– oder wuerfelfoermigen Behaeltern wahlweiser Groesse zusammensetzbar sind 2. The plates are for assembly into a self–supporting flat or three–dimensional structure, adjacent edges being secured together by coupling members. The plates are supplied in three and preferably four different standard sizes, their side lengths being to the proportions of 1:1, 2:1, 2:3 and 2:2, based on the side length (S) of the smallest square plate (A). At regular intervals in the plates edges are recesses (3), in which the coupling members positively engage. Oblong corner pieces are provided, to allow the plates to be assembled into square or rectangular containers of any desired size.

0) US4481500A – ELECTRODE FOR ELECTRIC ARC FURNACES

46) Family number: 17812394 (US4481500A) © PatBase

Title: Electrode for electric arc furnaces

Priority: CA19810390225 19811117 EP19800107523 19801202

Family:

Publication number	Publication date	Application number	Application date
AT22383 E	19861015	AT19800107523T	19801202
AU198177694 A1	19820610	AU19810077694	19811120
AU546162 B2	19850815	AU19810077694	19811120
CA1173482 A1	19840828	CA19810390225	19811117
DD208283 A5	19840328	DD19810235287	19811201
DE3071765 D1	19861023	DE19803071765	19801202
DK532781 A	19820603	DK19810005327	19811201
EP0053200 A1	19820609	EP19800107523	19801202
EP0053200 B1	19860917	EP19800107523	19801202
ES508108 A1	19821116	ES19810508108	19811201
ES8301088 A1	19830201	ES19810508108	19811201
FI813636 A	19820603	FI19810003636	19811117
FI813636 L	19820603	FI19810003636	19811117
GB2092418 A1	19820811	GB19810036351	19811202
GR77313 B	19840911	GR19810166642	19811127
HU192078 B	19870528	HU19810003541	19811126
IN155086 A	19841229	IN1981CA01319	19811124
JP57119493 A2	19820724	JP19810194313	19811202
KR830007888 A	19831107	KR19810004570	19811126
KR870000098 B1	19870210	KR19810004570	19811126
NO814093 A	19820603	NO19810004093	19811201
NZ199015 A	19850712	NZ19810199015	19811120
PL234059 A1	19820719	PL19810234059	19811202
PT74061 A	19811201	PT19810074061	19811130
PT74061 B	19830511	PT19810074061	19811130
SU1093266 A3	19840515	SU19813360407	19811202
TR21916 A	19851115	TR19810021916	19811201
US4481500 A	19841106	US19810326068	19811130
YU279781 A	19831031	YU19810002797	19811127
ZA8107978 A	19821027	ZA19810007978	19811117

Probable Assignee: ARC TECHNOLOGIES SYSTEMS LTD A CORP OF CAYMAN ISLA

Assignee(s):(std)**:** ARC TECH SYST LTD ; C CONRADTY NUERNBERG GMBH AND CO KG DE ; ARK TEKNOLODZHIZ SISTEMZ LTD KA MAHOB OCTPOBA PM ; NURNBERG C C GMBH AND CO KG ; CHIE KONRATEI NIYURUNBERUKU GM ; CONRADTY NUERNBERG ; CONRADTY NUERNBERG GMBH U CO K ; CONRADTY NURNBERG C GMBH AND CO

Assignee(s): CONRADTY NURNBERG C GMBH AND CO KG ; CHIE KONRATEI NIYURUNBERUKU GMBH UNTO CO KG ; CONRADTY NUERNBERG AND CO C ; ZOLLNER DIETER ; RITTMANN FRIEDRICH ; CONRADTY CLAUDIO ; C CONRADTY NURNBERG GMBH AND CO KG ; ARK TEKNOLODZHIZ SISTEMZ LTD KAOEMAHOBO OCTPOBA ; C CONRADTY NUERNBERG GMBH U CO KG DE ; ARC TECHNOLOGIES SYSTEMS LTD GB ; C CONRADTY NURNBERG GMBH AND CO GRUNTHAL 1 6 8505 ; ARK TEKNOLODZHIZ SISTEMZ LTD KAOEMAHOBO OCTPOBA OPMA ; ARC TECHNOLOGIES SYSTEMS LTD ; ARC TECHNOLOGIES SYSTEMS LTD A CORP OF CAYMAN ISLA ; C CONRADTY NURNBERG GMBH

Inventor(s):(std)	FURIIDORITSUHI RITSUTSUMAN ; KLAUDIO KONRADTI DE ; KONRADTI KLAUDIO ; KURAUJIO KONRATEI ; OBERING FRIEDRICH RITTMAN ; RITTMAN OBERING FRIEDRICH ; RITTMANN F ; RITTMANN FRIDRIKH ; RITTMANN FRIEDERICH ; RITTMANN FRIEDERICH DE ; RITTMANN FRIEDRICH ; RITTMANN FRIEDRICH DE ; RITTMANN OBERING FRIEDRICH ; TSELLNER DITER ; ZOELLNER D ; ZOELLNER DIETER DE ; ZOELLNER DIETER H ; ZOLLNER D ; ZOLLNER DIETER ; ZOLLNER DIETER DR ; ZOELLNER DIETER DR ; ZOELLNER DIETER ; CONRADTY C ; CONRADTY CLAUDIO ; CONRADTY CLAUDIO DE ; CONRADTY CLAUDIO DIPL ING ; CONRADTY DIPL ING CLAUDIO ; DEIITERU TSUERUNAA ; DIETER ZOELLNER ; DIPL ING CLAUDIO CONRADTY ; DITER TSELLNER DE ; DR DIETER ZOLLNER ; FRIDRIKH RITTMANN DE
Inventor(s):	FRIEDRICH RITTMANN ; CLAUDIO CONRADTY ; DIETER ZOLLNER
Agent(s):	SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; GOWLING LAFLEUR HENDERSON LLP
Designated states:	AT BE CH DE FR GB IT LI NL SE
International class (IPC 8–9):	H05B7/07 H05B7/08 H05B7/085 H05B7/101 H05B7/14 (Advanced/Invention)
International class (IPC 1–7):	C25B F27D H01R3/08 H05B7/06 H05B7/07 H05B7/08 H05B7/085 H05B7/101 H05B7/102 H05B7/14 H05B7/18
CPC:	H05B7/085 H05B7/101
European class:	H05B7/085 H05B7/101
US class:	373/92 373/93
Classification Explorer	
Cited documents:	US824153 A, US4145564 A, US3526699 A, US3293347 A, US3046319 A, FR877771 A, FR628050 A, FR480802 A, FR421991 A, FR2176546 A1, DE92811 A, DE322889 A, DE1440345 A1, DE1128581 B, DE1120038 B,
Forward Citations:	WO8707811, WO02062105, US4615036, KR101293870, EP0127568, EP0061612, DE102010048647,

Abstract:
Source: US4481500A The invention concerns an electrode for arc furnaces, especially for electrosteel production, comprising a metallic liquid−cooled upper shaft (1) and an exchangeable lower active portion (2) of self−consuming material, particularly graphite, whereby a securing means is provided which is electrically insulated against the current−conducting components (11) of the shaft (1) and said securing means detachably connects the shaft (1) with the active portion (2) as well as holding the contact surfaces of the active portion (23) pressed against the contact surfaces (14) of the current−conducting components (11) of said shaft. To further develop an electrode of this type, which also provides the possibility of rapid and simple disconnection or connection with respect to the shaft (1) and the active portion (2) with a simple design, especially of the area of the active portion on the connection side, the securing device is designed as a clamping means (40; 60) which takes direct effect on the upper end of the active portion (2) in such manner that the clamping force essentially pressure−loads the material of the active portion (2), whereby the physical properties of the material of the active portion (2) are so exploited that no complicated designs are required on the connection side for said active portion (2).

0) ES257740Y – PORTA–TARJETAS DE APARCAMIENTO

47) Family number: 16879468 (ES257740Y) © PatBase

Title: PORTA–TARJETAS DE APARCAMIENTO

Priority: ES19810257740U 19810415

Family:

Publication number	Publication date	Application number	Application date
ES257740 U	19811216	ES19810257740U	19810415
ES257740 Y	19821201	ES19810257740U	19810415

Probable Assignee: FERNANDEZ MUNOZ VICENTE

Assignee(s):(std)**:** FERNANDEZ MUNOZ VICENTE

International class (IPC 8–9): F16M13/00 (Advanced/Invention); F16M13/00 (Core/Invention)

International class (IPC 1–7): F16M13/00 F16M13/00

Classification Explorer

Abstract:
Source: ES257740U Porta–tarjetas de aparcamiento, caracterizado esencialmente porque el soporte propiamente dicho esta constituido por un plano monopieza que en su parte anterior presente en sentido de altura unos vaciados iguales entre si dispuestos en posicion vertical y que corresponden a los sectores impresos indicativos de los meses del ano, existiendo otros sectores circulares con perforaciones ciegas y/o abiertas que marcan los dias del mes, otras series asimismo en altura marcan las horas, en tanto que la ultima serie sirve con igual finalidad para los minutos y, en la parte inferior las perforaciones de mayor tamano actuan en las zonas impresas indicativas de anos con cuya disposicion se cubren las posibilidades de marcaje cronologico de periodos bienales, presentando este soporte general en su parte superior una ranura paralela a su borde transversal correspondiente y de ligera mayor anchura, que el del impreso de identificacion, el cual se aloja a efectos de retencion en dicho corte, quedando el mismo superpuesto en el plano y con el fin de establecer una perfecta coincidencia entre la impresion y los rebajes, esta prevista una flecha que indica una linea de fe o coincidencia, con lo cual las impresiones se corresponderan con los vaciados y por medio de lapicero o similar con la simple presion la rotura parcial del impreso marcara exactamente el dato elegido en todas sus variantes y posibilidades cronometricas. Parking card holder, essentially characterized in that the carrier itself is constituted by a single piece plane anteriorly present in approximately equal height sense emptied each arranged in vertical position and corresponding to the printed indicative sectors the months of the year, there other circular sectors with blind holes and / or marking open day of the month, other height series also mark the hours, while the last series serves the same purpose for minutes and, bottom larger perforations indicative act in printed areas whose disposition years with possibilities biennial marking chronological periods covered, this general support presenting in its upper part parallel to the corresponding transverse edge and of slightly greater width slot that of the printing of identification, which is housed within the meaning of retention in that court, being superimposed on the same plane and in order to establish a perfect match between print and recesses, is foreseen an arrow indicating a faith or coincidence line, which prints will correspond to the recesses and through pen or similar with the simple pressure the partial tear of the printed mark exactly the chosen data in all its forms and chronometric possibilities.

0) US4406155A – MEASURING APPARATUS FOR THE DETERMINATION OF TH...

48) Family number: 1877837 (US4406155A) © PatBase

Title: Measuring apparatus for the determination of the particulates content of exhaust gases

Priority: AT19800004584 19800911 JP19810144557 19810911

Family:

Publication number	Publication date	Application number	Application date
AT376299 B	19841025	AT19800004584	19800911
AT458480 A	19840315	AT19800004584	19800911
DE3175065 D1	19860911	DE19813175065	19810814
EP0048237 A2	19820324	EP19810890140	19810814
EP0048237 A3	19830622	EP19810890140	19810814
EP0048237 B1	19860806	EP19810890140	19810814
JP1237436 A2	19890921	JP19880310964	19881207
JP1583178 C3	19901022	JP19880310964	19881207
JP1596887 C3	19910128	JP19810144557	19810911
JP2009300 B4	19900301	JP19880310964	19881207
JP2019896 B4	19900507	JP19810144557	19810911
JP57082750 A2	19820524	JP19810144557	19810911
US4406155 A	19830927	US19810296834	19810827

Probable Assignee: LIST HANS

Assignee(s):(std)**:** LIST HANS ; LIST HANS DIPL ING DR

Assignee(s): LIST HANS DIPL ING DR DR H C ; HANSU RISUTO

Inventor(s):(std)**:** BURUUNO SHAHINAA ; BURUUNO SHIYAHINAA ; KRACHLER WALTER ; KRACHLER WALTER ING ; SCHACHNER BRUNO ; SCHACHNER BRUNO DIPL ING ; WARUTAA KURATSUHARAA

Designated states: CH DE FR GB IT LI SE

International class (IPC 8–9)**:** F01N7/00 G01N1/02 G01N1/22 G01N15/06 G01N21/47 G01N21/59 (Advanced/Invention); G01N1/24 (Advanced/Non–invention); F01N7/00 G01N1/02 G01N1/22 G01N15/06 G01N21/47 G01N21/59 (Core/Invention); G01N1/24 (Core/Non–invention)

International class (IPC 1–7)**:** F01N7/00 G01N1/02 G01N1/22 G01N1/24 G01N15/00 G01N15/06 G01N21/17 G01N21/47

CPC: G01N1/2205 G01N1/24 G01N15/0618 G01N2001/2223

European class: G01N1/22B1 G01N1/24B G01N15/06A3 S01N1/22B1 S01N1/22B9A S01N1/24

US class: 73/23.33 73/28

Classification Explorer

Cited documents: US4246788 A, US4245669 A, US3995494 A, US3817100 A, US3654801 A, JP53049666 U1, JP53038395 U1, FR1518172 A, DE1214024 B, AT322881 B,

Forward Citations: WO03065016, US7222517, US2004244582, US2004200265, JP59095251, FR2938920, DE102004025208, CN104062154, CN102445366,

Abstract:
Source: US4406155A The particulates content of exhaust gases is determined by a sampling device connected to the exhaust supply line. The particulates in the exhaust gases are deposited onto a gas–permeable filter material and the particulates determined by light reflected from the filter material. A constant differential exhaust gas pressure is maintained and a predetermined sample volume per time unit is metered to the filter material. The total cross–section of the exhaust–gas flow through the measuring device is maintained constant. The sampling is taken in short consecutive intervals at a rate such that the characteristics of dynamic changes in the particulates content of the exhaust gas can be determined.

0) FR2508228A – PROCEDE DE FABRICATION D'UN CLAVIER DE COMMANDE...

49) Family number: 7936132 (FR2508228A) © PatBase

Title: PROCEDE DE FABRICATION D'UN CLAVIER DE COMMANDE, ET CLAVIER DE COMMANDE OBTENU PAR CE PROCEDE KEYBOARD AND MFG. METHOD FOR OFFICE TELEPHONE TERMINAL – PROVIDES KEYS SET IN MAGNETIC PLATE AND USES MAGNETIC RESTORING FORCE FOR KEYS

Priority: FR19810012141 19810619

Family:

Publication number	Publication date	Application number	Application date
FR2508228 A1	19821224	FR19810012141	19810619
FR2508228 B1	19840323	FR19810012141	19810619

Probable Assignee: THOMSON CSF MAT TEL

Assignee(s):(std)**:** THOMSON CSF MAT TEL

Assignee(s): THOMSON CSF TELEPHONE

Inventor(s):(std)**:** PETIT JULIEN

Inventor(s): JULIEN PETIT

International class(IPC 8–9)**:** H01H11/00 H01H13/705 (Advanced/Invention); H01H11/00 H01H13/70 (Core/Invention)

International class(IPC 1–7)**:** H01H11/00 H01H13/70

CPC: H01H11/00 H01H13/705 H01H2221/04

European class: H01H11/00 H01H13/705 H01H13/70B2 T01H221/040

Classification Explorer

Cited documents: US3697711, US3190975, FR2454684, EP0036570, DE2253866,

Forward Citations: US5977888, FR2559614, EP0749138,

Abstract:
Source: FR2508228A L'INVENTION CONCERNE LES CLAVIERS DE COMMANDE DES DISPOSITIFS ELECTRONIQUES. ELLE CONSISTE POUR REALISER UN TEL CLAVIER, A PARTIR D'UNE PLANCHE DE TOLE QUE L'ON DECOUPE AUX DIMENSIONS VOULUES PUIS QUE L'ON POINCONNE POUR OBTENIR DES PERFORATIONS 202, 203 SITUEES AUX EMPLACEMENTS DES TOUCHES ET DES DIFFERENTS ORGANES ANNEXES, NOTAMMENT DES ENTRETOISES 203, DU CLAVIER. ON PROCEDE ENSUITE AU SURMOULAGE DANS CES PERFORATIONS DES GLISSIERES 304 DES BOUTONS, ET DES ENTRETOISES 313, 314 D'ASSEMBLAGE DES AUTRES ORGANES DU CLAVIER. CE SURMOULAGE PEUT SE FAIRE PAS A PAS, ELEMENT PAR ELEMENT OU D'UN SEUL BLOC. ON TERMINE PAR L'ASSEMBLAGE DES AUTRES ORGANES DU CLAVIER. ELLE PERMET DE REALISER DES CLAVIERS DE COMMANDE DE TERMINAUX TELEPHONIQUES, BUREAUTIQUES ET INFORMATIQUES. The plinth (201) of the keyboard is made of a magnetic metal. The keys (303) travel in square holes. The plinth has an array of holes for the keys, and smaller holes (315) which take spacer and support stems (313,314). The base of the assembly (316) carries a printed circuit card (319) which has metal contact pads underneath the keys. Depression of the keys allows the underside of the stem to bridge the contact pads on the printed circuit and thus to complete the key circuit. The keys travel in a sleeve section (304) which has shoulders (306,307) which allow it to clip into the edges of the hole. This is possible even if the tolerance on the dimensions of the hole is not high. A plastics or ceramic magnetic plate (311) is fixed to the lower part of the button stem and its attraction to the magnetic plinth plate (201) constitutes the restoring force of the key. A positive action and appropriate force–displacement characteristic is obtained in this arrangement.

0) GB2103975A – A FACE MILLING CUTTER

50) Family number: 3014428 (GB2103975A) © PatBase

Title: A face milling cutter

Priority: DE19813125185 19810626 DE19813140905 19811015

Family:

Publication number	Publication date	Application number	Application date
DE3125185 A1	19830113	DE19813125185	19810626
DE3140905 A1	19830505	DE19813140905	19811015
DE3140905 C2	19851017	DE19813140905	19811015
FR2508361 A1	19821231	FR19820010683	19820618
FR2508361 B3	19840427	FR19820010683	19820618
GB2103975 A1	19830302	GB19820018326	19820624
GB2103975 B2	19850411	GB19820018326	19820624

Probable Assignee: SITZMANN AND HEINLEIN

Assignee(s):(std)**:** SITZMANN AND HEINLEIN ; SITZMANN AND HEINLEIN GMBH

Assignee(s): SITZMANN AND HEINLEIN GMBH 8502 ZIRNDORF DE ; SITZMANN HEINLEIN GMBH

Inventor(s):(std)**:** KOTSCHAREK WALDEMAR

Inventor(s): VERZICHT DES ERFINDERS AUF NENN ; VERZICHT DES ERFINDERS AUF NENNUNG ; WALDEMAR KOTSCHAREK

International class (IPC 8–9)**:** B23C5/20 B23C5/24 (Advanced/Invention)

International class (IPC 1–7)**:** B23C5/14 B23C5/24 B27G13/10

CPC: B23C5/207 B23C5/241 B23C5/2462 B23C2226/315 B23C5/2486 B23C5/2489

European class: B23C5/20B4 B23C5/24B2 B23C5/24G B23C5/24R B23C5/24S L23C226/31P

Classification Explorer

Cited documents: FR1316881, DE917528, DE8034884 U, DE2701441, DE2363902, DE1085746,

Forward Citations: WO9934948, WO9014186, WO9009854, WO8404478, USRE33440, US7080963, US7037050, US5536119, US5120166, US4993890, US4848977, US4627771, JP60501945, EP1827740, EP1044081, EP0282090, EP0217035, EP0182290, EP0126432, DE4419668, DE4208617, DE4117835, DE3922963, DE3441821, DE3317916, DE102006024880,

Abstract:
Source: GB2103975A A face milling cutter (1) has interchangeable cutting elements (3), for example reversible carbide tips, located on a backing material (2). Fine adjustment of the cutting elements (3) in the axial and radial directions is achieved by wedge adjusters (8 or 9) for each cutting tip holder (5), which is axially and radially adjustable in grooves (4) of the backing material (2) and to each of which holders a cutting tip (3) is attached. The wedge adjuster (8) for the radial fine adjustment of the cutting tip holder (5) consists of a plain wedge which is supported with a wedge face (15) on an axially inclined bottom (16) of the groove (4) for guiding the cutting tip holders (5) and which combines with an axially parallel face (17) to form a support for the cutting tip holder (5), and an adjusting screw (19) is provided for the axial movement between the plain wedge (18) and the backing material (2). The wedge adjuster (9) for the axial fine adjustment of the cutting tip holder (5) consists of a gib or strip (22) which engages in a groove (21) of the cutting tip holder (5), the longitudinal axis (23) of the gib being approximately axially parallel, and which is located on a guide (25) which can be adjusted radially by means of a set screw (24) inclined to the axis (23). The gib (22) engages in a groove (21) of the cutting tip holder (5) and consequently causes an axial movement to the cutting tip holder (5) as a result of the wedge angle between the longitudinal axis of the gib (22) and the longitudinal axis (26) of the adjusting screw (24).

0) US4607467A – UNDERGROUND ROOM SUCH AS NOTABLY A CELLAR

51) Family number: 5261879 (US4607467A) © PatBase

Title: Underground room such as notably a cellar

Priority: EP19830400666 19830330 FR19820007292 19820427 FR19840006418 19840424 FR19830000104 19830105

Family:

Publication number	Publication date	Application number	Application date
AT25413 E	19870215	AT19830400666T	19830330
DE3369716 D1	19870312	DE19833369716	19830330
DE3564462 D1	19880922	DE19853564462	19850424
EP0093030 A1	19831102	EP19830400666	19830330
EP0093030 B1	19870204	EP19830400666	19830330
EP0162758 A1	19851127	EP19850400806	19850424
EP0162758 B1	19880817	EP19850400806	19850424
FR2525663 A1	19831028	FR19820007292	19820427
FR2525663 B1	19850301	FR19820007292	19820427
FR2538833 A2	19840706	FR19830000104	19830105
FR2538833 B2	19860425	FR19830000104	19830105
FR2563264 A2	19851025	FR19840006418	19840424
FR2563264 B2	19860801	FR19840006418	19840424
US4607467 A	19860826	US19830458329	19830117
US4658551 A	19870421	US19850725308	19850419

Probable Assignee: ROUX PAUL

Assignee(s):(std)**:** ROUX PAUL ; ROUX PAUL M M ; ROUX PAUL MAURICE MARIE

Inventor(s):(std)**:** ROUX PAUL MAURICE MARIE ; ROUX PAUL M M

Designated states: AT BE CH DE GB IT LI LU NL

International class (IPC 8–9): E02D27/48 E02D29/00 E04B1/00 (Advanced/Invention); E02D27/32 E02D29/00 E04B1/00 (Core/Invention)

International class (IPC 1–7): E02D17/04 E02D17/08 E02D27/48 E02D29/00 E04B1/00 E04B1/348 E04G23/00 E04H1/00 E04H1/02 E04H9/12

CPC: E04B1/0007 E04B1/0015

European class: E04B1/00B E04B1/00B1

US class: 52/169.6 52/250 52/266 52/79.1

Classification Explorer

Cited documents: US971734 A, US824511 A, US4231201 A, US3750410 A, US3584465 A, US3495371 A, US3490186 A, US3416273 A, US3263378 A, US2387431 A, US1935704 A, US1275874 A, IT414427 A, FR2525663 A1, FR2391340 A1, EP0002141 A1, DE3013637 A1, DE3003790 A1, DE2350437 A1, DE1817765 A1, CH342739 A, AT201542 B,

Forward Citations: WO12087182, US9243398, US8919058, US8484929, US6085475, US5493838, US5199233, US2012110928, US2006272654, JP2015025292, GB2182371, GB2182371, FR2574445, FR2574443, FR2573788, FR2563264, EP1348812, EP0458703, EP0228730, EP0162758, CN105089064, CN102888856, CH673502,

Abstract:
Source: US4607467A The present invention relates to an underground room, such as notably a cellar, including a floor, a ceiling and lateral walls formed notably by stacked box−sections, prefabricated from concrete, the entire assembly being accommodated in an excavation sunk under a floor slab of a structure, this excavation being lined with a fluid−tight enclosure and provided with a bed of sand. The underground room has vertical posts or columns of reinforced concrete extending from the floor to the level of the ceiling thereof, and having a portion of a predetermined shape. The walls of the stacked box−sections have vertical edges of a shape corresponding to the predetermined shape of the portion of the columns, with the vertical edges bearing against the columns so that the box−sections act as supporting walls to withstand the earth pressure.

0) US4626034A – CUTTER–BIT ASSEMBLIES

52) Family number: 1919713 (US4626034A) © PatBase

Title: Cutter–bit assemblies

Priority: DE19843404295 19840208 DE19843440448 19841106

Family:

Publication number	Publication date	Application number	Application date
AU198538232 A1	19850815	AU19850038232	19850131
AU567471 B2	19871119	AU19850038232	19850131
BE901649 A1	19850529	BE19850214446	19850205
CA1234588 A1	19880329	CA19850473423	19850201
CS275066 B2	19920115	CS19850000666	19850131
CS8500666 A3	19920115	CS19850000666	19850131
DD232735 A5	19860205	DD19850273089	19850206
DE3440448 A1	19850808	DE19843440448	19841106
DE3440448 C2	19921001	DE19843440448	19841106
ES540214 A1	19860401	ES19850540214	19850207
ES8700722 A1	19870116	ES19850540214	19850207
FR2559205 A1	19850809	FR19850001789	19850208
FR2559205 B1	19880311	FR19850001789	19850208
GB2153883 A1	19850829	GB19850002989	19850206
GB2153883 B2	19870311	GB19850002989	19850206
GB8502989 A0	19850306	GB19850002989	19850206
NL8500122 A	19850902	NL19850000122	19850118
PL147255 B1	19890531	PL19850251853	19850206
PL251853 A1	19851022	PL19850251853	19850206
SU1375144 A3	19880215	SU19853850148	19850204
US4626034 A	19861202	US19850698520	19850205

Probable Assignee: GEWERKSCHAFT EISENHUTTE WESTFALIA

Assignee(s):(std)**:** GEWERK EISENHUETTE WESTFALIA ; WESTFALIA BECORIT IND TECH

Assignee(s): GEWERKSCHAFT EISENHUTTE WESTFALIA GMBH ; WESTFALIA BECORIT INDUSTRIETECHNIK GMBH 4670 LUENEN DE ; EISENHUTTE WESTFALIA GEWERKSCHAF ; FIRMA GEWERKSCHAFT EISENHUETTE WESTFALIA TE LUENEN BONDSREPUBLIEK DUITSLAND ; GEWERKSCHAFT EISENHUETTE WESTFALIA ; GEWERKSCHAFT EISENHUETTE WESTFALIA DE ; GEWERKSCHAFT EISENHUTTE WESTFA DE ; GEWERKSCHAFT EISENHUTTE WESTFALIA

Inventor(s):(std)**:** BREUER OSWALD ; HOELTKEN WERNER ; HOLTKEN WERNER ; RASSMANN CHRISTOPH ; ROLING FRANZ ; SCHOOP GUNTHER DIETMAR ; SCHOPP GUNTHER DIETMAR ; STEINKUHL BERND ; SHTAJNKUL BERND ; SHOOP GYUNTER DITMAR ; SCHOOP GUNTHER DIETMAR DIPL IN ; ROLING FRANZ DIPL ING ; ROLING FRANTS ; RASMANN KHRISTOF ; KHESSE NORBERT ; KHELTKEN VERNER ; KOELTKEN WERNER ; HESSE NORBERT ; BROJER OSVALD

Inventor(s): BREUER OSWALD DE ; BERND SHTAJNKUL DE ; BERND STEINKUHL ; GYUNTER DITMAR SHOOP DE ; FRANTS ROLING DE ; KHRISTOF RASMANN DE ; HOLTKEN WERNER DE ; HOELTKEN WERNER DE ; HESSE NORBERT DE ; OSWALD BREUER BERND STEINKUHL FRANZ ROLING NORBERT HESSE CHRISTOPH RASSMANN GUNTHER DIETMAR SCHOOP ET WERNER KOELTKEN ; OSWALD BREUER BERND STEINKUHL FRANZ ROLING NORBERT ; OSVALD BROJER DE ; NORBERT KHESSE DE ; RASSMANN CHRISTOPH DE ; RASSMANN CHRISTOPH DD ; ROLING FRANZ DE ; ROLING FRANZ DIPL ING DE ; SCHOOP GUNTHER DIETMAR DIPL ING DE ; WERNER HOLTKEN ; VERNER KHELTKEN DE ; STEINKUHL BERND DE ; SCHOPP GUNTHER DIETMAR DE ; SCHOOP GUNTHER DIETMAR DIPL ING ; SCHOOP GUNTHER DIETMAR DIPL ING 4403 OTTMARSBOCHOL ; ROLING FRANZ DIPL ING 4717 NORDKIRCHEN DE ; RASSMANN CHRISTOPH 4670 LUENEN DE ; NORBERT HESSE ; OSWALD BREUER ; HOELTKEN WERNER 4670 LUENEN DE ; BREUER

OSWALD 4600 DORTMUND DE ; CHRISTOPH RASSMANN ; FRANZ ROLING ; GUNTHER DIETMAR SCHOOP ; HESSE NORBERT 4670 LUENEN DE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD

International class (IPC 8–9): E21C27/00 E21C35/19 (Advanced/Invention); E21C27/00 E21C35/00 (Core/Invention)

International class (IPC 1–7): E21B10/00 E21C25/42 E21C25/44 E21C25/46 E21C27/00 E21C27/32 E21C27/44 E21C35/18 E21C35/19

CPC: E21C35/19

European class: E21C35/19

US class: 299/108 299/91 299/92 37/142A 37/458 37/460

Classification Explorer

Cited documents: US4456307 A, US4455771 A, US4267653 A, US3608218 A, US2420057 A, US2322929 A, PL41830, GB754662 A, DE3209411 A1, DE3209410 A1, DE3002807 C2, DE2835410 A1, CA880769 A, AU8436682 A1, AU1249583 A1,

Forward Citations: WO05098149, WO05098149, WO0052303, US7793444, US7596895, US7299570, US7124836, US7124836, US7070007, US6684963, US6684538, US6186597, US5983534, US5331754, US4762372, US2015102654, US2007204490, US2007022640, US2006010726, US2005229442, US2005161239, US2005023013, GB2178782, FR2595755, FR2595754, EA8958, EA025724, EA008958, DE3828942, DE3828942, DE3608786, DE3608785, DE3528440, BE1000133, BE1000116,

Abstract:
Source: US4626034A A cutter–bit assembly employs an arcuate wedge 16 to secure a cutter–bit 2 within a pocket 4 of a holder 1. An additional deformable insert or resilient backing piece 18 is also located in an arcuate gap between the cutter–bit shank and a curved surface of the holder. The insert or backing piece co–operates with teeth 19 to lock the wedge in position.

0) US4545707A – DRILLING DEVICE FOR PIPE JOINTS

53) Family number: 4876197 (US4545707A) © PatBase

Title: DRILLING DEVICE FOR PIPE JOINTS

Priority: US19820454876 19821230

Family:

Publication number	Publication date	Application number	Application date
US4545707 A	19851008	US19820454876	19821230

Probable Assignee: BRADLEY EARL C

Assignee(s):(std)**:** BRADLEY EARL C

Assignee(s): BRADLEY EARL C JR

Inventor(s):(std)**:** BRADLEY JR EARL C ; VANDER LINDEN JOHN

International class (IPC 8–9): B23B41/08 B23B45/06 (Advanced/Invention); B23B41/00 B23B45/00 (Core/Invention)

International class (IPC 1–7): B23B45/06

CPC: B23B45/06 Y10T408/55 Y10T408/5605 Y10T408/5647 Y10T408/6786 Y10T408/6793

European class: B23B45/06

US class: 408/111 408/136 408/137 408/72R 408/86

Classification Explorer

Cited documents: US3726549 A, US2501000 A, US2309765 A, US1384116 A, US1033419 A, US1033419,

Forward Citations: US5553645, US4711013, CN103846467,

Abstract:
Source: US4545707A A set screw pocket drilling device for drilling blind holes in a pipe surface at a pipe joint for set screws holding the joint together including an externally threaded sleeve sized to fit the set screw hole and engage the surface of a pipe within a retainer in which the set screw hole is drilled, a drill fitting through and rotatable relative to the sleeve, and apparatus for rotating the drill relative to the sleeve. One embodiment of the device includes only a sleeve and a drill fitting through the sleeve having an outward end extending from the outward end of the sleeve for engagement of a wrench to rotate the drill and the sleeve. Another form of the device has a sleeve provided with a head having locking lugs, a drill extendable through the sleeve and having a head provided with a locking flange, and a clamping bracket for securing the sleeve head with the drill head at a position at which the cutting end of the drill is extended beyond the sleeve end so that a set screw pocket is drilled as the sleeve is screwed into a set screw hole of a pipe joint retainer. A third form of the device includes an externally threaded sleeve having a rotatable head and a drill provided with a cam coacting with the head to advance the drill as the head and cam are turned by means of a cam handle.

0) US4757164A – PUSHBUTTON SWITCH

54) Family number: 10250420 (US4757164A) © PatBase

Title: Pushbutton switch

Priority: DE19843412027 19840331 US19850717457 19850329

Family:

Publication number	Publication date	Application number	Application date
DE3412027 A1	19851010	DE19843412027	19840331
DE3412027 C2	19880714	DE19843412027	19840331
EP0160791 A1	19851113	EP19850101787	19850219
EP0160791 B1	19880210	EP19850101787	19850219
JP60241615 A2	19851130	JP19850065092	19850330
US4757164 A	19880712	US19870042521	19870424

Probable Assignee: PREH ELEKTRO FEINMECHANIK

Assignee(s):(std)**:** PREH ELEKTRO FEINMECHANIK

Assignee(s): PREH ELEKTROFEINMECHANISCHE WERKE JAKOB PREH NACHF ; PREH ELEKTROFEINMECHANISCHE WERKE JAKOB PREH NACHF GMBH AND CO ; PREH ELEKTROFEINMECHANISCHE WERKE JAKOB PREH NACHF GMBH AND CO 8740 BAD NEUSTADT DE ; PUREE EREKUTOROFUAINMEKANITSUSHIE UERUKE YAKOBU PU ; PUREE EREKUTOROFUAINMEKANITSUSHIE UERUKE YAKOBU PUREE NATSUHAFUORUGERU YONZU LTD

Inventor(s):(std)**:** BAUER KARL HEINZ ; MAISCH EDGAR

Inventor(s): MAISCH EDGAR 8740 BAD NEUSTADT DE ; EDOGAARU MAISHIYU ; KARURU HAINTSU BAUERU

Designated states: AT BE CH FR GB IT LI LU NL SE

International class (IPC 8–9): H01H13/02 H01H13/60 (Advanced/Invention); H01H9/16 (Advanced/Non–invention)

International class (IPC 1–7): H01H1/06 H01H13/02 H01H13/20 H01H13/56 H01H13/60 H01H5/04

CPC: H01H9/16 H01H13/60

European class: H01H13/60 T01H9/16

US class: 200/153J 200/159R 200/275 200/340 200/453 200/67A 200/68.1

Classification Explorer

Cited documents: US4354076 A, US4300026 A, US4287401 A, US4204102 A, US3789173 A, US3521013 A, US3394403 A, US2668204 A, US2623960 A, US2576771 A, US2295484 A, US2044065 A, GB995378 A, DE3151501 A1, DE3046831 A1, DE3043133 A1, DE2416969 A1, DE1765776 A1,

Forward Citations: WO11032775, US7105763, US7105763, US5894551, US4916269, US2005077163, NL1011361, FR2775828, ES2159228, EP0307364, BE1012503,

Abstract:
Source: US4757164A A pushbutton switch comprising a housing within which a pushbutton can move with respect to a housing socket is described. Within the housing is placed a switch plunger which moves longitudinally and can also pivot through a small angle. A contact bridge, which can be pivoted in an oversprung fashion between two fixed contacts, is disposed in the housing. The placement of the contact bridge is governed by a switch rocker, which is arranged in a hinged fashion in the housing. This allows the switch plunger and switch rocker to engage. The counterbearing for the contact bridge consists of a knife–edge bearing in the switch rocker. Between the switch plunger and the switch rocker is a return spring, arranged so that in the rest position of the pushbutton, the switch plunger occupies a pivoted position remote from the middle position. The cross motion of the switch plunger is halted, depending on the direction of motion of the pushbutton, by a constraining guide on each side.

0) US4641902A – SHIELDED CONNECTOR WITH LATCHES

55) Family number: 2250265 (US4641902A) © PatBase

Title: SHIELDED CONNECTOR WITH LATCHES

Priority: CA19860522121 19861104 EP19860308518 19861031 US19850797475 19851113

Family:

Publication number	Publication date	Application number	Application date
AT66318 E	19910815	AT19860308518T	19861031
AU198665036 A1	19870521	AU19860065036	19861112
AU595739 B2	19900405	AU19860065036	19861112
BRPI8605544 A	19870811	BR1986PI05544	19861110
CA1286013 A1	19910709	CA19860522121	19861104
DE3680867 D1	19910919	DE19863680867	19861031
EP0222567 A2	19870520	EP19860308518	19861031
EP0222567 A3	19881012	EP19860308518	19861031
EP0222567 B1	19910814	EP19860308518	19861031
HK5192 A	19920117	HK19920000051	19920116
JP2938450 B2	19990823	JP19860267880	19861112
JP62117282 A2	19870528	JP19860267880	19861112
KR970009213 B1	19970607	KR19860009551	19861112
SG9191003 A	19920214	SG19910091003	19911128
US4641902 A	19870210	US19850797475	19851113

Probable Assignee: BERG TECHNOLOGY INC

Assignee(s):(std): DU PONT

Assignee(s): DU PONT DE NEMOURS E I AND CO ; EI DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY ; E I DU PONT DE NEMOURS AND CO ; DU PONT E I DE NEMOURS AND CO ; DU PONT E I DE NEMOURS AND COMPANY ; E I DU PONT DE NEMOURS AND CO WILMINGTON DEL US ; FUSSELMAN DAVID F ; EI DU PONT DE NEMOURS AND CO WILMINGTON DE A CORP OF DE ; DU PONT EI DE NEMOURS AND CO ; DU PONT DE NEMOURS EI AND CO ; BAAGU TEKUNOROJII INC ; BERG TECHNOLOGY INC ; CHEMICAL BANK

Inventor(s):(std): FUSSELMAN DAVID FRANCINS ; FUSSELMAN DAVID FRANCIS ; FUSSELMAN DAVID F

Inventor(s): DEBITSUDO FURANSHISU FUTSUSERUMAN ; FUSSELMAN DAVID FRANCIS MIDDLETOWN PENNSYLVANIA 17 ; FUSSELMAN DAVID FRANCIS MIDDLETOWN... ; FUSSELMAN DAVID FRANCIS MIDDLETOWN PENNSYLVANIA 17057 US ; DAVID FRANCINS FUSSELMAN ; DAVID FRANCIS FUSSELMAN

Agent(s): CALLINANS; MCCALLUM BROOKS AND CO

Designated states: AT BE CH DE FR GB IT LI LU NL SE

International class (IPC 8–9): H01R13/46 H01R13/627 H01R13/639 H01R13/658 H01R13/6581 (Advanced/Invention); H01R13/46 H01R13/639 (Advanced/Non–invention); H01R13/46 H01R13/627 H01R13/639 H01R13/658 (Core/Invention)

International class (IPC 1–7): H01R13/00 H01R13/46 H01R13/62 H01R13/627 H01R13/629 H01R13/639 H01R13/648 H01R13/658 H05K9/00

CPC: H01R13/6581 H01R13/6275

European class: H01R13/627D H01R13/658

US class: 339/143R 339/91R 439/350 439/607 439/607.09

Classification Explorer

Cited documents: US4460230 A, US4431244 A, US4367003 A, US4057879 A, US4002389 A, US3760333 A, US3329925 A, JPS6067679 U, JPS5064990 U, JP60067679 U1, JP60067679 U, JP50064990 U1, JP50064990 U, GB2042827 A1, EP0090539 A2, EP0073957 A2,

AU5922086 A1, AU566391 B2,

Forward Citations: WO9110268, USRE35508, US9601866, US6280227, US5788528, US5727970, US5531614, US5480327, US5389006, US5383792, US5380223, US5374203, US5273459, US5197900, US5154629, US4973258, US4929195, US4887977, US4824383, US4787860, US4735583, US4731031, US4709976, EP0617482, EP0473049, EP0410491, EP0372766, EP0305101, DE3834182,

Abstract:
Source: US4641902A A shielded connector for electrical circuits comprising a non−conducting housing containing electrically conductive terminals and an electrically conductive housing, said electrically conductive housing comprising at least two elements, each of said elements being capable of mating with the other of said elements, at least one of said elements having at least one recessed pocket having an aperture open to the exterior of said element, each of said pockets being adapted to hold a projection on a latch, the interior walls of said pocket being continuous with the exterior walls of said electrically conductive housing and either a portion of said pocket also being located in a second element or at least one wall of said pocket being contributed by a second element.

0) DE8710957U1 –

56) Family number: 16789199 (DE8710957U1) © PatBase

Priority: DE19870010957U 19870807

Family:

Publication number	Publication date	Application number	Application date
DE8710957 U1	19871008	DE19870010957U	19870807

Probable Assignee: RUD KETTENFABRIK RIEGER AND DIETZ GMBH U CO 7080 AALEN DE

Assignee(s): RUD KETTENFABRIK RIEGER AND DIETZ GMBH U CO 7080 A ; RUD KETTENFABRIK RIEGER AND DIETZ GMBH U CO 7080 AALEN DE

International class (IPC 8–9): B66C1/12 B66C1/18 F16B45/00 (Advanced/Invention); B66C1/12 F16B45/00 (Core/Invention)

International class (IPC 1–7): A44B21/00 B65D63/00 B66C1/12 B66C1/36 F16B1/00 F16B45/00 F16G15/00

CPC: B66C1/18 B66C1/125 F16B45/00

European class: B66C1/12D B66C1/18 F16B45/00

Classification Explorer

Abstract:
Source: DE8710957U1 (Claim 1) 1. Verbindungsorgan fuer mindestens zwei miteinander zu verbindende Bauteile, wie Gurte, Gurtschlingen, Seile, Seilschlingen, Kettenglieder, Haken, Ringe od. dgl., mit einer Aufnahme fuer mindestens eines der Bauteile, die vom Grundkoerper des Verbindungsorganes sowie einem Schliesselement gebildet wird, dessen eines Ende durch einen in fluchtende Bohrungen sich ueberlappender Teile des Grundkoerpers und des Schliesselementes einfuehrbaren Haltebolzen mit dem Grundkoerper verbindbar ist, dadurch g e k e n n z e i c h n e t, dass das andere Ende des Schliesselementes (2, 29, 47, 52) und der diesem Ende zugeordnete Abschnitt des Grundkoerpers (1, 27, 33,34, 35,37, 41,43, 46,53) ineinander einhaengbare Teile eines Schwenklagers bilden und dass die ineinander eingehaengten Teile des Schwenklagers durch den in die Bohrungen (13, 14,15) der sich ueberlappenden Teile (9,11, 12) einfuehrbaren Haltebolzen (16) in der eingehaengten Stellung verriegelbar sind.

Machine translation: (Claim 1) 1 Connecting member for at least two to be connected together components such as belts, Gurtschlingen, ropes, slings, chain links, hooks, rings or the like, for a recording at least one of the components, which is formed from the basic body of the connecting organ, and a closing element having one end by one into aligned holes overlapping parts of the basic body and the locking elements insertable retaining pin to the basic body is connectable, wherein the other end of the closure elements (2, 29, 47, 52) and to this end associated section of the basic body (1, 27, 33.34, 35.37, 41.43, 46.53) attachable parts together form a pivot bearing and that the interlocking parts of the pivot bearing Fishhooking through the holes (13, 14,15) of the overlapping parts (9:11, 12) insertable retaining pin (16) in the Fishhooking position can be locked.

0) US4838792A – ONE LETTER ALPHABET (OLA)

57) Family number: 3030783 (US4838792A) © PatBase

Title: One letter alphabet (OLA)

Priority: CA19860507178 19860421 CA19860521183 19861023 US19870035885 19870408 IL19870082080 19870401

Family:

Publication number	Publication date	Application number	Application date
AU198771311 A1	19871022	AU19870071311	19870407
AU198775375 A1	19871105	AU19870075375	19870707
AU606862 B2	19910221	AU19870071311	19870407
BRPI8701883 A	19880202	BR1987PI01883	19870421
BRPI8705250 A	19880524	BR1987PI05250	19871002
CA1233447 A1	19880301	CA19860521183	19861023
CA1253337 A1	19890502	CA19860507178	19860421
CN87102909 A	19871125	CN19871002909	19870418
CN87105284 A	19880504	CN19871005284	19870729
DE3789520 D1	19940511	DE19873789520	19870410
EP0242739 A2	19871028	EP19870105340	19870410
EP0242739 A3	19890215	EP19870105340	19870410
EP0242739 B1	19940406	EP19870105340	19870410
EP0264549 A2	19880427	EP19870110761	19870724
EP0264549 A3	19890719	EP19870110761	19870724
IL82080 A0	19871030	IL19870082080	19870401
IL82080 A1	19930221	IL19870082080	19870401
IL83441 A0	19880131	IL19870083441	19870805
IN168322 A	19910316	IN1987CA00308	19870420
JP63026690 A2	19880204	JP19870095502	19870420
JP63186287 A2	19880801	JP19870262928	19871020
US4838792 A	19890613	US19870035885	19870408

Probable Assignee: HOYECK R H

Assignee(s):(std)**:** HOYECK R H ; HOYECK RALPH H ; HOYECK RALPH HABER ; MARITIDE LTD ; RARUFU EICHI HOIETSUKU ; RARUFU HABAA HOIETSUKU

Assignee(s): MARITIDE CO LTD ; HOYECK RH ; RALPH HABER HOYECK ; HOYECK RALPH HABER WESTMOUNT QUEBEC CA ; HOYECK RALPH H 80 SOMERVILLE AVE WESTMOUNT QUE H3Z ; HOYECK RALPH H 80 SOMERVILLE AVE WESTMOUNT QUEBEC ; HOYECK RALPH H 80 SOMERVILLE AVE WESTMOUNT QUEBEC H3Z 1J5

Inventor(s):(std)**:** HOYECK RALPH H SOMERVILLE AVE ; HOYECK RALPH HABER ; HOYECK RALPH H ; RARUFU EICHI HOIETSUKU ; RARUFU HABAA HOIETSUKU

Inventor(s): HOYECK RALPH H 80 SOMERVILLE AVE WESTMOUNT QUE H3Z ; HOYECK RALPH H 80 SOMERVILLE AVE WESTMOUNT QUEBEC ; HOYECK RALPH HABER WESTMOUNT QUEBEC H3Z 1J5 CA ; RALPH HABER HOYECK

Agent(s): HOYECK RH; MARITIDE CO LTD; EITAN PEARL LATZER AND COHEN ZEDEK

Designated states: DE ES FR GB GR IT NL SE

International class (IPC 8–9)**:** B43L13/20 G06K15/02 G09D1/00 G09D3/00 G09D3/10 G09F11/00 G09F3/04 G09F7/14 G09F9/00 G09F9/30 G09F9/302 (Advanced/Invention); B43L13/20 G06K15/02 G09D1/00 G09D3/00 G09F11/00 G09F3/04 G09F7/02 G09F9/00 G09F9/30 G09F9/302 (Core/Invention)

International class (IPC 1–7)**:** G06K15/02 G07F7/08 G09B11/04 G09D3/00 G09D3/04 G09F11/00 G09F13/00 G09F13/28 G09F3/04 G09F7/00 G09F7/08 G09F9/00 G09F9/30

CPC: B43L13/208 G09D3/10 G09F7/14 G09F9/302

European class: B43L13/20B5 G09D3/10 G09F7/14 G09F9/302

US class: 40/451 434/163 434/164

Classification Explorer

Cited documents: US4285147 A, US4257084 A, US4012010 A, US3964197 A, US3905133 A, US3733468 A, US3731402 A, US2786291 A, US1688266 A, JP54145091 B4, GB694042 A, FR793864 A, FR2532094 A1, FR2494468 A1, FR2467452 A1, FR2401680 A1, FR1303639 A, FR1244258 A, FR1113046 A, EP0072964 A1, EP0031033 A1, DE841262 A, DE546200 A, DE459685 A, DE3329310 A1, DE2625174 A1, CH616522, CA957498 A1, BE898588 A1,

Forward Citations: WO05073619, USD643840, US6544038, US6048207, US5707081, US5661284, US5374083, US5203704, US2010264591, US2009258773, JP4201542, GB2261085, GB2261085, EP0338294, CN103251210, CN103225376, CN101817272,

Abstract:
Source: US4838792A The present invention deals with guided writing and variable displays, for signs, illustrations, etc., using: (a) guiding points at the main intersections of the lines of a common symbol representing a group of symbols, letters or figures, etc., and display means in between; (b) holding means at the said guiding points and tie lines in between; (c) grooves, raised tracks, magnetic tracks, stretched strings, etc., in between the said guiding points and fillers, coverings, markings, etc., along the lines of the symbols to be displayed; (d) colorless markings or grooves as in (c) and pen markings over the selected symbols; (e) bars, inking elements, etc., in between said guiding points, connected to various command centers to print or display the required symbols; (f) series of lights on electric wires in between said guiding points, activated by various command centers; (g) light sources located at the guiding points described in (a) and projecting lights in between, along the lines of the characters to be displayed.

0) US5042145A – METHOD FOR MOUNTING AN ELECTRONIC COMPONENT AND...

58) Family number: 4734196 (US5042145A) © PatBase

Title: METHOD FOR MOUNTING AN ELECTRONIC COMPONENT AND MEMORY CARD USING SAME

Priority:

AU19890036618	19890621	AU19890041427	19890918	EP19880905804	19880630
DE19870016576U	19871216	BE19880000059	19880118	BE19880001103	19880927
EP19920200259	19880630	US19890446529	19891206	FR19870018291	19871229
GB19870029124	19871214	LU19880087116	19880127	EP19890202342	19890916
WO1988EP00595	19880630				

Family:

Publication number	Publication date	Application number	Application date
AT93075 E	19930815	AT19890202342T	19890916
AU198936618 A1	19900104	AU19890036618	19890621
AU198941427 A1	19900405	AU19890041427	19890918
AU199183531 A1	19911107	AU19910083531	19910830
AU199185836 A1	19911212	AU19910085836	19911015
AU617867 B2	19911205	AU19890041427	19890918
AU619560 B2	19920130	AU19890036618	19890621
AU640052 B2	19930812	AU19910085836	19911015
AU646284 B2	19940217	AU19910083531	19910830
BE1002281 AE	19901120	BE19880000059	19880118
BE1002529 AG	19910312	BE19880001103	19880927
DE3855185 D1	19960509	DE19883855185	19880630
DE3855185 T2	19961031	DE19883855185T	19880630
DE3884620 D1	19931104	DE19883884620	19880630
DE3884620 T2	19940203	DE19883884620T	19880630
DE68908341 D1	19930916	DE19896008341	19890916
DE68908341 T2	19940113	DE19896008341T	19890916
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NO892501 A	19900102	NO19890002501	19890616
NO892501 A0	19890616	NO19890002501	19890616
US5042145 A	19910827	US19890446529	19891206
WO9000326 A1	19900111	WO1988EP00595	19880630

Probable Assignee: ALCATEL NV

Assignee(s):(std)**:** BELL TELEPHONE MFG ; ALCATEL NV ; BELL TELEPHONE MFG CO NV ; SHEN CHANG A ; CHANG A S ; CHANG A SHEN ; BELL TELEPHONE MFG COMPANY NV

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Inventor(s): SEVENHANS JOHANNES MATHILDA JOSEPHUS ; SEVENHANS JOANNES MATHILDE JOSEPHUS ; SEVENHANS JOANNES MATHILDE JOSEPHUS B 2130 BRASSCH ; SEVENHANS JOANNES MATHILDE JOSEPHUS B 2130 BRASSCHAAT BE ; BOUQUET JAN PAUL B 8800 ROESELARE BE ; SEVENHANS JOANNES MATHILDA JOSEPHUS B 2930 BRASSCH ; SEVENHANS JOANNES MATHILDA JOSEPHUS B 2930 BRASSCHAAT BE ; GUEBELS PIERRE PAUL FRANCOIS MAURICE MARIE B 2520 ; GUEBELS PIERRE PAUL FRANCOIS MAURICE MARIE B 2520 EDEGEM BE ; GUEBELS PIERRE PAUL FRANCOIS MAURICE MARIE B 2650 ; GUEBELS PIERRE PAUL FRANCOIS MAURICE MARIE B 2650 EDEGEM BE ; JAN PAUL BOUCQUET

Agent(s): ALCATEL AUSTRALIA LTD

Designated states: AT BE CH DE ES FR GB IT LI LU NL SE

International class (IPC 8–9): E06B9/386 G05F3/24 G05F3/26 G06K19/06 G06K19/077 H01L21/60 H01L27/092 H03F3/45 H03K17/687 H03K3/356 H05K1/18 H05K3/06 H05K3/32 (Advanced/Invention); H05K1/18 H05K3/06 H05K3/32 (Advanced/Non–invention); E06B9/38 G05F3/08 G06K19/06 G06K19/077 H01L21/02 H01L27/085 H03F3/45 H03K17/687 H03K3/00 (Core/Invention); H05K1/18 H05K3/06 H05K3/32 (Core/Non–invention)

International class (IPC 1–7): A47H B42D15/10 E06B9/36 E06B9/388 F42D1/00 G05F3/24 G05F3/26 G06K19/00 G06K19/06 G06K19/06 G06K19/077 G11C5/06 H01L21/033 H01L21/60 H01L21/70 H01L21/98 H01L23/28 H01L23/50 H01L27/092 H03F3/45 H03K17/687 H03K3/295 H03K3/356 H03K5/24 H03M1/34 H03M3/02 H05K3/06 H05K3/32 H05K3/34

CPC: G05F3/242 H03F3/45076 H03F2200/331 H03K3/35613 E06B9/386 H03K3/356191 Y10T29/49144 H01L24/81 G06K19/07745 H01L2224/81801 H01L2924/01006 H01L2924/01013 H01L2924/01029 H01L2924/01033 H01L2924/0105 H01L2924/01074 H01L2924/01075 H01L2924/01079 H01L2924/014 H01L2924/14 H01L2924/30105 H05K1/182 H05K3/06 H05K3/328

European class: E06B9/386 G05F3/24C G06K19/077M H01L24/81 H03F3/45S1 H03K3/356G2D H03K3/356G6B T01L224/81801 T01L924/14000 T01L924/30105 T03F200/331 T05K1/18C T05K3/06 T05K3/32D

US class: 174/52.4 174/557 174/558 228/180.2 228/180.21 257/E21.511 29/840 361/401 361/761

Classification Explorer

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Forward Citations: WO9849652, WO9626501, WO9602042, WO9324902, WO07107630, WO05027602, WO04077903, WO04077902, WO03096595, WO03096595, US9622354, US9245838, US9232658, US8984746, US8959756, US8822323, US8817485, US8581109, US8524535, US8453323, US8438727, US8393076, US8293579, US8240033, US8240032, US8225499, US8186045, US8079142, US8067699, US8046914, US7999387, US7939765, US7908745, US7893360, US7888606, US7888605, US7884286, US7855342, US7852634, US7842887, US7836588, US7696005, US7609527, US7299546, US7140540, US7140540, US6531997, US6293470, US5523618, US5274570, US5203078, US2010188823, US2010140803, US2010103635, US2010032199, US2010018049, US2009263939, US2009133251, US2009077796, US2009070996, US2009014872, US2008261338, US2008230914, US2008206926, US2008202801, US2008201944, US2008196930, US2008169123, US2008151522, US2008151520, US2008151519, US2008151517, US2008120834, US2007227765, US2007209831, US2007166886, US2006218782, US2006076686, US2004245346, US2004014317, GB2422054, GB2422054, FR2731132, EP0720296, EP0720296,

BE1002281,

Abstract:
Source: US5042145A A method for mounting a LSI chip (1) with conductive bumps (2, 3, 4) as terminals into a hole (15) of a card (5) and for interconnecting them. The card and therefore one end of the hole is first covered by a layer (16) of a conductive material. Then the conductive bumps of the chip placed in the hole are soldered to the layer while being pressed against this layer. Thus protrusions (17, 18, 19) are created on the external surface of the layer. These protrusions are ussed to facilitate the alignment of the mask used during the subsequent etching operation of the layer. The invention also concerns a process for creating the conductive bumps (2, 3, 4) on the terminal pads (6, 7, 8) of the LSI chip (1).

59) Family number: 30080313 (US2001003099A) © PatBase

Title: EVALUATION OF RESPONSES OF PARTICIPATORY BROADCAST AUDIENCE WITH PREDICTION OF WINNING CONTESTANTS; MONITORING, CHECKING AND CONTROLLING OF WAGERING, AND AUTOMATIC CREDITING AND COUPONING

Priority:

US19860837827	19860310	US19880192248	19880510	US19880192355	19880510
US19890424089	19891019	US19910776180	19911015	US19940179589	19940110
US19960615472	19960308	US19940226073	19940411	US19910763672	19910919
US19900603882	19901025	US19930025397	19930225	US19900604787	19901025
US20020205832	20020725	US19970986850	19971208	WO1994US01535	19940214
WO1999US10850	19990517	US19980088148	19980601		

Family:

Publication number	Publication date	Application number	Application date
AU199461377 A1	19940914	AU19940061377	19940214
AU199940822 A1	20000105	AU19990040822	19990517
AU199940822 A5	20000105	AU19990040822	19990517
EP0686334 A1	19951213	EP19940908036	19940214
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US2003003990 AA	20030102	US20020205832	20020725
US4745468 A	19880517	US19860837827	19860310
US4745468 B1	19910611	US19860837827	19860310
US4876592 A	19891024	US19880192248	19880510
US4926255 A	19900515	US19880192355	19880510
US5034807 A	19910723	US19890424089	19891019
US5057915 A	19911015	US19900603882	19901025
US5128752 A	19920707	US19900604787	19901025
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US5916024 A	19990629	US19970986850	19971208
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WO9419906 A1	19940901	WO1994US01535	19940214
WO9966707 A2	19991223	WO1999US10850	19990517
WO9966707 A3	20030206	WO1999US10850	19990517

Probable Assignee: QUEST NETTECH CORP

Assignee(s):(std)**:** KOHORN H VON ; HENRY VON KOHORN ; RESPONSE REWARD SYSTEMS L C ; VON KOHORN HENRY

Assignee(s): RESPONSE REWARD SYSTEMS LC ; RESPONSE REWARDS SYSTEMS LC ; INTERTECH HOLDINGS LLC ; PRAGMATIC PATENT MANAGEMENT CO ; QUEST NETTECH CORP ; RESPNSE REWARD SYSTEMS LC

Inventor(s):(std): KOHORN HENRY VON ; VON KOHORN HENRY

Inventor(s): HENRY VON KOHORN ; KOHORN HENRY V

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW

International class (IPC 8–9): A63F11/00 A63F13/12 A63F3/08 A63F9/00 A63F9/18 A63F9/24 G07F17/32 G09B7/06 H04H20/28 H04H20/31 H04H20/38 H04H20/61 H04H20/62 H04H60/33 H04H60/45 H04H60/64 H04H60/68 H04H60/94 H04H9/00 H04N7/08 H04N7/088 (Advanced/Invention); A63F11/00 A63F13/12 A63F3/08 A63F9/00 A63F9/18 A63F9/24 H04H20/28 H04H20/31 H04H20/61 H04H20/62 H04H60/14 H04H60/33 H04H60/45 H04H60/94 (Advanced/Non–invention); A63F13/12 G07F17/32 G09B7/00 H04H1/00 H04N7/08 H04N7/087 (Core/Invention)

International class (IPC 1–7): A63B71/00 A63F13/00 A63F9/18 A63F9/22 A63F9/24 G06F15/28 G06F17/60 G07C13/00 G09B7/00 H04H9/00 H04N7/00 H04N7/08 H04N7/10

CPC: G07F17/3225 A63F13/338 G06Q30/02 G06Q30/0201 G06Q30/0212 G06Q30/0218 G06Q30/0225 G06Q30/0241 H04H60/14 G06Q30/0203 H04H60/68 G07F17/32 A63F9/18 A63F13/12 A63F2003/083 A63F2011/0095 A63F2300/409 A63F2300/638 G07F17/3202 G07F17/3227 G07F17/3248 G07F17/3262 G07F17/3295 G09B7/00 G09B7/063 H04H20/28 H04H20/31 H04H20/38 H04H20/61 H04H20/62 H04H60/33 H04H60/375 H04H60/45 H04H60/64 H04H60/94 H04H60/98 H04N7/08 H04N7/0806 H04N7/088 H04N7/0884

European class: A63F13/12 G06Q30/0201 G06Q30/0203 G06Q30/0212 G06Q30/0218 G06Q30/0225 G06Q30/0241 G07F17/32 G07F17/32C G07F17/32E2 G07F17/32K4 G07F17/32M2 G07F17/32P8 G09B7/00 G09B7/06B H04H20/26 H04H20/28 H04H20/38 H04H220/28 H04H260/64 H04H260/68 H04H60/26 H04H60/33 H04H60/37B H04H60/54 H04H60/60 H04H60/64 H04H60/68 H04H60/802 H04H60/94 H04H60/98 H04N7/08 H04N7/088D H04N7/08C K63F11/00Y10T4 K63F3/08E2Q K63F300/40T K63F300/63T K63F9/18 T04H20/262 T04H20/31 T04H20/61 T04H20/62 T04H20/69 T04H60/14 T04H60/26 T04H60/33 T04H60/36 T04H60/45 T04H60/802 T04H60/94 T04N7/088

US class: 273/138A 348/1 348/12 348/13 348/E07.024 348/E07.034 348/E07.039 348/E7.024 348/E7.034 348/E7.039 348/E70.24 348/E70.24S 348/E70.34 348/E70.34S 348/E70.39 348/E70.39S 358/84 358/86 364/402 364/405 364/412 379/72 379/92 379/92.01 434/323 455/2 455/4 455/4.2 455/42 455/5 455/5.1 455/51 463/16 463/16S 463/17 463/25 463/25P 463/40 463/40P 463/41 463/42 463/9 705/10 705/14 705/14.14 705/14.2 705/14.26 705/14.4 705/7.29 705/7.32 725/105 725/116 725/13 725/131 725/133 725/134 725/135 725/138 725/139 725/141 725/144 725/151 725/23 725/24 725/5 725/60 725/9 902/23

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US2002055883, US2002054088, US2002054078, US2002052838, US2002052780, US2002052779, US2002052776, US2002052752, US2002049975, US2002049967, US2002049909, US2002046162, US2002046121, US2002046095, US2002046049, US2002044066, US2002042914, US2002042751, US2002042282, US2002038257, US2002034980, US2002033365, US2002026346, US2002023272, US2002016964, US2002016737, US2002013950, US2002013173, US2002007371, US2002004739, US2002002487, US2001056376, US2001054003, US2001053998, US2001053686, US2001051540, US2001049627, US2001048439, US2001047291, US2001047252, US2001041977, US2001041612, US2001037293, US2001037211, US2001036858, US2001036272, US2001034741, US2001034654, US2001032125, US2001029477, US2001027467, US2001025252, US2001021915, US2001013123, US2001001145, TWI558188, NL1011141, KR100949483, KR100743584, JP4192608, JP2004229223, GB2479333, GB2440284, GB2440284, GB2405807, GB2386565, GB2363583, GB2362835, GB2353667, GB2353667, GB2326004, GB2326004, GB2302247, GB2302247, FR2865289, FR2826224, FR2814085, FR2775820, FR2754189, FR2739993, FR2658375, FR2647619, EP2317768, EP2299713, EP2265019, EP1929439, EP1856682, EP1833011, EP1622380, EP1535259, EP1434183, EP1434183, EP1431943, EP1431943, EP1417614, EP1410350, EP1359757, EP1351748, EP1345662, EP1343319, EP1320942, EP1277659, EP1265386, EP1195183, EP1155391, EP1139592, EP1109406, EP1054713, EP1034822, EP1019160, EP1008948, EP0974921, EP0964542, EP0921696, EP0921696, EP0904140, EP0835564, EP0833469, EP0809899, EP0783229, EP0769749, EP0686334, EP0613600, EP0474923, EP0399897, DE4309504, DE19909130, DE19819920, DE19819920, DE19547902, DE19547902, DE19523515, DE19523515, CZ299063, AU770698, AU766566, AU758616, AU758614, AU758608, AU686795, AU636842, AU636583, AU2004216690, AU2003200901, AU2003200901, AU2001287073,

Abstract:
Source: US2001003099A A system and method for evaluating responses to broadcast programs, such as television programs, include an instructional signal modulated onto a signal transmitted concurrently with the television program, simulcast, or time−multiplexed with a television. At each of a plurality of remote receiving stations, one or more members of a remote audience has the opportunity to respond to a situation presented in the television program by entering a response on a keyboard. The system includes response evaluation circuitry which may be located at a central facility or partially at the central facility and partially at each remote receiving station, or completely within a response unit at each remote receiving station, in the latter case the response unit having a memory responsive to the instructional signal for storing acceptable responses, a comparison circuit for comparing responses entered at the keyboard with those stored in the memory, circuitry for scoring responses in accordance with commands from the instructional signal, and a recording device for providing a permanent record of the audience score at the remote station. For conducting a sweepstakes, numbers or other responses are entered at the remote stations and are stored at a central facility for verification. The program may be presented live conducted by a host at a central station, or by a prerecorded message accessible by telephone from a remote station with regulation from a central station, and members of the remote audience may predict or select winning contestants.

0) DE3638085A1 – METHOD AND TOOL FOR DRESSING AN ABRASIVE PENCIL...

60) Family number: 6519603 (DE3638085A1) © PatBase

Title: Method and tool for dressing an abrasive pencil

Priority: DE19863638085 19861107

Family:

Publication number	Publication date	Application number	Application date
DE3638085 A1	19880519	DE19863638085	19861107
DE3638085 C2	19880825	DE19863638085	19861107

Probable Assignee: EX CELL O GMBH

Assignee(s):(std)**:** EX CELL O GMBH

Assignee(s): EX CELL O GMBH 7332 EISLINGEN DE

Inventor(s):(std)**:** FREYWIS GOTTFRIED

Inventor(s): FREYWIS GOTTFRIED 7344 GINGEN DE

International class (IPC 8–9): B24B53/065 B24B53/12 (Advanced/Invention); B24B53/06 B24B53/12 (Core/Invention)

International class (IPC 1–7): B24B53/065 B24B53/12

CPC: B24B53/065 B24B53/12

European class: B24B53/065 B24B53/12

Classification Explorer

Forward Citations: DE102009011493,

Abstract:
Source: DE3638085A1 In order to improve a method and a tool for dressing an abrasive pencil in which the abrasive pencil having a surface to be dressed is rotated and in which at least one cutting surface of one or more diamonds is guided on at least one trajectory which engages along a trajectory section substantially tangentially into a surface of the abrasive pencil and whose position is changed in accordance with an abrasive pencil surface shape to be dressed, in such a way that the abrasive pencil has, on the one hand, an accurately worked surface and, on the other hand, larger pockets in its surface, it is proposed that in each case only one diamond engages into the surface of the abrasive pencil along the path section.

0) ES2004088A – PERFECCIONAMIENTOS EN TERRAJAS DE APERTURA AUTO...

61) Family number: 18999813 (ES2004088A) © PatBase

Title: PERFECCIONAMIENTOS EN TERRAJAS DE APERTURA AUTOMATICA
IMPROVEMENTS IN AUTOMATIC OPENING DIES (Machine translation)

Priority: ES19870000287 19870206

Family:

Publication number	Publication date	Application number	Application date
ES2004088 AF	19881201	ES19870000287	19870206

Probable Assignee: CIVA TOOLS S A

Assignee(s):(std)**:** CIVA TOOLS S A

Inventor(s):(std)**:** ECHEVERRIA URBIETA JOSE LUIS

International class (IPC 8–9)**:** B23G5/12 (Advanced/Invention); B23G5/00 (Core/Invention)

International class (IPC 1–7)**:** B23G5/12

Classification Explorer

Forward Citations: ES2100770,

Abstract:
Source: ES2004088A UNA TERRAJA CON UNA TAPA FRONTAL EN LA QUE SE DISPONE UN CUERPO POSTIZO PERPENDICULAR AL EJE DE LA TERRAJA, QUE ESTA DOTADO DE UNA SERIE DE DIENTES RADIALES. LA TAPA ESTA RELACIONADA CON EL PORTAEXCENTRICAS, DE MANERA QUE CUANDO EL TUBO ROSCADO INCIDE SOBRE EL POSTIZO, LOS DIENTES ACTUAN CONTRA EL FRENTE DEL TUBO, Y LOS PEINES SE ABREN AUTOMATICAMENTE. A SWEEP WITH A FRONT COVER IN A BODY THAT HAS insert perpendicular to the axis SWEEP OF WHICH IS EQUIPPED WITH A SERIES OF TEETH RADIO. THE COVER IS RELATED PORTAEXCENTRICAS, SO WHEN THE PIPE THREADING SHINES ON hairpiece, ACTING AGAINST TOOTH FRONT PIPE, AND AUTOMATICALLY OPEN COMBS.

62) Family number: 39097421 (US4913343A) © PatBase

Title: Electrical insulator for insulating a railway rail–fastening clip from a retaining member for it

Priority: AU19870079914 19871019 EP19880309798 19881019 EP19880309800 19881019 WO1988GB00885 19881019 GB19880024065 19881013

Family:

Publication number	Publication date	Application number	Application date
AT67803 E	19911015	AT19880309798T	19881019
BRPI8805380 A	19890613	BR1988PI05380	19881018
BRPI8805381 A	19890613	BR1988PI05381	19881018
BRPI8805382 A	19890620	BR1988PI05382	19881018
BRPI8807755 A	19901016	BR1988PI07755	19881019
CN1035537 A	19890913	CN19881007295	19881018
DE3865169 D1	19911031	DE19883865169	19881019
DK579488 A	19890420	DK19880005794	19881018
DK579488 A0	19881018	DK19880005794	19881018
EP0313325 A1	19890426	EP19880309798	19881019
EP0313325 B1	19910925	EP19880309798	19881019
EP0313326 A1	19890426	EP19880309799	19881019
EP0313327 A1	19890426	EP19880309801	19881019
EP0318150 A1	19890531	EP19880309800	19881019
ES2025783 T3	19920401	ES19880309798T	19881019
FI884811 A	19890420	FI19880004811	19881018
FI884811 A0	19881018	FI19880004811	19881018
FI901792 A0	19900409	FI19900001792	19900409
GB2211229 A1	19890628	GB19880024062	19881013
GB2211229 B2	19911106	GB19880024062	19881013
GB2211230 A1	19890628	GB19880024063	19881013
GB2211231 A1	19890628	GB19880024064	19881013
GB2211232 A1	19890628	GB19880024481	19881019
GB2211232 B2	19910821	GB19880024481	19881019
GB8824062 A0	19881123	GB19880024062	19881013
GB8824063 A0	19881123	GB19880024063	19881013
GB8824064 A0	19881123	GB19880024064	19881013
GB8824065 A0	19881123	GB19880024065	19881013
GB8824481 A0	19881123	GB19880024481	19881019
JP1137001 A2	19890530	JP19880261669	19881019
JP1137002 A2	19890530	JP19880261671	19881019
JP1142101 A2	19890605	JP19880261670	19881019
MA21410 A1	19890701	MA19880021650	19881018
MW4888 A	19890510	MW19880000048	19881018
NO884640 A	19890420	NO19880004640	19881018
NO884640 A0	19881018	NO19880004640	19881018
NO901681 A	19900417	NO19900001681	19900417
NO901681 A0	19900417	NO19900001681	19900417
NZ226596 A	19910426	NZ19880226596	19881017
NZ226597 A	19910426	NZ19880226597	19881017
NZ226598 A	19910426	NZ19880226598	19881017

NZ226623 A	19910426	NZ19880226623	19881019	
OA9065 A	19911031	OA19880059450	19881006	
PT88768 A	19890731	PT19880088768	19881014	
PT88768 B	19940131	PT19880088768	19881014	
TNSN88109 A1	19900710	TN1988SN00109	19881019	
US4913343 A	19900403	US19880260175	19881019	
US4915299 A	19900410	US19880260176	19881019	
US4934594 A	19900619	US19880260177	19881019	
US4971247 A	19901120	US19880260174	19881019	
WO8903912 A1	19890505	WO1988GB00885	19881019	
YU194388 A	19910831	YU19880001943	19881018	
ZA8807727 A	19890726	ZA19880007727	19881017	
ZA8807728 A	19890726	ZA19880007728	19881017	
ZA8807729 A	19890726	ZA19880007729	19881017	
ZA8807814 A	19890726	ZA19880007814	19881019	
ZW13888 A	19890517	ZW19880000138	19881017	

Probable Assignee: PANDROL LIMITED

Assignee(s):(std)**:** PANDROL LTD

Assignee(s): PANDROL 1 VINCENT SQUARE LONDON SW1P 2PN UNITED KI ; PANDROL LIMITED

Inventor(s):(std)**:** RARANSU HAAKASU ; RANSU HAAKASU ; LANCE HARKUS ; HARKUS LANCE ; HARKUS L

Designated states: AT BE BR CH DE ES FI FR IT JP KR LI LK NL NO SE

International class (IPC 8–9)**:** E01B9/18 E01B9/30 E01B9/48 E01B9/68 (Advanced/Invention); E01B (Subclass/Invention)

International class (IPC 1–7)**:** E01B13/02 E01B26/00 E01B31/26 E01B9/00 E01B9/18 E01B9/28 E01B9/30 E01B9/34 E01B9/46 E01B9/48 E01B9/66 E01B9/68 F16B2/20 F16B5/06

CPC: E01B9/18 E01B9/303 E01B9/685 E01B9/686

European class: E01B9/18 E01B9/30B E01B9/68C1 P01B9/68C

US class: 238/283 238/306 238/310 238/315 238/349 238/351

Classification Explorer

Cited documents: WO7900727 A1, US853684 A, US675761 A, US4757945 A, US4715533 A, US4706367 A, US4696429 A, US4632308 A, US4627132 A, US4625912 A, US4618093 A, US4466569 A, US4454985 A, US4447006 A, US4316643 A, US4316578 A, US4254908 A, US4175700 A, US4067495 A, US3957201 A, US3920183 A, US3904112 A, US3326466 A, US3315537 A, US3295760 A, US3134611 A, US2713974 A, US2046817 A, US1822963 A, US1549623 A, NL8502313 A, JP57041901 B4, JP50098005 A2, JP49011770 U1, JP31015412 Y1, GB968659 A, GB841776 A, GB797889 A, GB2105389 A1, GB2087460 A1, GB2077330 A1, GB2034788 A1, GB1557315 A, GB1549623 A, GB1510224 A, GB1497908 A, GB1099201 A, GB1059190 A, GB1044884 A, GB1039017 A, FR2330803 A1, FR2310168 A1, FR1481961 A, FR1204262 A, EP0232029 A2, EP0095210 A1, EP0050048 A1, DE1658300 A1, BE897056 A1, BE543755 A, AU556966 B2, AU556966 A1,

Forward Citations: WO9736055, WO16094965, WO14032114, WO13186520, WO13186520, USD736609, US9686921, US9562330, US9435082, US9103074, US8905322, US8684280, US8210444, US8201751, US8042747, US7845578, US7655294, US7651759, US7100837, US6648238, US6471139, US6398123, US6342287, US5628454, US5551633, US5551632, US5549245, US5203502, US5170937, US2014374499, US2012247256, US2010206958, US2009261177, US2009108086, US2009065599, US2009057435, US2007210178, US2007202308, US2005175817, US2004200906, RU2619149, LT4543, JP5878855, JP2013518196, JP2013039412, GB2472850, GB2472850, GB2469371, FR2741639, EP2944721, EP0828891, CN104540996, CN104540996, CN102472020, CN102472020, AU2013276280, AU2012357745, AU2007217202,

Abstract:
Source: US4913343A A bushing of electrically insulating material has a passageway, of elongate cross−section,

through it. The bushing is inserted in a clip−retaining member and the latter is supported in a mould into which a wet cement mix is poured so that a concrete railway sleeper is formed and the clip−retaining member is held in the concrete with the passageway above the concrete. A center arm and an upper arm of a substantially e−shaped clip are driven into the passageway and a lower arm of the clip bears downwardly on a flange of a railway rail.

0) US4869318A – ANNULUS VALVE FOR CONCENTRIC TUBING HANGERS

63) Family number: 3184259 (US4869318A) © PatBase

Title: Annulus valve for concentric tubing hangers

Priority: CA19890604791 19890705 EP19880306135 19880706 EP19880306135 19880716 US19880242530 19880912

Family:

Publication number	Publication date	Application number	Application date
CA1314206 A1	19930309	CA19890604791	19890705
DE3868634 A1	19920402	DE19883868634	19880706
DE3868634 D1	19920402	DE19883868634	19880706
EP0349685 A1	19900110	EP19880306135	19880706
EP0349685 B1	19920226	EP19880306135	19880706
JP2027090 A2	19900129	JP19890091685	19890411
NO890710 A	19900108	NO19890000710	19890220
NO890710 A0	19890220	NO19890000710	19890220
SG9290636 A	19920904	SG19920090636	19920618
US4869318 A	19890926	US19880242530	19880912

Probable Assignee: COOPER CAMERON CORP

Assignee(s):(std)**:** CAMERON IRON WORKS INC ; COOPER IND INC

Assignee(s): COOPER IND ; COOPER INDUSTRIES INC ; KELLETT RODNEY ; CAMERON IRON WORKS USA INC ; CAMERON IRON WORKS USA INC 13013 NORTHWEST FREEWAY ; CAMERON IRON WORKS USA INC A CORP OF DE ; CAMERON IRON WORKS USA INC A DELAWARE CORP ; COOPER CAMERON CORP

Inventor(s):(std)**:** KELLETT RODNEY ; RODONII KERETSUTO

Agent(s): SMART AND BIGGAR

Designated states: DE FR GB NL

International class(IPC 8–9)**:** E21B33/03 E21B33/04 E21B34/02 E21B34/10 (Advanced/Invention); E21B33/03 E21B34/00 (Core/Invention); E21B (Subclass/Invention)

International class(IPC 1–7)**:** E21B33/03 E21B34/02 E21B34/10

CPC: E21B33/04 E21B34/02

European class: E21B33/04 E21B34/02

US class: 166/321 166/87 166/97

Classification Explorer

Cited documents: US4449583 A, US4333526 A, US4125155 A, US3360048 A, GB2049765 A1,

Forward Citations: WO10022170, WO08137340, US9611717, US8746350, US8464795, US8434560, US7219741, US7073591, US6840323, US5769162, US5687794, US5549163, US5503230, US5211243, US5207275, US5143158, US5044432, US2010139910, US2005121199, US2003121667, GB2474991, GB2474991, GB2389599, GB2389599, GB2243383, GB2243383, CN102536161, AU2009283910,

Abstract:
Source: US4869318A An improved valve for controlling flow through a tubing hanger in a unit having a concentric tubing system and includes upwardly facing recesses or blind pockets in the hanger with a valve member in each of said pockets and having circumferential seals around its upper end and around its lower enlarged end, the valve members are biased upwardly in their pockets by springs and by annulus pressure which is transmitted to the lower end of the valve members through valve passages, the valve members each includes an upper projection or rod which is engaged by an annular actuator controlled responsive to a downwardly exerted spring force and by a pressure area differential which is exposed to annulus pressure and control pressure to urge the annular actuator downwardly which movement moves the valve member to its downward or open position. Control line pressure is provided to the actuator and to the exterior surface of the valve members below their upper seals so that the movement of the valve members can be controlled from remote locations.

0) US5107649A – COMPACT VACUUM INSULATION EMBODIMENTS

64) Family number: 29343373 (US5107649A) © PatBase

Title: COMPACT VACUUM INSULATION EMBODIMENTS

Priority:
CA19890596025 19890407 EP19950909353 19950127 US19900473641 19900201
US19920856840 19920323 US19900535782 19900612 US19880181926 19880415
US19940188394 19940127 US19960716822 19960910 WO1991US04121 19910612
US19940194932 19940214 US19940194933 19940214 US19920960885 19921014
WO1989US01553 19890413 US19940343081 19941121 WO1995US01086 19950127
WO1993US00656 19930125 WO1995US15130 19951121

Family:

Publication number	Publication date	Application number	Application date
AT143084 E	19961015	AT19910913152T	19910612
AT265615 E	20040515	AT19950909353T	19950127
AT410588 E	20081015	AT19950009833T	19950127
AU198935590 A1	19891103	AU19890035590	19890413
AU199182289 A1	19920107	AU19910082289	19910612
AU199336559 A1	19940509	AU19930036559	19930125
AU199642414 A1	19960617	AU19960042414	19951121
AU645481 B2	19940120	AU19890035590	19890413
AU662294 B2	19950831	AU19910082289	19910612
BRPI9506649 A	19970902	BR1995PI06649	19950127
CA1328724 A1	19940426	CA19890596025	19890407
CA2182016 AA	19950803	CA19952182016	19950127
CA2182016 C	20000829	CA19952182016	19950127
CN1078660 C	20020130	CN19951092286	19950127
CN1144551 A	19970305	CN19951092286	19950127
DE68928547 D1	19980219	DE19896028547	19890413
DE68928547 T2	19980423	DE19896028547T	19890413
DE69122249 D1	19961024	DE19916022249	19910612
DE69122249 T2	19970206	DE19916022249	19910612
DE69532972 D1	20040603	DE19956032972	19950127
DE69532972 T2	20050623	DE19956032972T	19950127
DE69535858 D1	20081120	DE19956035858	19950127
DK0535147 T3	19970113	DK19910913152T	19910612
EP0425499 A1	19910508	EP19890905479	19890413
EP0425499 A4	19910925	EP19890905479	19890413
EP0425499 B1	19980114	EP19890905479	19890413
EP0535147 A1	19930407	EP19910913152	19910612
EP0535147 A4	19930714	EP19910913152	19910612
EP0535147 B1	19960918	EP19910913152	19910612
EP0832346 A1	19980401	EP19950909353	19950127
EP0832346 A4	19980415	EP19950909353	19950127
EP0832346 B1	20040428	EP19950909353	19950127
EP0832346 B9	20041013	EP19950909353	19950127
EP1445440 A1	20040811	EP20040009833	19950127
EP1445440 B1	20081008	EP20040009833	19950127
ES2091935 T3	19961116	ES19910913152T	19910612
GR3021712 T3	19970228	GR19960403105T	19961120
JP2736468 B2	19980402	JP19890505232T	19890413
JP2821582 B2	19981105	JP19950520184T	19950127

JP3045543 B2	20000529	JP19910512414T	19910612
JP4503701 T2	19920702	JP19890505232T	19890413
JP5509381 T2	19931222	JP19910512414T	19910612
JP9511558 T2	19971118	JP19950520184T	19950127
KR0175719 B1	19990320	KR19967004070	19960727
KR100175719 B1	19990320	KR19960704070	19960727
KR19970700815 A	19970212	KR19960704070	19960727
MX9603023 A1	19970628	MX19960003023	19950127
US5107649 A	19920428	US19900473641	19900201
US5157893 A	19921027	US19900535782	19900612
US5175975 A	19930105	US19920856840	19920323
US5318108 A	19940607	US19920960885	19921014
US5433056 A	19950718	US19940194933	19940214
US5477676 A	19951226	US19940188394	19940127
US5562154 A	19961008	US19940194932	19940214
US5643485 A	19970701	US19940343081	19941121
US5813454 A	19980929	US19960716822	19960910
WO8909860 A1	19891019	WO1989US01553	19890413
WO9119867 A1	19911226	WO1991US04121	19910612
WO9409333 A1	19940428	WO1993US00656	19930125
WO9520721 A1	19950803	WO1995US01086	19950127
WO9616526 A1	19960530	WO1995US15130	19951121

Probable Assignee: VARITEC THERMAL LLC

Assignee(s):(std)**:** THOMAS F POTTER ; POTTER THOMAS F ; MIDWEST RESEARCH INST ; BENSON DAVID ; BENSON DAVID K ; DAVIDK BENSON ; VARITEC L L C ; VARITEC THERMAL L L C ; VARITEC LLC

Assignee(s): ALLIANCE FOR SUSTAINABLE ENERGY LLC ; VARITEC THERMAL LLC ; DAVID K BENSON ; MIDWEST RESEARCH INSTITUTE ; POTTER THOMAS F DENVER COL US ; BENSON DEBITSUDO KEE ; BENSON DAVID GOLDEN CONN ; BENSON DAVID GOLDEN CONN US ; HOTSUTAA TOOMASU EFU ; ENERGY UNITED STATES DEPARTMENT OF GC ; UNITED STATES DEPARTMENT OF ENERGY GC ; ENERGY UNITED STATES DEPARTMENT OF ; UNITED STATES DEPARTMENT OF ENERGY

Inventor(s):(std)**:** BENSON DAVID ; BENSON DAVID K ; BURCH STEVEN D ; DAVID K BENSON ; POTTER THOMAS F ; STEVEN D BURCH ; THOMAS F POTTER

Inventor(s): HOTSUTAA TOOMASU EFU ; BENSON DEBITSUDO KEE ; BENSON DAVID GOLDEN CONN

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; FINLAYSON AND SINGLEHURST; SMART AND BIGGAR; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CN DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR LI LK LU MC MG ML MN MR MW MX NL NO NZ PL PT RO RU SD SE SN SU TD TG US

International class (IPC 8–9): A47J27/00 A47J41/02 B64G1/22 B64G1/50 B64G1/58 B65D81/38 E04B1/76 E04B1/80 E04B1/90 E04C2/08 E04C2/292 E04C2/34 E06B1/12 E06B3/26 E06B3/663 F01N13/02 F01N13/14 F01N3/08 F01N3/20 F01N3/24 F01N3/26 F01N3/28 F01N5/02 F16L59/06 F28F13/00 H01M10/50 H01M2/10 H05B6/12 (Advanced/Invention); B65D81/38 E04B1/76 E06B1/12 F01N13/02 F01N13/14 F01N3/10 F01N7/02 F01N7/14 F16L59/06 (Advanced/Non-invention)

International class (IPC 1–7): A47G23/04 A47J27/00 B64G1/50 B65D81/38 E04B1/80 E04B1/90 E04C2/08 E04C2/32 E04C2/34 E06B1/12 E06B3/26 F01N3/10 F01N3/20 F01N3/24 F01N3/26 F01N3/28 F01N5/02 F01N7/18 F16L59/02 F16L59/06 F28F13/00 F28F27/00 H05B6/12

CPC: Y10S99/14 F01N3/2828 F01N3/2875 F01N5/025 F28F2013/005 F28F2013/008 B64G1/503 F01N3/08 F01N3/2013 F01N13/14 F01N2260/02 F01N2470/12 H01M2/1094 F01N13/0097 F01N3/2046 A47J27/002 A47J41/028 B64G1/22 B64G1/226 B64G1/50

B64G1/58 E04C2/292 E04C2/34 E06B3/66304 F01N3/2006 F01N3/2882 F01N3/2889 F01N5/02 F01N2240/02 F01N2240/10 F01N2260/08 F01N2330/06 F28F13/00 Y02T10/16 Y02T10/26 Y10T428/26 Y10T428/231 Y10T428/233 Y10T428/24612 H01M10/613 H01M10/615 H01M10/647 H01M10/6554 H01M10/658 A47J41/02 F28F1/02 F28F1/40 F28F3/06 F28F13/12 E04B1/803 E04B2001/7691 A47L15/4209 Y02B80/12

European class: A47J27/00A A47J41/02 A47J41/02G4 B64G1/22 B64G1/22P B64G1/50 B64G1/58 E04B1/80B E04C2/292 E04C2/34 E06B3/663A F01N13/14 F01N3/08 F01N3/20B F01N3/20B2 F01N3/20B8 F01N3/28D F01N3/28D6 F01N5/02 F01N5/02B F28F13/00 H01M10/50C2 H01M10/50C4 H01M10/50H4 H01M10/50K10H H01M10/50K16 H01M2/10F L64G1/50A P04B1/76R R01N13/02S R01N13/14 R01N240/02 R01N240/10 R01N260/02 R01N260/08 R01N3/20B2 R01N3/28B4B R01N3/28C12 R01N3/28D6 R01N330/06 R01N470/12 Y02B80/12 Y02E60/12

US class: 126/375 126/375.1 126/390 165/276 165/287 165/32 165/96 219/430 219/439 219/621 219/625 219/651 220/422 220/573.1 220/592.22 220/592.27 220/62.18 428/172 428/332 428/432 428/69 428/71 52/309.4 52/309.7 52/404 52/406 52/406.3 52/783.14 52/788.1 52/789.1 52/791 52/792 52/793.1 52/794.1 52/798.1 52/799 52/806 52/809 52/814 523/94 527/910 527/920 60/274 60/300 60/303 99/DIG.14

Classification Explorer

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Forward Citations: WO9936726, WO9821454, WO9805184, WO9616526, WO9519532, WO9105926, WO16128520, WO15163560, WO15007269, WO14063927, WO14022428, WO13186225, WO13186224, WO13148962, WO13065162, WO13010555, WO12176880, WO12084874, WO12052849, WO11096847, WO10076588, WO10022507, WO08071373, WO08071373, WO08068632, WO08068632, WO08068396, WO07096384, WO07000274, WO05057077, WO05026605, WO04091773, WO04089175, WO03009925, WO02092936, WO02092936, WO02081833, WO0157372, WO0157371, WO0151780, WO0128296, WO0043105, WO0043104, WO0043103, WO0034614, WO0022285, USRE42513, USD633324, USD620303, USD549852, USD548856, US9696083, US9689604, US9688046, US9663952, US9651292, US9630381, US9630206, US9606587, US9603288, US9599392, US9598857, US9587425, US9566552, US9534793, US9532659, US9528749, US9493948, US9481994, US9463917, US9442514, US9430006, US9389013, US9377227, US9366071, US9346237, US9328512, US9320293, US9315988, US9306143, US9293680, US9276188, US9272484, US9271610, US9268366, US9228775, US9221210, US9207010, US9182158, US9181838, US9140481, US9125512, US9108156, US9102086, US9101881, US9091203, US9074506, US9073462, US9071907, US9046308, US9038403, US9035222, US9006557, US8955358, US8950162, US8911847, US8899068, US8870102, US8857931, US8840819, US8839613, US8814863, US8814862, US8806858, US8796598, US8765247, US8675358, US8602248, US8596863, US8590598, US8526179, US8512830, US8487221, US8365813, US8336822, US8329267, US8327634, US8309032, US8283023, US8234835, US8201615, US8161920, US8097336, US8087534, US8053709, US8018128, US7989040, US7980171, US7968159, US7954301, US7926418, US7921640, US7845142, US7832177, US7774997, US7743816, US7574858, US7573005, US7565862, US7562507, US7538300, US7530204, US7523607, US7517712, US7473872, US7431896, US7378623, US7353081, US7343714, US7334375, US7238546, US7178302, US7152394, US7055315, US7043881, US6989517, US6988509, US6986247, US6953919, US6951099, US6946171, US6942383, US6908595, US6899170, US6894255, US6884398, US6881905, US6875407, US6871700, US6861628, US6832475, US6767619, US6744019, US6718758, US6714278, US6701749, US6691509, US6659037, US6641689, US6612115, US6565903, US6564796, US6558494, US6557313, US6555799, US6555789, US6544618, US6541083,

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Abstract:
Source: US5107649A An ultra−thin compact vacuum insulation panel is comprised of two hard, but bendable metal wall sheets closely spaced apart from each other and welded around the edges to enclose a vacuum chamber. Glass or ceramic spacers hold the wall sheets apart. The spacers can be discrete spherical beads or monolithic sheets of glass or ceramic webs with nodules protruding therefrom to form essentially "point" or "line" contacts with the metal wall sheets. In the case of monolithic spacers that form "line" contacts, two such spacers with the line contacts running perpendicular to each other form effectively "point" contacts at the intersections. Corrugations accommodate bending and expansion, tubular insulated pipes and conduits, and preferred applications are also included.

0) US5406815A – MAGNETIC KEY OPERATED CODE–CHANGE LOCK

65) Family number: 3527223 (US5406815A) © PatBase

Title: MAGNETIC KEY OPERATED CODE–CHANGE LOCK

Priority: DE19883841597 19881209 DE19890013985U 19891128 JP19960220908 19960822 DE19895008239 19891206 DE19898913985 19891128 GB19900021111 19900928 WO1991GB01683 19910930 WO1989EP01491 19891206

Family:

Publication number	Publication date	Application number	Application date
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AT110318 E	19940915	AT19890900850T	19891206
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Probable Assignee: MATSUSHITA ELECTRIC INDUSTRIAL CO LTD

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Assignee(s): SEDLEY BRUCE SAMUEL ; SEDLEY BRUCE SAMUEL KOLOA HAWAII US ; BRUCE SAMUEL SEDLEY ; MATSUSHITA ELECTRIC INDUSTRIAL CO ; LOTHAR ELSNER ; ELSNER LOTHAR 7157 WINNENDEN DE ; MATSUSHITA ELECTRIC INDUSTRIAL CO LTD

Inventor(s):(std)**:** AMANO HIROKI ; AMANO HIROMI ; HONBU TAKAHIRO ; KUROKI HIROYUKI ; MORISHITA MASANORI ; MORISHITA SEIKI ; MOTOBE TAKAHIRO ; SEDLEY BRUCE S ; TAKAHIRO HOBE ; SIDLY BRUSS SAEMUEL ; LOTHAR ELSNER ; HIROYUKI KUROKI ; HIROMI AMANO ; ELSNER LOTHAR ; SEDLEY BRUCE SAMUEL ; BRUCE SAMUEL SEDLEY ; ELSNER LOTHAR DE ; ELSNER L

Inventor(s): BRUSS SAEMUEL SIDLY ; ELSNER LOTHAR 7157 WINNENDEN DE ; HOBE TAKAHIRO ; SEDLEY BRUCE SAMUEL KOLOA HAWAII US ; SEIKI MORISHITA ; TAKAHIRO HONBU

Agent(s): WOLFF BREGMAN AND GOLLER

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CS DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR LI LK LU MC MG ML MN MR MW NL NO PL PT RO SD SE SN SU TD TG US

International class (IPC 8–9): B29C35/08 B29C35/10 B29C37/00 B29C53/60 B29C53/80 B29C53/82 B29C63/10 B29C65/08 B29C70/08 B29C70/20 B29C70/50 E05B47/00 H04N5/225 (Advanced/Invention); B29C35/08 B29C65/08 (Advanced/Non–invention); B29C35/10 B29C37/00 B29C53/00 B29C63/02 B29C70/04 B29C70/08 B29C70/10 E05B47/00 H04N5/225 (Core/Invention); B29C35/08 B29C65/08 (Core/Non–invention)

International class (IPC 1–7): B29B23/022 B29C35/10 B29C37/00 B29C53/56 B29C53/60 B29C63/10 B29C67/14 B29C70/22 B29D23/00 B29D23/22 E05B19/26 E05B35/00 E05B37/00 E05B47/00 E05C17/56 H04N5/225

CPC: H04N5/2251 B29C35/10 B29C53/607 B29C53/8058 B29C63/10 B29C65/08 B29C70/086 B29C70/207 B29C70/50 B29C2035/0822 B29C37/005 B29C53/82 Y10T70/7057 Y10T70/7904 E05B47/0043

European class: B29C35/10 B29C37/00D B29C53/60C B29C53/80B6B B29C53/82 B29C63/10 B29C70/08C B29C70/20B2 B29C70/50 E05B47/00B E05B47/00B5 H04N5/225C L29C35/08B3 L29C65/08

US class: 348/333 348/373 348/375 348/E05.025 348/E5.025 70/276 70/413 702/760

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Forward Citations: WO9604444, WO08029252, WO0185517, USD542819, US9444980, US8363171, US7573527, US7515826, US7405751, US7349021, US7339624, US7222544, US7046286, US6741287, US6474121, US5653134, US5622067, US2015002721, US2009273722, US2006269272, US2006092319, US2006055806, US2005052407, US2005018067, US2004212709, US2004051811, KR100754524, FR2808756, EP2787721, EP2061640, EP1814313, EP1280689, DE4402349, DE102013108259, DE102013108251, DE102004004932, CN104786514, CN102233681, CN101791853,

Abstract:
Source: US5406815A PCT No. PCT/GB91/01683 Sec. 371 Date Mar. 25, 1993 Sec. 102(e) Date Mar. 25, 1993 PCT Filed Sep. 30, 1991 PCT Pub. No. WO92/06264 PCT Pub. Date Apr. 16, 1992.A magnetic key operated lock has code changing magnet pins 108a, 110a, 112a and 114 a mounted in rotatable carriers 104 and 106 in a slide member 6. Spurious rotation of the carriers is prevented by a spring biassed bar 400 which is only released by keys, coded as code changing keys, when they are fully inserted and pressed against an end 403 of the bar 400 and by carriers 104 and 106 held against rotational movement by one or more of the above pins entering blind bores; the pins also acted upon by such keys in the slide member 6 when they are fully inserted.

0) US4974257A – MODULAR PUBLIC TELEPHONE FOR OUTSIDE USE

66) Family number: 3033679 (US4974257A) © PatBase

Title: MODULAR PUBLIC TELEPHONE FOR OUTSIDE USE

Priority: CU19890000158 19890824 ES19890001506 19890428 SU19898901506 19890428 ES19898901506 19890428 ES19890001506 19890428 ES19890011606 19890428

Family:

Publication number	Publication date	Application number	Application date
AT120322 E	19950415	AT19890500113T	19891116
BG51370 A3	19930415	BG19890090801	19891229
BRPI8906296 A	19901113	BR1989PI06296	19891201
CS9000072 A2	19910716	CS19900000072	19900105
CU22110 A3	19930430	CU19890000158	19890824
CZ278764 B6	19940615	CS19900000072	19900105
DD294150 A5	19910919	DD19900340228	19900427
DE0394600 T1	19910523	DE19890500113T	19891116
DE68921879 D1	19950427	DE19896021879	19891116
DE68921879 T2	19951116	DE19896021879T	19891116
DK174392 B1	20030127	DK19890006682	19891227
DK668289 A	19901029	DK19890006682	19891227
DK668289 A0	19891227	DK19890006682	19891227
DOP1989004757 A	19981015	DO19890004757	19891122
DOS1989004757 S	19951102	DO19890004757F	19891117
DZ1386 A1	20040913	DZ19890000202	19891227
EP0394600 A2	19901031	EP19890500113	19891116
EP0394600 A3	19911218	EP19890500113	19891116
EP0394600 B1	19950322	EP19890500113	19891116
ES2014071 AF	19900616	ES19890001506	19890428
FI105381 B	20000731	FI19890006341	19891229
FI896341 A0	19891229	FI19890006341	19891229
GR910300059 T1	19911115	GR19910300059T	19911115
IE67352 B	19960320	IE19900000009	19900102
IE900009 L	19901028	IE19900000009	19900102
LT1859 A	19950825	LT19940001859	19940131
LT3900 B	19960425	LT19940001859	19940131
LV11412 A	19960620	LV19930001324	19931210
LV11412 B	19961020	LV19930001324	19931210
MD950092 A	19960628	MD19950000092	19951228
MX171898 B	19931122	MX19890017022	19890801
NO180610 B	19970203	NO19890005328	19891229
NO180610 C	19970514	NO19890005328	19891229
NO895328 A	19901029	NO19890005328	19891229
NO895328 A0	19891229	NO19890005328	19891229
PT93068 A	19901120	PT19900093068	19900206
PT93068 B	19980529	PT19900093068	19900206
RU2145777 C1	20000220	SU19894742825	19891229
SK278899 B6	19980408	SK19900000072	19900105
US4974257 A	19901127	US19890391789	19890809
YU3590 A	19940120	YU19900000035	19900109

YU47503 B	19951003	YU19900000035	19900109	
ZA8909959 A	19901031	ZA19890009959	19891228	
ZW17789 A	19910612	ZW19890000177	19891229	

Probable Assignee: TELEFONICA SA

Assignee(s):(std)**:** CIERRES DE SEGURIDAD SA ; SAIPEM SPA ; TELEFONICA DE ESPAEA SA ; TELEFONICA DE ESPANA S A ; TELFONICA DE ESPANA S A ; TELEFONICA NACIONAL ESPANA CO ; TELEFONICA SA ; TELEFONIGA DE ESPANA S A

Assignee(s): TELEFONIKA DE EHSPAN'JA S.A. ; TELEFONIGA DE ESPANA SA ; TELFONICA DE ESPANA SA ; TELEFONIKA DE EHSPAN JA SA ; TELEFONIKA DE EHSPAN JA S A ; TELEFONICA S A ; TELEFONICA DE ESPANA ES ; TELEFONICA DE ESPANA ; TELEFONICA DE ESPANA S A ES ; TELEFONICA DE ESPANA S A MADRID ES ; TELEFONICA DE ESPANA GRAN VIA 28 28013 MADRID (SPAIN) A CORP OF SPAIN SA ; TELEFONICA DE ESPANA GRAN VIA 28 28013 MADRID SPAIN A CORP OF SPAIN SA ; TELEFONICA DE ESPANA SA ; TELEFONICA GRAN VIA SA ; GARCIA MORALES J M ; IBANEZ PALOMEQUE F ; SAIPEM S P A

Inventor(s):(std)**:** FRANTSISKO IBAN ES PALOMEK ; GARCIA MANUEL M J ; GARCIA MORALES ; GARCIA MORALES J M ; IBANEZ FRANCISCO P ; IBANEZ PALOMEQUE ; IBANEZ PALOMEQUE F ; MORALES G ; MORALES JOSE MIGUEL GARCIA ; MORALES MANUEL GRACIA ; PALOMEQUE FRANCISCO IBAEES ; PALOMEQUE I ; PALOMEQUE FRANCISKO IBANEZ ; JOSE MANUEL GARCIA MORALES ; IBANEZ PALOMEQUE FRANCISCO ; GARCIA MORALES JOSE MANUEL ; FRANCISCO IBANEZ PALOMEQUE ; PALOMEQUE FRANCISCO IBANEZ ; PALOMEQUE FRANCISCO I ; MORALES JOSE MANUEL GARCIA ; MORALES JOSE MANUEL G ; KHOSE MANUEHL GARSIA MORALES ; PALOMEGUE FRANCISCO IBANEZ ; IBANEZ PALOMEQUE FRANCISKO ; GARCIA MORALES JOSE M

Inventor(s): FRANTSISKO IBAN'ES PALOMEK ; FRANCISCO IBANEZ PALOMEGUE ; JOSE MIGUEL GARCIA MORALES ; MANUEL GRACIA MORALES ; KHOSE MANUEHL' GARSIA MORALES ; IBANEZ PALOMEQUE FRANCISCO E 28050 MADRID ES ; GARCIA MORALES JOSE MANUEL ES ; GARCIA MORALES JOSE MANUEL E 28002 MADRID ES ; FRANCISKO IBANEZ PALOMEQUE ; IBANEZ PALOMEQUE FRANCISCO ES

Designated states: AT BE CH DE FR GB GR IT LI LU NL SE

International class(IPC 8–9)**:** H04M1/02 H04M15/32 H04M17/00 H04M17/02 H04M7/12 (Advanced/Invention); H04M1/02 H04M15/32 H04M17/00 H04M7/12 (Core/Invention)

International class(IPC 1–7)**:** E04H E05B63/14 G07F11/00 H04J7/02 H04M1/00 H04M1/02 H04M11/00 H04M11/02 H04M15/32 H04M17/00 H04M17/02 H04M7/02 H04M7/12

CPC: H04M17/026

European class: H04M17/02C

US class: 379/143 379/144 379/144.01 379/145 379/434 379/435 D14/146

Classification Explorer

Cited documents: WO8001126 A1, US4731819 A, US4645876 A, US4638121 A, US3393273 A, US3142522 A, GB2079846 A1, FR2558325 A1, FR2217879 A1, EP0251238 A2, CH538162 A,

Forward Citations: WO9956453, WO9856161, WO9815109, WO9815109, USD452231, USD452230, USD452223, USD451910, USD451500, USD435838, USD434746, USD434745, USD434020, USD429712, USD429711, US8861167, US6275584, US6097799, US6047173, US6047065, US5701338, US5600122, US5483582, US5420915, US5402476, US5400400, US5134654, US2008013011, US2002126236, ES2327306, EP0984611, EP0948185, DE19814165,

Abstract:
Source: US4974257A A modular public telephone has two independent armored boxes, one of which contains the telephone mechanism and the other of which is a strong coin receiving box. Both boxes are provided with front doors, and the upper box has a number of windows for receiving the respective operating modules including a coin insertion module a credit card insertion module, a display module, a keyboard module, a coin return module and a handset receiving module. A number of the modules can be interchanged or substituted.

67) Family number: 3065425 (US4963083A) © PatBase

Title: COMPOSITE METAL–ELASTOMER STYLED WHEELS AND METHOD AND APPARATUS FOR MOLDING THE SAME

Priority: CA19892005615 19891215 US19880285634 19881216 US19900584810 19900919

Family:

Publication number	Publication date	Application number	Application date
CA2005615 AA	19900616	CA19892005615	19891215
CA2005615 C	19951226	CA19892005615	19891215
DE68925690 D1	19960328	DE19896025690	19891215
DE68925690 T2	19960627	DE19896025690T	19891215
EP0378019 A2	19900718	EP19890403496	19891215
EP0378019 A3	19920102	EP19890403496	19891215
EP0378019 B1	19960214	EP19890403496	19891215
JP2225016 A2	19900907	JP19890325764	19891215
JP2642997 B2	19970820	JP19890325764	19891215
US4963083 A	19901016	US19880285634	19881216
US5088798 A	19920218	US19900584810	19900919

Probable Assignee: MOTOR WHEEL CORP

Assignee(s):(std)**:** MOTOR WHEEL CORP

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH AG ; HAYES LEMMERZ INT INC ; HLI OPERATING CO INC ; HLI SUSPENSION HOLDING CO LLC ; CONGRESS FINANCIAL CENTRAL CORP ; PRUETER ALBERT H ; STALTER ROBERT J SR ; CONGRESS FINANCIAL CORP ; MOOTAA HOIIRU CORP ; MOTOR WHEEL CORP LANSING MICH US ; DEUTSCHE BANK AG ; CANADIAN IMP ; CANADIAN IMP BANK OF COMMERCE (AS AGENT) ; CANADIAN IMP BANK OF COMMERCE AGENT AS ; CANADIAN IMP BANK OF COMMERCE AS AGENT ; CITICORP NORTH AMERICA INC ; CITICORP NORTH AMERICA INC AGENT AS ; CONGRESS FINANCIAL (CENTRAL) CORP

Inventor(s):(std)**:** ARUBAATO EICHI PURUUTAA ; PRUETER A ; PRUETER ALBERT H ; ROBAATO JIEI SUTARUTAA SHINIA ; STALTER ROBERT ; STALTER ROBERT J SR ; STALTER SR ROBERT J

Inventor(s): STALTER ROBERT J SR BOWLING GREEN OHIO 43 402 US ; STALTER ROBERT J ; PRUETER ALBERT H PERRYSBURG OHIO 43551 US ; ROBAATO JEI SUTARUTAA SHINIA

Agent(s): MARKS AND CLERK

Designated states: DE FR GB IT

International class (IPC 8–9)**:** B22D17/00 B29C45/00 B29C45/14 B60B19/00 B60B3/02 B60B5/02 B60B7/00 (Advanced/Invention); B29K75/00 B29L31/30 B29L31/32 (Advanced/Non–invention); B22D17/00 B29C45/00 B29C45/14 B60B5/00 B60B7/00 (Core/Invention)

International class (IPC 1–7)**:** B22C9/28 B22D17/00 B29C45/00 B29C45/14 B29D31/00 B29K75/00 B29L31/30 B29L31/32 B60B19/00 B60B3/02 B60B5/02 B60B7/00 B60R19/00

CPC: Y10S425/812 B60B5/02 B60B7/00

European class: B60B5/02 B60B7/00

US class: 249/108 249/176 249/183 249/56 249/91 249/95 264/259 264/46.7 264/46.9 301/37.42 301/37P 301/37R 425/125 425/127 425/812 425/817R

Classification Explorer

Cited documents: US733895 A, US4861538 A, US4847030 A, US4844967 A, US4786027 A, US4712765 A, US4688752 A, US4682820 A, US4659148 A, US4562990 A, US4437257 A, US4409716 A, US4318214 A, US4230645 A, US4201742 A, US4100247 A, US4017239 A, US3956451 A, US3935291 A, US3827756 A, US3815200 A, US3811737 A, US3762677 A, US3628237 A, US3430291 A, US3341647 A, US3308513 A, US3302919 A,

US3293694 A, US3266099 A, US2818604 A, US2340278 A, JPS61213112, JPS6097818, JPS5469191, JP61213112 A2, JP60097818 A2, JP54069191 A2, GB1290946 A, EP0329907 A1, EP0219434 A2,

Forward Citations: WO9515268, US7500840, US7097730, US6346159, US6054647, US5874037, US5842750, US5779951, US5639147, US5531949, US5517759, US5431556, US5143426, US2007199651, US2007196529, US2004144475, EP0852530,

Abstract:
Source: US4963083A An improved composite metal−elastomer styled automotive−type wheel with a three−dimensionally contoured ornamental outboard face formed by a plastic overlay body permanently adhered or affixed to the outboard face, and an improved molding apparatus and method for constructing such a wheel. A plastic overlay body has an annular row of outboard pockets disposed in radially offset, axially overlapping relation with a annular row of inboard pockets which in turn register with vent openings in the disc to thereby provide air passages through the wheel for brake ventilation. The outboard pockets preferably are disposed radially remote from the center of the wheel close to the wheel rim, and a relatively thin cross−section of plastic material is molded so as to overlie the outboard rim flange to provide a full−face appearance to the wheel. In the method and apparatus of the invention the mold cavity is provided with perimeter air vents to enable thin cross−section molding adjacent the outer perimeter of the mold cavity.

0) US5127837A – ELECTRICAL CONNECTORS AND IC CHIP TESTER EMBODY...

68) Family number: 10848171 (US5127837A) © PatBase

Title: ELECTRICAL CONNECTORS AND IC CHIP TESTER EMBODYING SAME

Priority: CA19890615035 19890929 CA19912038998 19910325 US19910754261 19910828 US19920871586 19920420 US19890364343 19890609 US19900499025 19900326 WO1990US02875 19900514 US19920923849 19920731 US19950467727 19950606

Family:

Publication number	Publication date	Application number	Application date
CA1320546 A1	19930720	CA19890615035	19890929
CA2038998 AA	19910927	CA19912038998	19910325
DE69033029 D1	19990506	DE19906033029	19900514
DE69033029 T2	19990812	DE19906033029T	19900514
DE69130928 D1	19990408	DE19916030928	19910323
DE69130928 T2	19990729	DE19916030928T	19910323
EP0428681 A1	19910529	EP19900908839	19900514
EP0428681 A4	19920722	EP19900908839	19900514
EP0428681 B1	19990331	EP19900908839	19900514
EP0449150 A2	19911002	EP19910104591	19910323
EP0449150 A3	19911113	EP19910104591	19910323
EP0449150 B1	19990303	EP19910104591	19910323
ES2128302 T3	19990516	ES19910104591T	19910323
ES2130122 T3	19990701	ES19900908839T	19900514
JP2554409 B2	19961113	JP19910132450	19910326
JP2891539 B2	19990517	JP19900508281T	19900514
JP4501192 T2	19920227	JP19900508281T	19900514
JP5095195 A2	19930416	JP19910132450	19910326
US5127837 A	19920707	US19910754261	19910828
US5282111 A	19940125	US19920871586	19920420
US5485351 A	19960116	US19920923849	19920731
US5761036 A	19980602	US19950467727	19950606
WO9015517 A1	19901213	WO1990US02875	19900514

Probable Assignee: CINCH CONNECTORS INC

Assignee(s):(std): LABINAL COMPONENTS AND SYSTEMS ; LABINAL COMPONENTS AND SYSTEMS I

Assignee(s): LABINAL COMPONENTS AND SYSTEMS INC ; RABINARU KONHOONENTSU ANDO SHISUTEMUZU INC ; RABINARU COMPONENTS AND SYST INC ; LABINAL COMPONENTS AND SYSTEMS INC ELK GROVE VILLA ; LABINAL COMPONENTS AND SYSTEMS INC ELK GROVE VILLAGE ILL US ; ZAFAR SAEED ; LINDEMAN RICHARD J ; SHAH ARUN JAYANTILAL ; MCCLUNG DAVID WILLIAM ; CINCH CONNECTORS INC ; HOPFER ALBERT N ; HOPFER ALBERT NICHOLAS ; KEYBANK NATIONAL ASSOCIATION

Inventor(s):(std): ALLARD EDWARD M ; ARUBAATO NIKORASU HOPUFUAA ; HOPFER ALBERT ; HOPFER ALBERT N ; HOPFER ALBERT NICHOLAS ; LINDEMAN RICHARD ; LINDEMAN RICHARD J ; LINDERMAN RICHARD J ; MCCLUNG DAVID ; MCCLUNG DAVID W ; MCCLUNG DAVID WILLIAM ; SHAH ARUN ; SHAH ARUN J ; SHAH ARUN JAYANTILAL ; ZAFAR SAEED

Inventor(s): ZAFAR SAEED PARK RIDGE IL 60068 US ; ZAFUAA SAEEDO ; SHAH ARUN JAYANTILAL HANOVER PARK IL 60103 US ; MCCLUNG DAVID WILLIAM BRIDGEVIEW IL 60455 US ; RINDEMAN RICHAADO JEI ; SHAA ARUN JAYANTEIRARU ; MAKUKURANGU DEBITSUDO UIRIAMU ; LINDEMAN RICHARD J WOOD DALE IL 60191 US ; HOPFER ALBERT NICHOLAS PARK RIDGE ILLINOIS 60008 U ; HOPFER ALBERT NICHOLAS PARK RIDGE ILLINOIS 60008 US ; HOTSUFUAA ARUBAATO ENU ; HOPFER ALBERT N PARK RIDGE IL 60068 US

Agent(s): SMART AND BIGGAR

Designated states: AT BE CH DE DK ES FR GB IT JP LU NL SE

International class (IPC 8–9): G01R1/04 G01R1/073 G01R31/26 G01R31/28 H01L21/66 H01L23/32 H01L23/34 H01L23/40 H01R11/09 H01R13/33 H01R13/642 H01R33/76 H05K7/10 H05K7/20 (Advanced/Invention); G01R1/02 G01R1/073 G01R31/26 G01R31/28 H01L21/66 H01L23/32 H01L23/34 H05K7/10 H05K7/20 (Core/Invention)

International class (IPC 1–7): G01R1/073 G01R31/26 H01L21/66 H01L23/34 H01L23/40 H01R11/09 H01R11/9 H01R13/33 H01R13/62 H01R13/622 H01R13/642 H01R33/76 H01R4/58 H01R9/09 H01R9/9 H05K1/00 H05K1/14 H05K7/10 H05K7/20 H65K7/20

CPC: H01L2924/0002 H05K7/1069 H01L23/4093 H05K7/1084 H01L23/32 G01R1/0408 G01R1/07314 G01R1/07357 G01R31/2886

European class: G01R1/04S G01R1/073B2 G01R1/073B8 G01R31/28G5 G01R31/316G H01L23/32 H01L23/40S H05K7/10F2B H05K7/10F3B

US class: 165/185 174/16.3 257/E23.086 361/704 361/707 361/785 439/248 439/331 439/485 439/487 439/525 439/66 439/700 439/71 439/73 439/75

Classification Explorer

Cited documents: US5282111 A, US5163837 A, US5127837 A, US5109980 A, US5074798 A, US5013249 A, US5007841 A, US5000689 A, US4992053 A, US4988306 A, US4882799 A, US4803546 A, US4750092 A, US4744009 A, US4733172 A, US4731698 A, US4716494 A, US4707657 A, US4706161 A, US4682269 A, US4679118 A, US4620761 A, US4595794 A, US4593961 A, US4581679 A, US4574331 A, US4539621 A, US4508405 A, US4373778 A, US4360858 A, US4278311 A, US4257661 A, US4236776 A, US4202593 A, US4193108 A, US4190098 A, US4168877 A, US4092697 A, US4082407 A, US4082399 A, US4029375 A, US3971610 A, US3917375 A, US3904934 A, US3881799 A, US3873173 A, US3862790 A, US3858958 A, US3795047 A, US3795037 A, US3764959 A, US3680037 A, US3616532 A, US3513434 A, US3509206 A, US3419844 A, US3200297 A, US3195628 A, US3149844 A, US3077511 A, US2853656 A, US2153177 A, JP62165958, JP59072739 U1, JP59072739 U, JP53003010 U1, JP53003010 U, JP44031404 Y1, GB2189657 A1, GB2163287 A1, EP0314481 A1, EP0248521 A2, EP0143262 A1, EP0055376 A2, EP0005376 A1,

Forward Citations: WO9701264, WO9304512, WO05119770, WO0243143, WO0243143, WO02075328, USRE42785, USRE42429, USRE42318, USD592380, US9699906, US9689897, US9685722, US9660368, US9613841, US9603249, US9559447, US9536815, US9482452, US9414500, US9350124, US9350093, US9320144, US9320133, US9318862, US9318846, US9277654, US9276339, US9276336, US9263817, US9232654, US9231328, US9196980, US9184527, US9184145, US9136196, US9093767, US9076884, US9054097, US9048565, US8988093, US8987886, US8984748, US8981809, US8981568, US8970031, US8955216, US8955215, US8928344, US8912812, US8803539, US8789272, US8758067, US8704377, US8568150, US8559180, US8373428, US8221135, US8143909, US8120480, US8113710, US8033838, US8011933, US7982477, US7934951, US7727785, US7708580, US7683648, US7651340, US7635269, US7601039, US7535713, US7503773, US7489514, US7411337, US7388751, US7385408, US7361862, US7358603, US7350290, US7280362, US7242583, US7238543, US7170306, US7169685, US7160119, US7159313, US7140901, US7121863, US7121843, US7121843, US7101210, US7101191, US7094618, US7057295, US7056128, US7040902, US7029289, US7029288, US7019984, US7014479, US7005754, US6991960, US6988310, US6979202, US6974345, US6969266, US6963143, US6945794, US6937044, US6913468, US6910897, US6908347, US6904671, US6899568, US6894898, US6890202, US6877993, US6876551, US6866531, US6858453, US6843657, US6840777, US6836003, US6832919, US6831834, US6789146, US6776625, US6769923, US6760216, US6752636, US6746270, US6735085, US6716050, US6703853, US6700068, US6676429, US6672892, US6672881, US6669489, US6661660, US6639803, US6626682, US6600652, US6590772, US6575764, US6574109, US6570763, US6559665, US6557625, US6547580, US6537082, US6535394, US6535002, US6533589, US6529385, US6529023, US6528760, US6500024, US6487079, US6435882, US6428337, US6426878, US6417484, US6394820, US6375473, US6367263, US6354859, US6351392, US6323437, US6300781, US6296520, US6293817, US6287068, US6284981, US6282761, US6264476, US6263067, US6256199, US6249436, US6246589, US6244875, US6243264, US6241459, US6231370, US6229320, US6222731, US6201705, US6191480, US6181149, US6166908, US6116566, US6115253, US6113399, US6106316, US6097198, US6064218, US6062870, US6049215, US6046597, US6042388, US6034874, US6015301, US5997316, US5991157, US5979025, US5953208, US5923179, US5917701, US5893765, US5889654, US5889653, US5805419, US5804875, US5791914, US5788512, US5785535, US5772451, US5761036, US5750421, US5741141, US5736428,

US5720630, US5704795, US5704794, US5699612, US5696405, US5688127, US5677247, US5672062, US5671118, US5669783, US5666064, US5660562, US5640305, US5637923, US5600540, US5597313, US5594624, US5571027, US5569039, US5528466, US5517125, US5485351, US5484013, US5475259, US5468909, US5468158, US5468157, US5451165, US5413489, US5400222, US5397245, US5395254, US5395249, US5383787, US5382169, US5371652, US5355281, US5320552, US5273439, US5247250, US5215472, US5176524, US2016365657, US2015139722, US2014370727, US2014139250, US2014075961, US2014073165, US2014043768, US2012164888, US2011299253, US2011235283, US2011059635, US2010297857, US2010295572, US2010261372, US2010128442, US2010124827, US2009315701, US2009233464, US2009232186, US2008265918, US2008207037, US2008160815, US2008160814, US2008081489, US2008036071, US2008014780, US2008000618, US2007297131, US2007230139, US2007230134, US2007223159, US2007222061, US2007126445, US2007111600, US2007076377, US2006244472, US2006228914, US2006141815, US2006116012, US2006110953, US2006101637, US2006094269, US2006038287, US2005245119, US2005236719, US2005233628, US2005191875, US2005164534, US2005122690, US2005099763, US2005091844, US2005074992, US2005048807, US2005048806, US2005029903, US2004242030, US2004192080, US2004178812, US2004137797, US2004125570, US2004120119, US2004115966, US2004110396, US2004072456, US2004052055, US2004038583, US2004027790, US2004018755, US2004002233, US2003194898, US2003190825, US2003094707, US2003042626, US2002065965, NL1008000, JP9139270, JP7130924, JP2007324141, FR2810571, FR2786275, EP1830439, EP1809085, EP1400811, EP1400811, EP1309039, EP1154275, EP1154275, EP1072180, EP1072180, EP0962123, EP0911913, EP0911913, EP0858135, EP0663704, EP0616366, EP0616366, EP0554689, EP0538010, EP0538010, DE20316645, DE10309103,

Abstract:
Source: US5127837A A novel wadded wire−plunger contact is provided which possesses excellent durability and desired functional characteristics in a large variety of applications such as the testing of IC chips.

0) US5033797A – METHOD OF AND APPARATUS FOR MAKING BRUSHES

69) Family number: 3324561 (US5033797A) © PatBase

Title: METHOD OF AND APPARATUS FOR MAKING BRUSHES

Priority: CA19902019662 19900622 DE19893920769 19890624 DE19905007034 19900608 DE19893920770 19890624

Family:

Publication number	Publication date	Application number	Application date
AT110942 E	19940915	AT19900110871T	19900608
AU199057690 A1	19910103	AU19900057690	19900620
AU624048 B2	19920528	AU19900057690	19900620
CA2019662 AA	19901224	CA19902019662	19900622
CA2019662 C	19960813	CA19902019662	19900622
DD298879 A5	19920319	DD19900341991	19900622
DE3920769 A1	19910110	DE19893920769	19890624
DE3920769 C2	19911219	DE19893920769	19890624
DE59007034 D1	19941013	DE19905007034	19900608
EP0405204 A2	19910102	EP19900110871	19900608
EP0405204 A3	19910807	EP19900110871	19900608
EP0405204 B1	19940907	EP19900110871	19900608
ES2060869 T3	19941201	ES19900110871T	19900608
JP2774185 B2	19980709	JP19900164351	19900625
JP3215211 A2	19910920	JP19900164351	19900625
US5033797 A	19910723	US19900542352	19900625

Probable Assignee: FRISETTA GMBH

Assignee(s):(std)**:** FRISETTA GMBH ; FURITSUTSU RIYUUPU ; RUEB FRITZ

Assignee(s): RUEB FRITZ 7869 SCHOENAU DE ; FRISETTA GMBH 79677 SCHOENAU DE ; FRITZ RUEB ; FRITZ RUEB DE

Inventor(s):(std)**:** FURITSUTSU RIYUUPU ; RUEB FRITZ

Inventor(s): RUEB FRITZ 7869 SCHOENAU DE ; RUEB FRITZ D 79677 SCHOENAU DE ; RUEB FRITZ DE ; FRITZ RUEB

Agent(s): PHILLIPS ORMONDE FITZPATRICK; FETHERSTONHAUGH AND CO

Designated states: AT BE CH DE DK ES FR GB IT LI SE

International class (IPC 8–9): A46B3/22 A46D3/00 A46D3/04 A46D3/06 (Advanced/Invention); A46D3/00 (Advanced/Non–invention); A46B3/00 A46D3/00 (Core/Invention)

International class (IPC 1–7): A46D1/08 A46D3/00 A46D3/04 A46D3/06 A46D3/6

CPC: A46D1/08 A46D3/045 A46D3/082

European class: A46D3/04C

US class: 300/21 300/5 300/9 500/5

Classification Explorer

Cited documents: US985806 A, US824503 A, US562930 A, US4904025 A, US4647113 A, US4610481 A, US4609228 A, US413788 A, US3230015 A, DE845933 A, DE3616976 A1, DE3512192 A1, DE3405001 A1, DE2808966 A1, DE2731762 C2, DE2731762 A1, DE2539417 A1, DE2335468 A1, DE1769825 U, DE1769825 A1, DE1632375 A1,

Forward Citations: WO9955194, WO9911156, WO9837787, WO17072197, WO13050181, WO11128020, WO10105745, WO04056235, WO0215743, WO0143587, WO0103546, WO0103540, USRE45141, USRE44346, USRE42985, US9392867, US9232852, US9192227, US9167888, US8876221, US8864241, US8814275, US8813299, US8806695,

US8695146, US8613123, US8533889, US8418306, US8239996, US8156599, US8151397, US7992247, US7988238, US7930792, US7774891, US7549187, US7520571, US7458647, US7445295, US7354112, US7281768, US7251849, US7174596, US7162767, US6988777, US6869148, US6854811, US6832819, US6779851, US6752949, US6702394, US6290303, US6290302, US6149861, US5927819, US5474366, US5454626, US5390984, US5224763, US2012013169, US2011308026, US2009193604, US2009025165, US2004032159, US2003132661, US2003042786, US2002180253, TWI520699, TWI516225, KR101752024, JP5818875, JP4251942, JP4173749, JP4173677, JP4079668, JP4059696, JP2013524881, JP2012520698, JP2005065870, JP2003504098, JP2003310355, JP2003245139, JP2003245138, JP2003245135, FR2769477, EP2886010, EP2683271, EP2526815, EP2298126, EP2292118, EP2215923, EP2196108, EP2196107, EP1312281, EP1194051, EP1142505, EP1136017, EP1136016, EP1110479, EP1073352, EP0972464, EP0972464, EP0680707, EP0626141, EP0623298, DE4409395, DE202010015966, DE202006020598, DE19932377, DE19818553, DE19738256, DE19738256, DE102011013621, DE102010055686, DE102010015118, DE102009013723, DE102008061389, DE102008061389, DE102008061384, DE10062398, CZ300411, CN106102517, CN105231654, CN103857312, CN103857312, CN102551339, CN102551339, CN102361576, CN101332012, BE1018439, AU762663,

Abstract:
Source: US5033797A Individual bristles and/or batches of bristles are withdrawn from one or more magazines and are mechanically or pneumatically transferred to positions of alignment with the sockets of one or more forms. The individual bristles and/or batches of bristles are thereupon drawn into the aligned sockets by suction prior to being welded or glued to an adapter which constitutes or forms part of a brush body and defines the open ends of sockets during drawing of bristles into the form or forms.

0) US4994734A – REGISTER CIRCUIT BOARD FOR ELECTRONIC ENERGY ME...

70) Family number: 2985437 (US4994734A) © PatBase

Title: Register circuit board for electronic energy meter

Priority: US19890412351 19890925 US19900618846 19901128

Family:

Publication number	Publication date	Application number	Application date
AR242857 A1	19930531	AR19900317828	19900911
BRPI9004758 A	19910910	BR1990PI04758	19900924
DE69008807 D1	19940616	DE19906008807	19900924
DE69008807 T2	19941222	DE19906008807T	19900924
EP0420536 A2	19910403	EP19900310404	19900924
EP0420536 A3	19911127	EP19900310404	19900924
EP0420536 B1	19940511	EP19900310404	19900924
ES2052185 T3	19940701	ES19900310404T	19900924
JP3099297 B2	20001016	JP19900252096	19900925
JP3152476 A2	19910628	JP19900252096	19900925
PH27170 A	19930402	PH19900041246	19900924
PT95413 A	19920529	PT19900095413	19900925
US4994734 A	19910219	US19890412351	19890925
US5068962 A	19911203	US19900618846	19901128

Probable Assignee: GEN ELECTRIC

Assignee(s):(std): GEN ELECTRIC ; GEN EREKUTORITSUKU CO

Assignee(s): GENERAL ELECTRIC CO ; GENERAL ELECTRIC CO A NY CORP ; GENERAL ELECTRIC CO GE ; GENERAL ELECTRIC CO SCHENECTADY N Y ; GENERAL ELECTRIC CO SCHENECTADY N Y US ; GENERAL ELECTRIC COMPANY

Inventor(s):(std): CORVEA PETER F ; CORYEA PETER E ; CORYEA PETER F ; GERMER WARREN R ; GERMER WARREN RALPH ; JIEIKOBU EMU SUCHIRUWAGON ; PIITAA EFU KORIIA ; STILLWAGON JACOB M ; WAREN RARUFU GAAMAA

Inventor(s): WARREN R GERMER ; WARREN RALPH GERMER ; STILLWAGON JACOB M NOTTINGHAM NEW HAMPSHIRE 03290 ; PETER F CORVEA ; PETER F CORYEA ; GERMER WARREN RALPH DOVER NEW HAMPSHIRE 03820 ; GERMER WARREN RALPH DOVER NEW HAMPSHIRE 03820 US ; JACOB M STILLWAGON ; CORYEA PETER F SALEM NEW HAMPSHIRE 03079 ; CORYEA PETER F SALEM NEW HAMPSHIRE 03079 US

Designated states: CH DE ES FR GB LI

International class (IPC 8–9): G01R11/02 G01R11/04 G01R22/00 (Advanced/Invention); H05K1/18 (Advanced/Non–invention); G01R11/00 G01R22/00 (Core/Invention); H05K1/18 (Core/Non–invention)

International class (IPC 1–7): G01R1/04 G01R11/02 G01R11/04 G01R11/32 G01R21/06 G01R22/00 G01R3/00 H05K3/36

CPC: G01R22/065 G01R11/02 H05K1/18 Y10T29/49126

European class: G01R11/02 G01R11/04 G01R22/06D2 T05K1/18

US class: 29/830 324/114 324/142 324/156 324/157 329/114 329/142 329/156 361/370 361/405 361/665 361/773 439/167

Classification Explorer

Cited documents: US4892485 A, US4791362 A, US4615009 A, US4520423 A, US2691769 A, GB2161945 A1,

Forward Citations: WO0101079, US9279543, US7701199, US7540766, US7065457, US6778920, US6663422, US6644989, US6592399, US6589072, US6564159, US6486652, US6478589, US6459258, US6443761, US6428350, US6335864, US6325666,

US5625286, US5311068, US5297929, US5216802, US2012087137, US2008024115, US2005162149, EP1120658, DE10324355, CN101915861,

Abstract:
Source: US4994734A An output connection and signal conditioning circuit board is selected and detachably connected to an electronic energy meter to customize its functions. Connectors are provided at the ends of the circuit board to mate with an edge connector in the bezel of the register and spaced holes in the base. A separate flexible connection to the KYZ terminals is provided, along with an intermediate tab and slot to position the circuit board and strengthen the meter. A selected circuit board is added to the manufactured meter to meet customer requirements by inserting a pin connector at the bottom of the circuit board through the spaced holes, and rotating the circuit board to mate with the tab and the edge connector.

0) US5194769A – ELECTRIC MOTOR, IN PARTICULAR ELECTRIC SMALL–SI...

71) Family number: 2601484 (US5194769A) © PatBase

Title: ELECTRIC MOTOR, IN PARTICULAR ELECTRIC SMALL–SIZE MOTOR FOR DRIVING WINDSHIELD WIPERS ON MOTOR VEHICLES

Priority: DE19893930144 19890909 WO1990EP01467 19900901 WO1990EP01467 19900901

Family:

Publication number	Publication date	Application number	Application date
BRPI9006893 A	19911001	BR1990PI06893	19900901
DE3930144 A1	19910321	DE19893930144	19890909
DE3930144 C2	19930429	DE19893930144	19890909
EP0443017 A1	19910828	EP19900914142	19900901
EP0443017 B1	19950208	EP19900914142	19900901
ES2067762 T3	19950401	ES19900914142T	19900901
JP2804989 B2	19980930	JP19900513245T	19900901
JP4501650 T2	19920319	JP19900513245T	19900901
US5194769 A	19930316	US19910688933	19910528
WO9103856 A1	19910321	WO1990EP01467	19900901

Probable Assignee: ITT AUTOMOTIVE EUROPE GMBH

Assignee(s):(std): SWF AUTO ELECTRIC GMBH ; TEVES GMBH ALFRED

Assignee(s): ITT AUTOMOTIVE EUROPE GMBH ; SWF AUTO ELECTRIC GMBH 7120 BIETIGHEIM BISSINGEN DE

Inventor(s):(std): ADE ROLF ; BUEHL HARRO ; BUHL HARRO ; SCHNEIDER THEODOR

Inventor(s): SCHNEIDER THEODOR 7121 FREUDENTAL DE ; THEODOR SCHNEIDER ; HARRO BUHL ; ROLF ADE ; BUEHL HARRO 7125 KIRCHHEIM DE ; ADE ROLF 7120 BIETIGHEIM BISSINGEN DE

Designated states: AT BE BR CH DE DK ES FR GB IT JP LU NL SE US

International class (IPC 8–9): B60S1/08 H02K11/00 H02K11/02 H02K23/66 H02K7/116 (Advanced/Invention); B60S1/08 H02K11/00 H02K11/02 H02K23/66 H02K7/116 (Core/Invention)

International class (IPC 1–7): B60S1/08 H02K11/00 H02K11/02 H02K23/66 H02K5/10 H02K7/116

CPC: H02K11/026 B60S1/08 H02K7/1166 H02K11/02 H02K11/024 H02K23/66 H02K2205/03 H02K2213/09

European class: B60S1/08 H02K11/02A1 H02K23/66 H02K7/116B1 T02K11/02 T02K205/03 T02K213/09

US class: 310/51 310/67R 310/89

Classification Explorer

Cited documents: US5063317 A, US4857812 A, US2464847 A, GB2046997 A1, EP0252481 A2, DE8527874 U, DE3607891 A1, DE3542632 A1, DE3021948 A1, DE2914864 A1, DE2813956 B1,

Forward Citations: WO9900278, WO9743819, WO9701465, WO9701464, WO9213381, WO13144125, WO13144125, WO08095564, WO08080714, WO04077642, WO03081751, WO0007281, WO0007281, US9083223, US8072116, US8026645, US7898141, US7843105, US7605506, US7511393, US7265475, US7262528, US6927522, US6867515, US6756754, US6717299, US6653754, US6573625, US6555943, US6548978, US6104110, US6051899, US5983484, US5872411, US5796198, US5747901, US5723924, US5691585, US5659211, US5528093, US5453649, US5382857, US5306974, US2015084459, US2013134811, US2010117470, US2010096956, US2009315420, US2009255081, US2008315711, US2008048507, US2006244321, US2005280323, US2005218750, US2004195928, KR101455622, JP2015517290, ITTO20111086, GB2287133, GB2256982, FR2754952, FR2750810, FR2748613, FR2733377, FR2730204, EP2114735, EP1489725, EP0898807, EP0739077, EP0735646, EP0726188, EP0708999, EP0608581, DE4101368, DE19727120, DE19727118, DE19652929, DE19623258, DE19623258, DE19548866, DE102012102813, DE102009032522, DE102009019726, DE102009019725,

DE102007061011, DE102007005572, DE102007002836, DE102006061957, CN104303403, CN103138457, CN103138457,

Abstract:
Source: US5194769A PCT No. PCT/EP90/01467 Sec. 371 Date May 28, 1991 Sec. 102(e) Date May 28, 1991 PCT Filed Jan. 9, 1990 PCT Pub. No. WO91/03856 PCT Pub. Date Mar. 21, 1991.An electric motor, in particular an electric small−size motor for driving windshield wipers on motor vehicles including a cup−shaped motor housing, a gear housing closing one front side of the motor housing by an end shield and having a cup−shaped section for receiving gearing elements and a cover closing the cup−shaped section of the gear housing, a holding device for an electric component positioned in a pocket of the cup−shaped section of the gear housing, in particular a holding device for at least one noise suppressor as coil, capacitor or diode, which electric component is connected in an electrically conductive way with a carbon brush arranged in the motor housing. The motor's impermeability is improved holding device being located in a pocket of the interior of the cup−shaped section of the gear housing, the pocket is closed by the cover, a passage closed towards the outside is conducted from the pocket through the end shield into the motor housing and the component is connected with the carbon brush through the passage.

72) Family number: 30408411 (US5392049A) © PatBase

Title: Device for positioning a first object relative to a second object

Priority:

SE19900002493	19900724	SE19910000185	19910122	SE19920000209	19920123
SE19930003879	19931123	SE19930001419	19930427	SE19920001864	19920617
SE19920003590	19921130	SE19920000210	19920123	SE19920001475	19920511
WO1993SE00030	19930121	WO1991SE00478	19910705	WO1994SE00363	19940425
WO1993SE00418	19930511	WO1993SE00031	19930121	WO1991SE00479	19910705

Family:

Publication number	Publication date	Application number	Application date
AT143734 E	19961015	AT19910914072T	19910705
AT147864 E	19970215	AT19910913906T	19910705
AU199182802 A1	19920218	AU19910082802	19910705
AU199183073 A1	19920218	AU19910083073	19910705
AU199334133 A1	19930901	AU19930034133	19930121
AU199334652 A1	19930901	AU19930034652	19930121
AU650470 B2	19940623	AU19910082802	19910705
CA2087980 AA	19930122	CA19912087980	19910705
DE69122511 D1	19961107	DE19916022511	19910705
DE69122511 T2	19970417	DE19916022511	19910705
DE69124259 D1	19970227	DE19916024259	19910705
DE69124259 T2	19970430	DE19916024259	19910705
DE69324132 D1	19990429	DE19936024132	19930121
DE69324132 T2	19991028	DE19936024132T	19930121
EP0540638 A1	19930512	EP19910914072	19910705
EP0540638 B1	19961002	EP19910914072	19910705
EP0553094 A1	19930804	EP19910913906	19910705
EP0553094 B1	19970115	EP19910913906	19910705
EP0623219 A1	19941109	EP19930902629	19930121
EP0623219 B1	19990324	EP19930902629	19930121
EP0640235 A1	19950301	EP19930910522	19930511
EP0700613 A1	19960313	EP19940914662	19940425
ES2092575 T3	19961201	ES19910914072T	19910705
FI930254 A	19930122	FI19930000254	19930122
FI930254 A0	19930122	FI19930000254	19930122
JP5508824 T2	19931209	JP19910513027T	19910705
JP6501595 T2	19940217	JP19910512868T	19910705
JP7509793 T2	19951026	JP19930520128T	19930511
JP8509564 T2	19961008	JP19940524156T	19940425
NO930217 A	19930322	NO19930000217	19930122
NO930217 A0	19930122	NO19930000217	19930122
SE465391 B	19910902	SE19900002493	19900724
SE465391 C	19920102	SE19900002493	19900724
SE501033 C2	19941024	SE19930001419	19930427
SE9002493 A	19910902	SE19900002493	19900724
SE9002493 A0	19900724	SE19900002493	19900724
SE9002493 L	19910902	SE19900002493	19900724
SE9100185 A0	19910122	SE19910000185	19910122
SE9200209 A	19930106	SE19920000209D	19920123

SE9200209 A0	19920123	SE19920000209	19920123	
SE9200209 L	19930106	SE19920000209	19920123	
SE9200210 A	19930106	SE19920000210D	19920123	
SE9200210 A0	19920123	SE19920000210	19920123	
SE9200210 L	19930106	SE19920000210	19920123	
SE9201475 A0	19920511	SE19920001475	19920511	
SE9201864 A0	19920617	SE19920001864	19920617	
SE9203590 A	19930724	SE19920003590	19921130	
SE9203590 A0	19921130	SE19920003590	19921130	
SE9203590 L	19930724	SE19920003590	19921130	
SE9301419 A	19941024	SE19930001419D	19930427	
SE9301419 A0	19930427	SE19930001419	19930427	
SE9301419 L	19941024	SE19930001419	19930427	
SE9303879 A	19940531	SE19930003879	19931123	
SE9303879 A0	19931123	SE19930003879	19931123	
SE9303879 L	19940531	SE19930003879	19931123	
US5392049 A	19950221	US19930934663	19930121	
US5414427 A	19950509	US19930961939	19930121	
US5552790 A	19960903	US19940256791	19941019	
WO9201952 A1	19920206	WO1991SE00478	19910705	
WO9201953 A1	19920206	WO1991SE00479	19910705	
WO9315417 A1	19930805	WO1993SE00030	19930121	
WO9315418 A1	19930805	WO1993SE00031	19930121	
WO9323833 A1	19931125	WO1993SE00418	19930511	
WO9325918 A1	19931223	WO1993SE00543	19930617	
WO9426043 A1	19941110	WO1994SE00363	19940425	

Probable Assignee: COMBITECH TRAFFIC SYSTEMS AB

Assignee(s):(std)**:** HANSSON JESPER ; SAAB SCANIA COMBITECH AB ; SAAB SCANIA COMBITECH AB JOENK ; STAFFAN GUNNARSSON ; SAAB SCANIA COMBITECH AKTIEBOL ; WINQVIST GUNNAR ; EGNELL LARS ; GUNNARSSON STAFFAN

Assignee(s): GUNNARSSON STAFFAN HAESSELBY SE ; COMBITECH TRAFFIC SYSTEMS A ; COMBITECH TRAFFIC SYSTEMS AB ; SAAB SCANIA COMBITECH JOENK AB ; SAAB SCANIA COMBITECH AKTIEBOLEG BOX ; SAAB SCANIA COMBITECH AKTIEBOLEG ; SAAB SCANIA COMBITECH AKTIEBOLAG ; SAAB SCANIA COMBITECH AB JOENKOEPING SE ; SAAB SCANIA COMBITECH AB JOENKOEPING

Inventor(s):(std)**:** EGNELL LARS ; GUNNAR WINQVIST ; GUNNARSSON S ; GUNNARSSON STAFFAN ; HANSSON JESPER ; WINQVIST GUNNAR ; STAFFAN GUNNARSSON ; S GUNNARSSON

Inventor(s): GUNNARSSON STAFFAN S 162 43 VAELLINGBY SE ; GUNNARSSON STAFFAN HAESSELBY SE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MARKS AND CLERK

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LI LU MC NL NO PT SE US

International class (IPC 8–9)**:** B25J13/08 B25J9/10 B67D5/04 B67D7/04 B67D7/08 G01S13/56 G01S13/74 G01S13/76 G01S13/87 G04G99/00 G06K17/00 G06K19/07 G06K19/077 G06K7/00 G07B15/02 G07C9/00 G08B13/24 G09C1/00 H01Q1/22 H01Q1/24 H01Q1/32 H01Q11/04 H01Q19/10 H01Q23/00 H01Q9/04 H02J17/00 H04B1/59 H04B7/26 H04L9/10 H04L9/32 (Advanced/Invention);
B25J13/08 B25J9/10 G06K19/07 H01Q19/10 H01Q23/00 H02J17/00 H04B1/59 (Advanced/Non–invention);
B25J13/08 B25J9/10 B67D7/00 B67D7/08 G01S13/00 G06K19/077 H01Q1/22 H01Q1/24 H01Q23/00 H01Q9/04 H02J17/00 H04B1/59 (Core/Invention);
G01S (Subclass/Invention)

International class (IPC 1–7)**:** B25J13/08 B25J9/10 B67D5/04 B67D5/08 G01S13/56 G01S13/74 G01S13/75 G01S13/80 G04G1/00 G06K17/00 G06K19/07 G07B15/00 G07B15/02 G07B15/02 G07C9/00

G07C9/00 G08B13/24 G09C1/00 H01Q11/04 H01Q19/10 H01Q23/00 H04B1/59 H04B7/26 H04K1/00 H04L9/10 H04L9/32

CPC: G06K7/10178 G06K19/07758 G06K19/07786 G07B15/02 G07C9/00111 H01Q1/247 H01Q9/0407 H01Q23/00 B67D2007/0471 G06K19/07762 H01Q1/22 H01Q1/2225 G01S13/56 G01S13/74 G01S13/87 G06K7/0008 G06K19/0723 H01Q1/3241 B67D7/0401 B67D7/08 G01S13/767 G06K19/07749

European class: B67D7/04A G01S13/56 G01S13/74 G01S13/76R G01S13/87 G06K19/077T G06K19/077T3 G06K19/077T3D G06K19/077T7E G06K19/07T G06K7/00E G06K7/10A3C G07B15/02 G07C9/00B10 H01Q1/22 H01Q1/22C4 H01Q1/24D H01Q1/32A6A H01Q23/00 H01Q9/04B L67D7/04A6F4D

US class: 340/686.6 342/42 342/51 343/700MS

Classification Explorer

Cited documents: WO9202911 A1, WO9201953 A1, WO9201952 A1, WO9116695 A1, WO8805546 A1, WO8800379 A1, WO8200377 A1, US5212494 A, US5168522 A, US5119099 A, US5077790 A, US5025247 A, US5001492 A, US4987421 A, US4933680 A, US4926187 A, US4908615 A, US4893126 A, US4857893 A, US4855749 A, US4835541 A, US4816839 A, US4813025 A, US4771291 A, US4728955 A, US4673936 A, US4612719 A, US4600906 A, US4442590 A, US4435699 A, US4390880 A, US4303904 A, US4242661 A, US4068232 A, SE465391 B, JP63292734 A2, GB2203313 A1, GB2050769 A1, GB2048601 A1, FR2624677 A1, FR2582429 A1, FR2527870 A1, EP0467036 A2, EP0441031 A2, EP0438250 A1, EP0255095 A2, DE2530841 C1, AU482746 B2,

Forward Citations: WO9959912, WO9854084, WO9854083, WO9852155, WO9843217, WO9836473, WO9836472, WO9827441, WO9823971, WO9724628, WO9709200, WO9532919, WO9315418, WO9315417, WO11141633, WO09141041, WO08006947, WO06057864, WO05064360, WO04088583, WO04032044, WO03023525, WO0225583, WO0213309, WO02073234, WO0125571, WO0103243, WO0048019, USRE42773, USRE41301, USRE40137, US9607475, US9489949, US9361444, US9355349, US9275517, US9219708, US9152909, US9130272, US8935367, US8843057, US8794531, US8781905, US8671160, US8669910, US8668544, US8624774, US8610538, US8544753, US8538801, US8509680, US8447615, US8425273, US8325016, US8319609, US8159332, US8078136, US8062090, US8019609, US8018340, US7948382, US7941480, US7839285, US7780524, US7746230, US7706838, US7705733, US7649463, US7642896, US7605706, US7583192, US7580000, US7571139, US7568963, US7555654, US7492165, US7480692, US7414517, US7400248, US7383297, US7353392, US7334735, US7289877, US7280970, US7265674, US7259654, US7248145, US7212124, US7187341, US7165349, US7158031, US7106201, US7106201, US7084770, US7084761, US7082406, US7075595, US7075595, US7036390, US7027890, US7020541, US7002475, US6999000, US6980085, US6950023, US6914564, US6882900, US6813609, US6812824, US6810304, US6724690, US6693535, US6664569, US6574603, US6545606, US6513220, US6494305, US6483427, US6472986, US6470233, US6441740, US6422464, US6384767, US6381514, US6363299, US6343241, US6339385, US6338008, US6333693, US6325294, US6320509, US6313737, US6288634, US6279624, US6278369, US6273339, US6269848, US6265963, US6263319, US6246356, US6236314, US6220516, US6215402, US6185307, US6169938, US6166638, US6161761, US6157871, US6150921, US6133836, US6118379, US6104333, US6098879, US6089284, US6078888, US6078791, US6073840, US6070156, US6068192, US6049278, US6026868, US6023244, US6013949, US5988510, US5971042, US5963177, US5956259, US5890520, US5868179, US5862222, US5841123, US5776278, US5757521, US5717307, US5646634, US5581257, US5566441, US5552790, US5534872, US5497140, US2011228820, US2010314454, US2010258726, US2010255265, US2008173717, US2008106272, US2007290862, US2007285210, US2007176839, US2007159336, US2007103316, US2007040685, US2007007345, US2006255946, US2006247935, US2006181419, US2006162210, US2006103502, US2006097849, US2005285744, US2005270159, US2005242964, US2005206577, US2005162278, US2005157867, US2005116049, US2005001725, US2004246099, US2004160337, US2004155818, US2004140896, US2004080681, US2003200008, US2003117900, US2002107608, US2002075184, US2002062174, US2002024429, US2002014952, US2001020198, KR100821786, JP5218714, JP3273806, JP2015008513, JP2009237822, JP2007008574, JP2005109603, GB2423672, GB2423672, GB2391319, GB2391319, GB2333623, GB2333623, FR2814574, FR2735929, FR2726127, EP1978592, EP1936740, EP1932207, EP1768070, EP1724714, EP1630730, EP1630730, EP1542309, EP1525908, EP1525908, EP1493885, EP1424611, EP1420477, EP1420270, EP1339132, EP1030266, EP1030266, EP0970455, EP0941555, EP0871236, EP0871236, EP0871236, EP0840251, EP0801491, EP0750276, EP0708492, EP0651459, DE19947798, DE10330321, DE10330321, DE10309419, DE10209015, DE102007027539, DE102007022461, DE102004041644, DE10155092, DE10026033,

DE10026033, DE10012438, AU2004237691,

Abstract:
Source: US5392049A A device for positioning a first object relative to a second object, primarily for positioning an automatic fuelling device relative to vehicles. A transponder using a microstrip antenna design is small in dimension and gives accurate position indication by attachment to a back surface of a body which acts as a close reflection plane. The preferred embodiment of the device is a microstrip patch antenna where the ground plane is of similar size as the antenna element, and where the transponder is mounted on a car body rearward of the fuel filling point, to result in a radiation diagram that is created from the added direct signal from the antenna element and the reflected signal from the car body. A rounded profile of the transponder is a result of placement of its battery adjacent to the radiating element.

0) US5221105A – SKI AND A MANUFACTURING METHOD THEREFOR

73) Family number: 2824670 (US5221105A) © PatBase

Title: SKI AND A MANUFACTURING METHOD THEREFOR

Priority: AT19900002548 19901214

Family:

Publication number	Publication date	Application number	Application date
AT254890 A	19920215	AT19900002548	19901214
AT395113 B	19920925	AT19900002548	19901214
DE59102254 D1	19940825	DE19915002254	19911021
EP0490064 A1	19920617	EP19910117898	19911021
EP0490064 B1	19940720	EP19910117898	19911021
JP4314466 A2	19921105	JP19910330243	19911213
JP7102239 B4	19951108	JP19910330243	19911213
US5221105 A	19930622	US19910808029	19911213

Probable Assignee: HTM SPORT U FREIZEITGERAETE AG

Assignee(s):(std)**:** TMC CORP ; TYROLIA FREIZEITGERAETE

Assignee(s): HTM SPORT U FREIZEITGERAETE AG ; HTM SPORT U FREIZEITGERAETE GES ; HTM SPORT U FREIZEITGERAETE GES M B H ; HTM SPORT U FREIZEITGERAETE GES MBH ; HTM SPORT U FREIZEITGERAETE SCHWECHAT AT AG

Inventor(s):(std)**:** BERUNHARUTO MAIRU ; HERUMUUTO UMURAUFUTO ; MAYR BERNHARD ; MAYR BERNHARD DR ; UMLAUFT HELMUT ; UMLAUFT HELMUT ING

Inventor(s): UMLAUFT HELMUT A 6971 HARD AT ; MAYR BERNHARD DR A 6971 HARD AT

Designated states: CH DE FR LI

International class (IPC 8–9): A63C5/00 A63C5/06 A63C5/12 A63C9/00 F16B37/12 F16B5/01 (Advanced/Invention); A63C5/00 A63C5/06 A63C5/12 A63C9/00 F16B37/00 F16B5/00 (Core/Invention)

International class (IPC 1–7): A63C5/00 A63C5/06 A63C5/12 A63C5/14 A63C9/00

CPC: A63C9/00 F16B5/01 F16B37/12

European class: A63C9/00 F16B37/12 F16B5/01

US class: 280/611 280/633

Classification Explorer

Cited documents: US5042829 A, US5042430 A, US3766636 A, US2526137 A, JP2164382 A2, GB572218 A, FR2431868 A1, EP0354379 A2, DE3934888 A1, DE3705507 A1, AT387726 B,

Forward Citations: WO9626773, US7766363, US7726682, US7540526, US7537236, US7451998, US7404564, US7011331, US6386561, US6227558, US6042126, US5863050, US5855389, US5839747, US5782482, US5727451, US5655786, US5380031, US2008088100, US2007257471, US2007205582, US2007069503, US2006186618, US2006163845, US2006145454, US2005248127, US2005206129, US2004227311, US2003102651, EP1329243, EP0607544,

Abstract:
Source: US5221105A A ski with a core and at least one upper and one lower surface layer. Grooves for receiving parts of a ski binding are recessed in the upper side of the core. The receiving parts each consist of a fixed holding part and an elastic sleeve surrounding the holding part. A spacer element rests on the receiving part, which spacer element is used as support for the base plate of a ski binding. In order to facilitate the mounting of the ski binding, each holding part has at least one upwardly bent section, with the upwardly bent section extending in the installed state of the receiving part at least to the underside of the upper surface layer of the ski.

0) DE4033072A1 – METHOD OF CLAMPING INSERTED CARBIDE TIPS – INVO...

74) Family number: 8652469 (DE4033072A1) © PatBase

Title: Method of clamping inserted carbide tips – involves kinematic constraint of tip on localised areas to eliminate bending moments and breakage

Priority: DE19904033072 19901018

Family:

Publication number	Publication date	Application number	Application date
DE4033072 A1	19920423	DE19904033072	19901018

Probable Assignee: KRUPP WIDIA GMBH

Assignee(s):(std)**:** KRUPP WIDIA GMBH

Assignee(s): KRUPP WIDIA GMBH 4300 ESSEN DE

Inventor(s):(std)**:** HAAS VON RAINER DIPL ING

International class (IPC 8–9): B23B27/16 (Advanced/Invention)

International class (IPC 1–7): B23B27/16

CPC: B23B27/1611 B23B2200/088 B23B2200/128 B23B2200/165

European class: B23B27/16B4 L23B200/08E2 L23B200/12D L23B200/16E

Classification Explorer

Cited documents: DE3714055 A1, DE2914568 A1, DE2510960 A1, DE2326748 A1,

Forward Citations: WO10143177, US9120155, US8573902, US2010158622, EP1595648, CN102802848, CN102802848,

Abstract:
The clamping method works on the principle that the tip should be supported only on carefully selected and localised areas, thus producing a kinematic constraint of the carbide tip. For example in a milling cutter with a square tip, the tip (20) is supported at the bottom face on a ball (11) recessed in the floor of the pocket. The tip has depressions in top and bottom faces whicha ct as seatings. Around the periphery the tip has re–entrant segments which provide line contact against locating pins (15). Clamping is done with a claw (30). A variety of configuraitons to suit tips of varying forms is possible. ADVANTAGE – Tip is relieved by bending moments and therefore not subject to breakage. A central fastening hole is not required. Clip flow is unimpeded. Careful finishing of pocket and tip abutment faces is not required. Tip is accurately located.

0) ES1020462Y – DISPOSICION DE SOPORTE Y SUJECION DE AUXILIARES...

75) Family number: 17183126 (ES1020462Y) © PatBase

Title: DISPOSICION DE SOPORTE Y SUJECION DE AUXILIARES EN ELEMENTOS DE CUARTOS DE ASEO.

Priority: ES19920000637U 19920302

Family:

Publication number	Publication date	Application number	Application date
ES1020462 UA	19920701	ES19920000637U	19920302
ES1020462 Y1	19931116	ES19920000637U	19920302
ES1020462 YA	19931116	ES19920000637U	19920302

Probable Assignee: LORD TOILET S L

Assignee(s):(std)**:** LORD TOILET S L

Inventor(s):(std)**:** CATEURA JOSE MARIA

International class (IPC 8–9)**:** A47K10/10 (Advanced/Invention); A47K10/00 (Core/Invention)

International class (IPC 1–7)**:** A47K10/10

Classification Explorer

Abstract:
Source: ES1020462U 1. Disposicion de soporte y sujecion de auxi– liares en elementos de cuartos de aseo, del tipo de los que cuentan con una pieza base que se asegura a la pared y una intermedia asegurada a dicha pieza a la cual se conectan los diferentes modulos o elementos en que la pieza–base esta dotada de agujeros para paso de tornillos de jaci on a la pa– red, estando estos agujeros ocultos por una pieza dispuesta sobre ella a modo de tope, que esencial– mente se caracteriza porque la pieza base esta dotada, en su cara de la pared, con una cajera a modo de entrante de cuyo fondo se destacan dos agujeros paralelos al eje axial de la pieza–base, presentando esta por su cara exterior un cuello cilndrico centrado de exterior roscado que pro– cura un hueco interno ciego al que acceden los agujeros que provienen de la cajera antedicha y en el que se aloja el extremo de la pieza intermedia, extremo que es cilndrico y est a dotado de unas perforaciones ciegas correspondientes con las de la pieza base, situandose sobre el antedicho cuello roscado una tapa cilndrica con un agujero ros– cado central que se rosca a dicho cuello ocultando l o sa g u j e r o sd el ap i e z ab a s ep o rl o sq u es e j al a misma a la pared, estando la pieza intermedia do– tada de un extremo exterior cilndrico hueco es– tablecido perpendicularmente con respecto al ex– t r e m od el am i s m aq u es ea l oj ae ne li n t e r i o rd e l cuello roscado de la pieza base, en que el dicho extremo exterior cilndrico de la pieza intermedia esta dotado de sendos extremos con juntas toricas alojadas en canales circulares internos y porque se dispone una perforacion circular en sentido radial en el espesor del dicho cuerpo exterior cilndrico para recibir un tornillo de jaci on de las unidades q u es ea l oj a ne ne li n t e r i o rd e lm i s m o. 1. Provision of support and restraint of auxiliary elements of toilets, the type that have a base piece to the wall and secured to said intermediate part to which the different elements are connected modules or secured in the piece–base is provided with holes for passage of screws jaci on the wall, these hidden by a piece disposed thereon as a stop holes being, which is essentially characterized in that the base unit is provided, in the face of the wall, with a pocket by way of the bottom recess highlights two holes parallel to the axial axis of the part–based, presenting this at its outer side a Cylindrical outer threaded neck which centered pro–cures a hollow accessing internal blind holes originating from the aforesaid pocket, in which the end of the intermediate piece, which is Cylindrical end is received and is provided with a corresponding to blind the perforations in the base part standing on the above neck threaded one cilndrica lid with a threaded center hole that is threaded into said neck hiding what sa gujero sd ap iez ab as ep or rl or sq u is eg to a same to the wall, the spacer being do–tada a Cylindrical outer end gap en–tablished perpendicular to the ex–trem od the am ism aq u is ea l oj ae ne li nterio rd threaded neck of the base part, wherein the said outer end Cylindrical of the midpiece is provided with two end with O rings in internal circular channels, and that a perforation is arranged radially circulated within the thickness of said outer body to receive a screw Cylindrical Jaci on what units is ea l li ne ne oj nterio rd e sam lm.

0) US5423183A – HYDRAULIC MACHINE WITH WEDGE–SHAPED SWASHPLATE ...

76) Family number: 30356140 (US5423183A) © PatBase

Title: HYDRAULIC MACHINE WITH WEDGE–SHAPED SWASHPLATE

Priority: US19910640645 19910114 US19930093192 19930713 US19950465631 19950605 US19950481805 19950607 US19950478947 19950607 US19950481802 19950607 US19950483997 19950607 US19950480772 19950607 US19950481032 19950607 WO1996US09849 19960607 WO1992US00259 19920114

Family:

Publication number	Publication date	Application number	Application date
AT163992 E	19980315	AT19920906345T	19920114
AU199213755 A1	19920817	AU19920013755	19920114
AU199663274 A1	19961230	AU19960063274	19960607
AU663487 B2	19951012	AU19920013755	19920114
BRPI9205492 A	19940301	BR1992PI05492	19920114
CA2100461 AA	19930713	CA19922100461	19920114
DE69224738 D1	19980416	DE19926024738	19920114
DE69224738 T2	19981001	DE19926024738T	19920114
EP0567598 A1	19931103	EP19920906345	19920114
EP0567598 A4	19931201	EP19920906345	19920114
EP0567598 B1	19980311	EP19920906345	19920114
JP3294265 B2	20020624	JP19920505680T	19920114
JP6505327 T2	19940616	JP19920505680T	19920114
KR100259405 B1	20000615	KR19937002116	19930714
RU2101586 C1	19980110	SU19930051181	19920114
RU2101586 C1	19980110	RU19930051181	19920114
RU93051181 A	19960727	RU19930051181	19930714
US5423183 A	19950613	US19930093192	19930713
US5575152 A	19961119	US19950465631	19950605
US5630318 A	19970520	US19950481802	19950607
US5655369 A	19970812	US19950481032	19950607
US5655370 A	19970812	US19950480772	19950607
US5657629 A	19970819	US19950483997	19950607
US5839889 A	19981124	US19950478947	19950607
WO9212357 A1	19920723	WO1992US00259	19920114
WO9641067 A1	19961219	WO1996US09849	19960607

Probable Assignee: FOLSOM TECHNOLOGIES INC

Assignee(s):(std)**:** EHDVEHNST PAUEHR TEKNOLODZHI I ; EHDVEHNST PAUEHR TEKNOLODZHI INK ; FOLSOM LAWRENCE R ; FOLSOM TECHNOLOGIES INC ; TUCKER CLIVE ; MARTIN MARIETTA CORP ; ADVANCED POWER TECHNOLOGY ; ADVANCED POWER TECHNOLOGY INC

Assignee(s): LOCKHEED MARTIN CORP ; ADVANCED POWER TECHNOLOGY INC ATLANTA GA US ; GENERAL DYNAMICS DEFENSE SYSTEMS INC ; GENERAL DYNAMICS LAND SYSTEMS INC ; L 3 COMMUNICATIONS CORP

Inventor(s):(std)**:** CLIVE TUCKER ; LAWRENCE R FOLSOM ; LORENS R FOLSOM ; LORENS RFOLSOM ; TUCKER CLIVE ; FOLSOM LAWRENCE R ; FOLSOM LAWRENCE

Inventor(s): LORENS R.FOLSOM[US]

Agent(s): MACRAE AND CO

Designated states: AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG

TJ TM TR TT UA UG US UZ VN

International class (IPC 8–9): F04C14/20 F16D39/00 F16H39/10 F16H39/14 F16H39/32 (Advanced/Invention); F04C14/00 F16D39/00 F16H39/00 (Core/Invention)

International class (IPC 1–7): F01B13/04 F01C21/16 F01C5/00 F03C2/00 F03C2/22 F03C4/00 F04C15/04 F04C2/00 F04C2/344 F04C29/00 F04C5/00 F16D31/02 F16D39/00 F16H39/14

CPC: F04C14/20 F16H39/10 F16H39/32 F16H2039/105

European class: F04C14/20 F04C15/04B6 F16H39/10 F16H39/32 R16H39/10A

US class: 418/156 418/31 60/413 60/414 60/487 60/488 60/491 60/492 92/12.2 92/71

Classification Explorer

Cited documents: WO8905754 A1, US5243822 A, US5033265 A, US4901529 A, US4731997 A, US4679396 A, US4674280 A, US4646521 A, US4495768 A, US4493189 A, US4196586 A, US4175389 A, US4109466 A, US4098083 A, US3898021 A, US3765183 A, US3740954 A, US3654761 A, US3602105 A, US3601981 A, US3291068 A, US3224198 A, US3204411 A, US3175363 A, US3153984 A, US3130681 A, US3027719 A, US2991619 A, US2927430 A, US2842064 A, US2832198 A, US2738649 A, US2685255 A, US2673448 A, US2670689 A, US2535267 A, US2434546 A, US2417218 A, US2227631 A, US1648000 A, US1603437 A, SU1555572 T, FR726934 A, FR2400125 A1,

Forward Citations: WO9951894, WO9849470, WO9849468, WO9849467, WO9744596, WO9714896, WO9709546, WO9631715, WO9630673, WO9623997, WO9623993, WO9623992, WO9616283, WO9614523, WO9614523, WO16149740, WO11061630, WO10068602, WO04042233, WO04042233, US9400043, US9394983, US9132824, US9115770, US8956256, US8840524, US8807972, US8668480, US8622620, US8366412, US8359854, US8336304, US8176838, US8162621, US8162094, US8133036, US8132868, US8087733, US7984783, US7707872, US7698960, US7637724, US7617761, US7562944, US7537075, US7481298, US7337869, US7055507, US6666670, US6604269, US6572344, US6510779, US6485277, US6439335, US6434979, US6413055, US6381842, US6381529, US6354186, US6200114, US6109034, US6062022, US5976046, US5931758, US5896745, US5684694, US5678405, US5540048, US5535589, US5531072, US5524437, US5493862, US5486142, US2017009632, US2015167630, US2015075323, US2012263614, US2012064814, US2012058854, US2011232418, US2010141024, US2010107626, US2010101406, US2010064675, US2009313984, US2009242301, US2009236906, US2009223359, US2009196768, US2009173318, US2009041591, US2008210500, US2008185909, US2008072657, US2007278027, US2007186690, US2006288864, US2006174759, US2006055238, US2006039816, US2005281698, US2005211231, US2005207921, US2004251067, RU2557105, JP2011027097, JP2007261578, FR2769965, EP2733386, EP1845241, EP1582716, EP1343948, EP0975902, EP0918176, CN104482159, CN104482159, CN102753851, AU683782,

Abstract:
Source: US5423183A A continuously variable transmission includes a pump (258) driven by an input shaft (256) against a wedge−shaped swashplate (260). Hydraulic fluid pressurized in the pump flows through ports (402) in a pump cylinder block (422) into kidney−shaped slots (406) in the swashplate (260), and from there flows into and pressurizes a series of cylinders (394) in a motor cylinder block (366). The pump and motor exert first and second components of torque on a swashplate (260) in the rotational direction on the input shaft (256), and the hydraulic system pressure in the swashplate slots exerts a third component of torque in the same direction on the swashplate (260). The third torque component is a product of the hydraulic system pressure and the differential area of the two ends of the high pressure slot (406P) at the narrow and thick sides of the wedge−shaped swashplate (260). The swashplate (260) drives an output shaft (266) through an output sleeve (264) pinned to the outside peripheral edge (416) of the swashplate (260). The input/output ratio of the transmission is controlled by controlling the tilt angle of the swashplate (260) with a control sleeve (268), coupled at one end to the swashplate (260) through a coupling mechanism (267) and coupled at the other end through a bearing (528) to an axially movable control cylinder (270). The axial position of the control cylinder (270) is hydraulically controlled by a follower valve system (269) which moves the control cylinder (270) to positions uniquely corresponding to positions of a manually or automatically positioned control rod (636).

0) US2001009265A – SHIELDED OPTICAL PROBE AND METHOD

77) Family number: 34548677 (US2001009265A) © PatBase

Title: Shielded optical probe and method

Priority:

EP20010909052 20010209 JP19960514884T 19951101 JP20010557463 20010209
US19940333132 19941101 US19910672890 19910321 JP20010557463T 20010209
US19970790674 19970128 US19980094202 19980609 US19950543789 19951016
US19990318563 19990526 US19970838392 19970409 US19950543297 19951016
US19980021957 19980211 US19990150922P 19990826 US20020260049 20020927
US20010898990 20010703 US20040957843 20041004 US20060341999 20060127
US20050065994 20050224 US20050311212 20051219 US20030624446 20030722
US20010798764 20010302 US20010982453 20011017 US20010770757 20010125
US19990404060 19990923 US20000708251 20001107 US20030357531 20030203
US20000502032 20000210 US20030404961 20030331 US19990420544 19991019
US20090360828 20090127 WO2001US04265 20010209 WO2001US04265 20010209
US20070714303 20070306 WO2000US22849 20000821 WO1995US14785 19951101
US20100955814 20101129 US20110069261 20110322 WO1992US01894 19920305
US20120358461 20120125

Family:

Publication number	Publication date	Application number	Application date
AT192302 E	20000515	AT19920908666T	19920305
AT195409 E	20000915	AT19950940704T	19951101
AT323445 E	20060515	AT20010909052T	20010209
AU199215691 A1	19921021	AU19920015691	19920305
AU199642365 A1	19960523	AU19960042365	19951101
AU664175 B2	19951109	AU19920015691	19920305
BRPI0013483 A	20020514	BR2000PI13483	20000821
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Agent(s): GRIFFITH HACK; KIRBY EADES GALE BAKER; VOSSIUS AND PARTNER; KNOBBE MARTENS OLSON AND BEAR LLP

Designated states: AL AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CY CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TR TT UA UG UZ VN

International class(IPC 8–9)**:** A61B1/00 A61B5/00 A61B5/02 A61B5/022 A61B5/024 A61B5/0245 A61B5/05 A61B5/145 A61B5/1455 A61B6/00 A61B6/02 B23P11/00 G01N21/01 G01N21/17 G01N21/27 G01N21/59 G01N21/86 G06F19/00 G07C3/00 H01J40/14 H01L31/00 H01R13/26 H01R13/627 H01R13/639 H05K1/18 (Advanced/Invention); A61B5/00 A61B5/022 A61B5/145 G01N21/17 G01N21/59 H05K1/18 (Advanced/Non–invention); A61B5/00 A61B5/02 A61B5/022 A61B5/024 A61B5/145 G01N21/17 G01N21/25 G01N21/59 G01N21/86 H01R13/02 H01R13/627 H01R13/639 (Core/Invention); A61B5/00 H05K1/18 (Core/Non–invention)

International class(IPC 1–7)**:** A61B5/00 A61B5/02 A61B5/022 A61B5/024 A61B5/0245 A61B5/14 A61B5/145 G01J1/04 G01N21/01 G01N21/27 G01N21/59 G01N21/86 G06K15/00 H01J40/14 H01L27/00 H01L31/00 H01R13/62 H01R39/00

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European class: A61B5/024D4 A61B5/1455N A61B5/1455N2 A61B5/68B2J1 A61B5/68B2N A61B5/68B3L G07C3/00 H01R13/26 H01R13/627D H01R23/10 K61B5/145 K61B5/1455N2 K61B560/02H4 K61B560/02H6 K61B562/08 K61B562/12 K61B562/22B2 T01R201/12 T05K1/18F

US class: 128/653.1 250/206 250/208.1 250/208.100P 250/214.00R 250/214.00RS 250/214.1 250/214.100P 250/214.100S 250/214R 250/221 250/221S 250/227.14 250/227.140P 250/239 250/461.2 250/557 250/559.1 250/559.4 250/559.400P 250/559.45 29/428 29/428S 356/41 439/11 439/11P 439/160 439/325 439/377 439/729 439/838 439/909 439/909S 439/931 600/300 600/300P 600/308 600/308P 600/31 600/310 600/310P 600/310S 600/322 600/322S 600/323 600/323P 600/323S 600/344 600/344P 600/476 600/476P 600/479 702/84 702/84P

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US2007007612, US2007000494, US2006290488, US2006281983, US2006276700, US2006270921, US2006270920, US2006264725, US2006264724, US2006264722, US2006264720, US2006264719, US2006258925, US2006258924, US2006258923, US2006258922, US2006258193, US2006253007, US2006241363, US2006241358, US2006238358, US2006229511, US2006229510, US2006229509, US2006226992, US2006224059, US2006220881, US2006217609, US2006217608, US2006217607, US2006217606, US2006217605, US2006217604, US2006211955, US2006211932, US2006211929, US2006211925, US2006211924, US2006206030, US2006206021, US2006200018, US2006200016, US2006195041, US2006195028, US2006195027, US2006195025, US2006192667, US2006189871, US2006189862, US2006189860, US2006189859, US2006183982, US2006183003, US2006173247, US2006161389, US2006135860, US2006122520, US2006122517, US2006097135, US2006084878, US2006084852, US2006080047, US2006073719, US2006058691, US2006052680, US2006030765, US2006030764, US2006030763, US2006030762, US2006020185, US2006009698, US2006009697, US2006009687, US2006009685, US2006004293, US2005277819, US2005275836, US2005261598, US2005261594, US2005256385, US2005245831, US2005245797, US2005234317, US2005228300, US2005228299, US2005228297, US2005216199, US2005209517, US2005209514, US2005203362, US2005203352, US2005197551, US2005197550, US2005192500, US2005187449, US2005187440, US2005181723, US2005177199, US2005165316, US2005148882, US2005143631, US2005131285, US2005101849, US2005101848, US2005090724, US2005085704, US2005085702, US2005083193, US2005075553, US2005075548, US2005070775, US2005070773, US2005065417, US2005055276, US2005049501, US2005043600, US2005037680, US2005020893, US2005010092, US2004267103, US2004254478, US2004254473, US2004250819, US2004242980, US2004221370, US2004210146, US2004210120, US2004204639, US2004204638, US2004204637, US2004204636, US2004181133, US2004181017, US2004179723, US2004162472, US2004158134, US2004153009, US2004147824, US2004147823, US2004147822, US2004143172, US2004133088, US2004133087, US2004122302, US2004122301, US2004113245, US2004107065, US2004073115, US2004068164, US2004039272, US2004030230, US2003225334, US2003225323, US2003220576, US2003220542, US2003218386, US2003212312, US2003199948, US2003197679, US2003181799, US2003181798, US2003167391, US2003162414, US2003156288, US2003143297, US2003135099, US2003132495, US2003122080, US2003111592, US2003105392, US2003101027, US2003055363, US2003055325, US2003050576, US2003050560, US2003045785, US2003018243, US2002193708, US2002165440, US2002140675, US2002082529, US2002072691, US2002049395, TWI425936, KR100798487, JP5738752, JP4934768, JP2016206175, JP2014002062, JP2012522579, JP2012516186, JP2012157748, JP2012130756, JP2012081271, JP2011519591, JP2011147746, JP2010506625, JP2010264115, JP2010264114, JP2010263931, JP2009539576, JP2009517192, JP2009502296, JP2008531217, JP2008531215, JP2007518440, JP2004344668, JP2004337605, ES2213472, EP3023053, EP2967495, EP2929834, EP2837333, EP2730222, EP2727522, EP2693448, EP2564775, EP2532302, EP2476369, EP2443993, EP2407093, EP2352417, EP2335583, EP2335569, EP2305104, EP2277440, EP2099266, EP2064989, EP1992278, EP1889569, EP1618839, EP1148809, EP1017312, EP0790800, EP0723417, DE202008015271, DE202008005840, DE112011100761, DE112011100282, DE102015104312, DE102012212806, DE102008017403, DE10030862, CN105072996, CN104188624, CN104024828, CN102688028, CN102165304,

Abstract:
Source: US2001009265A An optical probe, which is particularly suited to for use in measurements on tissue material of a patient. In one embodiment, the probe comprises upper and lower housing elements incorporating a light energy source and corresponding detector. The tissue material of the patient is disposed between the upper and lower housing elements such that the light energy emitted by the source passes through the tissue material to the detector. A plurality of light shields are attached to one or both of the housing elements to reduce the amount of ambient and reflected light reaching the detector. Additionally, various portions of the upper and lower housing elements and shields utilize light absorbent coloration and/or coatings which further mitigate the effects of undesired ambient and reflected light, thereby reducing noise generated within the instrument and increasing its accuracy. In one embodiment, the light shields are made removable from the optical probe, thereby facilitating replacement. A circuit for monitoring the condition of the probe, and indicating when replacement of the probe is desirable, is also disclosed.

78) Family number: 8804358 (US5361944A) © PatBase

Title: Device for the conditioning and the distribution of pasty or liquid products

Priority: CH19910002259 19910729 CH19920001894 19920616

Family:

Publication number	Publication date	Application number	Application date
AT149952 E	19970315	AT19920112651T	19920724
CH686037 A	19951215	CH19910002259	19910729
CH686505 A	19960415	CH19920001894	19920616
DE69218066 D1	19970417	DE19926018066	19920724
EP0526811 A2	19930210	EP19920112651	19920724
EP0526811 A3	19930922	EP19920112651	19920724
EP0526811 B1	19970312	EP19920112651	19920724
JP5192558 A2	19930803	JP19920220927	19920729
US5361944 A	19941108	US19920920684	19920728

Probable Assignee: AKA INNOVATIVE DEV

Assignee(s):(std): AKA INNOVATIVE DEV ; AKA INNOVATIVE DEVELOPMENTS S ; GUEISSAZ AND CIE SA ANDRE ; AKA INOBUEITEIBU DEV SA ; ANDRE GIYUEESA E CO SA ; GUEISSAZ AND CIE ANDRE SA

Assignee(s): ANDRE GUEISSAZ AND CIE SA ; ANDRE GUEISSAZ ET CIE ; ANDRE GUEISSAZ ET CIE L AUBERSON CH ; ANDRE GUEISSAZ AND CIE S A ; AKA INNOVATIVE DEVELOPMENTS S A ; AKA INNOVATIVE DEVELOPMENTS S A ECUBLENS CH ; AKA INNOVATIVE DEVELOPMENTS SA

Inventor(s):(std): ERITSUKU OO ; GUEISSAZ MICHEL ; HAUF ERIC ; JIEMU ROSERU ; MISHIERU GIYUEESA ; ROSSELL JAIME

Inventor(s): ROSSELL JAIME CH 1009 PULLY CH ; HAUF ERIC CH 1005 LAUSANNE CH ; GUEISSAZ MICHEL CH 1454 L AUBERSON CH

Designated states: AT BE CH DE DK ES FR GB GR IT LI LU MC NL PT SE

International class (IPC 8–9): B01J4/02 B05B11/00 B65D81/32 (Advanced/Invention); B01J4/02 B05B11/00 B65D81/32 (Core/Invention)

International class (IPC 1–7): B01J4/02 B05B11/00 B65D47/34 B65D83/00 B65D83/76 B67D5/52

CPC: B05B11/0048 B05B11/3015 B05B11/3084 B65D81/325 B05B11/3081

European class: B05B11/00B5A4 B05B11/00P11 B05B11/00P11D B05B11/00P3N B05B11/30C6 B05B11/30K B05B11/30K4 B65D81/32F

US class: 222/136 222/254 222/256 222/341 222/383 222/383.1

Classification Explorer

Cited documents: US4949874 A, US4872596 A, US4823818 A, US4687663 A, US4502617 A, US4485943 A, US4438871 A, US3760986 A, US2824673 A, US2703191 A, US2622539 A, US2529365 A, US2283529 A, US2233716 A, US1164754 A, FR2647757 A1, FR2641337 A2, FR2634825 A1, EP0282595 A1,

Forward Citations: WO9527664, WO9526832, USD669792, USD657691, USD630949, USD592899, US8262592, US8133309, US8047406, US6705493, US6382472, US6189736, US5961005, US5711457, US5439141, US2009283547, US2009057345, US2006163282, FR2958131, FR2718417, FR2718109, EP1709945, DE19938798, CN102762463,

Abstract:
Source: US5361944A A device for the conditioning and the distribution of pasty or liquid products comprises a casing 1 in which is located a primary chamber 3 divided in two parts by a free piston 4. This primary chamber 3 communicates with a secondary chamber 7 thanks to an aspiration channel in which is located a non–return valve 9. The secondary chamber 7 comprises a piston 16 freely sliding in this chamber and tightly connected to a push button 17 which comes out of the casing. The secondary chamber communicates by an expulsion channel having a non–return valve 12 with an expulsion hole 2 of the product. Under the action of the control piston 16, the

product dose contained in the secondary chamber is expelled. When the piston 16 comes back in position a new amount of product passes from the primary chamber 3 toward the secondary chamber 7, and the non−return valve 12 prevents any intake of air inside the casing.

0) EP0534928A1 – ARRANGEMENT FOR LOCKING BICYCLES. VORRICHTUNG Z...

79) Family number: 8871322 (EP0534928A1) © PatBase

Title: ARRANGEMENT FOR LOCKING BICYCLES.

Priority: AT19910001909 19910923 AT19920001508 19920723 AT19920001507 19920723

Family:

Publication number	Publication date	Application number	Application date
EP0534928 A1	19930331	EP19920890197	19920921

Probable Assignee: PATENTE MARKEN LIZENZEN VERWAL

Assignee(s):(std)**:** PATENTE MARKEN LIZENZEN VERWAL

Assignee(s): PATENTE MARKEN LIZENZEN VERWALTUNGS UND VERWERTUNG ; PATENTE MARKEN LIZENZEN VERWALTUNGS UND VERWERTUNGS GESELLSCHAFT MBH

Inventor(s):(std)**:** RAMASEDER NORBERT DIPL ING

Designated states: AT BE CH DE DK FR LI LU NL

International class (IPC 8–9)**:** B62H3/10 (Advanced/Invention); B62H3/00 (Core/Invention)

International class (IPC 1–7)**:** B62H3/10

CPC: B62H3/10

European class: B62H3/10

Classification Explorer

Cited documents: US2803349 A, GB445214 A, GB2245238 A1, FR2664545 A1, FR2402574 A1, DE9013242 U,

Forward Citations: NL1036472, ITVR20110175, GB2270662, GB2270662, ES2304830, EP1547911, EP0818384, DE4402738, DE4315440, DE19900006, AT404711,

Abstract:
A device for securing bicycles on storage surfaces (4) provided for this purpose, which device consists of a holding rod (6) which is connected in an articulated fashion by its one end to a receptacle (8) or frame which is permanently anchored on the storage surface, and the opposite end of which holding rod is provided with a lockable securing element (9), is to be designed in a theft–proof fashion so that the most valuable parts of the bicycle can only be removed with a large degree of effort. For this purpose, it is proposed to arrange the articulated connection between the holding rod (6) and receptacle (8) in the vicinity of the storage surface (4) or a frame, to construct the holding rod (6) in a longitudinally variable fashion and to connect the securing element (9) to the holding rod (6) in an articulated fashion.

80) Family number: 17053608 (EP0628691A1) © PatBase

Title: FITTING FOR ROTATABLE AND TILTABLE WINDOWS, DOORS AND THE LIKE.

Priority: DE19930008472U 19930607 DE19945000015 19940520

Family:

Publication number	Publication date	Application number	Application date
AT127570 E	19950915	AT19940107819T	19940520
DE59400015 D1	19951012	DE19945000015	19940520
DE9308472 U1	19930902	DE19930008472U	19930607
DK0628691 T3	19951106	DK19940107819T	19940520
EP0628691 A1	19941214	EP19940107819	19940520
EP0628691 B1	19950906	EP19940107819	19940520
EP0628691 B2	20030910	EP19940107819	19940520
ES2076843 T3	19951101	ES19940107819T	19940520

Probable Assignee: PAX GMBH

Assignee(s):(std)**:** PAX GMBH ; PAX SCHWEIKHARD GMBH

Assignee(s): PAX SCHWEIKHARD GMBH 55218 INGELHEIM DE ; PAX GMBH 55218 INGELHEIM DE

Inventor(s):(std)**:** STRUTH FRITZ DR

Designated states: AT BE CH DE DK ES FR GB IT LI LU NL PT SE

International class (IPC 8–9)**:** E05C9/06 E05C9/18 E05D15/52 E05D15/522 (Advanced/Invention)

International class (IPC 1–7)**:** E05C19/18 E05C9/06 E05C9/18 E05D15/52 E05D15/522

CPC: E05C9/1808 E05Y2900/148 E05D15/522

European class: E05C9/18A E05D15/52 P05Y900/148

Classification Explorer

Cited documents: EP0533556 B1, DE8510247 U, DE2449352 C2, DE2242305 A1, DE2211523 B2, DE2057649 A1, DE1784674 A1, DE1031178 B,

Forward Citations: WO04007881, WO0052288, EP2025843, EP1159502, EP0829605, EP0765986, EP0761920, EP0733761, DE29513202, DE202007011394, DE19739407, DE19739407, DE19638359, DE102008007095, DE102008007095,

Abstract:
A pivot/tilt fitting for windows, doors or the like is provided with an edge gearing mechanism (6) which is fitted on the sash frame (4) and exhibits locking pins (7, 8) which can be moved into three different adjustment positions, namely for closing and pivoting open and tilting opening the sash, and with a plurality of closure pieces (9), arranged on the window frame (1), and a tilt–bearing closure piece (10) which is arranged on the lower transverse member (1') of the window frame and exhibits two closure pockets (12, 12') which, in the closed position and tilt–open position of the edge gearing mechanism (6), can be brought into engagement with a locking pin. In order to produce the pivot/tilt fitting in a substantially simpler manner in terms of its closure pieces, interacting with the locking pins of the edge gearing mechanism, and, in particular, also in terms of its lower tilt bearing and to permit even further improved tilt–opening securing of the sash, the two closure pockets (12, 12') in the tilt–bearing closure piece (10) are open towards the two ends thereof and, on the edge gearing mechanism (6) there are provided two locking pins (8, 8') which interact therewith and of which one (8), in the tilt position (K) of the gearing mechanism (6), is introduced into one closure pocket (12) and the other (8'), in the closed position (V) of the gearing mechanism, is introduced into the other closure pocket (12').

0) US5378314A – METHOD FOR PRODUCING SUBSTRATES WITH PASSAGES

81) Family number: 20255671 (US5378314A) © PatBase

Title: Method for producing substrates with passages

Priority:
CA19932098411 19930615 CH19920001872 19920615 CH19920001874 19920615
CH19920001875 19920615 CH19920001876 19920615 CH19920001877 19920615
CH19930001501 19930517 GB19920012648 19920615 CH19930001017 19930401
CH19930001050 19930406 CH19930001639 19930602 CH19920001878 19920615
WO1993CH00145 19930609 WO1993CH00147 19930610 WO1993CH00148 19930610

Family:

Publication number	Publication date	Application number	Application date
AT135521 E	19960315	AT19930810414T	19930609
AT137079 E	19960515	AT19930909756T	19930610
AT180137 E	19990515	AT19930909754T	19930609
AU199340585 A1	19940104	AU19930040585	19930609
AU199340586 A1	19940104	AU19930040586	19930610
AU199340587 A1	19940104	AU19930040587	19930610
CA2098411 AA	19931216	CA19932098411	19930615
CA2114792 AA	19940202	CA19932114792	19930610
CA2114954 AA	19940203	CA19932114954	19930609
DE59301849 D1	19960418	DE19935001849	19930609
DE59302260 D1	19960523	DE19935002260	19930610
DE59309575 D1	19990617	DE19935009575	19930609
EP0575292 A1	19931222	EP19930810414	19930609
EP0575292 B1	19960313	EP19930810414	19930609
EP0600051 A1	19940608	EP19930909754	19930609
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EP0600052 A1	19940608	EP19930909756	19930610
EP0600052 B1	19960417	EP19930909756	19930610
GB9212648 A0	19920729	GB19920012648	19920615
JP6061612 A2	19940304	JP19930169675	19930615
JP7500951 T2	19950126	JP19940500995T	19930609
JP7505015 T2	19950601	JP19940500997T	19930610
US5378314 A	19950103	US19930077298	19930615
US5436062 A	19950725	US19940193191	19940214
WO9326143 A1	19931223	WO1993CH00145	19930609
WO9326144 A1	19931223	WO1993CH00147	19930610
WO9326146 A1	19931223	WO1993CH00148	19930610

Probable Assignee: DYCONEX PATENT AG

Assignee(s):(std): DYCONEX PATENTE AG ; HEINZE DYCONEX PATENTE ; SCHMIDT WALTER ; MARTINELLI MARCO

Assignee(s): DYCONEX PATENTE AG ZUG CH ; DYCONEX PATENTE ZUG CH AG ; DEIKONETSUKUSU PATENTE AG ; DYCONEX PATENT AG

Inventor(s):(std): MARCO MARTINELLI ; MARTINELLI MARCO ; MARUTEINERI MARUKO ; SCHMIDT WALTER ; SHIYUMITSUTO BUARUTAA ; WALTER SCHMIDT ; SCHMIDT WALTER DR

Inventor(s): MARTINELLI MARCO CH 8413 NEFTENBACH CH ; SCHMIDT WALTER CH 8050 ZUERICH CH

Agent(s): RIDOUT AND MAYBEE LLP; SIM AND MCBURNEY

Designated states: AT AU BE CA CH DE DK ES FR GB GR HU IE IT JP KR LI LU MC NL PT RU SE UA US

International class (IPC 8–9): C23F1/00 H05K1/00 H05K1/02 H05K1/05 H05K1/11 H05K3/00 H05K3/38 H05K3/40 H05K3/42 H05K3/46 H05K7/20 (Advanced/Invention); H05K1/00 H05K1/05 H05K3/00 H05K3/38 H05K3/42 H05K3/46 (Advanced/Non–invention); C23F1/00 H05K1/02 H05K1/11 H05K3/00 H05K3/40 H05K3/42 H05K3/46 H05K7/20 (Core/Invention); H05K1/00 H05K1/05 H05K3/00 H05K3/38 H05K3/42 H05K3/46 (Core/Non–invention)

International class (IPC 1–7): B29C37/00 B32B3/00 B44C1/22 C23F1/00 C23F1/02 H05K1/02 H05K1/11 H05K3/00 H05K3/40 H05K3/42 H05K3/46 H05K7/20

CPC: H05K1/0206 H05K7/205 H05K2201/09572 Y10S428/901 H05K3/4655 H05K1/0287 H05K1/0289 H05K1/0393 H05K1/05 H05K1/115 H05K3/0041 H05K3/0061 H05K3/0064 H05K3/0097 H05K3/386 H05K3/4084 H05K3/42 H05K3/427 H05K3/429 H05K3/4635 H05K3/4641 H05K3/4652 H05K2201/0195 H05K2201/0355 H05K2201/0394 H05K2201/0397 H05K2201/066 H05K2201/0909 H05K2201/09327 H05K2201/09509 H05K2201/09536 H05K2201/09554 H05K2201/09609 H05K2201/09627 H05K2201/09781 H05K2201/09836 H05K2201/09945 H05K2201/10666 H05K2203/0554 H05K2203/0746 H05K2203/1184 H05K2203/1545 H05K2203/1572 Y10T428/24917

European class: H05K1/02B2B2 H05K1/11D H05K3/00K3P H05K3/00L H05K3/00L1 H05K3/00L2 H05K3/40D6 H05K3/42 H05K3/46B5D H05K3/46B8 H05K3/46C4B H05K7/20F5 T05K1/02M2 T05K1/02M2B T05K1/03F T05K1/05 T05K201/01C3 T05K201/03C1G T05K201/03C3B T05K201/03C3C T05K201/06C T05K201/09A9 T05K201/09C2D T05K201/09C4A T05K201/09C4D T05K201/09C4F T05K201/09C4H T05K201/09C4L T05K201/09C4N T05K201/09C5N T05K201/09D14 T05K201/09D2 T05K201/10D1F T05K203/05B2 T05K203/07B3 T05K203/11P T05K203/15E T05K203/15H T05K3/00K3P T05K3/00L T05K3/00L1 T05K3/00L2 T05K3/00S T05K3/38D T05K3/42E3 T05K3/42M T05K3/46C4

US class: 156/644 174/254 174/266 216/18 216/20 216/67 216/83 428/209 428/901

Classification Explorer

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Forward Citations: WO9806243, WO9718695, WO9700598, WO9612392, WO9600491, WO9531883, WO9526123, WO9526122, WO9521517, WO13003078, WO11140119, WO11140119, WO07053606, WO07053606, WO06118971, WO06118971, WO04027866, WO04027866, WO03055288, WO03030602, WO02100135, WO02100135, USRE45637, US9661749, US9408314, US9332638, US9332632, US9320143, US9155205, US8268537, US8203080, US8037596, US8030135, US7939920, US7918021, US7745733, US7667142, US7640660, US7635815, US7584535, US7514297, US7511371, US7452754, US7438969, US7352058, US7301105, US7279412, US7224046, US7135119, US7114250, US7045198, US7000845, US6982200, US6772515, US6763579, US6734369, US6715203, US6664484, US6629366, US6611046, US6557253, US6548887, US6486394, US6461527, US6452117, US6451509, US6426284, US6423907, US6344371, US6323096, US6321443, US6293008, US6221440, US6218628, US6175087, US6162996, US5930117, US5925206, US5879787, US5874770, US5840402, US5807469, US5651899, US5639389, US2014374142, US2014190733, US2014177177, US2014151107, US2014151106, US2014116764, US2012211267, US2011067233, US2009260867, US2009090465, US2009002953, US2008251279, US2008011507, US2007186414, US2007175025, US2007077688, US2006264709, US2006231198, US2006104035, US2006063428, US2005257957, US2005218503, US2005085065, US2005019541, US2005019535, US2005011856, US2004217003, US2004206829, US2004178492, US2004152256, US2004037950, US2004009335, US2003082363, US2002117329, KR101225363, KR100987504, JP2010058076, JP2009064840, JP2003023248, GB2391714, GB2391714, FR2834180, EP2717658, EP2717658, EP1437928, EP1437928, EP1404166, EP1187520, EP1187520, EP1166353, EP1119225, EP1119225, EP0916237, EP0834242, EP0740497, EP0700630, EP0668712, DE4439239, DE19633449, DE102013223888, DE102013223761, CN104798452, CN103563495, CN103563495, CN103068149,

Abstract:
Source: US5378314A A method for producing aligned passages through substrate materials, in which the projection of the inlet and outlet openings does not coincide, uses displaced application of etching windows on opposite sides and corresponding pronounced under–etching of these windows. By applying displaced etching windows on both sides of the substrate and through–etching the substrate through these windows, 'oblique' passages are obtained through the substrate. By a suitable location of the windows it is also possible to produce branched passages with more than one outlet opening.

0) US5486112A – AUTONOMOUS WEARABLE COMPUTING DEVICE AND METHOD...

82) Family number: 13177682 (US5486112A) © PatBase

Title: Autonomous wearable computing device and method of artistic expression using same

Priority:
US19910770610 19911003 US19920912874 19920713 US19940306141 19940914
US19930159194 19931130 US19930128821 19930928 US19940101843 19940215
WO1993US06768 19930713 WO1995US11581 19950912 US19950470263 19950606
WO1994US12682 19941115 US19950551935 19951023 US19940328393 19941024

Family:

Publication number	Publication date	Application number	Application date
AU199347761 A1	19940131	AU19930047761	19930713
AU199511710 A1	19950619	AU19950011710	19941115
AU199535872 A1	19960329	AU19950035872	19950912
CA2118935 AA	19940311	CA19932118935	19930713
CA2176352 AA	19960510	CA19942176352	19941115
EP0611467 A1	19940824	EP19930918242	19930713
EP0611467 A4	19960207	EP19930918242	19930713
GB2299198 A1	19960925	GB19960008759	19950912
GB9608759 A0	19960703	GB19960008759	19950912
US5486112 A	19960123	US19930159194	19931130
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US5554032 A	19960910	US19940328393	19941024
US5571020 A	19961105	US19930128821	19930928
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WO9401851 A1	19940120	WO1993US06768	19930713
WO9515547 A1	19950608	WO1994US12682	19941115
WO9608804 A1	19960321	WO1995US11581	19950912

Probable Assignee: TROUDET TERRY

Assignee(s):(std)**:** FARIDEH TROUDET ; TERRY TROUDET ; TROUDET FARIDEH ; TROUDET TERRY

Inventor(s):(std)**:** TROUDET FARIDEH ; TROUDET TERRY

Inventor(s): FARIDEH TROUDET ; TERRY TROUDET

Agent(s): MACRAE AND CO; RICHES MCKENZIE AND HERBERT LLP

Designated states: AT AU BE CA CH CN DE DK ES FR GB GR IE IT JP KR LU MC NL PT SE US

International class (IPC 8–9): G06F1/16 G09B13/00 G09B13/04 G09B17/00 G09B19/00 G09B5/06 (Advanced/Invention); G06F1/16 G09B13/00 G09B17/00 G09B19/00 G09B5/00 (Core/Invention)

International class (IPC 1–7): A63B69/00 G09B13/00 G09B13/04

CPC: G09B13/04 G06F1/163 G09B5/065 G09B17/00 G09B19/00

European class: G06F1/16P5 G09B13/04 G09B17/00 G09B19/00 G09B5/06C

US class: 2/160 341/20 434/112 434/157 434/162 434/167 434/233 434/250 63/15 63/15.2

Classification Explorer

Cited documents: WO9108559 A1, US623966 A, US5199876 A, US4909739 A, US4902231 A, US4864658 A, US4846687 A, US4635516 A, US4580984 A, US4519781 A, US4414537 A, US3831296 A, US3559302 A, US3501849 A, US3258858 A, US3166856 A, US3022878 A, US2570908 A, US2053874 A, US1823130 A, GB931038 A, GB2173597 A1, GB1581453 A, GB1255754 A, FR2672413 A1, FR1357068 A,

Forward Citations: WO9427267, WO14051600, WO08047172, WO08047172, WO0000883, USD732794, USD702889, USD676219, USD637788, USD462505, US9666091, US9647887, US9594443, US9501947, US9495351, US9349300, US9262940, US9201508, US9144908, US9038871, US9033875, US8862988, US8727777, US8523572,

US8510867, US8491311, US8477986, US8434164, US8386060, US8276215, US8093997, US8001620, US7941481, US7917235, US7690322, US7677194, US7674969, US7571226, US7570295, US7552054, US7301481, US7269557, US7109970, US7012593, US6967596, US6951464, US6796734, US6792124, US6675010, US6655269, US6634886, US6611962, US6491523, US6407679, US6406300, US6276685, US6275996, US6227862, US6155836, US6154199, US6151208, US6142785, US6140913, US6089872, US6044153, US5796354, US5764164, US5740557, US5649480, US5581484, US2015310762, US2015241998, US2015180716, US2015143276, US2015121246, US2014148951, US2013289970, US2012002698, US2010238005, US2010225590, US2010207881, US2010154102, US2010120003, US2010047747, US2009325137, US2009317777, US2009222973, US2009212979, US2009136908, US2009126554, US2008301856, US2008295670, US2008183460, US2008183052, US2008154601, US2008127810, US2008092798, US2008092797, US2007272070, US2007238078, US2007134630, US2007050880, US2007038190, US2006248478, US2006214912, US2006147883, US2006134586, US2006051726, US2006038917, US2006029914, US2005285760, US2005282120, US2005106536, US2004240924, US2004180317, US2004164880, US2004036678, US2003106781, US2003068904, US2003011568, GB2433154, EP0974948, DE19651941,

Abstract:
Source: US5486112A Educational devices using process−oriented educational methods are disclosed to prepare pre−school children, school children, and teenagers for keyboarding. The devices include sets of gloves and indicia applied to the fingers of the gloves to provide pictorial and alphanumeric representations of the computer keyboard. The visual and tactile memorization of the glove images are complemented by auditory and associative memorization provided by a story−telling educational method. Synergistic use of the gloves in the context of supervised story−telling also trains the pre−school children to develop and practise both lateral and vertical thinking skills1−2, thus preparing them for coping creatively with the inherent hardware/software limitations of computers. The memorization of the alphanumeric representation of the computer keyboard is reinforced through synergistic use of the gloves in a variety of activities including learning the alphabet, learning word−spelling, and learning languages. To best fit the psychology of teenagers, sets of picture−rings and medallion−rings are disclosed to specifically prepare that age−group for keyboarding. A process−oriented method based on the aforementioned devices is disclosed to facilitate the self−expression of children and/or help towards a more healthy communication and healing (therapy). A process−oriented method based on the aforementioned devices is disclosed to assist in the learning of the alphabet and the numbers, and in the learning of languages and scientific disciplines (arithmetic, mathematics, physics, chemistry, medical sciences, etc.). The functionality of the aforementioned devices and the efficiency of the aforementioned educational methods are enhanced through a highly integrated device disclosed under the term "keygloves" in analogy with the term "keyboard", since the "keygloves" extends the power of the "keyboard" to the very hands of the learner/user. 1 De Bono, E.: "How To Change Ideas", Seminar Cassettes, Londin, 1973. 2 Troudet, F.: "Can Creativity Be Taught?", Cleveland State University, Cleveland, OH, Dec. 1988.

0) US5492399A – SHELF, SHELF SYSTEM OR PARTITION

83) Family number: 17167408 (US5492399A) © PatBase

Title: Shelf, shelf system or partition

Priority: DE19930002558U 19930223 DE19945000309 19940122 WO1994DE00046 19940122

Family:

Publication number	Publication date	Application number	Application date
CA2118008 AA	19940915	CA19942118008	19940122
CA2118008 C	20041102	CA19942118008	19940122
DE59400309 D1	19960704	DE19945000309	19940122
DE9302558 U1	19940303	DE19930002558U	19930223
EP0637923 A1	19950215	EP19940904951	19940122
EP0637923 B1	19960529	EP19940904951	19940122
ES2088702 T3	19960816	ES19940904951T	19940122
US5492399 A	19960220	US19940318890	19941024
WO9419989 A2	19940915	WO1994DE00046	19940122
WO9419989 A3	19950112	WO1994DE00046	19940122

Probable Assignee: TILLACK JOACHIM

Assignee(s):(std)**:** TILLACK JOACHIM

Assignee(s): TILLACK JOACHIM 61476 KRONBERG DE

Inventor(s):(std)**:** TILLACK JOACHIM

Inventor(s): TILLACK JOACHIM 61476 KRONBERG DE

Designated states: AT BE CA CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE US

International class (IPC 8–9): A47B87/00 A47B87/02 (Advanced/Invention); A47B87/00 (Core/Invention)

International class (IPC 1–7): A47B57/48 A47B87/00 A47B87/02 F16B12/10

CPC: A47B87/0253

European class: A47B87/02B4

US class: 108/91 211/194 312/111

Classification Explorer

Cited documents: US4852749 A, US4836393 A, US4681477 A, US4660901 A, US4433881 A, US4322118 A, US3814033 A, US3767233 A, US3752511 A, US3529878 A, US3433547 A, US3162484 A, US3103374 A, US2582553 A, US2063621 A, FR2166506 A5, EP0394891 A1, EP0024013 A2, DE2607210 A1, DE2250769 A1, DE2239239 A1, DE2110892 A1, DD224211 A1,

Forward Citations: WO9628067, WO06109178, WO06107220, USD666418, USD663118, USD661095, USD661094, USD655087, USD648939, USD632892, USD622959, USD619832, USD619829, US9603448, US9277826, US9277813, US8783778, US8708433, US8485480, US8418874, US8186776, US8113600, US7866769, US7815264, US7516854, US7204377, US6877824, US6749070, US6338215, US6284139, US6230909, US5808871, US5704699, US5697304, US2014263108, US2014251934, US2011180452, US2010237755, US2010176256, US2008308516, US2008074013, US2008002346, US2007203787, US2007152546, US2007131632, US2006250052, US2006108308, ITUD20110056, ITPN20100037, FR2960609, EP1982620,

Abstract:
Source: US5492399A PCT No. PCT/DE94/00046 Sec. 371 Date Oct. 24, 1994 Sec. 102(e) Date Oct. 24, 1994 PCT Filed Jan. 22, 1994 PCT Pub. No. WO94/19989 PCT Pub. Date Sep. 15, 1994.A shelf, shelf system or partition is to be configured so that a rigid connection of the individual module units is guaranteed when they are stacked atop one another and when assembled next to one another. This is achieved in that U−shaped module units (1) have blind holes (7) that are placed at least approximately centrally to narrow sides (6) of carrying uprights (5). Module units (1) placed atop one another can be connected to one another by connecting elements (12) that can be inserted in blind holes (7) (Fig. 1).

0) US2002175515A – COIN–DISCRIMINATOR VOUCHER ANTI–COUNTERFEITING ...

84) Family number: 30431446 (US2002175515A) © PatBase

Title: COIN–DISCRIMINATOR VOUCHER ANTI–COUNTERFEITING METHOD AND APPARATUS

Priority:

AU19950024636	19950501	AU19950024636	19950501	AU19980071948	19980617
AU19980071949	19980617	CA19952189330	19950501	AU19990056048	19991025
CA19952235925	19950501	CA19952235925	19950501	CA19952235926	19950501
EP19950918879	19950501	US19970852328	19970507	US19970924098	19970905
US19960689926	19960812	US19970834952	19970407	US19920940931	19920904
US19960689826	19960812	US19940255539	19940606	CA19992287090	19991022
CA19982189330	19980710	EP20020759391	20020816	US19940237486	19940503
WO1995US05356	19950501	WO1993US08228	19930901	US19990422917	19991021
US20020211804	20020801	US20010960599	20010921	US20000549661	20000412
US19990450824	19991129	US19970924101	19970905	US20030653699	20030902
US20040894358	20040719	US20060336413	20060120	US20060526196	20060921
US20070782349	20070724	US20070923592	20071024	US20070931248	20071031
US20080235574	20080922	US19980105508P	19981023	US20020039181	20020105
US20090412142	20090326	US20030434384	20030507	US20020119534	20020409
US19980035273	19980309	US20030733522	20031210	US20050225874	20050913
WO1999US24895	19991021	WO2002US26245	20020816		

Family:

Publication number	Publication date	Application number	Application date
AT207230 E	20011115	AT19950918879T	19950501
AT484807 E	20101015	AT19990971128T	19991021
AU199348433 A1	19940329	AU19930048433	19930901
AU199524636 A1	19951129	AU19950024636	19950501
AU199871948 A1	19980827	AU19980071948	19980617
AU199871949 A1	19980827	AU19980071949	19980617
AU199956048 A1	20000511	AU19990056048	19991025
AU199956048 A5	20000511	AU19990056048	19991025
AU200012260 A1	20000515	AU20000012260	19991021
AU200012260 A5	20000515	AU20000012260	19991021
AU2002324730 AA	20030904	AU20020324730	20020816
AU2002324730 BB	20080313	AU20020324730	20020816
AU2004201498 AA	20040506	AU20040201498	20040408
AU2004201498 BB	20060615	AU20040201498	20040408
AU695403 B2	19980813	AU19950024636	19950501
AU714452 B2	20000106	AU19980071948	19980617
AU719014 B2	20000504	AU19980071949	19980617
AU768931 B2	20040108	AU19990056048	19991025
CA2143943 AA	19950306	CA19932143943	19930901
CA2143943 C	20030318	CA19932143943	19930901
CA2189330 AA	19961031	CA19952189330	19950501
CA2189330 C	20001205	CA19952189330	19950501
CA2235925 AA	19951109	CA19952235925	19950501
CA2235925 C	20010724	CA19952235925	19950501
CA2235926 AA	19951109	CA19952235926	19950501
CA2287090 AA	20000423	CA19992287090	19991022
CA2348921 AA	20010423	CA19992348921	19991021
CA2348921 C	20111011	CA19992348921	19991021
CA2472487 AA	20040702	CA20022472487	20020816
CA2472487 C	20091103	CA20022472487	20020816
DE60246948 D1	20150312	DE20026046948	20020816

DE69523309 D1	20011122	DE19956023309	19950501	
DE69523309 T2	20020627	DE19956023309T	19950501	
DE69942864 D1	20101125	DE19996042864	19991021	
DK1131782 T3	20110131	DK19990971128T	19991021	
EP0670072 A1	19950906	EP19930921282	19930901	
EP0670072 A4	19980114	EP19930921282	19930901	
EP0766859 A1	19970409	EP19950918879	19950501	
EP0766859 A4	19970903	EP19950918879	19950501	
EP0766859 B1	20011017	EP19950918879	19950501	
EP0924662 A2	19990623	EP19990103620	19950501	
EP0924663 A2	19990623	EP19990103621	19950501	
EP0924663 A3	20000426	EP19990103621	19950501	
EP0924664 A2	19990623	EP19990103622	19950501	
EP0924665 A2	19990623	EP19990103623	19950501	
EP0924666 A2	19990623	EP19990103624	19950501	
EP0924666 A3	20000426	EP19990103624	19950501	
EP1131782 A1	20010912	EP19990971128	19991021	
EP1131782 A4	20060927	EP19990971128	19991021	
EP1131782 B1	20101013	EP19990971128	19991021	
EP1472098 A1	20041103	EP20020759391	20020816	
EP1472098 A4	20110727	EP20020759391	20020816	
EP1472098 B1	20150128	EP20020759391	20020816	
ES2353944 T3	20110308	ES19990971128T	19991021	
GB2343979 A1	20000524	GB19990025225	19991025	
GB9925225 A0	19991222	GB19990025225	19991025	
JP9512655 T2	19971216	JP19950528451T	19950501	
MX9605331 A1	19971231	MX19960005331	19950501	
US2002175515 AA	20021128	US20020039181	20020105	
US2002189920 AA	20021219	US20020211804	20020801	
US2003196869 AA	20031023	US20030434384	20030507	
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US2004011620 AA	20040122	US20020119534	20020409	
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US2005121507 AA	20050609	US20040894358	20040719	
US2005189427 AA	20050901	US20030653699	20030902	
US2006060445 AA	20060323	US20050225874	20050913	
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US2007069007 AA	20070329	US20060526196	20060921	
US2008018094 AA	20080124	US20070782349	20070724	
US2008087520 AA	20080417	US20070923592	20071024	
US2008106089 AA	20080508	US20070931248	20071031	
US2009096205 AA	20090416	US20080235574	20080922	
US2009178897 AA	20090716	US20090412142	20090326	
US5564546 A	19961015	US19940255539	19940606	
US5620079 A	19970415	US19940237486	19940503	
US5799767 A	19980901	US19970834952	19970407	
US5909794 A	19990608	US19970852328	19970507	
US6047807 A	20000411	US19970924098	19970905	
US6349972 BA	20020226	US19990422917	19991021	
US6484863 BA	20021126	US20000549661	20000412	

US6494776 BA	20021217	US19990450824	19991129	
US6644696 BB	20031111	US20020039181	20020105	
US6736251 BB	20040518	US20020211804	20020801	
US6758316 BB	20040706	US20030434384	20030507	
US6854581 BB	20050215	US20020119534	20020409	
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US7971699 BB	20110705	US20060336413	20060120	
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WO0025260 C2	20000928	WO1999US24895	19991021	
WO03068527 A1	20030821	WO2002US26245	20020816	
WO9406101 A1	19940317	WO1993US08228	19930901	
WO9530215 A1	19951109	WO1995US05356	19950501	

Probable Assignee: COINSTAR LLC

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN

SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B42D15/00 B42D15/10 G06F17/00 G06F19/00 G06K15/00 G06K5/00 G06M3/06 G06M3/08 G06Q20/00 G06Q20/34 G06Q40/00 G07B5/00 G07D1/04 G07D11/00 G07D3/00 G07D3/16 G07D5/00 G07D7/00 G07D7/14 G07D9/00 G07D9/04 G07F1/04 G07F17/42 G07F19/00 G07F5/18 G07F7/00 G07F7/02 G07F9/08 G07G5/00 G09B19/22 G09C1/00 (Advanced/Invention);
B42D15/00 G07B5/00 G07D3/00 G07D9/00 (Advanced/Non–invention);
B42D15/00 G06F19/00 G06K15/00 G06M3/00 G07D1/02 G07D3/00 G07D7/00 G07D9/00 G07D9/04 G07F1/00 G07F17/00 G07F19/00 G07F5/00 G07F7/00 G07F9/08 G07G5/00 (Core/Invention)

International class (IPC 1–7): B42D15/00 G06F17/60 G06F19/00 G06F7/00 G06F9/00 G06K15/00 G06K19/06 G06M3/08 G07B1/00 G07B5/00 G07D3/00 G07D3/16 G07D5/00 G07D7/00 G07D9/00 G07D9/04 G07F1/04 G07F17/42 G07F3/04 G07F7/00 G07F9/00 G07F9/02 G07F9/06 G07F9/08 G07G5/00

CPC: G07F1/04 Y10S283/901 Y10S283/902 B42D15/0053 G06Q20/3437 G07F7/02 G07D7/14 G07F7/00 G07F19/201 B42D25/346 B42D25/405 B42D25/29 G07F11/002 G07D1/04 G07D3/16 G07D9/00 G07D9/008 G07F5/18 G07F5/24 G07F9/08 G07F17/42 G07F19/20 G07F19/202 G07G5/00 B42D2033/22 B42D2035/34

European class: B42D15/00C B42D15/00F G06Q20/3437 G07D1/04 G07D3/16 G07D7/14 G07D9/00 G07D9/00F G07F1/04 G07F11/00B G07F17/42 G07F19/00F G07F19/20 G07F19/201 G07F19/202 G07F5/18 G07F5/24 G07F7/00 G07F7/02 G07F9/08 G07G5/00 L42D31/04 L42D33/22 L42D35/34

US class: 194/200 194/202 194/215 194/215S 194/216 194/217 194/218 194/335 194/344 194/346 194/347 194/348 194/351 235/375 235/379 235/379P 235/380 235/381 235/383 235/494 235/494P 283/113 283/17 283/48.1 283/57 283/57P 283/60.1 283/62 283/67 283/67P 283/70 283/72 283/72P 283/72S 283/73 283/901 283/902 283/92 283/92P 283/92S 340/5.54 340/5.9 340/825.32 377/7 453/10 453/3 453/32 453/4 453/6 700/235

Classification Explorer

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Forward Citations: WO9921141, WO9911006, WO9911006, WO9858320, WO9858320, WO9824067, WO9800813, WO9733257, WO17048894, WO15108690, WO13183071, WO13183071, WO13052650, WO13052650, WO13047343, WO13003773, WO11026586, WO11015941, WO11015941, WO09084062, WO09025962, WO08024043, WO07065185, WO07035420, WO06062834, WO06004548, WO04100085, WO04077244, WO04077244, WO04036519, WO03071495, WO03071387, WO03068527, WO03034356, WO03030113, WO0248976, WO0242951, WO0239350, WO02071343, WO02056129, WO02056129, WO0180113, WO0165430, WO0123290, WO0052652, WO0028488, WO0025201, USRE44689, USRE44252, USRE43888, USRE42820, USRE40186, USD785640, USD448040, USD447164, USD422016, US9697553, US9652763, US9646319, US9633500, US9594982, US9558521, US9558418, US9519915, US9508208, US9501886, US9501885, US9495808, US9495708, US9495705, US9477896, US9460469, US9443367, US9437069, US9430893, US9398833, US9390574, US9389967, US9355295, US9332043, US9330524, US9330515, US9290338, US9240089, US9235955, US9235945, US9233812, US9230381, US9227800, US9218704, US9202329, US9195889, US9189780, US9183687, US9171316, US9142075, US9141876, US9129294, US9129271, US9092924, US9064268, US9059188, US9058626, US9036890, US9024722, US9022841, US9003861, US8992331, US8984080, US8973821, US8967362, US8967361, US8959029, US8959028, US8958626, US8950669, US8950566, US8948490, US8944320, US8944234,

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US2010215167, US2010198726, US2010198708, US2010180187, US2010174641, US2010161458, US2010112923, US2010100481, US2010070474, US2010030635, US2010029374, US2010010921, US2009313106, US2009309729, US2009309722, US2009309694, US2009242626, US2009239459, US2009236201, US2009236200, US2009236199, US2009222381, US2009212995, US2009204494, US2009178897, US2009166151, US2009162184, US2009159395, US2009138365, US2009132380, US2009120760, US2009118860, US2009113038, US2009108059, US2009087076, US2009063344, US2009063316, US2009055363, US2009045031, US2009032580, US2009030855, US2009018959, US2009013028, US2009006249, US2008308383, US2008296374, US2008288277, US2008262966, US2008249658, US2008177677, US2008177633, US2008176187, US2008135608, US2008133257, US2008121492, US2008106089, US2008090508, US2008087520, US2008083770, US2008082207, US2008067236, US2008033855, US2008033824, US2008033595, US2008033594, US2008021825, US2008018094, US2007258633, US2007237381, US2007235523, US2007221470, 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EP1934707, EP1862977, EP1840847, EP1736942, EP1481374, EP1481352, EP1474774, EP1393265,

EP1329335, EP1135318, EP1131697, EP1131697, EP1071561, EP1041518, EP1026642, EP0956543, EP0926634, EP0924666, EP0924663, EP0865005, EP0766859, DE202009015900, CN104268995, CN104268995, AU768931, AU756526, AU2004201498, AU2002345797,

Abstract:
Source: US2002175515A Vouchers and methods for providing vouchers configured to assist in distinguishing unauthorized duplicate or counterfeit vouchers are disclosed herein. In one embodiment, a voucher can include a substrate, a first indicia on the substrate, and a thermally responsive second indicia on the substrate. At least one of the first indicia and the second indicia indicating a value of the voucher. In another embodiment, a method is provided to assist in distinguishing duplicate or counterfeit vouchers. The method includes providing a substrate with a thermally responsive first indicia, and printing on the substrate at the coin–counting machine at least a second indicia. The second indicia containing at least an indication of a value of the voucher.

0) DE4236384A1 – BUTTON MAGAZINE – HAS REVOLVING CONTAINERS TO S...

85) Family number: 11046704 (DE4236384A1) © PatBase

Title: Button magazine – has revolving containers to select required button for delivery to the sewing machine

Priority: DE19924236384 19921028

Family:

Publication number	Publication date	Application number	Application date
DE4236384 A1	19940505	DE19924236384	19921028

Probable Assignee: EICKMEIER GERHARD DR JUR

Assignee(s):(std)**:** EICKMEIER GERHARD DR JUR

Assignee(s): EICKMEIER GERHARD DR JUR 2940 WILHELMSHAVEN DE

Inventor(s): VERZICHT DES ERFINDERS AUF NENNUNG

International class (IPC 8–9): D05B3/22 (Advanced/Invention); D05B3/00 (Core/Invention)

International class (IPC 1–7): B65G1/12 B65G47/08 D05B3/22

CPC: D05B3/22 D05D2203/00

European class: D05B3/22 N05D203/00

Classification Explorer

Abstract:
Source: DE4236384A1 The button is supplied to a button sewing machine is from a storage unit with several magazines each to contain a pile of buttons. The magazines are loaded by a mechanism for the purpose, and the storage unit has a means of transferring the selected button to the machine. The magazines are designed to hold the button size in an upright manner, and are mounted on a circular frame which revolves to align the selected position, at which the buttons are delivered along a channel to the machine. ADVANTAGE – The button storage unit and selection arrangement is uncomplicated, and can be operated by a machinist without the intervention of a specialist.

0) DE4241482A1 – CHIP–CARRYING CARD MFR. – INVOLVES CHIP RECESS ...

86) Family number: 11099016 (DE4241482A1) © PatBase

Title: CHIP–CARRYING CARD MFR. – INVOLVES CHIP RECESS PRODN. BY FORMING BLIND HOLE AND THEN EMBOSSING

Priority: DE19924241482 19921209

Family:

Publication number	Publication date	Application number	Application date
DE4241482 A1	19940616	DE19924241482	19921209

Probable Assignee: SIEMENS AG

Assignee(s):(std)**:** SIEMENS AG

Assignee(s): SIEMENS AG 80333 MUENCHEN ; SIEMENS 80333 MUENCHEN AG

Inventor(s):(std)**:** KETZER GEORG

Inventor(s): KETZER GEORG 82008 UNTERHACHING

International class (IPC 8–9): G06K19/077 (Advanced/Invention); G06K19/077 (Core/Invention)

International class (IPC 1–7): B29C59/02 B42D109/00 B42D15/10 G06K19/077

CPC: H01L2924/0002 B42D25/22 B42D25/425 G06K19/07745 B42D2033/46

European class: G06K19/077M L42D33/46

Classification Explorer

Cited documents: WO8808171 A1, DE3122981 C2,

Forward Citations: WO9704416, WO0033248, US8188867, US5965867, EP2074560, EP0842494, DE19720226, DE19720226, DE19518901, DE10228373, DE10228373,

Abstract:
In the mfr. of IC cards (e.g. cheque, credit, telephone and identify cards), involving fixing of an IC chip in a recess (M) formed in a plastics card, the novelty is that the recess (M) is formed by (i) producing a blind hole (S) in the card (K); and (ii) forming the recess (M) by means of an embossing punch (P), the excess plastics being displaced into the blind hole (S). Also claimed is the appts. used for carrying out the above process. ADVANTAGE – The process has a short prodn. time (e.g. 2.4 secs. per card compared with 6 secs. or more for prior art processes) and solves the problem of material displaced during the embossing operation.

0) US5473802A – BRUSH ARRANGEMENT FOR A NEEDLE LOOM

87) Family number: 8312871 (US5473802A) © PatBase

Title: BRUSH ARRANGEMENT FOR A NEEDLE LOOM

Priority: DE19934301572 19930121

Family:

Publication number	Publication date	Application number	Application date
AT214593 A	19960915	AT19930002145	19931022
AT402412 B	19970526	AT19930002145	19931022
DE4301572 A1	19940728	DE19934301572	19930121
DE4301572 C2	20000120	DE19934301572	19930121
FR2700557 A1	19940722	FR19930015936	19931230
FR2700557 B1	19960705	FR19930015936	19931230
IT1265480 B1	19961122	IT1993MI02771	19931230
ITMI932771 A0	19931230	IT1993MI02771	19931230
ITMI932771 A1	19940722	IT1993MI02771	19931230
US5473802 A	19951212	US19930158925	19931129

Probable Assignee: OSKAR DILO MASCHF KG

Assignee(s):(std): DILO MASCHF OSKAR KG ; DILO KG MASCHF OSKAR

Assignee(s): DILO MASCHF KG ; DILO MASCHINENFABRIK KG ; OSKAR DILO MASCH ; OSKAR DILO MASCHINENFABRIK KG ; OSKAR DILO MASCHINENFABRIK KG 69412 EBERBACH DE ; OSKAR DILO MASCHF KG ; OSKAR DILO MASCHF 69412 EBERBACH DE KG

Inventor(s):(std): DILO JOHANN P ; DILO JOHANN PHILIPP ; PHILIPP DILO JOHANN

Inventor(s): DILO JOHANN PHILIPP 6930 EBERBACH DE

International class (IPC 8–9): D04H18/00 D04H18/02 (Advanced/Invention); D04H18/00 (Core/Invention); D04H (Subclass/Invention)

International class (IPC 1–7): D04H1/46 D04H18/00

CPC: D04H18/02 D04H18/00

European class: D04H18/00 D04H18/02

US class: 28/107

Classification Explorer

Cited documents: US5144730 A, US5117541 A, US4651393 A, US4617695 A, FR2657093 A1, EP0183952 B1, EP0183952 A1, DE4041558 A1, DE4022237 A1, DE3404150 A1, AT391490 B, AT391489 B,

Forward Citations: US8287983, US6857170, US6779236, US6161269, US5819383, US5802682, US5758394, US2011083792, US2009117804, US2004050116,

Abstract:
Source: US5473802A A brush structure for use as a stitch support for a velour needle loom comprises bristle tufts inserted into a carrier plate, with their free ends forming a continuous support surface for supporting thereon a fiber batt to be needled. The foot portions of the bristle tufts are of polygonal cross–section, resulting in a high packing density of the bristle tufts on the carrier plate and optimum bristle–coverage thereof. This enables excellent continuity of the support surface formed by the free bristle ends to be achieved without the bristles having to be provided with a curl or crimp.

0) US5481242A – DEBRIS–REDUCING TELEPHONE RESISTOR COMBINATION ...

88) Family number: 10634899 (US5481242A) © PatBase

Title: Debris–reducing telephone resistor combination and method

Priority: US19940240322 19940510

Family:

Publication number	Publication date	Application number	Application date
AT177870 E	19990415	AT19950300535T	19950127
DE69508301 D1	19990422	DE19956008301	19950127
DE69508301 T2	19990715	DE19956008301T	19950127
EP0682347 A2	19951115	EP19950300535	19950127
EP0682347 A3	19960710	EP19950300535	19950127
EP0682347 B1	19990317	EP19950300535	19950127
ES2128656 T3	19990516	ES19950300535T	19950127
JP2635301 B2	19970730	JP19940318780	19941221
JP7307209 A2	19951121	JP19940318780	19941221
TW273064 B	19960321	TW19940108051	19941003
US5481242 A	19960102	US19940240322	19940510

Probable Assignee: CADDOCK ELECTRONICS INC

Assignee(s):(std)**:** CADDOCK ELECTRONICS INC ; KADOTSUKU ELECTRON INC

Assignee(s): KADOTSUKU EREKUTORONIKUSU INC ; KE DAKE ELECTRONICS ; CADDOCK ELECTRONICS INC RIVERSIDE CALIF US

Inventor(s):(std)**:** CADDOCK JR RICHARD E ; CADDOCK RICHARD E ; CADDOCK RICHARD E JR ; RICHIYAADO II KADOTSUKU JIYUNI

Inventor(s): RICHIYAADO II KADOTSUKU JIYUNIAA ; CADDOCK RICHARD E JR WINCHESTER OREGON 97495 US ; RICHAADO II KADOTSUKU JUNIAA

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE

International class (IPC 8–9)**:** B62K19/02 H01C13/00 H01C7/12 H04M1/00 H05K1/16 (Advanced/Invention); H01H85/00 H01H85/046 H01H85/048 (Advanced/Non–invention); B62K19/00 H01C13/00 H01C7/12 H05K1/16 (Core/Invention); H01H85/00 (Core/Non–invention)

International class (IPC 1–7)**:** H01C1/012 H01C13/00 H01C7/12 H01H85/48 H04M1/00 H05K1/16

CPC: H01C7/12 H01H85/0073 H01H85/046 H01H85/048

European class: H01C7/12 T01H85/00R7 T01H85/046 T01H85/048

US class: 338/21 338/306 338/308 338/309 338/314 361/104 361/119

Classification Explorer

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Abstract:
Source: US5481242A A telephone resistor combination and method, that is formed by a ceramic substrate having a resistive film on it, and pins on one edge of the substrate and connected to the film. A U–shaped cold region is provided on the substrate around at least much of the film, and is so constructed that application of common high overload voltages to the pins causes vertical fracture of the substrate. The resulting substrate pieces are held by the pins to the circuit board.

89) Family number: 15948628 (US2001035610A) © PatBase

Title: Method and apparatus for playing Blackjack with a three card poker wager ("21+3")

Priority:

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): A63B53/00 A63F1/00 A63F1/20 A63F13/00 A63F3/00 A63F3/08 A63F9/24 G06F17/00 G06F19/00 G07F17/32 (Advanced/Invention); A63F1/00 A63F3/00 (Advanced/Non–invention); A63F1/00 A63F13/00 A63F3/00 A63F9/24 G06F19/00 G07F17/32 (Core/Invention); A63F1/00 A63F3/00 (Core/Non–invention)

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CPC: A63F2003/00996 A63F1/00 A63F2003/00167 A63F2003/00164 G07F17/3211 G07F17/3216 G07F17/3276 G07F17/3293 A63F3/00157 A63F2001/003 A63F2001/005 G07F17/32 G07F17/322

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US2007114723, US2007111786, US2007108703, US2007108702, US2007102882, US2007099686, US2007096394, US2007090600, US2007090594, US2007080497, US2007080496, US2007075494, US2007069470, US2007069467, US2007066376, US2007063442, US2007063438, US2007061412, US2007060387, US2007060333, US2007060292, US2007060260, US2007060247, US2007060240, US2007057462, US2007057454, US2007057453, US2007054729, US2007054721, US2007052175, US2007049372, US2007045957, US2007040333, US2007029726, US2007026920, US2007024005, US2007018405, US2007018404, US2007018402, US2007018401, US2007018400, US2007013133, US2007007728, US2007004500, US2006287104, US2006287103, US2006287102, US2006287101, US2006287067, US2006287066, US2006284378, US2006284376, US2006279045, US2006276242, US2006270477, US2006267285, US2006258425, US2006255540, US2006252481, US2006246983, US2006246978, US2006244216, US2006240885, US2006237908, US2006237906, US2006237905, US2006223620, US2006223619, US2006223618, US2006217174, US2006214374, US2006211484, US2006211481, US2006211467, US2006205484, US2006205467, US2006205466, US2006199630, US2006192339, US2006192335, US2006189384, US2006186600, US2006186599, US2006183525, US2006183522, US2006178184, US2006175751, US2006157936, US2006157934, US2006154714, US2006139855, US2006135238, US2006131810, US2006125182, US2006121975, US2006119042, US2006116200, US2006116199, US2006108740, US2006091607, US2006089850, US2006089191, US2006087082, US2006084506, US2006084499, US2006082064, US2006082062, US2006079331, US2006071427, US2006068899, US2006068879, US2006068871, US2006068870, US2006068869, US2006068868, US2006068866, US2006068864, US2006068863, US2006068498, US2006066052, US2006066051, US2006066050, US2006063587, US2006058093, US2006058091, US2006058089, US2006058088, US2006058087, US2006058086, US2006058085, US2006058084, US2006058083, US2006052148, US2006049581, US2006046828, US2006046815, US2006045953, US2006030395, US2006027968, US2006025199, US2006025198, US2006025193, US2006025191, US2006025189, US2006014577, US2006009272, US2006001214, US2005285343, US2005285342, US2005282605, US2005277467, US2005277458, US2005269783, US2005269782, US2005269781, US2005269777, US2005269775, US2005269774, US2005269773, US2005266918, US2005261045, US2005253338, US2005250578, US2005242506, US2005242505, US2005233803, US2005230917, US2005230916, US2005218596, US2005215326, US2005212214, US2005212213, US2005206078, US2005202863, US2005170875, US2005167924, US2005148378, US2005146094, US2005142074, US2005137005, US2005130737, US2005130731, US2005127606, US2005121854, US2005119052, US2005110210, US2005107148, US2005104293, US2005104292, US2005101387, US2005101367, US2005090304, US2005085286, US2005082760, US2005082758, US2005082755, US2005077679, US2005073100, US2005059469, US2005051963, US2005051960, US2005051958, US2005049025, US2005043079, US2005040601, US2005040600, US2005040599, US2005035548, US2005032564, US2005029744, US2005029743, US2005029742, US2005029741, US2005026667, US2005026665, US2005012273, US2004262843, US2004259621, US2004259619, US2004259618, US2004248636, US2004248635, US2004242313, US2004239033, US2004227294, US2004219968, US2004217548, US2004214634, US2004207157, US2004176155, US2004176154, US2004160010, US2004160006, US2004157656, US2004150163, US2004147327, US2004132519, US2004121839, US2004121831, US2004113363, US2004090008, US2004090003, US2004084843, US2004080110, US2004075216, US2004075215, US2004070146, US2004066000, US2004063485, US2004061288, US2004043807, US2004041346, US2004033309, US2004023712, US2003216169, US2003207713, US2003207707, US2003199313, US2003178776, US2003176209, US2003176208, US2003162424, US2003119574, US2003119571, US2003114209, US2003104851, US2003094761, US2003057648, US2003045358, US2003027614, US2003013510, US2003008697, US2002198052, US2002187821, US2002169015, US2002132658, US2002087753, US2002063388, US2002024178, US2001046890, TWI533910, TWI458528, ITMI20081840, GB2397536, GB2376189, FR2938772, EP2475439, EP2475439, EP2300114, EP2136889, EP1796798, EP1743679, EP1541204, CN102407018, CN102407018, AU2008201304, AU2007234592, AU2003203981, AU2003203981,

Abstract:
Source: US2001035610A Card games that combine the play of Blackjack ("21") with a 3−card Poker wager or side bet ("21+3"). Each player places a basic Blackjack wager and an optional 3−card Poker wager before the cards are dealt. Each player is then dealt a card with the dealer receiving a face−up card. Each player is dealt a second card. At this point, the outcome of each 3−card Poker hand is determined, where a 3−card Poker hand consists of the 2−card hand dealt to that player and the dealer's face−up card. After settling the Poker wagers, the game of Blackjack continues in a typical fashion. The invention advantageously retains all the features and advantages of Blackjack as well as provides the dynamics of 3−card Poker, without interfering with the card sequence, for enhanced player anticipation and enjoyment.

0) US5678995A – ENOSSAL IMPLANT FOR TOOTH REPLACEMENT

90) Family number: 8634768 (US5678995A) © PatBase

Title: Enossal implant for tooth replacement

Priority: DE19944433671 19940921 WO1995DE01159 19950829

Family:

Publication number	Publication date	Application number	Application date
AU199532530 A1	19960409	AU19950032530	19950829
BRPI9509152 A	19971014	BR1995PI09152	19950829
CA2200207 AA	19970317	CA19952200207	19950829
CN1158557 A	19970903	CN19951095217	19950829
DE4433671 C1	19960328	DE19944433671	19940921
EP0702941 A1	19960327	EP19950113530	19950829
JP10507658 T2	19980728	JP19960510502T	19950829
US5678995 A	19971021	US19950531279	19950920
WO9609016 A1	19960328	WO1995DE01159	19950829

Probable Assignee: EBERLE MEDIZINTECHNISCHE ELEMENTE GMBH

Assignee(s):(std)**:** IMZ FERTIGUNG VERTRIEB ; EBERLE MEDIZINTECH ELEMENTE

Assignee(s): EBERLE MEDIZINTECHNISCHE ELEMENTE GMBH ; EBERLE MEDIZINTECHNISCHE ELEMENTE GMBH 75449 WURMB ; ALTATEC MEDIZINTECHNISCHE ELEMENTE GMBH AND CO KG ; DURR WALTER ; IMZ FERTIGUNGS UND VERTRIEBSGESELLSCHAFT ; IMZ FERTIGUNGS UND VERTRIEBS GESELLSCHAFT FUER DEN ; IMZ FERTIGUNGS UND VERTRIEBSGESELLSCHAFT FUER DENT ; IMZ FERTIGUNGS UND VERTRIEBSGESELLSCHAFT FUER DENTALE TECHNOLOGIE M B H ; EBERLE MEDIZINTECHNISCHE ELEMENTE GMBH 75449 WURMBERG DE ; IMZ FERTIGUNGS UND VERTRIEBS GESELLSCHAFT FUER DENTALE TECHNOLGIE MBH ; IMZ FERTIGUNGS U VERTRIEBSGESELLSCHAFT FUR DENTALE TECHNOLOGIE MBH ; IMZ FERTIGUNGS U VERTRIEBSGESELLSCHAFT F DENT ; IMZ FERTIGUNGS U VERTRIEBSGESELLSCHAFT FUR DENTALE TECHNOLOG ; IMZ FERTIGUNGS UND VERTRIEBSGESELLSCHAFT FUR DENTA ; IMZ FERTIGUNGS UND VERTRIEBSGESELLSCHAFT FUR DENTALE TECHNOLOG ; IMZ FERTIGUNGS UND VERTRIEBSGESELLSCHAFT FUR DENTALE TECHNOLOGIE MBH ; IMZ FERTIGUNGS UND VERTRIEBSGESELLSCHAFT FUER DENTALE TECHNOLOGIE MBH 70794 FILDERSTADT DE ; KIRSCH AXEL

Inventor(s):(std)**:** DIR WALTER ; DUERR WALTER ; DURR WALTER ; KIRSCH AXEL ; KIRSCH AXEL DR

Inventor(s): KIRSCH AXEL DR 70184 STUTTGART DE ; WALTER DIR ; WALTER DUERR ; WALTER DURR ; DUERR WALTER 75196 REMCHINGEN DE ; DR AXEL KIRSCH ; AXEL KIRSCH

Agent(s): G RONALD BELL AND ASSOCIATES

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LI LK LR LT LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SK SN SZ TD TG TJ TT UA UG UZ VN

International class (IPC 8–9): A61C8/00 (Advanced/Invention); A61C8/00 (Core/Invention)

International class (IPC 1–7): A61C13/12 A61C13/28 A61C8/00 A61K6/00

CPC: A61C8/0086

European class: A61C8/00Q

US class: 433/169 433/172

Classification Explorer

Cited documents: US5362234 A, US5174755 A, US5040982 A, US5026280 A, US4957437 A, RU2007141 C1, EP0434591 A1, EP0370590 A2, DE3909580 C2, DE3909580 A1, DE3839724 C2, DE3839724 A1, DE3731265 A1,

Forward Citations: WO04032786, USD427683, US9549793, US8961178, US8782897, US8683692, US8636511, US8408905, US8398402, US8398401, US8057229, US7484959, US7338286, US6394808, US6250922, US6012923, US2009117521, US2009029321, US2009029317, US2009029315, RU2496444, JP5225482, DE10245990, CN103126776,

Abstract:
Source: US5678995A An enossal implant includes a base member, a one−piece spacer member and fastening head which has a skeleton structure composed of metal and plastic material. The spacer sleeve has a blind bore with threads in the fastening head portion for receiving a threaded implant post. The skeleton structure has cavities in a metal body filled with an elastic plastic material to enable the spacer sleeve to be compressed in an axial direction and also to bend in response to bending stresses.

0) US5547565A – FUEL/WATER SEPARATOR WITH ADAPTOR PLATE FOR DRA...

91) Family number: 8661170 (US5547565A) © PatBase

Title: Fuel/water separator with adaptor plate for drain valve and water detector

Priority: CA19952163719 19951124 US19940350262 19941205

Family:

Publication number	Publication date	Application number	Application date
AU199540224 A1	19960613	AU19950040224	19951205
AU691367 B2	19980514	AU19950040224	19951205
CA2163719 AA	19960606	CA19952163719	19951124
DE69512872 D1	19991125	DE19956012872	19951125
DE69512872 T2	20000518	DE19956012872T	19951125
EP0715873 A2	19960612	EP19950118596	19951125
EP0715873 A3	19960710	EP19950118596	19951125
EP0715873 B1	19991020	EP19950118596	19951125
ES2139822 T3	20000216	ES19950118596T	19951125
JP8266804 A2	19961015	JP19950316826	19951205
MX9505051 A1	19970131	MX19950005051	19951205
US5547565 A	19960820	US19940350262	19941205

Probable Assignee: BALDWIN FILTERS INC

Assignee(s):(std)**:** BALDWIN FILTERS INC

Assignee(s): BIERE DAVID A ; BORUDOUIN FILTER ZU INC ; MCCONAUGHEY O TROY ; BROWN GENE W

Inventor(s):(std)**:** BIERE DAVID A ; BROWN GENE W ; BROWN GENE WAYNE ; MCCONAUGHEY O TROY ; MCCONAUGHEY ORA TROY

Inventor(s): O TROY MCCONAUGHEY ; OO TOROI MATSUKONAFUEI ; ORA TROY MCCONAUGHEY ; DAVID A BIERE ; DEIBITSUDO EE BIERU ; GENE W BROWN ; GENE WAYNE BROWN ; JIIN DABURIYUU BURAUN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO

Designated states: DE ES FR GB IT

International class(IPC 8–9)**:** B01D17/02 B01D17/022 B01D27/08 B01D35/30 B01D36/00 F02M37/22 (Advanced/Invention); B01D27/08 B01D35/30 (Advanced/Non–invention); B01D17/02 B01D27/08 B01D35/30 B01D36/00 F02M37/22 (Core/Invention)

International class(IPC 1–7)**:** B01D17/02 B01D17/022 B01D24/00 B01D27/00 B01D27/08 B01D35/02 B01D35/30 B01D36/00 F02M37/22

CPC: B01D17/0214 B01D36/005 B01D36/006 F02M37/221

European class: B01D17/02F4 B01D36/00L2 B01D36/00L4 F02M37/22A

US class: 210/232 210/248 210/313 210/444 210/86

Classification Explorer

Cited documents: US5322624 A, US5236579 A, US5144978 A, US4624779 A, US4619764 A, US4611627 A, US4502955 A, US4276161 A, US2333890 A, US2311320 A, FR2528912 A1, EP0213889 A2,

Forward Citations: WO15160736, WO12050702, WO12050702, WO12044884, WO09062075, WO08091418, WO05042962, WO04005695, US9151424, US8973760, US8877055, US8584702, US7967151, US7368060, US7297282, US6881328, US6852217, US6569320, US6258269, US2015115184, US2013298509, US2011031181, US2009114287, US2008223461, US2007034580, US2004144734, JP4190383, JP2009506882, JP2005103502, GB2497895, GB2497895, EP1512451, EP1163944, EP1163944, EP0806564, DE20008112, DE19847999, DE10308427, DE10308427, DE10124887, DE10124883, DE10029539, DE10029539, CN103261658, CN103261658, CN103201497, CN103201497,

Abstract:
Source: US5547565A The separator includes an all sheet metal shell having a bottom to which is secured a metal adaptor plate enabling a drain valve and a water detector to be attached to the bottom of the shell.

0) US5538291A – ANTI–THEFT CREDIT CARD

92) Family number: 12665893 (US5538291A) © PatBase

Title:	ANTI–THEFT CREDIT CARD
Priority:	US19940312787 19940926

Family:

Publication number	Publication date	Application number	Application date
US5538291 A	19960723	US19940312787	19940926

Probable Assignee:	GUSTAFSON ULF
Assignee(s):(std)**:**	GUSTAFSON ULF
Inventor(s):(std)**:**	GUSTAFSON ULF
International class (IPC 8–9)**:**	B42D15/10 (Advanced/Invention); B42D15/10 (Core/Invention)
International class (IPC 1–7)**:**	B42D15/00
CPC:	B42D25/45 B42D25/00 B42D25/318 B42D25/425 Y10S283/904 B42D2033/00
European class:	B42D15/10 L42D33/00
US class:	235/487 235/493 283/904

Classification Explorer

Cited documents:	US5326964 A, US5288979 A, US5284364 A, US5259649 A, US5255941 A, US5251259 A, US5239166 A, US5180902 A, US5163098 A, US5095194 A, US4931629 A, US4896027 A, US4643453 A, US3650210 A, US3605619 A, US3583317 A, US3511181 A, US3505954 A, US3434414 A,
Forward Citations:	US9665747, US9569777, US9547864, US9524458, US9495852, US9256870, US9092778, US8816826, US8542429, US7988061, US7988036, US7984849, US7719425, US7717347, US7591418, US7584558, US7487908, US7360710, US7325744, US7322519, US7316357, US7290703, US7065195, US7032817, US6830195, US6412690, US6370029, US6095416, US2013152631, US2010026466, US2009019751, US2008149727, US2008149709, US2008118255, US2008116295, US2007241198, US2007241197, US2007241186, US2007057040, US2007040019, US2006279127, US2006187061, US2006187060, US2006187055, US2006144926, US2005150961, US2005046175, US2004010416, US2003178496, US2003150919, EP2410479, EP1770615,

Abstract:
Source: US5538291A The invention is an improved credit card utilizing a die–cut removable portion which enables both visual and/or mechanical disablement of the card. The die–cut portion is preferably in the shape of a conventional key providing a visual indicator of the missing link necessary to make the card operational. The die–cut portion of the card may encompass identifying indicia such as the owner's name, the card expiration date, the numerical identification number, and/or the magnetic strip. Variations of the die–cut key allow certain aspects of the card to remain enabled should the removed key be accidentally lost. The invention requires that the key lock system be carried separately from the credit card thus frustrating pick–pockets or instances where the cards are otherwise stolen or lost. A second embodiment of the invention includes the use of the die–cut portion placed within two side surfaces of a credit card device. A portion of the card is transparent so as to provide visual indication of the key position within the card. An attachment device is further provided for securing the removed die–cut portion to a key ring or necklace providing ease of accessibility for reinsertion into a card member.

0) US5878463A – DOOR LOCK FOR A MOTOR VEHICLE DOOR FORMED INTEG...

93) Family number: 30511826 (US5878463A) © PatBase

Title: DOOR LOCK FOR A MOTOR VEHICLE DOOR FORMED INTEGRALLY WITH A DOOR HINGE

Priority: DE19961019473 19960514 DE19961019473U 19960514 DE19961026928 19960704 DE19961033451U 19960820 DE19961033461 19960820 DE19961033462 19960820 DE19961033462 19960820 DE19961033451 19960820 DE19962011674U 19960704 DE19975002593 19970816 DE19975011198 19970424

Family:

Publication number	Publication date	Application number	Application date
DE19619473 A1	19971120	DE19961019473	19960514
DE19626928 A1	19980205	DE19961026928	19960704
DE19633451 A1	19980226	DE19961033451	19960820
DE19633461 A1	19980226	DE19961033461	19960820
DE19633462 A1	19980226	DE19961033462	19960820
DE19633462 B4	20050707	DE19961033462	19960820
DE29611674 U1	19960912	DE19962011674U	19960704
DE59702593 D1	20001214	DE19975002593	19970816
DE59711198 D1	20040219	DE19975011198	19970424
EP0807738 A2	19971119	EP19970106759	19970424
EP0807738 A3	19990929	EP19970106759	19970424
EP0807738 B1	20040114	EP19970106759	19970424
EP0825318 A2	19980225	EP19970114157	19970816
EP0825318 A3	19980318	EP19970114157	19970816
EP0825318 B1	20001108	EP19970114157	19970816
ES2153149 T3	20010216	ES19970114157T	19970816
JP10046902 A2	19980217	JP19970122362	19970513
JP10184166 A2	19980714	JP19970222699	19970819
US5878463 A	19990309	US19970915365	19970820
US6282752 BA	20010904	US19970856163	19970514

Probable Assignee: EDSCHARWACHTER GMBH AND CO KG

Assignee(s):(std)**:** SCHARWAECHTER ED GMBH ; SCHARWAECHTER GMBH CO KG

Assignee(s): EDSCHARWACHTER GMBH ; EDSCHARWACHTER GMBH AND CO KG ; ED SCHARWACHTER GMBH ; ED SCHARWACHTER GMBH AND CO KG ; ED SCHARWAE CHTER GMBH AND CO KG ; ED SCHARWAECHTER GMBH ; ED SCHARWAECHTER GMBH AND CO 42855 REMSCHEID DE KG ; ED SCHARWAECHTER GMBH AND CO KG ; ED SCHARWAECHTER GMBH AND CO KG 42855 REMSCHEID ; ED SCHARWAECHTER GMBH AND CO KG 42855 REMSCHEID DE

Inventor(s):(std)**:** KLINGELHOFER FRIEDRICH G ; KLUTING BERND ALFRED ; KLUETING BERND ALFRED DIPL ING ; KLUETING BERND ALFRED ; KLINGELHOEFER FRIEDRICH G ING ; KLINGELHOEFER FRIEDRICH G ; BONNE ANDREAS DIPL ING ; BONNE ANDREAS

Inventor(s): BONNE ANDREAS DIPLING ; KLue TING BERND ALFRED ; KLUETING BERND ALFRED DIPL ING 42477 RADEVORMWALD ; BONNE ANDREAS DIPL ING 88167 GRUENENBACH DE ; KLINGELHOEFER FRIEDRICH G ING GRAD ; KLINGELHOEFER FRIEDRICH G ING GRAD 42857 REMSCH

Designated states: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9): B60J5/00 E05B65/06 E05C17/46 E05D11/08 E05D11/10 E05D7/086 E05D7/10 (Advanced/Invention) ; B60J5/00 E05B65/06 E05C17/00 E05D11/00 E05D7/00 E05D7/08 (Core/Invention)

B60J5/00 E05B65/06 E05C17/46 E05D11/08 E05D11/10 E05D7/086 E05D7/10

International class (IPC 1–7):

CPC: E05Y2800/26 Y10T16/54021 Y10T16/540255 Y10T16/54028 Y10T16/540256 E05D11/1085 E05D11/1057 E05D2011/1035 E05Y2900/531

European class: E05D11/10E3A E05D11/10E4A P05D11/10E1 P05Y900/531

US class: 16/322 16/330 16/331 16/334

Classification Explorer

Cited documents: US5408726 A, US5323512 A, US5269047 A, US5173993 A, US4829633 A, US4532675 A, US3028619 A, US2635281 A, US1159529 A, US1159525 A, US1078002 A, FR2670530 A1, FR2660008 A1, FR1203451 A, EP0139509 A2, DE8904337 U, DE86274597 U, DE8627459 U, DE84010622 U, DE8401062 U, DE4212181 A1, DE29700043 U1, DE2340762 A1, DE19619473 A1,

Forward Citations: WO9951845, WO05033454, WO05031097, WO02084058, WO0165041, WO0031367, WO0014371, WO0008283, WO0008283, WO0008283, US8438703, US7716787, US7461432, US7103938, US6701576, US6684455, US6607236, US6588483, US6568032, US6516495, US6481056, US6477738, US6457207, US6073309, US6029314, US6000098, US2004187260, JP4812820, JP4087254, JP2010077708, JP2004526086, FR2871833, EP2256274, EP1664468, EP1068417, EP1043468, EP0887504, DE29815747, DE19915718, DE19915718, DE19854602, DE19727041, DE19633462, DE10343587, DE10343587, DE102008051875, DE102008051875, DE10009375, DE10009375, AU776451,

Abstract:
Source: US5878463A A door lock for a motor vehicle door formed integrally with a door hinge and including a locking element having a plurality of detent points, with the locking element being formed as a substantially circular track concentric with respect to the hinge pin axis and securable to one of the two hinge halves without possibility of rotation relative to the one to hinge halves, a plurality of brake and locking members arrangeable concentrically with respect to the hinge pin radially outwardly of the hinge pin and operationally connectable with the hinge pin, and a spring−biased carrier for receiving the brake and locking members and arrangeable approximately congruently with the locking element.

94) Family number: 9302560 (WO9629217A1) © PatBase

Title: SAFE AND VALVE OR SWITCH PROTECTION DEVICE

Priority: CA19952144884 19950317

Family:

Publication number	Publication date	Application number	Application date
CA2144884 AA	19960918	CA19952144884	19950317
WO9629217 A1	19960926	WO1996CA00165	19960318

Probable Assignee: DESJARDINS DANIEL

Assignee(s):(std)**:** DESJARDINS DANIEL

Inventor(s):(std)**:** DESJARDINS DANIEL

Designated states: AT BE CH DE DK ES FI FR GB GR IE IT LU MC MX NL PT RU SE US

International class (IPC 8–9)**:** B60R25/04 B60R25/045 B60R25/08 E05B47/00 (Advanced/Invention); B60R25/04 (Core/Invention)

International class (IPC 1–7)**:** B60R25/04 B60R25/08 E05B47/00

CPC: B60R25/042

European class: B60R25/042

Classification Explorer

Cited documents: WO9318943, US4928506, US4422314, US4092506, US3750430, US1459688, GB2279404, FR554880, FR2293125,

Abstract:
A device for preventing the theft of various kinds of vehicles such as land vehicles, aircraft or watercraft. The device is designed to block a selected power line (air, fuel, electricity, etc.) in the expensive and/or hazardous vehicles, and consists of a specially designed compact safe having increased strength due to its small size, and being provided at the back with two inlets and two outlets for connection to the selected power line to be obstructed. The safe has a number of reinforcement and protection features, including a choice of two specially selected high–security bars (with one or two latches), and in two of its three embodiments, it is doubly protected by the use of a heavy–duty padlock which, when not in use, may be retained on the side of the safe housing. The protective device completely encloses a ball valve with an arm movable through one quarter of a turn from an open position to a closed position, or an electrical switch housing with AC/DC push buttons or a 6–36 volt all–weather DC switch. In particular, these three options may be made available without changing the design. Said device is also useful for protecting the identity papers of the vehicle and/or other important papers such as invoices by means of a magnetised detachable water–proof document holder mounted on the inner wall of the compact safe rather than being in the glove compartment where it is vulnerable to thieves.

95) Family number: 29182006 (US2002003027A) © PatBase

Title: APPARATUS FOR FORMING A FABRIC AND COMPONENTS THEREOF FOR A COVERING FOR ARCHITECTURAL OPENINGS AND METHOD OF TREATING ENDS THEREOF

Priority:

CA19962174915	19960424	CA19962174917	19960424	US19950437960	19950510
US19950472992	19950607	US19960639905	19960424	KR19960012627	19960424
US20020269324	20021011	US20000741526	20001218	US19980031211	19980226
US19960639906	19960424	WO1996US05707	19960424	WO1996US05720	19960424
US20000525613	20000314	US19980007576	19980115		

Family:

Publication number	Publication date	Application number	Application date
AT187224 E	19991215	AT19960913113T	19960424
AT219815 E	20020715	AT19960913105T	19960424
AU199655717 A1	19961129	AU19960055717	19960424
AU199655724 A1	19961129	AU19960055724	19960424
AU694031 B2	19980709	AU19960055724	19960424
AU712924 B2	19991118	AU19960055717	19960424
BRPI9606384 A	19971230	BR1996PI06384	19960424
CA2174915 AA	19961111	CA19962174915	19960424
CA2174915 C	19990615	CA19962174915	19960424
CA2174917 AA	19961208	CA19962174917	19960424
CA2174917 C	19990921	CA19962174917	19960424
CN1134586 C	20040114	CN19961090709	19960424
CN1163649 A	19971029	CN19961090709	19960424
DE69605383 D1	20000105	DE19966005383	19960424
DE69605383 T2	20000420	DE19966005383T	19960424
DE69622003 D1	20020801	DE19966022003	19960424
DE69622003 T2	20021031	DE19966022003T	19960424
EP0771387 A1	19970507	EP19960913113	19960424
EP0771387 B1	19991201	EP19960913113	19960424
EP0775243 A1	19970528	EP19960913105	19960424
EP0775243 B1	20020626	EP19960913105	19960424
ES2140846 T3	20000301	ES19960913113T	19960424
JP10505394 T2	19980526	JP19960534093T	19960424
JP2911009 B2	19990623	JP19960534093T	19960424
JP3006801 B2	20000207	JP19960534097T	19960424
JP9509709 T2	19970930	JP19960534097T	19960424
KR100441219 B1	20041006	KR19960012626	19960424
KR100492265 B1	20050823	KR19960012627	19960424
KR19960040270 A	19961217	KR19960012626	19960424
KR19970000137 A	19970121	KR19960012627	19960424
MX9700302 A1	19980131	MX19970000302	19960424
MX9700332 A1	19980131	MX19970000332	19960424
TW310303 B	19970711	TW19960104881	19960424
TW363107 B	19990701	TW19970117549	19960424
US2002003027 AA	20020110	US20000741526	20001218
US2003084981 AA	20030508	US20020269324	20021011
US5626177 A	19970506	US19950472992	19950607
US5749404 A	19980512	US19950437960	19950510

US5819833 A	19981013	US19960639905	19960424	
US5876545 A	19990302	US19960639906	19960424	
US6076588 A	20000620	US19980007576	19980115	
US6170548 BA	20010109	US19980031211	19980226	
US6478905 BB	20021112	US20000741526	20001218	
US6491085 BA	20021210	US20000525613	20000314	
US6761782 BB	20040713	US20020269324	20021011	
WO9635854 A1	19961114	WO1996US05720	19960424	
WO9635855 A2	19961114	WO1996US05707	19960424	
WO9635855 A3	19970501	WO1996US05707	19960424	

Probable Assignee: HUNTER DOUGLAS INC

Assignee(s):(std)**:** HUNTER DOUGLAS ; HUNTER DOUGLAS INT ; HUNTER DOUGLAS INTERNATIONAL ; HUNTER DOUGLAS INT NV ; HUNTER DOUGLAS INT CO LTD ; HUNTER DOUGLAS INT C

Assignee(s): HUNTER DOUGLAS INT CO ; OBERG BRAD ; MATEER DAVID G ; HUNTER DOUGLAS INTERNATIONAL N V NL ; HUNTER DOUGLAS INTERNATIONAL NVAN ; HUNTER DOUGLAS INTERNATIONAL NV ; HUNTER DOUGLAS INTERNATIONAL N V CURACAO ; HUNTER DOUGLAS INTERNATIONAL N V ; SWISZCZ PAUL G ; RAMIREZ RICARDO ; HUNTER DOUGLAS INC ; ANTHONY JIM ; COLSON WENDELL B ; GREENOUGH DWIGHT ; HANTAA DAGURASU INTERN NV

Inventor(s):(std)**:** SWISZCZ PAUL G ; SWISZCZ PAUL ; SWISZCZ P G ; RAMIREZ RICARDO ; OBERG BRAD H ; OBERG BRAD ; MATEER DAVID G ; MATEER DAVID ; GREENOUGH DWIGHT L ; GREENOUGH DWIGHT ; GREENOUGH D L ; DELLIMAN LARRY J ; COLSON WENDELL B ; COLSON WENDELL ; COLSON WENDALL B ; COLSON W B ; ANTHONY JIM ; ANTHONY JAMES M ; ANTHONY JAMES ; ANDERSON RICHARD N

Inventor(s): ANSONII JEIMUZU EMU ; BRAD H OBERG ; DAVID G MATEER ; D L GREENOUGH ; WENDELL B COLSON ; WENDALL B COLSON ; W B COLSON ; DWIGHT L GREENOUGH ; KORUSON UENDERU BII ; JAMES M ANTHONY ; OBAAGU BURATSUDO EICHI ; MATEIIA DEIUITSUDO JII ; PAUL SWISZCZ ; PAUL G SWISZCZ ; P G SWISZCZ ; SUISUZUKUTSU HOORU JII ; RICARDO RAMIREZ

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; GOWLING LAFLEUR HENDERSON LLP

Designated states: AT AU BE BR CH CN DE DK ES FI FR GB GR IE IT JP LI LU MC MX NL PT SE

International class (IPC 8–9): A47H1/00 A47H23/00 B32B23/00 D06J1/00 D06J1/12 E06B9/24 E06B9/262 E06B9/266 E06B9/323 E06B9/36 E06B9/386 (Advanced/Invention); A47H1/00 A47H23/00 D06J1/00 E06B9/24 (Advanced/Non–invention); E06B9/26 E06B9/28 (Core/Invention); B32B23/00 E06B9/24 E06B9/36 (Core/Non–invention)

International class (IPC 1–7): A47H1/00 A47H23/00 B32B23/00 B32B3/04 B32B31/10 C09J1/00 D06J1/00 D06J1/12 E06B9/06 E06B9/262 E06B9/266 E06B9/30 E06B9/36 E06B9/386

CPC: E06B9/323 E06B9/262 E06B9/266 E06B9/36 E06B9/361 E06B9/362 E06B9/367 E06B9/386 E06B2009/2429 E06B2009/2627 Y10T156/1008 Y10T156/101 Y10T156/1011 Y10T156/1013 Y10T156/1015 Y10T156/1026 Y10T156/1034 Y10T156/1036 Y10T156/1066 Y10T156/1075 Y10T156/1077 Y10T156/133 Y10T156/172 Y10T156/1734 Y10S160/90

European class: E06B9/262 E06B9/266 E06B9/323 E06B9/36 E06B9/36B E06B9/36D E06B9/36F E06B9/386 P06B9/24E2

US class: 156/200 156/201 156/202 156/203 156/204 156/211 156/216 156/217 156/258 156/264 156/265 156/461 156/47 156/470 156/519 156/546 156/552 156/65 160/166.1 160/167 160/167R 160/167V 160/168.1 160/168.1R 160/168.1V 160/173V 160/176.1 160/176.1V 160/177V 160/178.1 160/178.1R 160/178.1V 160/84.04 160/900

Classification Explorer

Cited documents: WO8912415 A1, WO8704057 A1, USD397571 S1, USD325681 S1, USD231326 S1, US6478905 BB, US6170548 BA, US6148894 A, US6135188 A, US6116322 A, US6076588 A, US5876545 A, US5819833 A, US5797442 A, US5749404 A, US5743318 A, US5713407 A, US5638881 A, US5626177 A, US5603369 A, US5562140 A, US5560414 A, US5465779 A, US5358024 A, US5351741 A, US5297607 A, US5289863 A, US5271447 A, US5263528 A, US5249617 A, US5203394 A, US5141042 A, US5109913 A, US5101876 A, US5088542 A, US5029365 A, US5012850 A, US5012552

A, US5004033 A, US4936370 A, US4930562 A, US4911220 A, US4909298 A, US4869309 A, US4846243 A, US4834163 A, US4834162 A, US4802522 A, US4799527 A, US4792427 A, US4779661 A, US4773464 A, US4724883 A, US4662422 A, US4648436 A, US4646808 A, US4628981 A, US4557309 A, US4535828 A, US4519435 A, US4438798 A, US4434834 A, US4425956 A, US4425955 A, US4386644 A, US4381812 A, US4381029 A, US4366852 A, US4361179 A, US4352384 A, US4316493 A, US4293021 A, US4267875 A, US4214622 A, US4122884 A, US4108702 A, US3996988 A, US3946789 A, US3851699 A, US3844330 A, US3843483 A, US3693696 A, US3486549 A, US3434524 A, US3334682 A, US3329385 A, US3280891 A, US3240260 A, US3079005 A, US2876834 A, US2869636 A, US2854071 A, US2822043 A, US2759534 A, US2660751 A, US2621723 A, US2503441 A, US2326454 A, US2169873 A, US2164206 A, US2123010 A, US1820328 A, US176005 A, US1468433 A, JPS5019313, JP5019313 A2, JP5019313, JP50019313 A2, GB868961 A, GB632832 A, GB349290 A, GB2275074 A1, GB2247488 A1, GB2171441 A1, GB1470533 A, GB1159635 A, FR2499390 A1, FR2362264 A1, FR1069055 A, EP0589846 A1, EP0469695 A1, EP0446587 A1, EP0427477 A2, EP0288937 A2, EP0228937 A1, EP0159812 A2, EP0120425 A2, EP0111926 A2, DE90014294, DE90014294, DE9001429 U, DE837171 A, DE3312988 A1, DE3207850 A1, DE3048763 A1, DE2920323 A1, DE2637067 A1, DE2367067 A1, CA576369 A, CA387133 A, CA2090046 AA, AU1924388 A1,

Forward Citations: WO16093512, WO09136703, WO09070397, WO0206619, USD753412, USD697335, USD693599, USD662747, USD643238, USD589288, USD448594, USD447374, USD446416, USD446415, USD444661, USD444660, USD444659, USD444658, USD440450, USD440449, USD440103, USD440102, USD439785, USD439784, US9587430, US9482046, US9376859, US9222302, US9175511, US9140061, US9133660, US9126548, US8579006, US8550141, US8277591, US7997323, US7836936, US7775250, US7757743, US7730927, US7637302, US7556081, US7516771, US7513291, US7389806, US7165594, US6786269, US6761782, US6761203, US6755230, US6688373, US6675858, US6631750, US6598650, US6550519, US6543517, US6510885, US6497266, US6491085, US6478905, US6450234, US6446694, US6394169, US6360806, US6354353, US6334477, US6325132, US6311755, US6186213, US6170552, US6105656, US6095227, US6076588, US5996671, US5937927, US5887693, US5819833, US2016060955, US2015176328, US2015152682, US2014299281, US2014174676, US2014096918, US2012031570, US2011056630, US2009308544, US2009308543, US2009236056, US2009139667, US2009139664, US2009038761, US2009010953, US2008314533, US2008289774, US2008236766, US2008099164, US2007144682, US2007107176, US2007032150, US2007000621, US2007000620, US2006237149, US2006237147, US2006236512, US2006185799, US2006180280, US2006151130, US2006027340, US2005257898, US2005230060, US2005211392, US2004177932, US2003084981, KR200459596, KR101747837, KR101387049, KR101181721, KR101126064, KR100916742, KR100597228, JP2012202197, EP3045090, EP1797270, EP1797270, EP1679422, EP1146198, EP1146198, EP0908597, CN103211479, AU781430, AU2006200014, AT13215,

Abstract:
Source: US2002003027A A fabric for use in an architectural covering device includes a plurality of elongated vanes preferably of tubular configuration having a pair of flaps extending longitudinally along the entire length of the vane. A continuous face sheet material has elongated folds at spaced intervals that are secured along the flaps of the vanes so as to pivotally connect the vanes to the face sheet material at predetermined spaced intervals. The fabric is adapted to be supported with an operational system in an architectural opening so that if the vanes are suspended vertically they are slidably movable laterally of the window opening and pivotally movable about vertical longitudinal axes to extend and retract as well as open and close the covering. An apparatus and method for forming the fabric is also disclosed as well as systems for finishing the endmost vanes in the fabric.

0) DE19637307A1 – MULTIPURPOSE SEATING WITH INDEPENDENT SEAT SHEL...

96) Family number: 16923885 (DE19637307A1) © PatBase

Title: MULTIPURPOSE SEATING WITH INDEPENDENT SEAT SHELLS

Priority: DE19952014742U 19950914 DE19952014743U 19950914 DE19961037307 19960913

Family:

Publication number	Publication date	Application number	Application date
DE19637307 A1	19970410	DE19961037307	19960913
DE29514742 U1	19970123	DE19952014742U	19950914
DE29514743 U1	19970123	DE19952014743U	19950914

Probable Assignee: EICHENAUER GMBH AND CO KG

Assignee(s):(std)**:** EICHENAUER GMBH AND CO KG

Assignee(s): EICHENAUER GMBH AND CO KG 42553 VELBERT DE ; EICHENAUER GMBH AND CO 42553 VELBERT DE KG

Inventor(s):(std)**:** DEUTSCHMANN SIEGFRIED

Inventor(s): DEUTSCHMANN SIEGFRIED 42553 VELBERT DE

International class (IPC 8–9)**:** A47C1/121 A47C1/124 A47C11/00 A47C7/60 B61D33/00 (Advanced/Invention); A47C1/00 A47C11/00 A47C7/00 B61D33/00 (Core/Invention)

International class (IPC 1–7)**:** A47C1/12 A47C1/121 A47C1/124 A47C1/13 A47C7/16 B61D1/04

CPC: A47C1/124 A47C7/60 A47C11/005 A47C1/121 B61D33/0007

European class: A47C1/121 A47C1/124 A47C11/00 A47C11/00B A47C7/60 B61D33/00B

Classification Explorer

Cited documents: EP0188002 A2, DE632143 A, DE3536512 A1, DE184605 A,

Forward Citations: CN103859859,

Abstract:
Source: DE19637307A1 The independent seat shells which are made of perforated steel plates have holes (6) in the seat and backrest faces (3,4) punched through towards the reverse side (5). At least one seat can be swivelled and locked by a key in a position of non–use. The holes in the seat surface are formed by an array of slits. The slits extend across the seat direction to protrude and form a roughened surface on the reverse side.

0) DE19612647A1 – AUTOMATIC PROVISION OF RECEIPT EQUIPPED NIGHT P...

97) Family number: 17993886 (DE19612647A1) © PatBase

Title: Automatic provision of receipt equipped night postboxes

Priority: DE19961012647 19960330

Family:

Publication number	Publication date	Application number	Application date
DE19612647 A1	19971002	DE19961012647	19960330

Probable Assignee: SCHWEINITZ PETRA

Assignee(s):(std)**:** SCHWEINITZ PETRA ; ZANDER GERD

Assignee(s): ZANDER GERD 46045 OBERHAUSEN DE ; SCHWEINITZ PETRA 46045 OBERHAUSEN DE

Inventor(s):(std)**:** SCHWEINITZ PETRA ; ZANDER GERD

Inventor(s): ZANDER GERD 46045 OBERHAUSEN DE ; SCHWEINITZ PETRA 46045 OBERHAUSEN DE

International class (IPC 8–9): A47G29/12 G07F17/40 (Advanced/Invention); A47G29/00 G07F17/00 (Core/Invention)

International class (IPC 1–7): B65D91/00

CPC: A47G29/1207 G07F17/40

European class: A47G29/12P G07F17/40

Classification Explorer

Forward Citations: US7436536, JP2007519063, EP1687143, DE19950801,

Abstract:
Source: DE19612647A1 The postbox used in central Europe, customarily provides 'night postboxes' for inhabitants of any authority to 'post' an objection against some law or action becoming obsolete. If there are no objections after certain time, the law becomes obsolete. The object was to keep the peace of the German state. In addition it is proposed in this innovation to use modem copiers to provide replicas of the 'objection' document, valid in court, with data stamp of posting. It is possible to print out documents and receipts for use in court, with recording in memory of posting.

0) US6264242B – STICK HANDLE WITH WRIST STRAP

98) Family number: 18391117 (US6264242B)

© PatBase

Title: Stick handle with wrist strap

Priority: DE19961036852 19960911 DE19962023158U 19960911 DE19975005688 19970909 JP19980513236 19970909 WO1997EP04900 19970909

Family:

Publication number	Publication date	Application number	Application date
AT209945 E	20011215	AT19970944857T	19970909
CA2264888 AA	19990305	CA19972264888	19970909
DE19636852 C1	19980212	DE19961036852	19960911
DE29623158 U1	19971211	DE19962023158U	19960911
DE59705688 D1	20020117	DE19975005688	19970909
EP0925099 A1	19990630	EP19970944857	19970909
EP0925099 B1	20011205	EP19970944857	19970909
JP2001502931 T2	20010306	JP19980513236T	19970909
JP2007229492 A2	20070913	JP20070109067	20070418
JP3993897 B2	20071017	JP19980513236T	19970909
JP4612652 B2	20110112	JP20070109067	20070418
US6264242 BA	20010724	US19990230651	19990129
WO9810844 A1	19980319	WO1997EP04900	19970909

Probable Assignee: LEKISPORT AG

Assignee(s):(std)**:** LENHART KLAUS

Assignee(s): LENHART KLAUS 73230 KIRCHHEIM DE ; LENHART KLAUS 73275 OHMDEN DE ; KLAUS LENHART ; LEKISPORT AG

Inventor(s):(std)**:** LENHART KLAUS

Inventor(s): LENHART KLAUS 73275 OHMDEN DE

Agent(s): MACRAE AND CO

Designated states: AT BE CA CH DE DK ES FI FR GB GR IE IT JP KR LI LU MC NL PT SE US

International class (IPC 8–9): A45B9/02 A63C11/22 (Advanced/Invention); A45B1/04 (Advanced/Non–invention); A45B9/00 A63C11/00 (Core/Invention); A45B1/00 (Core/Non–invention)

International class (IPC 1–7): A45B9/02 A63C11/22

CPC: A45B9/02 A45B2009/025 A63C11/222

European class: A45B9/02 A63C11/22B K45B9/02R

US class: 280/821 280/822

Classification Explorer

Cited documents: WO9634665 A1, USB16139060, US6139060, US5549330 A, US5470108 A, US5443287 A, US5312134 A, US5110154 A, US4779896 A, US4593933 A, US3658356 A, US3297333 A, US3113786 A, JPS6454586 U, JP64054586 U1, JP64054586 u1, JP4070072 U1, EP0370900 A1, DE7808851 U, DE7804728 U, DE7804390 U, DE2808549 A1,

Forward Citations: WO09006746, WO07038890, WO07038890, WO07038890, US9526974, US8678020, US8579329, US8006352, US7891708, US7770931, US7690085, US7661713, US7621564, US7322612, US7226084, US7191495, US6988745, US6637773, US6631927, US6325418, US2015150344, US2011079256, US2010218347, US2010088802, US2009242539, US2008313852, US2008231037, US2008169635, US2008149154, US2008121260, US2008036191, US2007120353, US2006143867, US2006135330, US2006001255, US2005029797, US2004075267, JP2015051030,

JP2005013739, FR3044235, EP2248561, EP1970105, EP1940522, EP1940522, EP1935274, EP1491241, EP1491241, EP1036579, DE29904591, DE29820451, DE29812502, DE29801388, DE20219461, DE202009006460, DE20118232, CH698164,

Abstract:
Source: US6264242B A handle for ski sticks and the like provided with a wrist strap. The wrist strap is attached to the stick handle by a first connecting element fixed at the wrist strap and a second connecting element lodged at the ski's stick handle, which are interlocked. To insure that the connection between the stick handle and the wrist strap is disengaged automatically only in case of danger and no inopportune releasing occurs, a flexible releasing device is installed, which holds one of the connecting elements at the interlocked position and yields only when the wrist strap is pulled in the same direction, a direction with a force component running longitudinally in the stick from its tip toward the handle, so that the second connecting element held together by the releasing device can be disengaged from its interlocked position.

0) EP0858050A2 – PROCEDURE FOR THE CONTINUOUS MANUFACTURE OF MIC...

99) Family number: 15189188 (EP0858050A2) © PatBase

Title: Procedure for the continuous manufacture of microchip carrier cards and cards obtained via the seid procedure

Priority: AR19970000508 19970207 AR19970000508 19970207

Family:

Publication number	Publication date	Application number	Application date
BRPI9800191 A	20001024	BR1998PI00191	19980206
EP0858050 A2	19980812	EP19980101964	19980205
EP0858050 A3	20010328	EP19980101964	19980205

Probable Assignee: CEDINSA S A

Assignee(s):(std)**:** CEDIN S A ; CEDINSA S A ; KEYLIHNK GESTAO E INVESTIMENTO ; KEYLINK GESTAO E INVESTIMENTOS

Assignee(s): KEYLINK GESTAO E INVESTIMENTOS LDA ; CEDINSA SA ; CEDIN SA

Inventor(s):(std)**:** ARTURO PELUFFO RODOLFO ; BONFICO CARLOS LUIS ; LUIS BONFICO CARLOS ; MARTINEZ MARCELO ; MARTINEZ MARCELO ADRIAN ; PELUFFO RODOLFO ARTURO

Inventor(s): RODOLFO ARTURO PELUFFO ; MARCELO ADRIAN MARTINEZ ; CARLOS LUIS BONFICO

Designated states: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9): B32B37/20 G06K19/077 (Advanced/Invention)

International class (IPC 1–7): G06K19/07 G06K19/077

CPC: B32B37/203 B32B2305/342 B32B2425/00 G06K19/077 G06K19/07718

European class: B32B31/00F3A B32B37/20A G06K19/077 G06K19/077D L32B305/34A L32B425/00

Classification Explorer

Cited documents: WO9802848 A1, US4539472 A, US4457798 A, EP0733994 A2, EP0249266 A1,

Forward Citations: WO0196117, KR100742996, FR2809986, DE19921230, DE19921230,

Abstract:
Source: EP0858050A2 It comprises placing in parallel at least three laminar bodies of a non–conducting material joined together one above the other, defining a single continuous composite band; die–stamping at least the intermediate band with at least one perforation, without die–stamping the other sheets, determining a housing for a microchip; the continuous composite band is then submitted to cutting into individual cards, which posses at least one cavity or housing.

0) US2002111068A – PRINTED CIRCUIT BOARD FOR DIFFERENTIAL SIGNAL E...

100) Family number: 30105799 (US2002111068A) © PatBase

Title: PRINTED CIRCUIT BOARD FOR DIFFERENTIAL SIGNAL ELECTRICAL CONNECTORS

Priority: KR19997007149 19990806 US19970797537 19970207 US19980199126 19981124 US19990389854 19990826 US20020118302 20020408 WO1998US01168 19980115 US20000599345 20000622 US20000599191 20000622

Family:

Publication number	Publication date	Application number	Application date
CA2280173 AA	19990805	CA19982280173	19980115
CA2280173 C	20080916	CA19982280173	19980115
DE69814123 D1	20030605	DE19986014123	19980115
DE69814123 T2	20040408	DE19986014123T	19980115
EP1021854 A1	20000726	EP19980902829	19980115
EP1021854 B1	20030502	EP19980902829	19980115
IL131286 A0	20010128	IL19980131286	19980115
JP2001510627 T2	20010731	JP19980534683T	19980115
KR100517158 B1	20050926	KR19997007149	19980115
US2002111068 AA	20020815	US20020118302	20020408
US5993259 A	19991130	US19970797537	19970207
US6238245 BA	20010529	US19990389854	19990826
US6379188 BA	20020430	US19980199126	19981124
US6503103 BA	20030107	US20000599345	20000622
US6554647 BA	20030429	US20000599191	20000622
US6607402 BB	20030819	US20020118302	20020408
WO9835409 A1	19980813	WO1998US01168	19980115

Probable Assignee: AMPHENOL CORP

Assignee(s):(std)**:** TERADYNE INC

Assignee(s): TERADYNE INC BOSTON ; ADVANCED ENGINEERING SYSTEMS OPERATIONS AND PRODUC ; ADVANCED ENGINEERING SYSTEMS OPERATIONS AND PRODUCTS INC D B A AESOP INC ; ALLEN STEVEN J ; AMPHENOL CORP ; COHEN THOMAS ; COHEN THOMAS S ; PATEL GAUTAM L ; STOKOE PHILIP T

Inventor(s):(std)**:** ALLEN J ; ALLEN STEVEN J ; COHEN S ; COHEN THOMAS ; COHEN THOMAS S ; GAILUS MARK W ; PATEL GAUTAM L ; STOKOE PHILIP T ; STOKOE T

Agent(s): SHAPIRO COHEN

Designated states: AT BE CA CH DE DK ES FI FR GB GR IE IL IT JP KR LU MC MX NL PT SE

International class (IPC 8–9)**:** H01R12/16 H01R12/20 H01R12/50 H01R13/514 H01R13/648 (Advanced/Invention); H01R12/16 H01R43/16 (Advanced/Non–invention); H01R13/514 (Core/Invention)

International class (IPC 1–7)**:** H01R12/16 H01R13/648 H01R23/68

CPC: H01R12/716 H01R12/737 H01R13/514 H01R23/688 H01R43/16 H01R12/724 H01R13/6587

European class: H01R13/514 H01R23/68D2 T01R23/70K T01R43/16

US class: 361/777 439/101 439/108 439/607 439/607.07 439/607.09 439/607.1 439/607.11 439/607.110P 439/608 439/609 439/95

Classification Explorer

Cited documents: WO9909616 A1, WO9638889 A1, US6113418 A, US6083047 A, US6050842 A, US5938479 A, US5913702 A, US5904594 A, US5860816 A, US5851121 A, US5842887 A, US5795191 A, US5775923 A, US5672064 A, US5664968 A, US5664967 A, US5645436 A, US5605476 A, US5580283 A, US5522727 A, US5496183 A, US5433618

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Forward Citations: WO15112773, WO15031019, WO11063105, WO11063105, WO11060241, WO10090743, WO10090743, WO09152081, WO08088462, WO08002376, WO07142790, WO07142790, WO07005598, WO07005598, WO07005597, WO07005597, WO06131215, WO06102327, WO06050202, WO06020378, WO06020351, WO05081596, WO05081596, WO05081595, WO05081595, WO05011061, WO04051809, WO04051809, WO04008584, WO03083998, WO03067716, WO02061889, WO02061887, WO02060011, WO02060011, WO0157962, WO0145107, USRE43330, USRE41283, USD790471, USD772168, USD766832, USD751507, USD750030, USD750025, USD748063, USD746236, USD745852, USD733662, USD727852, USD727268, USD720698, USD718253, USD696199, USD664096, USD660245, USD653621, USD651981, USD647058, USD641709, USD640637, USD619099, USD618181, USD618180, USD610548, USD608293, USD606497, USD606496, US9685736, US9660384, US9583853, US9564696, US9559468, US9543703, US9520689, US9515421, US9509101, US9509100, US9484674, US9461410, US9450344, US9419360, US9362646, US9300103, US9277649, US9257778, US9225085, US9219335, US9190745, US9153887, US9136634, US9106020, US9093800, US9077094, US9065215, US9054432, US9048583, US9039461, US9028281, US9022806, US9017114, US9004942, US8998642, US8992237, US8961227, US8944831, US8926377, US8905651, US8900014, US8864521, US8851926, US8814595, US8801464, US8784116, US8771023, US8771016, US8764464, US8734185, US8727814, US8727791, US8715003, US8701284, US8678860, US8657627, US8651881, US8636543, US8616919, US8608510, US8591257, US8579661, US8579660, US8556657, US8550861, US8547129, US8545240, US8540525, US8491313, US8480567, US8469745, US8460032, US8444436, US8382524, US8382521, US8366485, US8337246, US8323049, US8272877, US8267721, US8231415, US8226438, US8221162, US8215968, US8202118, US8189599, US8187033, US8187017, US8182289, US8172614, US8142236, US8137119, US8123563, US8109770, US8096832, US8083553, US8079847, US8062051, US8062046, US8057267, US7997933, US7988456, US7976321, US7967647, US7955130, US7927144, US7914305, US7914304, US7909646, US7905731, US7887371, US7883367, US7883366, US7878853, US7874873, US7867031, US7862359, US7862344, US7850489, US7841900, US7837505, US7837504, US7827442, US7819708, US7811130, US7798852, US7794278, US7794240, US7789716, US7789708, US7789705, US7789676, US7775822, US7762857, US7762843, US7758385, US7753742, US7753731, US7749009, US7744415, US7744414, US7731537, US7726982, US7722401, US7713088, US7708569, US7690937, US7682207, US7682193, US7682192, US7670196, US7651374, US7651337, US7649146, US7645944, US7641500, US7633766, US7632149, US7628625, US7597593, US7591655, US7588462, US7549897, US7544096, US7541135, US7540781, US7534142, US7524209, US7517250, US7513798, US7503804, US7500886, US7500871, US7497736, US7497735, US7494379, US7476108, US7473138, US7467955, US7462924, US7458839, US7452249, US7448909, US7442054, US7438556, US7431616, US7429176, US7425145, US7422484, US7422483, US7422444, US7413484, US7413451, US7410393, US7407413, US7402064, US7396259, US7393249, US7390218, US7390200, US7387535, US7384289, US7384275, US7361065, US7359214, US7351115, US7344391, US7335062, US7331830, US7331802, US7331800, US7318757, US7309257, US7309239, US7303427, US7285018, US7278886, US7270574, US7270573, US7264509, US7261580, US7229318, US7226296, US7214104, US7195497, US7182643, US7182642, US7182616, US7175446, US7160117, US7137832, US7137832, US7131870, US7131870, US7121889, US7121889, US7118391, US7114964, US7104808, US7101191, US7094102, US7090512, US7083432, US7083432, US7077710, US7074086, US7056128, US7048567, US7040924, US7040901, US7037138, US7025617, US7021945, US7019984, US7018246, US7008250, US6994569, US6988902, US6986682, US6981883, US6979202, US6976886, US6974336, US6932649, US6923664, US6923655, US6918789, US6918775, US6910897, US6905367, US6899550, US6890215, US6884117, US6880243, US6866518, US6851981, US6851980, US6848932, US6848917, US6843686, US6843657, US6836810, US6827611, US6811440, US6808419, US6808399, US6796822, US6790089, US6786771, US6780058, US6773305, US6769935, US6767252, US6764349, US6752665, US6746278, US6743057, US6743050, US6743049, US6739918, US6712646, US6699073, US6699072, US6695646, US6692272, US6685510, US6682369, US6663427, US6652319, US6652318, US6648688, US6638110, US6638079, US6623310, US6608762, US6602095,

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Abstract:
Source: US2002111068A An electrical connector for transferring a plurality of differential signals between electrical components. The connector is made of modules that have a plurality of pairs of signal conductors with a first signal path and a second signal path. Each signal path has a pair of contact portions, and an interim section extending between the contact portions. For each pair of signal conductors, a first distance between the interim sections is less than a second distance between the pair of signal conductors and any other pair of signal conductors of the plurality. Embodiments are shown that increase routability.

0) US2001005654A – HIGH SPEED, HIGH DENSITY ELECTRICAL CONNECTOR

101) Family number: 28114618 (US2001005654A) © PatBase

Title: HIGH SPEED, HIGH DENSITY ELECTRICAL CONNECTOR

Priority: JP19980534510 19980115 JP19980534510T 19980115 JP20070190357 19980115
KR19997007150 19990806 US19970797540 19970207 US20010755937 20010105
US19990389853 19990826 WO1998US00725 19980115

Family:

Publication number	Publication date	Application number	Application date
CA2280174 AA	19990805	CA19982280174	19980115
DE69805426 D1	20020620	DE19986005426	19980115
DE69805426 T2	20030109	DE19986005426T	19980115
EP1021855 A1	20000726	EP19980903496	19980115
EP1021855 B1	20020515	EP19980903496	19980115
IL131287 A0	20010128	IL19980131287	19980115
JP2001511300 T2	20010807	JP19980534510T	19980115
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JP2010177216 A2	20100812	JP20100115055	20100519
JP4063335 B2	20080319	JP19980534510T	19980115
JP4589362 B2	20101201	JP20070190357	20070723
JP4881461 B2	20120222	JP20100115055	20100519
KR100530857 B1	20051123	KR19997007150	19980115
US2001005654 AA	20010628	US20010755937	20010105
US5980321 A	19991109	US19970797540	19970207
US6299483 BA	20011009	US19990389853	19990826
WO9835408 A1	19980813	WO1998US00725	19980115

Probable Assignee: AMPHENOL CORP

Assignee(s):(std)**:** TERADYNE INC

Assignee(s): TERADYNE INC BOSTON ; WYETH HOLDINGS CORP ; AMPHENOL CORP ; COHEN THOMAS S ; MCNAMARA DAVID M ; STOKOE PHILIP T

Inventor(s):(std)**:** COHEN S ; COHEN THOMAS S ; MCNAMARA DAVID M ; MCNAMARA M ; STOKOE PHILIP T ; STOKOE T

Agent(s): SHAPIRO COHEN; MASUI CHUJI; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO; ONO SHINJIRO

Designated states: AT BE CA CH DE DK ES FI FR GB GR IE IL IT JP KR LU MC MX NL PT SE

International class (IPC 8–9)**:** H01R12/16 H01R12/50 H01R13/51 H01R13/514 H01R13/64 H01R13/648 H01R13/658 H01R24/00 H01R43/20 H01R43/24 (Advanced/Invention);
H01R107/00 H01R12/16 (Advanced/Non–invention);
H01R13/51 H01R13/64 (Core/Invention)

International class (IPC 1–7)**:** H01R107/00 H01R12/16 H01R12/22 H01R13/648 H01R23/68 H01R24/08 H01R43/20 H01R43/24

CPC: H01R12/716 H01R12/737 H01R23/688 H01R12/724 H01R13/6587

European class: H01R23/68D2 T01R23/70K

US class: 439/108 439/607.05 439/607.050P 439/607.07 439/607.09 439/608 439/609 439/701 439/701S

Classification Explorer

Cited documents: WO9638889 A1, US5672064 A, US5664968 A, US5607326 A, US5496183 A, US5433618 A, US5429521 A, US5388995 A, US5350319 A, US5342211 A, US5286212 A, US5174770 A, US5104341 A, US5066236 A, US4976628 A, US4975084 A, US4846727 A, US4768961 A, US4571014 A, JP8255658 A2, JP7169532 A2, JP6325829 A2, JP6029060 A2, JP3233879 A2, JP2148585 A2, JP08255658, JP07169532, JP06325829,

JP0629060, JP03233879, JP02148585, EP0752739 A1, EP0622871 A2, EP0337634 A1,

Forward Citations: WO07005598, WO04062037, WO04062037, WO04010749, WO04010749, WO03047039, WO03047039, WO03012928, USRE41283, USD790471, USD772168, USD766832, USD751507, USD750030, USD750025, USD748063, USD746236, USD745852, USD733662, USD727852, USD727268, USD720698, USD718253, USD696199, USD664096, USD660245, USD653621, USD651981, USD647058, USD641709, USD640637, USD619099, USD618181, USD618180, USD610548, USD608293, USD606497, USD606496, US9660384, US9583853, US9570849, US9545040, US9543703, US9520689, US9509101, US9484674, US9461410, US9450344, US9300074, US9277649, US9257778, US9246293, US9231393, US9225085, US9219335, US9166344, US9136634, US9048583, US9028281, US9004942, US8992237, US8961229, US8944831, US8926377, US8920195, US8905651, US8864521, US8801464, US8771023, US8771016, US8764464, US8734185, US8715003, US8678860, US8657627, US8651881, US8636543, US8616919, US8608510, US8591257, US8545240, US8540525, US8534301, US8491313, US8382524, US8382521, US8371875, US8337243, US8323049, US8298009, US8267721, US8215968, US8187033, US8187017, US8142236, US8137119, US8123563, US8096832, US8062051, US8062046, US8057267, US8011950, US7997933, US7967647, US7967638, US7955130, US7927144, US7914304, US7909646, US7905731, US7887371, US7874873, US7862359, US7850489, US7841900, US7837505, US7837504, US7819708, US7789716, US7775822, US7771233, US7762857, US7762846, US7762843, US7753742, US7749009, US7744414, US7726982, US7713088, US7708569, US7690937, US7670196, US7651374, US7651337, US7641500, US7591655, US7588462, US7549897, US7541135, US7540781, US7524209, US7517250, US7500871, US7497736, US7497735, US7494379, US7476108, US7467955, US7462924, US7458839, US7452249, US7442054, US7431616, US7429176, US7425145, US7422483, US7422444, US7413451, US7407413, US7402064, US7396259, US7393249, US7390218, US7390200, US7384289, US7384275, US7371117, US7344391, US7331830, US7331800, US7311556, US7309239, US7303427, US7285018, US7270574, US7270573, US7229318, US7226296, US7214104, US7195497, US7182643, US7182616, US7160117, US7121889, US7121889, US7118391, US7114964, US7101191, US7083432, US7083432, US7070424, US7056128, US7048567, US7037138, US7025617, US7019984, US7018246, US7010629, US7008250, US6994569, US6988902, US6986682, US6981883, US6979202, US6976886, US6910897, US6905367, US6890215, US6884117, US6875031, US6843657, US6808421, US6808419, US6790089, US6786771, US6776659, US6769935, US6752665, US6746278, US6743050, US6699073, US6699072, US6692272, US6685510, US6682369, US6663429, US6663427, US6648689, US6645010, US6645009, US6638110, US6638079, US6634908, US6623302, US6612869, US6608762, US6602095, US6517360, US6494743, US6491545, US6478624, US6435914, US6435913, US6409543, US6371813, US6354885, US6347962, US6287156, US6267604, US6231391, US6146202, US2015126061, US2011195607, US2011117779, US2011034072, US2011021083, US2011003509, US2010227503, US2010093209, US2010035470, US2010009571, US2009305533, US2009298308, US2009197483, US2009035955, US2008203547, US2008194146, US2008108233, US2007293067, US2007207675, US2007207674, US2007207641, US2007207632, US2007205774, US2007202746, US2007149053, US2007117472, US2007082535, US2007059961, US2007054554, US2007004287, US2006234532, US2006189212, US2006166528, US2006141818, US2006073724, US2006068640, US2006063404, US2006057897, US2006035531, US2006035530, US2006026483, US2006019517, US2005287869, US2005287849, US2005266728, US2005176307, US2005164555, US2005148239, US2005048838, US2005032429, US2005026506, US2005020109, US2004180562, US2004121652, US2004110420, US2004110411, US2004097138, US2004097112, US2004077228, US2004072470, US2004043672, US2003224632, US2003220019, US2003171010, US2002094705, KR101011741, JP5307473, JP2010212147, JP2010044977, EP2306598, EP2178175, EP2151896, EP1611641, EP1531527, EP1017134, CN103515796, CN103296547, CN103296547,

Abstract:
Source: US2001005654A A high speed, high density electrical connector for use with printed circuit boards. The connector is in two pieces with one piece having pins and shield plates and the other having socket type signal contacts and shield plates. The shields have a grounding arrangement which is adapted to control the electromagnetic fields, for various system architectures, simultaneous switching configurations and signal speeds, allowing all of the socket type signal contacts to be used for signal transmission. Additionally, at least one piece of the connector is manufactured from wafers, with each ground plane and signal column injection molded into components which, when combined, form a wafer. This construction allows very close spacing between adjacent columns of signal contacts as well as tightly controlled spacing between the signal contacts and the shields. It also allows for easy and flexible manufacture, such as a connector that has wafers intermixed in a configuration to accommodate single ended, point to point and differential applications.

0) US2002007510A – SMART BATHROOM FIXTURES AND SYSTEMS

102) Family number: 30560556 (US2002007510A) © PatBase

Title: Smart bathroom fixtures and systems

Priority:

CA19982228403	19980202	CA19982233047	19980315	CA19982233047	19980325
CA19982235030	19980414	CA19982249976	19981015	CA19982247649	19981013
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US19980172599	19981015	WO1999CA00248	19990325	WO1999CA00249	19990325

Family:

Publication number	Publication date	Application number	Application date
AT241245 E	20030615	AT19990910052T	19990325
AT242573 E	20030615	AT19990908727T	19990325
AU199928239 A1	19991018	AU19990028239	19990325
AU199929174 A1	19991018	AU19990029174	19990325
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CA2237939 AA	19980828	CA19982237939	19980629
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EP1064783 B1	20030604	EP19990908727	19990325	
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EP1066717 B1	20030521	EP19990910052	19990325	
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GB2370958 A1	20020710	GB20020003423	19990202	
GB2370958 B2	20021009	GB20020003423	19990202	
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US2003034874 AA	20030220	US20010944442	20010904	
US2003043268 AA	20030306	US20010944430	20010904	
US6307526 BA	20011023	US19980172599	19981015	
US6446862 BA	20020910	US19990480929	19991231	
US6614408 BA	20030902	US19990275775	19990325	

WO9949655 A1	19990930	WO1999CA00248	19990325	
WO9949656 A1	19990930	WO1999CA00249	19990325	

Probable Assignee: MANN WILLIAM S G

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Assignee(s): W STEPHEN G MANN ; MANN W ; WILLIAM STEPHEN GEORGE MANN

Inventor(s):(std)**:** MANN STEVE ; MANN STEVE G ; MANN W STEPHEN G ; MANN W STEVE G ; MANN WILLIAM STEPHEN GEORGE ; W STEPHEN G MANN

Inventor(s): MANN W ; WILLIAM STEPHEN GEORGE MANN

Agent(s): SMART AND BIGGAR; NA

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW

International class (IPC 8–9): A45C1/06 A45C13/18 A47K3/28 A61B5/00 A61F2/14 A61H33/00 A63F13/80 A63F9/00 A63F9/24 A63H30/04 B62D1/00 B64F1/36 E03C1/05 E03D3/00 E03D5/10 E03D9/00 E04H1/12 E05B47/00 E05B65/00 G02B23/12 G02B27/00 G02B27/01 G02B27/18 G02B27/20 G02C1/00 G02C11/00 G02C11/04 G02C11/06 G02C7/02 G02C7/04 G02C7/10 G02C9/00 G02F1/01 G03B1/00 G03B13/02 G03B13/04 G03B13/06 G03B13/16 G03B15/02 G03B15/05 G03B15/08 G03B17/18 G03B17/48 G03B17/56 G03B19/00 G03B29/00 G03B33/08 G03B43/00 G03B7/00 G04G21/04 G04G9/00 G04G99/00 G05B11/16 G05B19/00 G05B23/00 G05B23/02 G05D1/00 G05D7/06 G06F1/16 G06F17/00 G06F19/00 G06F3/00 G06F3/01 G06F3/02 G06F7/00 G06F7/04 G06K19/00 G06K9/00 G06K9/20 G06K9/36 G06T1/00 G06T5/50 G06T7/00 G07C9/00 G07F7/02 G07F7/12 G07G1/00 G07G1/12 G08B13/00 G08B13/196 G08B15/00 G08B19/00 G08B21/00 G08B21/02 G08B21/08 G08B23/00 G08B25/00 G08B29/00 G08C19/00 G09G3/00 G09G3/32 G09G5/00 G21F9/00 H04B1/00 H04B3/00 H04L12/16 H04L9/14 H04L9/28 H04L9/32 H04N5/00 H04N5/222 H04N5/225 H04N5/232 H04N5/243 H04N5/247 H04N5/30 H04N5/335 H04N5/77 H04N7/00 H04N7/14 H04N7/15 H04N7/18 H04N9/12 H04Q1/00 H04Q9/00 H04R1/40 H04R25/00 (Advanced/Invention); A63H30/04 G02B27/00 G06T1/00 H04N5/92 H04N7/15 (Advanced/Non–invention); A45C1/00 A45C13/00 A47K3/28 A61B5/00 A61F2/14 A63F9/00 A63H30/00 B62D1/00 B64F1/00 E03D3/00 E03D5/00 E03D9/00 E04H1/12 E05B47/00 E05B65/00 G02B27/00 G02B27/01 G02B27/18 G02B27/20 G02C1/00 G02C11/00 G02C7/00 G02C7/02 G02C7/04 G02C9/00 G02F1/01 G03B1/00 G03B13/02 G03B13/04 G03B13/06 G03B13/16 G03B15/02 G03B15/05 G03B15/08 G03B17/48 G03B17/56 G03B19/00 G03B29/00 G03B33/00 G04G1/00 G04G9/00 G05B11/01 G05B19/00 G05B23/00 G05B23/02 G05D1/00 G05D7/06 G06F1/16 G06F19/00 G06F3/00 G06F3/01 G06F3/02 G06F7/00 G06F7/02 G06K19/00 G06K9/00 G06K9/20 G06K9/36 G06T1/00 G06T5/50 G06T7/00 G07C9/00 G07F7/00 G07G1/00 G07G1/12 G08B13/00 G08B19/00 G08B21/00 G08B23/00 G08B25/00 G08B29/00 G08C19/00 G09G3/00 G09G3/32 G09G5/00 G21F9/00 H04B1/00 H04B3/00 H04L9/14 H04L9/28 H04L9/32 H04N5/00 H04N5/222 H04N5/225 H04N5/232 H04N5/243 H04N5/247 H04N5/30 H04N5/77 H04N7/00 H04N7/15 H04N7/18 H04N9/12 H04Q1/00 H04Q9/00 H04R1/40 H04R25/00 (Core/Invention); A63H30/00 (Core/Non–invention)

International class (IPC 1–7): A45C1/06 A45C13/18 A47K3/28 A61B5/00 A61F2/14 A61H33/00 A63F9/00 A63F9/24 B62D1/00 B64F1/36 E03C1/05 E03D11/00 E03D3/00 E03D5/10 E03D9/00 E05B47/00 E05B65/00 G02B23/12 G02B27/00 G02B27/01 G02B27/18 G02B27/20 G02C1/00 G02C11/00 G02C11/04 G02C11/06 G02C7/02 G02C7/04 G02C7/10 G02C9/00 G02F1/01 G03B1/00 G03B13/02 G03B13/04 G03B13/06 G03B13/16 G03B15/02 G03B15/05 G03B15/08 G03B17/48 G03B17/56 G03B19/00 G03B29/00 G03B33/08 G05B11/16 G05B19/00 G05B23/00 G05B23/02 G05D7/06 G06F1/16 G06F15/00 G06F17/00 G06F17/40 G06F17/60 G06F3/00 G06F3/02 G06F3/14 G06F7/00 G06F7/04 G06K19/00 G06K5/00 G06K9/00 G06K9/20 G06K9/36 G06T1/00 G06T5/50 G06T7/00 G07G1/00 G07G1/12 G08B13/00 G08B19/00 G08B21/00 G08B21/02 G08B21/08 G08B23/00 G08B25/00 G08B29/00 G08C19/00 G09G3/00 G09G3/32 G09G5/00 H04B1/00 H04B3/00 H04L12/16 H04L9/14 H04L9/28 H04L9/32 H04N5/00 H04N5/222 H04N5/225 H04N5/232 H04N5/243 H04N5/247 H04N5/30 H04N5/77 H04N7/00 H04N7/15 H04N7/18 H04N9/12 H04Q1/00 H04Q9/00 H04R1/40 H04R25/00

CPC: G06F1/165 G06F1/1626 G06F1/163 G06F1/1632 G06F1/1686 G06F2200/1632 H04N5/772 H04N5/9206 H04N7/141 H04N7/15 G06F3/011 G08B13/19613 G08B13/19643 G08B13/19669 G08B13/19686 G08B13/19619 G08B13/19621 G08B13/1966 G08B15/001 H04N7/183 G07C9/00087 G02B5/30 G02B27/0172 G02B2027/0138 H04N5/2251 H04N7/185 G06Q20/343 G07F7/02 G07G1/0081 G07G1/12

G02B2027/0134 G06F3/0386 G06Q10/101 G06Q30/0641 H04N7/18 E03C1/057 E03D5/105 E03C1/05 G02B27/0101 G02B2027/0118 G02B2027/0178 H04N5/332 A47K3/286 E04H1/1277 G21F9/001 G06F19/322 G06F19/3406 G05D1/0016 G05D1/0038 G05D2201/0214 G07F7/08 G07F7/12 H04N5/2355 G03B15/02 G03B15/05 G03B15/08 G03B29/00 G03B33/08 G08C19/00 H04N5/232 G06T5/50 G06F1/16 H04N5/222 H04N9/12 G02C11/00 G02C11/04 G03B13/06 G02C7/02 G02C9/00 G03B13/04 G09G3/00 G09G3/32 G03B13/02 H04N5/77 G02B27/18 G02B27/20 G03B17/48 G03B17/56 H04N5/243 G03B19/00 A45C1/06 A45C13/18 E05B47/00 E05B65/00 H04N7/00 G02C7/04 G02B27/00 G02F1/01 G02C7/10 G02C11/06 H04R1/40 H04N5/247 E03D5/10 G05B11/16 G05D7/06 G09G2380/02 G02B2027/014 G08B21/245 A47K2210/00 A63H30/04 B62D1/00 E03D9/002 G04G21/04 G04G9/0064 G04R20/02 H04N7/142 H04N7/147 H04R25/407 G02B27/017 H04N5/23293 G06T2207/10144 G06T2207/20221 H04N5/225

European class: A47K3/28C3 A63H30/04 B62D1/00 B64F1/36C E03C1/05 E03C1/05D2 E03D5/10B E03D9/00D E04H1/12F G02B27/01 G02B27/01A G02B27/01C G02B27/01C1 G04G21/04 G04G9/00F G05D1/00C G05D1/00C1 G05D1/00C5 G06F1/16P3 G06F1/16P5 G06F1/16P6 G06F1/16P9D5S G06F1/16P9P2 G06F19/00A G06F19/32C G06F3/00B8 G06F3/01B G06F3/038L G06Q10/101 G06Q20/343 G06Q30/0641 G07C9/00B6D4 G07F7/02 G07F7/08 G07F7/12 G07G1/00C2P G07G1/12 G08B13/196A5 G08B13/196C1 G08B13/196C2 G08B13/196L1D G08B13/196N3 G08B13/196S2 G08B13/196U4 G08B15/00B G08B15/00C G08B21/24H G21F9/00B H04N5/225C H04N5/232V H04N5/235N H04N5/33D H04N5/77B H04N7/14A H04N7/14A2 H04N7/14A3 H04N7/15 H04N7/18 H04N7/18D H04N7/18D2 K47K210/00 K63H30/04 S02B27/01A10 S02B27/01A4 S02B27/01A9A S02B27/01C3 S02B5/30 S05D201/0214 S06F19/34A S06F200/1632 T04N5/92N6

US class: 235/380 235/382 340/3.3 340/3.300P 340/33 340/5.3 340/5.300P 340/5.53 340/5.530S 340/5.81 340/5.810S 340/53 345/7 345/8 345/8P 345/8S 345/9 348/115 348/143 348/143P 348/207 348/207.1 348/211 348/E7.087 348/E70.87S 396/374 396/374P 396/661 396/661P 4/300 4/300P 702/187 702/187P

Locarno class: 00/43

Classification Explorer

Cited documents: WO9734411 A1, WO9636271 A1, WO9614641 A1, WO9426061 A1, US6752720 BA, US6731326 BA, US6704044 BA, US6563532 BA, US6535793 BB, US6408330 BA, US6307526 BA, US6182894 BA, US6182893 BA, US6152591 A, US6098879 A, US6057966 A, US6046712 A, US6045229 A, US6043799 A, US6036093 A, US6023723 A, US6005536 A, US5990938 A, US5886739 A, US5856844 A, US5828793 A, US5815741 A, US5777715 A, US5708449 A, US5692227 A, US5666157 A, US5664244 A, US5640221 A, US5640211 A, US5610678 A, US5596319 A, US5583571 A, US5570156 A, US5550585 A, US5546099 A, US5486701 A, US5422653 A, US5331333 A, US5323264 A, US5189512 A, US5095326 A, US4924521 A, US4920371 A, US4806011 A, US4786966 A, US4754295 A, US4649434 A, US4636866 A, US4516157 A, US4368966 A, US4220400 A, US4081209 A, US4035792 A, US3833300 A, US3697154 A, US2002140849 AA, JPH08179223, JP8179223 A2, JP7199278 A2, JP411066437, JP41106643 A2, GB1558839 A, EP0827337 A1, EP0665686 A2, DE9217643 U, DE9217643 U, DE9217643 A1, DE4436528 A1, DE19547166 A1,

Forward Citations: WO17083265, WO17032922, WO16196200, WO16118309, WO16107921, WO15160345, WO15057523, WO15047593, WO14178212, WO14170292, WO14088761, WO13052274, WO13052259, WO12164155, WO12126811, WO12027426, WO10138307, WO10138307, WO10042078, WO10042078, WO09094643, WO09083427, WO09082810, WO09001344, WO09001344, WO08153992, WO08101897, WO08082947, WO07007278, WO07007278, WO06084978, WO05071500, WO05071500, WO05018219, WO05018219, WO03054778, WO0231945, WO0231945, WO0215560, WO0215560, WO02097717, WO02097717, USRE46360, USRE45416, USRE45398, USRE43601, USRE43157, USD770143, USD768024, USD641351, USD582631, USD547346, US9699281, US9697746, US9697721, US9696564, US9691299, US9690121, US9685689, US9685099, US9684172, US9684171, US9677901, US9662054, US9658473, US9658454, US9654674, US9654563, US9652892, US9651787, US9651783, US9646565, US9646444, US9637051, US9636016, US9632514, US9629774, US9628552, US9619201, US9615235, US9609932, US9609902, US9607189, US9586318, US9585431, US9581883, US9578307, US9576460, US9572522, US9569001, US9568998, US9568173, US9560419, US9560314, US9551871, US9547184, US9542858, US9526292, US9526287, US9523865, US9521405, US9519894, US9501176, US9500883, US9500865, US9494807, US9492118, US9491365, US9488853, US9488520, US9485471, US9485459, US9483959, US9477317, US9468988, US9454752, US9451068, US9449340, US9442307, US9439563, US9429990, US9413939, US9411173, US9411172, US9405135, US9404278, US9398868, US9394675, US9383914, US9380976, US9366570, US9355110, US9350776, US9341866, US9336686, US9336634, US9332935, US9330575,

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Abstract:
Source: US2002007510A Image sensors, processors, and control systems facilitate automatic sensor operated bathroom fixtures, systems for controlling bathroom fixtures, and methods of bathroom fixture design, control, and management, as well as the control and management of hygiene and water resources. The networked plumbing systems also help facility managers and law enforcement personnel monitor the operation of various bathrooms in a facility or at remote facilities. Image sensors are used for controlling several showers, faucets, urinals, or water closets in large bathroom complexes. Image based intelligent bathroom fixtures and systems help enhance the privacy of users by ensuring that law abiding users need not be disturbed by police foot patrols into the restroom areas, or by security guards entering simply to make inspections. An aquionics bathroom control system of the invention maintains the cleanliness, safety, security, and privacy of the occupants in a smart bathroom environment. Additionally, in some embodiments, a bathroom facility of the invention may be used for mass decontamination during times of emergency for processing victims of a nuclear, biological, or chemical incident. Once ubiquitously installed for routine control of fixtures, the apparatus facilitates a secondary usage such as monitoring by triage staff, medical personnel, decontamination officers, or law enforcement officers during times of terrorist consequence management.

103) Family number: 11222457 (WO9839915A1) © PatBase

Title: HIGH DEFINITION/VERY HIGH DEFINITION SCREEN TELEVISION RECEIVER SET WITH MEMORY AND MIKROTELEC TELEVISION ENVIRONMENT SYSTEM

Priority: FR19970002484 19970303 WO1998FR00407 19980302

Family:

Publication number	Publication date	Application number	Application date
AU199868373 A1	19980922	AU19980068373	19980302
EP1042911 A1	20001011	EP19980913809	19980302
FR2760306 A1	19980904	FR19970002484	19970303
FR2760306 B1	20030711	FR19970002484	19970303
WO9839915 A1	19980911	WO1998FR00407	19980302

Probable Assignee: MIKRUT ANTOINE

Assignee(s):(std): MIKRUT ANTOINE

Assignee(s): ANTOINE MIKRUT

Inventor(s):(std): MIKRUT ANTOINE

Inventor(s): ANTOINE MIKRUT

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

International class (IPC 8–9): H04N11/18 H04N5/44 (Advanced/Invention); H04N11/18 (Advanced/Non–invention)

International class (IPC 1–7): H04N5/00 H04N5/222 H04N5/44 H04N7/00 H04N9/64

CPC: H04N5/44 H04N11/18

European class: H04N5/44 T04N11/18

Classification Explorer

Cited documents: FR2629973 A2, FR2621765 A1, FR2620888 A2, FR2401589 A1, FR2369694 A1, FR2368192 A1, FR2350704 A1, FR2339305 A1, FR2325237 A1, FR2281024 A1, FR2258755 A1, FR2133490 A1, EP0123584 A1, EP0123583 A1, EP0123582 A1, EP0122167 A1, EP0121458 A1, EP0119132 A1,

Forward Citations: WO0197511, FR2838000, FR2810476,

Abstract:
The invention concerns assemblies consisting of colour television receiver sets designed for world intercommunication and with multiple functions and/or other audio–visual appliances equipped with high definition and/or very high definition digital and/or analog television screen with memory combined with audio–visual appliances equipped with TVCOM wave transmitters and/or receivers and with MIKROTELEC technology television environment systems designed for UNICOM. The inventive concepts and inventions are characterised in that they also include the complex MIKROTELEC technology concerning the additions or novel creations and improvements of the inventions described by Antoine MIKRUT in the French patents n 7725774 publication 2 401 589 and n 8712986 publication 2 620 888 applicable in particular in all state–of–the–art industries and fields and used in all places of recreation, residence as well as in vehicles on land, at sea and in the air. Said inventions provides the solution to problems encountered by users, in front of their (very high definition) colour television receiver set, equipped with MIKROTELEC wave–transceivers with their pre–programmed and/or programmable software in micromodules or microcomputers with remote control functions, and also equipped with television environment multipin connections connected to the audio–visual appliances themselves provided with MIKROTELEC wave–transceivers...

0) US6058656A – MOVABLE WALL OR MOVABLE PARTITION SYSTEM HAVING...

104) Family number: 30389054 (US6058656A) © PatBase

Title: MOVABLE WALL OR MOVABLE PARTITION SYSTEM HAVING A DRIVE GEAR FOR USE IN A GUIDE RAIL TO MOVE MOVABLE WALL OR MOVABLE PARTITION ELEMENTS, AND A DRIVE GEAR FOR USE IN A MOVABLE WALL OR MOVABLE PARTITION SYSTEM

Priority: DE19971019008 19970507 DE19985002953 19980429 WO1998EP02526 19980429

Family:

Publication number	Publication date	Application number	Application date
AT212690 E	20020215	AT19980925498T	19980429
AU199877598 A1	19981127	AU19980077598	19980429
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CA2260127 AA	19990105	CA19982260127	19980429
CN1225702 A	19990811	CN19988000557	19980429
CZ296697 B6	20060517	CZ19990000030	19980429
CZ9900030 A3	19991117	CZ19990000030	19980429
DE19719008 C1	19981126	DE19971019008	19970507
DE59802953 D1	20020314	DE19985002953	19980429
DK0937188 T3	20020527	DK19980925498T	19980429
EP0937188 A1	19990825	EP19980925498	19980429
EP0937188 B1	20020130	EP19980925498	19980429
ES2135368 T1	19991101	ES19980925498T	19980429
ES2135368 T3	20020616	ES19980925498T	19980429
HU0001671 AB	20000928	HU20000001671	19980429
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HU223617 B1	20041028	HU20000001671	19980429
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SK182598 A3	20000516	SK19980001825	19980429
SK285097 B6	20060601	SK19980001825	19980429
US6058656 A	20000509	US19990225770	19990105
WO9850657 A1	19981112	WO1998EP02526	19980429

Probable Assignee: DORMA GMBH AND CO KG

Assignee(s):(std)**:** DORMA GMBH AND CO KG ; DORMA GMBKH AND KO KG ; RECHSTEINER STEFAN ; BISCHOF MARKUS

Assignee(s): DORMA GMBH ; DORMA GMBH AND COKG ; DORMA GMBH AND CO KG ENNEPETAL ; DORMA GMBH AND CO KG 58256 ENNEPETAL DE ; DORMA GMBH AND CO ENNEPETAL KG ; DORMA GMBH AND CO 58256 ENNEPETAL DE KG

Inventor(s):(std)**:**	RECHSTEINER STEFAN ; BISHOP MARKUS ; BISHOF MARKUS ; MARKUS BISCHOF ; RECKSTEINER STEPHEN ; REKHSHTAJNER STEFAN ; RECHTEINER STEFAN ; BISCHOF MARKUS ; STEFAN RECHSTEINER
Inventor(s):	BISCHOF MARKUS 9423 ALTENRHEIN CH ; RECHSTEINER STEFAN 9422 STAAD CH
Agent(s):	DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; BERESKIN AND PARR
Designated states:	AT AU BE BG BR CA CH CN CY CZ DE DK ES FI FR GB GR HU IE IT JP KR LI LU MC NL NO NZ PL PT RU SE SK US
International class (IPC 8–9):	E04B2/74 E05D15/06 (Advanced/Invention); E05D15/06 (Advanced/Non–invention); E05D15/00 E05D15/06 (Core/Invention)
International class (IPC 1–7):	E04B2/74 E05B13/00 E05D E05D15/06 E05D15/08
CPC:	Y10T16/364 Y10T16/3837 E05D15/0608 E05Y2900/142 E05D15/063 E05D15/0652 E05Y2800/43 E05D15/06
European class:	E05D15/06B1 P05Y900/142
US class:	16/106 16/91 49/409
Classification Explorer	
Cited documents:	US4723374 A, US4559740 A, US3071825 A, US2807058 A, US1931796 A, GB570540 A, GB1076949 A, FR1496751 A, EP0679788 A1, EP0413881 A1, DE4041925 A1, DE3148464 C2, DE3148464 A1,
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Abstract:
Source: US6058656A A drive gear for a guide rail with a partition wall or similar device in a hanging bearing from the drive gear, whereby the drive gear has a carrying roller and two guiding rollers. The guiding rollers have a truncated vertical section and approach with their casing surface as close as possible to the carrying roller's casing surface while still maintaining a minor gap. The guiding rollers are supported in guiding roller receivers in a way that the gap between the guide rail, passing above the carrying roller and the guiding rollers, and the carrying roller and the guiding rollers respectively is approximately identical.

0) US6160526A – IC MODULE AND IC CARD

105) Family number: 14931476 (US6160526A) © PatBase

Title: IC MODULE AND IC CARD

Priority: JP19970166318 19970623 JP19970166319 19970623 JP19970166320 19970623 JP19970192204 19970717 JP19970198037 19970724 JP19970265548 19970930 WO1998JP02833 19980623 JP19970297427 19971029

Family:

Publication number	Publication date	Application number	Application date
CN1144155 C	20040331	CN19988001035	19980623
CN1234887 A	19991110	CN19988001035	19980623
DE69819299 D1	20031204	DE19986019299	19980623
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EP0952542 A1	19991027	EP19980929675	19980623
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EP0952542 B1	20031029	EP19980929675	19980623
JP11011057 A2	19990119	JP19970166318	19970623
JP11011058 A2	19990119	JP19970166319	19970623
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JP11034550 A2	19990209	JP19970192204	19970717
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JP11099782 A2	19990413	JP19970265548	19970930
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KR100330652 B1	20020329	KR19997001432	19990222
KR20000068288 A	20001125	KR19997001432	19990222
US6160526 A	20001212	US19990242748	19990222
WO9859318 A1	19981230	WO1998JP02833	19980623

Probable Assignee: ROHM CO LTD

Assignee(s):(std)**:** HIRAI MINORU ; HORIO TOMOHARU ; MIYATA OSAMU ; ROHM CO LTD ; UEDA SHIGEYUKI

Assignee(s): ROHM CO LTD KYOTO ; ROHM CO

Inventor(s):(std)**:** HIRAI MINORU ; HORIO TOMOHARU ; MINORU HIRAI ; MIYATA OSAMU ; OSAMU MIYATA ; SHIGEYUKI UETA ; UEDA SHIGEYUKI

Inventor(s): UETA SHIGEYUKI

Agent(s): TANAKA TATSUYA; YOSHIDA MINORU

Designated states: AT BE CH CN CY DE DK ES FI FR GB GR IE IT KR LI LU MC NL PT SE US

International class (IPC 8–9): B42D15/10 G06K19/07 G06K19/077 (Advanced/Invention); G06K19/00 (Advanced/Non–invention); B42D15/10 G06K19/07 G06K19/077 (Core/Invention)

International class (IPC 1–7): B42D15/10 G06K19/00 G06K19/06 G06K19/07 G06K19/077 H01L23/02 H01Q1/36

CPC: B42D25/22 B42D25/485 G06K19/07728 G06K19/07747 G06K19/07749 G06K19/0775 G06K19/07779 G06K19/07783 H01L2224/16 H01L2224/73253 H01L2924/16195 H01L2924/3511 B42D2033/46 G06K19/00

European class: G06K19/077E5 G06K19/077M2 G06K19/077T G06K19/077T2 G06K19/077T7C1 G06K19/077T7C1C L42D33/46 T01L224/16 T01L224/73253 T01L924/16195 T01L924/35110

US class: 235/491 257/679 343/895

Classification Explorer

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Forward Citations: WO15097400, WO13180367, WO07125215, WO07125215, WO07125214, WO07125214, WO07061303, WO07054632, WO06077339, WO06077339, WO06005985, WO06000849, WO04040508, US9634391, US9622359, US9570227, US9489613, US9437777, US8973834, US8870076, US8772917, US8222735, US8127997, US8101459, US8083152, US8025239, US8004411, US7980596, US7971792, US7824029, US7815124, US7804982, US7798413, US7793846, US7789311, US7748638, US7744001, US7728048, US7712673, US7694887, US7661600, US7605453, US7598874, US7579217, US7532124, US7402454, US7397672, US7367512, US7334734, US7327266, US7304362, US7278580, US7248169, US7224279, US7198996, US7159785, US7129145, US7059534, US7041536, US7030763, US6992898, US6939738, US6923378, US6882325, US6861993, US6834810, US6832056, US6782222, US6782213, US6762682, US6734542, US6719206, US6715688, US6697578, US6693541, US6556175, US6369778, US6256572, US2014210687, US2012326931, US2009267767, US2008117118, US2007194133, US2007187820, US2007152834, US2007115131, US2007085222, US2007085202, US2007069382, US2006226237, US2006201703, US2006065738, US2006044651, US2006027667, US2006016895, US2005194451, US2005093090, US2005051872, US2004218273, US2004171192, US2004158980, US2004144847, US2004031855, US2003227421, US2003063002, US2003038174, US2002195500, US2002094596, US2001011012, TWI447651, NL1029985, KR101351904, KR101298950, KR101177302, KR100746703, JP6145807, JP4495295, JP2012146330, JP2007122690, JP2006344027, JP2006252050, JP2002373321, JP2002304608, JP2002074304, JP2001351075, JP2001260580, JP2001175829, FR2893163, FR2881252, EP2669852, EP2608113, EP2450871, EP2450870, EP1903481, EP1783669, EP1770610, EP1748382, EP1739597, EP1411465, EP1060457, EP1054346, DE102007019570, DE102005038132, DE102005038132, CN104200256, CN104200256, CN101467165,

Abstract:
Source: US6160526A PCT No. PCT/JP98/02833 Sec. 371 Date Feb. 22, 1999 Sec. 102(e) Date Feb. 22, 1999 PCT Filed Jun. 23, 1998 PCT Pub. No. WO98/59318 PCT Pub. Date Dec. 30, 1998An IC module incorporated in an IC−card includes a substrate, an IC chip mounted on the substrate, and an antenna coil electrically connected to the IC chip. The antenna coil includes a conductive film which is patterned on a surface of the substrate, thereby facilitating fabrication of the IC module while realizing a thickness reduction of the IC module.

0) FR2780710A – FREIGHT HANDLING DEVICE DISPOSITIF POUR MANIPUL...

106) Family number: 30240373 (FR2780710A) © PatBase

Title: Freight handling device

Priority: DE19982011761U 19980703 DE19982020063U 19981110 DE19992001087U 19990122 DE19992005637U 19990331

Family:

Publication number	Publication date	Application number	Application date
DE29820063 U1	19990422	DE19982020063U	19981110
DE29901087 U1	19990624	DE19992001087U	19990122
DE29905637 U1	19991104	DE19992005637U	19990331
FR2780710 A3	20000107	FR19990008751	19990702
FR2780710 B3	20000616	FR19990008751	19990702

Probable Assignee: WEGMANN THOMAS

Assignee(s):(std)**:** WEGMANN THOMAS

Assignee(s): WEGMANN THOMAS 76891 BUSENBERG DE

Inventor(s):(std)**:** WEGMANN THOMAS

International class (IPC 8–9)**:** B65G7/12 (Advanced/Invention); B65G7/00 (Core/Invention)

International class (IPC 1–7)**:** B65G7/12

CPC: B65G7/12

European class: B65G7/12

Classification Explorer

Forward Citations: DE10022410,

Abstract:
The handling device has at least one belt (23) round the freight, and at least one handle (40) with grip loop (5) with a holding surface against the freight. Holding plates (1) are fitted at the ends of the grip loop of at least one handle. The plates can move independently of each other and form the holding surface. The plates are able to turn on the loop ends about a turning axis aligned transversely to the longitudinal direction of the grip loop.

0) FR2775860A – MULTIPLE MEDIA HIGH DEFINITION TELEVISION RECEP...

107) Family number: 14340245 (FR2775860A) © PatBase

Title:	Multiple media high definition television reception system
Priority:	FR19980002517 19980303

Family:

Publication number	Publication date	Application number	Application date
FR2775860 A1	19990910	FR19980002517	19980303

Probable Assignee:	MIKRUT ANTOINE
Assignee(s):(std)**:**	MIKRUT ANTOINE
Inventor(s):(std)**:**	MIKRUT ANTOINE
International class (IPC 8–9)**:**	H04N5/782 H04N7/10 H04N7/14 H04N7/173 (Advanced/Invention); H04N5/44 (Advanced/Non–invention)
International class (IPC 1–7)**:**	H04N5/00
CPC:	H04N5/44 H04N5/782 H04N7/10 H04N7/147 H04N7/17309
European class:	H04N5/782 H04N7/10 H04N7/14A3 H04N7/173B T04N5/44

Classification Explorer

Abstract:
The system integrates every possible type of TV reception and has an antenna with selectable position and polarisation to allow use on boats aircraft and cars. The integrated remote control allows selection of the language received.

0) US2002066596A – SUBSEA MUD PUMP AND CONTROL SYSTEM

108) Family number: 28257736 (US2002066596A)

© PatBase

Title: SUBSEA MUD PUMP AND CONTROL SYSTEM

Priority: US19980079641P 19980327 US19990276404 19990325 US19990276405 19990325 US19990276406 19990325 WO1999US06111 19990326 WO1999US06695 19990326 WO1999US06694 19990326 US20030341511 20030113 US20010923287 20010806

Family:

Publication number	Publication date	Application number	Application date
AU199931055 A1	19991018	AU19990031055	19990326
AU199933664 A1	19991018	AU19990033664	19990326
AU199933665 A1	19991018	AU19990033665	19990326
BRPI9909170 A	20011204	BR1999PI09170	19990326
BRPI9909171 A	20011113	BR1999PI09171	19990326
BRPI9909172 A	20011113	BR1999PI09172	19990326
CA2326129 AA	20000927	CA19992326129	19990326
CA2326353 AA	20000927	CA19992326353	19990326
CA2326358 AA	20000927	CA19992326358	19990326
DE69919691 D1	20040930	DE19996019691	19990326
DE69919691 T2	20050908	DE19996019691T	19990326
DE69921639 D1	20041209	DE19996021639	19990326
DE69921639 T2	20051103	DE19996021639T	19990326
DE69924108 D1	20050414	DE19996024108	19990326
DE69924108 T2	20060119	DE19996024108T	19990326
EP1071862 A1	20010131	EP19990915061	19990326
EP1071862 A4	20010516	EP19990915061	19990326
EP1071862 B1	20041103	EP19990915061	19990326
EP1075582 A2	20010214	EP19990912749	19990326
EP1075582 A4	20010502	EP19990912749	19990326
EP1075582 B1	20040825	EP19990912749	19990326
EP1082515 A1	20010314	EP19990915060	19990326
EP1082515 A4	20010516	EP19990915060	19990326
EP1082515 B1	20050309	EP19990915060	19990326
NO20004849 A	20001127	NO20000004849	20000927
NO20004849 A0	20000927	NO20000004849	20000927
NO322408 B1	20061002	NO20000004849	20000927
US2002066596 AA	20020606	US20010923287	20010806
US2004007392 AA	20040115	US20030341511	20030113
US6102673 A	20000815	US19990276406	19990325
US6230824 BA	20010515	US19990276405	19990325
US6325159 BA	20011204	US19990276404	19990325
US6505691 BB	20030114	US20010923287	20010806
US6904982 BB	20050614	US20030341511	20030113
WO9949172 A1	19990930	WO1999US06694	19990326
WO9949173 A1	19990930	WO1999US06695	19990326
WO9950524 A2	19991007	WO1999US06111	19990326
WO9950524 A3	19991202	WO1999US06111	19990326

Probable Assignee: HYDRIL USA MFG LLC

Assignee(s):(std)**:** HYDRIL CO ; HYDRIL USA MFG LLC ; PETERMAN CHARLES P

Assignee(s): WADE HAROLD ; TANGEDAHL MICHAEL J ; HYDRIL CO LP ; HYDRIL COMPANY ; NGUYEN DAT MANH ; JUDGE ROBERT A ; MOTT KEITH C DECEASED ; PELATA KENNETH L ; HYDRIL USA MFG ; BAILEY ANDYLE G ; COLVIN KENNETH W ; GOLDSMITH RILEY G ; HYDRIL CO HOUSTON ; HYDRIL GENERAL LLC ; HYDRIL LLC ; HYDRIL USA MANUFACTURING LLC

Inventor(s):(std)**:** BAILEY ANDYLE G ; BROOKS RONALD D ; DANNA JOHN MARK ; GOLDSMITH RILEY G ; JUDGE ROBERT A ; MOTT KEITH C ; PETERMAN CHARLES P ; TANGEDAHL MICHAEL J ; WADE HAROLD ; TANGEDAHL J ; PETERMAN P ; PELATA L ; NGUYEN DAT MANH ; MOTT KEITHC ; MOTT C ; COLVIN W ; COLVIN ENNETH W ; BAILEY G ; RILEY G GOLDSMITH ; MICHAEL J TANGEDAHL ; KENNETH W COLVIN ; KENNETH L PELATA ; KEITH C DI MOTT ; CHARLES P PETERMAN ; ANDYLE G BAILEY ; PELATA KENNETH L ; MOTT KEITH C DI ; COLVIN KENNETH W ; GOLDSMITH G

Inventor(s): ENNETH W COLVIN ; MOTT KEITH C DECEASED ; KENNETH LPELATA ; KEITHC MOTT ; KEITH C MOTT

Agent(s): BORDEN LADNER GERVAIS LLP; OSHA AND MAY LLP

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZA ZW

International class(IPC 8–9)**:** E21B15/02 E21B17/00 E21B21/00 E21B21/01 E21B21/08 E21B33/08 E21B43/36 E21B7/128 F04B17/00 F04B19/00 F04B19/20 F04B43/06 F04B43/10 (Advanced/Invention); E21B17/00 E21B21/00 E21B33/02 E21B43/34 E21B7/12 F04B19/00 F04B43/06 (Core/Invention)

International class(IPC 1–7)**:** C09K7/00 E21B E21B1/00 E21B15/02 E21B17/00 E21B19/09 E21B21/00 E21B21/06 E21B21/10 E21B33/08 E21B7/12 E21B7/128 F04B17/00 F04B19/20 F04B35/02 F04B43/073 F04B43/10 F04B9/117

CPC: Y10T137/87217 Y10T137/86027 Y10T137/86059 E21B21/08 E21B21/001 E21B21/01 E21B33/085 E21B43/36 E21B2021/006 F04B19/003 F04B43/06

European class: E21B21/00A E21B21/01 E21B21/08 E21B33/08B E21B43/36 F04B19/00F F04B43/06 P21B21/00U

US class: 137/565.16 137/565.19 137/596.17 138/31 166/350 166/359 166/367 166/374 166/84.4 166/84.5 166/845 175/206 175/207 175/207S 175/213 175/214 175/216 175/217 175/218 175/5 175/7 175/70 220/721 251/129.07 251/282 251/324 251/331 417/390 417/392 417/395 417/521 417/533

Classification Explorer

Cited documents: WO9918323 A1, WO9749897 A1, US6325159 BA, US6230824 BA, US6102673 A, US5924448 A, US5868168 A, US5662181 A, US5622482 A, US5616009 A, US5558506 A, US5516429 A, US5480292 A, US5443241 A, US5322137 A, US5320325 A, US5297777 A, US5277249 A, US5263514 A, US5213158 A, US5184686 A, US5149055 A, US4832126 A, US4832005 A, US4828024 A, US4813495 A, US4755111 A, US4745970 A, US4709900 A, US4705462 A, US4649704 A, US4632358 A, US4611973 A, US4611661 A, US4611578 A, US4595343 A, US4546828 A, US4531593 A, US4531591 A, US4527632 A, US4523901 A, US4291992 A, US4291772 A, US4149603 A, US4099583 A, US4063602 A, US4046191 A, US3929014 A, US3815673 A, US3722584 A, US3638721 A, US3603409 A, US3587734 A, US3492007 A, US3372761 A, US3259198 A, US3209829 A, US3047018 A, US2904357 A, US2854998 A, US2723681 A, US2703055 A, US2673525 A, US2419993 A, GB2175352 A1, EP0627555 A1, EP0290250 A2, DE3243738 A1,

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US9322230, US9316054, US9309732, US9297245, US9297216, US9291021, US9291017, US9261391, US9260944, US9260934, US9260927, US9249646, US9249638, US9243493, US9234400, US9222320, US9187980, US9175542, US9175528, US9169700, US9163473, US9157285, US9151124, US9127512, US9127511, US9085940, US9080427, US9080411, US9080407, US9074425, US9062517, US9062498, US9051818, US9051790, US9045959, US9027649, US9022126, US9016381, US9004181, US8997851, US8985229, US8978767, US8955619, US8939235, US8887814, US8881831, US8875798, US8863858, US8845298, US8844652, US8833488, US8827242, US8826988, US8820747, US8820405, US8783379, US8783361, US8783360, US8783359, US8776894, US8776893, US8776891, US8776887, US8770297, US8757592, US8752630, US8746332, US8739863, US8733436, US8720584, US8720580, US8720577, US8720545, US8714240, US8701796, US8689880, US8684701, US8684090, US8684088, US8657013, US8636087, US8632318, US8631874, US8627890, US8622138, US8590629, US8585909, US8579033, US8573306, US8567507, US8543245, US8540018, US8534369, US8514663, US8511402, US8485279, US8469086, US8464752, US8459361, US8434356, US8417483, US8413722, US8408337, US8408297, US8408074, US8403059, US8403034, US8397836, US8393403, US8353367, US8353366, US8353337, US8347983, US8347982, US8342265, US8323003, US8322439, US8322435, US8322432, US8316945, US8297360, US8286734, US8286730, US8281875, US8281864, US8272435, US8261826, US8256283, US8251148, US8249826, US8240388, US8220535, US8201628, US8186456, US8180593, US8176985, US8167049, US8162079, US8157014, US8156953, US8152476, US8132630, US8122975, US8122948, US8118102, US8113300, US8113291, US8104541, US8100189, US8091630, US8088717, US8088716, US8076269, US8066076, US8066067, US8066063, US8066062, US8061445, US8037950, US8033335, US8029211, US8016033, US8002041, US7997355, US7997345, US7992655, US7992654, US7992643, US7992633, US7987928, US7984764, US7980326, US7972555, US7950463, US7938190, US7934545, US7931090, US7926593, US7913764, US7909116, US7893801, US7891429, US7874353, US7869978, US7866953, US7866399, US7845412, US7836973, US7836946, US7828064, US7798250, US7798249, US7793741, US7789172, US7789132, US7788972, US7766100, US7762357, US7762320, US7757786, US7757781, US7735563, US7726418, US7726416, US7717170, US7717169, US7708089, US7706980, US7703552, US7669649, US7668694, US7650950, US7644762, US7635034, US7559359, US7539548, US7516795, US7513310, US7497266, US7490670, US7487837, US7461547, US7448454, US7424917, US7416226, US7407022, US7395878, US7389818, US7367411, US7363982, US7350597, US7343983, US7314559, US7308954, US7296628, US7278496, US7274989, US7270185, US7258171, US7257940, US7243958, US7237623, US7210526, US7204327, US7185719, US7165610, US7159669, US7134498, US7134489, US7090036, US7090018, US7082750, US7082750, US7080685, US7066283, US7066247, US7044237, US7032691, US7021402, US6966367, US6920942, US6913092, US6904982, US6904981, US6892829, US6854534, US6843331, US6840322, US6814142, US6802379, US6745857, US6739408, US6708780, US6702012, US6571873, US6547002, US6505691, US6499540, US6474422, US6470975, US6450262, US6412562, US2017022776, US2016160857, US2016160856, US2016097240, US2015330173, US2015275602, US2015274275, US2015240578, US2015226024, US2015159460, US2015075804, US2015034326, US2015027717, US2015000753, US2015000378, US2014318768, US2014262531, US2014262505, US2014262305, US2014216721, US2014196907, US2014193282, US2014178155, US2014166268, US2014166267, US2014124211, US2014102805, US2014102551, US2014003963, US2013333894, US2013220600, US2013118806, US2013043036, US2013032396, US2013020097, US2012318496, US2012282116, US2012217018, US2012125622, US2012067590, US2012061090, US2012055677, US2012006559, US2012006558, US2012006556, US2011284220, US2011278014, US2011272257, US2011253445, US2011236236, US2011232912, US2011203802, US2011192610, US2011189029, US2011189028, US2011180740, US2011168410, US2011168382, US2011155388, US2011155379, US2011139509, US2011139506, US2011129357, US2011125332, US2011108282, US2011106452, US2011056748, US2011036591, US2011024195, US2011024189, US2011005769, US2010313647, US2010294567, US2010260617, US2010218937, US2010212156, US2010186946, US2010175882, US2010172771, US2010155063, US2010150737, US2010147593, US2010098568, US2010089654, US2010071907, US2010050917, US2010044054, US2010038134, US2010018715, US2010012327, US2010006299, US2009314544, US2009304455, US2009205871, US2009200747, US2009189354, US2009166046, US2009139724, US2009126994, US2009114443, US2009101411, US2009101351, US2009101333, US2009091053, US2009090559, US2009090558, US2009084604, US2009078036, US2009057029, US2009057026, US2009057025, US2009057024, US2009057023, US2009057022, US2009057021, US2009053074, US2009038856, US2009032301, US2009025930, US2008302570, US2008302569, US2008289878, US2008257548, US2008251257, US2008230275, US2008223467, US2008192577, US2008191822, US2008190618, US2008185152,

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Abstract:
Source: US2002066596A The invention is a subsea pump that includes pumping elements, each pumping element including a pressure vessel with a first and a second chamber therein and a separating member disposed between the first and second chambers. The first and second chambers are hydraulically connected to receive and discharge a hydraulic fluid and a drilling fluid, respectively. The separating member moves within the pressure vessel in response to a pressure differential between the first and second chambers. A hydraulic power supply is arranged to pump the hydraulic fluid to the first chamber of each of the pumping elements. A valve assembly is hydraulically coupled to the first chambers of the plurality of pumping elements and to the hydraulic power supply. Volume measurement devices are arranged to measure volumes of each of the first chambers and the second chambers. A valve controller is connected to the valve assembly and to the volume measurement devices, and the valve controller is arranged to control a rate and timing of a flow of the hydraulic fluid into the first chambers and a rate and timing of a flow of the hydraulic fluid out of the first chambers in response to the volume measurements. The valve controller is configured to maintain at least one of a substantially constant pump inlet pressure, a substantially constant pump discharge pressure, and a substantially constant total volume of the first chambers.

109) Family number: 31048544 (US6179663B)

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Title: HIGH DENSITY ELECTRICAL INTERCONNECT SYSTEM HAVING ENHANCED GROUNDING AND CROSS–TALK REDUCTION CAPABILITY

Priority: US19980083488P 19980429 US19980101626P 19980923 US19990149178P 19990817 US19990155645P 19990924 US19990149178 19990817 US19990149178P 19990924 US19990450996 19991129 WO2000US23344 20000825 US20000641704 20000821 US20000640182 20000817 WO2000US22534 20000817 US19990295344 19990421 WO1999US09163 19990428

Family:

Publication number	Publication date	Application number	Application date
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WO9956352 A2	19991104	WO1999US09163	19990428	
WO9956352 A3	20000203	WO1999US09163	19990428	

Probable Assignee: WINCHESTER ELECTRONICS CORP

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Assignee(s): SOVEREIGN BANK ; WINCHESTER ELECTRONICS CORP ; MAGES KENNETH G ; NEWSTAR FINANCIAL INC ; LITTONSYSTEMS INC ; MADISON CAPITAL FUNDING LLC AGENT AS ; WINCHESTER ELECTRONICS HOLDINGS LLC ; WINCHESTER HOLDING INC ; MAGES KENNETH C ; PERUGINI MICHAEL N ; WILMINGTON TRUST NATIONAL ASSOCIATION COLLATERAL AGENT AS ; SRI HERMETICS LLC ; TRU CORP ; KRYPTOSINA ; GLADSTONE CAPITAL CORP ; BRADLEY ROBERT M ; GUGLIOTTI CARMINE ; CIT FINANCE LLC ; CLEMENTS NATIONAL CO ; 4360796 CANADA INC ; 4361261 CANADA INC ; 4361423 CANADA INC ; ANTARES CAPITAL LP ADMINISTRATIVE AGENT AS ; BIOBANK LLC

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Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): G02B6/38 G06Q20/00 G06Q20/04 G06Q20/10 G06Q20/12 G06Q20/38 G06Q20/40 G07F19/00 H01R12/16 H01R12/26 H01R12/32 H01R12/50 H01R12/71 H01R12/72 H01R13/46 H01R13/514 H01R13/646 H01R13/648 H01R13/655 H01R13/658 H01R13/6581 (Advanced/Invention);
H01R12/72 H01R13/648 (Advanced/Non–invention);
G02B6/38 G06Q20/00 G07F19/00 H01R12/00 H01R13/00 H01R13/46 H01R13/514 H01R13/648 H01R13/655 H01R13/658 (Core/Invention);
H01R (Subclass/Invention)

International class (IPC 1–7): G02B6/38 G06F17/60 G07F19/00 G07F19/00 H01R107/00 H01R12/16 H01R12/26 H01R12/32 H01R13/46 H01R13/646 H01R13/648 H01R13/655 H01R13/658 H01R23/68 H01R24/00 H01R3/00

CPC: G06Q20/3823 G07F19/20 G07F19/206 G06Q20/108 G06Q20/382 G06Q20/3829 G06Q20/401 G06Q20/4012 H01R13/405 H01R13/502 Y10S439/931 H01R12/727 H01R13/6581 H01R12/71 G06Q20/04 G06Q20/12 G07F19/211 H01R23/688

European class: G06Q20/04 G06Q20/108 G06Q20/12 G06Q20/382 G06Q20/3823 G06Q20/3829 G06Q20/401 G06Q20/4012 G07F19/00B G07F19/00F G07F19/20 G07F19/206 G07F19/211 H01R13/405 H01R13/502 H01R23/68D2 T01R23/70K2

US class: 385/53 439/607.02 439/607.07 439/608 439/660 439/931 70/57.1 70/57.5 705/64 705/70 705/71 705/72 705/75

Classification Explorer

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Forward Citations: WO14066445, WO12015861, WO12015861, WO11063451, WO08018052, WO05011061, WO05004292, WO05004288, WO05004288, WO03012701, WO03012701, WO02063580, WO02063580, WO0113468, WO0113468, USD790471, USD772168, USD766832, USD751507, USD750030, USD750025, USD748063, USD746236, USD745852, USD733662, USD727852, USD727268, USD720698, USD718253, US9543703, US9479426, US9471918, US9461410, US9413766, US9386000, US9374346, US9343834, US9336523, US9280771, US9277649, US9257778, US9130295, US9100375, US9094399, US9093800, US9083700, US9077695, US9077694, US9053471, US9048583, US9038163, US9037713, US9027115, US8992237, US8944831, US8943201, US8909557, US8905651, US8904516, US8900014, US8898458, US8874771, US8868705, US8850009, US8843643, US8782414, US8764464, US8744963, US8715004, US8696381, US8678860, US8651881, US8621641, US8616919, US8595131, US8545240, US8540525, US8527407, US8382521, US8302174, US8267721, US8229848, US8137119, US8109770, US8096832, US8086539, US8070514, US8061592, US8057267, US7967647, US7962742, US7896698, US7883366, US7867032, US7853523, US7837505, US7823774, US7775802, US7765398, US7762843, US7500871, US7497736, US7497735, US7451117, US7431616, US7422444, US7407413, US7392388, US7360096, US7344391, US7341459, US7331830, US7319978, US7255579, US7204412, US7101191, US7054845, US7054843, US7040901, US7021945, US6980970, US6979202, US6941274, US6913490, US6905367, US6899551, US6899550, US6872085, US6821146, US6808420, US6743049, US6572409, US6533466, US6478625, US6428357, US6407932, US6267625, US2013052877, US2012323733, US2011117781, US2011113625, US2011099112, US2011097934, US2011022521, US2011021077, US2010291806, US2010275013, US2010273354, US2010212003, US2010186070, US2010093195, US2010093189, US2010048067, US2009327133, US2009222897, US2009221165, US2009183000, US2009149041, US2009130918, US2009125430, US2008282081, US2008237336, US2008045079, US2008033857, US2007293062, US2007207675, US2007207674, US2007207641, US2007207632, US2007205774, US2007198825, US2007011098, US2006292932, US2006228912, US2006199405, US2006069647, US2006019507, US2005273528, US2005177619, US2005119978, US2005101188, US2005070160, US2005020135, US2004268127, US2004166704, US2004098609, US2004064406, US2003236031, US2003129872, US2002077837, US2002062257, US2002049662, US2002029342, US2001051902, SG96618, JP5027907, JP4590406, JP2011040409, JP2010251335, JP2007531964, JP2007516565, GB2498326, GB2498326, GB2387278, GB2387278, GB2368202, GB2368202, EP2214268, EP2194606, EP1645012, DE102010039314, CN105191003, CN102255158, CN101926055, CN101853996, AU2004260455, AU2004260455,

Abstract:
Source: US6179663B Disclosed is an electrical interconnect system using multiple grounding methods to reduce or prevent spurious signals from interfering with high density contacts carrying high speed transmissions. A first connector includes an insulative pillar partially surrounded by a plurality of signal contacts. A ground contact is at least partially located within the insulative pillar. A second connector includes a corresponding plurality of flexible signal contacts for mating with the signal contacts adjacent the insulative pillar. The second connector also includes a ground contact for receiving the ground contact of the first connector. The ground contacts provide a first method of providing a ground path to reduce spurious signals from entering the signal path. An electrically conducting shield is located outside the signal contacts when the first and the second connectors are mated. The first connector includes a member which provides a ground path between the first connector and the electrically conducting shield. Advantageously, the electrical interconnect system has two grounding methods which are particularly important in a high density electrical interconnect system where the contacts are closely spaced and susceptible to noise and other spurious signals.

0) US2002168798A – METHOD OF MAKING NEAR CHIP SIZE INTEGRATED CIRC...

110) Family number: 28305104 (US2002168798A) © PatBase

Title: METHOD OF MAKING NEAR CHIP SIZE INTEGRATED CIRCUIT PACKAGE

Priority: US19960741797 19961031 US19980083524 19980522 US19990348772 19990707 US20020150400 20020517 US20000585901 20000602

Family:

Publication number	Publication date	Application number	Application date
US2002168798 AA	20021114	US20020150400	20020517
US5981314 A	19991109	US19960741797	19961031
US6150193 A	20001121	US19980083524	19980522
US6228676 BA	20010508	US19990348772	19990707
US6962829 BB	20051108	US20020150400	20020517
WO9962119 A1	19991202	WO1999US10852	19990517

Probable Assignee: AMKOR TECHNOLOGY INC

Assignee(s):(std)**:** AMKOR TECHNOLOGY INC

Assignee(s): BANK OF AMERICA NA ; CITICORP NORTH AMERICA INC ; CITICORP NORTH AMERICA INC ADMINISTRATIVE AGENT AS ; CITICORP NORTH AMERICA INC AGENT AS ; CITICORP USA INC ; GUARDIAN ASSETS INC ; GENERALE SOC ; PANCZAK ANTHONY E ; HOLLOWAY ROY D ; GLENN THOMAS P ; CITICORP USA INC COLLATERAL AGENT AS

Inventor(s):(std)**:** GLENN THOMAS P ; HOLLAWAY ROY D ; HOLLOWAY ROY D ; PANCZAK ANTHONY E

Agent(s): SERGE J; GUNNISON MCKAY AND HODGSON LLP

Designated states: AT BE CA CH CY DE DK ES FI FR GB GR IE IT JP KR LU MC NL PT SE SG

International class (IPC 8–9): H01L21/56 H01L23/31 H01L23/552 (Advanced/Invention); H01L21/02 H01L23/28 H01L23/552 (Core/Invention)

International class (IPC 1–7): H01L21/00 H01L21/44 H01L21/48 H01L21/50 H01L21/56 H01L21/58 H01L23/498 H01L23/552 H05K3/30

CPC: H01L24/48 H01L24/49 H01L2924/01028 H01L2224/49175 H01L21/561 H01L21/56 H01L23/3128 H01L23/552 H01L24/45 H01L24/97 H01L2224/16225 H01L2224/32225 H01L2224/45124 H01L2224/45144 H01L2224/48091 H01L2224/48227 H01L2224/73204 H01L2224/73265 H01L2224/97 H01L2924/01005 H01L2924/01006 H01L2924/01013 H01L2924/01015 H01L2924/01019 H01L2924/01029 H01L2924/01033 H01L2924/0105 H01L2924/01078 H01L2924/01079 H01L2924/01082 H01L2924/01087 H01L2924/01322 H01L2924/14 H01L2924/15184 H01L2924/15311 H01L2924/1815 H01L2924/3025 H01L2224/16227 Y10T29/49135 H01L2924/12042 H01L24/73 H01L2224/05568 H01L2224/05573 H01L2924/00014 H01L2924/181 H01L2924/15173 H01L2924/15183

European class: H01L21/56 H01L21/56B H01L23/31H2B H01L23/552 H01L24/97 T01L224/16 T01L224/16225 T01L224/32225 T01L224/45124 T01L224/45144 T01L224/48091 T01L224/48227 T01L224/49175 T01L224/73204 T01L224/73265 T01L224/92247 T01L224/97 T01L24/45 T01L924/01013 T01L924/01015 T01L924/01029 T01L924/01050 T01L924/01078 T01L924/01079 T01L924/01322 T01L924/14000 T01L924/15184 T01L924/15311 T01L924/30250

US class: 257/462 257/462S 257/E21.502 257/E21.502S 257/E23.114 257/E23.114S 29/835 438/106 438/107 438/109 438/110 438/110S 438/111 438/112 438/113 438/113P 438/114 438/121 438/123 438/124 438/125 438/126 438/126S 438/127 438/14 438/15 438/33 438/458 438/458S 438/460 438/464 438/613

Classification Explorer

Cited documents: WO9940624 A1, WO9913515 A1, WO9526047 A1, US6383835 BA, US6228676 BA, US6150193 A, US6111324 A, US6092281 A, US5990545 A, US5981314 A, US5976912 A, US5973337 A, US5973263 A, US5949132 A, US5901257 A, US5872338 A, US5866953 A, US5864132 A, US5855821 A, US5841192 A, US5835141 A, US5817545 A, US5783866 A, US5776798 A, US5767447 A, US5737191 A, US5729437 A, US5719440 A, US5700981 A, US5668406 A, US5639989 A, US5612513 A, US5600181 A, US5596485 A, US5593926 A, US5583378 A, US5578525 A, US5533256 A,

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Forward Citations: WO15038542, WO05093833, USRE40112, US9699906, US9692357, US9691734, US9689897, US9666513, US9661739, US9660584, US9660368, US9627230, US9613841, US9603249, US9601475, US9595511, US9576823, US9559447, US9545043, US9536815, US9520835, US9509251, US9508691, US9508689, US9490751, US9490230, US9490195, US9466545, US9431323, US9420704, US9414500, US9406658, US9406645, US9406552, US9374643, US9362210, US9350124, US9350093, US9349611, US9338560, US9324614, US9320144, US9320133, US9318862, US9313902, US9305862, US9295157, US9293423, US9277654, US9276339, US9276336, US9252116, US9245828, US9245082, US9236356, US9232654, US9231328, US9224676, US9203529, US9196980, US9196597, US9184527, US9184145, US9173583, US9172131, US9159672, US9156684, US9153542, US9153517, US9150409, US9148731, US9147583, US9139422, US9139421, US9137934, US9136196, US9133020, US9129954, US9129943, US9096423, US9093767, US9089268, US9082833, US9078063, US9076884, US9070793, US9067780, US9061893, US9059074, US9054117, US9054115, US9054097, US9051171, US9048298, US9041472, US9041168, US9040360, US9030841, US9024445, US9024432, US9023689, US9007273, US9006880, US8988093, US8987886, US8987734, US8987060, US8984748, US8981809, US8981572, US8981568, US8975157, US8970031, US8963316, US8963301, US8959762, US8955216, US8955215, US8952542, US8952522, US8949760, US8948712, US8937387, US8937381, US8937376, US8928344, US8927879, US8912812, US8912661, US8900995, US8884424, US8884403, US8865520, US8853836, US8853819, US8841751, US8836108, US8835226, US8832931, US8803539, US8796561, US8791501, US8786098, US8786060, US8779563, US8765530, US8751996, US8748234, US8742567, US8729690, US8723332, US8720051, US8710649, US8707239, US8704379, US8704360, US8704341, US8692362, US8691632, US8680687, US8653634, US8653633, US8652883, US8643167, US8633064, US8629552, US8629551, US8629543, US8629005, US8624387, US8624386, US8624385, US8624384, US8623710, US8623709, US8617934, US8614899, US8592958, US8552548, US8541883, US8502400, US8501543, US8492856, US8487445, US8486764, US8479141, US8479139, US8461698, US8458636, US8446000, US8440554, US8434220, US8410585, US8410584, US8410577, US8409658, US8399972, US8390130, US8378466, US8368185, US8359739, US8357999, US8350367, US8349659, US8341586, US8332805, US8332799, US8324511, US8309454, US8298866, US8296941, US8296938, US8294276, US8258613, US8250514, US8226874, US8222727, US8220145, US8212340, US8212339, US8201273, US8201128, US8188584, US8186048, US8171447, US8143110, US8119455, US8112733, US8110902, US8099700, US8095903, US8093690, US8071431, US8067831, US8062930, US8061012, US8053872, US8043894, US8037547, US8030750, US8022511, US8008130, US7999276, US7989928, US7986021, US7984411, US7977163, US7968998, US7944015, US7932595, US7927927, US7923349, US7906860, US7902660, US7842597, US7823113, US7802208, US7784010, US7741151, US7723210, US7714431, US7713791, US7713781, US7705432, US7692286, US7687895, US7659604, US7657185, US7652357, US7633133, US7605020, US7603644, US7572681, US7572670, US7564122, US7535085, US7530040, US7521294, US7510889, US7507603, US7489028, US7489026, US7485952, US7480885, US7459829, US7451539, US7421781, US7420272, US7405487, US7398498, US7397001, US7375435, US7373628, US7363607, US7361533, US7354796, US7348191, US7332375, US7321162, US7314782, US7307850, US7285727, US7276793, US7273769, US7271493, US7268013, US7266869, US7257797, US7253503, US7247523, US7245007, US7238550, US7223924, US7217999, US7217991, US7214326, US7211879, US7211471, US7202554, US7199306, US7196406, US7192807, US7190071, US7190062, US7183630, US7176062, US7173336, US7171635, US7170150, US7166490, US7164192, US7155697, US7143383, US7143382, US7139994, US7138724, US7138724, US7138707, US7131096, US7131096, US7125798, US7125798, US7125748, US7125748, US7125744, US7117747, US7115445, US7112474, US7102208, US7096448, US7095103, US7091606, US7091594, US7088590, US7087987, US7087987, US7080342, US7073150, US7071541, US7067908, US7064009, US7061120, US7057280, US7057268, US7047513, US7045883, US7045882, US7045396, US7042070, US7042068, US7036105, US7030474, US7015072, US7013450, US7010771, US7009288, US7008825, US7005326, US7003754, US7003752, US7001799, US6998702, US6998296, US6996789,

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Abstract:
Source: US2002168798A A plurality of integrated circuit chip (IC chip) packages are fabricated simultaneously from a single insulating substrate having sections. In each section, an IC chip is attached. Bonding pads on the IC chip are electrically connected to first metallizations on a substrate first surface. The first metallizations, IC chip including bonding pads and first substrate surface are then encapsulated. Interconnection balls or pads are formed at substrate bonding locations on a substrate second surface, the interconnection pads or balls being electrically connected to corresponding first metallizations. The substrate and encapsulant are then cut along the periphery of each section to form the plurality of IC chip packages.

0) DE29910218U1 – UNIVERSALLY APPLICABLE CONTAINERS, PACKING, AID...

111) Family number: 17000458 (DE29910218U1) © PatBase

Title: Universally applicable containers, packing, aids e.g. for meals/beverages

Priority: DE19982010570U 19980612 DE19992001825U 19990126 DE19992010218U 19990611

Family:

Publication number	Publication date	Application number	Application date
DE29910218 U1	19991111	DE19992010218U	19990611

Probable Assignee: ROTHE BJOERN

Assignee(s):(std)**:** ROTHE BJOERN

International class (IPC 8–9)**:** A47G21/00 A47J47/14 B65D8/00 (Advanced/Invention); A47G21/00 A47J47/00 B65D8/00 (Core/Invention)

International class (IPC 1–7)**:** A47J41/00 A47J47/14 B65D8/00

CPC: A47G21/001 A47J47/14

European class: A47G21/00B A47J47/14

Classification Explorer

Forward Citations: DE10261814,

Abstract:
Source: DE29910218U1 (Claim 1) 1. Vorrichtung als Universalbehaelter, –verpackung, –hilfsmittel z. B. fuer Speisen/Getraenke, dadurch gekennzeichnet, dass sie ein runder – z. B. kreisrunder, ovaler etc. – Zweiteiler oder Mehrteiler ist, zusammengesetzt aus gleichen oder verschiedenen Winkel–Teilen (Ausschnitten), die einen gemeinsamen Mittelpunkt haben koennen.

Machine translation: (Claim 1) 1 Device as Universalbehaelter, packaging, additives such as for food / beverage, characterized in that it is a round – for example circular, oval, etc. – is two–piece or multi–piece, composed of equal parts, or different angles (clippings), which can have a common center.

0) US2001012486A – HYDRAULIC DELIVERY DEVICE

112) Family number: 28622487 (US2001012486A) © PatBase

Title: Hydraulic delivery device

Priority:
DE19981030001 19980624 DE19981030002 19980624 DE19981030005 19980624
DE19991027247 19990615 DE19991017201 19990416 DE19981034119 19980729
DE19981034118 19980729 DE19981034117 19980729 DE19981050240 19981031
DE19991027256 19990615 DE19991027298 19990615 JP19990178937 19990624
DE19991027400 19990616 US20010808869 20010315 US19990339302 19990623
GB19990014415 19990622 DE19991027255 19990615 FR19990008014 19990623
FR19990008014 19990623

Family:

Publication number	Publication date	Application number	Application date
DE19927247 A1	19991230	DE19991027247	19990615
DE19927247 B4	20140717	DE19991027247	19990615
DE19927255 A1	20000504	DE19991027255	19990615
DE19927256 A1	19991230	DE19991027256	19990615
DE19927298 A1	20000113	DE19991027298	19990615
DE19927400 A1	19991230	DE19991027400	19990616
FR2780452 A1	19991231	FR19990008014	19990623
FR2780452 B1	20041105	FR19990008014	19990623
FR2782543 A1	20000225	FR19990012138	19990929
FR2782543 B1	20041210	FR19990012138	19990929
GB200230313 A0	20030205	GB20020030313	19990622
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GB2340889 B2	20030423	GB19990014415	19990622
GB2380524 A1	20030409	GB20020030313	19990622
GB2380524 B2	20030611	GB20020030313	19990622
GB9914415 A0	19990818	GB19990014415	19990622
IT1312505 B1	20020417	IT1999MI01399	19990623
ITMI991399 A0	19990623	IT1999MI01399	19990623
ITMI991399 A1	20001227	IT1999MI01399	19990623
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JP4651031 B2	20110316	JP20060171767	20060621
JP4800457 B2	20111026	JP19990178937	19990624
US2001012486 AA	20010809	US20010808869	20010315
US6227816 BA	20010508	US19990339302	19990623
US6428285 BB	20020806	US20010808869	20010315

Probable Assignee: LUK FAHRZEUNG HYDRAULIK GMBH AND

Assignee(s):(std)**:** IXETIC BAD HOMBURG GMBH ; LUK FAHRZEUG HYDRAULIK ; LUK FAHRZEUNG HYDRAULIK GMBH AMP ; LUK FAHRZEUNG HYDRAULIK GMBH AND

Assignee(s): LUK FAHRZEUNG HYDRAULIK GMBH AND CO KG ; LUK FAHRZEUG HYDRAULIK GMBH ; LUK FAHRZEUG HYDRAULIK GMBH AND CO K ; LUK FAHRZEUG HYDRAULIK GMBH AND CO K G ; LUK FAHRZEUG HYDRAULIK GMBH AND CO KG

Inventor(s):(std)**:** BREUER PETER ; JORDAN MARTIN ; KOERTGE RANDOLF ; LAUSSER CHRISTOF ; LAUSSER CHRISTOPH ; LAUTH HANS J UUML RGEN ; LAUTH HANS JUERGEN ; NGUYEN DOAN VAN ; NGUYEN VAN DOAN ; SIEPEL VOLKER ; VOLKER SEIPEL ; SEIPEL VOLKER ; LAUTH HANS JURGEN ; KORTGE RANDOLF

Inventor(s): VOLKER SIEPEL ; VAN DOAN NGUYEN ; PETER BREUER ; RANDOLF KORTGE ; MARTIN JORDAN ; LAUTH HANS J AND UUML RGEN ; CHRISTOF LAUSSER ; CHRISTOPH LAUSSER ; HANS JURGEN LAUTH

Agent(s):	CABINET REGIMBEAU
International class (IPC 8–9):	B60T17/02 F01C21/10 F04B23/00 F04B49/00 F04B53/10 F04B53/16 F04B53/22 F04C14/26 F04C15/00 F04C15/06 F04C2/34 F04C2/344 F04F1/06 F16D31/02 F16K1/54 F16L13/14 F16L37/14 (Advanced/Invention); F01C21/00 F04B53/00 F04C2/00 F16K1/32 F16L13/14 F16L37/00 (Core/Invention); F04C (Subclass/Invention)
International class (IPC 1–7):	B60T17/02 F04B23/00 F04B49/00 F04B53/16 F04C15/00 F04C15/04 F04C2/34 F04C2/344 F04F1/06 F16D31/02 F16K1/54 F16L13/14 F16L37/14
CPC:	F01C21/10 F04C2/3446 F04B53/16 F04B53/22 F04C15/00 F16L13/143 F16L37/146 F04C15/0023 F04C2230/603 F16K1/54 F16L13/14 F16L37/14 F04C2/344
European class:	F01C21/10 F04B53/16 F04B53/22 F04C15/00 F04C15/00B4 F04C2/344C F16L13/14 F16L13/14B6 F16L37/14B2 R04C230/603
US class:	417/132 417/133 417/297 417/302 417/307 417/310 417/440 60/468
Classification Explorer	
Cited documents:	US5685332 A, US5171131 A, US5046933 A, US5030366 A, US4850815 A, US4681517 A, US4240255 A, US4138204 A, US3834846 A, US3752609 A, US3359913 A, US3327636 A, US3076414 A, US2962973 A, JP9512876 T2, JP63057988 A2, JP59121491 U1, JP57035187 A2, GB2045869 A1, EP0116136 A2, DE29718219 U1, DE29510508 U1, DE2223087 A1, DE19749484 A1,
Forward Citations:	US9581158, US8696326, US8632321, US8597003, US8020399, US7488162, US7216579, US6837689, US6619928, US2015184559, US2015004023, US2010290934, US2010129239, US2010086424, US2008256969, US2008240945, US2007148011, US2006051230, US2004211615, US2003138330, DE10233582, DE102012204526, DE102004047564, DE10029962,

Abstract:
Source: US2001012486A The invention relates to a hydraulic delivery device with a displacement unit which delivers a medium from a suction connection under output pressure to a pressure connection, connectable with a consumer, and under consumer pressure, and a regulating device for setting and/or limiting a volume flow delivered by the delivery device.

0) US6405471B – SAFETY LOCK FOR AN AUTOMATIC WEAPON

113) Family number: 28999736 (US6405471B) © PatBase

Title: Safety lock for an automatic weapon

Priority: DE19981057319 19981211 DE19992020621U 19991124 US19990419036 19991015 US19990134456P 19990517 WO1999EP09787 19991210 DE19995002082 19991210

Family:

Publication number	Publication date	Application number	Application date
AT220789 E	20020815	AT19990963489T	19991210
CA2353811 AA	20010607	CA19992353811	19991210
CA2353811 C	20050517	CA19992353811	19991210
DE19857319 C1	20000713	DE19981057319	19981211
DE29920621 U1	20000217	DE19992020621U	19991124
DE59902082 D1	20020822	DE19995002082	19991210
DK1135661 T3	20021028	DK19990963489T	19991210
EP1135661 A1	20010926	EP19990963489	19991210
EP1135661 B1	20020717	EP19990963489	19991210
ES2178497 T3	20021216	ES19990963489T	19991210
PT1135661 T	20021231	PT19990963489T	19991210
US6405471 BA	20020618	US19990419036	19991015
WO0036360 A1	20000622	WO1999EP09787	19991210
WO0036360 C2	20010712	WO1999EP09787	19991210
ZA200102209 A	20020227	ZA20010002209	20010316

Probable Assignee: HECKLER AND KOCH GMBH

Assignee(s):(std)**:** HECKLER AND KOCH GMBH ; MAUCH ERNST

Inventor(s):(std)**:** ERNST MAUCH ; MAUCH ERNST

Agent(s): RIDOUT AND MAYBEE LLP

Designated states: AT BE CA CH CY DE DK ES FI FR GB GR IE IT KR LI LU MC NL PT SE SG ZA

International class (IPC 8–9)**:** F41A17/02 F41A17/36 F41A17/74 F41A19/14 (Advanced/Invention); F41A17/00 F41A19/00 (Core/Invention)

International class (IPC 1–7)**:** F41A F41A17/02 F41A17/36 F41A17/74 F41A19/14 F41A3/00 F41A5/00 F41A9/00

CPC: F41A17/02 F41A17/74 F41A19/14

European class: F41A17/02 F41A17/74 F41A19/14

US class: 42/66 42/70.01 42/70.08 42/70.11 42/701.1 89/137

Classification Explorer

Cited documents: US905020 A, US875469 A, US6283006 BA, US6269576 BA, US5910003 A, US5570527 A, US5361525 A, US5235763 A, US5225612 A, US5081779 A, US4967502 A, US4845870 A, US4833811 A, US4730537 A, US4682435 A, US4672763 A, US4467545 A, US4154014 A, US4135320 A, US4067132 A, US2945316 A, DE3937042 C2, DE3937042 A1,

Forward Citations: WO03062734, WO03062734, US9134081, US8881443, US7832135, US7726059, US7051468, US6796070, US6550176, US2014305016, US2013125441, US2010275488, US2008216376, US2005268512, US2005115130, US2003145504,

Abstract:
Source: US6405471B A safety lock is disclosed for use with an automatic weapon such as a pistol. The automatic weapon has a hammer which is connected to a spring guide rod on which a striker spring is supported. This rod enters a removable insert during cocking of the hammer. A detent is arranged in the insert. The detent is preferably releasable and designed to prevent entry of the spring guide rod into the insert. The insert is replaceable with an ordinary insert and can accept a lock or a magazine safety or can be designed as an unreleasable detent.

0) CO4890891A – VALVULAS DE APLICACION GENERAL PREFERENTEMENTE ...

114) Family number: 43656021 (CO4890891A) © PatBase

Title: VALVULAS DE APLICACION GENERAL PREFERENTEMENTE PARA GRIFERIA SANITARIA PREFERABLY VALVES GENERAL APPLICATION FOR HEALTH FAUCETS (Machine translation)

Priority: CO19990022241 19990414

Family:

Publication number	Publication date	Application number	Application date
CO4890891 A1	20000228	CO19990022241	19990414

Probable Assignee: FV SA

Assignee(s):(std)**:** F V S A ; FV SA

Inventor(s):(std)**:** VIEGENER FRANCISCO ENRIQUE

Inventor(s): FRANCISCO ENRIQUE VIEGENER

Agent(s): RAMIRO CASTRO DUQUE

International class (IPC 8–9): F16K5/00 F16K5/04 (Advanced/Invention); F16K5/00 (Core/Invention)

International class (IPC 1–7): F16K5/00 F16K5/04

Classification Explorer

Abstract:
Source: CO4890891A 1.– Valvulas de aplicacion general, preferentemente para griferia sanitaria en las cuales el flujo de liquido es controlado mediante el giro parcial de un volante, brazo de palanca o lo similar de accionamiento manual, y que comprenden un cuerpo calvular con una boca de entrada de fluido ubicada en el fondo de una camara de alojamiento para una cabeza a modo de cartucho reemplazable de montaje de un correspondiente obturador operativamente relacionado con un conducto de intercomunicacion desde dicha boca de entrada a una boca de salida a esta camara estando esta cabeza–cartucho fijada removiblemente dentro de esta camara, ajustando hermeticamente en su embocadura por sobre el nivel de esta boca de salida y por su base inferior, alrededor de dicha boca de entrada, caracterizadas porque este ultimo ajuste se establece por intermedio de un casquillo complementario aplicado en esta base con un orificio central de coincidencia, por un lado con esta boca y por el otro con el propio orificio de entrada de dicho conducto de intercomunicacion formado en el cuerpo del obturador que esta inserto con ajuste deslizable en una perforacion de alojamiento para el mismo y su vastago de accionamiento, extendida a lo largo de dicha cabeza, con estos elementos unidos entre si formando un conjunto solidario retenido axialmente a esta cabeza, con libre giro entre una posicion de cierre y otra de apertura, desfasadas entre si por lo menos un cuarto de vuelta y determinadas por topes cooperantes de uno y otra con el obturador ajustado hermeticamente por su extremo inferior dentro de dicho casquillo, mientras que el vastago se extiende en sentido opuesto y atravesando medios selladores sobresale de la base superior de la cabeza y termina en una punta de aplicacion para el correspondiente volante de accionamiento manual, teniendo dicho conducto de intercomunicacion un orificio de salida ubicado en la superficie lateral del obturador, enfrentado con la propia superficie de dicha perforacion–alojamiento de la cabeza, la cual presenta, en relacion con la posicion de cierre de este conjunto vastago–obturador, un sector de obturacion de este orificio de salida,...
1. Valve general application, preferably for domestic plumbing in which fluid flow is controlled by partial rotation of a wheel, lever arm or the like manually operated, and comprising a body with a mouth calvular fluid inlet located at the bottom of a chamber housing for a head as a replaceable cartridge of a corresponding shutter assembly operatively associated with a conduit Intercom from said inlet to an outlet of this chamber is being head cartridge fixed removably inside this chamber, adjusting hermetically at its mouth above the level of the outlet and at its lower base, around said inlet, characterized in that the latter setting is set via a complementary socket applied this base with a central hole matching the one hand with this mouth and on the other with own input port of said intercommunication passage formed in the body of the plug that is inserted with sliding fit in a housing bore for the same and drive rod extending along said head, with these elements connected together forming an integral assembly axially retained to the head, with free rotation between a closed position and an open position, offset from one another at least quarter turn and determined by stops cooperating with one another and hermetically tight seal at its lower end within said cap, while the shank extends in the opposite direction and through sealing means protruding from the top base of the head and ends in a point of application for the corresponding handwheel manually operated, said intercommunication through an outlet located on the side surface of the shutter, faced with the very surface of said drilling–head housing, which has, in relation to the closed position of the rod–shutter assembly, a sector shutter this outlet...

0) PE04022000A – MEJORAS EN EL PICO DE DESCARGA DE JUEGOS DE GRI...

115) Family number: 43655766 (PE04022000A) © PatBase

Title: MEJORAS EN EL PICO DE DESCARGA DE JUEGOS DE GRIFERIA SANITARIA

Priority: AR1998P102614 19980604

Family:

Publication number	Publication date	Application number	Application date
AR015853 AA	20010530	AR1998P102614	19980604
CO4920186 A1	20000529	CO19990035354	19990604
PE04022000 A1	20000609	PE19990000476	19990604

Probable Assignee: FV SA

Assignee(s):(std)**:** F V S A ; FV SA

Inventor(s):(std)**:** VIEGENER FRANCISCO ENRIQUE

Inventor(s): FRANCISCO ENRIQUE VIEGENER

Agent(s): RAMIRO CASTRO DUQUE

International class (IPC 8–9)**:** B67D1/14 E03C1/04 F16K21/00 F16K51/00 (Advanced/Invention); B67D1/00 E03C1/04 F16K51/00 (Core/Invention)

International class (IPC 1–7)**:** B67D1/14 E03C1/02 E03C1/04 F16K21/00 F16K51/00

Classification Explorer

Abstract:
Source: PE04022000A CARACTERIZADO POR: SENDAS PIEZAS VINCULADAS REMOVIBLES Y HERMETICAMENTE ENTRE SI, QUE COMPRENDEN: A) UNA BASE DE ASIENTO COMPUESTA DE: 1) UN VASTAGO TUBULAR O BOQUILLA DE CONEXION A LA RED DE ALIMENTACION; Y 2) UNA PLAQUETA DISCOIDAL, LA CUAL PROVEE A DICHO VASTAGO DE UNA CONEXION A LA RED DE ALIMENTACION. LAS PERIFERIAS DE DICHA PLAQUETA Y DEL VASTAGO ESTAN APOYADAS ENTRE SI EN SENTIDO AXIAL Y ESTAN AJUSTADAS HERMETICAMENTE POR INTERMEDIO DE UN PRIMER "O–RING". DICHA PLAQUETA COMPRENDE EN SU FAZ SUPERIOR UNA PRIMERA PROYECCION, LA CUAL SE ELEVA EN OPOSICION AL VASTAGO TUBULAR; Y B) UN CUERPO O PIEZA–PICO, QUE COMPRENDE: a) UN CASQUETE QUE CUBRE ENTERAMENTE A DICHA BASE.DONDE DICHO CASQUETE TIENE UNA PARED LATERAL, LA CUAL SE ADAPTA POR LA PERIFERIA ALREDEDOR DE LA PERIFERIA DE DICHA PLAQUETA POR MEDIO DE UN ENCHUFE SOBRE UNA SEGUNDA PROYECCION CORTA, b) UN FALDON, EL CUAL SE ADAPTA ALREDEDOR DE LA PERIFERIA DE DICHA PLAQUETA; c) UNA MANGA; Y d) UNA BOQUILLA DE DESCARGA AL EXTERIOR

116) Family number: 43631205 (CO4930323A) © PatBase

Title: MECANISMO MEJORADO DE ACCIONAMIENTO PARA CORTINAS PLEGABLES
IMPROVED DRIVE MECHANISM FOR FOLDING CURTAINS (Machine translation)

Priority: CO19980980631 19981028 CO19980063186 19981028

Family:

Publication number	Publication date	Application number	Application date
CO4930323 A1	20000627	CO19980063186	19981028

Probable Assignee: VERTILUX INC

Assignee(s):(std)**:** VERTILUX INC

Inventor(s):(std)**:** RAMA GARCIA TOMAS JUAN

Inventor(s): TOMAS JUAN RAMA GARCIA

Agent(s): ERNESTO CAVELIER

International class (IPC 8–9): A47H5/00 A47H5/14 (Advanced/Invention); A47H5/00 (Core/Invention)

International class (IPC 1–7): A47H5/00 A47H5/14

Classification Explorer

Abstract:
Source: CO4930323A 1.– Mecanismo mejorado de accionamiento para cortinas plegables, en particular para cortinas que se pliegan en zig–zag de sentido horizontal y del tipo que dispone de al menos dos tambores giratorios en el que se enrolla un correspondiente cordon fijado por un extremo en dicho tambor y por el otro extremo en el borde inferior de la cortina, asi como unos medios de mando para hacer girar dicho tambor, caracterizado esencialmente porque comprende un cajetin longitudinal (1), unos medios de mando (2) y reduccion (3) del giro de dichos tambores acoplados entre si y con un eje longitudinal (6) sobre el que esta montado dichos tambores (5), asi como al menos dos elementos de apoyo y guia (4) de dichos tambores, todo ello contenido dentro del citado cajetin (I). 1. Drive for improved folding curtains, particularly curtains are folded zig–zag type horizontally and which has at least two rotating drums on which is wound a corresponding cord attached at one end to the mechanism drum and by the other end on the lower edge of the curtain as well as control means for rotating said drum, essentially characterized in comprising a longitudinal housing (1), control means (2) and reduction (3) rotation of said drum and coupled together with a longitudinal axis (6) that is mounted on said drums (5) as well as at least two support and guide elements (4) of said drums, all contained within the cassette quoted (I).

0) EP1248241A1 – HOLDER FOR CHIP, THE CHIP BEING USED FOR UNLOCK...

117) Family number: 17027683 (EP1248241A1) © PatBase

Title: HOLDER FOR CHIP, THE CHIP BEING USED FOR UNLOCKING SHOPPING CARTS

Priority: DE20012006120U 20010406

Family:

Publication number	Publication date	Application number	Application date
DE20106120 U1	20010613	DE20012006120U	20010406
EP1248241 A1	20021009	EP20020006040	20020316

Probable Assignee: SPERBER GERHARD ELASTO FORM

Assignee(s):(std)**:** SPERBER GERHARD ELASTO FORM

Assignee(s): ELASTO FORM GERHARD SPERBER

Inventor(s):(std)**:** SPERBER GERHARD

Designated states: AT CH DE LI

International class (IPC 8–9)**:** G07F1/06 G07F7/06 (Advanced/Invention); G07F1/00 G07F7/00 (Core/Invention)

International class (IPC 1–7)**:** A44B15/00 G07D9/00 G07F1/06 G07F5/00 G07F7/06

CPC: G07F7/0672 G07F1/06

European class: G07F1/06 G07F7/06C G07F7/06C9

Classification Explorer

Cited documents: EP0854455 A1, DE4303391 A1, DE29609122 U1, DE29602241 U1, DE19532446 A1, DE19519837 A1,

Abstract:
The chip or token has a circular shape (2) and is fixed into a holder (1) when not in use. The holder is produced typically in plastic and has a recess with a spigot (18) that the token fits onto. The holder also has a hole for attaching to a key ring.

0) US2002167103A – METHOD FOR INTRODUCING ADDITIVES

118) Family number: 28312358 (US2002167103A) © PatBase

Title: METHOD FOR INTRODUCING ADDITIVES

Priority:

AT20000000019	20000110	AT20000000995	20000607	AT20000192000	20000110
AT20000001475	20000628	AT20000001929	20001115	AT20000001475	20000828
AT20009952000	20000607	EP20190292000	20001115	EP20010901005	20010104
US20060491222	20060721	WO2001AT00003	20010104	US20040958855	20041005
US20010936039	20010908	US20060491443	20060721	WO2001AT00003	20010401

Family:

Publication number	Publication date	Application number	Application date
AT345204 E	20061215	AT20010901005T	20010104
AU200126517 A5	20010724	AU20010026517D	20010104
CA2366321 AA	20010907	CA20012366321	20010104
CA2366321 C	20090512	CA20012366321	20010104
DE50111437 D1	20061228	DE20015011437	20010104
EP1159115 A1	20011205	EP20010901005	20010104
EP1159115 B1	20061115	EP20010901005	20010104
EP1724003 A2	20061122	EP20060018820	20010104
EP1724003 A3	20080514	EP20060018820	20010104
ES2274862 T3	20070601	ES20010901005T	20010104
JP2003529444 T2	20031007	JP20010551670T	20010104
US2002167103 AA	20021114	US20010936039	20010908
US2005077642 AA	20050414	US20040958855	20041005
US2006254389 AA	20061116	US20060491443	20060721
US2006272702 AA	20061207	US20060491222	20060721
US6866171 BB	20050315	US20010936039	20010908
US7306643 BB	20071211	US20060491443	20060721
US7347886 BB	20080325	US20060491222	20060721
US7438840 BB	20081021	US20040958855	20041005
WO0151267 A2	20010719	WO2001AT00003	20010104
WO0151267 A3	20020620	WO2001AT00003	20010104

Probable Assignee: SULZER CHEMTECH AG

Assignee(s):(std)**:** ICKINGER DR GEORG ; ICKINGER GEORG ; ICKINGER GEORG MICHAEL ; SULZER CHEMTECH AG ; ICKINGER GEORG M

Assignee(s): GEORG MICHAEL ICKINGER ; ICKINGER DR ; ICKINGER GEORG DIPL ING DR TECHN ; ICKINGER GEORG DIPL ING DRTECHN

Inventor(s):(std)**:** ICKINGER DR TECHN ; ICKINGER GEORG DIPL ING DR TEC ; ICKINGER GEORG DR ; ICKINGER GEORG DR TECHN ; ICKINGER GEORG M ; ICKINGER GEORG MICHAEL

Inventor(s): GEORG MICHAEL ICKINGER

Agent(s): GOWLING LAFLEUR HENDERSON LLP; EHRSAM CHRISTIAN; FRANCIS C HAND CARELLA BYRNE BAIN GILFILLAN CECCHI; FRANCIS C HAND ESQ C O CARELLA BYRNE BAIN GILFILLAN CECCHI; HAND FRANCIS C; CARELLA BYRNE BAIN ET AL; CARELLA BYRNE BAIN ETAL; FRANCIS C

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B01F15/04 B01F3/08 B01F5/02 B01F5/04 B22D17/20 B22D41/00 B22D41/50 B29B7/00 B29B9/00 B29C31/00 B29C31/04 B29C45/18 B29C47/10 C21C7/00 C22B21/00 C22B21/04 F02M47/00 G01F13/00 (Advanced/Invention);

B01F15/04 B01F3/08 B01F5/02 B22D17/20 B29B9/00 B29C31/04 B29C47/10 G01F13/00 (Advanced/Non–invention); B22D41/00 B22D41/50 C21C7/00 C22B21/00 (Core/Invention)

International class (IPC 1–7): B01F15/04 B01F3/08 B01F5/02 B01F5/04 B22D17/20 B22D41/00 B29B7/00 B29B9/00 B29C31/00 B29C31/04 B29C45/18 B29C47/06 B29C47/10 B29C47/92 F02M47/00 G01F13/00

CPC: B22D25/005 B01F5/045 B01F5/0471 B01F15/024 B29C43/34 B29C45/1816 B29C47/92 B29C2043/3455 B29C2043/3494 B29C2045/1841 F02M47/027 F02M61/1806 F02M69/04 F23R7/00 Y10T137/0329 B22F1/0003 C21C7/0043 C21C7/0068 C22B9/103 C22B21/06 B29C2947/92514 B29C2947/92561 B29C2947/926 B29C2947/92704 B29C2947/92895 B29C2947/92904

European class: B01F15/02B40K B01F5/04C13 B01F5/04C14 B22D25/00F B22F1/00A B29C45/18C C21C7/00D2 C21C7/00G C22B21/06 C22B9/10M F02M47/02D F02M61/18B F02M69/04 F23R7/00 L29C43/34 L29C43/34D1 L29C43/34H1 L29C45/18C3

US class: 137/3 137/3P 222/566 222/591 222/591S 222/596 222/596S 264/173.16 264/173.160S 264/211 264/211S 264/349 264/349S 264/40.3 264/40.300P 264/51 264/51P 266/216 266/216S 425/13 425/130 425/130S 425/132 425/132S 75/684 75/684P

Classification Explorer

Cited documents: WO8905226 A1, WO0166331 A1, WO0151267 A2, US7306643 BB, US6866171 BB, US6284810 BA, US5934521 A, US5913324 A, US5638791 A, US5286184 A, US5140965 A, US5129629 A, US5066137 A, US4931236 A, US4907516 A, US4781554 A, US4770198 A, US4689923 A, US4657496 A, US4563782 A, US4474717 A, US4302409 A, US4182601 A, US3990422 A, US3777977 A, US3717306 A, US2764565 A, US2006272702 AA, US2006254389 AA, US2005077642 AA, JP7108151 A2, JP58067327 A2, JP2178012 A2, GB989855 A, GB1320057 A, FR2613639 A1, FR2096236 A5, EP0432336 B1, EP0310914 B2, EP0161614 B1, EP0137250 A2, DE3838139 A1, DE2144069 A1, DE2028442 A1, DE1948454 A1, DE1204634 B, ATPCT/AT01/00003,

Forward Citations: WO15140239, WO14026794, WO12016715, WO11158184, WO11158184, WO11107762, WO09052615, WO08151958, WO08151958, WO08080241, WO06086814, WO06086814, WO04073953, US9555907, US9387619, US9238244, US8578682, US8561663, US8537960, US8465688, US8459571, US8308476, US8234870, US8142182, US7963762, US7931455, US7807091, US7722351, US7686603, US7438840, US7347886, US7341445, US7306643, US7281917, US7115226, US7115226, US6866171, US6769894, US2015190753, US2015028055, US2011281706, US2010291505, US2010263348, US2010195783, US2009054663, US2009038701, US2009035794, US2008199553, US2007248748, US2007001344, US2006272702, US2006254389, US2006113692, US2006090775, US2005077642, US2004256768, KR101631833, JP2013531568, JP2008049705, EP2361746, EP1488906, EP1488906, DE10213977, DE102012214519, DE102004024856, DE102004024856, CN101932424,

Abstract:
Source: US2002167103A The invention relates to a method for introducing additives into flowing or fluidized media. The spatially predetermined position of the additives in the flowing material, also called fluid bed, is obtained by controlling the pulsating injection, The introduction and exact dosing of additives, that is hardeners, dyes, gas producers and softener for instance, into a liquid plastic stream or metal stream (10) for instance or the fluid bed of bulk material, such as powder, granules and pellets, is carried out by means of an injector. The invention is used in melting units, in hot channel systems, in tools, componens of tools and injection moulding machines, extruder–, injection moulding–, pelleting–, burner– and injection arrangements. The nozzle needle (3) of at least one nozzle (2) respectively is variable and highly precisely moved for the introduction by means of a device and in such a way that additive (17) is dosed exactly in relation to the volume flow of the medium and that a pulsating stream (18, 36) is injected into the medium flowing past, by means of at least one well–aimed nozzle opening (4). The additives are bosed by means of a pressure that can be adjusted variable, pulse width and puls frequenmcy. The desired homogenous distribution is obtained by the penetrating injection jet (37) during compounding for instance.

0) ES2165242A – PNEUMATIC STAPLE DISTRIBUTOR. "DISTRIBUIDOR PA...

119) Family number: 23204469 (ES2165242A) © PatBase

Title: Pneumatic staple distributor.

Priority: ES19970001686 19971028

Family:

Publication number	Publication date	Application number	Application date
ES2165242 AA	20020301	ES19970001686	19971028
ES2165242 BB	20030616	ES19970001686	19971028

Probable Assignee: SIMES SENCO SA

Assignee(s):(std)**:** SIMES SENCO SA

Assignee(s): SIMES SENCO S A

Inventor(s):(std)**:** LUCAS HUERTA ANTONIO

International class (IPC 8–9)**:** B25C1/04 (Advanced/Invention); B25C1/04 (Core/Invention)

International class (IPC 1–7)**:** B25C1/04

Classification Explorer

Cited documents: US3673923, US3583496,

Abstract:
Pneumatic staple distributor. The basic function of the mechanism is to achieve a secure way of positioning the anvil of the tool exactly above the staple exit mouth moments prior to the staple leaving its housing. At the same time, unnecessary air leaks are eliminated. Two needles, mechanically related to each other, are combined. The back needle works in combination with a plug and a sliding rod, which facilitates the release of the air that comes from releasing the main rod. The upper needle works with a set of parts, communicator, upper body, upper sliding piston and head distributor, to propel the anvil rod and assist in its own release and the release of the lower set.

0) US2004040978A – APPARATUS AND METHOD FOR DISPENSING VAPOCOOLANT...

120) Family number: 29930620 (US2004040978A) © PatBase

Title: APPARATUS AND METHOD FOR DISPENSING VAPOCOOLANTS

Priority:
AU20010264839 20010522 AU20010264839 20061229 AU20010292939 20010921
AU20060252304 20061229 CA20012423163 20010921 US20000343723 20000921
US20010343723 20010921 US20000234488P 20000922 CA20012646759 20010921
US20010283062P 20010411 US20000248147P 20001113 US20000575396 20000522
US20050071642 20050303 US20040026588 20041230 US20030343723 20030131
WO2001US29627 20010921 WO2001US29627 20000921

Family:

Publication number	Publication date	Application number	Application date
AT486797 E	20101115	AT20010973349T	20010921
AU2001292939 AA	20020402	AU20010292939	20010921
AU2001292939 BB	20061116	AU20010292939	20010921
AU200192939 A5	20020402	AU20010092939	20010921
AU2006252301 AA	20070125	AU20060252301	20061229
AU2006252304 AA	20070125	AU20060252304	20061229
AU2006252304 BB	20100722	AU20060252304	20061229
AU2006252304 BI	20100819	AU20060252304	20061229
CA2423163 AA	20030320	CA20012423163	20010921
CA2423163 C	20090217	CA20012423163	20010921
CA2646759 AA	20020328	CA20012646759	20010921
CA2646759 C	20120424	CA20012646759	20010921
DE60143408 D1	20101216	DE20016043408	20010921
EP1339621 A1	20030903	EP20010973349	20010921
EP1339621 A4	20060920	EP20010973349	20010921
EP1339621 B1	20101103	EP20010973349	20010921
ES2354531 T3	20110315	ES20010973349T	20010921
NZ524713 A	20040227	NZ20010524713	20010921
US2004040978 AA	20040304	US20030343723	20030131
US2005150910 AA	20050714	US20050071642	20050303
US2006144864 AA	20060706	US20040026588	20041230
US6837401 BB	20050104	US20030343723	20030131
US7658304 BB	20100209	US20040026588	20041230
US7731062 BB	20100608	US20050071642	20050303
WO0224548 A1	20020328	WO2001US29627	20010921

Probable Assignee: GEBAUER CO

Assignee(s):(std)**:** AVERY DENNISON CORP ; GEBAUER CO ; GEBAUER CORP ; GROYS ALEKSANDR

Assignee(s): AUER CO GEB

Inventor(s):(std)**:** GROYS ALEKSANDR

Inventor(s): ALEKSANDR GROYS

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; FB RICE; FB RICE PTY LTD; OGILVY RENAULT LLP SENCRL SRL; NORTON ROSE CANADA SENCRL SRL LLP; FINDLAY ALICE ROSEMARY; PEARNE AND GORDON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B05B9/04 B65C11/00 B65C9/00 B65C9/26 B65D65/28 B65D83/00 B65D83/14 B65D83/16 B67D5/58 B67D7/76 G09F3/10 G11B23/40 (Advanced/Invention); B65C11/00 B65C9/00 B65C9/26 B65D65/22 G09F3/10 G11B23/38 (Core/Invention)

International class (IPC 1–7): B65D83/00 B67D5/08 B67D5/14 B67D5/58

CPC: B05B15/008 B65D83/20 B65D83/205 B65D83/38 B65D83/48 B65D83/75 B65D83/752 B65D83/754

European class: B05B15/00G B65D83/14Z3 B65D83/20 B65D83/20C B65D83/38 B65D83/48 B65D83/75 B65D83/752 B65D83/754 L05B15/00Y30 L65D83/14Y4

US class: 222/189.11 222/189.110P 222/402.1 222/402.12 222/494 222/52 222/52P 239/575 239/590.3

Classification Explorer

Cited documents: WO0003933 A1, US6837401 BB, US6484953 BB, US5988449 A, US5527577 A, US5507417 A, US5273191 A, US4730786 A, US4141472 A, US4122978 A, US4035303 A, US4030667 A, US3756472 A, US2995308 A, US2774628 A, US2418036 A, US2373037 A, US2006144864 AA, US2005150910 AA, GB2021698 A1, FR2424766 A1,

Forward Citations: WO14078278, US9067221, US8827123, US8690015, US7731062, US7726621, US7658304, US7077171, US2014291423, US2013017123, US2012048896, US2012043353, US2011253745, US2011017752, US2010062399, US2007154405, US2006144864, US2005269350, US2005150910, EP1824543, AU2005316813,

Abstract:
Source: US2004040978A An apparatus and method for discharging vapocoolants in stream or mist form includes the use of selected fluoroelastomers for valve parts to regulate discharge. The fluoroelastomers provide long–term stability to the vapocoolants to enable superior shelf life without minimal loss or contamination of the vapocoolant. In addition, a filter is provided to remove contaminants from vapocoolant prior to passage through the nozzle opening.

0) US2004003528A – PORTABLE FIREARMS HAVING IDENTIFICATION MARKS

121) Family number: 28937075 (US2004003528A) © PatBase

Title: PORTABLE FIREARMS HAVING IDENTIFICATION MARKS

Priority: DE20001062239 20001214 DE20012021902U 20011212 US20030459924 20030612 DE20012022213U 20011212 DE20015002558 20011212 EP20010990552 20011212 WO2001EP14599 20011204 US20040005604 20041206 WO2001EP14599 20011212 WO2001EP14599 20030613

Family:

Publication number	Publication date	Application number	Application date
AT268897 E	20040615	AT20010990552T	20011212
CA2423023 AA	20030319	CA20012423023	20011212
CA2423023 C	20050517	CA20012423023	20011212
DE10062239 A1	20020704	DE20001062239	20001214
DE10062239 C2	20030626	DE20001062239	20001214
DE20121902 U1	20030814	DE20012021902U	20011212
DE20122213 U1	20040902	DE20012022213U	20011212
DE50102558 D1	20040715	DE20015002558	20011212
DK1340032 T3	20041018	DK20010990552T	20011212
DK1340032 T4	20160509	DK20010990552T	20011212
EP1340032 A1	20030903	EP20010990552	20011212
EP1340032 B1	20040609	EP20010990552	20011212
EP1340032 B2	20160127	EP20010990552	20011212
ES2220828 T3	20041216	ES20010990552T	20011212
ES2220828 T5	20160429	ES20010990552T	20011212
KR100854191 B1	20080826	KR20037007941	20011212
KR20030072561 A	20030915	KR20037007941	20011212
PT1340032 T	20040930	PT20010990552T	20011212
US2004003528 AA	20040108	US20030459924	20030612
US2005183314 AA	20050825	US20040005604	20041206
US8171665 BB	20120508	US20040005604	20041206
WO0248632 A1	20020620	WO2001EP14599	20011212
ZA200304633 A	20040827	ZA20030004633	20030613

Probable Assignee: HECKLER AND KOCH GMBH

Assignee(s):(std)**:** HECKLAR AND KOCH GMBH ; HECKLER AND KOCH GMBH ; HOLZKNECHT DIRK ; MAUCH ERNST ; SCHUMACHER MICHAEL

Assignee(s): HOLTZKNECHT DIRK

Inventor(s):(std)**:** DIRK HOLZKNECHT ; ERNST MAUCH ; HOLTZKNECHT DIRK ; HOLZKNECHT DIRK ; MAUCH ERNST ; MICHAEL SCHUMACHER ; SCHUMACHER MICHAEL

Agent(s): RIDOUT AND MAYBEE LLP; SAMSON AND PARTNER PATENTANWAELTE MBB; SUGRANES PEDRO; MARK C ZIMMERMAN HANLEY FLIGHT AND ZIMMERMAN LLC; HANLEY FLIGHT AND ZIMMERMAN LLC

Designated states: AT BE CA CH CY DE DK ES FI FR GB GR IE IT KR LI LU MC NL PT SE TR US ZA

International class (IPC 8–9): F41A17/06 F41A9/53 (Advanced/Invention); F41A17/06 (Advanced/Non–invention); F41A17/00 (Core/Invention)

International class (IPC 1–7): F41A17/00 F41A17/06 F41A19/01 F41A35/00 F41A9/53 F41C27/00

CPC: F41A17/063 F41A17/06

European class: F41A17/06 F41A17/06B

US class: 42/1.01 42/1.010P 42/70.01 42/70.11 42/70.110P

Classification Explorer

Cited documents: WO9804880 A1, WO0161268 A1, WO0113217 A1, US6226913 BA, US6116298 A, US6002343 A, US5715623 A, US5700088 A, US5656996 A, US5636464 A, US5566486 A, US5537771 A, US5437117 A, US5416486 A, US5406730 A, US5291680 A, US5189395 A, US5097253 A, US5033217 A, US4748668 A, US4541191 A, US4488370 A, US3914996 A, US3785261 A, US3453892 A, GB2340589 A1, GB2182424 A1, EP0955618 A2, DEOS4433337, DE4433337 A1, DE4022038 A1, DE3911804 A1, DE19839622 A1, DE19707399 A1, DE19607294 A1,

Forward Citations: WO11046631, WO05119159, WO04046635, USD767075, USD755327, USD755326, US8671605, US2015077255, US2009028379, US2006010744, US2005262751, US2004217159, EP1563243, DE10254433, DE102004025719,

Abstract:
Source: US2004003528A Portable firearms having identification marks and methods of making the same are disclosed. An example firearm includes a first identification number visibly located on the firearm; and a second, hidden or disguised identification number associated with the first identification number to facilitate identifying the firearm if the first identification number is destroyed, changed, or damaged.

122) Family number: 28213587 (US2002120342A) © PatBase

Title: METHOD AND APPARATUS FOR ACETABULAR RECONSTRUCTION

Priority:

EP20070250588	20070214	EP20070253911	20071003	EP20080725961	20080222
US20010792174	20010223	US20020201485	20020723	US20060546500	20061011
US20070709549	20070222	US20080038570	20080227	US20090559230	20090914
US20050294692	20051205	US20050111123	20050421	US20060357868	20060217
US20070768510	20070626	US20030700292	20031103	US20120405683	20120227
WO2008US02372	20080222	WO2009US35303	20090226	US20130046244	20131004

Family:

Publication number	Publication date	Application number	Application date
AU2008218993 AA	20080828	AU20080218993	20080222
AU2008218993 BB	20130613	AU20080218993	20080222
CN101677861 A	20100324	CN200880008732	20080222
CN101677861 B	20130918	CN200880008732	20080222
DE602007042521 D1	20150924	DE200760042521T	20070214
DE602007042639 D1	20151001	DE200760042639T	20071003
DE602008043305 D1	20160519	DE200860043305T	20080222
EP1236450 A1	20020904	EP20020251273	20020225
EP1384456 A2	20040128	EP20030254588	20030723
EP1384456 A3	20060920	EP20030254588	20030723
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EP1532946 A3	20060927	EP20040256566	20041025
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EP1911419 B1	20150819	EP20070253911	20071003
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EP2129335 B1	20160406	EP20080725961	20080222
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EP2265215 B1	20170329	EP20090716144	20090226
JP2010518973 T2	20100603	JP20090550928T	20080222
JP5657894 B2	20150121	JP20090550928T	20080222
US2002120342 AA	20020829	US20010792174	20010223
US2003212459 AA	20031113	US20020201485	20020723
US2005021148 AA	20050127	US20030700292	20031103
US2006241776 AA	20061026	US20050294692	20051205
US2006241781 AA	20061026	US20060357868	20060217
US2007129809 AA	20070607	US20060546500	20061011
US2007173948 AA	20070726	US20070709549	20070222
US2007250175 AA	20071025	US20070768510	20070626
US2008147187 AA	20080619	US20080038570	20080227
US2010004754 AA	20100107	US20090559230	20090914
US2012150311 AA	20120614	US20120405683	20120227
US2014039638 AA	20140206	US20130046244	20131004
US6458161 BA	20021001	US20010792174	20010223
US7291177 BB	20071106	US20020201485	20020723
US7597715 BB	20091006	US20060357868	20060217
US7713306 BB	20100511	US20030700292	20031103

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US8197550 BB	20120612	US20090559230	20090914	
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US8292967 BB	20121023	US20050294692	20051205	
US8551181 BB	20131008	US20120405683	20120227	
US9375316 BB	20160628	US20130046244	20131004	
WO08103457 A2	20080828	WO2008US02372	20080222	
WO08103457 A3	20090205	WO2008US02372	20080222	
WO08103457 A9	20090326	WO2008US02372	20080222	
WO09108788 A1	20090903	WO2009US35303	20090226	

Probable Assignee: BIOMET MFG LLC

Assignee(s):(std)**:** HERSHBERGER TROY W ; BOLLINGER MARK A ; BROWN DAVID R ; GIBBS PHILLIP M ; BIOMET MFG CORP ; BIOMET MFG LLC ; KUMAR MUKESH ; HOEPPNER JACY C ; MERIDEW JASON D ; MAY BRIAN M ; RONK ROBERT M ; MAY BRIAN ; PARROTT RUSSELL ; SCHLUETER ELIZABETH ; WOODELL MAY JENNIFER ; WHITE JOHN R ; BIOMET INC

Assignee(s): BIOMET MANUFACTURING CORP ; BIOMET MFG ; BIOMET INT LTD ; LVB ACQUISITION INC ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT FOR SECURE ; BANK OF AMERICA NA ADMINISTRATIVE AGENT FOR SECURED PARTIES AS ; BIOLECTRON INC ; BIOMET 3I LLC ; BIOMET BIOLOGICS LLC ; BIOMET EUROPE LTD ; BIOMET FAIR LAWN LLC ; BIOMET FLORIDA SERVICES LLC ; BIOMET HOLDINGS LTD ; BIOMET LEASING INC ; BIOMET MICROFIXATION LLC ; BIOMET ORTHOPEDICS LLC ; BIOMET SPORTS MEDICINE LLC ; BIOMET TRAVEL INC ; CROSS MEDICAL PRODUCTS LLC ; EBI HOLDINGS LLC ; EBI LLC ; EBI MEDICAL SYSTEMS LLC ; ELECTR OBIOLOGY LLC ; IMPLANT INNOVATIONS HOLDINGS LLC ; INTERPORE CROSS INT LLC ; INTERPORE SPINE LTD ; KIRSCHNER MEDICAL CORP ; BIOMET MFG LLC WARSAW

Inventor(s):(std)**:** BEREND KEITH ; BOLLINGER MARK A ; BOYD JR ALLEN D ; GIBBS PHILLIP M ; GIBBS PHILLIP MARTIN ; HERSHBERGER TROY ; HERSHBERGER TROY W ; BROWN DAVID R ; HOEPPNER JACY C ; KUMAR MUKESH ; LOMBARDI ADOLPH ; MAY BRIAN ; MAY BRIAN M ; MERIDEW JASON D ; PARROTT RUSSELL ; RONK ROBERT M ; SCHLUETER ELIZABETH ; WHITE JOHN R ; WOODELL MAY JENNIFER

Inventor(s): TROY W HERSHBERGER ; WHITE JOHN ; RONK ROBERT ; MERIDEW JASON D SYRACUSE ; MERIDEW JASON ; LOMBARDI ADOLPH NEW ALBANY ; JASON D MERIDEW ; GIBBS PHILLIP ; HERSHBERGER TROY W WINONA ; HERSHBERGER TROY WINONA LAKE ; HOEPPNER JACY ; BROWN DAVID ; BEREND KEITH NEW ALBANY

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; HASELTINE LAKE LLP; GILES ASHLEY SIMON; MAYS JULIE; SCHROEDER CHRISTOPH; MANITZ FINSTERWALD AND PARTNER GBR; SOGA MICHIHARU; HARNESS DICKEY AND PIERCE PLC; HARNESS DICKEY; SCHWEGMAN LUNDBERG AND WOESSNER PA; WARNER RICHARD W ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61B17/72 A61B17/86 A61C8/00 A61F2/00 A61F2/02 A61F2/28 A61F2/30 A61F2/32 A61F2/34 A61F2/36 A61F2/38 A61F2/46 A61L27/00 B22F3/11 B22F7/08 B23P11/02 B23P9/00 C22C1/04 (Advanced/Invention);
A61B17/86 A61F2/00 A61F2/02 A61F2/28 A61F2/32 A61F2/34 A61F2/36 A61F2/46 B22F3/11 B22F7/08 C22C1/04 (Advanced/Non–invention);
A61B17/68 A61C8/00 A61F2/00 A61F2/02 A61F2/28 A61F2/30 A61F2/32 A61F2/36 A61F2/38 A61F2/46 A61L27/00 B23P9/00 (Core/Invention);
A61B17/68 A61F2/00 A61F2/02 A61F2/28 A61F2/32 A61F2/36 B22F3/11 B22F7/06 C22C1/04 (Core/Non–invention)

International class (IPC 1–7): A61F2/32 A61F2/34 A61F2/46

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Forward Citations: WO16044739, WO15023247, WO14151602, WO14150920, WO14121994, WO14031535, WO14006519, WO13179002, WO13106323, WO13096440, WO13086172, WO12166888, WO12166888, WO12048008, WO11156512, WO11156512, WO11156509, WO11156509, WO11156506, WO11156506, WO11156504, WO11156504, WO11130169, WO11044330, WO11012892, WO11002781, WO10099247, WO10099247, WO09108788, WO09102712, WO08135868, WO08127658, WO08103408, WO08103408, WO08063500, WO06031911, WO06031911, WO06031911, USD684693, US9687261, US9681906, US9675400, US9675394, US9668868, US9668747, US9668745, US9662216, US9662158, US9662157, US9662128, US9662127, US9649194, US9649193, US9642661, US9636226, US9622783, US9615942, US9610164, US9603613, US9597201, US9579112, US9579107, US9572669, US9572590, US9561063, US9561040, US9554910, US9549823, US9545369, US9545317, US9539099, US9539096, US9539095, US9539013, US9532777, US9522010, US9517145, US9517093, US9510950, US9510883, US9510821, US9504577, US9498233, US9492280, US9492201, US9492158, US9486264, US9480580, US9480490, US9474539, US9468530, US9468466, US9468433, US9463093, US9456901, US9456833, US9452056, US9452053, US9452001, US9451973, US9445907, US9445904, US9445903, US9445827, US9439659, US9427320, US9421108, US9421051, US9414833, US9408699, US9408616, US9402621, US9398956, US9393118, US9393028, US9386993, US9381112, US9375323, US9375316, US9370426, US9364503, US9358119, US9351839, US9351743, US9345576, US9345548, US9339318, US9339278, US9326864, US9314287, US9301848, US9301812, US9295497, US9289253, US9283079, US9283017, US9278004, US9278003, US9271744, US9265614, US9254194, US9248023, US9241801, US9241745, US9237953, US9237950, US9220601, US9220599, US9216090, US9216045, US9204978, US9204977, US9204968, US9204967, US9198760, US9180010, US9174390, US9173740, US9173666, US9173661, US9168145, US9168143, US9161844, US9149362, US9138273, US9135374, US9119723, US9113971, US9101476, US9089430, US9084618, US9066734, US9066727, US9060788, US9051639, US9050150, US9044326, US9044321, US9039777, US9039743, US9034048, US9028502, US9023112, US9023046, US9017416, US9011547, US9005305, US9005302, US9005297, US8999001, US8998918, US8986348, US8979940, US8979936, US8979926, US8968415, US8961611, US8961528, US8961518, US8956364, US8951465, US8940055, US8936648, US8920477, US8915970, US8911789, US8906109, US8906022, US8903530, US8900321, US8900320, US8900303, US8900244, US8888861, US8876837, US8871142, US8864826, US8864769, US8858601, US8858561, US8845748, US8845747, US8840623, US8834575, US8828089, US8828087, US8828086, US8828009, US8821581, US8814978, US8808391, US8808390, US8795380, US8790350, US8784496, US8778026, US8764843, US8764760, US8734522, US8734487, US8734462, US8728168, US8727203, US8721727, US8715359, US8715289, US8700198, US8696754, US8679187, US8679181, US8679166, US8679130, US8668742, US8668700, US8641773, US8632600, US8632547, US8632489, US8632464, US8608749, US8608748, US8603180, US8597365, US8591518, US8591516, US8585769, US8579984, US8568487, US8562616, US8556985, US8556980, US8551181, US8551180, US8535387, US8535385, US8532807, US8529961, US8529960, US8529959, US8529958, US8529956, US8529569,

US8506645, US8506643, US8491597, US8486150, US8480751, US8480750, US8473305, US8470004, US8465549, US8465548, US8460393, US8444693, US8439921, US8425570, US8419774, US8419743, US8414648, US8409294, US8407067, US8398718, US8398646, US8388887, US8388667, US8383033, US8377066, US8372154, US8361380, US8361161, US8333807, US8328873, US8308811, US8308810, US8298237, US8293530, US8292967, US8287538, US8282646, US8277728, US8277514, US8268005, US8266780, US8257395, US8244368, US8241365, US8241293, US8236061, US8236003, US8231683, US8226728, US8221432, US8206451, US8202305, US8197550, US8192498, US8187336, US8187335, US8187280, US8187213, US8177849, US8177788, US8175683, US8163029, US8163028, US8157869, US8133234, US8128703, US8123816, US8123815, US8123814, US8118868, US8109942, US8105390, US8105389, US8105388, US8100984, US8092412, US8080064, US8075627, US8066778, US8066777, US8052756, US8048166, US8025841, US8021432, US8015024, US7993408, US7988736, US7985260, US7985259, US7959680, US7947220, US7947083, US7927335, US7922769, US7918896, US7918895, US7909883, US7892290, US7892287, US7892267, US7883661, US7862570, US7794504, US7794467, US7771486, US7766970, US7764985, US7722735, US7722678, US7713306, US7708783, US7691149, US7682399, US7670383, US7635447, US7604667, US7597715, US7572296, US7547307, US7477926, US7476254, US7383164, US7291177, US7237556, US7220264, US6944518, US6908486, US6840959, US2017027704, US2016256288, US2016235539, US2016151167, US2016045319, US2015250508, US2015216668, US2015073489, US2014358242, US2014277547, US2014277530, US2014257501, US2014180429, US2014172113, US2014107794, US2014100579, US2014088724, US2014067080, US2013337724, US2013331848, US2013325139, US2013245781, US2013218282, US2013178947, US2013158557, US2013144301, US2013091683, US2013079785, US2013073050, US2013053968, US2013013080, US2013013078, US2012303035, US2012283840, US2012215311, US2012191202, US2012191200, US2012179270, US2012150310, US2012109327, US2012078259, US2012053699, US2012053592, US2012016487, US2011251698, US2011224674, US2011218641, US2011218640, US2011218636, US2011218583, US2011218582, US2011218537, US2011213467, US2011208189, US2011196431, US2011184478, US2011184419, US2011153025, US2011153023, US2011144762, US2011144758, US2011144696, US2011137424, US2011130845, US2011126403, US2011125284, US2011125273, US2011123395, US2011123382, US2011118790, US2011118785, US2011112651, US2011106268, US2011093086, US2011089041, US2011087335, US2011085929, US2011066252, US2011054618, US2011040388, US2011029092, US2011015752, US2011015639, US2011009975, US2011009974, US2011009973, US2010331981, US2010306987, US2010292738, US2010241040, US2010234923, US2010179549, US2010145393, US2010137995, US2010131068, US2010087879, US2010076572, US2010063597, US2010057211, US2010049327, US2010047434, US2010010636, US2010003155, US2009326670, US2009326669, US2009319050, US2009306673, US2009292365, US2009287311, US2009265015, US2009265014, US2009240256, US2009216325, US2009210067, US2009209963, US2009209962, US2009204225, US2009204224, US2009163922, US2009112315, US2009099665, US2009088866, US2009088864, US2009084491, US2009082810, US2009048675, US2009005876, US2008319512, US2008306606, US2008262627, US2008233203, US2008200995, US2008154261, US2008111272, US2008071146, US2008046091, US2008027558, US2008021568, US2007270660, US2007265708, US2007250175, US2007243312, US2007239283, US2007239282, US2007179624, US2007129809, US2007122305, US2007118229, US2007106392, US2007106390, US2007088443, US2006264969, US2006226570, US2006190089, US2006161261, US2006129247, US2006116775, US2006074430, US2006074353, US2006069444, US2006069443, US2006058887, US2006058886, US2006015186, US2006004463, US2005288793, US2005197814, US2005148843, US2005102033, US2005065628, US2005021148, US2005004675, US2003212459, US2003175410, US2003171818, KR20120046172, KR101651857, KR101396378, JP6049754, JP6022611, JP5784611, JP2015504719, JP2015211849, JP2015091371, JP2014000415, JP2013505767, JP2012529950, JP2010515478, JP2010012254, GB2476319, GB2476319, GB2424187, FR2917288, FR2911062, EP3033050, EP3033050, EP2977028, EP2967876, EP2883519, EP2832320, EP2777624, EP2772229, EP2764848, EP2730253, EP2638881, EP2617392, EP2579821, EP2579821, EP2579816, EP2579816, EP2488122, EP2405826, EP2385810, EP2385810, EP2319460, EP2316382, EP2189135, EP2140835, EP2114310, EP2114310, EP2044906, EP2042129, EP2020211, EP1911419, EP1634551, EP1532946, DE102013108160, CN106175991, CN105559951, CN105559951, CN105105878, CN104840273, CN104825255, CN104321036, CN104093379, CN104042360, CN103906482, CN103750924, CN103237514, CN103237514, CN103096841, CN103037812, CN103037811, CN102488573, CN102470035, CN102421390, CN102058445, CN101947149, AU2014271270, AU2014221316, AU2013202075, AU2010261502, AU2010237754, AU2009202628, AU2008219247,

Abstract:
Source: US2002120342A An acetabular prosthesis for implantation in an acetabulum and surrounding pelvis is described. The acetabular prosthesis includes an acetabular cup having a substantially concave inner surface and a substantially convex outer surface, wherein an area defining a groove is located on the outer surface of the acetabular cup. An optional spacer member, having a raised ridge formed on a surface thereof, slidably engages the groove. The spacer provides augmentation and load bearing support in cases where bone tissue loss has occurred in and around the acetabulum. A fastener, such as a surgical screw, is used to secure the acetabular cup, and the optional spacer, to the acetabulum. At least one attachment member is integrally formed with the acetabular cup for fastening to a surface of the pelvis, such as the ilium and/or the ischium. Another optional spacer member is provided for the attachment member to provide augmentation around the attachment points on the pelvis. A fastener, such as a surgical screw, is used to secure the attachment member, and the other optional spacer, to the pelvis. The described acetabular prosthesis is especially useful in revision hip implant procedures where significant bone tissue loss has occurred either in or around the acetabulum and/or the pelvis.

0) DE10316798A1 – MONEY BAG FOR WAITING STAFF ETC. CONSISTS OF UP...

123) Family number: 23927696 (DE10316798A1) © PatBase

Title: Money bag for waiting staff etc. consists of upper pocket with rigid coin holder with channels for individual coins, and lower pocket for bank note wallet, with belt loops, for easier handling

Priority: AT20020000573 20020412

Family:

Publication number	Publication date	Application number	Application date
AT410393 B	20030425	AT20020000573	20020412
AT5732002 A5	20020915	AT20020000573	20020412
DE10316798 A1	20031120	DE20031016798	20030411

Probable Assignee: JOVANOVIC BOBAN

Assignee(s):(std)**:** JOVANOVIC BOBAN

Inventor(s):(std)**:** JOVANOVIC BOBAN

International class (IPC 8–9)**:** A45C1/08 A45C1/10 (Advanced/Invention); A45C13/18 A45C13/34 (Advanced/Non–invention)

International class (IPC 1–7)**:** A45C1/04 A45C1/08 A45C1/10

CPC: A45C1/04 A45C1/08 A45C1/10 A45C13/185 A45C13/34 A45C2001/108

European class: A45C1/08 A45C1/10 K45C1/04 K45C1/08 K45C1/10R6D K45C13/18P K45C13/34

Classification Explorer

Cited documents: EP0281848, DE3312036,

Abstract:
The money bag has two separate pockets (20,21), located above each other and connected by a back section, for separate storage of coins and notes. A rigid coin holder (10) is fastened inside one pocket, and a waiter's wallet for bank notes can be pushed into the other pocket. The money bag has pref. two loops (23a,b) for fastening to a belt. The coin pocket has a flap (24), which is held open by press studs (25,26) on flap and belt loops. The bank note wallet can be secured by a chain passing through slots in the pocket side wall (28). The coin holder has several channels for different coins.

0) US2003081401A – LIGHTED HANDLE

124) Family number: 28628627 (US2003081401A) © PatBase

Title: LIGHTED HANDLE

Priority: US20010999814 20011031 US20030613143 20030703

Family:

Publication number	Publication date	Application number	Application date
US2003081401 AA	20030501	US20010999814	20011031
US2004062047 AA	20040401	US20030613143	20030703
US6592240 BB	20030715	US20010999814	20011031
US7374319 BB	20080520	US20030613143	20030703

Probable Assignee: ITC INC

Assignee(s):(std)**:** CAMAROTA RICHARD J ; HARTMANN RICHARD ; ITC INC

Assignee(s): HUNTINGTON NATIONAL BANK

Inventor(s):(std)**:** CAMAROTA RICHARD J ; HARTMANN JR RICHARD ; HARTMANN RICHARD

Agent(s): MILLER CANFIELD PLC; OBRIEN JONATHAN P; MURPHY KELLY T; KELLY T; JONATHAN P

International class (IPC 8–9): A47K3/00 B60Q1/26 E04F11/18 F21S4/00 F21V21/08 F21V8/00 (Advanced/Invention); A47K3/00 B60Q1/26 E04F11/18 F21S4/00 F21V21/08 F21V8/00 (Core/Invention)

International class (IPC 1–7): F21V21/08 F21V8/00

CPC: Y10T16/44 F21S4/28 B60Q1/2669 A47K3/003 E04F2011/1872 E05B1/0015 E05B17/10 F21W2111/08 G02B6/0006 G02B6/001 E04F11/1804 B60Q3/267 B60Q3/64 F21Y2115/10

European class: A47K3/00B2 B60Q1/26J B60Q1/26J4 B60Q3/00L1 B60Q3/02B14 E04F11/18A1 E05B17/10 F21S4/00C F21S4/00L6 G02B6/00L4C G02B6/00L4L P04F11/18T2 P05B1/00B R21W111/08 R21Y101/02

US class: 16/110.1 362/23.15 362/249.12 362/249.120S 362/251 362/26 362/26P 362/27 362/27S 362/29 362/29S 362/3 362/30 362/30S 362/31 362/337 362/337S 362/399 362/399P 362/551 362/551S 362/577 362/577S 362/602 362/602S

Classification Explorer

Cited documents: US6553629 BB, US6511214 BA, US6488397 BA, US6478442 BB, US6375343 BA, US6267492 BA, US6139174 A, US6135621 A, US6065852 A, US6058230 A, US5957566 A, US5692822 A, US5396740 A, US5339228 A, US5297010 A, US4924357 A, US4274131 A, US4231077 A, US2479500 A, US2242981 A, US1203576 A,

Forward Citations: WO05108861, WO05106322, USD631630, USD559653, US9534765, US9533615, US9421917, US9368004, US9200771, US8908359, US8789216, US8690402, US8599035, US8407823, US7866860, US7566157, US7542300, US7448779, US7400232, US7397218, US7350607, US7293903, US7213853, US7201415, US7018081, US6932492, US6793382, US6688636, US2016229669, US2016150881, US2015251590, US2015109767, US2014226318, US2014104070, US2014092530, US2013155708, US2013114296, US2013021777, US2012194350, US2011289731, US2010020558, US2008105805, US2008018437, US2007283864, US2007245480, US2007204437, US2007180869, US2007047245, US2007041174, US2007025119, US2006291189, US2006125263, US2006125262, US2006109676, US2006055371, US2006032687, US2005219854, US2005120519, US2005013133, US2004257822, US2004252499, US2003234515, US2003081423, JP2007308040, GB2447657, GB2420844, FR2950022, FR2857083, EP2505431, EP1865115, EP1808095, EP1522459, DE102006001614, AU2014200718,

Abstract:
Source: US2003081401A A lighted handle includes an elongate light transmitting member that has first and second end portions. First and second support surface engageable mounting brackets carry the first and second end portions of the light transmitting member. A narrow beam light emitter is located in the first mounting bracket and has a light beam emitting end. The light beam emitting end faces the adjacent first end portion of the light transmitting member and is aimed longitudinally along the light transmitting member to make the same more visible.

0) EP1319328A1 – CULTIVATOR WITH FORM–FITTING TINES BODENBEARBE...

125) Family number: 28579695 (EP1319328A1) © PatBase

Title: CULTIVATOR WITH FORM–FITTING TINES

Priority: DE20011061595 20011214 DE20025008400 20021128

Family:

Publication number	Publication date	Application number	Application date
AT341930 E	20061115	AT20020026554T	20021128
DE10161595 A1	20030710	DE20011061595	20011214
DE50208400 D1	20061123	DE20025008400	20021128
EP1319328 A1	20030618	EP20020026554	20021128
EP1319328 B1	20061011	EP20020026554	20021128

Probable Assignee: LEMKEN GMBH AND CO KG

Assignee(s):(std)**:** LEMKEN GMBH AND CO KG

Inventor(s):(std)**:** GEBBEKEN MARTIN ; HOENNEKES ERNST ; MEURS WILHELM ; SIEBERS JOSEF ; TERBOVEN JOHANNES

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

International class (IPC 8–9)**:** A01B33/14 (Advanced/Invention); A01B33/00 (Core/Invention)

International class (IPC 1–7)**:** A01B33/14

CPC: A01B33/146

European class: A01B33/14V

Classification Explorer

Cited documents: US4044840 A, GB2128461 A1, FR2405630 A1, EP1208729 A1, EP1082889 A1, DE8325853 U,

Forward Citations: EP1671526, DE102004060558,

Abstract:
The power harrow has rotors (7) with sockets (18), into which the tops (13) of tines (12) fit. These have grooves (40) which fit over ribs (41) on the tops of the sockets and are held in place by transverse wedges (21)

0) US2003159507A – HERMETIC FUEL LEVEL SENDER

126) Family number: 31797432 (US2003159507A) © PatBase

Title: HERMETIC FUEL LEVEL SENDER

Priority: US20020360337P 20020226 US20020370058P 20020404 US20020425770P 20021113 US20030704027 20031107 US20120667059 20121102 US20050052155 20050207 US20030373955 20030226

Family:

Publication number	Publication date	Application number	Application date
US2003159507 AA	20030828	US20030373955	20030226
US2005072229 AA	20050407	US20030704027	20031107
US2005139003 AA	20050630	US20050052155	20050207
US2013055807 AA	20130307	US20120667059	20121102
US6851315 BB	20050208	US20030373955	20030226
US6990862 BB	20060131	US20030704027	20031107

Probable Assignee: BERGSMA RUDOLPH TRUST ETC

Assignee(s):(std)**:** COCHRAN GARY D ; GARY D COCHRAN ; RUDOLPH BERGSMA TRUST ; BERGSMA ROSEMARY ; BERGSMA RUDOLPH

Assignee(s): BERGSMA RUDOLPH TRUST ETC ; RUDOLPH BERGSMA TRUST 2145 GREE NV ; RUDOLPH BERGSMA TRUST C O ROSEMARY BERGSMA

Inventor(s):(std)**:** BERGSMA LEGAL REPRESENTATIVE R ; BERGSMA ROSEMARY ; BERGSMA RUDOLPH ; COCHRAN GARY D

Inventor(s): LEGAL REPRESENTATIVE ROSEMARY ; BERGSMA ; COCHRAN GARY ; BERGSMA LEGAL REPRESENTATIVE ROSEMARY

Agent(s): GEORGE LAWRENCE BOLLER; GEORGE L

International class (IPC 8–9): G01F23/32 G01F23/36 (Advanced/Invention); G01F23/30 (Core/Invention)

International class (IPC 1–7): G01F23/32 G01F23/36 G01F23/38 G01F25/00

CPC: G01F23/363

European class: G01F23/36A

US class: 340/623 73/1.73 73/173 73/290R 73/305 73/313 73/313P 73/317 73/317S 73/DIG.005 73/DIG.5 73/DIG.5S

Classification Explorer

Cited documents: US6803759 BB, US6658934 BA, US6588288 BA, US6571978 BA, US6564632 BB, US6508121 BB, US6488015 BB, US6453741 BA, US6401533 BA, US6298540 BA, US6260543 BA, US6230690 BA, US6209392 BA, US6089086 A, US6070337 A, US6041650 A, US6014958 A, US5814830 A, US5798640 A, US5746088 A, US5666851 A, US5442865 A, US5431047 A, US5375467 A, US5357815 A, US5341679 A, US5301550 A, US5284055 A, US5150615 A, US5085078 A, US4987400 A, US4939932 A, US4924704 A, US4920797 A, US4679580 A, US4627283 A, US4557144 A, US4532491 A, US4229973 A, US3925747 A, US3739641 A, US3731805 A, US3449955 A, US2974313 A, US2870284 A, US2726296 A, US2001035215 AA,

Forward Citations: WO14133383, US9504370, US9488515, US9435680, US8695421, US8368835, US8291946, US8171787, US7721602, US7640800, US7584658, US7555946, US7549333, US7541712, US7530269, US7437929, US7140247, US2016231160, US2016223385, US2016223384, US2014251006, US2012251341, US2012234107, US2012060974, US2011075064, US2009266157, US2009158843, US2009000376, US2007256754, US2007214882, US2007107503, US2007074568, US2007006648, US2006288778, US2006277986, US2006236985, US2006219003, US2006042379, US2004182151, EP1637849, DE102004043717, DE102004043717,

Abstract:
Source: US2003159507A An in−tank fuel level sender (26) for signaling the level of liquid fuel in a motor vehicle fuel tank (22). An enclosure (31) forming a hub of the sender provides an interior that is sealed against intrusion of

fuel. An actuator (110, 122) is positionable on an exterior of the enclosure in correlation with liquid fuel level. A movement (52) within the interior of the enclosure follows the positioning of the actuator. An electric circuit element (62; 86) within the interior of the enclosure is operated by the movement to provide an electric characteristic for transmission through the enclosure to signal the liquid fuel level.

0) US2003236031A – HIGH SPEED, HIGH DENSITY INTERCONNECTION DEVICE...

127) Family number: 30122920 (US2003236031A) © PatBase

Title: HIGH SPEED, HIGH DENSITY INTERCONNECTION DEVICE

Priority: EP20030761284 20030624 US20020178957 20020624 US20040786248 20040225 US20040820296 20040408 WO2003US19830 20030624 US20060397334 20060404

Family:

Publication number	Publication date	Application number	Application date
AT550811 E	20120415	AT20030761284T	20030624
AU2003249355 AA	20040106	AU20030249355	20030624
CA2490096 AA	20031231	CA20032490096	20030624
CA2490096 C	20110816	CA20032490096	20030624
DE60340354 D1	20120516	DE20036040354	20030624
EP1540779 A1	20050615	EP20030761284	20030624
EP1540779 A4	20100106	EP20030761284	20030624
EP1540779 B1	20120321	EP20030761284	20030624
HK1078172 A1	20121109	HK20050111562	20051215
HK1078172 A3	20060303	HK20050111562	20051215
JP2005531122 T2	20051013	JP20040516178T	20030624
JP4434947 B2	20100317	JP20040516178T	20030624
US2003236031 AA	20031225	US20020178957	20020624
US2004166704 AA	20040826	US20040786248	20040225
US2004192089 AA	20040930	US20040820296	20040408
US2006240688 AA	20061026	US20060397334	20060404
US6743049 BB	20040601	US20020178957	20020624
US6899550 BB	20050531	US20040786248	20040225
US7021945 BB	20060404	US20040820296	20040408
US8109770 BB	20120207	US20060397334	20060404
WO04001912 A1	20031231	WO2003US19830	20030624

Probable Assignee: ADVANCED INTERCONNECTIONS CORP

Assignee(s):(std)**:** ADVANCED INTERCONNECTIONS CORP ; PERUGINI MICHAEL N ; EASTMAN GARY D ; LANGON ALFRED J ; PREW RAYMOND A ; SAYDAM EROL D ; PERUGINI MICHAEL ; ADVANCED INTERCONNECTION CORP ; ADVANCED INTERCONNECTIONS

Assignee(s): ADVANCED INTERCONNECTIONS A RHODE ISLA CORP ; ADVANCED INTERCONNECTIONS A RHODE ISLAND CORP ; ADVANCED INTERCONNECTIONS WEST WARWICK CORP

Inventor(s):(std)**:** ALFRED J LANGON ; EASTMAN GARY ; EASTMAN GARY D ; EROL D SAYDAM ; GARY D EASTMAN ; LANGDON ALFRED J ; LANGON ALFRED ; LANGON ALFRED J ; PERUGINI MICHAEL N ; PREW RAYMOND ; PREW RAYMOND A ; RAYMOND A PREW ; SAYDAM EROL ; SAYDAM EROL D ; MICHAEL PERUGINI ; PERUGINI MICHAEL

Inventor(s): PERUGINI MICHAEL MONROE ; SAYDAM EROL D FOSTER ; PREW RAYMOND A FOSTER ; LANGON ALFRED J CRANSTON ; EASTMAN GARY D NORTH KINGSTOWN

Agent(s): SMART AND BIGGAR; MARKS AND CLERK LUXEMBOURG LLP; MARTIN PHILIP JOHN; SHIMIZU HATSUSHI; FISH AND RICHARDSON PC; OCCHIUTI ROHLICEK AND TSAO LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): H01R12/00 H01R12/71 H01R13/6461 H01R13/648 H01R13/658 H05K9/00 (Advanced/Invention); H01R (Subclass/Invention)

International class (IPC 1–7): H01R12/00 H01R13/648 H05K9/00

CPC: H01R13/6471 H01R12/52 H01R13/187 H01R13/405 H01R13/514 H01R13/6477 H01R13/6591 H01R13/6598 H01R12/716

European class: H01R13/187 H01R13/405 H01R13/514 H01R13/646 H01R13/658E H01R23/00B H01R23/68D2 H01R23/72K T01R23/68D2 T01R9/09F

US class: 174/255 439/607 439/607.05 439/607.050P 439/607.12 439/608 439/609 439/610 439/74 439/74P 439/92 439/92P 439/95

Classification Explorer

Cited documents: WO9811633 A1, WO9736349 A1, WO9214281 A1, WO04001907 A1, WO0227598 A1, WO0176015 A1, WO0031832 A1, WO0031832, WO00031832, US6981883 BB, US6843657 BB, US6776629 BB, US6776629 BA, US6776629 B1, US6747216 BB, US6739885 BB, US6739885 BA, US6739885 B1, US6699048 BB, US6635958 BB, US6635958 BA, US6635958 B1, US6628524 BA, US6554647 BA, US6533613 BA, US6506076 BB, US6482038 BB, US6371773 BA, US6350134 BA, US6325644 BA, US6293827 BA, US6290535 BA, US6281715 BA, US6234827 BA, US6213787 BA, US6206729 BA, US6011691 A, US5997361 A, US5993259 A, US5969944 A, US5795191 A, US5748449 A, US5702255 A, US5672064 A, US5607326 A, US5588851 A, US5409400 A, US5403206 A, US5360349 A, US5344341 A, US5331505 A, US5310354 A, US5292256 A, US5282268 A, US5256086 A, US5135405 A, US5133679 A, US5055069 A, US4974075 A, US4938704 A, US4909743 A, US4898546 A, US4808126 A, US4789357 A, US4718866 A, US4449788 A, US4449778 A, US4433886 A, US4239318 A, US3904265 A, US2004084207 AA, US2003022555 AA, US2002125967 AA, US2002119701 AA, US2001046810 AA, US2001040050 AA, JPS6288383, JP9283247 A2, JP9283247, JP6506315 T2, JP6506315, JP6288383 U, JP62088383 U, JP62088383 A2, JP5283126 A2, JP5283126, JP5275139 A2, JP5275139, JP3156870, JP2002513502 T2, JP2002513502, JP2002313498 A2, JP2002313498, JP2002270303 A2, JP2002270303, JP2000507383, JP2000050783 A2, JP10162909 A2, JP10162909, JP09283247, JP06506315, JP05283126, JP05275139, JP03156870,

Forward Citations: WO15171584, WO09043508, WO06105535, WO06105508, WO06105485, WO06105484, USD790471, USD772168, USD766832, USD751507, USD750030, USD750025, USD748063, USD746236, USD745852, USD733662, USD727852, USD727268, USD720698, USD718253, US9543703, US9461410, US9362692, US9257778, US9048583, US8975735, US8944831, US8905651, US8696381, US8668522, US8597047, US8262411, US8167630, US8123531, US8113851, US8109767, US8075320, US8070514, US7918683, US7896698, US7867032, US7740489, US7736183, US7671273, US7637777, US7621779, US7553190, US7553170, US7484964, US7476110, US7448016, US7361022, US7322856, US7320621, US7262974, US7145083, US7145083, US7077658, US6918776, US2015041859, US2015009641, US2013122743, US2013052877, US2012276776, US2012106052, US2011177700, US2011151716, US2011021077, US2010303415, US2010093195, US2010093194, US2010093193, US2010093189, US2009091401, US2008305656, US2008146053, US2008009148, US2007298625, US2007097658, US2007021004, US2007021003, US2007021002, US2007021001, US2006294489, US2006148280, US2006135003, US2006051989, US2006011384, US2005020103, KR101578791, JP4174437, JP2005251552, EP2922154, EP2871725, EP2544315, EP2544315, EP2518835, EP2293393, EP1758209, DE102007045903, CN104183959, CN102761005,

Abstract:
Source: US2003236031A An intercoupling component for receiving an array of contacts within a digital or analog transmission system having an electrical ground circuit and chassis ground circuit, the intercoupling component including a segment formed of electrically insulative material and having an upper and lower surface, the segment including a plurality of holes disposed on its upper surface and arranged in a predetermined footprint and one or more a shield members formed of electrically conductive material disposed within the segment and configured to connect to the chassis ground circuit of the system. The intercoupling component may include an array of electrically conductive contacts within the plurality of holes disposed on the segment. One or more of these contacts may be configured to electrically connect with the electrical ground circuit of the system. The intercoupling component may also include a cavity located between signal contacts to adjust the differential impedance between signal contacts.

0) US2004035967A – GYRATORY CRUSHER WITH HYDROSTATIC BEARINGS

128) Family number: 30315428 (US2004035967A) © PatBase

Title: GYRATORY CRUSHER WITH HYDROSTATIC BEARINGS

Priority: CA20032417892 20030130 US20020225778 20020823

Family:

Publication number	Publication date	Application number	Application date
CA2417892 AA	20040223	CA20032417892	20030130
US2004035967 AA	20040226	US20020225778	20020823
US7048214 BB	20060523	US20020225778	20020823

Probable Assignee: NAWA ENGINEERS AND CONSULTANTS P LTD

Assignee(s):(std): JOHNSON BRUCE G ; JOHNSON BRUCE GORDON ; JOHNSON LOUIS WEIN

Assignee(s): NAWA ENGINEERS AND CONSULTANTS LTD ; NAWA ENGINEERS AND CONSULTANTS (P) LTD ; NAWA ENGINEERS AND CONSULTANTS P LTD ; DURABLE CRUSHERS INC ; JOHNSON ANNE I ; JOHNSON ANNE I MS

Inventor(s):(std): JOHNSON BRUCE GORDON ; JOHNSON LOUIS WEIN

Agent(s): BORDEN LADNER GERVAIS LLP

International class (IPC 8–9): B02C2/00 B02C2/04 (Advanced/Invention); B02C2/00 (Core/Invention)

International class (IPC 1–7): B02C2/00

CPC: B02C2/00 B02C2/005 B02C2/04

European class: B02C2/00 B02C2/00B B02C2/04

US class: 241/207 241/216 241/286 241/290 241/65

Classification Explorer

Cited documents: US4571112 A, US4454994 A, US4351490 A, US4192472 A, US3759453 A, US3337143 A, US3207449 A, US3118623 A,

Forward Citations: WO14170120, WO13052792, WO13052754, WO11133261, WO11044313, WO10053747, WO10053747, WO09126085, US9605711, US9527086, US9486804, US9433945, US9388855, US9157469, US9074713, US8832921, US8800904, US8444075, US8328125, US8282030, US8215576, US8011884, US7891595, US7566018, US7549315, US2015003760, US2014239102, US2014103154, US2014008475, US2013327865, US2013152372, US2012006923, US2011259984, US2011084156, US2010282886, US2010193621, US2010108193, US2009084168, US2006117972, US2005269436, RU2471559, EP2792411, CN105263632, CN104588161, CN104588154, CN103998800, CN103998800, CN103945943, CN103648651, CN101905181, AU2010200018, AU2009311492,

Abstract:
Source: US2004035967A A rock crusher of the gyratory cone type having a mainframe structured to be exceptionally strong yet lighter and less costly to manufacture. A tapered spindle bolted to mainframe, is drilled with multiple oil holes, is hollow for circulating heating/cooling fluid, and supports an adjustable thrust bearing. An eccentric member journals on spindle; eccentric has outer taper offset and canted relative to inner taper, and each taper has concentric cylinderical extensions; A gyrating conical member journals on eccentric. Said thrust bearing having spherical surfaces supports conical member on said spindle. A double reduction gear train transfers power to eccentric. Flow dividers direct lubricant to specific multiple ports for hydrostatic lubrication to conical and thrust bearings. Counterbalancing means. A detachable top frame positioned on top of mainframe is restrained against radial and circular movement. Pivoting hooks and hydraulic cylinders tilt outward facilitating rapid servicing. Gas accumulators with hooks and cylinders restrain top frame against crushing forces, yield to non–crushable objects. Detachable top frame has internal thread engaging an external thread of a rotatable member that when rotated adjusts for product sizes and replacement of wear parts; a means to lubricate said threads. Power means to unlock, rotate, and lock said rotatable member. A wear resistant mantle is clamped to gyrating conical member by hydraulic means. A wear resistant liner is held in rotatable member by slidable wedges.

129) Family number: 30497585 (WO04033054A1) © PatBase

Title: PUTTING PRACTICE DEVICE

Priority: DE20021046876 20021008 DE20021047286 20021010 WO2003DE03356 20031008

Family:

Publication number	Publication date	Application number	Application date
AU2003281932 AA	20040504	AU20030281932	20031008
DE10247286 A1	20040422	DE20021047286	20021010
DE10247286 B4	20050630	DE20021047286	20021010
WO04033054 A1	20040422	WO2003DE03356	20031008

Probable Assignee: IMPACT GOLF GMBH

Assignee(s):(std)**:** IMPACT GOLF GMBH ; MELCHERS WERNER ; OCHSENFARTH MANFRED ; SCHUMACHER JOCHEM M ; THOMPSON BRADLEY

Inventor(s):(std)**:** WERNER MELCHERS ; MANFRED OCHSENFARTH ; JOCHEM M SCHUMACHER ; BRADLEY THOMPSON ; THOMPSON BRADLEY ; SCHUMACHER JOCHEM M ; OCHSENFARTH MANFRED ; MELCHERS WERNER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A63B69/36 (Advanced/Invention); A63B69/36 (Core/Invention)

International class (IPC 1–7): A63B69/36

CPC: A63B2071/0694 A63B69/3676 A63B2225/12

European class: A63B69/36P

Classification Explorer

Cited documents: US5628694 A, US5431403 A, US5409231 A, US5294124 A, US4805912 A, US4344624 A, US2858133 A, DE19608875 C1,

Forward Citations: EP2983800,

Abstract:
Disclosed is a golf practice device (1) comprising a narrow flat metal sheet (2) that is continuously embodied in a flat and stiff manner and has a length which corresponds to the average putting distance on the green, i.e. on the golf course. Markings or a pocket–type borehole (7) is/are disposed on the upper face of the flat metal sheet (2) while sheet metal sections (19, 19', 19) that are arranged on the bottom face and are distinguished by means of different colors indicate to the practicing golfer how far back he has to swing, where he has to aim, and how far he has to swing through the ball. The practicing golfer thus has available a practice device (1) which he can use on the golf course, at home, and at the office and which helps him to use significantly fewer putts to complete a course once he has had enough practice.

130) Family number: 31381137 (US2008258035A) © PatBase

Title: PLASTIC CONTAINER PROVIDED WITH AT LEAST ONE SUCTION CUP

Priority: DE20032007669U 20030516 WO2004DE001030 20040517

Family:

Publication number	Publication date	Application number	Application date
AT477190 E	20100815	AT20040733304T	20040517
DE112004001377 D2	20060406	DE200411001377	20040517
DE20307669 U1	20040923	DE20032007669U	20030516
DE502004011524 D1	20100923	DE200450011524T	20040517
EP1663795 A1	20060607	EP20040733304	20040517
EP1663795 B1	20100811	EP20040733304	20040517
ES2350205 T3	20110120	ES20040733304T	20040517
US2008258035 AA	20081023	US20040556632	20040517
US7857158 BB	20101228	US20040556632	20040517
WO04103838 A1	20041202	WO2004DE01030	20040517

Probable Assignee: IMV INNOVATION MARKETING U VERTRIEBS GMBH

Assignee(s):(std): IMV INNOVATION MARKETING UND V ; IMV INNOVATION MARKETING UND VERTRIEBS GMBH ; WICHELHAUS ANDRE

Assignee(s): W EAST LTD ; IMV INNOVATION MARKETING U ; IMV INNOVATION MARKETING U VERTRIEBS GMBH

Inventor(s):(std): WICHELHAUS ANDRE

Agent(s): VIERING JENTSCHURA AND PARTNER; ALEXANDER R SCHLEE VIERING JENTSCHURA AND PARTNERS; SCHLEE IP INT PC; ALEXANDER R

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A47G29/00 B65D23/00 B65D25/24 (Advanced/Invention); A47G29/00 B65D23/00 (Core/Invention)

International class (IPC 1–7): A47K5/12 B65D23/00 B65D25/22

CPC: B65D23/003 B65D2313/06

European class: B65D23/00D L65D313/06

US class: 220/483 248/683 248/683P

Classification Explorer

Cited documents: US6808090 BB, US4793517 A, US4166553 A, US1696483 A, GB2318777 A1, DE9113970 U, DE9113970, DE9001543 U, DE3711858 A1, DE20119528 U1, DE20107912 U1, DE20107912 U, DE20100052 U1, DE19826371 A1, DE1835736 U, DE10051539 A1,

Forward Citations: USD684406, USD660181, US8347792, US2012067911, US2011266238, US2010065527, GB2447713,

Abstract:
Source: US2008258035A The invention relates to a plastic container provided with at least one suction cup. Said container comprises a holding recess (15) arranged in a container wall (12) for the holding projection (16) of the suction cup, and also comprises a flat receiving trough (18) arranged around the holding recess. The suction cup can be elastically flattened with the suction cover thereof (19) in the receiving trough such that the suction cup is arranged in an essentially expanded manner in the receiving trough and establishes a flush seal with the external contour (34) of the container wall (12).

0) WO05012685A1 – DRILLING METHOD PROCEDE DE FORAGE

131) Family number: 29060722 (WO05012685A1) © PatBase

Title: DRILLING METHOD

Priority: GB20030017846 20030731

Family:

Publication number	Publication date	Application number	Application date
GB200317846 A0	20030903	GB20030017846	20030731
WO05012685 A1	20050210	WO2004GB03293	20040730

Probable Assignee: MARIS INTERNAT LTD

Assignee(s):(std)**:** JENNER JAMES WILLIAM ; MARIS INT LTD ; MARIS INTERNAT LTD ; NEFFGEN JAMES MICHAEL

Assignee(s): MARIS INTERNATIONAL LIMITED

Inventor(s):(std)**:** JENNER JAMES WILLIAM ; NEFFGEN JAMES MICHAEL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): E21B19/16 E21B21/08 E21B21/10 (Advanced/Invention); E21B19/00 E21B21/00 (Core/Invention)

International class (IPC 1–7): E21B19/16 E21B21/08 E21B21/10

CPC: E21B19/16 E21B21/08 E21B21/10

European class: E21B19/16 E21B21/08 E21B21/10

Classification Explorer

Cited documents: WO9816716 A1, WO03060287 A1, WO03004827 A1, WO0079092 A2, WO0023686 A1, WO0022278 A1, US6412554 BA, US6315051 BA, US2002157838 AA, US2002147838, US2002134555 AA,

Forward Citations: WO12176182, WO06138565, WO06079662, US9637995, US7806203, GB2441927, GB2441927,

Abstract:
A method and apparatus which can be used to re–enter old or declining production wells through the completion tubing with a drill string, e.g. to workover, clean out and stimulate the well to increase production or to drill one or more side tracks or extensions from below the tubing to access isolated pockets of hydrocarbons and which enables circulation to be continuous whilst adding tubulars.

132) Family number: 31767603 (US2005112634A) © PatBase

Title: HIGH DENSITY SEQUENCE DETECTION METHODS AND APPARATUS

Priority:

CA20032441481	20030918	CA20032441481	20030918	EP20050783340	20050804
US20030504042P	20030919	US20030504500P	20030919	US20030504052P	20030919
US20040589224P	20040719	US20040589225P	20040719	EP20060739280	20060321
US20040944669	20040917	US20040944670	20040917	US20040944672	20040917
US20040589244P	20040719	US20040944690	20040917	US20040944671	20040917
US20040944691	20040917	US20040944686	20040917	US20040944673	20040917
US20040913601	20040805	US20040601716P	20040813	US20040944668	20040917
US20050086271	20050322	US20050086272	20050322	US20050086273	20050322
US20050086260	20050322	US20050087103	20050322	US20050086259	20050322
US20050086799	20050322	US20040944696	20040917	US20050086275	20050322
US20050086800	20050322	US20050086800	20050322	US20050086253	20050322
US20050087077	20050322	US20050086683	20050322	US20050086261	20050322
US20040944697	20040917	US20050087088	20050322	US20050087086	20050322
US20050086263	20050322	US20050086276	20050322	US20050086264	20050322
US20050086262	20050322	US20050087101	20050322	US20050086274	20050322
US20050096282	20050331	US20050184595	20050719	WO2004US30489	20040917
US20060393059	20060330	US20060393061	20060330	US20060393083	20060330
US20060393060	20060330	US20070803403	20070514	US20070766119	20070621
US20080176656	20080721	US20080220763	20080728	US20090407234	20090319
US20090419015	20090406	US20090417536	20090402	US20050087104	20050322
US20090406309	20090318	US20090413396	20090327	US20090558428	20090911
US20090553782	20090903	US20090431685	20090428	US20090497398	20090702
US20090534802	20090803	US20090628115	20091130	US20060393047	20060330
US20090543459	20090818	US20090626507	20091125	US20070828572	20070726
US20050087105	20050322	US20100775391	20100506	US20100859143	20100818
US20110049686	20110316	US20110252058	20111003	US20050664314P	20050322
US20060385959	20060321	US20120420998	20120315	US20120593945	20120824
US20120623856	20120920	US20130743217	20130116	US20130931643	20130628
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Family:

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Probable Assignee: APPLIED BIOSYSTEMS LLC

Assignee(s):(std)**:** STUDIOSTAMPA INC ; STAMP ARLENE ; REEVE VINCENT ; LU MIKE ; SANDELL DON ; PATEL JAYNISH ; WOUDENBERG TIMOTHY ; OLDHAM MARK ; LIM GARY ; LIVAK KENNETH ; LIU TIMOTHY ; REED MARK T ; SHANNON MARK ; OLDHAM MARK F ; RUFF DAVID ; LU MIKE Y ; SANDELL DONALD ; MACK JEROME A ; NGUYEN HOANG ; REEVE VINCENT M ; YAN TONY S ; WOUDENBERG TIM ; OSTADAN OMEAD ; PRATT MARK R ; STEVENS JUNKO F ; TOMANEY AUSTIN B ; YOUNG GREG ; TOMANEY AUSTIN ; STEVENS JUNCO F ; ULDHAM MARK ; WOUDENBERG TIMOTHY M ; LIVAK KENNETH J ; SHANNON MARK E ; RUFF DAVID W ; BLASENHEIM BARRY ; LI ROBIN ; CARRILLO ALBERT ; HARDING IAN ; KAO H PIN ; ERMAKOV SERGEY ; FAWCETT ADRIAN ; JONES BOB ; JONES ROBERT C ; CARRILLO ALBERT L ; HARDING IAN A ; LEHTO DENNIS A ; FOCARACCI JULIO P ; GUERRA ROBERT ; KAO H P ; HAYASHIBARA KATHLEEN C ; KARGER ACHIM ; LAIRD HYLAND FIONA C ; GUNSTREAM STEPHEN J ; KINNEY PATRICK D ; K LAU ALDRICH N ; AMIN YUSUF ; ANGELICA STEVE ; APLERA CORP ; APPLERA CORP ; APPLIED BIOSYSTEM LLC ; APPLIED BIOSYSTEMS ; BODNER KEVIN ; BODEAU JOHN ; BAHATT DAR ; BLASENHEIM BARRY J ; BODEAU JOHN P ; BEARD NIGEL P ; APPLIED BIOSYSTEMS LLC ; LIFE TECHNOLOGIES CORP

Assignee(s): LIFE TECHNOLOGIES CARLSBAD CORP ; BANK OF AMERICA NA AS COLLATERAL AGENT ; BANK OF AMERICA NA COLLATERAL AGENT AS ; APPLIED BIOSYSTEMS INC ; KAO H ; LIFE TECHNOLOGIES CORP CARLSBAD

Inventor(s):(std)**:** BEARD NIGEL P ; BLASENHEIM BARRY ; BLASENHEIM BARRY J ; BODEAU JOHN ; BODEAU JOHN P ; BODNER KEVIN ; CARRILLO ALBERT ; CARRILLO ALBERT L ; AMIN YUSUF ; ANGELICA STEVE ; BAHATT DAR ; ERMAKOV SERGEY ; FAWCETT ADRIAN ; GUNSTREAM STEPHEN J ; HARDING IAN ; HARDING IAN A ; FOCARACCI JULIO P ; GUERRA ROBERT ; HAYASHIBARA KATHLEEN C ; JONES BOB ; JONES ROBERT C ; K LAU ALDRICH N ; KAO H P ; KAO H PIN ; KARGER ACHIM ; LEHTO DENNIS A ; LI ROBIN ; LIM GARY ; LIU TIMOTHY ; LIVAK KENNETH ; LIVAK KENNETH J ; LU MIKE ; LU MIKE Y ; KINNEY PATRICK D ; LAIRD HYLAND FIONA C ; MACK JEROME A ; NGUYEN HOANG ; OLDHAM MARK ; OLDHAM MARK F ; REED MARK T ; REEVE VINCENT ; REEVE VINCENT M ; RUFF DAVID ; RUFF DAVID W ; SANDELL DON ; SANDELL DONALD ; SANDELL DONALD R ; SHANNON MARK ; SHANNON MARK E ; STAMP ARLENE ; STEVENS JUNCO F ; JONES JONES C ; ERMAKOV SERGEY V ; CAMILLO ALBERT L ; PRATT MARK R ; STEVENS JUNKO F ; TOMANEY AUSTIN ; TOMANEY AUSTIN B ; WOUDENBERG TIM ; WOUDENBERG TIMOTHY ; WOUDENBERG TIMOTHY M ; OSTADAN OMEAD ; PATEL JAYNISH ; YAN TONY S ; YOUNG GREG

Inventor(s): PRATT MARK ; YAN TONY ; TOMANEY AUSTIN SAN FRANCISCO ; REED MARK ; STEVENS JUNKO ; OLDHAM MARK F LOS GATOS ; OLDHAM MARK LOS GATOS ; LEHTO DENNIS ; LAIRD HYLAND FIONA ; LU MIKE Y SAN JOSE ; MACK JEROME ; KINNEY PATRICK ; KAO H ; K LAU ALDRICH ; JONES ROBERT ; GUNSTREAM

STEPHEN ; HARDING IAN A SAN MATEO ; HAYASHIBARA KATHLEEN ; FAWCETT ADRIAN PLEASANTON ; FOCARACCI JULIO ; BEARD NIGEL ; CARRILLO ALBERT L REDWOOD CITY

Agent(s): WEBER BIRGIT DIPL BIOL DR RER NAT; WOEHLER CHRISTIAN; CRAMPHORN CONRAD ET AL; HARNESS DICKEY AND PIERCE PLC; STEVE ANGELICA; MILA KASAN PATENT DEPT APPLIED BIOSYSTEMS; KILYK AND BOWERSOX PLLC; INVITROGEN C O INTELLEVATE CORP; LIFE TECHNOLOGIES C O INTELLEVATE CORP; JEFFREY L; JONES ROBB PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

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Abstract:
Source: US2005112634A Methods for amplifying polynucleotides, e.g., by PCR, in a sample comprising polynucleotide targets present at very low concentration, comprising: (a) applying amplification reactants to the surface of a substrate comprising reaction spots, wherein the reactants comprise the sample and an amplification reagent; (b) forming a sealed reaction chamber, having a volume less than about 120 nanoliters, preferably less than about 20 nanoliters, over each of said reaction spots; and (c) thermal cycling the substrate and reactants. In one embodiment, the forming step comprises loading a sealing fluid, e.g., mineral oil, on the surface so as to cover the reaction spots. The present invention also provides microplates, comprising: (a) a substrate having at least about 10,000 reaction spots, each comprising a primer and a droplet of reagent having a volume less than about 120 nanoliters, preferably less then about 20 nanoliters; and (b) a sealing liquid isolating each of the spots.

0) US2005141986A – TAMPER–RESISTANT FASTENER AND METHOD AND TOOL F...

133) Family number: 31881726 (US2005141986A) © PatBase

Title: TAMPER–RESISTANT FASTENER AND METHOD AND TOOL FOR USE WITH SAME

Priority: US20030513739P 20031024 US20040970274 20041022 US20070746581 20070509 US20060451383 20060613

Family:

Publication number	Publication date	Application number	Application date
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International class (IPC 8–9): B25B13/48 B25B15/00 B25B15/02 B25B23/00 B25B23/08 F16B23/00 F16B31/02 F16B35/06 (Advanced/Invention); F16B41/00 (Advanced/Non–invention); F16B31/00 (Core/Invention); F16B41/00 (Core/Non–invention); F16B (Subclass/Invention)

International class (IPC 1–7): B25B13/48 B25B15/00 B25B23/00 F16B23/00 F16B35/06

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European class: B25B13/48D F16B23/00B10 F16B23/00B4 F16B23/00P F16B31/02B R16B41/00C

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Cited documents: WO9809886 A1, WO8909886 A1, USD524637 S1, USD517404 S1, USD415676 S1, US806398 A, US755804 A, US7066062 BB, US6988432 BB, US6935824 BB, US6935824 BA, US6935824 B1, US6764114 BA, US6739631 BB, US6739631 BA, US6739631 B1, US6186718 BA, US5927917 A, US5910643 A, US5730567 A, US5713705 A, US5544675 A, US5256015 A, US5179877 A, US5154557 A, US4776442 A, US4478115 A, US4258596 A, US4167886 A, US4149434 A, US4144796 A, US4128038 A, US4018111 A, US3929054 A, US3812757 A, US3498173 A, US3460428 A, US3369441 A, US3267792 A, US2362999 A, US2338024 A, US2338023 A, US2006039749 AA, US2005260058 AA, US2005135898 AA, US1300275 A, US1298398 A, US1261916 A,

Forward Citations: USRE46431, USD689352, US9668771, US9662151, US9662143, US9636151, US9636146, US9629669, US9597119, US9566092, US9532815, US9522021, US9513640, US9504496, US9480517, US9451993, US9451989, US9439683, US9414863, US9409286, US9393047, US9320545, US9308027, US9216041, US9216039, US9211150, US9168069, US9144444, US9055978, US9050148, US9050139, US8998960, US8998959, US8992151, US8979904, US8936623, US8926672, US8926670, US8911479, US8911478, US8894657, US8870928, US8852239, US8845649, US8840652, US8814913, US8814911, US8696711,

US8690504, US8636777, US8636769, US8591560, US8591515, US8556938, US8545538, US8540753, US8475498, US8444681, US8398682, US8394133, US8377102, US8377067, US8366745, US8353932, US8308782, US8292892, US8273089, US8257398, US8257396, US8162948, US8152810, US8137386, US8105368, US8100915, US8092502, US8066739, US8037788, US7967850, US7875065, US7572279, US7441483, US2015343623, US2015283446, US2014363257, US2013299024, US2013133487, US2013059271, US2012187127, US2011061501, US2010129176, US2010018359, US2009299414, US2009287261, US2009145270, US2007207008, US2007016200, US2006100621, US2006084979, TWI444259,

Abstract:
Source: US2005141986A A fastener includes a round, blind hole or pocket in its head. Installation and removal of the fastener is accomplished with a tool containing an eccentric segment on the end of a shaft. When rotated within the pocket, the eccentric segment displaces laterally relative to the shaft to provide a friction grip to the lateral wall of the pocket. The strength of the grip is proportional to the applied torque. Eccentric displacement allows rotation but prevents the tool from spinning out of the fastener thereby eliminating cam−out and surface damage resulting from contact with a spinning tool tip. The eccentric head of the tool can be made disposable and to shear off when a predetermined torque is reached. The smooth−sided round hole offers no purchase for commonly available tools; making the fastener tamper−resistance. In another embodiment, the fastener includes a raised portion in the pocket. A tool having a complementary opening shears off the raised portion at a predetermined torque.

0) US2005152106A – QUICK RELEASE STRUCTURES FOR A COMPUTER

134) Family number: 32083090 (US2005152106A) © PatBase

Title: QUICK RELEASE STRUCTURES FOR A COMPUTER

Priority: US20040535279P 20040108 US20040791997 20040302 US20040815488 20040331
US20070742485 20070430 US20080277879 20081125 US20100699756 20100203
US20070747825 20070511 US20060357311 20060217 US20130851031 20130326

Family:

Publication number	Publication date	Application number	Application date
US2005152106 AA	20050714	US20040791997	20040302
US2005152112 AA	20050714	US20040815488	20040331
US2006139879 AA	20060629	US20060357311	20060217
US2007201205 AA	20070830	US20070742485	20070430
US2007242426 AA	20071018	US20070747825	20070511
US2009141444 AA	20090604	US20080277879	20081125
US2010138056 AA	20100603	US20100699756	20100203
US2013229764 AA	20130905	US20130851031	20130326
US7035102 BB	20060425	US20040815488	20040331
US7242576 BB	20070710	US20040791997	20040302
US7248476 BB	20070724	US20060357311	20060217
US7466547 BB	20081216	US20070742485	20070430
US7684192 BB	20100323	US20080277879	20081125
US7848105 BB	20101207	US20100699756	20100203
US8425286 BB	20130423	US20070747825	20070511
US9207724 BB	20151208	US20130851031	20130326

Probable Assignee: APPLE INC

Assignee(s):(std)**:** APPLE INC ; COSTER DANIEL J ; DE IULIIS DANIELE ; HEIRICH DOUGLAS L ; IVE JONATHAN ; HOLMES STEVEN ; GOH CHIEW SIANG ; MISAGE THOMAS J ; MARIANO RICK ; KIM SUNG ; KIM SUNG H ; HOLMES STEVEN W ; DE IULIIS DANIELE G ; IVE JONATHAN P ; MARIANO RICARDO A ; YAEKEL JEREMY ; RICCIO DAN ; TAN TANG YEW ; TAN TANG Y ; RICCIO DANIEL J ; APPLE COMPUTER

Assignee(s): APPLE COMPUTER INC

Inventor(s):(std)**:** HEIRICH DOUGLAS L ; HOLMES STEVEN ; HOLMES STEVEN W ; IVE JONATHAN ; IVE JONATHAN P ; KIM SUNG ; KIM SUNG H ; MARIANO RICARDO A ; MARIANO RICK ; COSTER DANIEL J ; DE IULIIS DANIELE ; DE IULIIS DANIELE G ; GOH CHIEW SIANG ; MISAGE THOMAS J ; RICCIO DAN ; RICCIO DANIEL J ; TAN TANG Y ; TAN TANG YEW ; YAEKEL JEREMY

Inventor(s): COSTER DANIEL ; TAN TANG ; HEIRICH DOUGLAS ; MISAGE THOMAS

Agent(s): BEYER WEAVER AND THOMAS LLP; BEYER WEAVER LLP APPLE INC; BEYER LAW GROUP LLP APPLE INC; BEYER WEAVER LLP; BEYER LAW GROUP LLP; WOMBLE CARLYLE SANDRIDGE AND RICE LLP; DOWNEY BRAND LLP

International class (IPC 8–9): G05D23/19 G05D7/06 G06F1/16 G06F1/18 G06F1/20 H05K5/00 H05K5/02 H05K7/20 (Advanced/Invention);
A47B97/00 E05C19/00 E05C5/00 (Advanced/Non–invention);
G06F1/16 G06F1/18 G06F1/20 H05K5/00 (Core/Invention);
A47B97/00 E05C19/00 E05C5/00 (Core/Non–invention)

International class (IPC 1–7): G06F1/16 H05K7/20

CPC: G06F1/20 G06F1/206 G06F1/3203 Y02B60/1275 Y10T292/0886 Y10T292/089 Y10T292/0891 Y10T292/432 G06F1/181 G06F1/183 H05K5/0221

European class: G06F1/18E G06F1/20 G06F1/20T G06F1/32P Y02B60/12L

US class: 1/1 165/104.33 165/122 165/80.3 174/16.1 174/16.3 292/302 292/63 292/66 292/67 312/223.2 312/263 312/265.5 312/265.6 361/679.32 361/679.47 361/679.48 361/679.480P

361/679.51 361/679.510S 361/679.58 361/683 361/687 361/690 361/694 361/695 361/695P 454/184 700/282 700/282P 700/300 700/300S

Classification Explorer

Cited documents: US8054638 BB, US7408788 BB, US7248476 BB, US7242576 BB, US7167993 BA, US7068505 BB, US7061761 BB, US7035102 BB, US7027309 BB, US6992900 BA, US6961249 BB, US6935130 BB, US6932447 BB, US6865078 BA, US682863 A, US6824174 BB, US6822863 BA, US6816391 BB, US6795314 BA, US6775144 BB, US6722971 BB, US6721180 BB, US6678157 BA, US6665163 BB, US6665163 BA, US6654894 BB, US6654894 BA, US6628512 BB, US6628512 BA, US6618245 BB, US6618245 BA, US6595605 BA, US6592327 BB, US6587342 BA, US6574102 BB, US6574102 BA, US6556437 BA, US6549424 BA, US6545438 BA, US6542384 BA, US6532151 BB, US6522535 BA, US6504718 BB, US6504718 BA, US6490895 BA, US6473297 BA, US6472779 BB, US6462940 BA, US6459574 BA, US6434001 BA, US6430041 BA, US6414845 BB, US6414828 BA, US6407910 BA, US6400045 BA, US6373698 BA, US6366832 BB, US6366832 BA, US6362958 BA, US6359214 BA, US6356435 BA, US6336080 BA, US6288897 BA, US6259352 BA, US6257682 BA, US6219226 BA, US6212069 BA, US6200215 BA, US6157532 A, US6134667 A, US6132019 A, US6109710 A, US6072397 A, US6062663 A, US6058009 A, US6053586 A, US6049973 A, US6031719 A, US6031717 A, US6029119 A, US6027360 A, US6018456 A, US6006168 A, US5963424 A, US5918188 A, US5867095 A, US5860015 A, US5822186 A, US5808867 A, US5788467 A, US5781408 A, US5695605 A, US5562410 A, US5452181 A, US5412534 A, US5375038 A, US5216246 A, US4501460 A, US4412478 A, US2008092330 AA, US2007242426 AA, US2007201205 AA, US2004196623 AA, US2004190246 AA, US2004085719 AA, US2004080910 AA, US2004022024 AA, US2003123222 AA, US2003112601 AA, US2003076652 AA, US2003017747 AA, US2003000898 AA, US2002142646 AA, US2002094283 AA, US2002069760 AA, JP10284863 A2,

Forward Citations: WO16122458, WO15175693, WO15138133, WO14183290, WO12129239, WO11153644, US9696769, US9671833, US9648786, US9629284, US9622394, US9612632, US9603280, US9549457, US9547334, US9519319, US9507378, US9504190, US9497889, US9485851, US9471115, US9470720, US9448582, US9417671, US9408334, US9392871, US9380729, US9377808, US9374927, US9348377, US9326419, US9313874, US9261100, US9244065, US9207724, US9207023, US9200854, US9158349, US9148984, US9055690, US9005417, US8988881, US8976514, US8964375, US8962346, US8945914, US8913385, US8888450, US8830672, US8773852, US8681501, US8659891, US8638563, US8626343, US8614893, US8605438, US8593815, US8451622, US8425286, US8385076, US8376777, US8254108, US8254107, US8248783, US8231403, US8228675, US8218317, US8182319, US8162690, US8149000, US8089762, US8077458, US8051671, US8025528, US8009430, US7978469, US7940525, US7920381, US7848105, US7782603, US7742296, US7724517, US7685349, US7684192, US7642453, US7623344, US7580263, US7554818, US7535710, US7522414, US7466547, US7414841, US7306224, US7173822, US7075781, US6999310, US2016219745, US2016219744, US2016103469, US2015334880, US2015277518, US2015277513, US2015177750, US2014321045, US2014293526, US2014213172, US2014198474, US2014126148, US2014118946, US2014098494, US2014098493, US2013342993, US2013229755, US2013168530, US2013141865, US2013135801, US2012293952, US2012155015, US2012140405, US2012058718, US2012035783, US2012020012, US2011304978, US2011284705, US2011248610, US2011235261, US2011234068, US2011182021, US2011177708, US2011128702, US2011110029, US2011103011, US2010290187, US2010177480, US2010142143, US2010138056, US2010107397, US2010102687, US2010014250, US2009199997, US2009168350, US2009106849, US2009059516, US2009059515, US2009058429, US2009038783, US2009025434, US2008291624, US2008288193, US2008285232, US2008239651, US2008239650, US2008196868, US2008196453, US2008030954, US2007268666, US2007253171, US2007242426, US2007201205, US2007083298, US2007074525, US2007064404, US2007053771, US2007035923, US2006274781, US2006274494, US2006092608, US2006023414, US2006007647, US2005023750, TWI364251, CN104317368, CN103164004, CN102340235, CN102129274, CN102129274, CN102073357, CN101866205, CN101833363, CN101819457, CN101807100,

Abstract:
Source: US2005152106A Quick release couplings for releasably coupling components of a computer to the computer are disclosed. The quick release coupling mechanisms are generally configured to allow tool−less placement of the components relative to the computer. That is, the quick release coupling mechanisms are configured to perform their couplings without using conventional fasteners such as screws, bolts, etc. By eliminating the use of fasteners, the components may be inserted and removed from the computer without using tools (e.g., tool−less). Furthermore, the quick release couplings are easy to maneuver thereby enabling quick and straightforward assembly and disassembly of the components to and from the computer (e.g., quick release). For example, the components may be inserted and removed by a simple pushing or pulling motion, and/or by a simple flick of a latch or handle.

0) US2008234056A – UNIVERSAL JOINT SYSTEM

135) Family number: 32134370 (US2008234056A) © PatBase

Title: UNIVERSAL JOINT SYSTEM

Priority: DE200410005185 20040202 DE200410017104 20040407 WO2005EP00508 20050120

Family:

Publication number	Publication date	Application number	Application date
DE102004017104 A1	20050908	DE200410017104	20040407
DE502005005469 D1	20081106	DE200550005469T	20050120
EP1723345 A1	20061122	EP20050701057	20050120
EP1723345 B1	20080924	EP20050701057	20050120
US2008234056 AA	20080925	US20060597230	20060914
WO05073580 A1	20050811	WO2005EP00508	20050120

Probable Assignee: VOITH TURBO GMBH AND CO KG

Assignee(s):(std)**:** GRAWENHOF PETER ; VOITH TURBO KG

Assignee(s): VOITH TURBO GMBH ; VOITH TURBO GMBH AND CO KG

Inventor(s):(std)**:** GRAWENHOF PETER

Agent(s): BAKER AND DANIELS LLP 111 E WAYNE STREET

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): F16D3/38 F16D3/41 (Advanced/Invention); F16D3/16 (Core/Invention)

International class (IPC 1–7): F16D3/38 F16D3/41

CPC: F16D3/38 F16D3/387

European class: F16D3/38 F16D3/38B3

US class: 464/135

Classification Explorer

Cited documents: US6540617 BB, US6056644 A, US279415 A, US2004121844 AA, US2002045487 AA, US1700991 A, US1622768 A, EP0206026 A1, DE4313141, DE10107606 A1, DE10037866 A1,

Forward Citations: US8635779, US8500565, US2015126291,

Abstract:
Source: US2008234056A The invention relates to a universal joint system for use in cardan shafts, especially in heavy duty cardan shafts. Said universal joint system comprises a journal cross−assembly mounted in double yokes, the individual yoke comprising two yoke parts. Every yoke part comprises a base part and a bearing part, the yoke parts being positively interlinkable in the area of their base parts in coupling areas constituting coupling surfaces. The base parts of the yoke parts, on their coupling surface pointing to the base part of the respective other yoke part in the area of their outer periphery, have a first toothed section that is complementary thereto. The extensions of at least one tooth trace characterizing the first toothed section form an angle of>0 degrees to <180 degrees with a plane which is produced by the journal axis of the journal mounted in a yoke part and a yoke axis that is concurrent with a rotational axis of the yoke. In the area of the yoke axis, a second toothed section is provided at an angle to the first toothed section. According to the invention, the individual base part is configured as a full flange and joins the bearing part in a flush manner. The journal cross−assembly comprises two journal systems, offset from each other by 90 degrees, and formed by two journals that are offset from each other by 180 degrees and disposed on a common axis and in parallel planes. Every bearing part is provided with a blind bore for receiving the journals.

0) DE102004004326A1 – LOADING METHOD FOR FLAT POCKET TYPE PACKAGES WI...

136) Family number: 32156455 (DE102004004326A1) © PatBase

Title: LOADING METHOD FOR FLAT POCKET TYPE PACKAGES WITH DISK−TYPE DATA CARRIERS, E.G. CDS OR DVDS, WHEREIN AN INDIVIDUAL DISK IS SLID INTO A PACKAGE IN THE SAME PLANE AS IT AND THE PACKAGE IS THEN PUSHED OUT FROM THE BOTTOM OF A STACK

Priority: DE200410004326 20040128

Family:

Publication number	Publication date	Application number	Application date
DE102004004326 A1	20050811	DE200410004326	20040128

Probable Assignee: VARIOPAC SWISS GMBH RHEINECK

Assignee(s):(std)**:** VARIOPAC SWISS GMBH RHEINECK

International class (IPC 8–9)**:** B65B11/50 B65B25/00 G11B23/02 G11B33/04 (Advanced/Invention); B65B11/50 B65B25/00 G11B23/02 G11B33/04 (Core/Invention)

International class (IPC 1–7)**:** B65B11/50 G11B23/02

CPC: B65B25/002 G11B33/0422

European class: B65B25/00B G11B33/04D1B

Classification Explorer

Abstract:
Method for equipping flat pocket type packages with a disk−type data carrier, e.g. a CD or DVD, whereby the disk is placed in essentially the same plane as its intended package and then moved sideways to a slit in the package. Once at the slit mouth the disk is inserted into the opening slit until it reaches a set position in the package. Once the package has its allocated disk it is pushed out from the bottom of a stack of packages. An independent claim is made for a device for loading a flat pocket type package with a data carrying disk.

0) US2005272005A – DENTAL WEDGES

137) Family number: 32385939 (US2005272005A) © PatBase

Title: DENTAL WEDGES

Priority: DE200410022778 20040508

Family:

Publication number	Publication date	Application number	Application date
DE102004022778 A1	20051201	DE200410022778	20040508
DE102004022778 B4	20071004	DE200410022778	20040508
EP1593352 A1	20051109	EP20050009869	20050506
JP2005319308 A2	20051117	JP20050136236	20050509
JP4738884 B2	20110803	JP20050136236	20050509
US2005272005 AA	20051208	US20050125358	20050509
US7425130 BB	20080916	US20050125358	20050509

Probable Assignee: SCHAFFNER ALFRED

Assignee(s):(std)**:** BORER GEROLD ; GOLDMAN RICHARD ; SCHAFFNER ALFRED

Inventor(s):(std)**:** GOLDMAN RICHARD ; GOLDMAN RICHARD B ; GOLDMAN RICHARD B DR ; SCHAFFNER ALFRED ; BORER GEROLD ; BORER GEROLD DR MED DENT

Inventor(s): BORER GEROLD DRMEDDENT

Agent(s): HORST M KASPER; KASPER HORST M; HORST M

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

International class (IPC 8–9): A61C5/04 A61C5/12 A61C7/00 (Advanced/Invention); A61C5/00 A61C5/04 A61C7/00 (Core/Invention)

International class (IPC 1–7): A61C5/04 A61C5/12 A61C7/00

CPC: A61C5/88 A61C2201/002

European class: A61C5/12W K61C201/00C

US class: 433/149 433/149P

Classification Explorer

Cited documents: WO0217813 A1, US6402514 BA, US6375463 BA, US6142781 A, US5890900 A, US5890900, US5743738 A, US4631030 A, US4337041 A, US4337041, US3890714 A, US3815243 A, US3636631 A, US3510948 A, US3510948, US2004014006 AA, US2004014006, US05890900, US04337041, US03510948, US0014006, JPS6187542, JP9010230 A2, JP9010230, JP61087542 A2, JP61087542, JP5091623 U, JP09010230, JP05091623 U, EP1192915 A2, EP0860149 A1, EP0668060 A2, EP0169803 A1, DE10119733 A1, CH669514,

Forward Citations: WO15187927, WO10075984, USD645562, US9629693, US9610139, US9456880, US8591230, US8425228, US8206151, US7976308, US7381055, US2014342311, US2012058447, US2012045734, US2011171596, US2008241787, US2007254263, US2005158691, JP2007209757, CN104224332,

Abstract:
Source: US2005272005A A dental wedge for use in a dental medical treatment and restoration of hollow spaces associated with caries between neighboring teeth. The dental wedge has a triangular cross–section and a free end running out to a rounded tip. The dental wedge (1) is bent upwardly like a saber. The base face (3) and the side faces (4) of the dental wedge (1) are arched concavely inwardly. The impact edges (5) of the base face (3) and of the side faces (4) of the dental wedge (1) are rounded. The dental wedge (1) exhibits a first, longer wedge section (1 a) and a second, shorter wedge section (1 b), wherein the impact edges (5) between the base face (3) and the side faces (4) in the first wedge section (1 a) are running parallel to each other. The impact edges (5) in the second wedge section (1 b) run toward each other toward the free upwardly bent tip (2) of the dental wedge (1).

0) US2005248914A – NOTEBOOK COMPUTER LOCKING BASE

138) Family number: 32432180 (US2005248914A)

© PatBase

Title: NOTEBOOK COMPUTER LOCKING BASE

Priority:

US20040569561P 20040510 US20040589561P 20040510 US20040626839P 20041110
US20040659561P 20040510 US20040626840P 20041110 US20050038591 20050119
US20050655270P 20050222 US20050678911P 20050506 US20050691476P 20050617
US20080154561 20080523 US20100657670 20100125 US20110031174 20110218
US20060359871 20060222 US20060454136 20060615 US20050725333P 20051011
US20060757737P 20060110 US20060783188P 20060316 US20060454137 20060615
US20060454433 20060615 US20120365222 20120202 US20060757797P 20060110
WO2005US16487 20050509 WO2011US00108 20110120 WO2012US25217 20120215
US20120478933 20120523 US20120526514 20120618 US20120550334 20120716
US20140270085 20140505 US20140486470 20140915 US20150949067 20151123
US20170424950 20170206

Family:

Publication number	Publication date	Application number	Application date
CA2566151 AA	20061108	CA20052566151	20050509
CA2787270 AA	20120716	CA20112787270	20110120
CN102782604 A	20121114	CN201180007078	20110120
EP2529280 A1	20121205	EP20110734960	20110120
IN06119DN2012 A	20131129	IN2012DN06119	20120710
MX2012008396 A1	20120815	MX20120008396	20110120
US2005248914 AA	20051110	US20050038591	20050119
US2006176661 AA	20060810	US20060359871	20060222
US2006291156 AA	20061228	US20060454136	20060615
US2006291157 AA	20061228	US20060454137	20060615
US2006291158 AA	20061228	US20060454433	20060615
US2008232059 AA	20080925	US20080154561	20080523
US2010284144 AA	20101111	US20100657670	20100125
US2011170257 AA	20110714	US20110031174	20110218
US2012201000 AA	20120809	US20120365222	20120202
US2012260698 AA	20121018	US20120478933	20120523
US2012272693 AA	20121101	US20120526514	20120618
US2012307448 AA	20121206	US20120550334	20120716
US2014238091 AA	20140828	US20140270085	20140505
US2015052957 AA	20150226	US20140486470	20140915
US2016076276 AA	20160317	US20150949067	20151123
US2017145719 AA	20170525	US20170424950	20170206
US7315443 BB	20080101	US20050038591	20050119
US7324333 BB	20080129	US20060359871	20060222
US7443665 BB	20081028	US20060454433	20060615
US7499269 BB	20090303	US20060454136	20060615
US7499270 BB	20090303	US20060454137	20060615
US7724520 BB	20100525	US20080154561	20080523
US8139356 BB	20120320	US20100657670	20100125
US8223488 BB	20120717	US20110031174	20110218
US8456836 BB	20130604	US20120478933	20120523
US8717758 BB	20140506	US20120526514	20120618
US8837144 BA	20140916	US20140270085	20140505
US9206626 BB	20151208	US20140486470	20140915
US9562375 BB	20170207	US20150949067	20151123

WO05111764 A2	20051124	WO2005US16487	20050509	
WO05111764 A3	20070726	WO2005US16487	20050509	
WO07044096 A2	20070419	WO2006US23480	20060615	
WO07044096 A3	20070913	WO2006US23480	20060615	
WO11090791 A1	20110728	WO2011US00108	20110120	
WO11090791 A9	20111020	WO2011US00108	20110120	
WO12112669 A2	20120823	WO2012US25217	20120215	
WO12112669 A3	20130228	WO2012US25217	20120215	
WO12112669 A9	20121108	WO2012US25217	20120215	

Probable Assignee: THINK PRODUCTS INC

Assignee(s):(std)**:** ALLEN PETER ; MARSZALEK ANDRZEJ ; PETER ALLEN ; THINK PRODUCTS INC ; THINK PRODUCTS INC A NEW YORK CORP

Inventor(s):(std)**:** ALLEN PETER ; PETER ALLEN ; MARSZALEK ANDRZEJ

Agent(s): MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP; SKONE JAMES ROBERT EDMUND; ALFRED M WALKER; WALKER ALFRED M; ALFRED M; JOHN F; EDWIN D

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A47B81/00 A47B91/00 A47B97/00 A47F3/00 A47F7/00 A47F7/024 B23P11/00 E05B27/00 E05B65/00 E05B65/46 E05B69/00 E05B73/00 E05B9/04 E05C7/06 F16L3/00 F16M13/00 G06F1/16 G06F21/86 G06F21/88 H01L23/12 H01L23/34 H05K5/00 H05K7/00 H05K7/16 (Advanced/Invention);
A47B23/04 (Advanced/Non–invention);
A47B81/00 A47B91/00 A47B97/00 A47F7/00 E05B65/44 E05B69/00 E05B73/00 E05C7/00 F16L3/00 F16M13/00 G06F1/16 H01L23/12 H01L23/34 H05K5/00 H05K7/00 H05K7/16 (Core/Invention)

International class (IPC 1–7): G06F1/16

CPC: Y10T70/7672 Y10T29/4995 A47B23/042 G06F21/86 G06F21/88 H01L2924/0002 H01L2924/00 G06F1/1656 E05B65/0067 E05B27/00 A47F7/024 A47F3/002 E05B73/00 Y10T29/49826 Y10T70/402 Y10T70/485 Y10T70/5009 E05B65/006 G06F1/1681 E05B73/0082 E05B73/0005

European class: E05B73/00 E05B73/00D P05B73/00A

US class: 1/1 211/8 211/9 248/551 248/553 257/727 257/731 29/428 29/525.03 312/223.2 361/679 361/679.01 361/679.010S 361/679.03 361/679.030P 361/679.55 361/679.550P 361/679.56 361/679.560P 361/679.57 361/679.570P 361/679.570S 361/679.58 361/679.580S 361/680 361/681 361/683 361/684 361/686 70/15 70/15S 70/373 70/373S 70/50 70/58 70/58S

Classification Explorer

Cited documents: WO9615347 A1, WO9607002 A1, WO9605347 A1, WO9510680 A1, WO9315295 A1, WO8600396 A1, WO8067173, WO11000108 A1, WO10080402 A1, WO09026225 A1, WO08147818 A1, WO08067173 A2, WO08051930 A2, WO08051919 A2, USRE28187 E, USD565839 S1, USD559076 S1, USD553352 S1, USD533994 S1, USD521232 S1, USD519731 S1, USD503532 S1, USD499546 S1, USD491009 S1, USD485060 S1, USD436310 S1, USD425402 S1, USD415950 S1, USD405348 S1, US8111511 BB, US8107236 BB, US7963132 BB, US7647796 BB, US7499270 BB, US7499269 BB, US7443665 BB, US7409842 BB, US7315443 BB, US7255228 BB, US7204106 BB, US7128586 BB, US7107093, US7107054 BB, US7104093 BB, US7007912 BA, US6926141 BB, US6920770 BB, US6913238 BB, US6883694 BB, US6865914 BB, US6820362 BA, US6810698 BB, US6796539 B1, US6796536 BA, US6788216 BB, US6763690 BB, US6755056 BB, US6735990 BA, US6711921 BA, US6708966 BA, US6705133 BA, US6697252 BB, US6689954 BB, US6684548 BA, US6612455 BB, US6590767 BB, US6581420 BA, US6578394 BB, US6560710 BA, US6497125 BA, US6490154 BB, US6477871 BA, US6477870 BA, US6443417 BB, US6427499 BA, US6331934 BA, US6317963 BA, US6317936 BA, US6308928 BA, US6275378 BA, US6257542 BA, US6237375 BA, US6216499 BA, US6212921 BA, US6185964 BA,

US6182481 BA, US6178089 BA, US6178089 B1, US6155088 A, US6138483 A, US6006557 A, US6000252 A, US5927108 A, US5926092 A, US5836183 A, US5829280 A, US5816076 A, US5794463 A, US5787739 A, US5787738 A, US5762306 A, US5760690 A, US5709110 A, US5675998 A, US5645261 A, US5608605 A, US5595074 A, US5582044 A, US5568359 A, US5560481 A, US5542723 A, US5531082 A, US5526226 A, US5502989 A, US5493878 A, US5469726 A, US5446618 A, US5406809 A, US5381685 A, US5361610 A, US5351508 A, US5351507 A, US5345219 A, US5265449 A, US5257839 A, US5169114 A, US5154456 A, US5135197 A, US5085395 A, US5082232 A, US5076079 A, US5052199 A, US5052198 A, US4870842 A, US4856304 A, US4821538 A, US4738428 A, US4733840 A, US4696449 A, US4426863 A, US4418553 A, US4066231 A, US4009599 A, US3965705 A, US3945227 A, US3707860 A, US3535898 A, US3410580 A, US3410122 A, US3275160 A, US3181319 A, US2010320884 AA, US2008110217 AA, US2007235493 AA, US2007205125 AA, US2006176661 AA, US2006163885 AA, US2006117814 AA, US2006075794 AA, US2006032877 AA, US2005247584 AA, US2005178173 AA, US2005161557 AA, US2005150263 AA, US2005028571 AA, US2004177658 AA, US2004007651 AA, US2003085143 AA, US2003085125 AA, US2001049949 AA, NO14095, NO14095, JP87462, JP87462, JP8007462, JP57179618, JP57025092, JP52036813, JP49091096, JP37007592, JP37007592, JP2004318426 A2, JP2002149264 A2, JP2000305845, JP20003035845, JP2000140948, JP2000035845, IT451949, IT451949, HUP0000398, HU398, HU224329, GB4470901, GB4470901, GB2234856, GB2109109, GB1376011, GB1256295, FR877220, FR455740, FR2741375, FR2636686, FR2308006, FR1085107, FR1026519, DE577757, DE456219, DE3824393, DE361068, DE3407723, DE335741, DE329934, DE3202700, CN101014751 A, CA987121, CA791364, CA454901,

Forward Citations: WO16187398, WO13095703, WO12166994, WO12035530, WO12015822, WO11138582, WO11094439, WO11094439, WO11090791, WO09116039, USRE45179, USD785439, USD777548, USD773465, USD769881, USD704033, USD694092, USD686629, USD606096, USD604744, USD599821, USD599820, US9617758, US9600141, US9598883, US9592453, US9592452, US9581285, US9513797, US9486897, US9477849, US9470357, US9424444, US9410344, US9316026, US9282814, US9234372, US9188275, US9172669, US9163433, US9151083, US9141145, US9126119, US9114319, US9080721, US9013863, US9005026, US8967560, US8953308, US8944913, US8944912, US8935943, US8924893, US8881560, US8881025, US8869573, US8839723, US8837144, US8833117, US8826831, US8814128, US8813528, US8812987, US8788348, US8783073, US8780553, US8777653, US8749959, US8720848, US8717758, US8711553, US8649169, US8646294, US8615557, US8613667, US8567798, US8529357, US8456836, US8451599, US8438979, US8418514, US8379382, US8315041, US8289698, US8223488, US8214913, US8139356, US8061164, US7983034, US7866623, US7778023, US7724520, US7611119, US7600736, US7492580, US2016224065, US2016090755, US2016011634, US2016004886, US2015351529, US2015330437, US2015040621, US2014346311, US2014319296, US2014290315, US2014285959, US2014226298, US2014204529, US2014118930, US2014104761, US2014071619, US2013122734, US2012318711, US2012293940, US2012234055, US2012212685, US2012127651, US2012103031, US2012006078, US2011283751, US2011228453, US2011186708, US2011185774, US2011158765, US2011140381, US2011100073, US2011095662, US2011088086, US2011088003, US2011087994, US2011087972, US2011087970, US2011087749, US2011087705, US2011080137, US2011075337, US2011031293, US2010115634, US2010096517, US2010012796, US2010000447, US2009315287, US2009178068, US2009159769, US2008252045, US2008035823, US2008024967, US2007171027, US2002057088, GB2528900, EP2179682, EP2140804, DE102011083586, DE102009009362, CN104715212, CN104715211, CN104234545, CN103068279, CN103068279, CN102782604, CN102196694, CN102196694,

Abstract:
Source: US2005248914A A notebook/laptop computer locking assembly includes a locking base secured to a working surface. The locking base has a first rear wall to receive a keyboard portion of the notebook computer, with a screen portion of the notebook computer in the open position resting against the rear wall. A locking bar is adapted to pivot over the notebook computer screen in the open position, extending across a front surface of the screen portion. This locking bar has a rearwardly extending locking plug insertable within a locking receptacle of a lock. The locking bar is deployed on the notebook computer, thereby preventing removal of the notebook computer from the locking base. Additionally, locking holes are aligned with each other to receive a padlock to lock the locking bar to the locking base.

139) Family number: 32482338 (US2007270216A) © PatBase

Title: GAMING DEVICE WITH ATTACHED AUDIO–CAPABLE CHAIR

Priority:
US20040575153P 20040528 US20040575604P 20040528 US20040575605P 20040528
US20050569730 20050526 US20050569689 20050526 US20050569732 20050526
US20050569687 20050526 US20070569730 20070611 US20040640350P 20041230
WO2005US18392 20050526 WO2005US18595 20050526 WO2005US18475 20050526
US20080569687 20080128 US20120494521 20120612 WO2005US18681 20050526

Family:

Publication number	Publication date	Application number	Application date
US2007270216 AA	20071122	US20050569730	20050526
US2008039215 AA	20080214	US20050569689	20050526
US2008211276 AA	20080904	US20050569732	20050526
US2008246321 AA	20081009	US20050569687	20050526
US2012258791 AA	20121011	US20120494521	20120612
US8000484 BB	20110816	US20050569732	20050526
US8029369 BB	20111004	US20050569689	20050526
US8262478 BB	20120911	US20050569730	20050526
US8454087 BB	20130604	US20050569687	20050526
US8672757 BB	20140318	US20120494521	20120612
WO05117647 A1	20051215	WO2005US18392	20050526
WO05117648 A1	20051215	WO2005US18475	20050526
WO05117649 A1	20051215	WO2005US18681	20050526
WO05120127 A1	20051215	WO2005US18595	20050526
WO05120127 C2	20060330	WO2005US18595	20050526

Probable Assignee: BALLY GAMING INC

Assignee(s):(std)**:** CANTERBURY STEPHEN A ; HAHN BRIAN ; PRYZBY ERIC M ; WMS GAMING INC ; RASMUSSEN JAMES M

Assignee(s): DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT AS ; BALLY GAMING INC ; BANK OF AMERICA NA COLLATERAL AGENT AS

Inventor(s):(std)**:** CANTERBURY STEPHEN A ; HAHN BRIAN ; PRYZBY ERIC M ; RASMUSSEN JAMES M

Inventor(s): PRYZBY ERIC

Agent(s): SCHWEGMAN LUNDBERG AND WOESSNER/WMS GAMING; SCHWEGMAN LUNDBERG AND WOESSNER WMS GAMING; SCHWEGMAN LUNDBERG AND WOESSNER PA; SCHWEGMAN LUNDBERG AND WOESSNER P A; NIXON PEABODY LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A47B83/00 A47B97/00 A47C31/00 A47C7/62 A47C7/72 A47C9/02 A63F11/00 A63F13/02 A63F13/08 A63F13/12 A63F9/24 B23P6/00 G06F19/00 G07F17/32 H04R1/02 H04R5/02 (Advanced/Invention);
A63F9/24 (Advanced/Non–invention);
A47B97/00 A47C31/00 A47C9/00 A63F11/00 A63F13/08 B23P6/00 H04R5/02 (Core/Invention)

International class (IPC 1–7): A47B97/00 A63F13/02 A63F13/08 H04R5/02

CPC: G07F17/3216 A63F2009/247 A63F13/08 A63F13/12 A63F2300/6063 A47C9/022 Y10T29/49723 A47C7/72 A63F13/28

European class: A47C9/02B A63F13/08 A63F13/12 K63F300/60S

US class: 29/402.04 29/402.040S 297/172 297/217.3 297/217.300P 297/217.4 297/217.400P 297/463.1 381/119 381/301 381/333 381/351 381/388 439/489 463/25 463/35 463/35P 463/46 463/47 463/47P 463/47S

Classification Explorer

Cited documents: WO05120127 A1, WO05117649 A1, WO05117648 A1, WO05117647 A1, US8262478 BB, US8029369 BB, US8000484 BB, US7867085 BB, US7867085 B1, US7832799 BB, US7826628 BB, US7826627 BB, US7826627 B1, US7819750 BB, US7766747 BB, US7766747 B1, US7704147 BB, US7688992 BB, US7688992 B1, US7658445 BB, US7522740 BB, US7479063 BB, US7479063 B1, US7389153 BB, US7367886 BB, US7367886 B1, US7364508 BB, US7364508 B1, US7290072 BB, US7240093 BA, US7206426 BA, US7136498 BA, US7114171 BB, US7112139 BB, US7112139 B1, US7090582 BB, US6935959 BB, US6928329 BA, US6899627 BB, US6885899 BA, US6824419 BA, US6752445 BA, US6694034 BB, US6656041 BA, US6572187 BB, US6572187 B1, US6544200 BA, US6530842 BA, US6503147 BA, US6443839 BB, US6430297 BA, US6422941 BA, US6422670 BA, US6422041 BA, US6368216 BA, US6354660 BA, US6314330 BA, US6290536 BA, US6227614 BA, US6206335 BA, US6191892 BA, US6161892 A, US6135562 A, US6089663 A, US6075868 A, US6012755 A, US5953429 A, US5910991 A, US5908354 A, US5807177 A, US5791731 A, US5768724 A, US5762617 A, US5678886 A, US5669818 A, US5622511 A, US5618178 A, US5617331 A, US5596647 A, US5542748 A, US5522641 A, US5437453 A, US5409296 A, US5398992 A, US5344331 A, US5290034 A, US5232191 A, US5114112 A, US5102192 A, US5083738 A, US5052685 A, US4887298 A, US4875546 A, US4840343 A, US4805952 A, US4705274 A, US4664456 A, US4660833 A, US4549631 A, US4413198 A, US2689016 A, US2012258791 AA, US2010317437 AA, US2010298051 AA, US2010248815 AA, US2010099487 AA, US2010075750 AA, US2010029385 AA, US2009298579 AA, US2009170597 AA, US2009041257 AA, US2008299819 AA, US2008246321 AA, US2008234026 AA, US2008214289 AA, US2008211276 AA, US2008194319 AA, US2008188291 AA, US2008176654 AA, US2008161108 AA, US2008139284 AA, US2008111408 AA, US2008096666 AA, US2008070685 AA, US2008064486 AA, US2008054561 AA, US2008039215 AA, US2008009347 AA, US2007293304 AA, US2007270216 AA, US2007015570 AA, US2006269088 AA, US2006116073 AA, US2006100015 AA, US2006073881 AA, US2006073681 AA, US2006072765 AA, US2006068909 AA, US2006068908 AA, US2006064187 AA, US2005239434 AA, US2005164788 AA, US2005159219 AA, US2005054442 AA, US2005053252 AA, US2004258270 AA, US2004254020 AA, US2004254006 AA, US2004162144 AA, US2004161115 AA, US2004142747 AA, US2004018867 AA, US2004014514 AA, US2004007907 AA, US2003217363 AA, US2003185400 AA, US2003152243 AA, US2003122973 AA, US2003100359 AA, US2003054880 AA, US2003044033 AA, US2003044003 AA, US2003012297 AA, US2002155887 AA, US2002041069 AA, US2002041068 AA, JP5031254 A2,

Forward Citations: WO16120464, US9547952, US9532655, US9530287, US9520018, US9514599, US9449456, US9367987, US9245407, US9142083, US9135785, US9087429, US9058719, US9058714, US9011247, US8968088, US8913777, US8912727, US8894487, US8858343, US8840464, US8827805, US8814673, US8747225, US8740701, US8740689, US8678936, US8678923, US8672757, US8663019, US8636570, US8622830, US8591308, US8454087, US8414373, US8408996, US8376844, US8262478, US8221218, US8197340, US8113517, US8029369, US8016674, US8000484, US7901291, US7892091, US7832799, US7789748, US7708642, US7699699, US7695363, US7666098, US7658445, US7526736, US7494412, US7355112, US7341512, US7258613, US7105736, US2015289662, US2015287274, US2015287272, US2015087401, US2015025688, US2012315985, US2012282997, US2012115589, US2011111847, US2011111839, US2011109134, US2011003631, US2010081500, US2009280896, US2009197673, US2009179479, US2009146484, US2008246321, US2008211276, US2008054561, US2008039215, US2007270216, TWI366631, AT516773,

Abstract:
Source: US2007270216A A gaming system includes a chair communicably coupled to a gaming device. The chair includes an audio playback device operable to receive audio playback commands. The audio playback commands may be received from a gaming device physically attached to the chair, a remote gaming device, or from a network interface communicably coupling the chair to a gaming establishment audio system, a player tracking system, or other gaming establishment system. Additionally, the chair may include an audio data storage device. Audio data from the storage device may be played through speakers on the chair, audio output devices on a gaming device, or audio output devices on a peripheral attached to the gaming device such as a top box or signage peripheral.

0) US2006131810A – CASINO CARD GAME

140) Family number: 33082769 (US2006131810A) © PatBase

Title: CASINO CARD GAME

Priority: US20040635912P 20041214 US20050304516 20051214

Family:

Publication number	Publication date	Application number	Application date
US2006131810 AA	20060622	US20050304516	20051214
US7748714 BB	20100706	US20050304516	20051214
WO06065952 A2	20060622	WO2005US45348	20051214
WO06065952 A3	20070802	WO2005US45348	20051214

Probable Assignee: IGT

Assignee(s):(std)**:** IGT RENO NEV ; NICELY MARK C ; WAGERWORKS INC

Assignee(s): IGT

Inventor(s):(std)**:** LAFKY ERNIE M ; NICELY MARK C ; PARKER PAUL E

Agent(s): GREENBERG TRAURIG; K AND L GATES LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A63F1/00 A63F9/24 G06F19/00 (Advanced/Invention); A63F1/00 A63F9/24 G06F19/00 (Core/Invention)

CPC: G07F17/32 G07F17/3293

European class: G07F17/32 G07F17/32P6

US class: 273/138.1 273/292 273/292P 463/11 463/11S 463/13 463/17 463/17S 463/23 463/9

Classification Explorer

Cited documents: US7222857 BB, US7165770 BB, US7137628 BB, US6964418 BB, US6955356 BB, US6749500 BA, US6695695 BB, US6685560 BA, US6652377 BA, US6196918 BA, US6110040 A, US6098995 A, US6098985 A, US6007066 A, US5823873 A, US5788240 A, US5046736 A, US2003003997 AA,

Forward Citations: WO13103876, WO08109988, USD783096, USD771193, USD760846, USD746380, USD742974, USD730993, USD712975, USD708676, USD704275, USD704273, USD691666, USD691665, USD685435, USD682948, USD681130, USD678958, USD678957, USD678956, USD678955, USD626182, USD599859, USD559917, US9659440, US9626828, US9619972, US9547959, US9547958, US9530283, US9406202, US9406193, US9401071, US9345960, US9311785, US9269235, US9251665, US9245412, US9230405, US9138634, US9129486, US9126108, US9033806, US9017159, US9011227, US9011226, US9011225, US8888577, US8777722, US8727851, US8702520, US8696424, US8672736, US8500532, US8475254, US8449363, US8449362, US8398473, US8387986, US8353751, US8235785, US8192267, US8177619, US8167715, US8137174, US7862423, US7803043, US7611404, US2014274257, US2013130809, US2013079083, US2011159940, US2011115159, US2010234090, US2010120530, US2010120484, US2010004057, US2010001467, US2009124316, US2009121434, US2009082090, US2008227516, US2008207297, US2008188312, GB2437790,

Abstract:
Source: US2006131810A A card game and method of playing the card game is disclosed. The card game is premised on the game of Texas Hold'em and pits a player against one or more virtual players. Initially, the player places a blind wager and then the player and multiple virtual players are provided two hole cards. The player's two hole cards are provided face–up and each virtual player receives the hole cards face down. In one version, at least one virtual hand is eliminated from play during the game. Elimination criteria can be based on a ranking of the virtual player's hand or other suitable criteria. At the end of the game the player's hand is compared to each remaining virtual player's hand. If the player's hand outranks each virtual player's hand, the player wins a payout. A hand swap or exchange, "All In" wager and a side wager are other features of the game.

0) WO06114375A1 – SWIM OR SCUBA DIVING FIN PALME POUR LA NATATIO...

141) Family number: 33586732 (WO06114375A1) © PatBase

Title: SWIM OR SCUBA DIVING FIN

Priority: IT2005SV00018 20050428

Family:

Publication number	Publication date	Application number	Application date
ITSV20050018 A1	20061029	IT2005SV00018	20050428
WO06114375 A1	20061102	WO2006EP61655	20060419

Probable Assignee: SALVAS SUB S P A

Assignee(s):(std)**:** SALVAS SUB S P A ; TESTA FABIO

Assignee(s): SALVAS SUB SPA

Inventor(s):(std)**:** TESTA FABIO

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A63B31/11 (Advanced/Invention); A63B31/00 (Core/Invention)

CPC: A63B31/11 A63B2225/09

European class: A63B31/11 K63B225/09

Classification Explorer

Cited documents: US6341383 BA, US6227924 BA, US5766050 A, JPH01136673, GB2128096 A1, FR2744639 A1, FR2617051 A1, FR2505663 A1, FR2483239 A1, DE1078913 B,

Abstract:
A swim or scuba diving fin comprising a footpocket portion (1) for receiving the foot of a user, and a blade portion (2), which is a forward extension of the footpocket portion (1), characterized in that the footpocket has a heel section (101) which is completely separated from the remaining front footpocket section (201) and is or may be removably connected to said remaining front footpocket section and/or to the blade or blade base portion that is integral therewith in such a manner as to allow adjustment of the distance between said heel section (101) from the remaining front footpocket section (201).

0) US2006273518A – CARD GAME

142) Family number: 33976626 (US2006273518A) © PatBase

Title: CARD GAME

Priority: US20050296161 20051207 US20050687906P 20050607 US20060419724 20060522

Family:

Publication number	Publication date	Application number	Application date
US2006273518 AA	20061207	US20050296161	20051207
US2006273519 AA	20061207	US20060419724	20060522
US7429046 BB	20080930	US20060419724	20060522
US7438295 BB	20081021	US20050296161	20051207

Probable Assignee: AIDA MASAO

Assignee(s):(std)**:** AIDA MASAO

Inventor(s):(std)**:** AIDA MASAO

Agent(s): GREENBERG TRAURIG; PHILLIPS ROB L; ROB L

International class (IPC 8–9)**:** A63F1/00 (Advanced/Invention); A63F1/00 (Core/Invention)

CPC: A63F1/00 A63F3/00157 A63F2001/005 A63F2003/00164

European class: A63F1/00 K63F1/00P K63F3/00A32 K63F3/00A32D

US class: 273/292 273/292P

Classification Explorer

Cited documents: US6959928 BB, US6817615 BA, US6705613 BA, US6651983 BA, US6637746 BA, US6547247 BB, US6511068 BA, US6474644 BA, US6422564 BA, US6379245 BB, US6206373 BA, US6132311 A, US6102402 A, US5845907 A, US5678821 A, US5657993 A, US5489101 A, US5382025 A, US2005161884 AA, US2005151319 AA, US2005104292 AA, US2004183254 AA, US2004121831 AA, US2003094761 AA, US2002125642 AA,

Forward Citations: WO15123386, US9659461, US9564016, US9530278, US9339723, US9183705, US9165428, US9129487, US9126102, US9120007, US8986091, US8974305, US8579292, US8523654, US7954821, US7850515, US2015151188, US2014357336, US2013207342, US2011227287, US2010178974, US2010001467, US2009289417, US2009121437, US2009093288, US2008315521, US2008305852, US2008122179, US2007024005, US2006281514,

Abstract:
Source: US2006273518A A method of conducting a poker game is disclosed. The method may be played as a player v. house (i.e., dealer) or player v. player game and may be facilitated in an online version or on electronic gaming devices. The method comprises each participating receiving five hole cards, two of which, are used in combination with three common cards. Three sets of three common cards are dealt such that after each set is dealt, each player discards one hole card. Consequently, at the end of the game, each player has two hole cards and nine common cards are presented in a pattern, such as a 3x3 matrix. Each player combines his or her two hole cards with three common cards (e.g., a row, column or diagonal) from the 3x3 matrix to form a five−card poker hand.

0) US2007072682A – HEAD TO HEAD ELECTRONIC POKER GAME ASSEMBLY AND...

143) Family number: 34350718 (US2007072682A) © PatBase

Title: HEAD TO HEAD ELECTRONIC POKER GAME ASSEMBLY AND METHOD OF OPERATION

Priority: US20050722019P 20050929 US20060534492 20060922 US20060743436P 20060308 US20060822428P 20060815 US20060558694 20061110

Family:

Publication number	Publication date	Application number	Application date
US2007072682 AA	20070329	US20060534492	20060922
US2007213116 AA	20070913	US20060558694	20061110
WO07041163 A2	20070412	WO2006US37689	20060927
WO07041163 A3	20090507	WO2006US37689	20060927
WO07103351 A2	20070913	WO2007US05650	20070305
WO07103351 A3	20071025	WO2007US05650	20070305

Probable Assignee: POKERTEK INC

Assignee(s):(std)**:** CRAWFORD JAMES T ; POKERTEK INC ; STANFORD MICHAEL SCOTT ; LESTER JONATHAN TALMADGE ; WHITE GEHRIG HENDERSON ; CRAWFORD JAMES T III ; STANFORD MICHAEL S ; WHITE GEHRIG H ; LESTER JONATHAN T ; SHINN HAL JEROME III ; FERNER KENDAL BOYD ; SHINN HAL JEROME ; BERMAN LYLE A ; BERMAN LYLE ARNOLD ; BYRD DANIEL V ; BYRD DANIEL VINCENT

Inventor(s):(std)**:** BERMAN LYLE A ; BERMAN LYLE ARNOLD ; BYRD DANIEL V ; BYRD DANIEL VINCENT ; CRAWFORD JAMES T ; CRAWFORD JAMES T III ; FERNER KENDAL BOYD ; LESTER JONATHAN T ; LESTER JONATHAN TALMADGE ; SHINN HAL JEROME ; SHINN HAL JEROME III ; STANFORD MICHAEL S ; STANFORD MICHAEL SCOTT ; WHITE GEHRIG H ; WHITE GEHRIG HENDERSON

Inventor(s): WHITE GEHRIG ; STANFORD MICHAEL ; LESTER JONATHAN ; CRAWFORD JAMES TIII ; CRAWFORD JAMES ; BYRD DANIEL ; BERMAN LYLE

Agent(s): HOWARD AND HOWARD ATTORNEYS PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F9/24 G07F17/32 (Advanced/Invention); A63F9/24 G07F17/32 (Core/Invention)

CPC: G07F17/322 G07F17/3223 G07F17/3276 G07F17/3293 G07F17/32

European class: G07F17/32 G07F17/32C4D G07F17/32C6 G07F17/32M8D G07F17/32P6

US class: 463/16 463/16P 463/46 463/46P

Classification Explorer

Cited documents: US7306516 BB, US6739970 BB, US6734878 BA, US6729956 BB, US6729621 BB, US6729620 BB, US6722985 BB, US6722974 BB, US6712694 BA, US6708975 BA, US6705943 BB, US6702667 BB, US6672959 BB, US6569014 BB, US6569013 BA, US6568680 BA, US6565432 BB, US6565088 BB, US6561898 BB, US6561897 BA, US6558253 BA, US6544121 BB, US6544120 BB, US6537150 BA, US6536768 BB, US6530842 BA, US6517437 BA, US6517074 BA, US6511068 BA, US6386979 BA, US6386973 BA, US6382628 BB, US6379245 BB, US6371851 BA, US6368216 BA, US6368214 BA, US6358144 BA, US6343989 BA, US6343988 BA, US6342007 BA, US6334613 BA, US6237916 BA, US6234897 BA, US6227969 BA, US6220960 BA, US6220959 BA, US6206780 BA, US6203430 BA, US6203429 BA, US6196547 BA, US6190254 BA, US6179711 BA, US6165069 A, US6068552 A, US6056641 A, US6050568 A, US6045129 A, US6039648 A, US6036601 A, US6018677 A, US6012719 A, US5902983 A, US5902184 A, US5882260 A, US5882259 A, US5876334 A, US5876283 A, US5868619 A, US5868618 A, US5755621 A, US5707285 A, US5669817 A, US5609525 A, US5511781 A, US5505461 A, US5415404 A, US5411257 A, US5407199 A, US5401023 A, US5393057 A, US5377997 A, US5377973 A, US5308065

A, US5294120 A, US5277424 A, US5275400 A, US5188363 A, US5159549 A, US5100137 A, US5022653 A, US5019973 A, US5014991 A, US4926327 A, US4760527 A, US4743022 A, US4614342 A, US4516777 A, US2006068899 AA, US2006068871 AA, US2006068870 AA, US2006068869 AA, US2006068868 AA, US2006068867 AA, US2006068866 AA, US2006068865 AA, US2006068864 AA, US2006068498 AA, US2006066052 AA, US2006058093 AA, US2006058092 AA, US2006058091 AA, US2006058090 AA, US2006058089 AA, US2006058088 AA, US2006058087 AA, US2006058086 AA, US2006058085 AA, US2006058084 AA, US2006058083 AA, US2006058082 AA, US2005090304 AA, US2005050175 AA, US2005032563 AA, US2004082372 AA, US2004036219 AA, US2003176214 AA, US2003176211 AA, US2003087685 AA, US2003083119 AA, US2003070178 AA, US2003064767 AA, US2003032469 AA,

Forward Citations: WO08154048, USD595783, US9697687, US9682314, US9669316, US9669315, US9669313, US9659461, US9656174, US9649549, US9626475, US9619970, US9613179, US9610503, US9607016, US9569933, US9569924, US9530278, US9517413, US9517405, US9501897, US9468851, US9463376, US9339723, US9257002, US9183705, US9165428, US9162138, US9159185, US9142094, US9129487, US9126102, US9120007, US9101821, US9007189, US8986091, US8974305, US8926423, US8831758, US8734235, US8616966, US8604042, US8602865, US8597114, US8591305, US8517826, US8511684, US8490973, US8481536, US8435111, US8372971, US8360873, US8342954, US8342529, US8314781, US8287347, US8262475, US8251802, US8251801, US8138199, US8133900, US8125578, US8087999, US8033904, US8012028, US7997979, US7825246, US7528143, US7456176, US7371173, US2017069167, US2016155296, US2015379825, US2015356811, US2015031431, US2014357335, US2014179406, US2013344945, US2013029760, US2012115607, US2011269531, US2011212077, US2011210925, US2011118011, US2010330030, US2010311491, US2010113120, US2010062845, US2010019454, US2009298584, US2009286789, US2009286590, US2009275582, US2009275569, US2009124337, US2009088253, US2009042644, US2008239172, US2008153586, US2008153578, US2007259904, US2007161424, US2007024005, US2006292203, US2005245524, EP2315184,

Abstract:
Source: US2007072682A An electronic poker game assembly preferably provides a head−to−head poker game for two players. The assembly has a housing that is preferably a table and contains at least a portion of a computer system that generates and shuffles a virtual poker card deck, deals the cards and performs other tasks typically associated with a dealer. The housing supports an electronic player interaction area (EPIA) for each player and a common display area. Dealt virtual hole cards are displayed on screens of each EPIA and virtual common cards are preferably displayed on a screen of the common display area. Mechanical actuators for each EPIA are operated by the players when playing poker, sending electric signals to the computer system for play of the game.

144) Family number: 34708595 (US2007151390A) © PatBase

Title: FORCE AND TORQUE SENSING FOR SURGICAL INSTRUMENTS

Priority:

EP20060850942 20061213 JP20080548797 20061213 JP20080548798 20061213
JP20090518470 20070622 JP20090515625 20070613 JP20090515625T 20070613
US20050755157P 20051230 US20050755108P 20051230 JP20110516398 20090604
JP20130072931 20070613 JP20120503535 20100326 US20050093372 20050330
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US20060491384 20060720 US20060553303 20061026 US20060478531 20060629
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US20130095011 20131203

Family:

Publication number	Publication date	Application number	Application date
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CN101325920 B	20120201	CN200680046320	20061213
CN101340850 A	20090107	CN200680048475	20061213
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US2008065106 AA	20080313	US20070762170	20070613	
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Probable Assignee: INTUITIVE SURGICAL OPERATIONS

Assignee(s):[(std)]**:** GOMEZ DANIEL ; GOMEZ DANIEL H ; LARKIN DAVID Q ; INTULTIVE SURGICAL INC ; ROGERS THEODORE W ; LOCKYER BRETT J ; SCHENA BRUCE ; MCGROGAN ANTHONY K ; ROSA DAVID J ; MOHR CATHERINE J ; MOHR CATHERINE ; KUMAR RAJESH ; MOHR PAUL W ; LILAGAN PAUL ; MUSTAFA TABISH ; LILAGAN PAUL E ; MITRA PROBAL ; MUSTUFA TABISH ; SHAFER DAVID C ; WILLIAMS MATTHEW R ; SCHENA BRUCE MICHAEL ; SCHENA BRUCE M ; TOGNACCINI MARC E ; BLUMENKRANZ STEPHEN J ; COOPER THOMAS G ; DIOLAITI NICOLA ; DUVAL EUGENE F ; INTUITIVE SURGICAL INC ; INTUITIVE SURGICA INC ; INTUITIVE SURGICAL OPERATIONS

Assignee(s): INTUITIVE SURGICAL OPERATIONS, INC.

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Inventor(s): WILLIAMS MATTHEW ; DUVAL EUGENE ; SHAFER DAVID ; COOPER THOMAS ; BLUMENKRANZ STEPHEN ; ROSA DAVID

Agent(s): MACDOUGALL ALAN JOHN SHAW; MACDOUGALL ALAN JOHN SHAW ET AL; YAMAKAWA MASAKI; FRANK NGUYEN, INTUITIVE SURGICAL; FRANK NGUYEN INTUITIVE SURGICAL; PATENT DEPT, INTUITIVE SURGICAL INC; PATENT DEPT INTUITIVE SURGICAL INC; MACPHERSON KWOK CHEN AND HEID LLP; INTELLECTUAL PROPERTY DEPT INTUTIVE SURGICAL INC; PATENT DEPT INTUITIVE SURGICAL OPERATIONS INC; PATENT DEPT INTUITIVE SURGICAL OPERATIONS; NGUYEN FRANK; NGUYEN FRANK ET AL; ALLENBY CHRISTOPHER B ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61B1/00 A61B1/002 A61B1/01 A61B1/018 A61B1/04 A61B1/045 A61B1/05 A61B1/06 A61B1/313 A61B1/32 A61B17/00 A61B17/02 A61B17/28 A61B17/29 A61B17/295 A61B17/32 A61B17/3209 A61B17/34 A61B17/94 A61B18/00 A61B19/00 A61B34/00 A61B34/20 A61B34/30 A61B34/32 A61B34/35 A61B34/37 A61B5/00 A61B5/06 A61B5/151 A61B8/00 A61B8/12 A61B90/00 A61B90/30 A61F11/00 A61M25/00 B23P11/00 B23P17/04 B25J13/02 B25J13/06 B25J13/08 B25J15/00 B25J17/00 B25J17/02 B25J18/00 B25J18/02 B25J18/06 B25J19/02 B25J19/04 B25J19/06 B25J3/00 B25J9/06 B25J9/10 B25J9/16 G01D7/00 G01L1/00 G01L1/22 G01L1/24 G05B19/04 G05B19/18 G05B19/19 G05B19/42 G06F17/00 G06F19/00 G06F3/048 G06K9/00 G06T11/40 G06T11/60 G06T17/00 G06T19/00 G06T7/00 G09B23/28 (Advanced/Invention); A61B1/005 A61B1/018 A61B1/04 A61B17/00 A61B17/04 A61B17/29 A61B17/34 A61B19/00 A61B34/10 A61B34/20 A61B34/35 A61B34/37 A61B90/00 B25J13/08 B25J17/00 B25J18/02 B25J19/04 B25J3/00 B25J9/16 G01L1/24 (Advanced/Non–invention); A61B1/00 A61B1/005 A61B1/012 A61B1/04 A61B1/045 A61B1/06 A61B1/32 A61B17/00 A61B17/28 A61B17/32 A61B17/34 A61B17/94 A61B19/00 A61B8/00 B25J17/02 B25J3/00 B25J9/16 G01D7/00 G01L1/00 G05B19/04 G05B19/18 G05B19/19 G06F3/048 G06K9/00 G06T17/00 G09B23/00 (Core/Invention)

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Abstract:
Source: US2007151390A An apparatus, system, and method for improving force and torque sensing and feedback to the surgeon performing a telerobotic surgery are provided. Groups of axially oriented strain gauges are positioned on a distal end of an instrument shaft proximate a moveable wrist of a robotic surgical instrument to sense forces and torques at the distal tip of the instrument. Advantageously, errors due to changes in the configuration of the tip or steady state temperature variations are eliminated. Other advantageous configurations and methods are disclosed.

0) US2009086436A – CARRIER BODY FOR COMPONENTS OR CIRCUITS

145) Family number: 37221528 (US2009086436A) © PatBase

Title: CARRIER BODY FOR COMPONENTS OR CIRCUITS

Priority: CN200710089366 20070323 DE200610013873 20060323 EP20070727202 20070322 DE200710014433 20070322 DE200610055965 20061124 DE200610058417 20061208 WO2007EP52726 20070322 EP20110177204 20070322

Family:

Publication number	Publication date	Application number	Application date
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Assignee(s):(std)**:** CERAM GMBH ; CERAMTEC AG ; KLUGE CLAUS PETER ; KERAMTEK AG ; CERAMTEC GMBH

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Inventor(s): CLAUS PETER KLUGE ; KLUGE CLAUS

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; ROBIC; SCHERZBERG ANDREAS HANS; UPPENA FRANZ; DE ELZABURU ALBERTO; REINHOLD COHN AND PARTNERS; FULBRIGHT AND JAWORSKI LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): F21K99/00 F21S8/10 F21V29/00 F21Y101/00 F21Y101/02 F21Y105/00 H01B3/18 H01B3/46 H01L23/00 H01L23/15 H01L23/34 H01L23/36 H01L23/367 H01L23/373 H01L23/552 H01L23/64 H01L25/16 H01L33/62 H01L33/64 H05K1/02 H05K1/03 H05K3/10 H05K7/02 H05K7/20 (Advanced/Invention);
F21Y101/00 F21Y101/02 F21Y105/00 (Advanced/Non–invention);
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H01L (Subclass/Invention)

International class (IPC 1–7): H01L23/373

CPC: H01L24/32 H01L24/48 H01L2224/32245 F21S48/328 F28F2215/10 H01L23/15 H01L23/367 H01L23/3672 H01L23/3735 H01L23/3736 H01L23/3737 H01L23/552 H01L25/16 H01L25/162 H01L33/642 H01L33/648 H01L2224/32014 H01L2224/48091 H01L2224/73265 H01L2924/01004 H01L2924/01005 H01L2924/01006 H01L2924/01013 H01L2924/01015 H01L2924/01019 H01L2924/0102 H01L2924/01027 H01L2924/01029 H01L2924/01033 H01L2924/0104 H01L2924/01046 H01L2924/01047 H01L2924/01058 H01L2924/01068 H01L2924/01074 H01L2924/01077 H01L2924/01078 H01L2924/01079 H01L2924/01082 H01L2924/014 H01L2924/09701 H01L2924/13055 H01L2924/19041 H01L2924/3025 H05K1/0203 H05K1/0284 H05K1/0306 H05K1/0373 H05K2201/0209 H05K2201/09045 H01L2224/45139 H01L2224/45144 H01L2924/07811 H01L2924/12041 H01L2924/1305 F21V29/71 F21V29/713 F21V29/75 F21V29/763 F21V29/86 F21V29/89 H01L2924/00014 H01L2924/12042 H01L24/45 F21V29/70 H01L23/3731 F21K9/23 F21Y2105/10 F21Y2115/10 F21V29/004 H01L2924/181

European class: F21K9/13 F21S48/32P F21V29/00C2 F21V29/22B2F2 F21V29/24B F21V29/24F H01L23/15 H01L23/34 H01L23/36 H01L23/367 H01L23/367F H01L23/373C H01L23/373L H01L23/373M H01L23/373P H01L23/552 H01L24/31 H01L25/16F H05K1/02B2 R21V29/22B4 R21V29/26 R21V29/26B R21Y101/02 R21Y105/00D T01L224/32014 T01L224/48091 T01L224/73265 T01L25/16 T01L33/64C T01L33/64H T01L924/01004 T01L924/01005 T01L924/01013 T01L924/01015 T01L924/01020 T01L924/01027 T01L924/01029 T01L924/01040 T01L924/01046 T01L924/01074 T01L924/01077 T01L924/01078 T01L924/01079 T01L924/13055 T01L924/19041 T01L924/30250

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Abstract:
Source: US2009086436A A carrier body for electrical or electronic component elements or circuits, the carrier body being electrically nonconductive or virtually nonconductive. In order to simplify the carrier body while at the same time providing extremely improved heat dissipation, the invention process that the carrier body is provided integrally with heat−dissipating or heat−supplying cooling elements.

146) Family number: 41512220 (US2008045079A) © PatBase

Title: ELECTRICAL CONNECTOR SYSTEM WITH JOGGED CONTACT TAILS

Priority: CN200780051456 20071129 CN200780051466 20071218 US20060839071P 20060821 US20060846711P 20060922 EP20070863105 20071218 EP20070862316 20071129 US20070917491P 20070511 US20070837847 20070813 US20060870791P 20061219 US20060870793P 20061219 US20060870796P 20061219 US20070726936 20070323 US20070887081P 20070129 US20070958098 20071217 US20090355278 20090116 US20090396086 20090302 WO2007US25910 20071218 WO2007US24552 20071129 US20100843735 20100726 US20110310970 20111205 WO2007US18224 20070816 US20130770425 20130219

Family:

Publication number	Publication date	Application number	Application date
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CN101632200 A	20100120	CN200780051456	20071129
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WO08088462 A1	20080724	WO2007US24552	20071129	
WO08088462 A8	20091015	WO2007US24552	20071129	

Probable Assignee: FCI

Assignee(s):(std)**:** FCI AMERICAS TECHNOLOGY INC ; FCI AMERICAS TECHNOLOGY LLC ; FRAMATOME CONNECTORS INT ; MINICH STEVEN ; MORLION DANNY ; MORLION DANNY L C ; MINICH STEVEN E ; JOHNESCU DOUGLAS M ; SERCU STEFAAN H ; SERCU STEFAAN HENDRIK JOZEF ; FCI INC ; BUCK JONATHAN E

Assignee(s): FCI ; WILMINGTON TRUST LONDON LTD

Inventor(s):(std)**:** BUCK JONATHAN E ; JOHNESCU DOUGLAS M ; MINICH STEVEN ; MINICH STEVEN E ; SERCU STEFAAN H ; SERCU STEFAAN H J ; SERCU STEFAAN HENDRIK JOZEF ; STEVEN MINICH ; MORLION DANNY ; MORLION DANNY L C

Inventor(s): MORLION DANNY LC ; MINICH STEVEN YORK ; JOHNESCU DOUGLAS M YORK ; BUCK JONATHAN E HERSHEY

Agent(s): REGI FRANCOIS XAVIER; DE VRIES AND METMAN; WOODCOCK WASHBURN LLP; HARRINGTON AND SMITH PC; BAKER AND HOSTETLER LLP; GEIBEL DEAN E ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class(IPC 8–9)**:** H01R12/00 H01R12/16 H01R12/28 H01R12/51 H01R12/52 H01R12/58 H01R13/02 H01R13/40 H01R13/46 H01R13/514 H01R13/518 H01R13/631 H01R13/6461 H01R13/648 H01R13/6581 H01R13/73 H01R13/74 H01R24/00 H01R24/30 H01R31/02 H01R33/88 H01R4/66 H01R9/03 H05K1/00 (Advanced/Invention); H01R12/00 H01R13/02 H01R13/46 H01R13/648 H01R13/73 H01R13/74 H01R24/00 H01R31/00 H01R33/00 H01R4/66 H01R9/03 H05K1/00 (Core/Invention)

CPC: Y10S439/941 H01R12/727 H01R24/30 H01R13/6471 H01R13/6477 H01R9/038 H01R33/88 H01R12/724 H01R13/518 H01R12/585 H01R13/514

European class: H01R12/58B H01R13/514 H01R13/518 H01R23/00B H01R23/68D2 H01R23/70K H01R23/70K2 T01R33/88 T01R9/03S5

US class: 174/250 439/544 439/545 439/55 439/55P 439/607.05 439/607.050P 439/607.050S 439/607.08 439/608 439/625 439/625S 439/638 439/660 439/660P 439/686 439/79 439/79P 439/884 439/892 439/892S 439/941

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Abstract:
Source: US2008045079A Connector systems include electrical connectors orthogonally connected to each other through shared through−holes in a midplane. An orthogonal vertical connector includes jogged contacts to offset for or equalize the different length contacts in the right−angle connector to which the vertical connector is connected. A first contact in the right angle connector may mate with a first contact in the vertical connector. A second contact in the right angle connector may mate with a second contact in the vertical connector. The first contact in the right angle connector may be greater in length than the adjacent second contact of the right angle connector. Thus, the second contact of the vertical connector may be jogged by the distance to increase the length of the second contact by the distance.

0) US2008108412A – POKER GAME INCORPORATING "BAD BEAT" FEATURE

147) Family number: 41785807 (US2008108412A) © PatBase

Title: POKER GAME INCORPORATING "BAD BEAT" FEATURE

Priority: US20060594337 20061108

Family:

Publication number	Publication date	Application number	Application date
AU2007231739 AA	20080522	AU20070231739	20071107
US2008108412 AA	20080508	US20060594337	20061108

Probable Assignee: BALLY GAMING INC

Assignee(s):(std): SHUFFLE MASTER INC

Assignee(s): BALLY GAMING INC ; DEUTSCHE BANK TRUST CO ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT A ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT AS ; SHFL ENTERTAINMENT INC

Inventor(s):(std): SNOW ROGER M ; YOSELOFF MARK L

Inventor(s): MARK L YOSELOFF ; ROGER M SNOW

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; MARK A LITMAN AND ASSOCIATES PA

International class (IPC 8–9): A63F1/00 A63F13/10 A63F13/12 A63F9/24 (Advanced/Invention); A63F1/00 A63F13/10 A63F13/12 A63F9/24 (Core/Invention)

CPC: A63F1/00

European class: A63F1/00

US class: 273/292 463/13 463/20

Classification Explorer

Cited documents: USD548799 S1, USD519164 S1, USD518112 S1, USD452283 S1, US6896265 BA, US6827348 BA, US6811153 BA, US6802773 BB, US6719291 BA, US6655684 BB, US6637747 BA, US6581936 BA, US6517072 BA, US6479200 BA, US6467771 BA, US6428005 BB, US6334614 BA, US6206373 BA, US6149154 A, US6113101 A, US6102402 A, US6102400 A, US5975529 A, US5820460 A, US5810354 A, US5725216 A, US5685774 A, US5489101 A, US5417430 A, US5411257 A, US5251897 A, US5167413 A, US5100137 A, US5098107 A, US5022653 A, US4836553 A, US2007210520 AA, US2007102882 AA, US2007024005 AA, US2006284376 AA, US2006267285 AA, US2006186599 AA, US2006178183 AA, US2006119044 AA, US2005269782 AA, US2005164762 AA, US2005164759 AA, US2005051958 AA, US2005032564 AA, US2005032563 AA, US2004224777 AA, US2004217548 AA, US2004150163 AA, US2003042679 AA, US2002195775 AA, US2002113371 AA, US2001040345 AA,

Forward Citations: WO11059382, US9293007, US9129487, US9064379, US8905842, US8851475, US8794628, US8721417, US8678391, US8545316, US8512116, US8491390, US8348739, US8177618, US8177616, US8157646, US8066285, US8033903, US7758412, US2013316775, US2012309481, US2012283012, US2012270626, US2012088563, US2011111833, US2010225060, US2010216532, US2010194046, US2010004042, US2009315264, US2009117959, US2009091081, US2008237985, US2008224402, US2008161103, US2008113711, US2007060267, CN102407018, CN102407018,

Abstract:
Source: US2008108412A A variant game of Texas Hold' Em poker allows for players to be rewarded for high ranking hands, even when the dealer has a premium hand. The method comprises: a player placing an ante wager that the player hand will beat the dealer hand, and a blind wager. The players and dealer receive hole cards and community cards are dealt. Players are provided with multiple opportunities to check or make play wagers. With full knowledge of the player hand, the player can either make a final Ante or fold. Folding is only permitted if the player did not previously place a play wager. The dealer reviews his cards and the hands are resolved. The dealer must qualify, otherwise the Ante is a push. Even if the dealer does not qualify, if the player hand beats the dealer hand, the player wins on all play wagers. The player wins the blind wager if he beats the dealer hand and his hand is at least a certain predetermined rank. Players with certain high ranking hands win a "bad beat" payoff when the dealer hand beats the player hand.

148) Family number: 42135860 (US2010145337A) © PatBase

Title: INSTRUMENTED ORTHOPAEDIC IMPLANT FOR IDENTIFYING A LANDMARK

Priority:

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WO2008US05530	20080228	WO2010US30784	20100412	WO2010US32634	20100427
US20150937454	20151110				

Family:

Publication number	Publication date	Application number	Application date
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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61B17/00 A61B17/16 A61B17/17 A61B17/56 A61B17/58 A61B17/72 A61B17/88 A61B17/90 A61B18/18 A61B19/00 A61B34/00 A61B34/20 A61B34/30 A61B5/05 A61B5/06 A61B5/11 A61B6/00 A61B90/00 A61B90/11 A61F2/28 A61F2/46 A61L2/07 A61L2/08 A61L31/04 H01F41/00 (Advanced/Invention);
A61B17/16 A61B17/17 A61B17/72 A61B19/00 A61B5/00 (Advanced/Non–invention);
A61B17/16 A61B17/56 A61B17/58 A61B17/68 A61B19/00 A61B5/05 A61F2/28 (Core/Invention);
A61B17/68 A61B19/00 (Core/Non–invention);
A61B A61F (Subclass/Invention)

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European class: A61B17/17D A61B17/17M A61B5/05 A61B5/06 A61B5/06C3 A61B5/11W2 K61B17/17D K61B17/17J K61B17/17M K61B17/72 K61B19/48J K61B19/52H12B4 K61B19/52H12F K61B19/54L2 K61B19/54R K61B5/45B

US class: 1/1 128/899 29/602.1 422/22 422/26 600/409 600/409P 600/424 600/424P 606/130 606/62 606/62S 606/67 606/67P 606/86.00RP 606/86.00RS 606/86R 606/96 606/96P 623/16.11 623/16.110S D24/171

Locarno class: 24/01

Classification Explorer

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Forward Citations: WO17070523, WO15157703, WO15055797, WO14137909, WO14116961, WO14116853, WO13173138, WO12154496, WO12154496, WO12134308, WO12109760, WO12103169, WO12103169, WO12061286, WO12040100, WO12040100, WO11153468, WO11153468, WO11137301, WO10145858, WO10080560, USRE45854, USD704841, USD701962, USD684691, USD684690, USD674093, US9684078, US9628775, US9618620, US9607239, US9585722, US9579133, US9554812, US9551575, US9539037, US9529083, US9526441, US9513107, US9495483, US9492210, US9451972, US9445720, US9417316, US9417056, US9372265, US9358018, US9329271, US9295482, US9232985, US9226800, US9226689, US9226688, US9220514, US9210288, US9192399, US9186161, US9168654, US9168153, US9163922, US9149615, US9113023, US9084617, US9074883, US9031637, US9023050, US9017411, US9009000, US8997362, US8974539, US8970207, US8945230, US8945147, US8890511, US8814868, US8784428, US8784425, US8778029, US8739801, US8721643, US8704124, US8623023, US8570187, US8491599, US8486070, US8444653, US8388553, US2016374561, US2016081728, US2016029952, US2015238277, US2015141811, US2014148808, US2014088594, US2014081121, US2013253660, US2013218007, US2013131679, US2012165950, US2012053585, US2011144760, US2011066193, US2011029091, US2010305708, US2010303324, US2010303313, US2010274121, US2010203468, US2010152573, US2010152566, US2010145337, US2009222103, US2009112215, US2008275452, US2007233269, US2007100462, US2007083266, US2005267584, US2004147927, TWI507169, JP6138699, JP6125231, JP6081353, JP2016005816, JP2014534836, JP2014519870, JP2014512876, JP2014505524, JP2013544138, JP2013527015, JP2013506538, ITPI20100070, EP2953562, EP2901946, EP2709542, EP2575686, EP2575686, EP2485665, DE102010046948, DE102009025248, CN105443048, CN105377194, CN105377194, CN105073034, CN103635153, CN103561670, CN103533903, CN103492833, CN103096839, CN103068320, CN102892364, AU2012253862, AU2011323613, AU2011323613, AU2011261307,

Abstract:
Source: US2010145337A A system (110, 150) for targeting a landmark (114, 160) is disclosed. The system includes an instrumented medical implant (112, 152), a control circuit (118, 153), a power supply (120, 157), and a landmark identifier (122, 154). The instrumented medical implant (112, 152) has one or more landmarks (114, 160) and each landmark (114, 160) has a corresponding coil (116, 162). The control circuit (118, 153) is electrically connected to the corresponding coil (116, 162), and the power supply (120, 157) is electrically connected to the control circuit (118,153). The landmark identifier (122, 154) has a magnetic sensor (124, 155) for sensing the corresponding coil (116, 162).

0) US2010108394A – DOWNHOLE TOOL

149) Family number: 34468973 (US2010108394A) © PatBase

Title: DOWNHOLE TOOL

Priority: GB20070004484 20070308 WO2008GB00812 20080310

Family:

Publication number	Publication date	Application number	Application date
AU2008222456 AA	20080912	AU20080222456	20080310
CA2679547 AA	20090820	CA20082679547	20080310
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GB2447225 B2	20110817	GB20070004484	20070308
US2010108394 AA	20100506	US20080530295	20080310
WO08107694 A1	20080912	WO2008GB00812	20080310

Probable Assignee: NAT OILWELL VARCO LP

Assignee(s):(std)**:** NAT OILWELL VARCO L P ; NAT OILWELL VARCO LP ; OLLERENSHAW ANDREW ; RUSSELL MARK ; REAMERCO LTD

Assignee(s): REAMERCO LIMITED ; NATIONAL OILWELL VARCO L P ; NATIONAL OILWELL VARCO LP

Inventor(s):(std)**:** OLLERENSHAW ANDREW ; RUSSELL MARK

Inventor(s): ANDREW OLLERENSHAW ; MARK RUSSELL

Agent(s): HALFORDS IP; GOWLING LAFLEUR HENDERSON LLP; LUNT MARK GEORGE FRANCIS; KEELING PATENTS AND TRADEMARKS LLC; HARRISON GODDARD FOOTE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): E21B10/32 E21B17/10 E21B17/12 E21B33/128 (Advanced/Invention); E21B10/26 E21B17/00 (Core/Invention)

CPC: E21B17/1014 E21B10/32 E21B17/10 E21B33/128

European class: E21B10/32 E21B17/10 E21B17/10C E21B33/128

US class: 166/241.1 166/241.100S 175/284 175/325.1 175/325.100S

Classification Explorer

Cited documents: WO06072761 A2, US7353889 BA, US5979550 A, US5318138 A, US5022484 A, US4960173 A, US4865137 A, US4693328 A, US3068400 A, US274740 A, US2719700 A, US2011203849 AA, US2007007043 AA, US2006144623 AA, US2004134687 AA, US2002144815 AA, GB2421744 A1, GB2410510 A1, GB2385344 A1, GB2216571 A1, EP0771932 A1,

Forward Citations: US9677355, US9493991, US9488020, US9482054, US9447648, US9341027, US9284816, US9228403, US8944161, US8555963, US8485278, US2015008041, US2014246236, US2011073300, EP2638233, EP2483508, DK201470422, CN104781495, CN104781495,

Abstract:
Source: US2010108394A A downhole tool (10') comprises a body (12') having a longitudinal axis and a body through–bore (14'), a slot (34') communicating the outside of the body with the body through–bore. A sleeve actuator (30') mandrel also has a bore and is selectively axially slidable in the body through–bore. A hollow bar (36') is slidable with a radial component in the slot. At least two levers (210), each pivoted to the mandrel (about a first axis perpendicular the longitudinal axis) extend into the hollow bar and are pivoted thereto (about a second axis parallel the first axis). The levers lie in an actuation plane perpendicular the first and second axes and

containing the slot. The levers are disposed at an inclined angle with respect to the longitudinal axis so that longitudinal motion of the mandrel translates into radial movement of the bar.

0) WO08125219A1 – HOUSING FOR A GEARBOX, GEARBOX, METHOD, AND GEA...

150) Family number: 42299753 (WO08125219A1) © PatBase

Title: HOUSING FOR A GEARBOX, GEARBOX, METHOD, AND GEARBOX SERIES

Priority: DE200710017883 20070413 DE200810004337 20080115 WO2008EP02626 20080402 EP20080734969 20080402

Family:

Publication number	Publication date	Application number	Application date
AT524672 E	20110915	AT20080734969T	20080402
DE102008004337 A1	20081016	DE200810004337	20080115
DE502008004878 D1	20111117	DE200850004878T	20080402
EP2147233 A1	20100127	EP20080734969	20080402
EP2147233 B1	20110914	EP20080734969	20080402
EP2147233 B2	20150729	EP20080734969	20080402
WO08125219 A1	20081023	WO2008EP02626	20080402

Probable Assignee: SEW EURODRIVE GMBH AND CO

Assignee(s):(std)**:** MEGERLE JUERGEN ; SEW EURODRIVE GMBH AND CO ; TEGELTIJA MIKI

Assignee(s): SEW EURODRIVE GMBH AND CO KG

Inventor(s):(std)**:** TEGELTIJA MIKI ; MEGERLE JUERGEN

Agent(s): TUENGLER EBERHARD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): F16H57/02 F16H57/033 (Advanced/Invention); F16H57/02 (Core/Invention)

CPC: F16H57/033

European class: F16H57/033

Classification Explorer

Cited documents: US6202507 BA, US4108021 A, US3348430 A, EP1610031 A2, DE818716 A, DE6909020 U, DE4227512 C1,

Forward Citations: WO15132558, WO15067344, WO15067341, WO15067340, GB2469267, DE102012008653, CN105443729, CN105333106, CN104712744, CN104712739, CN103753227, CN103753227, CN103331634, CN103331634, CN102990286, CN102990286,

Abstract:
The invention relates to variants of a gearbox series having housings comprising housing shells, wherein in one variant the housing shells are produced from an identical cast body, in a second, weight–reduced variant the housing shells are produced from different cast bodies, and in a third, further weight–reduced variant the housing shells are produced from identical cast bodies identical to the cast body having reduced weight from the second variant.

0) BRMU8701064U – DISPOSICCO CONSTRUTIVA APLICADA EM MAQUINA DE A...

151) Family number: 43214838 (BRMU8701064U) © PatBase

Title: disposiCco construtiva aplicada em mAquina de auto–atendimento para venda alimentos
DisposiCco constructively applied in machine self–service sale food (Machine translation)

Priority: BR2007MU01064U 20070615

Family:

Publication number	Publication date	Application number	Application date
BRMU8701064 U2	20090203	BR2007MU01064U	20070615

Probable Assignee: HASHIMOTO MITSURU

Assignee(s):(std)**:** HASHIMOTO MITSURU

Assignee(s): MITSURU HASHIMOTO

Inventor(s):(std)**:** HASHIMOTO MITSURU

Inventor(s): MITSURU HASHIMOTO

International class (IPC 8–9): G07F9/10 (Advanced/Invention); G07F9/10 (Core/Invention)

Classification Explorer

Abstract:
Source: BRMU8701064U RESUMO "DISPOSICAO CONSTRUTIVA APLICADA EM BARRA ANTI–PANICO", compreendido por uma fechadura horizontal e uma fechadura vertical, caracterizada pela fechadura horizontal ser constituida por um corpo principal formado a partir de um caixilho cujo fondo detem furos passantes que recebem parafusos de fixacao enquanto centralmente, na seccao superior, e provido de furo para acoplamento de um cubo condutor que projeta transversalmente um segmento circular primario e centralmente um anel circular com furo quadrado passante e rebaixo para acoplamento de um cubo de arraste de formato cilindrico que projeta transversalmente um segmento circular secundario, enquanto centralmente e dotado de furo quadrado com ressalto anelar, sendo que o segmento circular primario do cubo condutor encaixa–se em uma carro de acionamento cujo unha e engatado na lingueeta de travamento acoplada no alivio disposto na lateral do dito caixilho que mtemamente detem orelhas que promovem a fixacao da dita lingueeta atraves de um pino que incorpora uma mola tensionadora, formando um mecanismo acionador blindado revestido por tampa, dotado de alivio para deslocamento da lingueeta, seguido imediatamente por um cavidade guia e furo passante, sendo que a dita cavidade guia recebe o acoplamento de uma chapa de arraste disposta em um manipulo provido de alojamento para insercao de uma barra de ligacao, sendo que o manipulo recebe o engate de uma mola de compressao fixada no extremo do dito caixilho, enquanto mtemamente o mecanismo acionador e provido de molas, sendo o conjunto dotado de capa de fechamento, enquanto fechadura vertical e constituida por um corpo principal formado a partir de um caixilho cujo fundo detem furos passantes que recebem parafusos de fixacao e furo para fixacao de um pino guia inserido em uma chapa de limitadora dotada de /2 pinos condutores acoplados em canais dispostos nas travas superior e inferior esta provida de canal de engate para acoplamento de uma chapa arraste disposta em um manipulo, sendo as travas providas inferiormente de duto acoplador onde e fixado uma haste de deslocamento cujos extremos 5 opostos sao fixados nos dispositivos acionadores que deslocam as lingueetas travadoras fixadas nos caixilhos secundarios providos de capas. SUMMARY "constructive disposition APPLIED IN antipanic BAR", comprised of a horizontal lock and a vertical lock, characterized by the horizontal locking consists of a main body formed from a frame whose fondo holds through holes that receive bolts Fixing while centrally in the top section, and provided with a hole for engagement of a driver hub transversally projects a circular primary segment and centrally a circular ring with through square hole and recess for engagement of a cube drag cylindrical shape transversally projects a circular segment secondary while centrally provided with square hole with annular shoulder, wherein the circular segment primary conductor cube fits in a drive carriage whose nail and engaged with the locking lingueeta coupled to the provisions relief on the side of said frame that mtemamente holds ears to promote the fixation of said lingueeta through a pin that incorporates a tensioning spring, forming a shielded trigger mechanism coated cover, provided with relief to displacement of lingueeta, followed immediately by a sinus guide and through–hole, and said cavity tab receiving coupling a drag plate disposed in a handle provided with a housing for insertion of a connecting rod, wherein the handle receives the engagement of a compression spring fixed on the end of said frame while mtemamente mechanism actuator and spring–loaded, the whole being provided with closing cover, while vertical lock and consists of a main body formed from a frame whose fund holds through holes which receive fixation screws and hole for fixation of a pin inserted guide a limiting plate endowed with / 2–pin drivers engaged in channels arranged on the top and bottom latches this coupling channel provided for coupling a plaque drag disposed on a handle, and the locks provided inferiorly coupler duct where and fixed a stem displacement 5 whose opposite ends are fixed in devices that triggers moving the lingueetas travadoras set out in secondary frames fitted with covers.

152) Family number: 43214769 (BRMU8701061U) © PatBase

Title: disposiCco construtiva aplicada em barra anti–pAnico DisposiCco constructively applied in anti–panic bar (Machine translation)

Priority: BR2007MU01061U 20070612

Family:

Publication number	Publication date	Application number	Application date
BRMU8701061 U2	20090203	BR2007MU01061U	20070612

Probable Assignee: SANCHEZ DE OLIVEIRA SERGIO

Assignee(s):(std)**:** SANCHEZ DE OLIVEIRA SERGIO

Assignee(s): SERGIO SANCHEZ DE OLIVEIRA

Inventor(s):(std)**:** SANCHEZ DE OLIVEIRA SERGIO

Inventor(s): SERGIO SANCHEZ DE OLIVEIRA

International class (IPC 8–9): E05B65/10 (Advanced/Invention); E05B65/10 (Core/Invention)

Classification Explorer

Abstract:
Source: BRMU8701061U 2 RESUMO "DISPOSICAO CONSTRUTIVA APLICADA EM MAQUINA DE AUTO–ATENDIMENTO PARA VENDA ALIMENTOS" compreendido por um equipamento detem lampadas fluorescentes que promovem a iluminacao interna, maquina e composta de tres elementos: conjunto eletromecanico, placa controladora e sistema de pagamento, que aceitam tanto moedas como cedulas, este moedeiro e o identificador de cedulas validam o dinheiro quando recebem o pagamento, calculam, fazem o troco e entregam o produto, o moedeiro tem campos eletromagneticos que identificam o modelo da moeda que esta entrando pelo tipo de metal, diametro, espessura e peso, um software de facil programacao pode, em poucos minutos, fazer o moedeiro aceitar moedas de qualquer lugar do mundo, ja o identificador de cedulas e de programacao um pouco mais complexo, pois possui um leitor optico que faz o reconhecimento de alguns pontos da nota antes de aceita–la, assim a nota passa pelo leitor optico deslizando por uma esteira e depois fica guardada num sistema como o de porta–guardanapos onde o contraste de luminosidade e marca d'agua sao os principais pontos avaliados por esse mecanismo, o identificador de cedulas e moedeiro trabalham juntos para devolver o troco, a placa inteligente da maquina liga um sistema de pagamento ao outro e faz a devolucao do dinheiro, a maquina e automaticamente detem compartimentos verticais •que mostram os alimentos, apos a colocacao das moedas ou cedula, o produto escolhido pelo usuario devera ser selecionado por um dos push–buttons, e o cliente podera entao abrir o compartimento e retirar o produto, caso nao houver o produto escolhido o compartimento nao abrira e um LED indicara o erro, para que usuario promova uma nova escolha, caracterizado por um corpo principal de aco inox, que intemamente e /2 dotado de resistencias que promove o aquecimento dos compartimentos, cuja regulagem da temperatura ocorre manualmente atraves de termostato, sendo • o equipamento passivel de receber um sistema de refrigeracao. 2 SUMMARY "constructive disposition APPLIED IN MACHINE FOR SELF–SERVICE FOOD SALE" comprised of a device holds fluorescent lamps that promote internal lighting, machine is composed of three elements: Electromechanical assembly, board controller and payment system, which accept both Coins and banknotes, this purse and the ballots identifier validate money when they receive the payment, calculate, make the change and deliver the product, the purse has electromagnetic fields that identify the model of the coin is entering the type of metal, diameter, thickness and weight, an easy programming software can, in minutes, making the purse accept coins from anywhere in the world, since the ballots identifier and programming a bit more complex because it has an optical reader that makes the recognition of some Note points before accepting it, so the note passes through the optical reader sliding down a mat and then is stored in a system like the napkin where the brightness contrast and watermark are the main points evaluated by this mechanism the ballots and purse identifier work together to return the change, the intelligent machine card connects a payment system to the other and makes the money back, the machine and automatically holds vertical compartments • showing the food, after the placement of coins or cedula, the product chosen by the User shall be selected by one of the push–buttons, and the customer will be able then open the compartment and remove the product if there is not the product of choice not opened the compartment and an LED will indicate the error, User to promote a new choice, characterized by a main body of stainless steel which intemamente and / 2 provided with resistances that promotes heating of the compartments, whose temperature regulation occurs manually through thermostat, and • the likely equipment receiving a system refrigeration.

0) US2011013997A – MILLING TOOL FOR MACHINING WORK PIECES

153) Family number: 43225692 (US2011013997A) © PatBase

Title: MILLING TOOL FOR MACHINING WORK PIECES

Priority: DE200820000026U 20080318 DE200820013759U 20081105 WO2009EP53153 20090317 EP20090721922 20090317

Family:

Publication number	Publication date	Application number	Application date
BRPI0910392 A2	20151006	BR2009PI10392	20090317
CA2718584 AA	20100915	CA20092718584	20090317
CA2718584 C	20160614	CA20092718584	20090317
CN101977716 A	20110216	CN200980109628	20090317
CN101977716 B	20130306	CN200980109628	20090317
DE202008000026 U1	20090430	DE200820000026U	20080318
DE202008013759 U1	20091217	DE200820013759U	20081105
DE502009004407 D1	20121011	DE200950004407T	20090317
DK2271452 T3	20121203	DK20090721922T	20090317
EP2271452 A1	20110112	EP20090721922	20090317
EP2271452 B1	20120815	EP20090721922	20090317
ES2393441 T3	20121221	ES20090721922T	20090317
HR20120771 T1	20121231	HR20120000771	20120928
IN03820KN2010 A	20101224	IN2010KN03820	20101012
JP2011515231 T2	20110519	JP20110500200T	20090317
JP5496177 B2	20140521	JP20110500200T	20090317
KR101560014 B1	20151015	KR20107023239	20090317
KR20100132040 A	20101216	KR20107023239	20101018
KR20100132040 A	20101216	KR20107023239	20090317
MX2010010047 A1	20101206	MX20100010047	20090317
PT2271452 T	20121129	PT20090721922T	20090317
RU2010142366 A	20120427	RU20100142366	20090317
RU2489233 C2	20130810	RU20100142366	20090317
SI2271452 T1	20121231	SI20090030386T	20090317
US2011013997 AA	20110120	US20090933289	20090317
US8690490 BB	20140408	US20090933289	20090317
WO09115526 A1	20090924	WO2009EP53153	20090317

Probable Assignee: POKOLM FRANZ JOSEF

Assignee(s):(std)**:** JOSEF POKOLM FRANZ ; POKOL M FRANTS JOZEF ; POKOLM FRANZ JOSEF

Assignee(s): FRANZ JOSEF POKOLM

Inventor(s):(std)**:** JOSEF POKOLM FRANZ ; POKOL M FRANTS JOZEF ; POKOLM FRANZ JOSEF

Inventor(s): FRANZ JOSEF POKOLM

Agent(s): OSLER HOSKIN AND HARCOURT LLP; PATENTANWAELTE MELDAU STRAUSS FLOETOTTO; FLOETOTTO HUBERT; CARVAJAL Y ISABEL; COHEN AND GRIGSBY PC

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9):	B23B27/16 B23C5/02 B23C5/08 B23C5/20 B23C5/22 (Advanced/Invention); B23C5/02 B23C5/20 B23C5/22 (Advanced/Non–invention); B23C5/00 B23C5/16 (Core/Invention)
International class (IPC 1–7):	B23C5/22
CPC:	B23C5/2208 B23C5/2269 B23B27/12 B23C5/109 B23C5/22 B23C5/2221 B23C2200/045 B23C2210/165 B23C2210/168 B23C2210/506
European class:	B23B27/12 B23C5/10F B23C5/22 B23C5/22B1 B23C5/22B1B4 B23C5/22D1 L23C200/04G L23C210/16F L23C210/16J L23C210/50D
US class:	407/103 407/103S 407/115 407/115S 407/48 407/48P 407/64 407/64S 407/7
Classification Explorer	
Cited documents:	US6073524 A, US5597270 A, US5478175 A, US5423719 A, US5333938 A, US5035544 A, US5022795 A, US4963061 A, US4378184 A, US3515029 A, US3341920 A, US3329065 A, US2908203 A, US2885766 A, US2885766, US2233724 A, US2009175695 AA, US2008232909 AA, US2003119319 AA, US1838520 A, US1838520, SU965634 T, SU965634 A, JP8229706 A2, JP7185903 A2, JP7051905 A2, JP60100113 U1, JP60100113 U, JP5228716 A2, JP2001353602 A2, JP2001353602, JP10118802 A2, EP1561532 A2, DE9303054 U, DE202008000027 U1 DE202008000026 U1 DE10304732 A1, DE102005051695 A1 DD118543 Z, CH480120 A, AU450099 B2,
Forward Citations:	US9333568, US8647024, US2011293381, KR20170021254, EP2614910, DE202008013759, DE102015107594, DE102013226734, DE102013226734, CN103203493,

Abstract:
Source: US2011013997A The invention related to a milling tool (**1**) for machining work pieces, comprising at least one blade that is arranged in a radial manner on the milling head (**2**) that is rotationally mounted on a rotationally symmetrical designed Y–axis (**4**) on the milling head. According to the invention, said indexable cutting insert (**2**) is arranged below a tolerance play (**7**) in a freely rotating manner on the free end (**8**) of a mounting pin (**9**) secured in a detachable manner to the milling head (**3**) below the clamping seat. The freely rotationally mounted indexable cutting insert (**2**) is mounted or surrounded on the entire surface of the rear side (**10**) and on certain pats on the front side (**11**) such that the mounting pin (**9**) does not detach itself from the material (**12**) of the milling head (**3**).

0) CA2608174A – AGRICULTURAL PRODUCTS PRODUITS AGRICOLES

154) Family number: 43227449 (CA2608174A) © PatBase

Title: AGRICULTURAL PRODUCTS

Priority: CA20072608174 20071030

Family:

Publication number	Publication date	Application number	Application date
CA2608174 AA	20090430	CA20072608174	20071030

Probable Assignee: VOON GERARD G V

Assignee(s):(std)**:** VOON GERARD G V

Inventor(s):(std)**:** VOON GERARD

International class (IPC 8–9)**:** A46D1/00 C05F5/00 C07H1/08 C08J11/00 C08J3/20 C09K17/00 C12N1/12 C12P7/06 C13B10/00 C13B5/02 D07B5/00 D21J1/00 F16L9/14 (Advanced/Invention); A01G9/02 (Advanced/Non–invention)

CPC: Y02E50/343 C05F11/00 C05F3/00 C12P7/06 C13B5/04 Y02E50/17 Y02T50/678 Y02W30/47 Y02P20/134 Y02P20/145

European class: C05F11/00 C05F3/00 C12P7/06 C13B5/04 Y02E50/17 Y02T50/67J

Classification Explorer

Forward Citations: RU2505520, CN103304322, CN103274852, CN102515938,

Abstract:
Source: CA2608174A We plan to grow algae, bamboo, sugar cane and corn to make ethanol. The sugar cane will be shredded and its liquids squeezed out for ethanol. The remaining fibers will be shredded and cut to an optimal length for agricultural use. Sugar is a form of fertilizer. These fibers will be cooked in manure tea (stirred even blended to instil fertilizing potency – wider blend of nutrients) and rolled and squeezed and cooked in manure tea (stirred even blended to instil fertilizing potency – wider blend of nutrients) rolled and squeezed (depending on whether the results of such a process – high quality organic fertilizer are worthwhile). The fertilizer can even be pelletized. The tea manure as well as the powdered sugar cane can be used to grow algae. The algae could be bagged with transparent bags and solar panels underneath the bags could further make the most use of the site by both producing energy; Solar panel energy a nd algae converted into ethanol. A self brewed medium for algae includes Glucose, Na2HPO4, KH2PO4, NH4Cl, NaCl,MgSO4, CaCl2... The sugar cane fibers as well as the corn shredded husks can also be used to make soil substrate (GP 0.05 percent) as well as biodegradable seeding and trans planting and all planting pots, biodegradable packaging, bags, imitation cardboard, pulp and paper, envelopes, books, treated with preservatives and mixed with adhesive and compressed to produce a form of gypsum; fiber board, faux wood cabinetry, door, frames, posts, exterior finishing, all construction usage, including wood floors, wood ceilings, roofing, shutters, closet doors, faux wood furniture 2 percent, all housing, all office, all real estate, all condominium s, all sky scrappers, all apartments, all wood finishings, all shelves, (all decorations 5 percent), all wood decks, all gazebos, all wood structures, all sheds, all extra wood structures (eg. pool house or tree house), The powdered sugar cane fiber and powdered corn husks can be mixed with resi n; As well as the 3–dimensional modeling printer, we could also build plastic/resin (perhaps mixed with particle/gypsum board) or glues/adhesives structures. We are the first to make and sell the following novel products because they are to be developed using mix with nano particles or nano fibres or biodegradable substances such as shredded and powdered corn husks) possibly sprayed or spun/woven and) create strong/durable and yet flexible (if need be) and light weight products (where the addition of nano material or the 3 – dimensional model creator can be used to make a better product – or at least a niche). New products include all sportsobjects/accessories, all construction materials and all aeroplane (flying) parts, all boating parts, all electronic parts and accessories, all furnishings, all infrastructure (eg. roads and bridges) materials, carpets, all toys, all fabrics, all frames and cages, all floating devices, all containers, all packaging materials, spray on collagen or other biodegradable structural products for tissue culture, all windows, all metal frames, all mechanical parts, all kitchen ware and utensils, all appliances, all heaters / all air conditioners, skeletal structures, all stationary, all ink – photo and laser and ink jet qualities, all business to consumer, all business to business, all infrastructure products, all hard ware––soft ware–communications products, all coverings, faux constructions and decorati ve objects, all handles, locks, all glass and glass substitutes, all vehicles parts, all consumer products, all industrial parts and machines and safety gears, all cups–spoons–forks– knives–mugs––glasses, all racks, all hangers, all storage bins, lightings – street lamps to candie s to bulbs, furnaces, lawn mower parts, vacuum cleaners, shells for engines, engine part s, indoor/outdoor furnishings and their parts, bricks and mortar – barbeques an d buildings, all wheels, all tires, all inner tubes, chains, cosmetics, toileterties, all wires, all cables, all televisions – all electronic audio/video entertainment products, all construction tools, all elastics, all tethers, all erasers, all stationary, eg. all pencils, all pen s, all pencil cases, all liquid paper...all board game parts, all lenses, all eye glass frames, all fitting tools for assembly of parts for all the products herein listed, all contact lenses, al l wiping clothes for wind shields and eye glasses, all wiping cloths for CD's and DVD's, carrying cases for all products, from soft (eg. leather or other skins) to faux fur, all buttons metal and plastic, all lasers and cameras and all their components, all garbage bins, all

radios, a ll DVD players, all CD players, all servers... all railways, all monorails (intercity), all highspeed trains, all cargo trains, all cargo ships, all pleasure boats, all fishing boats, all cruise ships, all yachts, a small boats/dingy, all life boats, all life jackets, all diver's suits, all plasti c and all paper bags, all plastic house

0) US2009121437A – FIVE CARD OMAHA PLAYED AGAINEST THE DEALER

155) Family number: 43228419 (US2009121437A) © PatBase

Title: FIVE CARD OMAHA PLAYED AGAINEST THE DEALER

Priority: US20070983471 20071109

Family:

Publication number	Publication date	Application number	Application date
US2009121437 AA	20090514	US20070983471	20071109

Probable Assignee: BALLY GAMING INC

Assignee(s):(std)**:** SHUFFLE MASTER INC

Assignee(s): BALLY GAMING INC ; DEUTSCHE BANK TRUST CO ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT A ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT AS ; SHFL ENTERTAINMENT INC

Inventor(s):(std)**:** SCOTT ROBERT P ; SNOW ROGER M

Agent(s): THOMAS J DAMICO DICKSTEIN SHAPIRO LLP

International class(IPC 8–9)**:** A63F13/00 (Advanced/Invention); A63F13/00 (Core/Invention)

CPC: A63F1/00 A63F3/00157 G07F17/32 G07F17/322 G07F17/3293

European class: A63F3/00A32 G07F17/32 G07F17/32C4D G07F17/32P6 K63F1/00

US class: 273/292 273/292S 273/303 273/303P 463/13 463/13S 463/27 463/27S 463/32 463/32S 463/42 463/42S

Classification Explorer

Cited documents: USD548799 S1, USD519164 S1, USD518112 S1, USD452283 S1, US5725216 A, US5685774 A, US5489101 A, US5417430 A, US5411257 A, US5251897 A, US5167413 A, US5100137 A, US5098107 A, US5022653 A, US4836553 A, US2007216099 AA, US2007170651 AA, US2007075496 AA, US2006273518 AA, US2006183525 AA, US2006125180 AA, US2005161884 AA,

Forward Citations: WO12004632, US9129487, US8512116, US2016203675, US2016078718, US2015123345, US2012104697, US2009315264,

Abstract:
Source: US2009121437A A card game with an optional side bet and methods for playing this game. The method comprises the player placing an ante bet and a blind bet to enter the game and optionally placing the optional side bet. The dealer deals a plurality of Hole cards to the players, and the players are then given the option to place a first play bet or check. The dealer deals a plurality of community cards, turning at least one of the community cards face up, and the players are given the option to place a second play bet or check. The dealer turns the remaining community cards face up, and the players are then given the option to place a third play bet or check. The dealer receives a plurality of dealer Hole cards. After the dealer Hole cards are revealed, the hands are determined by combining two dealer Hole cards with the community cards to form a dealer's hand. The ante, blind, play and optional bets are then resolved, the optional side bet resolved according to a predetermined criteria.

0) US2009199940A – COMBINATION WALLET TOOL

156) Family number: 43623948 (US2009199940A) © PatBase

Title: COMBINATION WALLET TOOL

Priority: US20080030456 20080213 US20080040435P 20080328 US20090412154 20090326 US20100367766F 20100812

Family:

Publication number	Publication date	Application number	Application date
US2009199940 AA	20090813	US20090412154	20090326
US2009199941 AA	20090813	US20080030456	20080213
USD630849 S1	20110118	US20100367766F	20100812

Probable Assignee: TONER MACHINING TECHNOLOGIES I

Assignee(s):(std)**:** TONER JAMES CARL ; TONER MACHINING TECHNOLOGIES I

Assignee(s): TONER MACHINING TECHNOLOGIES INC

Inventor(s):(std)**:** HENSLEY GARRY BRANDON ; TONER JAMES CARL

Agent(s): SHOEMAKER AND MATTARE LTD; SHOEMAKER AND MATTARE

International class (IPC 8–9)**:** A45C1/06 A45C11/00 B25F1/00 B26B11/00 B65D69/00 B65D71/00 (Advanced/Invention); A45C1/00 A45C11/00 B25F1/00 B26B11/00 B65D69/00 B65D71/00 (Core/Invention)

CPC: A45C1/06 A45C13/008 A45C11/18 A45C11/327 B25F1/00 B26B11/00 B26B29/025

European class: A45C1/06 A45C11/18 A45C11/32T A45C13/00W B25F1/00 B26B11/00 B26B29/02A

US class: 150/133 150/143 206/234 206/234S 206/38 206/38.1 206/38.100S 206/38S 7/118 7/118S D3/249

Locarno class: 03/01

Classification Explorer

Cited documents: USD449211 S1, USD417780 S1, USD403858 S1, US7036174 BB, US6691905 BB, US6571940 BB, US6527112 BB, US6460698 BA, US6449881 BA, US6347875 BA, US6257405 BA, US6250470 BA, US6193066 BA, US6145994 A, US6056118 A, US6044967 A, US6009584 A, US5865307 A, US5778954 A, US5642809 A, US5412896 A, US5370419 A, US5328026 A, US5320219 A, US5199573 A, US4946030 A, US4918775 A, US4826014 A, US4807744 A, US2655705 A, US2464956 A, US2433714 A, US2298945 A, US2007131323 AA, US2004154714 AA,

Forward Citations: WO16046041, USD723898, USD710179, US8091266, US2010325933, EP2862470,

Abstract:
Source: US2009199940A A combination wallet tool includes a pair of hinged, mating shells which define a closed chamber when closed and latched. The chamber is partitioned to provide areas in which currency, cards and papers may be kept. A money clip is built into at least one of the shells. The mating surfaces of the shells are sealed by an O–ring to keep water from entering the chamber. Recesses which serve as secret compartments are molded into one of the shells and interchangeable partitioned trays are provided for the other shell.

0) US2011139587A – CONVEYOR PAN WITH CHANGEABLE TROUGH, AND A CHAN...

157) Family number: 43843941 (US2011139587A) © PatBase

Title: CONVEYOR PAN WITH CHANGEABLE TROUGH, AND A CHANGEABLE TROUGH

Priority: DE200820011518U 20080829 EP20090787043 20090828 WO2009IB53770 20090828

Family:

Publication number	Publication date	Application number	Application date
AU2009286335 AA	20100304	AU20090286335	20090828
AU2009286335 BB	20151210	AU20090286335	20090828
CN102105373 A	20110622	CN200980128635	20090828
DE202008011518 U1	20091008	DE200820011518U	20080829
DE602009015467 D1	20130627	DE200960015467T	20090828
EP2318294 A1	20110511	EP20090787043	20090828
EP2318294 B1	20130501	EP20090787043	20090828
IN00656KN2011 A	20110429	IN2011KN00656	20110211
RU2011111713 A	20121010	RU20110111713	20090828
RU2470849 C2	20121227	RU20110111713	20090828
UA100914 C2	20130211	UA20110003622	20090828
US2011139587 AA	20110616	US20090060074	20090828
US8365901 BB	20130205	US20090060074	20090828
WO10023637 A1	20100304	WO2009IB53770	20090828
ZA201102226 A	20111228	ZA20110002226	20110325

Probable Assignee: CATERPILLAR GLOBAL MINING EUROPE GMBH

Assignee(s):(std)**:** BUCYRUS EUROPE GMBH ; BUTSIRUS OJROPE GMBKH ; CATERPILLAR GLOBAL MINING EUR ; SCHMIDT SIEGFRIED ; WIRTZ JOERG ; BUCYRUS DBT EUROPE GMBH ; CATERPILLAR GLOBAL MINING EUROP GMBH ; WIRTZ JORG

Assignee(s): BUCYRUS EUROP GMBH ; CATERPILLAR GLOBAL MINING EUROPE GMBH

Inventor(s):(std)**:** SCHMIDT SIEGFRIED ; SHMIDT ZIGFRID ; SIEGFRIED SCHMIDT ; VIRTTS JORG ; JOERG WIRTZ ; WIRTZ JOERG ; WIRTZ JORG

Inventor(s): JORG WIRTZ ; WIRTZ J RG

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; FPA PATENT ATTORNEYS PTY LTD; KRAMER BARSKE SCHMIDTCHEN PATENTANWAELTE PARTG MBB; ALTHAUS ARNDT; FOLEY AND LARDNER LLP; ALTHAUS ARNDT ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65G19/28 E21F13/00 (Advanced/Invention); B65G19/00 (Core/Invention); B65G (Subclass/Invention)

International class (IPC 1–7): B65G19/28

CPC: E21C35/12 B65G19/287

European class: B65G19/28F E21C35/12

US class: 198/735.1 198/735.100P 198/735.6

Classification Explorer

Cited documents: WO08080551 A1, US6966426 BA, US6896121 BB, US5938000 A, US4842128 A, US4787501 A, US4735304 A, US4667811 A, US4643296 A, US3842966 A, SU1342407

D, RU63786 U1, GB2078653 A1, DE4233840 A1, DE29708613 U1, DE2833363 A1, DE20315759 U1,

DE202007007362 U1

DE202005019730 U1

DE20114166 U1, DE10253622 A1,

Forward Citations: WO12135063, WO12135063, US9096378, US8783446, US8783445, US8733536, US2013306438, US2012234650, US2012080289, CN104627594, CN104309993, CN102502177,

Abstract:
Source: US2011139587A A conveyor pan for a mining conveyor having a substructure with two side elements and an intermediate floor as well as a changeable trough forming a top strand and being detachably and exchangeably fastenable to the substructure. The trough having side profiles, each with a top web, and the top strand fastening means including screw bolts being fixable in place on the substructure. In order to ease an exchange of the trough, at least the top web of one side profile is provided with a plurality of open−edged indentations, in which there are welded holding strips, which project laterally over the top web and are provided with a plurality of bolt holes for the passage of a plurality of screw bolts.

158) Family number: 43812097 (WO09123428A2) © PatBase

Title: WATCHES AND CLOCKS HAVING NOVEL ROTATIONAL DIRECTION OF HANDS, NAMELY TRIGONOMETRIC, POSITIVE, AND ARABIC ROTATION

Priority: MA20080030819 20080404 MA20100033309 20101101 WO2009MA00010 20090406

Family:

Publication number	Publication date	Application number	Application date
MA30830 B1	20091102	MA20080030819	20080404
MA32287 B1	20110502	MA20100033309	20101101
WO09123428 A2	20091008	WO2009MA00010	20090406
WO09123428 A3	20100729	WO2009MA00010	20090406
WO09123428 A4	20101118	WO2009MA00010	20090406

Probable Assignee: KAMAL SAID

Assignee(s):(std)**:** KAMAL SAID

Inventor(s):(std)**:** KAMAL SAID

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G01D13/02 G01P1/08 G04B19/08 G04B19/16 G06F3/02 (Advanced/Invention); G01D13/00 G01P1/00 G04B19/06 G06F3/02 (Core/Invention)

International class (IPC 1–7): G04B19/00

CPC: G04B19/082 G04B19/085 G04B19/16

European class: G04B19/08B G04B19/08D G04B19/16

Classification Explorer

Cited documents: WO8706030 A1, US2007201316 AA, US2003076746 AA, FR2379100 A1, EP0896261 A2, DE6805993 U, DE20200833 U1, DE19953678 C1, DE1626458 U, CH11403 A, CA2373448 AA,

Forward Citations: WO13054161, FR2981466,

Abstract:
The present invention relates to watches, clocks, and chronometers having hands rotating in the trigonometric positive rotational direction (1) and apparatuses and instruments having hands measuring physical units and rotating in the trigonometric positive rotational direction (1) that increases the value of the physical units. Watches and clocks having hands spanning 12 hours in the rotational direction (1), characterized in that they are watches and clocks having hands spanning 12 hours in the rotational direction (1), and their faces are divided into 12 hours for the hour hands, 60 minutes for the minute hands, and 60 seconds for the second hands. Watches and clocks having hands spanning 12 hours in both rotational directions, watches and clocks having hands spanning 12 hours and 24 hours in both rotational directions, watches and clocks having hands spanning 12 hours and 24 hours in the rotational direction opposite the rotational direction (1), watches and clocks having hands spanning 24 hours in the trigonometric positive rotational direction, watches and clocks having hands spanning 24 hours in both rotational directions, watches and clocks having hands spanning 24 hours in the rotational direction opposite the rotational direction (1), number distribution in the rising direction from right to left on computer keyboards and portable phones, linear watches and clocks, living room clocks with mirrors, systems for changing the mode of rotation direction for hands on watches and clocks to hands spanning 12 hours and 24 hours in both rotational directions, novel dashboards for automobiles and other modes of transportation, or the like.

159) Family number: 44034190 (CA2629555A) © PatBase

Title: RELATED/OVERLAPPING INNOVATIONS IN HEALTH/ENERGY/TRANSPORT/FARMING AND INFRASTRUCTURE

Priority: CA20082629555 20080514

Family:

Publication number	Publication date	Application number	Application date
CA2629555 AA	20091114	CA20082629555	20080514

Probable Assignee: VOON GERARD

Assignee(s):(std)**:** VOON GERARD

Inventor(s):(std)**:** VOON GERARD

International class (IPC 8–9)**:** A01N63/02 A01P1/00 A23L3/3562 A61K31/722 A61P31/04 A62D3/00 A99Z99/00 B09C1/00 C02F1/50 C12N1/00 C12N15/00 C12N5/00 C99Z99/00 (Advanced/Invention); A01N63/02 A01P1/00 A23L3/3463 A61K31/716 A61P31/00 A62D3/00 A99Z99/00 B09C1/00 C02F1/50 C12N1/00 C12N15/00 C12N5/00 C99Z99/00 (Core/Invention)

CPC: Y02W10/37 A23G3/36 A23G3/42 A61K31/722 A61K36/00 B09B3/00 B09C1/00 C11D3/227 A23L3/3463 A23L33/10 A23L33/135 A23L33/22

European class: A23G3/36 A23G3/42 A23L1/30 A23L1/308A A23L1/30M A23L3/3463 A61K31/722 A61K36/00 B09B3/00 B09C1/00 C11D3/22E10

Classification Explorer

Forward Citations: EP2968128, CN104012693, CN104012693,

Abstract:
Source: CA2629555A (Claim 1) 1.) tissue culture of the stem cells and then differentiating them into desired cells (fruits and/or vegetables, kernels),

160) Family number: 44222182 (US2011185718A) © PatBase

Title: CLOSURE WITH THERMAL SAFETY FUNCTION FOR A HYDRODYNAMIC MACHINE

Priority: CN200980126469 20090530 DE200810031905 20080708 WO2009EP03895 20090530 EP20090776666 20090530

Family:

Publication number	Publication date	Application number	Application date
BRPI0915452 A2	20151110	BR2009PI15452	20090530
CN102089543 A	20110608	CN200980126469	20090530
CN105221591 A	20160106	CN201510587695	20090530
DE102008031905 A1	20100114	DE200810031905	20080708
DE502009006591 D1	20130516	DE200950006591T	20090530
EP2310705 A1	20110420	EP20090776666	20090530
EP2310705 B1	20130320	EP20090776666	20090530
IN00014MN2011 A	20111202	IN2011MN00014	20110104
RU2011104229 A	20120820	RU20110104229	20090530
RU2500933 C2	20131210	RU20110104229	20090530
US2011185718 AA	20110804	US20090737307	20090530
US8904775 BB	20141209	US20090737307	20090530
WO10003485 A1	20100114	WO2009EP03895	20090530

Probable Assignee: VOITH PATENT GMBH

Assignee(s):(std)**:** FOJT PATENT GMBKH ; HOFFELD HARALD ; VOITH PATENT GMBH

Inventor(s):(std)**:** HARALD HOFFELD ; HOFFELD HARALD ; KHOFFEL D KHARAL D

Agent(s): DR WEITZEL AND PARTNER PATENT U RECHTSANWAELTE MBB; SCHMIDT SVEN HENDRIK; FARJAMI AND FARJAMI LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): F16D33/02 F16D33/18 F16D9/02 F16K17/38 F16K17/40 (Advanced/Invention); F16D33/00 F16D9/00 F16K17/36 (Core/Invention)

CPC: F16D33/18 F16D9/02

European class: F16D33/18 F16D9/02

US class: 60/337 60/347 60/347P

Classification Explorer

Cited documents: US6866507 BB, US6866057 BA, US5791367 A, US5398794 A, US5251441 A, US4744382 A, US47076 A, US4581892 A, US3927791 A, US3436916 A, US3399532 A, US3399352 A, US3377957 A, US2216351 A, US2007251228 AA, US2004159349 AA, EP1577577 A2, EP1557557 A2, DE3002804 C2, DE3002804 A1, DE2009194 A1, DE10361453 B3, DE10361440 A1,

Forward Citations: CN102808916, CN102808916,

Abstract:
Source: US2011185718A The invention relates to a closure with a thermal safety function for a hydrodynamic or hydraulic machine, in particular a hydrodynamic clutch, designed for use in a housing of the hydrodynamic or hydraulic machine which holds a working medium, wherein the closure has a closure body for screwing or inserting into the housing or mounting on the housing in some other way; the closure body has a passage into which a closure core is introduced, which closure core is connected, by means of a melting element which can be melted on at a predefined temperature, directly to the closure body or to an intermediate element introduced in a seal–forming fashion in the closure body, in such a way that the passage is sealed off so as to prevent the working medium from passing through. The invention is characterized in such a way that the closure core has a

blind bore or a blind hole which is open with respect to the working space, with the result that working medium can flow into the closure core.

161) Family number: 44814556 (US2010081377A) © PatBase

Title: MAGNETIC LATCHING MECHANISM FOR USE IN MATING A MOBILE COMPUTING DEVICE TO AN ACCESSORY DEVICE

Priority:
CN201080052070 20101117 US20080142194P 20081231 US20080239656 20080926
US20090142195P 20090101 US20090142602P 20090105 US20090142560P 20090105
US20090455802 20090604 US20090478763 20090604 US20090478766 20090604
US20090142617P 20090105 US20090620478 20091117 US20090621087 20091118
US20100916388 20101029 US20110171878 20110629 WO2009US55928 20090903
WO2009US68332 20091216 WO2009US69847 20091230 WO2009US68328 20091216
US20110173252 20110630 WO2010US57093 20101117 US20110440859P 20110208
US20110440858P 20110208 US20110172120 20110629 US20110402095F 20110920
US20130443146F 20130114 WO2012US24202 20120207

Family:

Publication number	Publication date	Application number	Application date
CN102217201 A	20111012	CN200980137882	20090903
CN102217201 B	20141022	CN200980137882	20090903
CN102272689 A	20111207	CN200980153509	20091216
CN102341986 A	20120201	CN200980157817	20091216
CN102341986 B	20150603	CN200980157817	20091216
CN102362563 A	20120222	CN200980157753	20091230
CN102640381 A	20120815	CN201080052070	20101117
CN102640381 B	20150701	CN201080052070	20101117
CN102646081 A	20120822	CN201110420873	20111028
CN102646081 B	20150930	CN201110420873	20111028
CN103348762 A	20131009	CN201280008195	20120207
CN103348762 B	20170609	CN201280008195	20120207
CN105048646 A	20151111	CN201510345895	20101117
DE112009002333 T5	20120308	DE200911002333T	20090903
DE112010004487 T5	20121025	DE201011004487T	20101117
EP2377227 A2	20111019	EP20090836923	20091216
EP2377227 A4	20170705	EP20090836923	20091216
EP2377381 A2	20111019	EP20090837171	20091230
EP2384460 A2	20111109	EP20090836921	20091216
EP2448134 A2	20120502	EP20110186983	20111027
EP2448134 A3	20120523	EP20110186983	20111027
EP2674011 A1	20131218	EP20120744828	20120207
EP2674011 A4	20141105	EP20120744828	20120207
GB201106194 A0	20110525	GB20110006194	20090903
GB201209511 A0	20120711	GB20120009511	20101117
GB2476214 A1	20110615	GB20110006194	20090903
GB2476214 B2	20130626	GB20110006194	20090903
GB2488279 A1	20120822	GB20120009511	20101117
GB2488279 B2	20160921	GB20120009511	20101117
US2010081377 AA	20100401	US20090478763	20090604
US2010081473 AA	20100401	US20080239656	20080926
US2010081483 AA	20100401	US20090455802	20090604
US2010083012 AA	20100401	US20090478766	20090604
US2010131691 AA	20100527	US20090620478	20091117
US2010146308 AA	20100610	US20090621087	20091118
US2011106954 AA	20110505	US20100916388	20101029

US2012005495 AA	20120105	US20110173252	20110630	
US2012042087 AA	20120216	US20110171878	20110629	
US2012202422 AA	20120809	US20110172120	20110629	
US8234509 BB	20120731	US20090621087	20091118	
US8385822 BB	20130226	US20080239656	20080926	
US8401469 BB	20130319	US20090455802	20090604	
US8527688 BB	20130903	US20090620478	20091117	
US8688037 BB	20140401	US20090478763	20090604	
US8712324 BB	20140429	US20090478766	20090604	
US8850045 BB	20140930	US20110171878	20110629	
US8868939 BB	20141021	US20110173252	20110630	
US8948692 BB	20150203	US20110172120	20110629	
USD674391 S1	20130115	US20110402095F	20110920	
USD687038 S1	20130730	US20130443146F	20130114	
WO10036501 A2	20100401	WO2009US55928	20090903	
WO10036501 A3	20100610	WO2009US55928	20090903	
WO10077991 A2	20100708	WO2009US68328	20091216	
WO10077991 A3	20100923	WO2009US68328	20091216	
WO10077991 A4	20101104	WO2009US68328	20091216	
WO10077994 A2	20100708	WO2009US68332	20091216	
WO10077994 A3	20101007	WO2009US68332	20091216	
WO10077994 A4	20101125	WO2009US68332	20091216	
WO10078444 A2	20100708	WO2009US69847	20091230	
WO10078444 A3	20101021	WO2009US69847	20091230	
WO10078444 A4	20101209	WO2009US69847	20091230	
WO11063033 A2	20110526	WO2010US57093	20101117	
WO11063033 A3	20111027	WO2010US57093	20101117	
WO12058629 A2	20120503	WO2011US58449	20111028	
WO12058629 A3	20120712	WO2011US58449	20111028	
WO12109286 A1	20120816	WO2012US24202	20120207	
WO12109364 A2	20120816	WO2012US24346	20120208	
WO12109364 A3	20121115	WO2012US24346	20120208	

Probable Assignee: QUALCOMM INC

Assignee(s):(std)**:** BERG SAMANTHA ; BROWN ROBERT ; CAHTTERJEE MANJIRNATH ; CAMES MICHAEL ; CARNES MICHAEL ; CORBRIDGE MARK ; CROOIJMANS WIM ; CHATTERJEE MANJIRNATH ; GILMOUR NICHOLAS R ; GRANGE WILLIAM JUSTIN ; GIOSCIA RICHARD ; HASSENFLOW ALLAN ; GEORGE MOSES ; FRANCISCO MICHAEL ; CAZALET PETER ; HESSENFLOW ALLAN ; KUMAR MUKUL ; HOROWITZ RONALD ; HORNYAK MATTHEW ; HEWLETTE PACKARD DEV COMPANY L P ; KUGLIKOV VITALY ; HEWLETT PACKARD DEVELOPMENT CO ; KRUGLIKOV VITALY ; HP DEV COMPANY ; LEHR MICHAEL ; MARTIN LARRY W ; LIU ERIC ; MATSUOKA YOSHIMICHI ; TOWNSEND KARL ; NEUBARTH STUART ; RASCO JACOB ; PALM INC ; TANG JOHN ; SKILLMAN PETER ; LENOX KIM ; LENOX KIMBERLY ; QUALCOMM INC ; HEWLETTE PACKARD DEV CO L P ; HP DEV CO

Assignee(s): HP DEVELOPMENT CO ; HEWLETTE PACKARD DEVELOPMENT CO LP ; HEWLETT PACKARD DEVELOPMENT CO L P ; HEWLETTE PACKARD DEVELOPMENT COMPANY L P ; HEWLETT PACKARD DEVELOPMENT COMPANY ; HP DEVELOPMENT COMPANY ; HEWLETT PACKARD DEVELOPMENT CO LP ; JPMORGAN CHASE BANK NA ; HEWLETT PACKARD DEVELOPMENT COMPANY L P

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G06F1/00 G06F1/16 G06F1/26 G06F13/00 G06F13/10 G06F15/16 G06F3/033 G06K17/00 H02J17/00 H02J5/00 H02J50/10 H02J50/80 H02J7/00 H02J7/02 H04B1/40 H04B17/00 H04B5/00 H04L29/06 H04M1/00 H04M1/02 H04M1/04 H04M1/725 H04W12/04 H04W12/08 H04W52/02 H04W52/08 H04W88/02 H04W92/02 H04W92/18 H05K9/00 (Advanced/Invention);
H04B1/10 H04M1/725 (Advanced/Non–invention);
G06F1/00 G06F1/16 G06F1/26 G06F13/00 G06F3/033 H02J17/00 H02J7/00 H04B1/40 H04B5/00 H04M1/00 H04W92/00 H05K9/00 (Core/Invention)

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European class: G06F1/16P6 G06F1/26 H01F27/36B H01F38/14 H02J5/00T H02J7/02B1 H04B17/00B3 H04B5/00P H04B5/00P2 H04B5/00P4 H04L63/08 H04L63/18 H04M1/04 H04M1/725F1B H04M1/725F1B1 H04M1/725F1G H04W12/06 H04W52/02T4J H04W52/08 H05K9/00M2 T01F1/153 T01F27/28A T01F27/34D T01F27/36A T01F7/02B2 T02J7/00E1 T02J7/02B1 T04B5/00P2 T04B5/00P4 T04L63/04B16 T04M1/725F1B1 T04M1/725F1G T04M1/725F2H T04M250/02 T04M250/12 T04W12/04

US class: 307/104 307/104S 320/107 320/108 320/111 320/114 320/115 336/221 336/229 336/232 359/214.1 455/300 455/41.1 455/41.100P 455/41.2 455/41.3 455/42.3 455/559 455/559P 455/572 455/572P 455/575.1 455/575.100S 709/225 709/227 709/227P 709/229 709/229P 709/230 709/231 709/232 710/303 710/303P 713/300 713/300P D14/434

Locarno class: 14/02

Classification Explorer

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Abstract:
Source: US2010081377A A mobile computing device and an accessory device are individually equipped with features and components that enable magnetic coupling of the two devices. Specific embodiments provide for the use of one or more horseshoe magnets for use in the magnetic coupling mechanisms. As an addition or alternative, electromagnetic coupling may be used to selectively maintain and/or orient the two devices in a mated position.

0) US2010112853A – INSERTION COUPLING COAXIAL CONNECTOR

162) Family number: 44970465 (US2010112853A)

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Title: INSERTION COUPLING COAXIAL CONNECTOR

Priority: US20080264932 20081105 US20090611095 20091102 US20090612428 20091104 US20100886939 20100921 US20100886941 20100921 US20100886940 20100921 WO2009US63315 20091104 WO2009US63320 20091104 US20110151078 20110601 WO2010US51773 20101007 WO2010US51792 20101007 WO2010US51799 20101007

Family:

Publication number	Publication date	Application number	Application date
AU2010313682 AA	20110505	AU20100313682	20101007
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Probable Assignee: COMMSCOPE TECHNOLOGIES LLC

Assignee(s):(std)**:** ALLISON LEE ; ANDREW LLC ; BUENZ LARRY ; BUENZ LAWRENCE ; BUENZ LAWRENCE J ; ISLAM NAHID ; COX AL ; PAYNTER JEFFREY ; LOW DAVID ; PAYNTER JEFFREY D

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Inventor(s):(std)**:** AL COX ; ALLISON LEE ; BUENZ LARRY ; BUENZ LAWRENCE ; COX AL ; ISLAM NAHID ; JEFFREY PAYNTER ; LOW DAVID ; PAYNTER JEFFERY ; PAYNTER JEFFREY ; PAYNTER JEFFREY D ; COX AI ; LARRY BUENZ ; DAVID LOW ; NAHID ISLAM ; LEE ALLISON ; BUENZ LAWRENCE J

Inventor(s): COX ALBERT

Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; ALTON ANDREW; NILSSON LARS MAGNUS; BABCOCK IP PLLC; BABCOCK ANDREW

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): H01R11/11 H01R13/187 H01R13/40 H01R13/58 H01R13/658 H01R24/00 H01R24/02 H01R24/38 H01R24/40 H01R24/56 H01R43/20 H01R9/00 H01R9/05 (Advanced/Invention); H01R103/00 H01R9/05 (Advanced/Non–invention); H01R11/11 H01R24/00 H01R9/05 (Core/Invention); H01R24/02 (Core/Non–invention)

International class (IPC 1–7): H01R11/11 H01R24/02 H01R9/05

CPC: H01R4/5025 H01R9/05 H01R9/0524 H01R13/111 H01R24/38 H01R24/56 Y10T29/49208 H01R24/564 H01R4/4818 H01R9/0521 H01R9/0527 H01R13/187 H01R13/5205 H01R13/5804 H01R13/65802 H01R24/40 H01R2103/00

European class: H01R13/187 H01R13/52D H01R13/58B H01R13/658B H01R24/40 H01R24/56D H01R9/05P H01R9/05R H01R9/05T T01R103/00 T01R13/11B T01R13/52D T01R24/40 T01R24/56 T01R4/48B2 T01R4/50C2

US class: 29/876 29/876S 439/578 439/578P 439/578S 439/579 439/584 439/584P

Classification Explorer

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Forward Citations: WO16066842, WO16010885, WO15061394, WO13091838, WO13091838, WO12162431, WO12162431, USD709834, USD703147, USD662064, USD662063, USD662062, USD662061, USD662060, USD662059, USD662058, USD662057, USD661660, USD661659, USD661257, USD661256, USD646226, USD646225, USD644998, USD644612, US9608343, US9590287, US9583885, US9548572, US9548557, US9525220, US9490573, US9484645, US9472928, US9431755, US9407016, US9362634, US9343855, US9327371, US9325163, US9287659, US9276363, US9214771, US9190744, US9172156, US9172154, US9166348, US9153911, US9151905, US9147963, US9136654, US9099825, US9083113, US9071019, US9052469, US9048599, US9048527, US9039445, US9017102, US8986044, US8968025, US8888526, US8814587, US8758053, US8628352, US8622768, US8506325, US8469739, US8460031, US8458898, US8454384, US8449325, US8439703, US8435073, US8430688, US8393919, US8298006, US8157588, US8157587, US8136234, US7931499, US7927134, US2017133772, US2016322755, US2016285205, US2016036161, US2015255917, US2015180142, US2015162675, US2015136473, US2015024627, US2014199886, US2014137393, US2014120766, US2014024254, US2013295793, US2013203287, US2013171870, US2013065420, US2012184135, US2012064768, US2012064767, US2011230093, US2010126011, US2010112855, EP2442407, EP2393159, CN104779482, CN103107441, CN102829041, CN102829041, CN102332642,

Abstract:
Source: US2010112853A A coaxial connector with a connector body is provided with a connector body bore. A grip ring is retained within the connector body bore, and an outer diameter of the grip ring abuts an annular wedge surface provided with a taper between a maximum diameter proximate the connector end and a minimum diameter proximate the cable end. The wedge surface may be provided directly on the connector body bore sidewall or alternatively on an inner diameter of a clamp ring coupled to the cable end of the connector body. An inner diameter of the grip ring is provided with a grip surface. A spring contact is retained within the connector body bore. The grip surface and an inner diameter of the spring contact are dimensioned to receive the outer conductor from the cable end there through and to then couple with an outer diameter of the outer conductor.

163) Family number: 45554502 (US2010159829A) © PatBase

Title: TIGHTLY–COUPLED NEAR–FIELD COMMUNICATION–LINK CONNECTOR–REPLACEMENT CHIPS

Priority:

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Family:

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ

NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** F01C1/348 F01C1/356 F01C1/40 F01C21/08 F01C21/10 F03C2/30 F03C4/00 F04C18/00 F04C18/40 F04C2/00 F04C2/348 F04C2/356 F04C2/40 G01R27/26 G01S11/02 G01S13/04 G01S13/08 G06F1/16 G06F1/18 G06F13/00 G06F13/40 G06F13/42 G06F3/14 G06K19/07 G06K19/077 G09G3/20 G09G5/00 H01F38/14 H01F7/02 H01L23/00 H01L23/12 H01L23/31 H01L23/495 H01L23/498 H01L23/66 H01L25/065 H01P3/12 H01P3/127 H01P3/16 H01P5/02 H01Q1/12 H01Q1/22 H01Q1/24 H01Q1/38 H01Q1/48 H01Q1/50 H01Q13/02 H01Q19/02 H01Q19/18 H01Q23/00 H01Q7/00 H01Q9/26 H01R11/30 H01R13/62 H01R13/631 H01R13/64 H01R13/646 H02J50/10 H02J50/80 H03M3/02 H04B1/04 H04B1/38 H04B1/40 H04B1/401 H04B1/44 H04B13/00 H04B14/02 H04B14/06 H04B17/00 H04B17/309 H04B17/318 H04B5/00 H04B5/02 H04B7/00 H04B7/08 H04B7/24 H04J3/16 H04J3/24 H04L12/00 H04L12/12 H04L12/46 H04L25/02 H04L25/40 H04L25/49 H04L27/00 H04L27/04 H04L29/02 H04L29/06 H04L5/14 H04L9/32 H04Q5/22 H04R3/00 H04W12/08 H04W4/00 H04W4/02 H04W52/02 H04W76/02 H04W76/04 H04W8/00 H05K1/02 H05K9/00 (Advanced/Invention); G09G5/00 H01L23/00 H01L23/31 H01L23/498 H04B1/38 H04B1/40 H04B5/00 H04L7/00 H05K1/02 (Advanced/Non–invention); H04B5/00 (Core/Invention)

CPC: H01L2223/6677 H04B7/00 H04W76/043 H01Q1/50 G09G2370/12 G06F1/1622 G06F1/1654 G06F1/1681 G06F1/1698 H01Q13/02 F01C1/3566 H04L25/4902 H04B14/02 H04L27/04 H01R13/6205 H04R3/00 H04W8/085 H01L2924/00 H01L2224/49 H04B1/04 H04W76/02 H04W8/005 H04L25/40 H04W4/023 H01L23/3128 H01L23/49816 H01L23/49861 H01L24/48 H01L24/49 H01L2224/16225 H01L2224/16245 H01L2224/32225 H01L2224/32245 H01L2224/48091 H01L2224/48227 H01L2224/48247 H01L2224/49113 H01L2224/73204 H01L2224/73265 H01L2924/09701 H01L2924/10253 H01L2924/13091 H01L2924/15311 H01Q7/00 H01Q9/26 H04L67/2823 H04W4/008 H04L67/06 H04L69/08 H04L2463/101 G06F13/4027 H04L12/12 H01L2224/48137 H01L2924/3011 H01L2924/3025 H01Q1/2283 H01L2224/49111 H01L2224/49171 H04L7/0087 H01Q1/22 H01P3/16 H04B17/309 H04L63/00 H04L63/0876 H01L2924/00014 H04W76/023 H01P3/165 H04B5/0025 H04L5/1407 H01L2924/30111 H04B17/318 F01C1/348 F01C21/0809 F01C21/0836 F01C21/106 F01C21/108 F04C2/348 F04C2/3566 F04C2240/10 F04C2240/20 F04C2240/603 Y02B60/34 G01S13/08 H04B5/00 H04B1/401 H04L29/06068 G06F1/1626 G06F1/181 G06F1/182 G09G3/2096 G09G5/003 G09G2330/00 H04B5/0012 H01Q19/021 H01Q1/48 H01Q19/18 H04W12/08 H04L63/107 H04L63/0428 H01L23/66 H04R2420/09 H04R2420/07 H04B1/44 H01L2224/05554 H01L24/73 H04W52/0229 H05K1/0243 H05K1/0259 H05K2201/10098 Y02B60/50 H01L2924/00012 G09G5/006 G09G2370/16 H04B5/02 H04B7/24 G01S13/04 H04L12/4633 H04B5/005 H01F7/0252 H02J50/10 H04B5/0075 H04B1/40 G06F3/14 G06F13/42 H02J50/80 H01P3/127 G09G2330/021 G06F3/0488 G06F3/0481 G06F13/00 H01Q1/12 H01P3/122 H04B5/0037 H01L2924/181 H04B5/0031

European class: H01L23/498L H01L23/66 H01Q7/00 H01Q9/26 H04B14/02 H04B5/00P2 H04B5/02 H04L25/49A H04L27/04 T01L23/498C4

US class: 1/1 327/291 332/106 333/239 333/24R 340/539.1 340/568.1 340/572.2 340/572.4 340/572.8 341/173 341/20 343/833 343/905 345/520 361/679.01 361/679.09 361/679.27 370/277 370/474 375/259 375/295 381/117 418/143 439/246 439/39 455/113 455/39 455/41.1 455/41.2 455/90.2 455/90.3 713/168 726/3 726/4

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Forward Citations: WO17052566, WO17039849, WO17030703, WO17023518, WO17023044, WO16171727, WO16137518, WO16111667, WO16048202, WO16005225, WO15058207, WO14186772, WO14151812, WO14150702, WO14145367, WO14145366, WO14145366, WO14120545, WO14100058, WO14093958, WO14093958, WO14058534, WO14043577, WO14026191, WO13162844, WO13158786, WO13149006, WO13139939, WO13134444, WO13131095, WO13131095, WO13130486, WO13116364, WO13090625, WO13059801, WO13040396, WO13006641, WO13006641, WO12174350, WO12166922, WO12155135, WO12155135, WO12129426, WO12129426, USD776058, US9692476, US9692106, US9655102, US9653927, US9652020, US9648569, US9647715, US9645959, US9644570, US9640496, US9635127, US9633968, US9615197, US9614590, US9577372, US9577314, US9571161, US9565515, US9565495, US9559798, US9559790, US9559753, US9553616, US9553353, US9544857, US9544007, US9543777, US9537462, US9531425, US9529755, US9529737, US9526979, US9525496, US9525463, US9525451, US9515859, US9515707, US9515365, US9510237, US9497708, US9491273, US9490953, US9490874, US9478855, US9474099, US9473207, US9467194, US9448596, US9444525, US9444523, US9444146, US9426660, US9420409, US9419683, US9419673, US9419376, US9414310, US9409489, US9407731, US9407311, US9402195, US9397871, US9391394, US9379450, US9378110, US9374163, US9374154, US9373894, US9349717, US9344970, US9344201, US9332458, US9331004, US9325384, US9324666, US9322904, US9313004, US9300365, US9300349, US9281860, US9275946, US9252543, US9219956, US9210008, US9203597, US9197011, US9191263, US9190772, US9148345, US9142886, US9118356, US9087227, US9035435, US8977792, US8976561, US8971453, US8929834, US8909135, US8902956, US8897700, US8843062, US8811526, US8794980, US8757501, US8714459, US8554136, US2017179641, US2017149951, US2017149112, US2017111943, US2017033818, US2017021783, US2016344851, US2016299862, US2016285513, US2016210254, US2016197392, US2016131698, US2016127052, US2016105760, US2016105759, US2016100249, US2016087671, US2016073347, US2016065386, US2016048472, US2016043776, US2015378399, US2015372380, US2015370305, US2015341013, US2015340336, US2015323589, US2015303619, US2015296330, US2015295307, US2015278063, US2015258459, US2015237647, US2015236445, US2015214677, US2015213281, US2015212783, US2015194764, US2015138714, US2015126047, US2015110609, US2015080065, US2015070240, US2015065069,

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Abstract:
Source: US2010159829A Tightly−coupled near−field transmitter/receiver pairs are deployed such that the transmitter is disposed at a terminal portion of a first conduction path, the receiver is disposed at a terminal portion of a second conduction path, the transmitter and receiver are disposed in close proximity to each other, and the first conduction path and the second conduction path are discontiguous with respect to each other. In some embodiments of the present invention, close proximity refers to the transmitter antenna and the receiver antenna being spaced apart by a distance such that, at wavelengths of the transmitter carrier frequency, near−field coupling is obtained. In some embodiments, the transmitter and receiver are disposed on separate substrates that are moveable relative to each other. In alternative embodiments, the transmitter and receiver are disposed on the same substrate.

164) Family number: 45954294 (IN00549MU2010A) © PatBase

Title: AN APPARATUS, SYSTEM, AND METHOD FOR AUTOMATED PRODUCTION OF RULE BASED NEAR LIVE SPORTS EVENT IN THE FORM OF A VIDEO FILM FOR ENTERTAINMENT

Family:

Publication number	Publication date	Application number	Application date
IN00549MU2010 A	20100709	IN2010MU00549	20100303

Probable Assignee: RATHOD YOGESH CHUNILAL

Assignee(s): RATHOD YOGESH CHUNILAL

Inventor(s): RATHOD YOGESH CHUNILAL

International class (IPC 8–9): G06T17/00 H04N5/445 H04N5/765 (Advanced/Invention)

Classification Explorer

Abstract:
Source: IN00549MU2010A An apparatus, system, and method for automated production of sport video using expert sports video production rules. Methods and systems for automated rule based real and live sports video or film or movie productions by merging pre–created standardize video clips as per administrator score or points or goal settings and domain or subject specific film or movie production rules by domain and subject specific rule engine and real time or near real time live broadcasting or telecasting or streaming or screening or transmission or playing or recording live or real sports match event via multiple communication networks on multiple types of user(s) device(s) to viewers, e.g. real and live sports comprising cricket, baseball, golf, football, soccer, basketball, hockey, tennis, racing.

165) Family number: 46624633 (US2010212138A) © PatBase

Title: METHOD FOR FORMING A PATIENT SPECIFIC SURGICAL GUIDE MOUNT

Priority:

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EP20110805730	20111220	AU20160244327	20161014	EP20100705524	20100224
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Family:

Publication number	Publication date	Application number	Application date
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Inventor(s): LANCIANESE SARAH ORLANDO ; STEMNISKI PAUL ARLINGTON ; OBERT RICHARD GERMANTOWN

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; FPA PATENT ATTORNEYS PTY LTD; FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; DEETH WILLIAMS WALL LLP; MOFFAT AND CO; JUAN CARLOS CUESTA QUINTERO; MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; HIRSCH AND ASSOCIES; PULIERI GIANLUCA ANTONIO; DUANE MORRIS LLP – PHILADELPHIA,IP DEPARTMENT; DUANE MORRIS LLP PHILADELPHIA IP DEPARTMENT; DUANE MORRIS LLP; ADAMS AND REESE LLP; SENTILLES SHAWN D; GUNTHER JARRAD M ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61B17/00 A61B17/15 A61B17/16 A61B17/17 A61B17/56 A61B17/58 A61B17/60 A61B17/84 A61B17/88 A61B17/90 A61B19/00 A61F2/00 A61F2/42 A61F2/46 A61F5/00 B23P11/02 B23P17/04 B29C67/00 G05B15/02 G06F17/50 (Advanced/Invention); A61B17/00 A61B17/17 A61B17/56 A61B19/00 A61B34/10 A61F2/42 B33Y50/02 (Advanced/Non–invention); A61B17/14 A61B17/56 B23P11/02 (Core/Invention)

CPC: A61B17/151 A61B17/155 A61B2017/0023 Y10T29/49 Y10T29/49863 G06F17/50 G05B15/02 B29C67/0088 A61B2017/00526 B33Y50/02 A61B17/154 A61B17/157 A61B2017/0046 A61B2017/568 A61B17/15 A61B34/10 A61B2034/104 A61B2034/108 A61B17/1775 B33Y70/00 B33Y80/00 A61B2017/1775 A61B17/1717 A61B17/1682 A61B17/1739 A61B17/1728 A61B17/1703 A61B2017/00477 A61B17/1633 A61F2/4202

European class: A61B17/15 A61B17/15K2 A61B17/16S12 A61B17/17J K61B17/00D K61B17/00H K61B17/15K4 K61B17/16D14 K61B17/17S12 K61B17/56S K61B19/50F K61F2/42A

US class: 1/1 29/446 29/446P 29/446S 29/592 29/592S 606/300 606/300P 606/86.00RP 606/86.00RS 606/86R 606/87 606/87P 606/96 606/96S 700/98

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US4936862 A, US4880429 A, US4865607 A, US4846835 A, US4841975 A, US4769040 A, US4759350 A, US4721104 A, US4715860 A, US4704686 A, US4703751 A, US4627853 A, US4609551 A, US4601290 A, US4594380 A, US4586496 A, US4502161 A, US4501266 A, US4436684 A, US4368040 A, US4340978 A, US4213816 A, US4203444 A, US4098626 A, US4085466 A, US4055862 A, US4052753 A, US3987499 A, US3938198 A, US3855638 A, US3843975 A, US3808606 A, US3798679 A, US3605123 A, US3314420 A, US2014324053 AA, US2012158001 AA, US2012151730 AA, US2012143197 AA, US2012101503 AA, US2012072185 AA, US2012071883 AA, US2012071882 AA, US2012071881 AA, US2012066892 AA, US2012041446 AA, US2012029520 AA, US2011319900 AA, US2011319897 AA, US2011313423 AA, US2011245835 AA, US2011238073 AA, US2011230888 AA, US2011218584 AA, US2011218542 AA, US2011218539 AA, US2011213431 AA, US2011213430 AA, US2011213429 AA, US2011213428 AA, US2011213427 AA, US2011213377 AA, US2011213374 AA, US2011213373 AA, US2011213368 AA, US2011071581 AA, US2011066193 AA, 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DE202008017199 U, DE202008017199, CN1175893 A, CN101466317 A, CN101237835 A, CN101111197 A,

Forward Citations: WO17105815, WO17059287, WO16148675, WO16142711, WO16112092, WO16065040, WO16039762, WO14163845, WO14152308, WO14043503, WO14020562, WO14020561, WO13078076, WO12176077, WO12113735, WO12024317, WO12024317, USD775335, USD747481, USD747480, USD745673, USD745672, USD745671, USD738498, USD705929, USD672038, USD660961, US9687261, US9687250, US9681958, US9675461, US9675400, US9675365, US9668747, US9662216, US9662127, US9649117, US9642633, US9642632, US9622805, US9615840, US9603613, US9597201, US9585597, US9579112, US9579107, US9561040, US9561039, US9554910, US9539013, US9522010, US9517145, US9498233, US9492182, US9480580, US9480571, US9480490, US9474539, US9456833, US9451973, US9445907, US9439659, US9427320, US9414846, US9408618, US9408616, US9402637, US9398919, US9393028, US9386993, US9351743, US9345551, US9345548, US9339278, US9314251, US9301812, US9295497, US9289253, US9271744, US9254155, US9241745, US9237950, US9208263, US9204977, US9198678, US9192459, US9173666, US9173662, US9173661, US9168048, US9138332, US9138239, US9131945, US9113971, US9113957, US9113914, US9101443, US9095355, US9089342, US9084618, US9066734, US9066727, US9060797, US9060788, US9005297, US8998907, US8992538, US8979936, US8979855, US8974459, US8956364, US8920512, US8903530, US8900244, US8870889, US8864769, US8858561, US8858557, US8840629, US8834490, US8828087, US8808302, US8784495, US8777875, US8764760, US8758357, US8737700, US8734455, US8715291, US8715289, US8668700, US8641721, US8632547, US8617175, US8617171, US8608749, US8608748, US8603180, US8597365, US8594395, US8591516, US8568487, US8535387, US8532807, US8532361, US8486150, US8483469, US8475463, US8473305, US8425524, US8425523, US8419740, US8407067, US8398646, US8398645, US8377068, US8377066, US8361076, US8357166, US8357111, US8343159, US8337503, US8298237, US8282646, US8265949, US8241293, US8170641, US8133234, US8092465, US8070752, US2017056185, US2016089153, US2015088142, US2014188236, US2013190765, US2013138111, US2013131681, US2013066319, US2012109226, US2012109138, US2012035672, US2011218542, US2011213376, US2011106093, US2011015636, US2010262150, US2010152782, JP5723460, JP2014513566, JP2014505523, FR3033691, FR2992850, EP3064155, EP2854663, EP2742878, EP2742877, EP2684544, CN104661619, CN104379074, CN103945782, CN103932755, CN103582461, CN103582461, CN103379868, AU2015202252, AU2015202252, AU2014239941,

Abstract:
Source: US2010212138A A resection guide locator includes a bone engagement portion with surfaces that are complementary to the surface topographies of a bone to be resected during surgery. A housing includes a socket defined by a resilient annular wall that is sized and arranged so to accept a resection guide by press−fit to thereby position and hold the resection guide within the socket. The resection guide is maintained in a predetermined, preferred position while the surfaces are releasably locked in position on the bone. A method is disclosed for forming and using the resection guide locator.

0) US2011023201A – UNOBTRUSIVE STYLISH WEARABLE APPAREL PROTECTION...

166) Family number: 48235868 (US2011023201A) © PatBase

Title: UNOBTRUSIVE STYLISH WEARABLE APPAREL PROTECTION BODY ARMOR GARMENT VEST INCORPORATED INTO A READY TO WEAR ARTICLE OF CLOTHING AND METHOD OF FITTING AND MANUFACTURE A BALLISTIC PANEL CARRYING GARMENT.

Priority: US20090462306 20090803 US20120620503P 20120405 US20130028563 20130917 US20140534134 20141105 US20130986149 20130405 US20130852142P 20130315 WO2014US30814 20140317 US20160369885 20161205

Family:

Publication number	Publication date	Application number	Application date
CA2907363 AA	20150915	CA20142907363	20140317
MX2015012522 A1	20160804	MX20150012522	20140317
US2011023201 AA	20110203	US20090462306	20090803
US2014013495 AA	20140116	US20130028563	20130917
US2015059042 AA	20150305	US20140534134	20141105
US2017082403 AA	20170323	US20160369885	20161205
US8555412 BB	20131015	US20090462306	20090803
US8904562 BB	20141209	US20130028563	20130917
US9513090 BB	20161206	US20140534134	20141105

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International class (IPC 8–9): A41B1/08 A41D1/04 A41D27/20 A41D3/00 F41H1/00 F41H1/02 F41H5/04 (Advanced/Invention); A41D27/00 F41H1/00 (Advanced/Non–invention)

CPC: F41H1/02 F41H5/0485 F41H5/0471 Y10S428/911 A41D1/04 A41D3/00 A41B1/08

European class: F41H1/02 F41H5/04F4

US class: 2/102 2/102S 2/2.5 2/2.500P 2/252 2/252S 2/463 428/911 89/36.05

Classification Explorer

Cited documents: WO12144894 A1, US8555412 BB, US7825045 BA, US7776401 BB, US7556855 BB, US7546853 BB, US7498276 BB, US7426753 BA, US7401363 BB, US7386894 BB, US7226878 BB, US6962739 BA, US6961958 BA, US6846545 BB, US6745661 BA, US6705197 BA, US6704934 BB, US6698024 BB, US6260196 BA, US6233737 BA, US6189157 BA, US6170378 BA, US6170378 B1, US6159590 A, US6131198 A, US6088831 A, US6035438 A, US5974585 A, US5970513 A, US5943694 A, US5584737 A, US5495621 A, US5495620 A, US5471906 A, US5331683 A, US5327811 A, US5325538 A, US5325537 A, US5175040 A, US5157792 A, US5072453 A, US5008959 A, US4623574 A, US4608716 A, US4535478 A, US4507802 A, US4497069 A, US4485491 A, US4483020 A, US4479999 A, US4466135 A, US4413357 A, US4266297 A, US4198494 A, US3988780 A, US3973275 A, US3891996 A, US3855632 A, US3843969 A, US3771171 A, US3562810 A, US3452362 A, US3409907 A, US3337875 A, US3061839 A, US2748391 A, US2747190 A, US2743446 A, US2517615 A, US2424985 A, US2052684 A, US2012246788 AA, US2012124713 AA, US2011023201 AA, US2010221521 AA, US2009255022 AA, US2009211000 AA, US2009151036 AA, US2009142557 AA, US2009142535 AA, US2009126057 AA, US2008235841 AA, US2008178358 AA, US2008134419 AA, US2008098500 AA, US2008075933 AA, US2007234459 AA, US2007169244 AA, US2007079416 AA, US2007079414 AA, US2006253950 AA, US2006175581 AA, US2004003445 AA, US2002073473 AA, US2002069444 AA,

Forward Citations: WO17089835, WO14186042, USD713997, US9513090, US9513089, US9414631, US9237774, US8904562, US2016273882, US2016169632, US2015113700,

US2015048216, US2014201878, US2013318671, US2013219581, US2012084906, US2011185463, CN105192933,

Abstract:
Source: US2011023201A This invention is a torso−body shaped frame vest−like garment that is designed to function as ballistic armor. This garment contains inserts comprised of unitary panels of pliable ballistic material capable of stopping bullets from most handguns. The use of a torso pattern sloper as a base structure for frame design allows this garment to be adapted for all types of wearable apparel besides vests such as jackets, coats, suits, shirts, etc, and allows for an increased range of movement and level of comfort. Unlike most other types of ballistic armor that is concealed by being worn under normal clothing this garment is designed to be used as outerwear that can compliment casual, business, or other professional attire. Its function as fashionable, concealable, and comfortable ballistic armor is achieved by using design methods, sewing techniques, ornamental trim applications, and fabric applications common to high fashion casual and professional attire.

167) Family number: 49831083 (US2013194688A) © PatBase

Title: THREE DIMENSIONAL ANGULAR ADJUSTABLE OPTICAL MOUNT

Priority: CN201110163866 20110617 WO2011CN01064 20110628

Family:

Publication number	Publication date	Application number	Application date
CN102226850 A	20111026	CN201110163866	20110617
CN102226850 B	20121010	CN201110163866	20110617
JP2014517354 T2	20140717	JP20140515018T	20110628
JP5719478 B2	20150520	JP20140515018T	20110628
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US9116259 BB	20150825	US20110806766	20110628
WO12171145 A1	20121220	WO2011CN01064	20110628

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Agent(s): MEI AND MARK LLP; MANNI; SHANGHAI XIN TIAN PATENT AGENCY CO LTD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G02B5/00 G02B7/00 G02B7/02 (Advanced/Invention)

CPC: G02B7/00 G02B7/004

US class: 1/1 359/894

Classification Explorer

Cited documents: US5877902 A, US5847885 A, US5694257 A, US5530547 A, US5419522 A, US2011102893 AA, US2003043294 AA, JP61105398 A2, JP61105398, JP2006201404 A2, JP2006201404, EP1177887 A2, CN2577407 Y, CN101567222 A, CN101144895 A,

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Abstract:
Source: US2013194688A A compact optical mount for adjust optical component in 3 dimensions. Based on the traditional 2D adjustable optical mount, its inner space is utilized for installing the third dimension angular adjustment. By virtue of its compact structure, convenient adjustment, high precision and good stability, the invention is suitable for adjusting small optics in 3 dimensions, by which the real optical axel can agree with the idea optical axel well to fast adjust the whole optical system.

0) EP2383505A3 – FIXING UNIT FOR FIXING AN INSULATING ELEMENT TO...

168) Family number: 49817498 (EP2383505A3) © PatBase

Title: FIXING UNIT FOR FIXING AN INSULATING ELEMENT TO A CONTAINER

Priority: DE201010016650 20100427

Family:

Publication number	Publication date	Application number	Application date
DE102010016650 A1	20111027	DE201010016650	20100427
EP2383505 A2	20111102	EP20110163937	20110427
EP2383505 A3	20120321	EP20110163937	20110427

Probable Assignee: KAEFER ISOLIERTECHNIK

Assignee(s):(std)**:** KAEFER ISOLIERTECHNIK

Assignee(s): KAEFER ISOLIERTECHNIK GMBH AND CO KG

Inventor(s):(std)**:** BOGUHN ALEXANDER ; HOLTZ SEBASTIAN

Agent(s): TAPPE UDO

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8–9): F16B5/06 F16L59/12 F17C13/08 F17C3/02 (Advanced/Invention)

CPC: F17C3/02 F16B5/01 F16B5/0664 F16B21/125 F17C2201/0128 F17C2201/0157 F17C2203/0304 F17C2203/0329 F17C2203/0333 F17C2209/221 F17C2209/227 F17C2209/232 F17C2221/033 F17C2223/0161 F17C2223/033 F17C2260/033 F17C2270/0107 F17C2203/0358

European class: F17C3/02 R16B21/12R R16B5/01 R16B5/06B3J R17C201/01B R17C201/01G2 R17C203/03A R17C203/03A3 R17C203/03A3A R17C209/22A R17C209/22D R17C209/23A R17C221/03B1 R17C223/01B1B R17C223/03B R17C260/03A2 R17C270/01A1A

Classification Explorer

Cited documents: US4312165 A, EP1338526 A1, EP0590317 A2, DE4413510 A1, DE3321064 A1, DE3015745 A1, DE19730921 A1, DE10207696 B4,

Abstract:
Source: EP2383505A3 Die Erfindung betrifft eine Befestigungseinheit (10, 36) zum Befestigen eines Daemmelementes (11) an einem Behaelter, insbesondere fuer kryogene Stoffe, mit einem mit einer Behaelterwand (23) des Behaelters fest verbundenem Halteelement (21, 28, 30, 33, 37), das zum Daemmelement (11) mit mindestens einer zur Behaelterwand (23) rechtwinkligen Komponente verschiebbar ist. Zum moeglichst weitgehenden Vermindern der Gefahr einer Entstehung von Waermebruecken, zur Vermeidung einer vollstaendigen Durchdringung des Daemmelementes durch eine Befestigung mit der Befestigungseinheit (10, 36), und zum Reduzieren der Kosten bei der Herstellung und Montage ist die erfindungsgemaesse Befestigungseinheit (10, 36) dadurch gekennzeichnet, dass das Halteelement (21, 28, 30, 33, 37) mindestens teilweise innerhalb eines Sackloches (12) gefuehrt ist, wobei das Sackloch (12) auf einer der Behaelterwand (23) zugewandten Seite des Daemmelementes (11) angeordnet ist.

0) US2011303358A – MANUFACTURING FIXTURES FOR SMALL FORM FACTOR DE...

169) Family number: 50099484 (US2011303358A) © PatBase

Title: MANUFACTURING FIXTURES FOR SMALL FORM FACTOR DESKTOP COMPUTER

Priority:

US20100355138P	20100615	US20100355144P	20100616	US20100893970	20100929
US20100893963	20100929	US20100355145P	20100616	US20100355150P	20100616
US20100894054	20100929	US20100894056	20100929	US20100893994	20100929
US20110339096	20111228	US20100894050	20100929	US20120615362	20120913
US20130887172	20130503	US20130017193	20130903	WO2011US38807	20110601
WO2011US38806	20110601	US20130921960	20130619	US20150822762	20150810

Family:

Publication number	Publication date	Application number	Application date
CN102985892 A	20130320	CN201180017243	20110601
CN102985892 B	20170118	CN201180017243	20110601
CN102985893 A	20130320	CN201180017244	20110601
CN102985893 B	20160316	CN201180017244	20110601
KR101450987 B1	20141015	KR20127025773	20110601
KR101488577 B1	20150202	KR20127025781	20110601
KR20120138793 A	20121226	KR20127025773	20110601
KR20120139766 A	20121227	KR20127025781	20110601
US2011303358 AA	20111215	US20100894054	20100929
US2011304968 AA	20111215	US20100893970	20100929
US2011304972 AA	20111215	US20100893963	20100929
US2011304973 AA	20111215	US20100894056	20100929
US2011304974 AA	20111215	US20100893994	20100929
US2011304976 AA	20111215	US20100894050	20100929
US2012106067 AA	20120503	US20110339096	20111228
US2013044429 AA	20130221	US20120615362	20120913
US2013279107 AA	20131024	US20130921960	20130619
US2013286577 AA	20131031	US20130887172	20130503
US2014000427 AA	20140102	US20130017193	20130903
US2016044831 AA	20160211	US20150822762	20150810
US8295040 BB	20121023	US20100894050	20100929
US8411434 BB	20130402	US20110339096	20111228
US8432679 BB	20130430	US20100894056	20100929
US8451598 BB	20130528	US20100893963	20100929
US8493727 BB	20130723	US20100893994	20100929
US8897001 BB	20141125	US20130921960	20130619
US8953321 BB	20150210	US20120615362	20120913
US9132562 BB	20150915	US20130887172	20130503
US9648780 BB	20170509	US20130017193	20130903
WO11159473 A1	20111222	WO2011US38806	20110601
WO11159474 A1	20111222	WO2011US38807	20110601

Probable Assignee: APPLE INC

Assignee(s):(std)**:** APPLE INC ; FARAHANI HOUTAN R ; GOH CHIEW SIANG ; KNOPF ERIC A ; TARKINGTON DAVID P ; ROHRBACH MATTHEW D ; THEOBALD MATTHEW S ; MOAK JOSEPH B ; MARIANO RICARDO A ; TARKINTON DAVID P

Inventor(s):(std)**:** FARAHANI HOUTAN R ; GOH CHIEW SIANG ; KNOPF ERIC A ; MARIANO RICARDO A ; MOAK JOSEPH B ; ROHRBACH MATTHEW D ; TARKINGTON DAVID P ; TARKINTON DAVID P ; THEOBALD MATTHEW S

Agent(s):

WOMBLE CARLYLE SANDRIDGE AND RICE LLP; DOWNEY BRAND LLP; FERRAZANO MICHAEL J ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B23C3/30 B23C5/08 B23P11/00 B26D3/14 B29C65/78 B32B37/10 B65C9/26 G06F1/16 G06F1/18 G06F1/20 G06F17/00 G11B33/14 H05K13/00 H05K5/00 H05K5/02 H05K7/00 H05K7/02 H05K7/14 H05K7/20 (Advanced/Invention)

CPC: G06F1/187 H05K13/00 G06F1/185 G06F1/16 G06F1/181 G06F1/182 G06F1/203 Y10T29/49002 Y10T29/49117 Y10T29/49169 Y10T29/49826 Y10T83/04 Y10T83/869 Y10T83/9391 H05K7/20336 G06F1/20 B26D3/14 B23C3/30 B23C5/08 B23C2220/36

European class: G06F1/18E G06F1/18E2 G06F1/20P

US class: 1/1 156/285 156/358 156/358S 156/361 156/361S 165/104.26 165/121 165/80.3 165/80.4 29/428 29/428S 29/592.1 29/592.100S 29/825 29/854 29/854S 361/679.02 361/679.04 361/679.31 361/679.33 361/679.330P 361/679.330S 361/679.34 361/679.340P 361/679.35 361/679.36 361/679.37 361/679.370P 361/679.370S 361/679.46 361/679.460S 361/679.47 361/679.470P 361/679.48 361/679.49 361/679.54 361/679.55 361/679.56 361/679.58 361/679.6 361/679.600P 361/679.600S 361/690 361/692 361/694 361/695 361/699 361/700 361/701 361/702 361/807 361/807S 700/117 700/117S 720/648 720/648S 83/13 83/523 83/671 G9B/33.035

Classification Explorer

Cited documents: WO10050971 A1, USRE40630 E, USD689860 S1, US8824142 BB, US8799935 BB, US8648752 BB, US8411434 BB, US8390999 BB, US8269674 BB, US8264412 BB, US8250724 BB, US8226052 BB, US8221152 BB, US8192209 BA, US8151285 BB, US8072754 BB, US8064209 BB, US7995343 BB, US7959382 BB, US7911387 BB, US7894185 BB, US7894184 BB, US7830660 BB, US7828592 BB, US7782630 BB, US7760983 BB, US7724532 BB, US7719831 BB, US7649736 BB, US7643284 BB, US7643279 BA, US7639490 BB, US7608782 BB, US7574715 BB, US7539009 BB, US7532470 BB, US7457111 BB, US7455915 BB, US7405930 BB, US7387281 BB, US7355845 BB, US7298615 BB, US7262735 BB, US7182118 BB, US7177161 BB, US7114245 BB, US7104817 BB, US7097047 BB, US7073412 BA, US7056138 BB, US7054165 BB, US6985355 BB, US6919532 BB, US6918174 BB, US6789611 BA, US6639796 BB, US6625372 BA, US6574115 BB, US6568442 BA, US6556529 BA, US6494413 BA, US6459576 BA, US6456486 BA, US6423928 BA, US6378586 BA, US6369798 BA, US6368154 BA, US6343020 BA, US6339397 BA, US6312278 BA, US6238181 BA, US6172870 BA, US6172870 B1, US6115243 A, US6094352 A, US5949020 A, US5820236 A, US5793728 A, US5763830 A, US5701216 A, US5669744 A, US5613223 A, US5559672 A, US5546654 A, US5495389 A, US5364289 A, US5339220 A, US5018052 A, US4982303 A, US4874908 A, US4795354 A, US4775121 A, US4705244 A, US4572604 A, US4132583 A, US3894706 A, US3823050 A, US3696920 A, US3632070 A, US3568284 A, US3549787 A, US3383457 A, US3149808 A, US2431294 A, US2418960 A, US2354639 A, US2013265199 AA, US2012106067 AA, US2012087065 AA, US2011304972 AA, US2011273829 AA, US2011063794 AA, US2010238619 AA, US2010146766 AA, US2010091442 AA, US2010044855 AA, US2010008040 AA, US2009103265 AA, US2009034189 AA, US2008285225 AA, US2008266198 AA, US2008259554 AA, US2008158808 AA, US2008094795 AA, US2008024999 AA, US2007211422 AA, US2007186223 AA, US2007177294 AA, US2007131338 AA, US2007019374 AA, US2006181845 AA, US2006067066 AA, US2006035501 AA, US2006034048 AA, US2005276018 AA, US2005259389 AA, US2005243511 AA, US2005002157 AA, US2004252455 AA, US2004246677 AA, US2004228086 AA, US2004174676 AA, US2003086673 AA, US2003085056 AA, US2002031322 AA, US1241176 A, JP3019715 A2, JP2008260108 A2, EP0541378 A1, CN2375999 Y, CN201491423 U,

Forward Citations: WO14129705, USD776657, USD776656, USD757710, USD755134, USD754751, USD737819, USD721338, USD708592, USD708591, USD692884, USD689860, US9578769, US9395765, US9137921, US9132562, US9025320, US8905769, US8897001, US8743015, US8462497, US8300336, US2016294629, US2015077920, US2014077668, US2013342704, US2013318766, US2013314869, US2013208427, US2013171845, US2013050945, US2012120612, US2012106064, US2010103550,

Abstract:
Source: US2011303358A One automated process for evenly applying a thin layer within a device housing includes applying a vacuum hold from a curved surface applicator to the thin layer, pressing the thin layer against the device housing with the applicator, wherein said pressing includes applying pressure from the center of the

applicator first and then radially expanding said pressure, and pressing the cylindrical outer housing against an outer region of the thin layer to effect a hard pressed application at the outer surface thereof.

170) Family number: 50484840 (US2013107509A) © PatBase

Title: TORCH WITH A ROTATIONALLY SYMMETRICAL OPTICAL ATTACHMENT

Priority: AU20110282009 20110712 AU20150202562 20150512 DE201010027326 20100716 WO2011DE001453 20110712

Family:

Publication number	Publication date	Application number	Application date
AU2011282009 AA	20120126	AU20110282009	20110712
AU2011282009 BB	20150212	AU20110282009	20110712
AU2015202562 AA	20150709	AU20150202562	20150512
AU2015202562 BB	20160929	AU20150202562	20150512
CN103026122 A	20130403	CN201180034950	20110712
DE102010027326 A1	20120119	DE201010027326	20100716
EP2593711 A2	20130522	EP20110809298	20110712
JP2013531347 T2	20130801	JP20130518954T	20110712
JP5795063 B2	20151014	JP20130518954T	20110712
US2013107509 AA	20130502	US20110700211	20110712
US8770783 BB	20140708	US20110700211	20110712
WO12010153 A2	20120126	WO2011DE001453	20110712
WO12010153 A3	20120607	WO2011DE001453	20110712

Probable Assignee: ZWEIBRUDER OPTOELECTRONICS GMBH AND CO KG

Assignee(s):(std)**:** OPOLKA RAINER ; ZWEIBRUDER OPTOELECTRONICS GMBH AND CO KG ; ZWEIBRUEDER OPTOELECTRONICS

Assignee(s): ZWEIBRUEDER OPTOELECTRONICS GMBH AND CO KG ; ZWEIBRUEDER OPTOELECTRONICS GMBH AND COKG

Inventor(s):(std)**:** OPOLKA RAINER

Agent(s): FB RICE; FB RICE PTY LTD; VOMBERG FRIEDHELM; ANDREW

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): F21L4/00 F21L4/02 F21L4/04 F21V14/04 F21V14/06 F21V29/00 F21V29/70 (Advanced/Invention); F21Y101/02 (Advanced/Non–invention)

CPC: F21V5/006 F21V5/04 F21V7/0091 F21V14/045 F21L4/00 F21L4/027 F21Y2115/10

European class: F21L4/02P4 F21V14/04L F21V5/00L F21V5/04 R21V7/00T R21Y101/02

US class: 362/187 362/188 362/190

Classification Explorer

Cited documents: WO10007504 A1, WO09044376 A2, WO09044376, US2254962 A, US2010002422 AA, US2009109687 AA, US2007263390 AA, JP3148911 U, JP3148911 U, JP2010146857 A2, JP2010146857, JP2010107844 A2, JP2010107844, JP2006332411 A2, JP2006332411, JP2005229082 A2, JP2005229082, EP1890076 A1,

DE202005009923 U1

DE202005007500 U1

Abstract:
Source: US2013107509A The present invention relates to a flashlight having an auxiliary optical system that is rotation symmetrical to an optical axis, and that has an outer reflector part, an inner converging lens part, and a rear surface having a blind bore, and having a light–emitting diode (LED) arranged on a disk–shaped holder. In

order to provide a flashlight having an auxiliary optical system, in which the emission characteristic can be set between a so−called moon setting and a focus setting, wherein the operability of the flashlight is to be as simple as possible and the desired setting can be found rapidly and reliably, according to the invention, the auxiliary optical system is displaceable relative to the LED delimited by two stops in such a manner that a substantially homogeneous light cone is generated in the case of contact of the auxiliary optical system on the holder.

0) US2013230263A – STRUCTURED DIRT DEPOSITORY IN SLIDING BEARING S...

171) Family number: 50751698 (US2013230263A) © PatBase

Title: STRUCTURED DIRT DEPOSITORY IN SLIDING BEARING SURFACES

Priority: DE201010040158 20100902 EP20110721035 20110523 WO2011EP58336 20110523

Family:

Publication number	Publication date	Application number	Application date
BR112013005241 A2	20160426	BR20131105241	20110523
CN103168181 A	20130619	CN201180042286	20110523
CN103168181 B	20160622	CN201180042286	20110523
DE102010040158 A1	20120308	DE201010040158	20100902
DE502011006203 D1	20150416	DE201150006203T	20110523
EP2612047 A1	20130710	EP20110721035	20110523
EP2612047 B1	20150311	EP20110721035	20110523
IN00878KN2013 A	20130712	IN2013KN00878	20130328
JP2013536921 T2	20130926	JP20130526373T	20110523
JP5830099 B2	20151209	JP20130526373T	20110523
KR20130115232 A	20131021	KR20137007994	20110523
MX2013002340 A1	20130405	MX20130002340	20110523
RU2013114462 A	20141010	RU20130114462	20110523
US2013230263 AA	20130905	US20110820389	20110523
US9341211 BB	20160517	US20110820389	20110523
WO12028345 A1	20120308	WO2011EP58336	20110523

Probable Assignee: FEDERAL MOGUL WIESBADEN GMBH

Assignee(s):(std)**:** AUBELE THOMAS ; FED MOGUL WIESBADEN GMBH ; FEDERAL MOGUL WIESBADEN GMBH ; RITTMANN STEFAN

Inventor(s):(std)**:** AUBELE THOMAS ; RITTMANN STEFAN ; STEFAN RITTMANN ; THOMAS AUBELE

Agent(s): HOFFMANN EITLE PATENT U RECHTSANWAELTE PARTMBB; HOFFMANN EITLE; OHNUKI SHINSUKE; ITOH TADAHIKO; ITOH TADASHIGE; ROBERT L; DICKINSON WRIGHT PLLC; WIEDEMANN PETER ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): F16C17/02 F16C17/24 F16C33/06 F16C33/10 F16C33/14 F16C33/20 F16C9/04 (Advanced/Invention)

CPC: F16C33/10 F16C33/14 F16C9/04 F16C33/1065 F16C17/246 F16C33/105 F16C33/106 F16C2240/42 Y10T29/49668 F16C2220/44 F16C2220/68 F16C2220/70

European class: F16C33/10L5G F16C9/04

US class: 1/1 29/898.054 384/291

Classification Explorer

Cited documents: US7441957 BB, US7318847 BB, US6991377 BB, US6491438 BA, US4105267 A, US3552807 A, US2012148179 AA, US2012128286 AA, US2011058761 AA, US2011002563 AA, US2010316313 AA, US2010046869 AA, US2008187259 AA, US2005201647 AA, US2003156769 AA, US2003059136 AA, US2002061147 AA, US2001000073 AA, US1597429 A, JP55012180 U1, JP55012180 U, JP55012180 U, JP55012180 U, JP52113445 A2, JP52113445, JP5202936 A2, JP5202936, JP2010116953 A2, JP2009068511 A2, JP2009068511, JP2008151200 A2, JP2005195004 A2, JP2004244177 A2, JP2002155946 A2, JP2002155946, JP05202936, GB2323414 A1, GB1144131 A, GB1144131, GB1128370 A, GB01144131, FR738343 A, DE3905450 C2, DE339649 A, DE3024629 A1, DE2946921 A1, DE2711983 A1,

DE2305834 A1, DE2100365 A1, DE19953576 A1, DE19953576,

DE102009007847 A1

DE102009002772 A1

DE102006010698 A1

DE10156344 A1, DD258149 T, DD258149 A3, CN1485552 A,

Forward Citations: WO13178558, WO13167318, US9664063, DE102012022268, DE102012022268, CN103775500, CN103775500,

Abstract:
Source: US2013230263A The invention relates to a sliding bearing and to a method for producing a sliding bearing, having at least one groove formed on the sliding surface which extends at least partially in the axial direction of a mounted shaft, ends on at least one end before the edge of the bearing and is deeper than 80 mum and/or wider than 150 mum, so that dirt and/or particles can be embedded.

0) BRPI1002276A – CAROS OU CAMARAS ACELERADORAS POR RODAS SEQUENC...

172) Family number: 51294192 (BRPI1002276A) © PatBase

Title: caros ou camaras aceleradoras por rodas sequenciais Accelerator or expensive cameras on wheels sequential (Machine translation)

Priority: BR2010PI02276 20100727

Family:

Publication number	Publication date	Application number	Application date
BRPI1002276 A2	20120605	BR2010PI02276	20100727

Probable Assignee: FERREIRA DE SOUZA CIVONEZ

Assignee(s):(std)**:** FERREIRA DE SOUZA CIVONEZ

Assignee(s): CIVONEZ FERREIRA DE SOUZA

Inventor(s):(std)**:** FERREIRA DE SOUZA CIVONEZ

Inventor(s): CIVONEZ FERREIRA DE SOUZA

International class (IPC 8–9): B64F1/08 (Advanced/Invention)

Classification Explorer

Abstract:
Source: BRPI1002276A CAROS OU CAMARAS ACELERADORAS POR RODAS SEQUENCIAIS. As Patentes de Invencoes CAROS (1), ou camaras aceleradoras por rodas seqtienciais, e um inovador metodo de acelerar corpos ou objetos autos propulsores ou estacionarios. Sao caracterizados, no estado da tecnica, por: CEPRO (517), capsula externa protetora, ARMETA, armacao metalica externa, ARMINTE, armacao metalica interna. A ARMiNTE e composta por: SUSA (365), suporte de sustentacao anelar, SEL (375), suporte de extensao lateral e SEV (381), suporte de extensao vertical. As rodas seqilenciais sao aceleradas com ganho de energia cinetica e potencial entre elas. Durante aceleracao as rodas internas transmitem energia cinetica e potencial para as rodas externas. Nas freadas acontece o contrario. Eixos aceleradores e engrenagens diversas. Sistemas diversos, entre eles: sistema de transferencia de velocidade ou TVC (454), e de deslizamento (455) entre as rodas ou SDR (455). Outros sistemas: lubrificacao (67), refrigeracao (70), hidrico (556),hidraulico (557), eletrico (558), eletronico (559), contra incendio (560). Resumidamente, os sistemas CAROS sao multiplicadores mecanicos de forcas. Os CAROS sao divididos em: RADEV, PAU, RADEC, RADELP e RADELS. Significam rodas aceleradoras com deslizamentos diversos: vertical, cruzado, longitudinal. A RAU roda aceleradora unica. Os CAROS podem ser acelerados por outros CAROS formando os CAROS sequenciais.

Machine translation: EXPENSIVE CAMERAS OR WHEELS FOR SEQUENTIAL accelerator. The patents for inventions DEAR (1), or chambers on wheels seqtienciais accelerator, and an innovative method of accelerating bodies or objects propelled cars or stationary. Are characterized in the state of technique, of: CEPRO (517), protective outer capsule, ARMETA, external metal frame, ARMINTE, internal metal frame. The ARMiNTE and comprised: SUSA (365), support bracket ring, SEL (375), extension and lateral support SEV (381), support for vertical extension. The wheels are accelerated seqilenciais with a gain of kinetic and potential energy between them. During acceleration the wheels transmit internal kinetic energy and potential to the outside wheels. In braking the opposite happens. Axis accelerators and several gears. Different systems, including: transfer system speed or CVT (454) and slide (455) between the wheels and SDR (455). Other systems, lubrication (67), refrigerated (70), water (556), hydraulic (557), electric (558), electronic (559) against fire (560). Briefly, the systems are EXPENSIVE multipliers of mechanical forces. The DEAR are divided into: Radev, PAU, Radec, and RADELP RADELS. Mean wheel slips with different accelerators: vertical, cross and longitudinal. The RAU wheel single accelerator. The DEAR can be accelerated by other forming DEAR DEAR sequential.

173) Family number: 52581704 (US2014148913A) © PatBase

Title: ROTARY JOINT PROSTHESIS HAVING A REINFORCED BEARING BUSH

Priority: EP20110170134 20110616 EP20120718684 20120508 WO2012EP58418 20120508

Family:

Publication number	Publication date	Application number	Application date
AU2012269362 AA	20121220	AU20120269362	20120508
AU2012269362 BB	20170119	AU20120269362	20120508
BR112013032185 A2	20161220	BR20131132185	20120508
CA2839369 AA	20131213	CA20122839369	20120508
CL2013003595 A1	20140829	CL20130003595	20131216
CN103930070 A	20140716	CN201280039772	20120508
CN103930070 B	20160224	CN201280039772	20120508
CO6970567 A2	20140613	CO20130301517	20131227
DE502012008242 D1	20161027	DE201250008242T	20120508
EP2535020 A1	20121219	EP20110170134	20110616
EP2720645 A1	20140423	EP20120718684	20120508
EP2720645 B1	20160914	EP20120718684	20120508
ES2605809 T3	20170316	ES20120718684T	20120508
HU029804 T2	20170428	HU20120718684T	20120508
IL229945 A0	20140227	IL20120229945	20120508
IL229945 A1	20170430	IL20120229945	20120508
IN00206CN2014 A	20140926	IN2014CN00206	20140109
JP2014526910 T2	20141009	JP20140515111T	20120508
JP6028020 B2	20161116	JP20140515111T	20120508
KR20140038522 A	20140328	KR20147000883	20120508
MX2013014732 A1	20140709	MX20130014732	20120508
MX338172 B	20160406	MX20130014732	20120508
PL2720645 T3	20170228	PL20120718684T	20120508
PT2720645 T	20161104	PT20120718684T	20120508
RU2014100975 A	20150727	RU20140100975	20120508
RU2602928 C2	20161120	RU20140100975	20120508
TR201618255 T4	20170123	TR20160018255T	20120508
UA112081 C2	20160725	UA20140000204	20120508
US2014148913 AA	20140529	US20120126356	20120508
US9226829 BB	20160105	US20120126356	20120508
WO12171722 A1	20121220	WO2012EP58418	20120508
ZA201400155 A	20150624	ZA20140000155	20140108

Probable Assignee: DERU GMBH

Assignee(s):(std)**:** BARTELS CAROLIN ; DERU GMBH ; DMUSCHEWSKY KLAUS ; IREDI MARCO ; LINK WALDEMAR GMBH CO ; WALDERMAR LINK GMBH AND CO KG

Assignee(s): WALDEMAR LINK GMBH AND COKG ; WALDEMAR LINK GMBH CO KG ; WALDEMAR LINK GMBH AND CO KG ; WALDEMAR LINK GMBH AND CO

Inventor(s):(std)**:** BARTELS CAROLIN ; CAROLIN BARTELS ; DMUSCHEWSKY KLAUS ; IREDI MARCO ; KLAUS DMUSCHEWSKY ; MARCO IREDI

Agent(s): GRIFFITH HACK; RIDOUT AND MAYBEE LLP; ESTUDIO BEUCHAT BARROS AND PFENNIGER; GLAWE DELFS MOLL; LEHMANN MARIA ISABEL; REINHOLD COHN AND PARTNERS; TAKEUCHI MIKIO; YAMADA TAKUJI; TANAKA MITSUO; TOLGA CAYLAK; MORRISON AND FOERSTER LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61F A61F2/00 A61F2/30 A61F2/38 (Advanced/Invention); A61F2/00 A61F2/30 (Advanced/Non–invention); A61F2/00 (Core/Invention); A61F (Subclass/Invention)

CPC: A61F2/3836 A61F2/3804 A61F2/385 A61F2002/30354 A61F2002/30364 A61F2002/30507 A61F2220/0025 A61F2220/0033 F04C2270/041

European class: A61F2/38D2 A61F2/38D2C K61F2/30A3T1E K61F2/30A3T1M2 K61F2/30A3T33V K61F2/38D2C K61F220/00T K61F220/00T1

US class: 1/1 623/23.41

Classification Explorer

Cited documents: US5824102 A, US5766257 A, US5314481 A, US5139521 A, US4790853 A, US4538305 A, US4136405 A, US05824102, US05766257, US05314481, US04790853, RU2151577C, RU2080840, JP9313511 A2, JP9313510 A2, JP8507245 T2, JP8173464 A2, JP09313511, JP09313510, JP08507245, JP08173464, FR2601873 A1, EP1532945 A2, EP0913132 A1, EP0174531 B1, EP0174531 A2, DE3119841 C2, DE3119841 A1,

DE202009001442 U1

CN1549695 A,

Forward Citations: US9283081, US2015018828, US2014039635,

Abstract:
Source: US2014148913A A joint prosthesis comprises a distal component for anchoring to a first bone, a proximal component for anchoring to a second bone, and a coupling piece that, together with the first component, forms a flexion bearing around a first axis and, together with the second component, forms a rotary bearing formed by the pin and the bearing bush around a second axis oriented transversely to the first axis. The rotary bearing comprises a multi–layer bearing insert, having a sliding sleeve surrounding the pin and a support sleeve that encloses said sliding sleeve and is fastened to the coupling piece by means of a securing element, wherein the securing element comprises an actuation unit within the support sleeve and can be connected to the coupling piece such as to ensure tensile strength by means of two aligned bores in the support sleeve and the coupling piece.

174) Family number: 54394876 (US2013199020A) © PatBase

Title: FASTENING DEVICES AND SYSTEMS AND METHODS THEREOF

Priority: EP20130153930 20130204 US20120367362 20120206 US20120412658F 20120206 US20120377103 20120608 US20130468991F 20131004 US20130468997F 20131004 WO2012US41713 20120608 US20140493108 20140922 US20130899445P 20131104 US20130884840P 20130930 US20130880204P 20130920 US20130468999F 20131004 WO2014US56824 20140922

Family:

Publication number	Publication date	Application number	Application date
BR302012003934 S1	20131217	BR20123003934F	20120801
CA146138 S	20130422	CA20120146138F	20120613
CA2831406 AA	20130925	CA20122831406	20120608
CA2831406 C	20150421	CA20122831406	20120608
CL2014002085 A1	20150612	CL20140002085	20140806
CN103238987 A	20130814	CN201210308271	20120824
CN103238987 B	20160224	CN201210308271	20120824
CN104203030 A	20141210	CN201280069064	20120608
CN104203030 B	20170315	CN201280069064	20120608
CN203182150 U	20130911	CN201320083349U	20130206
CN302306051 S	20130130	CN201230369100F	20120806
CO7101216 A2	20141031	CO20140171751	20140806
DE202012012779 U1	20140424	DE201220012779U	20120608
DE602013002266 D1	20150827	DE201360002266T	20130204
EP2622979 A2	20130807	EP20130153930	20130204
EP2622979 A3	20140507	EP20130153930	20130204
EP2622979 B1	20150715	EP20130153930	20130204
EP3046438 A1	20160727	EP20140845433	20140922
ES2549227 T3	20151026	ES20130153930T	20130204
HK1199185 A1	20150626	HK20140112772	20141222
IL233940 A0	20140930	IL20120233940	20120608
IL233940 A1	20150331	IL20120233940	20120608
IN01628KN2014 A	20141031	IN2014KN01628	20140804
JP3197186 U	20150430	JP20140600095U	20120608
PH2014501752 A	20141110	PH20140501752	20140804
PH2014501752 B	20141110	PH20140501752	20140804
SG11201404661P A1	20140926	SG20141104661	20120608
TWD159237 S1	20140311	TW20130300429F	20120724
US2013199020 AA	20130808	US20120367362	20120206
US2015074955 AA	20150319	US20120377103	20120608
US2015082588 AA	20150326	US20140493108	20140922
US8850675 BB	20141007	US20120367362	20120206
US9538802 BB	20170110	US20140493108	20140922
USD686909 S1	20130730	US20120412658F	20120206
WO13119268 A1	20130815	WO2012US41713	20120608
WO15042541 A1	20150326	WO2014US56824	20140922
WO15042541 A9	20150528	WO2014US56824	20140922

Probable Assignee: HICKIES INC

Assignee(s):(std)**:**

LE GETTE BRIAN ; REEB DAVID ; WAINGARTEN MARIA RAQUEL ; TIPP ALAN ; FRYDLEWSKI GASTON ; HICKIES INC ; LEGETTE BRIAN ; WAINGARTEN MARIA R

Assignee(s): HICKIES INC BROOKLYN ; TCJ I LLC

Inventor(s):(std)**:** ALAN TIPP ; BRIAN LEGETTE ; DAVID REEB ; FRYDLEWSKI GASTON ; GASTON FRYDLEWSKI ; GRYDLEWSKI GASTON ; LE GETTE BRIAN ; LEGETTE BRIAN ; RAQUEL WAINGARTEN MARIA ; REEB DAVID ; TIPP ALAN ; WAINGARTEN MARIA R ; WAINGARTEN MARIA RAQUEL

Inventor(s): WAINGARTEN MARIA RAQUEL BROOKLYN ; TIPP ALAN ELKHORN ; REEB DAVID SYKESVILLE ; LEGETTE BRIAN BALTIMORE ; MARIA RAQUEL WAINGARTEN ; FRYDLEWSKI GASTON BROOKLYN

Agent(s): NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; CLARKE MODET AND CO CHILE LIMITADA; SILVANA MARIA LOPEZ DIAZ; MEISSNER BOLTE AND PARTNER GBR; ILGART JEAN CHRISTOPHE; COPSEY TIMOTHY GRAHAM; WESTPHAL MUSSGNUG AND PARTNER PATENTANWAELTE MBB; ISERN JORGE; LUZZATTO AND LUZZATTO; VENABLE LLP; STEVEN J; TRENT B; LACKENBACH SIEGEL LLP; ANDREW F; MILLER PATRICK L ET AL; SCHWARZ STEVEN J

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A41F1/00 A43B1/00 A43B3/00 A43C A43C1/02 A43C11/00 A43C11/06 A43C11/14 A43C11/22 A43C9/00 A43C9/02 A44B11/00 A44B11/20 A44B11/25 A44B17/00 A44B99/00 A44C25/00 A44C5/00 B23P11/00 (Advanced/Invention); A43C (Subclass/Invention)

CPC: Y10T29/49947 Y10T24/45277 Y10T24/3787 Y10T24/37 Y10T24/314 A43C11/22 Y10T24/268 Y10T24/26 A44B17/0023 A43B3/0078 A44B17/0064 A43C11/1493 A43B1/0081 A43C11/004 Y10T24/45251

US class: 24/300 24/437 24/441 24/594.1 24/598.2 24/712 24/715.3 29/525.01 D2/978 D8/394 D8/396

Locarno class: 08/08 02/07

Classification Explorer

Cited documents: WO14106974 A1, WO13119268 A1, WO13066004 A1, USD89286 S1, USD705442 S1, USD698232 S1, USD686909 S1, USD672230 S1, USD662987 S1, USD641708 S1, USD637066 S1, USD637065 S1, USD628936 S1, USD623933 S1, USD621585, USD615385 S1, USD614855 S1, USD599196 S1, USD596759 S1, USD590705 S1, USD579764 S1, USD544338 S1, USD543833 S1, USD542928 S1, USD513880 S1, USD503034 S1, USD492897 S1, USD488374 S1, USD432946 S1, USD409522 S1, USD393411 S1, USD179614 S1, USD177723 S1, US976826 A, US8590121 BA, US830902 A, US8261416 BB, US7825337 BB, US7506420 BB, US715599 A, US705562 A, US6701589 BA, US6634063 BB, US6513210 BA, US6490767 BB, US6313406 BA, US5822844 A, US5799376 A, US5746500 A, US5737811 A, US5692276 A, US565884 A, US5639244 A, US562114 A, US5586353 A, US5537763 A, US5465442 A, US5388315 A, US5295315 A, US5239732 A, US5230171 A, US5214826 A, US4486965 A, US4296515 A, US4144621 A, US4112988 A, US3731350 A, US3701572 A, US3382546 A, US3193950 A, US315819 A, US2871537 A, US2689991 A, US2438143 A, US2289225 A, US2264644 A, US2012180268 AA, US2011271491 AA, US2011058902 AA, US2010325849 AA, US2010293767 AA, US2009242439 AA, US2006254089 AA, US2006168785 AA, US20060254089, US2005268435 AA, US2005251967 AA, US2004139583 AA, US2003140459 AA, US2002178559 AA, US1966135 A, US1945932 A, US1934455 A, US1898225 A, US1685489 A, US1678241 A, US1595630 A, US146913 A, US1458088 A, US1184647 A, US1055118 A, TWD146324, TWD139416, NL23055810001, MU6900021, KR300303765, JPD201019098, JPD1409037, JPD1393106, JP201019098, FR958758 A, DE20201201277909, CN983105243 S, CN98310524, CN963027522 S, CN96302752, CN95320054, CN3105681, CN3055530, CN3052239 S, CN3052239, CN301267166, CN301257699, CN301041762, CN202069049 U, CN201139130 Y, CN200930207725 S, CN200930154885 S, CN200830249244 S, CN200720198450, CN200610008963, CN1833567 A, CN1036129 A, BRMU6900021 U, BRMU6900021, BR6900021 U,

Forward Citations: WO17065973, USD790207, USD786055, USD762459, USD752333, USD741695, USD734605, USD719823, USD715609, USD714631, USD707116, USD705647, US9538802, US9250031, US9210959, US9200862, US8850675, US2016146565,

US2015327649, US2014208615, US2013247895, CN105639850, CN105629394,

Abstract:
Source: US2013199020A Fastening devices and systems and methods thereof. Fastening devices and systems and methods thereof can include a unitary or one−piece body having first and second ends configured and operative to be coupled together or to be coupled to their respective complement in another of said fastening devices. The first end can include a ring or annular portion and a projection that are sized and shaped to fit around an anchor and in an orifice, respectively, of the second end. Fastening devices and systems and methods thereof according to embodiments may be used with items, including footwear, apparel, luggage, a backpack, a bag, a purse, a boxing glove, a punching bag, football or lacrosse shoulder pads, or the like.

0) BRPI1004385A – COMUNICACCO TACTIL PARA TODO PEBLICO: SISTEMA B...

175) Family number: 53661035 (BRPI1004385A) © PatBase

Title: comunicaCco tActil para todo peblico: sistema braille usando verniz relevo acrllico de secagem ultravioleta (uv), impresso junto com texto e imagens em tinta; ausEncia de micro–furos denominada: i–br/vza–uvxmf ComunicaCco touch for all peblico: system using braille embossed acrylic varnish drying ultraviolet (uv), printed with text and images in ink; absence of micro–holes called: i–br/vza–uvxmf (Machine translation)

Priority: BR2010PI04385 20101018

Family:

Publication number	Publication date	Application number	Application date
BRPI1004385 A2	20130424	BR2010PI04385	20101018

Probable Assignee: UNIV TECNOLOGICA FED DO PARANA UTFPR

Assignee(s):(std)**:** UNIV TECNOLOGICA FED DO PARANA UTFPR

Assignee(s): UNIVERSIDADE TECNOLOGICA FEDERAL DO PARANA UTFPR

Inventor(s):(std)**:** DE ABREU RODRIGUES LUIZ CARLOS ; HERNANDEZ SANCLEMENTE JOSE MANUEL

Inventor(s): JOSE MANUEL HERNANDEZ SANCLEMENTE ; LUIZ CARLOS DE ABREU RODRIGUES

International class (IPC 8–9): B41J3/32 B41M3/16 G09B21/00 (Advanced/Invention)

Classification Explorer

Abstract:
Source: BRPI1004385A COMUNICACCO TACTIL PARA TODO PEBLICO: SISTEMA BRAILLE USANDO VERNIZ RELEVO ACRILICO DE SECAGEM ULTRAVIOLETA (UV), IMPRESSO JUNTO COM TEXTO E IMAGENS EM TINTA; AUSENCIA DE MICRO–FUROS DENOMINADA: I–Br/Vza–UVxmf. A presente invencao expressa a observacao, investigacao, criatividade, inovacao e uso da tecnologia de impressao grafica disponivel e instalada, conjugadas para obter o sistema de COMUNICACCO TACTIL PARA TODO PEBLICO: SISTEMA BRAILLE USANDO VERNIZ RELEVO ACRILICO DE SECAGEM ULTRAVIOLETA (UV), IMPRESSO JUNTO COM TEXTO E IMAGENS EM TINTA; AUSENCIA DE MICRO–FUROS DENOMINADA: I–Br/Vza–UVxmf; com o significando: i – impressao; B – Brailie; r – relevo; I – mediante; Vz – Verniz; a – acrilico; UV – Ultra Violbeta x – ausencia; mf – micro–furos. Aplicada como ferramenta de Inclusao e acessibilidade facilitadoras da educacao, capacitacao profissional, convivencia e relacionamento entre as pessoas deficientes visuais (que representam 6,8 percent da populacao Brasileira) com videntes normais, higidos; conduzindo–las para melhor nivel de vida, contribuindo a aplicado da legislacao que exige nas embalagens de medicamentos, alimentos, material de uso pessoal e asseio informacao do nome, conteudo, especificacao, uso e validade dos produtos bens e servicos empacotados; mostrado no prototipo: "mundo Bralile livro ilustrado, album de 80 figurinhas" desenhado e manufaturado de acordo a esta invencao.

Machine translation: COMUNICACCO TACTIL FOR ALL PEBLICO: BRAILLE SYSTEM USING ACRYLIC ENAMEL RELIEF OF DRYING ULTRAVIOLET (UV), TOGETHER WITH PRINTED TEXT AND IMAGES IN INK; ABSENCE OF MICRO–HOLE NAMED: I–Br/Vza–UVxmf. The present invention expresses the observation, research, creativity, innovation and use of printing technology available and installed, combined to get the system COMUNICACCO TACTIL FOR ALL PEBLICO: BRAILLE SYSTEM USING ACRYLIC ENAMEL RELIEF OF DRYING ULTRAVIOLET (UV), PRINTED TOGETHER WITH TEXT AND IMAGES IN INK; ABSENCE OF MICRO–HOLE NAMED: I–Br/Vza–UVxmf, with the meaning: i – impression, B – Brailie, r – relief, I – through; Vz – Varnish, the – acrylic; UV – Ultra Violbeta x – absence; mf – micro–holes. Applied as a tool to facilitate the accessibility and Inclusion Education, Professional, coexistence and relationship between visually impaired people (representing 6.8 percent of the Brazilian population) with seers normal, healthy, leading them to better standard of living, contributing to applied the legislacao that requires the packaging of medicines, food, material usage and personal hygiene information name, content, specification, usage and durability of products bundled goods and services; shown in prototype: "World Bralile illustrated book, album of 80 figurines "designed and manufactured according to this invention.

176) Family number: 53976268 (US2013139990A) © PatBase

Title: SYSTEMS, DEVICES, AND/OR METHODS FOR PRODUCING HOLES

Priority: US20110567259P 20111206 US20120705671 20121205 US20140450565 20140804

Family:

Publication number	Publication date	Application number	Application date
DE102012111875 A1	20130606	DE201210111875	20121206
FR2983420 A1	20130607	FR20120061717	20121206
GB2500449 A1	20130925	GB20120021956	20121206
GB2500449 B2	20140820	GB20120021956	20121206
US2013139990 AA	20130606	US20120705671	20121205
US2014342176 AA	20141120	US20140450565	20140804
US8813824 BB	20140826	US20120705671	20121205
US9057277 BB	20150616	US20140450565	20140804

Probable Assignee: MIKRO SYSTEMS INC

Assignee(s):(std)**:** FRASER IAIN ; HENEVELD BENJAMIN ; KLINGER JILL ; PAULUS JOHN ; MIKRO SYSTEMS INC ; APPLEBY MICHAEL

Assignee(s): BENJAMIN HENEVELD ; JILL KLINGER ; IAIN FRASER ; JOHN PAULUS ; MICHAEL APPLEBY

Inventor(s):(std)**:** FRASER IAIN ; HENEVELD BENJAMIN ; APPLEBY MICHAEL ; KLINGER JILL ; PAULUS JOHN

Inventor(s): MICHAEL APPLEBY ; BENJAMIN HENEVELD ; IAIN FRASER ; JILL KLINGER ; JOHN PAULUS

Agent(s): CABINET NUSS; MICHAEL N; MICHAEL HAYNES PLC

International class (IPC 8–9): B22C7/02 B22C9/02 B22C9/04 B22C9/10 B22C9/22 B22C9/24 B22D25/02 F01D5/14 F01D5/18 F01D5/28 (Advanced/Invention)

CPC: B22C9/02 B22D25/02 B22C9/04 B22C9/10 B22C9/24 F01D5/18 F01D5/282 F01D5/284 Y02T50/672 Y02T50/673 Y02T50/676 F01D5/147 B22C9/22 B22C7/02 Y10T428/12361

US class: 1/1 164/137 164/271 164/361 164/369 164/47 428/596

Classification Explorer

Cited documents: WO10036801, WO08059272, WO02098624, US8734108 BA, US8322988 BA, US8317475 BA, US8206095 BB, US8167537 BA, US8162609 BA, US8096766 BA, US8066483 BA, US8057183 BA, US7893413 BA, US7866950 BA, US7785098 BA, US7717677 BA, US7518136 BB, US7514482 BB, US7462852 BB, US7413001 BB, US7411204 BB, US7410606 BB, US7371046 BB, US7252861 BB, US7235166 BB, US7203569 BB, US7170140 BB, US7165936 BB, US7141812 BB, US7141080 BB, US7112797 BB, US7097729 BB, US7077638 BB, US7074358 BB, US7057245 BB, US6987836 BB, US6881950 BB, US6839408 BB, US6829536 BB, US6812061 BA, US6784433 BB, US6780368 BB, US6745446 BA, US6731438 BB, US6713199 BB, US6682688 BA, US6682684 BA, US6663810 BA, US6660209 BB, US6627835 BA, US6627030 BB, US6616885 BB, US6616884 BA, US6615899 BA, US6613438 BA, US6612811 BB, US6611731 BB, US6588484 BA, US6575218 BA, US6572910 BB, US6557607 BB, US6543099 BA, US6524507 BA, US6519500 BA, US6519313 BB, US6508971 BB, US6505089 BA, US6490496 BA, US6484050 BA, US6480320 BB, US6479824 BA, US6472459 BB, US6471800 BB, US6471471 BA, US6468039 BA, US6467138 BA, US6463349 BB, US6463115 BA, US6462858 BA, US6458263 BA, US6457629 BA, US6454945 BA, US6453083 BA, US6450047 BB, US6447727 BA, US6445840 BA, US6440284 BA, US6438210 BA, US6433657 BA, US6426145 BA, US6416168 BA, US6415860 BA, US6411672 BA, US6410213 BA, US6409072 BA, US6408884 BA, US6406658 BA, US6404942 BA, US6401004 BA, US6399010 BA, US6398490 BA, US6397793 BB, US6397677 BA, US6396677 BA, US6395126 BA, US6393685 BA, US6392524 BA, US6392313 BA, US6392187 BA, US6387713 BB, US6387305 BA, US6386015 BA, US6383601 BB, US6382588 BA, US6381846 BB, US6376148 BA, US6375880 BA, US6375871 BA, US6373919 BA, US6373158 BA, US6367911 BA, US6366643 BA, US6365900 BA, US6363843 BA, US6363712 BA, US6360424 BA, US6352656 BA, US6350983 BA, US6346030 BA, US6344392 BA,

US6340222 BA, US6338249 BA, US6338199 BA, US6336318 BA, US6333584 BA, US6328903 BA, US6324748 BA, US6324259 BA, US6318849 BA, US6318069 BA, US6314887 BA, US6310419 BA, US6307815 BA, US6304626 BA, US6299300 BA, US6286289 BA, US6285739 BA, US6280090 BA, US6276313 BA, US6270335 BB, US6261506 BA, US6261066 BA, US6258311 BA, US6252938 BA, US6250070 BA, US6248419 BA, US6245849 BA, US6245487 BA, US6245249 BA, US6245184 BA, US6242163 BA, US6241934 BA, US6230408 BA, US6226120 BA, US6224807 BA, US6219015 BA, US6210644 BA, US6206679 BA, US6197180 BA, US6193923 BA, US6190594 BA, US6188743 BA, US6185278 BA, US6179601 B1, US6175615 B1, US6172364 B1, US6165406 A, US6163939 A, US6162040 A, US6159407 A, US6155634 A, US6152181 A, US6149160 A, US6143293 A, US6134301 A, US6134294 A, US6133670 A, US6126775 A, US6124663 A, US6099289 A, US6088102 A, US6084980 A, US6084626 A, US6075840 A, US6068684 A, US6055899 A, US6039556 A, US6021358 A, US6018680 A, US6018566 A, US6018422 A, US6017410 A, US6014419 A, US6011265 A, US6007765 A, US6004500 A, US5998260 A, US5994816 A, US5994801 A, US5985204 A, US5963788 A, US5962949 A, US5961458 A, US5955818 A, US5955801 A, US5949850 A, US5947181 A, US5945131 A, US5932940 A, US5929446 A, US5925308 A, US5924277 A, US5902538 A, US5900350 A, US5879489 A, US5875527 A, US5855718 A, US5851897 A, US5849229 A, US5847958 A, US5836150 A, US5814807 A, US5814235 A, US5812629 A, US5799057 A, US5795748 A, US5786597 A, US5778468 A, US5773116 A, US5763318 A, US5751000 A, US5729585 A, US5721687 A, US5718618 A, US5717213 A, US5712435 A, US5702384 A, US5692507 A, US5681661 A, US5644177 A, US5638212 A, US5637169 A, US5620854 A, US5606589 A, US5596504 A, US5581592 A, US5576147 A, US5559708 A, US5555481 A, US5551904 A, US5531568 A, US5514232 A, US5512754 A, US5483387 A, US5479981 A, US5459320 A, US5450751 A, US5450183 A, US5447068 A, US5398193 A, US5394932 A, US5384339 A, US5378583 A, US5348693 A, US5340512 A, US5335255 A, US5319014 A, US5306447 A, US5303459 A, US5301863 A, US5286573 A, US5260009 A, US5252881 A, US5216616 A, US5208431 A, US5207371 A, US5206983 A, US5203944 A, US5198680 A, US5192559 A, US5190637 A, US5183598 A, US5150183 A, US5147761 A, US5127037 A, US5126529 A, US5088047 A, US5043043 A, US5031483 A, US5017317 A, US5002889 A, US4951305 A, US4915757 A, US4868843 A, US4856043 A, US4837187 A, US4825646 A, US4812236 A, US4801379 A, US4752352 A, US4748328 A, US4708626 A, US4641270 A, US460377 A, US4534813 A, US4465540 A, US4460832 A, US4356400 A, US4355400 A, US4317036 A, US4288697 A, US4284121 A, US4273178 A, US4190450 A, US4091289 A, US408677 A, US4075483 A, US4054800 A, US4012549 A, US4001069 A, US3988589 A, US3988586 A, US3964534 A, US3957715 A, US3950651 A, US3889921 A, US3829536 A, US3676541 A, US3379812 A, US3312583 A, US2961751 A, US2903390 A, US2679172 A, US2012186082 AA, US2011204205 AA, US2011132564 AA, US2011132562 AA, US2011113627 AA, US2011014474 AA, US2010096778 AA, US2009272874 AA, US2009209745 AA, US2009084933 AA, US2008246180 AA, US2008216983 AA, US2008169081 AA, US2008164001 AA, US2008053638 AA, US2007158014 AA, US2007118212 AA, US2007036844 AA, US2005281701 AA, US2005269052 AA, US2005206048 AA, US2005199166 AA, US2005131106 AA, US2004227092 AA, US2004218713 AA, US2004217291 AA, US2004156478 AA, US2004128016 AA, US2004120464 AA, US2004094287 AA, US2004086458 AA, US2004006405 AA, US2003235272 AA, US2003157347 AA, US2003128813 AA, US2003128812 AA, US2003057096 AA, US2003026386 AA, US2003023149 AA, US2003004407 AA, US2002181647 AA, US2002149137 AA, US2002123683 AA, US2002093115 AA, US2002087073 AA, US2001038803 AA, US2001034114 AA, US2001031531 AA, US2001022416 AA, US1164987 A, JP8276438, JP8230049, JP60259420, JP2212112, JP2099260, JP2001162658, JP1077890, JP10109313, EP1935532 A1, EP1193721, EP1108518, EP0818256 A1, EP0586153, EP0273181, CA2448736,

Forward Citations: US9579714, US9387533, US9286422, US9278462, US8752612, US8678071, US2015283604, US2014358498, US2014271225, EP3078807,

Abstract:
Source: US2013139990A Certain exemplary embodiments can provide a system, machine, device, manufacture, circuit, and/or composition of matter adapted for and/or resulting from, and/or a method for activities that can comprise and/or relate to, a first form comprising: a plurality of surface artifacts that substantially spatially replicate a surface geometry of a stacked foil mold; and a prong that is adapted to form a hole in a cast product.

177) Family number: 54177327 (EP2614755A1) © PatBase

Title: SYSTEM MIT EINEM TURMMODUL, EINEM KOPFMODUL UND EINER VIELZAHL WEITERER MODULE A SYSTEM COMPRISING A TOWER MODULE, A TOP MODULE AS WELL AS A PLURALITY OF ADDITIONAL MODULES

Priority: DK20120000032 20120112 EP20130388001 20130108

Family:

Publication number	Publication date	Application number	Application date
DE602013000122 D1	20140904	DE201360000122T	20130108
DK177463 B1	20130617	DK20120000032	20120112
EP2614755 A1	20130717	EP20130388001	20130108
EP2614755 B1	20140716	EP20130388001	20130108
ES2515744 T3	20141030	ES20130388001T	20130108

Probable Assignee: ERGONOMIC SOLUTIONS MFG AS

Assignee(s):(std)**:** ERGONOMIC SOLUTIONS MFG AS

Assignee(s): ERGONOMIC SOLUTIONS MANUFACTURING A S ; ERGONOMIC SOLUTIONS MFG A S

Inventor(s):(std)**:** CRYSELL MARK SIMON

Agent(s): VIERING JENTSCHURA AND PARTNER MBB PATENT U RECHTSANWAELTE; LARSEN HANS OLE; CARPINTERO MARIO

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8–9): A47F9/04 (Advanced/Invention)

CPC: A47F9/047 A47F9/042

Classification Explorer

Cited documents: US4113331 A, US2009188757 AA, US2003226891 AA, EP0445422 A1,

Abstract:
The invention relates to a system for the building of a free–standing tower structure (1) for the support of electronic equipment, comprising a tower module (2) and a top module (3) as well as a plurality of supplementary modules to be mounted on the tower module or the top module, said tower structure, in cooperation with selected electronic equipment, constituting a functional unit, such as a self–service checkout station, a storage control desk, an info stand or the like, characterized in that the tower module (2) comprises a foot plate (10) and a cabinet (11) secured to the foot plate, said cabinet being equipped with a mounting position (12) for the top module (3) and a mounting position (13, 14) for supplementary modules, and that the top module comprises a mounting plate (17) and a housing (18) coupled to the mounting plate, said housing being equipped with a mounting position (15) for supplementary modules and a mounting position (16) for electronic equipment, and that the supplementary modules comprise packaging shelves (4, 5) with and without a bag holder (66), a blind plate (6), a frame–shaped shelf (7) as well as arms (8, 9) for the support of electronic equipment. This provides a relatively inexpensive and flexible mechanical structure which requires a minimum of floor space, which makes it movable, and which allows layout, expansion and change, as needed, in a simple manner.

0) US2015164685A – PUPIL EXPANSION DEVICE

178) Family number: 54594406 (US2015164685A) © PatBase

Title: PUPIL EXPANSION DEVICE

Priority: IN2013KO00225 20130227 IN2014KO00228 20140224 WO2013IN00457 20130723
US20150628636 20150223 IN2014KO00841 20140813 IN2014KO01319 20141217

Family:

Publication number	Publication date	Application number	Application date
AU2013380203 AA	20140904	AU20130380203	20130723
AU2013380203 BB	20170406	AU20130380203	20130723
CA2902800 AA	20150827	CA20132902800	20130723
CN105142535 A	20151209	CN201380075982	20130723
EP2961329 A1	20160106	EP20130771217	20130723
HK1218703 A1	20170310	HK20160106689	20160610
IN00225KO2013 A	20130823	IN2013KO00225	20130227
JP2016511680 T2	20160421	JP20150559604T	20130723
KR20150128762 A	20151118	KR20157026927	20130723
SG11201508026R A1	20151029	SG20151108026	20130723
US2015164685 AA	20150618	US20150628636	20150223
US2015351736 AA	20151210	US20130379684	20130723
WO14132264 A1	20140904	WO2013IN00457	20130723

Probable Assignee: BHATTACHARJEE SUVEN

Assignee(s):(std)**:** BHATTACHARJEE SUVEN ; SUVEN BHATTACHARJEE

Inventor(s):(std)**:** BHATTACHARJEE SUVEN

Inventor(s): SUVEN BHATTACHARJEE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; RIDOUT AND MAYBEE LLP; GREEN MARK CHARLES; ASAMURA PATENT OFFICE PC

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61B17/00 A61B17/02 A61F9/007 G02B21/00 (Advanced/Invention); A61B (Subclass/Invention)

CPC: A61B2017/00862 A61B2017/00867 A61B17/0293 A61B2017/0287 A61B17/0231

US class: 600/209 606/198

Classification Explorer

Cited documents: WO13059305 A1, US8496583 BA, US8323296 BB, US6648819 BB, US6620098 BA, US5374272 A, US5267553 A, US5163419 A, US4321916 A, US2014276900 AA, US2013267988 AA, US2013131458 AA, US2013096386 AA, US2012289786 AA, US2012269786 AA, US2008108879 AA,

Forward Citations: WO17069703, US9510814, US9504459, US2015265269,

Abstract:
Source: US2015164685A A device, providing enlargement and preventing collapse, of the pupil of the eye, during an ophthalmic surgical procedure. The device made of resiliently flexible material and configured as a ring, comprises plurality of notches at corners and flanges at sides. Notches engage the pupillary margin at different parts, pushing them apart, causing enlargement of the pupil. Consecutive flanges lie above and below the iris and bend the pupillary margin at the notches. The enlarged pupil allows a wide view of the structures deeper to the pupillary plane, previously obscured due to a small pupil. When the ring is manually expandable or self−expandable it is made of a combination of shape retaining and shape memory material that is selected from the group consisting of a self−enlarging material, a self−healing material, a self−reconfiguring programmable

material, a biodegradable material, and/or drug–eluting material.

179) Family number: 55001913 (US2013279997A) © PatBase

Title: CUTTING TOOL AND CUTTING TOOL HOLDER HAVING LEVER PIN

Priority: IL20140233734 20140721 US20120450691 20120419 WO2013IL50256 20130319

Family:

Publication number	Publication date	Application number	Application date
CA2870855 AA	20141017	CA20132870855	20130319
CN104220194 A	20141217	CN201380020683	20130319
CN104220194 B	20161019	CN201380020683	20130319
EP2838683 A1	20150225	EP20130721111	20130319
IL233734 A0	20140930	IL20130233734	20130319
IL233734 A1	20170228	IL20130233734	20130319
IN01794KN2014 A	20151030	IN2014KN01794	20140825
JP2015514596 T2	20150521	JP20150506347T	20130319
JP6148327 B2	20170614	JP20150506347T	20130319
KR101711268 B1	20170228	KR20147028455	20130319
KR20150004343 A	20150112	KR20147028455	20130319
RU2014146309 A	20160610	RU20140146309	20130319
US2013279997 AA	20131024	US20120450691	20120419
US8573900 BA	20131105	US20120450691	20120419
WO13156991 A1	20131024	WO2013IL50256	20130319

Probable Assignee: ISCAR LTD

Assignee(s):(std)**:** HECHT GIL ; ISCAR LTD

Assignee(s): ISCAR LTDP.O. BOX 1124959TEFENIL

Inventor(s):(std)**:** HECHT GIL

Inventor(s): HECHT GILIL

Agent(s): DIMOCK STRATTON LLP; WILSON LUE LLP; VOSSIUS AND PARTNER; ISCAR LTD; INABA YOSHIYUKI; WOMBLE CARLYLE; ISCAR LTD PATENT DEPARTMENT

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B23B B23B27/04 B23B27/16 B23B29/04 B23B29/12 B23C5/20 (Advanced/Invention); B23C5/20 (Advanced/Non–invention); B23B (Subclass/Invention)

CPC: B23B27/1614 B23B2205/04 B23B27/045 B23B29/043 B23B2200/165 Y10T407/2274 Y10T407/2278 B23B29/12

US class: 407/103 407/105

Classification Explorer

Cited documents: WO13081065 A1, US7431539 BB, US6599060 BB, US6582162 BB, US6158928 A, US4615650 A, US4166711 A, US3997951 A, US3491421 A, US3469296 A, US3469296, JP54083087 U1, JP54083087 U1, JP54083087 U, JP54083087 U, JP51121876 U1, JP51121876 U1, JP51121876 U, JP51121876 U, JP4950576 A2, JP49050576 A2, JP49050576, JP2000000702 A2, EP0559965 A1, EP0450542 A1,

Forward Citations: WO16012996, US9566651, US9409236, US9272343, US2015151364, US2014334889, US2013195568, DE102014100259,

Abstract:
Source: US2013279997A A tool holder includes an insert pocket having a support surface with a pocket recess occupied by a lever pin, and a fastening member. A head portion of the lever pin has a lever head rear contact surface, located above the support surface, for pressing against a bore of a cutting insert in the insert pocket. The fastening member engages a threaded recess which extends from the pocket recess along a threaded recess axis. The fastening member includes a guiding prong, located within a blind hole in the front of the lever pin. A clamping contact surface of the fastening member is adjacent to a lever front contact surface of the lever pin. A first longitudinal distance, between the lever rear contact surface and the lever front contact surface, is smaller than a second longitudinal distance, between the lever front contact surface and a lever rear contact surface.

0) US2015128938A – DEVICE FOR DISTRIBUTING A FLUID PRODUCT

180) Family number: 55204256 (US2015128938A) © PatBase

Title: DEVICE FOR DISTRIBUTING A FLUID PRODUCT

Priority: EP20130739747 20130522 FR20120054784 20120524 WO2013FR51110 20130522

Family:

Publication number	Publication date	Application number	Application date
CN104334221 A	20150204	CN201380027009	20130522
CN104334221 B	20160824	CN201380027009	20130522
DE602013009184 D1	20160818	DE201360009184T	20130522
EP2854913 A1	20150408	EP20130739747	20130522
EP2854913 B1	20160706	EP20130739747	20130522
FR2990871 A1	20131129	FR20120054784	20120524
FR2990871 B1	20150410	FR20120054784	20120524
IN08586DN2014 A	20150522	IN2014DN08586	20141014
JP2015517366 T2	20150622	JP20150513244T	20130522
US2015128938 AA	20150514	US20130397502	20130522
WO13175120 A1	20131128	WO2013FR51110	20130522

Probable Assignee: APTAR FRANCE SAS

Assignee(s):(std)**:** APTAR FRANCE S A S ; APTAR FRANCE SAS ; VALOIS SAS

Inventor(s):(std)**:** BAILLET MATTHIEU ; COLOMB ARNAUD

Inventor(s): MATTHIEU BAILLET ; ARNAUD COLOMB

Agent(s): CAPRI

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61M13/00 A61M15/00 A61M16/00 (Advanced/Invention)

CPC: A61M15/0026 A61M15/0055 A61M15/007 A61M15/0058 A61M15/0021 A61M15/0071 A61M15/0086 A61M16/0075 A61M15/0045 A61M15/0051 A61M15/0091 A61M2202/064 A61M15/0073 A61M15/0075 A61M15/0081

US class: 128/202.27 128/203.15

Classification Explorer

Cited documents: WO11154659 A1, WO09136098 A2, WO09077700 A2, WO09007640 A1, WO08012458 A2, WO06079750 A1, US2009166379 AA, JP8511723 T2, JP2009544387 T2, JP2008528155 T2, JP2008296948 A2, JP2004528980 T2, FR2881117 A1, DE10011717 A1,

Abstract:
Source: US2015128938A A fluid dispenser device including a body and a reservoir, and an opening mechanism. The device includes an inhalation piece and an inhalation trigger system that has a deformable air chamber and a trigger element, such that during inhalation through the inhalation piece, the air chamber is deformed and the trigger element actuates the opening mechanism. The air chamber has a deformable side body; an open first end including a peripheral edge that surrounds an opening forming the inlet of the hollow pouch; and a second end forming the bottom of the hollow pouch. The said second end includes a connection mechanism for connecting the air chamber to the trigger element. The side body is in the form of a bellows having bellows portions arranged axially one after another, the bellows–forming side body has bellows portions having outside and/or inside diameters that are different.

0) US2013326833A – TOOTHBRUSH HEAD

181) Family number: 55321605 (US2013326833A) © PatBase

Title: TOOTHBRUSH HEAD

Priority: FI20120006243 20121126 US20120744676P 20120611 US20130794860 20130312 US20140516595 20141017

Family:

Publication number	Publication date	Application number	Application date
EP3009030 A1	20160420	EP20150190157	20151016
FI125061 B	20150515	FI20120006243	20121126
FI20126243 A	20140527	FI20120006243	20121126
US2013326833 AA	20131212	US20130794860	20130312
US2015033488 AA	20150205	US20140516595	20141017
US9095206 BB	20150804	US20130794860	20130312

Probable Assignee: VARILA REIJO

Assignee(s):(std)**:** VARILA REIJO

Inventor(s):(std)**:** VARILA REIJO

Agent(s): SEPPO LAINE OY

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8–9): A46B13/02 A46B7/06 A46B9/02 A46B9/04 A46D1/04 A46D3/04 A61C17/22 (Advanced/Invention)

CPC: A46B7/06 A46B9/04 A46D1/04 A46B9/028 A46D3/04 A46B13/02 A46B9/025 A46B9/026 A61C17/222 A46B2200/1066 A46D3/047 A61C17/22 A61C17/3436

US class: 1/1 15/167.1 300/21

Classification Explorer

Cited documents: USD94303 S1, USD621158 S1, USD483183 S1, US8166601 BB, US7788756 BB, US6892413 BB, US5467495 A, US5464275 A, US4619009 A, US2013326833 AA,

Forward Citations: EP3009030,

Abstract:
Source: US2013326833A The present invention relates to a replacement brush head for an electromagnetic driven toothbrush and to a method of manufacturing such a brush head. The brush head includes a bristle carrier, where the bristle carrier has blind–end holes in which a plurality of tooth cleaning bristles can be fixedly attached. The bristles are arranged in inwardly centered rows, one behind the other. Bristles in outer rows are arranged in groups on both sides of the bristle carrier. Bristle groups are arranged with an outward leaning angle for efficient cleaning of the tooth neck area and gum pockets. Bristles in the inner rows can be shorter than the ones in the outer rows.

0) US2014211457A – SIMPLIFIED LOW PROFILE MODULE WITIH LIGHT GUIDE...

182) Family number: 56157787 (US2014211457A) © PatBase

Title: SIMPLIFIED LOW PROFILE MODULE WITIH LIGHT GUIDE FOR PENDANT, SURFACE MOUNT, WALL MOUNT AND STAND ALONE LUMINAIRES

Priority:

US20130015801 20130830 US20130101051 20131209 US20130101086 20131209
US20130101132 20131209 US20130101099 20131209 US20130101129 20131209
US20130460890F 20130716 US20130839949 20130315 US20130841074 20130315
US20130840563 20130315 US20130758660P 20130130 US20130101147 20131209
US20130841651 20130315 US20130841622 20130315 US20130842521 20130315
US20130938877 20130710 US20130842557 20130315 US20130922017P 20131230
US20130843928 20130315 US20140292778 20140530 US20140462426 20140818
US20140005955P 20140530 US20140009039P 20140606 US20140462391 20140818
US20140020866P 20140703 US20140462322 20140818 US20140005965P 20140530
US20140025436P 20140716 US20140025905P 20140717 US20140020666P 20140703
US20140472078 20140828 US20140472064 20140828 US20140472035 20140828
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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B29C45/16 B29C59/16 B29D11/00 F21K9/61 F21K99/00 F21S13/02 F21S2/00 F21S8/00 F21S8/04 F21S8/06 F21S8/08 F21V11/00 F21V13/04 F21V15/01 F21V19/00 F21V21/00 F21V21/005 F21V21/03 F21V21/112 F21V21/14 F21V23/00 F21V23/04 F21V23/06 F21V29/00 F21V29/70 F21V29/74 F21V29/76 F21V29/77 F21V29/85 F21V5/00 F21V5/02 F21V5/04 F21V7/00 F21V7/04 F21V7/09 F21V7/10 F21V8/00 F21V99/00 F21Y101/00 F21Y101/02 F24F11/00 F28F9/02 G02B19/00 G02B6/00 G02B6/10 G02B6/122 G02B6/125 G02B6/24 G02B6/26 G02B6/28 G02B6/30 G02B6/32 G02B6/34 G05B15/02 G09F13/00 H01L33/08 H01L33/54 H01L33/56 H01L33/58 H01Q15/02 H01Q19/06 H05B33/08 (Advanced/Invention); B29K83/00 B29L11/00 F21K9/61 F21S8/00 F21S8/04 F21V23/00 F21V29/76 F21V5/00 F21V5/04 F21V7/00 F21W131/10 F21W131/103 F21Y101/00 F21Y101/02 F21Y103/00 F21Y103/02 F21Y103/10 F21Y103/33 F21Y105/00 F21Y105/10 F21Y113/00 F21Y115/10 G02B6/42 G02F1/1335 (Advanced/Non–invention)

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Forward Citations: WO17045938, WO17037028, WO17035206, WO17004145, WO16146409, WO16096225, WO16073937, WO15123702, WO15089517, USD785230, USD785225, USD781486, USD778488, USD773103, USD759292, USD757349, USD757348, USD755433, USD749776, USD744669, USD744145, USD743090, USD738034, USD738033, US9686832, US9686831, US9668310, US9658385, US9651740, US9651238, US9645303, US9625638, US9581751, US9581750, US9572226, US9568662, US9549448, US9470394, US9456482, US9442243, US9442017, US9433061, US9389367, US9366799, US9366396, US9338858, US9328893, US9291320, US9176260, US9155166, US9155165, US9151461, US9046225, US9033538, US2017176666, US2017175955, US2017097460, US2017090097, US2017010404, US2016320025, US2016131319, US2016109645, US2016062032, US2016043293, US2016025276, US2016011362, US2015362149, US2015354803, US2015345772, US2015345770, US2015345715, US2015260902, US2015198760, US2015192471, US2015085483, US2015049509, US2014355302, US2014347885, US2014293645, US2014240844, US2014211503, US2014211462, US2014211457, US2013301293, EP3026326,

Abstract:
Source: US2014211457A A luminaire having a waveguide suspended beneath a mounting element, the waveguide has a first surface proximal to the mounting element, a second surface distal to the mounting element, and an edge between the first and the second surfaces. At least one cavity extends into the waveguide from the first surface to the second surface. A LED component is coupled to the waveguide so as to emit light into the cavity. LED support structures are also disclosed.

0) US2014194199A – COLLUSION DETECTION

183) Family number: 56884657 (US2014194199A) © PatBase

Title: COLLUSION DETECTION

Priority: US20110110519 20110518 US20120642812P 20120504 US20140149192 20140107 US20130749525P 20130107 WO2014US10471 20140107 US20120680168P 20120806

Family:

Publication number	Publication date	Application number	Application date
AU2014203857 AA	20140710	AU20140203857	20140107
CA2897394 AA	20150706	CA20142897394	20140107
TW201447823 A	20141216	TW20140100488	20140107
US2014194199 AA	20140710	US20140149192	20140107
US9652931 BB	20170516	US20140149192	20140107
WO14107715 A1	20140710	WO2014US10471	20140107

Probable Assignee: CFPH LLC

Assignee(s):(std)**:** CFPH LLC

Assignee(s): DIGIOVANNI JOE

Inventor(s):(std)**:** DIGIOVANNI JOE

Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; DICKINSON WRIGHT LLP; MARK; MILLER MARK A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F1/00 A63F13/00 G06Q50/34 G07F17/32 (Advanced/Invention); A63F1/00 (Advanced/Non–invention)

CPC: G07F17/3239 G07F17/3241

US class: 463/29

Classification Explorer

Cited documents: US8152619 BB, US7699702 BB, US2013178270 AA, US2009069011 AA, US2007281767 AA, US2007232398 AA, US2006287068 AA, US2005164793 AA, US2002155884 AA,

Forward Citations: US9697682, US9613498, US9589417,

Abstract:
Source: US2014194199A Various embodiments that may generally relate to collusion are described. Collusion detection may be used to prevent players in a wagering environment from violating the integrity of a game. Player actions may be tracked to develop a wagering profile that is specific to various game situations. A player acting in a manner that would be against their interest and against their defined profile may be considered a colluding action. Information about collusion actions may be presented for evaluation and/or anti–collusion actions may be automatically taken in response to such collusion actions being determined.

184) Family number: 57133908 (WO14117233A1) © PatBase

Title: DEVICE PROVIDING PROTECTION AGAINST RADIATION GENERATED BY CELLPHONES AND THE LIKE

Priority: WO2013BR00045 20130201

Family:

Publication number	Publication date	Application number	Application date
WO14117233 A1	20140807	WO2013BR00045	20130201

Probable Assignee: FERNANDES DE OLIVEIRA LIMA SANDRA

Assignee(s):(std)**:** FERNANDES DE OLIVEIRA LIMA SANDRA

Inventor(s):(std)**:** FERNANDES DE OLIVEIRA LIMA SANDRA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G21F1/00 H04B1/03 (Advanced/Invention)

CPC: H01Q17/00 H04B1/3838

Classification Explorer

Cited documents: US7512430 BB, US7099709 BB, US2002137475 AA,

Abstract:
This invention patent in the electrical engineering, electronics and telecommunication development sector claims, in accordance with the description, a device providing a shield against radiation harmful to human health (the international opinions confirming this being mentioned in the text) emitted from cellular devices, iPhones and similar devices. The invention blocks such radiation without any negative effect whatsoever on the normal operation of the devices. Since radiation accumulates in the human body, the major problem relating to absorbed radiation is not the specific absorption rate (SAR) of the emitting devices. This specific absorption rate (SAR) is commonly used ineffectively as a solution to the problem of radiation. The document sets out references and concepts that show how this rate does not safeguard the health of users of mobile telephones, including Nokia, which sells anti–radiation headphones (which do not solve the problem). The invention described is a shield made of high–density steel or lead glass or phosphates for housing the devices. The shielding is open on the sides to enable data communication from the cell phone or the like with the telecommunication systems, and the shielding includes through–holes for the wires of the cellphone accessories, such as headphones, microphones and external keyboards. The through–holes are designed to be placed in technologically suitable locations to prevent radiation leaking through them, since they do not satisfy the essential ratio of being up to 1/10 of the wavelength of the radiation to be blocked. Ferrites or magnets are arranged about these holes to improve blocking (more necessary in the glass version).

0) US2014311087A – RIB MOUNTING DEVICE WITH PIVOTING INSERT

185) Family number: 57613341 (US2014311087A) © PatBase

Title: RIB MOUNTING DEVICE WITH PIVOTING INSERT

Priority: US20130814426P 20130422 US20140257747 20140421 WO2014US34804 20140421 US20150789607 20150701

Family:

Publication number	Publication date	Application number	Application date
AU2014257326 AA	20141030	AU20140257326	20140421
IN10644DN2015 A	20160226	IN2015DN10644	20151120
US2014311087 AA	20141023	US20140257747	20140421
US2016153184 AA	20160602	US20150789607	20150701
US9085900 BB	20150721	US20140257747	20140421
WO14176165 A1	20141030	WO2014US34804	20140421

Probable Assignee: HADDOCK DUSTIN

Assignee(s):(std)**:** HADDOCK DUSTIN ; HADDOCK DUSTIN M M

Assignee(s): HADDOCK DUSTIN MM ; RMH TECH LLC

Inventor(s):(std)**:** HADDOCK DUSTIN M M

Inventor(s): HADDOCK DUSTIN MM

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MARSH FISCHMANN AND BREYFOGLE LLP; MARSH FISCHMANN BREYFOGLE LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** E04B1/38 E04C2/38 E04D1/34 E04D13/14 F16B2/06 F16B5/06 F24J2/52 (Advanced/Invention); E04D13/10 E04F13/08 F16B2/10 F16B5/00 (Advanced/Non–invention)

CPC: E04D13/10 E04F13/0821 F16B2/10 F16B5/0004 F24J2/5249 Y02E10/47 F24J2/5258 E04B1/38 E04D13/14 F16B2/065 F16B5/0685 E04B2001/405 E04C2/38 Y02B10/20

US class: 1/1 52/698 52/741.1 52/745.21 52/801.1

Classification Explorer

Cited documents: US7703256 BB, US7513080 BA, US7013612 BB, US6725623 BA, US6718718 BB, US6688047 BA, US6385914 BB, US6164033 A, US6119317 A, US5983588 A, US5732513 A, US5715640 A, US5613328 A, US5609326 A, US5479752 A, US5228248 A, US4546586 A, US4351140 A, US4261384 A, US4200107 A, US3986746 A, US3904161 A, US3817270 A, US3590543 A, US3503244 A, US3307235 A, US3039161 A, US2340692 A, US2183844 A, US2013161462 AA, US2012267490 AA, US2002108335 AA, US2002088196 AA, US1735937 A, US1511529 A, US1465042 A, JP5346055 A2, JP2004124583 A2, EP1126098 A1, EP0952272 A1, DE3723020 A1,

DE202007018367 U1

DE102007036206 A1

DE10200703620,

Forward Citations: WO16167934, US9493955, US2016025262, JP2016205122, DE202014009504,

Abstract:
Source: US2014311087A A mounting device (100) for installation on a hollow rib of a panel is disclosed. The mounting device (100) includes a mounting body (102), an insert (160), and at least one clamping fastener (180). The mounting body (102) includes an upper section or base (104), along with a first leg (112) and a second leg (122) that each extend downwardly from the base (104) in at least generally diverging relation to one another. The first leg (112) includes a first projection (116) positionable in a recess on one sidewall of a rib, while the insert

(160) includes a second projection (164) positionable in a recess on the opposite sidewall of this same rib. The clamping fastener(s) (180) extends through the second leg (122) of the mounting body (102) and forces the insert (160) in the direction of the first leg (112) of the mounting body (102).

0) US2014357335A – METHOD AND APPARATUS FOR CONDUCTING AN ELECTRON...

186) Family number: 57929192 (US2014357335A) © PatBase

Title: METHOD AND APPARATUS FOR CONDUCTING AN ELECTRONIC CARD GAME TOURNAMENT

Priority: US20130907403 20130531 US20150182324P 20150619 US20160077415 20160322

Family:

Publication number	Publication date	Application number	Application date
US2014357335 AA	20141204	US20130907403	20130531
US2016199732 AA	20160714	US20160077415	20160322
US9569933 BB	20170214	US20130907403	20130531

Probable Assignee: BAKER BRAD

Assignee(s):(std)**:** BAKER BRAD

Inventor(s):(std)**:** BAKER BRAD

Agent(s): NEAL

International class (IPC 8–9): A63F1/00 A63F13/35 A63F13/79 G07F17/32 (Advanced/Invention)

CPC: G07F17/3293 A63F13/35 A63F13/79 G07F17/3218 G07F17/322 G07F17/3223 G07F17/3241 G07F17/3276

US class: 463/11 463/13 463/29

Classification Explorer

Cited documents: US2008318651 AA, US2007213116 AA, US2003109306 AA,

Abstract:
Source: US2014357335A Systems and methods for conducting a localized, electronic card game tournament adaptable for play in private homes and public venues with no equipment or system modifications are disclosed. In one embodiment the tournament players' identities are verified. Once the players' identities are identified, they are provided with handheld electronic game units and tournament entry credentials. Players will enter their tournament entry credentials into the respective handheld electronic game units. Once the tournament entry credentials have been entered into the handheld electronic game unit, game events are transmitted to the handheld electronic game unit from a single remote server. Furthermore, in this embodiment, the tournament entry fee, if any, is maintained separately from the remote game server and the handheld electronic game units. The fees may be collected and/or winnings may be paid in case, through electronic transfer or through electronic currency.

0) ES1135980Y – CAJA, RECIPIENTE, CONTENEDOR, BAUL, CAJON, TERM...

187) Family number: 58500273 (ES1135980Y) © PatBase

Title: CAJA, RECIPIENTE, CONTENEDOR, BAUL, CAJON, TERMINAL AUTOMATIZADO LOGISTICO, DE ADQUISICIONES, ALMACENAMIENTO, REPARTO Y ENTREGAS DE DEPOSITO, CON SISTEMAS DE CONTROL DE TEMPERATURAS CLIMATOLOGICAS, FRIGORIFICO, CONGELADOR, CLIMATIZADOR Y CON MEDIDAS PROTECTORAS, DE SEGURIDAD Y TELEMATICAS

Priority: ES20140031706U 20141231

Family:

Publication number	Publication date	Application number	Application date
ES1135980 UA	20150212	ES20140031706U	20141231
ES1135980 Y1	20150506	ES20140031706U	20141231

Probable Assignee: TECHNOKONTROL CAT GLOBAL SL

Assignee(s):(std)**:** CANADA SIERRA LAURA ; TECHNOKONTROL CAT GLOBAL SL

Assignee(s): LAURA CANADA SIERRA

Inventor(s):(std)**:** CANADA SIERRA LAURA

Inventor(s): LAURA CANADA SIERRA

International class(IPC 8–9)**:** A47G29/124 (Advanced/Invention)

CPC: A47G29/14 A47G29/141

Classification Explorer

Forward Citations: GB2537122, CN106333595,

Abstract:
Source: ES1135980U 1. Caja, recipiente, contenedor, baul, cajon, terminal automatizado logistico, de adquisiciones, almacenamiento, reparto y entregas de deposito, con sistemas de control de temperaturas climatologicas, frigorifico, congelador, climatizador y con medidas protectoras, de seguridad y telematicas, caracterizada porque presenta: – Una estructura con un tejido nanotecnologico especial con unas propiedades de proteccion fisica con al menos una capa no tejida que comprende fibras cortas de para–aramida, nano textiles, polimeros. – Un cuerpo principal dotado de un mueble modular de varios apartados de almacenaje, depositos de bienes, compras, adquisiciones, retornos, devoluciones de paqueteria, mensajeria, postales, tipo buzones, cajetines. – Una carcasa con sistema de control para apertura, cierre, almacenaje, control de uso de la zona de guardado, proteccion, ubicacion, deposito del bien, paqueteria. Con sensores, analizadores, controladores. – Unas secciones, zonas, capsulas, sectores, divisiones, con controlador de temperaturas, positivas y negativas, refrigeradas, congeladoras, identificadoras de documentos, cajero, con controles de seguridad. – Un sistema operativo dotado de unos sistemas de software informaticos y con medios de encriptacion algoritmica de alta seguridad, medios telematicos, de comunicacion, operatividad, emision, recepcion, retransmision, verificacion, validacion y control. – Unas frecuencias propias y/o alternativas, via satelite, via analogicos, digitales, GPS, GMS. – Unos microprocesadores para el control y operatividad del sistema de apertura y cierre. – Unos sistemas de comunicacion por cables, sistemas analogicos, digitales, wifi, GMS, GPS, via satelite integrados en sistemas operativos encriptados de codigos para la operatividad. – Una pantalla protectora para consignas de paqueteria, prevista para situarse por delante del frente de una pantalla visual/sonora/tactil, cajero cubriendo la totalidad de la pantalla de esta. 1. Box, container, container, baul, cajon, automated terminal logistics, procurement, storage, distribution and delivery of deposit, control systems climatological temperatures, refrigerator, freezer, air conditioner and protective measures, security and telematic, wherein presented: – A structure with a special nano tissue with properties of physical protection to at least one nonwoven layer comprising short para–aramid fibers, nano textiles, polymers. – A main body equipped with a modular furniture of several sections of storage, storage of goods, purchases, acquisitions, returns, refunds parcel, courier, post office boxes type boxes. – A housing with control system for opening, closing, storage, use control area saving, protection, location, storage of the goods, parcels. Sensors, analyzers, controllers. – Some sections, areas, capsules, sectors, divisions, with temperature controller, positive and negative, chilled, freezers, identifying documents, cash, with security checks. – A gifted software of computer systems and algorithmic means high security encryption, electronic means of communication, operation, emission, reception, transmission, verification, validation and control operating system. – A own and / or alternative frequencies, satellite, via analog, digital, GPS, GMS. – A microprocessor for control and operation of the system of opening and closing. – A cable communication systems, analog systems, digital, wireless, GSM, GPS, satellite integrated into operating systems encrypted codes for the operation. – A protective screen slogans Parcel, planned to stay ahead of the front of a visual / audio screen / touch, cashier covering the entire screen of the .

0) JP1523502S – WALLET (MACHINE TRANSLATION)

188) Family number: 59885478 (JP1523502S) © PatBase

Title: Wallet (Machine translation)

Priority: JP20140024241F 20141030

Family:

Publication number	Publication date	Application number	Application date
JP1523502 S	20150518	JP20140024241F	20141030

Probable Assignee: KOIZUMI KEIKO

Assignee(s): KOIZUMI KEIKO

Locarno class: 03/01

Abstract:
Source: JP1523502S Pertaining to this matter is at the top center with main compartment, front compartment features on the front side of the main compartment, at the back side of the main compartment after in the wallet with coin compartment at the bottom of main compartment with side compartment. Main compartment can be opened by openings at the top are formed in a bag, at the top with zipper; Also, has a bellows–shaped holder on the inside of the main compartment to keep bills, receipts, cards, etc. Front compartment can be opened by openings at the top are formed in a bag, at the top with zipper; The belt was wound onto reels inside the front compartment is enclosed. From the holes in the top right hand side of the front compartment, and there are hooks at the tip of the belt protrude outside. On the other hand, in the upper–left corner of the main compartment with hook engages ring has been installed. And extend the belt hook in the ring can be used as hanging cord and engaging. After and side compartment can be opened by has been shaped like a bag, with top zipper opening at the top. In addition, after the side compartment inside the storage possible, smart phone, etc.. Primary storage coin compartment, beneath the plurality of being. Between the top of the coin compartment at the bottom of the main compartment, also provided fasteners on both sides of the front side and back side. And have been formed for communicating with the internal coin compartment also opens and closes any fasteners. In addition, coin compartment inside the accordion partitions are provided. This blind can adjust the spacing in that whole stretch. And enable the partition between adjacent, coin storage.Color (black) represented in the area of each figure is in shape to clear background.

189) Family number: 59339688 (US2015148619A) © PatBase

Title: SYSTEM AND METHOD FOR MONITORING BIOMETRIC SIGNALS

Priority: US20130908077P 20131123 US20140013405P 20140617 US20140016373P 20140624 US20140077781P 20141110 US20140078078P 20141111 US20140057226P 20140929 US20140541446 20141114 US20150702129 20150501 US20150742420 20150617 US20150153904P 20150428 US20150937767 20151110 US20150869398 20150929 WO2015US28900 20150501 WO2015US52969 20150929

Family:

Publication number	Publication date	Application number	Application date
AU2015277767 AA	20151223	AU20150277767	20150501
AU2015323905 AA	20160407	AU20150323905	20150929
EP3158569 A1	20170426	EP20150809222	20150501
US2015148619 AA	20150528	US20140541446	20141114
US2015230719 AA	20150820	US20150702129	20150501
US2015359485 AA	20151217	US20150742420	20150617
US2016128632 AA	20160512	US20150937767	20151110
US2016270727 AA	20160922	US20150869398	20150929
WO15195209 A1	20151223	WO2015US28900	20150501
WO16054057 A1	20160407	WO2015US52969	20150929

Probable Assignee: MAD APPAREL INC

Assignee(s):(std)**:** ATHOS WORKS INC ; MAD APPAREL INC

Inventor(s):(std)**:** BERG JAMES ; BERG JAMES ARTEL ; BUTT HAMID ; BUTT HAMID HAMEED ; GLAISTER CHRIS ; GROOM WESLEY ; JAYALATH DHANANJA ; WIEBE CHRISTOPHER ; MACMILLAN GASTON ; WIEBE CHRISTOPHER JOHN ; JAYALATH DHANANJA PRADHAN ; YAO LIANG

Agent(s): PIPERS; GREEN MARK CHARLES; SCHOX JEFFREY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A41D1/00 A61B5/00 A61B5/0205 A61B5/024 A61B5/04 A61B5/0402 A61B5/0408 A61B5/0476 A61B5/0478 A61B5/0488 A61B5/0492 A61B5/0496 A61B5/11 B29C45/00 D05C13/00 H01H9/04 H01R12/77 H05K1/11 (Advanced/Invention)

CPC: A61B5/0533 A61B5/024 A61B5/04 B29C45/0001 A61B2562/0214 A61B2562/04 A61B2562/164 A61B2562/166 A61B2562/14 A61B2562/182 B29L2031/34 A61B5/0024 A61B5/0205 A61B5/0478 A61B5/08 A61B5/1112 A61B5/1118 A61B5/7445 A61B2505/09 A61B5/0022 A61B5/0816 A61B5/743 A61B2562/12 A61B5/7203 D05D2303/40 A61B5/0015 H01H13/807 D03D1/0088 G10H2220/321 G10H2220/371 H01H2203/0085 H01H2203/028 A61B2562/225 A61B2562/06 A61B2562/08 H05K1/116 A61B5/0402 A61B5/0476 A61B5/0488 A61B5/0006 A61B5/02055 H01R12/774 H01R2201/20 A61B5/6804 A61B2562/125 A61B5/0408 A61B5/0492 A61B5/0496

US class: 112/475.18 264/104 29/832 340/870.07 439/37 600/300 600/301 600/388

Classification Explorer

Cited documents: US8267701 BB, US8214007 BB, US4799441 A, US4400341 A, US3973099 A, US2017035354 AA, US2015109202 AA, US2015100135 AA, US2014343391 AA, US2014278125 AA, US2014275888 AA, US2014200432 AA, US2014180023 AA, US2014172134 AA, US2013245480 AA, US2013245388 AA, US2013198867 AA, US2013192071 AA, US2013137956 AA, US2013077263 AA, US2013041590 AA, US2012330126 AA, US2012165645 AA, US2012068759 AA, US2010037489 AA, US2008278899 AA, US2007299325 AA, US2005178201 AA,

Forward Citations:

WO17075674, WO17048580, WO16149751, USD777331, USD744109, US9656117, US9498128, US2016063890, US2015331533, US2015254992,

Abstract:
Source: US2015148619A A system for monitoring biometric signals of a user comprising: a garment configured to be worn by the user and comprising a mounting module having an array of connection regions; a set of biometric sensors coupled to the garment and configured to communicate with the array of connection regions to receive and transmit biometric signals indicative of muscle activity of the user; and a portable control module configured to couple to the garment in a first configuration and to decouple from the garment in a second configuration and comprising: a housing comprising an array of openings; a set of contacts, each including a first region that hermetically seals at least one of the array of openings and couples to at least one of the array of connection regions in the first configuration, and an electronics subsystem coupled to the housing and in communication with a second region of each contact.

0) CN205250913U – ANTI –SKIDDING NOISE CONTROL MAHOGANY FURNITURE...

190) Family number: 62447007 (CN205250913U) © PatBase

Title: ANTI –SKIDDING NOISE CONTROL MAHOGANY FURNITURE FOOT PAD TAKES PRECAUTIONS AGAINST EARTHQUAKES

Priority: CN201521013126U 20151208

Family:

Publication number	Publication date	Application number	Application date
CN205250913 U	20160525	CN201521013126U	20151208

Probable Assignee: LI MAOXIAN

Assignee(s):(std)**:** LI MAOXIAN

Assignee(s): LI MAO FIRST

Inventor(s):(std)**:** LI MAOXIAN

International class (IPC 8–9): A47B91/00 A47B91/04 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN205250913U The utility model discloses an anti –skidding noise control mahogany furniture foot pad takes precautions against earthquakes, it includes mahogany furniture foot and plastic callus on the sole, it is equipped with a circular blind hole to bore in the middle of the mahogany furniture sole portion, plastic callus on the sole formula structure as an organic whole, it goes into the cylinder including bearing round platform and card, it is protruding that the outer surface parallel interval of card income cylinder is equipped with three annular cards, and the axial lead coincidence of cylinder is gone into to the protruding axial lead of annular card, the axial lead and the card that bear the round platform, the card income cylinder of plastic callus on the sole is inserted and is established in the circular blind hole of mahogany furniture foot, hold on the round platform top of bearing of plastic callus on the sole mahogany furniture sole portion, plastic callus on the sole axial lead is equipped with circular through –hole. The utility model discloses a bore in the bottom of mahogany furniture foot and establish circular blind hole to go into the card of plastic callus on the sole during the cylinder inserts circular blind hole, the plastic callus on the sole is fixed in circular blind hole, bears the round platform and hugs closely with the bottom of mahogany furniture foot, and the plastic callus on the sole plays the effect of the anti –skidding noise control that takes precautions against earthquakes.

191) Family number: 62740487 (WO16097832A9) © PatBase

Title: COMMUNICATION BETWEEN RADIO TERMINALS ON AN EXTRATERRESTRIAL BODY USING A SPACE BASED COMPONENT AND AN ANCILLARY COMPONENT LOCATED ON THE EXTRATERRESTRIAL BODY.

Priority: SD20140003288 20141216

Family:

Publication number	Publication date	Application number	Application date
WO16097832 A1	20160623	WO2015IB00427	20150518
WO16097832 A4	20161020	WO2015IB00427	20150518
WO16097832 A9	20160825	WO2015IB00427	20150518

Probable Assignee: ALDAWSARI FAISAL

Assignee(s):(std)**:** ALDAWSARI FAISAL ; AMMAR MOHAMMED ; KAMIL IDRIS ; MAHGOUB ABULGASIM ; SALIH ELTAYEB ; YOUSIF AMRO

Inventor(s):(std)**:** ALDAWSARI FAISAL ; AMMAR MOHAMMED ; KAMIL IDRIS ; MAHGOUB ABULGASIM ; SALIH ELTAYEB ; YOUSIF AMRO

Agent(s): AMMAR MOHAMMED

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): H04B7/185 (Advanced/Invention)

CPC: H04B7/18584

Classification Explorer

Cited documents: US2011171986 AA, US2008155070 AA, US2008151913 AA, US2005239457 AA,

Abstract:
The underlying invention is "Solar Sonic" deep−space multidimensional coded universal communications "via ionosphere" armed signals and quantum algorithm resonance of hydroxyl molecules cosmic− radio− waves. The said invention is a solar sonic universe multidimensional radio astronomical control tower resonator for systemic multi−communications and manipulation of all resonating matters and antimatters alike. The solar sonic multidimensional interstellar radio signal communications resonator is a novel technology precisely pertaining to deep space multidimensional radio signal communications, which is an art reflected within the formal technology stated title. The present invention provides a system for communications on an extraterrestrial body, may include a space−based component and an ancillary extraterrestrial component on the extraterrestrial body. The space−baaed component may be configured to provide wireless communications with plurality of radio−terminals located on the extraterrestrial body over a satellite frequency band wherein the space−based component includes at least one satellite orbiting the extraterrestrial body. The ancillary extraterrestrial component may be configured to provide wireless communications with the plurality of radio−terminal located on the extraterrestrial body. Moreover, the ancillary extraterrestrial component may reuse at least one satellite frequency of the satellite frequency band and the space−based component and the ancillary extraterrestrial component may be configured to relay communications there between. An exciter system is provided for use in facilitating electromagnetic communication within an enclosed space. The system includes an exciter which may be in the form of a three dimensional hemispherical exciter or a two dimensional planar sector exciter depending on the size of the associated structure and the power requirements of operation. The exciter system operates in conjunction with a hub/controller network. The exciter system is adapted to induce a quasi−static evanescent field within the space and to thereby enable communications using the evanescent field at frequencies within an operational frequency range determined by the characteristics of the space. The exciter is mounted in opposition to a portion of a conductive framework within the enclosed space. In operation an coaxial connector connects the exciter to die hub/controller network with the central conductor connecting at a feed point to the exciter while the shield conductor is connected to the opposing conductive framework. In some embodiments a post acts as a curtain to enhance performance at tower frequencies. Improved communications systems and methods, however, may be desired to accommodate increasing communications to and from extraterrestrial bodies such as the moor and/or mars as more missions are sent to extraterrestrial bodies. More particularly, communications systems and methods may be desired to accommodate increased communications between radio− terminals on the

extraterrestrial body and a satellite orbiting a celestial body and/ or transceivers on earth. The present invention relates generally to wireless communications and more particularly to systems for internal communications within structures, at frequencies in the range of 0.5 to l00 MHz.

192) Family number: 63563335 (WO16142439A1) © PatBase

Title: CURRENT SENSOR FOR MEASURING AN ALTERNATING CURRENT

Priority: FR20150051984 20150310

Family:

Publication number	Publication date	Application number	Application date
FR3033647 A1	20160916	FR20150051984	20150310
WO16142439 A1	20160915	WO2016EP55060	20160309

Probable Assignee: SOCOMEC SA

Assignee(s):(std)**:** SOCOMEC SA

Assignee(s): SOCOMEC

Inventor(s):(std)**:** KERN CHRISTIAN

Inventor(s): CHRISTIAN KERN

Agent(s): CABINET NITHARDT ET ASSOCIES; KOELBEL CAROLINE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G01R15/14 G01R15/18 G01R19/00 (Advanced/Invention)

CPC: G01R15/181

Classification Explorer

Cited documents: WO15150671 A1, WO15150670 A1, WO13037986 A1, US2014167786 AA, US2008106253 AA, FR2845197 A1, EP1923709 A1,

DE102007046054 A1

Abstract:
Current sensor for measuring an alternating current. The invention relates to a current sensor provided with an electric coil (5) made in the form of a printed circuit. Its closed contour is inscribed within a rectangle delimiting a through window (9) for passing a primary conductor (2). It comprises four rectilinear segments (TR), linked in pairs by a circular sector (SC), delimited by an interior arc (10) and an exterior arc (11). It comprises, in its circular sectors (SC), additional turns (13), which extend from the exterior arc (11) to an intermediate arc (14) disposed between the interior arc (10) and the exterior arc (11). They are interposed between the main turns (12) in such a way that the spacing between two consecutive turns (12, 13) on the exterior arc (11) is equal to the spacing P of the main turns (12) in the rectilinear segments (TR) and that the mean density of turns is almost constant in the electric coil (5).

0) WO17059830A1 – MULTIFUNCTIONAL RESCUE AND TRANSPORT ROBOTIC BE...

193) Family number: 65423392 (WO17059830A1) © PatBase

Title: MULTIFUNCTIONAL RESCUE AND TRANSPORT ROBOTIC BED FOR OUTDOOR AND INDOOR USE

Priority: CZ20150000701 20151007

Family:

Publication number	Publication date	Application number	Application date
CZ20150701 A3	20170426	CZ20150000701	20151007
WO17059830 A1	20170413	WO2015CZ00135	20151110

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Inventor(s):(std)**:** HALADA PAVEL ; HALADOVA PETRA ; MRUZEK PAVEL ; POLAK DANIEL ; ROBOTSYSTEM S R O

Inventor(s): ROBOTSYSTEM SRO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61G1/02 A61G1/048 A61G1/052 A61G1/06 A61G3/06 A61G5/04 A61G7/008 A61G7/012 A61G7/015 A61G7/05 A61G7/07 A61G7/08 B60B33/00 B62D51/04 (Advanced/Invention)

CPC: A61G1/0281 A61G1/0231 A61G1/0275 A61G1/0287 A61G1/0293 A61G1/042 A61G1/048 A61G7/0519 A61G2203/42 A61G2210/50

Classification Explorer

Cited documents: WO15067225 A1, US9138363 BA, US6792630 BA, US6725956 BA, US2750605 A, US2011087416 AA, US2008141459 AA,

Abstract:
Multifunctional rescue and transport robotic bed for outdoor and indoor use consists of an interface (4) which is an intermediate element between a mobile chassis (2) and a transfer bed (5); while the interface (4) is placed firmly on the telescopic columns (3) with extensions (15) with transverse pins equipped with sliding segments (16); white the main part of the mobile chassis is a chassis frame (6) forming lateral and anteroposterior bumper zones; where in corners of the chassis frame (6), wheel units (8) with unlimited turning radius are arranged pivotally in forks; while the wheel unit (8) with unlimited turning radius is placed in the corner forks of the chassis frame (6) in the corner pegs (10); while a supporting girder (11) of suspension and damping elements is suspended in the corner pegs (10) leaning on height– adjustable handles of the supporting girder (11) which position is adjustable via linear drive (12) placed between the chassis frame (6) and the supporting girder (11); while a part of the mobile chassis (2) is a control column (18) which basic part is a column frame (19) placed rotationally in the chassis frame flange (22); while the control column (18) is from a working position adjustable by plus or minus 90 degrees; while the column frame (19) is followed by a disengaging part of column (23) with handlebars (31) control elements; while the main part of the transfer bed (5) is the bed frame (93); where the sides of the bed frame (93) form runners (94) on which in the central zone the double handles (95) are attached, and which together support the loading area of the bed; while in corners of the bed frame (93) there are the angled corner forks (79) designated to store the carrying handles (101) arranged pivotally in the horizontal plane in the range of 90 degrees; while in parallel to the longitudinal axis of the bed frame (63), along the entire length there are placed longitudinal lines (109) in which the X–ray frame (110) moves slidingly with alternative option of longitudinal or transverse inserting of the X–ray cassette (11 1), where on the sides on the shaped extensions (112) the X–ray frame (110) has indicators (113) moving between the longitudinal profiles of the double runners (94) of the bed frame (93); while a system of side rail retraction (1 14) is arranged parallel to the longitudinal axis of the bed frame (93) consisting of transversely extending guiding side rails (115) with guiding grooves (116) in opposition for slidably deposition of a collapsible side rail (117); where the main element of the collapsible side rail (117) is a side rail frame (118); where the collapsible side rail (117) position is arrested in the functional position; while the upper part of the bed frame (93) is equipped with a the loading board; this function is performed by a backrest (96) in the front part.

0) US2017116876A – MODULAR LEARNING DEVICE

194) Family number: 65499428 (US2017116876A) © PatBase

Title: MODULAR LEARNING DEVICE

Priority: IN2015MU04019 20151024

Family:

Publication number	Publication date	Application number	Application date
IN04019MU2015 A	20170428	IN2015MU04019	20151024
US2017116876 AA	20170427	US20150983542	20151230

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Inventor(s):(std): SUROSHI PURNIMA YOGESH ; SUROSHI YOGESH RAO

Inventor(s): YOGESH RAO SUROSHI ; PURNIMA YOGESH SUROSHI

International class (IPC 8–9): G09B19/00 G09B19/08 G09B3/10 (Advanced/Invention)

CPC: G09B3/10 G09B19/22 G09B19/08

US class: 434/157

Classification Explorer

Abstract:
Source: US2017116876A A modular learning device comprising of a base board having a frame with plurality of sides, a network of tracks having a spinal track and several other tracks; a plurality of sliding blocks; and a plurality of wisdom cards having an identifier section, a margin having same number of sides as the base board, a plurality of zones in the margin, and a middle area, a solution code for the problems or situations, each wisdom card containing different problems or situations, and an indicator for each problem or situation, for generating the solution code. A wide range of subjects–academic, linguistic, cultural and behavioural, cross learning of two or more subjects, learnable using wisdom card can be deployed in the modular learning device, including problems or situations for persons with specific physical or mental constraints. A plurality of base boards can be unified by a complementary construction so as to use combination wisdom cards for cross learning of two or more subjects and for learning several languages together.