PatBase – Session log 04 August 2017

Search history

Search 1: ft=telescop* and key and (blade or shaft) and (keyway or groove*) (Results 1088)

Search 2: ft=telescop* and key and (blade or shaft) and (keyway or groove*) and lock (Results 335)

Search 3: FT=telescop* and MACS and key (Results 2)

Search 4: FT= telescop* and MAXIMUM ADJACENT CUT SPECIFICATION and key (Results 1)

Search 5: FT= MAXIMUM ADJACENT CUT SPECIFICATION and key (Results 5)

- session log created:04 August 2017 05:28:33
- Update information:

PatBase Coverage at Update 2017 Week 30 (Year 2017 Week 30)

PatBase Coverage includes 100+ million documents from over 100 patent–issuing authorities and includes patent applications, granted patents, utility models and designs â€“ detailed in the below coverage listings.

Major countries

Publishing body	Document type	Bibliographic publication date		Full–Text publication date	
		Earliest	Latest	Earliest	Latest
CN China	Patent Applications	19850910	20170728	19850910	20170728
	Patents	19930106	20170728	19930106	20170728
	Utility Model Applications	19850409	19921230	19850409	19921230
	Utility Models	19930106	20170728	19930106	20170728
	Designs	19850910	20170728	19850910	20150819
DE Germany	Patent Applications	19211221	20170727	19650317	20170727
	Patents	18770101	20170727	19200113	20170727
	Utility Models	19280626	20170727	19610831	20170727
	EP/WO Patents	19871217	20140410		
EP European Patent Office	Patent Applications	19781220	20170726	19781220	20170726
	Patents	19800109	20170726	19800109	20170726
FR France	Patent Applications	19690307	20170728	19810102	20170707
	Patents	18550227	20170728	19600502	20170721
	Utility Model Applications	19720107	20170728	19800104	20170707
	Utility Models	19730112	20170728	19690802	20170721
GB United Kingdom	Unpublished Patent Applications	19830209	20170712		
	Patent Applications	19790104	20170726	19790104	20170712

	Patents	17820704	20170726	19020911	19811216
JP Japan	Patent Applications	19710116	20170720	19930108	20170720
	Patents	19281026	20170719	19960529	20170719
	Utility Model Applications	19710723	20060209	19990817	20031107
	Utility Models	19640805	19960329		
	Registered Utility Models	19940726	20170713	19940726	20101216
	Designs	20141110	20170724		
KR Republic of Korea	Patent Applications	19781209	20170728	19940103	20170728
	Patents	19700820	20170728	19970104	20170728
	Utility Model Applications	19781127	20170728	19940730	20170728
	Utility Models	19780110	20170728	19970104	20170728
US United States of America	Patent Applications	20010315	20170727	20010315	20170727
	Patents	18360101	20170725	18560617	20170725
	Designs	18650912	20170725	19770719	20170725
WO World Intellectual Property Organization (WIPO)	Patent Applications	19781019	20170727	19781019	20170727
	Designs	20151127	20170728	20151127	20170728

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- **search:** SS1 ft=telescop* and key and (blade or shaft) and (keyway or groove*) (Results 1088)
- List: SS1 1–50 (ft=telescop* and key and (blade or shaft) and (keyway or groove*)) (Results 1088)

0) US2015130256A – ROLLING FRICTION OR SUSPENSION FRICTION IMPACT ...

1) Family number: 53193063 (US2015130256A)

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Title: ROLLING FRICTION OR SUSPENSION FRICTION IMPACT MINING METHOD AND WEAR–RESISTANT IMPACT MINING MACHINE USING SAID METHOD

Priority:

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Family:

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Probable Assignee: LIU SU

Assignee(s):(std)**:** LIU SUHUA ; SUHUA LIU

Assignee(s): LIU SU ; LIU SUHUAXINYANZHEN INDUSTRIAL PARKYANZHOU HAIZHI MECHANICAL AND ELECTRICALSHANDONG272100YANZHOU272100CN ; LIU SUHUAYANZHOU HAIZHI MECHANICAL AND ELECTRICALTECHNOLOGY CO., LTDXINYANZHEN INDUSTRIAL PARKSHANDONG PROVINCE, 272100YANZHOUCN ; LIU SUHUAYANZHOU HALZHL MECHANICAL AND ELECTRICALTECHNOLOGY CO., LTDXINYANZHEN INDUSTRIAL PARKSHANDONG PROVINCE, 272100YANZHOUCN

Inventor(s):(std)**:** LIU SUHUA ; SUHUA LIU

Inventor(s): LIU SUHUAXINYANZHEN INDUSTRIAL PARKYANZHOU HAIZHI MECHANICAL AND ELECTRICALSHANDONG272100YANZHOU272100CN ; LIU SUHUAYANZHOU HAIZHI MECHANICAL AND ELECTRICALTECHNOLOGY CO., LTDXINYANZHEN INDUSTRIAL PARKSHANDONG PROVINCE, 272100YANZHOUCN ; LIU SUHUAYANZHOU HALZHL MECHANICAL AND ELECTRICALTECHNOLOGY CO., LTDXINYANZHEN INDUSTRIAL PARKSHANDONG PROVINCE, 272100YANZHOUCN

Agent(s): FB RICE; FB RICE PTY LTD; SHELSTON IP; SHELSTON IP PTY LTD; CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; LIU SUHUA; MIKHAILYUK VADIM MR; GOWLING LAFLEUR HENDERSON LLP; MBM INTELLECTUAL PROPERTY LAW LLP; NEXUS LAW GROUP LLP; LAPIENIS JUOZAS

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)**:** E02F3/18 E02F3/22 E02F3/24 E02F3/28 E02F3/36 E02F3/38 E02F3/39 E02F3/96 E02F5/08 E02F5/30 E02F9/20 E21B E21B1/02 E21B1/14 E21B10/36 E21C E21C25/00 E21C25/02 E21C25/04 E21C25/08 E21C27/00 E21C27/01 E21C27/02 E21C27/12 E21C27/14 E21C27/20 E21C27/24 E21C27/28 E21C27/30 E21C27/46 E21C29/22 E21C31/00 E21C31/02 E21C31/04 E21C31/08 E21C31/10 E21C31/12 E21C35/00 E21C35/02 E21C35/04 E21C35/08 E21C35/18 E21C35/183 E21C35/19 E21C35/193 E21C35/197 E21C35/20 E21C35/22 E21C37/00 E21C47/06 E21D9/10 E21D9/12 E21F5/04 F02B65/00 F02B75/00 F02B75/40 F02F1/00 F02F1/18 F02F11/00 F02F3/00 F02F5/00 F03C1/28 F03C1/32 F04B17/04 F04B39/00 F04B39/12 F04B53/00 F04B53/14 F04B53/16 F15B15/14 F15B15/20 F16C29/04 F16C3/18 F16C32/04 F16C32/06 F16C33/30 F16C33/32 F16C33/34 F16C33/38 F16C33/46 F16C33/58 F16C33/78 F16C7/02 F16F15/04 F16H1/04 F16J1/00 F16J1/08 F16J10/02 F16J15/16 F16J15/32 F16J15/44 F16J15/56 F16N1/00 (Advanced/Invention); E21C27/12 E21C27/14 E21C31/10 (Core/Invention); E21C (Subclass/Invention)

CPC: E21B10/36 E21C27/02 E21D9/106 E21D9/1086 E21C35/04 E21C27/46 E21C35/193 E21C35/197 E21C2035/1826 E21D9/1026 E21C27/01 E02F5/305 E02F3/964 F16J1/02 B25D2250/275 F16J15/3208 F16J15/3224 F16J15/3252 F16J15/56 E02F3/181 E21C27/24 Y10T29/49842 E21C31/10 E21C35/19 E21C27/14 E21C27/12 E21C35/18 E21C35/1936 E21D9/12 E02F3/245 E02F5/08 E21C27/00 E21C35/20 F16J15/441 E21C35/00 E21C31/04 F16C3/18 E21C25/02 E21C27/28 E21C31/02 E02F3/966 E21B1/02

US class: 277/305 29/434 299/10 299/113 299/18 299/39.2 299/56 299/69 37/189 74/11

Classification Explorer

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Abstract:
Source: US2015130256A A rolling friction or suspension friction impact mining method and a wear−resistant impact mining machine using said method. The mining machine comprises a reciprocating impact part (3). The reciprocating impact part comprises an impact drive device (4), a rolling reciprocating device, and an impact head (6). The rolling reciprocating device comprises a rubbing body (38), a rubbing body support (39), an impact guiding element (5.1), and a position−limiting mechanism. The rubbing body (5.3) are disposed between the robbing body support (39) and the impact guiding element (5.1), and inside of the position−limiting mechanism to form rolling guiding. The impact drive device is disposed with a damage−prevention mechanism, a rotary power buffer device, and a structural buffer device, such that the impact head reciprocatingly move and have rolling or suspending friction under the support of the impact guiding element, thereby preventing the damage−prevention force to damage a power drive device and a rolling channel guiding device, and preventing the impact vibration caused by the

reciprocating impact part to affect the machine body and other parts. The overall stability is therefore enhanced, and the service life is extended.

0) US2007028658A – LOCK AND KEY SYSTEM WITH IMPROVED TUMBLERS IN T...

2) Family number: 34194743 (US2007028658A) © PatBase

Title: LOCK AND KEY SYSTEM WITH IMPROVED TUMBLERS IN THE LOCK

Priority: EP20060769585 20060726 SE20050001782 20050805 WO2006SE00913 20060726

Family:

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Probable Assignee: WINLOC AG

Assignee(s):(std)**:** WIDEN BO ; WINLOC AG ; WINLOG AG

Assignee(s): BO WIDEN

Inventor(s):(std)**:** WIDEN BO ; WIBEN BO ; BO WIDEN

Agent(s): SPRUSON AND FERGUSON; OGILVY RENAULT LLP SENCRL SRL; NORTON ROSE OR SENCRL SRL LLP; SARGENT; BOEHMERT AND BOEHMERT ANWALTSPARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; MODIN JAN; KARLSTROEM LENNART; DE ELZABURU ALBERTO; SULEIMAN I AL AMMAR LAW OFFICE; PEARL COHEN ZEDEK LATZER BARATZ; 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 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 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 ZA ZM ZW

International class (IPC 8–9): E05B19/04 E05B27/06 E05B15/00 E05B15/12 E05B15/14 E05B19/06 E05B27/00 E05B27/02 E05B27/04 (Advanced/Invention);
E05B15/12 E05B27/02 E05B27/10 (Advanced/Non–invention);
E05B15/00 E05B19/00 E05B27/00 (Core/Invention);
E05B (Subclass/Invention)

International class (IPC 1–7): E05B15/12 E05B27/02

CPC: E05B27/00 Y10T70/7605 Y10T70/7701 Y10T70/7785 Y10T70/7881 E05B27/0017 E05B19/0023 E05B27/0039 E05B27/02 E05B17/2023

European class: E05B19/00K1 E05B27/00 E05B27/00A3 E05B27/00E

US class: 70/378 70/392 70/409 70/409S 70/493 70/493P

Classification Explorer

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Abstract:
Source: US2007028658A A lock and key system is disclosed including locks of the kind comprising a cylindrical key plug (203) with locking tumblers (205) having a body part (206 a) and an integral key sensing part (206 b) for engagement with an associated key (100). The key sensing part (206 b) of each locking tumbler comprises at least two neighbouring key contacting portions (210 a, 211 a), confined within a limited region, for possible sliding engagement with a longitudinal code pattern of the associated key, at least one but not necessarily all of these key contacting portions of each locking tumbler actually engaging with a corresponding code portion of the associated key upon fully inserting the latter into the key slot of the lock.

0) US2009093792A – EXTERNAL DRUG PUMP

3) Family number: 43127351 (US2009093792A) © PatBase

Title: EXTERNAL DRUG PUMP

Priority:

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Family:

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Probable Assignee: LAMODEL LTD

Assignee(s):(std)**:** BARKAN MOSHE ; CABIRI OZ ; GROSS YOSSI ; KLEIN DAVID ; LAMODEL LTD ; PAPROSKI JOHN ; MEDIMOP MEDICAL PROJECTS LTD

Inventor(s):(std)**:** BAR EL YOSSI ; BARKAN MOSHE ; CABIRI OZ ; DEGITIAR BORIS ; DEGTIAR BORIS ; FILMAN REUVEN Y ; GROSS YOSSI ; OZ CABIRI ; PAPROSKI JOHN ; YOSSI GROSS

Inventor(s): MEDIMOP MEDICAL PROJECTS LTD

Agent(s): PATENTANWAELTE VOLLMANN AND HEMMER; LECOMTE DIDIER; HARAKENZO WORLD PATENT AND TRADEMARK; DARBY AND DARBY PC; PANITCH SCHWARZE BELISARIO AND NADEL LLP; SANFORD T COLB AND CO ET AL; BELISARIO MARTIN G

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)**:** A61M1/00 A61M31/00 A61M5/00 A61M5/14 A61M5/142 A61M5/145 A61M5/158 A61M5/172 A61M5/178 A61M5/20 A61M5/24 A61M5/31 A61M5/315 B65D67/00 F16B7/10 F16H25/12 F16H25/20 (Advanced/Invention); A61M5/14 A61M5/142 A61M5/168 A61M5/172 A61M5/178 A61M5/31 A61M5/315 (Advanced/Non–invention); A61M5/20 A61M5/31 A61M5/315 (Core/Invention)

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European class: A61M5/142P2 A61M5/145B12 A61M5/24E1 K61M205/35E2 K61M205/35R3 K61M5/142P2N K61M5/142P2S K61M5/142P6 K61M5/145B10 K61M5/145B12 K61M5/14M K61M5/168A11 K61M5/172B K61M5/315C5

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Abstract:
Source: US2009093792A Apparatus is described for administering a substance to a subject. A vial contains the substance and a stopper is disposed within the vial and is slidably coupled to the vial. A first threaded element is (a) rotatable with respect to the vial and (b) substantially immobile proximally with respect to the vial during rotation of the first threaded element. A second threaded element is threadedly coupled to the first threaded element. At least a distal end of the second threaded element is substantially non−rotatable with respect to the vial, and the distal end of the second threaded element defines a coupling portion that couples the second threaded element to the stopper. The first threaded element, by rotating, linearly advances the stopper and at least the distal end of the second threaded element toward a distal end of the vial. Other embodiments are also described.

4) Family number: 50963741 (US2014005683A) © PatBase

Title: HIGHLY ARTICULATED ROBOTIC PROBES AND METHODS OF PRODUCTION AND USE OF SUCH PROBES

Priority:

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Probable Assignee: MEDROBOTICS CORP

Assignee(s):(std)**:** ANDERSON ROBERT ; BETTENCOURT LUIS ; CALEF THOMAS ; CASTRO MICHAEL SALVATORE ; CALEF TOM ; DARISSE IAN ; DIDOMENICO ROBERT ; FRANGOLIS TODD ; FLAHERTY R MAXWELL ; DEGEORGE CHRISTOPHER P ; FLAHERTY CHRISTOPHER J ; FLAHERTY J CHRISTOPHER ; DARISSE IAN J ; DIDOMENICO ROBERT A ; CERIER JEFFREY ; CRUZ AMOS ; GROVER SIMON ; DALEY ERIC ; MEDROBOTICS CORP ; STAND JOSEPH A ; STRAFACE SAMUEL F ; OYOLA ARNOLD E ; WRIGHT CORNELL III ; WHIPPLE DALE ; KENNEFICK WILLIAM H ; OYOLA ARNOLD ; JOHNSTON GABRIEL ; STAND III JOSEPH A ; MEDROBOTICS ; HOLLOWAY JR ANTHONY RAY ; MALAQUAIS COREY ANTHONY ; RIENZIE ADAM ; LEWIS REYNALDO ; RUNYON JUSTIN S ; JOHNSTON GABRIEL A ; METROBOTICS CORP ; WITHERSPOON LELAND ; TULLY STEPHEN ; TRIGGS EMILY ; O KEEFE JONATHAN ; WALKER JR RICHARD ; WARNOCK DAVID ; PUNGOR ANDRAS ; ZUBIATE BRETT ; WRIGHT III CORNELL

Assignee(s): ANDERSON BOB ; KENNEDY KEVIN ; NUNES NANCY A ; MORDENTE ZACKERY ; MEDROBOTICS INC ; KARCSMAR JOSEPH ; STAND JOSEPH A III ; MEDROBOTICS CORP475 PARAMOUNT DRIVERAYNHAMMA02767US ; FLAHERTY MAXWELL R ; COHEN DAVID ; FLAHERTY J ; DARISSE IAN JOSEPH ; GILMARTIN KEVIN ; HOLLOWAY ANTHONY RAY JR ; CASTRO MICHAEL S ; CALEF THOMAS J ; CASTRO MICHAEL

Inventor(s):(std)**:** ANDERSON BOB ; ANDERSON ROBERT ; ARNOLD OYOLA ; BETTENCOURT LUIS ; BRETT ZUBIATE ; CALEF THOMAS ; CALEF TOM ; CASTRO MICHAEL ; CASTRO MICHAEL SALVATORE ; CRUZ AMOS ; DALE WHIPPLE ; DALEY ERIC ; DARISSE IAN

; DARISSE IAN J ; DEGEORGE CHRISTOPHER P ; DIDOMENICO ROBERT ; DIDOMENICO ROBERT A ; FLAHERTY CHRISTOPHER J ; FLAHERTY J CHRISTOPHER ; CERIER JEFFREY ; COHEN DAVID ; FLAHERTY MAXWELL R ; FLAHERTY R MAXWELL ; FRANGLOIS TODD ; FRANGOLIS TODD ; GROVER SIMON ; HALLOWAY JR ANTHONY RAY ; HOLLOWAY ANTHONY RAY JR ; HOLLOWAY JR ANTHONY RAY ; IAN J DARISSE ; JOHNSTON GABRIEL ; JOHNSTON GABRIEL A ; JOSEPH A STAND ; JOSEPH STAND ; KARCSMAR JOSEPH ; KENNEDY KEVIN ; KENNEFICK WILLIAM H ; LEWIS REYNALDO ; MALAQUAIS COREY ANTHONY ; MORDENTE ZACKERY ; NUNES NANCY A ; O KEEFE JONATHAN ; OYOLA ARNOLD ; PUNGOR ANDRAS ; RIENZIE ADAM ; ROBERT A DIDOMENICO ; ROBERT DIDOMENICO ; RUNYON JUSTIN S ; SALVATORE CASTRO MICHAEL ; STAND III JOSEPH A ; STAND JOSEPH ; STAND JOSEPH A ; STAND JOSEPH A III ; TRIGGS EMILY ; TULLY STEPHEN ; WALKER JR RICHARD ; WARNOCK DAVID ; WHIPPLE DALE ; WILLIAM H KENNEFICK ; WITHERSPOON LELAND ; WRIGHT CORNELL III ; WRIGHT LLL CORNELL ; WRIGTH CORNELL III ; ZUBIATE BRETT ; GILMARTIN KEVIN ; DARISSE IAN JOSEPH ; CASTRO MICHAEL S ; CALEF THOMAS J ; WRIGHT III CORNELL ; STRAFACE SAMUEL F ; OYOLA ARNOLD E ; SAMUEL F STRAFACE ; MICHAEL SALVATORE CASTRO ; J CHRISTOPHER FLAHERTY ; FLAHERTY CHRISOPHER J ; ARNOLD E OYOLA

Inventor(s): FLAHERTY J ; STAND JOSEPH AUS ; OYOLA ARNOLD EUS ; OYOLA ARNOLDUS ; JOHNSTON GABRIELUS ; IAN DARISSE ; FRANGOLIS TODDUS ; FLAHERTY R ; CORNELL WRIGTH III ; FLAHERTY J CHRISTOPHERUS ; DARISSE IAN JUS ; CASTRO MICHAEL SALVATOREUS ; BETTENCOURT LUISUS ; ANDERSON ROBERTUS

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; RICHES MCKENZIE AND HERBERT LLP; BITTNER BERNHARD; HANNKE CHRISTIAN; YKI PATENT ATTORNEYS; ONELLO AND MELLO LLP; ONELLO ANTHONY P JR ET AL; ONELLO JR ANTHONY P 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

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US4943296 A, US4941457 A, US4900218 A, US4888708 A, US4873965 A, US4864888 A, US4863133 A, US4838859 A, US4831547 A, US4830569 A, US4806066 A, US4805477 A, US4804897 A, US4796607 A, US4790294 A, US4787369 A, US4780045 A, US4726355 A, US4706001 A, US4700693 A, US4666366 A, US4661032 A, US4655257 A, US4600355 A, US4564179 A, US4535207 A, US4531885 A, US4517963 A, US4502830 A, US4496278 A, US4494417 A, US4479914 A, US4475375 A, US4474174 A, US4445184 A, US4432349 A, US4393728 A, US4351323 A, US4299533 A, US4260319 A, US4259876 A, US4221997 A, US4150329 A, US4148308 A, US4108211 A, US4078670 A, US4024859 A, US3920972 A, US3892228 A, US3790002 A, US3739770 A, US3703968 A, US3643653 A, US3638973 A, US3625200 A, US3583393 A, US3572325 A, US3557780 A, US3060972 A, US2510198 A, US2016174816 AA, US2016074028 AA, US2015164491 AA, US2015105629 AA, US2014371764 AA, US2014336675 AA, US2014296875 AA, US2014088356 AA, US2014081292 AA, US2014012288 AA, US2014012287 AA, US2014005683 AA, US2013296654 AA, US2013150673 AA, US2013023915 AA, US2012265220 AA, US2012253326 AA, US2012209174 AA, US2012209073 AA, US2012203063 AA, US2012143173 AA, US2012138834 AA, US2012109186 AA, US2012109186, US2012078248 AA, US2012078248, US2012065467 AA, US2011313243 AA, US2011238108 AA, US2011238083 AA, US2011230723 AA, US2011213384 AA, US2011198386 AA, US2011198386, US2011196418 AA, US2011184241 AA, US2011152882 AA, US2011152878 AA, US2011152613 AA, US2011152609 AA, US2011118748 AA, US2011118707 AA, US2011118545 AA, US2011118543 AA, US2011105954 AA, US2011098678 AA, US2011071543 AA, US2011066161 AA, US2011056320 AA, US2011028990 AA, US2011028790 AA, US2011021871 AA, US2010318100 AA, US2010280325 AA, US2010274078 AA, US2010262161 AA, US2010228270 AA, US2010224022 AA, US2010217089 AA, US2010204713 AA, US2010179540 AA, US2010175940 AA, US2010160736 AA, US2010160735 AA, US2010130924 AA, US2010063354 AA, US2010022825 AA, US2010016852 AA, US2009326556 AA, US2009326449 AA, US2009287043 AA, US2009259141 AA, 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JP57168889 A2, JP57168889, JP57123101 U1, JP4194406 A2, JP4194406, JP3021057 U, JP3011005 Y2, JP2013534147 T2, JP2013527041 T2, JP2013527041, JP2012000487 A2, JP2012000487, JP2011522626 T2, JP2010518963 T2, JP2010057919 A2, JP2009514610 T2, JP2009514610, JP2009500086 T2, JP2009195489 A2, JP2009045428 A2, JP2008504072 T2, JP2008504072, JP2008504072, JP2007511248 T2, JP2007511248, JP2007511247 T2, JP2007511247, JP2007502198 T2, JP2007117394 A2, JP2006522657 T2, JP2006522657, JP2005515012 T2, JP2005204728 A2, JP2003299663 A2, JP2002543865 T2, JP2002336263 A2, JP2002090656 A2, JP2001511023 T2, JP2000033071 A2, EP1015068 A1, EP0653922 A1,

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CN101938946 A, CN101528111 A, CN101106935 A, CN101087563 A,

Forward Citations: WO17077888, WO17025982, WO17009604, WO17002143, WO16172162, WO16084997, WO15188071, WO15081008, WO15042453, WO14201538, WO14179683, WO14136583, US9713873, US9629683, US9591964, US9550293, US9517557, US9517059, US9266029, US9144370, US2017144298, US2017086931, US2017014024, US2016213227, US2015367508, US2015352715, US2015196364, US2015174500, US2015141756, JP6093911, JP2016527927, JP2015523221, GB2546625, GB2540930, EP2996619, EP2996613, EP2984535, EP2943140, EP2929303, EP2777480, CN105105703, CN103817704, CN103817704,

Abstract:
Source: US2014005683A A highly articulated robotic probe comprises an outer sleeve and an inner core. The outer sleeve and inner core include a plurality of links. The links of the outer sleeve and inner core are configured to pivot relative to one another. Various characteristics of the links determine the overall pivot angle of the articulated probe. Each of the plurality of links may have one or more channels. The channels form a semi−continuous passage from link to link and are configured to receive an elongated member such as an inner core, tool or cable. One or more cables may be used to control the outer links of the outer sleeve and the inner links of the inner core. Various characteristics of the cables determine the overall performance of the articulated probe.

0) US2006108200A – METHOD FOR DISTRIBUTING A CONVEYOR BELT CLEANER...

5) Family number: 33023466 (US2006108200A) © PatBase

Title: METHOD FOR DISTRIBUTING A CONVEYOR BELT CLEANER

Priority: US20040996830 20041124 US20040996957 20041124 US20080056011 20080326 WO2005US42586 20051123 US20050078824 20050311

Family:

Publication number	Publication date	Application number	Application date
AU2005309592 AA	20060601	AU20050309592	20051123
BRPI0515739 A	20080805	BR2005PI15739	20051123
CN101102951 A	20080109	CN200580046721	20051123
EP1824765 A2	20070829	EP20050852115	20051123
EP1824765 A4	20090304	EP20050852115	20051123
IN03639DN2007 A	20070824	IN2007DN03639	20070515
MX2007006215 A1	20070720	MX20070006215	20051123
US2006108200 AA	20060525	US20040996830	20041124
US2006108202 AA	20060525	US20040996957	20041124
US2006108203 AA	20060525	US20050078824	20050311
US2008179168 AA	20080731	US20080056011	20080326
US7308980 BB	20071218	US20040996830	20041124
US7367443 BB	20080506	US20040996957	20041124
US7370750 BB	20080513	US20050078824	20050311
WO06058146 A2	20060601	WO2005US42586	20051123
WO06058146 A3	20061130	WO2005US42586	20051123
WO06058179 A2	20060601	WO2005US42662	20051123
WO06058179 A3	20090611	WO2005US42662	20051123
ZA200704101 A	20091125	ZA20070004101	20070521

Probable Assignee: MARTIN ENGINEERING CO

Assignee(s):(std)**:** MARTIN ENG CO ; PETERSON EDWIN H ; SWINDERMAN ROBERT TODD

Assignee(s): MARTIN ENGINEERING CO ; MARTIN ENGINEERING COMPANY

Inventor(s):(std)**:** PETERSON EDWIN H ; SWINDERMAN ROBERT T ; SWINDERMAN ROBERT TODD ; TODD SWINDERMAN ROBERT

Inventor(s): ROBERT TODD SWINDERMAN ; SWINDERMAN ROBERT ; PETERSON EDWIN

Agent(s): SPRUSON AND FERGUSON; PATZIK FRANK AND SAMOTNY LTD; MAX SHAFTAL PATZIK FRANK AND SAMOTNY LTD; THOMPSON COBURN 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 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): A46B15/00 B29C45/17 B60S1/00 B60S1/28 B65G45/00 B65G45/10 B65G45/12 B65G45/14 B65G45/16 (Advanced/Invention); A46B15/00 B29C45/17 B60S1/00 B60S1/04 B65G45/00 (Core/Invention); A46B B60S B65G (Subclass/Invention)

International class (IPC 1–7): B65G45/00

CPC: B65G45/16 B65G45/12

European class: B65G45/12 B65G45/16

US class: 15/256.5 198/494 198/497 198/499 198/617 264/238 474/92

Classification Explorer

Cited documents: WO05054094 A1, USD347918 S1, US7370750 BB, US7367443 BB, US7308980 BB, US7134163 BB, US6968940 BB, US6820734 BA, US6796000 BB, US6612419 BA, US6591969 BB, US6581754 BB, US6457575 BB, US6439373 BA, US6401911 BA, US6374990 BA, US6360875 BA, US6354428 BA, US6321901 BA, US6315105 BA, US6296105 BA, US6270113 BA, US6182816 BA, US6179114 BA, US6179114 B1, US6152290 A, US6104911 A, US6056112 A, US6050621 A, US5992614 A, US5979638 A, US5887702 A, US5845761 A, US5655642 A, US5647476 A, US5573102 A, US5556201 A, US5522280 A, US5413208 A, US5344000 A, US5301797 A, US5222589 A, US5201402 A, US5197587 A, US5161669 A, US5161666 A, US5114000 A, US5016746 A, US5011002 A, US4987993 A, US4962845 A, US4953689 A, US4854443 A, US4836356 A, US4825996 A, US4787500 A, US4787000 A, US4779716 A, US4696388 A, US4643293 A, US4598823 A, US4541523 A, US4402394 A, US4344525 A, US4290520 A, US4269301 A, US4131194 A, US3994384 A, US2005269470 AA, US2005126889 AA, US2004149544 AA, US2003066737 AA, GB2221440 A1, EP0891934 A1, DE10301230 A1,

Forward Citations: WO12129078, WO12129078, WO09126884, USD779769, USD747838, USD687925, USD674976, USD674975, USD669243, USD657525, US9586765, US9580251, US9376264, US9090405, US9085419, US8875870, US8757360, US8640856, US8573384, US8556064, US8464858, US8393459, US8312986, US8245836, US8061508, US7987966, US7461736, US2015360880, US2014283358, US2013075228, US2013026008, US2012241288, US2011220461, US2011203904, US2011192705, US2010294623, US2010000842, US2009133990, US2008179168, US2006131135, EP2279142, EA026606, CN104787558, CN103930358, CN103930358, CN103662742,

Abstract:
Source: US2006108200A A method of distributing and assembling a conveyor belt cleaner comprises manufacturing a first key component at a first point of fabrication in a longer than needed standard length, obtaining a first common component at a second point of fabrication, cutting the first key component to a desired length, and assembling the first key component with the first common component at the second point of fabrication. The method further comprises manufacturing a second key component at the first point of fabrication and assembling the second key component with the first common component at the second point of fabrication. In another aspect of the invention, the key components are manufactured into desired lengths and are sold as part of kit to be assembled to by the end user of the conveyor belt cleaner.

0) US2015345177A – ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION ...

6) Family number: 56882671 (US2015345177A) © PatBase

Title: ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION RESTRICTIONS FOR TELESCOPING PINS

Priority: EP20130829087 20131204 IL20130224111 20130102 IL20130224111 20130103 WO2013US72945 20131204

Family:

Publication number	Publication date	Application number	Application date
AP201508559 A0	20150630	AP20150008559	20131204
AR094302 AA	20150722	AR2013P105057	20131227
AU2013371518 AA	20140710	AU20130371518	20131204
AU2013371518 BB	20170202	AU20130371518	20131204
CA2894857 AA	20150611	CA20132894857	20131204
CL2015001816 A1	20151016	CL20150001816	20150623
CN104968874 A	20151007	CN201380069151	20131204
CO15306611 A2	20160630	CO20150306611	20151224
CR20150348 A	20151117	CR20150000348	20150702
DE602013013349 D1	20161208	DE201360013349T	20131204
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EA201500709 A1	20160129	EA20150000709	20131204
EP2882912 A2	20150617	EP20130829087	20131204
EP2882912 B1	20161026	EP20130829087	20131204
HK1210511 A1	20160422	HK20150111167	20151112
HR20170018 T1	20170224	HR20170000018	20170109
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IN06012DN2015 A	20160408	IN2015DN06012	20150709
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KR20150102028 A	20150904	KR20157017086	20131204
LT2882912 T	20170125	LT20130829087T	20131204
MX2015008216 A1	20150929	MX20150008216	20131204
NZ709026 A	20161125	NZ20130709026	20131204
PH2015501510 A	20150928	PH20150501510	20150702
PL2882912 T3	20170428	PL20130829087T	20131204
PT2882912 T	20170123	PT20130829087T	20131204
SG11201504751P A1	20150730	SG20151104751	20131204
TR201700824 T4	20170221	TR20170000824T	20131204
TW201432128 A	20140816	TW20130146442	20131216
US2015345177 AA	20151203	US20130758832	20131204
WO14107254 A2	20140710	WO2013US72945	20131204
WO14107254 A3	20141016	WO2013US72945	20131204

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** KLEIN DAVID ; MUL T LOCK TECHNOLOGIES LTD ; MUL T LOCK TECH LTD

Assignee(s): TAYLOR S CO ; YITZHAK KAISER ; ZVI FRENKEL ; BEN AHARON EFFI ; EFFI BEN AHARON ; FRENKEL ZVI ; KAISER IZHAK

Inventor(s):(std)**:** BEN AHARON EFFI ; FRENKEL ZVI ; IZHAK KAISER ; KAISER IZHAK ; ZVI FRENKEL ; KAISER YITZHAK ; EFFI BEN AHARON ; BENAHARON EFFI

Inventor(s): YITZHAK KAISER

Agent(s):

SPRUSON AND FERGUSON; REGEHR HERBERT B; BULL HOUSSER AND TUPPER LLP; CLARO SWINBURN LUIS FELIPE; JORGE CHAVARRO ARISTIZABAL; WHITE DUNCAN ROHAN; TANI AND ABE PC; FULYA SUEMERALP; KLEIN DAVID

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): B24B27/02 B24B27/04 B62D E05B19/00 E05B19/08 E05B27/00 E05B27/10 (Advanced/Invention); E05B19/00 E05B27/00 (Core/Invention); E05B (Subclass/Invention)

CPC: E05B19/0017 E05B27/0003 Y10T70/7531 Y10T70/7842 E05B19/0023 E05B19/0035 E05B19/0058 E05B27/0017 E05B27/0021

US class: 70/352 70/402

Classification Explorer

Cited documents: WO10026381 A1, WO09019726 A1, WO04048724 A1, WO04001165 A1, US6516644 BA, US5819566 A, US2013327102 AA, US2013091910 AA, US2011146360 AA, US2009301144 AA, US2006207303 AA, JP2006507435 T2, JP2005530072 T2, GB2412689 A1, CN1714214 A, CN1662720 A, CN101743367 A,

Abstract:
Source: US2015345177A A key device (10) includes a generally elongate shaft portion (12) including a key combination surface (16) that has a plurality of key cut stations (18) for forming telescoping key cuts at each key cut station (18). Each key cut station (18) has a telescoping maximum adjacent cut specification (MACS) that defines a maximum depth of adjacent. The key device (10) also has a non−MACS key cut (20), formed at one or more of the key cut stations (18), for interfacing with a first pin (24) of a given telescoping plug pin. The non−MACS key cut (20) is dimensioned to leave material in the elongate shaft portion (12) for forming another key cut (20A) for interfacing with a second pin (26) of the given telescoping plug pin.

0) US2003093106A – CATHETER

7) Family number: 27909180 (US2003093106A) © PatBase

Title: CATHETER

Priority:

EP20020743578	20020627	EP20020743579	20020627	IE20010000591	20010627
IE20020000530	20020627	IE20010000772	20010820	IE20010000946	20011026
IE20020000529	20020627	IE20010001094	20011220	IE20010001098	20011220
US20020180972	20020627	US20020180971	20020627	US20020180973	20020627
US20010312791P	20010817	US20010330627P	20011026	IE20020000533	20020627
IE20020000532	20020627	US20010341275P	20011220	IE20020000535	20020627
US20010301820P	20010702	US20010341276P	20011220	US20010341271P	20011220
US20020180974	20020627	WO2002IE00089	20020627	WO2002IE00090	20020627
WO2002IE00088	20020627	WO2002IE00092	20020627	US20060562633	20061122
US20070841259	20070820	US20110093344	20110425	US20020180980	20020627
US20020321625	20021218	WO2002US40354	20021218		

Family:

Publication number	Publication date	Application number	Application date
AR037939 AA	20041222	AR2002P105026	20021219
AU2002345310 AA	20030303	AU20020345310	20020627
AU2002345311 AA	20030303	AU20020345311	20020627
AU2002345312 AA	20030303	AU20020345312	20020627
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AU2002359729 AA	20030709	AU20020359729	20021218
AU2002359729 AH	20030709	AU20020359729	20021218
CA2449961 AA	20031204	CA20022449961	20020627
CA2449981 AA	20031204	CA20022449981	20020627
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DE60247841 D1	20160421	DE20026047841	20020627
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EP1399085 A1	20040324	EP20020743579	20020627
EP1399085 B1	20160217	EP20020743579	20020627
EP1399095 A1	20040324	EP20020743581	20020627
EP1399095 B1	20170621	EP20020743581	20020627
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EP1465916 A4	20050720	EP20020794284	20021218
EP3072479 A1	20160928	EP20160155772	20020627
IE20020529 A1	20021230	IE20020000529	20020627
IE20020530 A1	20030305	IE20020000530	20020627
IE20020532 A1	20030305	IE20020000532	20020627
IE20020533 A1	20030528	IE20020000533	20020627
IE20020535 A1	20030528	IE20020000535	20020627
JP2004530507 T2	20041007	JP20030508262T	20020627
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US2003125751 AA	20030703	US20020180973	20020627

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US2008262506 AA	20081023	US20070841259	20070820	
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US7789860 BB	20100907	US20020180971	20020627	
US7967837 BB	20110628	US20020180972	20020627	
WO03002018 A2	20030109	WO2002IE00088	20020627	
WO03002019 A2	20030109	WO2002IE00089	20020627	
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Probable Assignee: SALVIAC LTD

Assignee(s):(std)**:** ARDATI ALI ; AVENTIS PHARMA INC ; AVENTIS PHARMACEUTICALS INC ; BRADY EAMON ; CAI JIDONG ; CASEY BRENDAN ; FARRELL FERGAL ; GRIFFIN PATRICK ; GILVARRY MICHAEL ; COLL SIORA ; NEILAN JOHN ; KEEGAN MARTIN ; MOLLOY SHANE ; HORAN STEVEN ; EISHINGDRELO HAIFENG ; SALVIAC LTD ; VALE DAVID ; O HIGGINS AVRIL ; SALVIAC LIMITED

Inventor(s):(std)**:** ALI ARDATI ; ARDATI ALI ; ARDATI MOHAMAD ALI ; AVRIL O HIGGINS ; BRADY EAMON ; BRADY EAMONN ; BRENDAN CASEY ; CAI JIDONG ; CASEY BRENDAN ; DAVID VALE ; EAMON BRADY ; EISHINGDRELO HAIFENG ; FARRELL FERGAL ; GILVARRY MICHAEL ; GRIFFIN PATRICK ; HAIFENG EISHINGDRELO ; HORAN STEVEN ; COLL SIORA ; JOHN NEILAN ; KEEGAN MARTIN ; MICHAEL GILVARRY ; MOHAMAD ALI ARDATI ; MOLLOY SHANE ; O HIGGINS AVRIL ; PATRICK GRIFFIN ; SIORA COLL ; VALE DAVID ; NEILAN JOHN

Inventor(s): NEILAN JOHN GORT ; MOLLOY SHANE CORRANDULLA ; KEEGAN MARTIN KNOCKNACARRA ; COLL SIORA ROSCOMMON TOWN ; HORAN STEVEN ATHLONE ; CASEY BRENDAN BARNA ; BRADY EAMON ELPHIN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MOFFAT AND CO; MITSCHERLICH PATENT U RECHTSANWAELTE PARTMBB; OBRIEN JOHN AUGUSTINE; O BRIEN JOHN AUGUSTINE; FINNEGAN HENDERSON FARABOW GARRETT AND DUNNER LLP; SUGHRUE MION PLLC; JONATHAN

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): A61B17/22 A61F2/01 A61F2/06 A61F2/82 A61F2/84 A61F2/95 A61F2/962 A61F2/966 A61K45/00 A61M25/00 A61M25/01 A61M25/08 A61M25/088 A61M25/09 A61M25/16 A61M29/00 A61M5/178 A61P11/08 A61P29/00 A61P43/00 A61P5/00 A61P9/08 C07K14/705 C07K16/28 C12N1/15 C12N1/19 C12N1/21 C12N15/09 C12N15/63 C12N5/10 C12P21/02 C12P21/08 C12Q1/02 G01N33/15 G01N33/50 (Advanced/Invention); A61F2/01 A61K38/00 (Advanced/Non–invention); A61F2/01 A61F2/06 A61F2/82 A61M25/00 A61M25/01 A61M25/08 A61M25/088 A61M25/09 A61M25/16 A61M29/00 (Core/Invention)

International class (IPC 1–7): A01N37/18 A61F11/00 A61F2/00 A61F2/01 A61F2/06 A61K31/00 A61K45/00 A61M25/00 A61M25/01 A61M25/08 A61M25/088 A61M25/09 A61M25/16 A61M29/00 A61M5/178 A61P11/08 A61P29/00 A61P43/00 A61P5/00 A61P9/08 C07H21/02 C07H21/04 C07K1/00 C07K14/47 C07K14/705 C07K16/00 C07K16/18 C07K16/28 C12N1/15 C12N1/19 C12N1/21 C12N15/00 C12N15/09 C12N15/12 C12N15/63 C12N15/85 C12N5/06 C12N5/10 C12P21/02 C12P21/06 C12P21/08 C12Q1/02 G01N33/15 G01N33/50 G01N33/53 G01N33/68

CPC: C07K14/705 A61K38/00 A61F2002/018 A61F2230/0006 A61F2230/0008 A61F2230/0067 A61M2025/0183 A61F2/013 A61F2002/9517 A61F2/966 A61F2/95 A61F2002/011 A61F2002/9528

European class: A61F2/01D A61F2/06S2 A61F2/95 A61F2/966 C07K14/705 K61F2/01B K61F2/95H K61F2/95R K61F2/966 K61K38/00 K61M25/01M M07K203/02 M07K215/00

US class:

435/320.1 435/320.100S 435/325 435/325S 435/69.1 435/69.100P 514/1 514/1S 530/350 530/350S 530/388.1 530/388.100S 536/23.5 536/23.500S 604/164.09 604/164.090S 604/164.13 604/164.130P 606/108 606/108P 606/194 606/194P 606/200 606/200P 606/200S 623/1.11 623/1.110S

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Abstract:
Source: US2003093106A A delivery catheter 200 for rapid exchange delivery of an embolic protection filter 301 over a guidewire 22, and rapid exchange deployment of the filter 301 at a desired site in a vasculature. The delivery catheter 200 comprises a catheter body 2, a restraining sheath 10 and an elongate pull wire 9. The catheter body 2 comprises a proximal hypotube portion 5 and a radially offset distal spring pusher 6. The restraining sheath 10 is movable in a sliding manner relative to the catheter body 2 upon retraction of the wire 9, and the distal end of the pusher 6 is engageable with the filter 301 in a reception space 11 upon retraction of the sheath 10 to deploy the filter 301 out of the reception space 11. The pusher 6 has a guidewire lumen 16 and a proximal guidewire opening 17 for passage of the guidewire 22 through the lumen 16 and out through the proximal guidewire opening 17 in a rapid exchange manner.

0) US2003167799A – METHOD AND A MACHINE FOR THE PRODUCTION OF HOLL...

8) Family number: 46663700 (US2003167799A) © PatBase

Title: METHOD AND A MACHINE FOR THE PRODUCTION OF HOLLOW GLASSWARE ARTICLES

Priority:

AU20030209600 20030306	AU20090202275 20090605	US20020093431 20020307
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US20080156109 20080528	US20080154480 20080522	US20080156171 20080530

Family:

Publication number	Publication date	Application number	Application date
AR038908 AA	20050202	AR2003P100800	20030307
AU2003209600 AA	20030916	AU20030209600	20030306
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BRPI0307750 B1	20121211	BR2003PI07750	20030306
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Probable Assignee: VITRO SAB DE CV

Assignee(s):(std)**:** SADA TREVINO ADRIAN ; TIJERINA RAMOS VICTOR ; VITRO GLOBAL S A ; VITRO GLOBAL SA

Assignee(s): VITRO SAB DE CV ; COMPANIA VIDRIERA DE CV SA

Inventor(s):(std)**:** ADRIAN SADA TREVINO ; RAMOS VICTOR TIJERINA ; SADA TREVI UMLAUT OVER N O ADRIAN ; ADRIAN SADA TREVI O ; SADA TREVIN O ADRIAN ; SADA TREVINO ADRIAN ; TIJERINA RAMOS VICTOR ; TIKHERINA RAMOS VIKTOR ; TREVINO ADRIAN SADA ; VICTOR TIJERINA RAMOS

Inventor(s): TIJERINA ROMOS VICTOR ; SADA TREVIN'O ADRIAN ; ADRIAN SADA TREVI plus or minus O ; SADA TREVI{UMLAUT OVER (N)}O ADRIAN

Agent(s): SPRUSON AND FERGUSON; JAY S CINAMON ABELMAN FRAYNE AND SCHWAB; ABELMAN FRAYNE AND SCHWAB

Designated states: AT AU BE BG BR CH CN CY CZ DE DK EE ES FI FR GB GR HU IE IN IT JP LI LU MC MX NL PT RO RU SE SI SK TR

International class (IPC 8–9): C03B11/00 C03B11/06 C03B11/10 C03B11/16 C03B7/01 C03B9/00 C03B9/13 C03B9/16 C03B9/193 C03B9/197 C03B9/29 C03B9/30 C03B9/323 C03B9/335 C03B9/34 C03B9/347 C03B9/353 C03B9/36 C03B9/38 C03B9/40 C03B9/41 C03B9/44 C03B9/447 C03B9/453 (Advanced/Invention); C03B11/06 C03B11/16 C03B7/00 C03B9/00 (Core/Invention)

International class (IPC 1–7): C03B C03B0/00 C03B9/00 C03B9/16 C03B9/193 C03B9/20 C03B9/29 C03B9/30 C03B9/34 C03B9/347 C03B9/353 C03B9/36 C03B9/38 C03B9/44

CPC: C03B9/3866 C03B9/165 C03B9/1932 C03B9/1936 C03B9/292 C03B9/342 C03B9/347 C03B9/3535 C03B9/3618 C03B9/3627 C03B9/3645 C03B9/369 C03B9/3816 C03B9/3825 C03B9/3875 C03B9/40 C03B9/41 C03B11/10 C03B11/16

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US class: 65/157 65/158 65/159 65/161 65/167 65/170 65/172 65/173 65/207 65/215 65/224 65/225 65/227 65/229 65/230 65/232 65/233 65/235 65/236 65/239 65/240 65/241 65/243 65/260 65/261 65/266 65/266P 65/267 65/29.1 65/29.11 65/291.1 65/302 65/304 65/307 65/314 65/318 65/322 65/355 65/356 65/68 65/72 65/79 65/8 65/80 65/82

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US2005147712, RU2603861, RU2592317, JP2014073957, JP2011505321, JP2010526760, JP2010505738, EP1568663, EP1568663, DE102014011310, DE102014001740, CN105314822, CN104512997, CN104071968, CN104071968, CN102442789, CN102442789, CN102320717, CN102211852, AU2008331887,

Abstract:
Source: US2003167799A A method and a machine for the production of hollow glassware articles, by the blow−and−blow, press−and−blow, press−and−blow paste mold and direct−press processes in a glassware forming machine including single or multiple machine sections each having single or multiple−cavity, comprising: forming a parison in an inverted orientation, into a blank mold and a first transferable and open−able neck ring mold held by an inverting apparatus having a first and a second diametrically opposed arms, each arm holding a transferable and open−able neck ring mold; inverting the parison held by the first transferable and open−able neck ring mold, by rotating the first arm 180 degrees to an upright orientation at an intermediate station, while the second arm with a second transferable and open−able neck ring mold is simultaneously placed at the parison forming station; transferring the first transferable and open−able neck ring mold holding the parison in an upright orientation, from the intermediate station, to a blow mold station, by a transference apparatus; releasing the first parison into a blow mold, and turning back the first transferable and open−able neck ring mold empty to the first arm of the inverting apparatus, at the intermediate station to be placed again at the parison forming station by rotating the first arm additional 180 degrees, completing a 360 degrees turn, while the second arm reaches to the intermediate station; blowing the parison into a blow mold to form a finished article; and transferring the finished article in an upright orientation, once the blow mold is opened, by a take out apparatus, to place it at a dead plate or at a carrying conveyor.

0) ZA201102200A – "CYLINDER ASSEMBLIES AND KEYS FOR CYLINDER ASSE...

9) Family number: 42453282 (ZA201102200A) © PatBase

Title: "CYLINDER ASSEMBLIES AND KEYS FOR CYLINDER ASSEMBLIE"

Priority: GB20080016058 20080903 GB20080016060 20080903 GB20080016063 20080903 GB20080016061 20080903 WO2009GB02123 20090903

Family:

Publication number	Publication date	Application number	Application date
AU2009289055 AA	20100311	AU20090289055	20090903
AU2009289055 BB	20141009	AU20090289055	20090903
GB200816058 A0	20081008	GB20080016058	20080903
GB200816060 A0	20081008	GB20080016060	20080903
GB200816061 A0	20081008	GB20080016061	20080903
GB200816063 A0	20081008	GB20080016063	20080903
GB2453623 A1	20090415	GB20080016058	20080903
GB2453623 B2	20090826	GB20080016058	20080903
GB2453624 A1	20090415	GB20080016060	20080903
GB2453624 B2	20090826	GB20080016060	20080903
GB2453625 A1	20090415	GB20080016061	20080903
GB2453625 B2	20090826	GB20080016061	20080903
GB2453626 A1	20090415	GB20080016063	20080903
GB2453626 B2	20090826	GB20080016063	20080903
NZ592048 A	20130628	NZ20090592048	20090903
WO10026381 A1	20100311	WO2009GB02123	20090903
ZA201102200 A	20120725	ZA20110002200	20110324

Probable Assignee: ASSA ABLOY LTD

Assignee(s):(std)**:** ASSA ABLOY AUSTRALIA PTY LTD ; ASSA ABLOY LTD ; MCCARTHY BRUCE PATRICK

Assignee(s): ASSA ABLOY LIMITED

Inventor(s):(std)**:** MCCARTHY BRUCE PATRICK

Inventor(s): BRUCE PATRICK MCCARTHY

Agent(s): PHILLIPS ORMONDE FITZPATRICK

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): E05B19/00 E05B27/00 (Advanced/Invention); E05B19/00 E05B27/00 (Core/Invention); E05B (Subclass/Invention)

CPC: E05B27/0021 E05B19/0023 E05B19/0052 E05B19/0017

European class: E05B19/00K E05B19/00K1 E05B27/00A3B P05B19/00K P05B19/00K1 P05B19/00K4M P05B27/00A3B

Classification Explorer

Cited documents: WO04001165 A1, US5222383 A, US3818732 A, US2653467 A, US2007028658 AA, US1095500 A, JP55126672 A2, GB2410292 A1, GB1586799 A, EP1394341 A1, EP0396492 A2, DE2038039 A1, AT395262 B,

Forward Citations: WO14148994, WO14107254, WO14107254, JP2016502010, CN104968874,

Abstract:
A pin tumbler cylinder assembly comprises a cylinder housing (501), a plug (502) rotatably mounted in the cylinder housing, a keyway extending along the longitudinal axis of the plug and open at a front end of the plug to allow insertion of a key, a plurality of tumbler pin passageways extending inwardly from the circumference of the plug (502) to the keyway, and a plurality of driver pin passageways extending outwardly from the interior of the cylinder housing (501), the tumbler pin passageways being aligned with the driver pin passageways in one rotational position of the plug (502). A plurality of tumbler pins (3) are slidably mounted in respective tumbler pin passageways. The tumbler pins (3) include telescopic tumbler pin assemblies including an outer pin and an inner pin slidably mounted in the outer pin. In one form of telescopic tumbler pin assembly an inner pin (3D) engages a dome (23) in a notch of a key blade; in another form of telescopic tumbler pin assembly an inner pin (3B) is received in a cavity (201) in a notch of a key blade.

0) US2001017068A – SCREWDRIVER WITH DUAL CAM SLOT FOR COLLATED SCR...

10) Family number: 29791981 (US2001017068A) © PatBase

Title: SCREWDRIVER WITH DUAL CAM SLOT FOR COLLATED SCREWS

Priority:

AU19980094122	19981124	CA19952189026	19950427	CA19952325281	19950427
CA19962182765	19960806	CA19982293615	19980619	CA19972207647	19970612
CA19982254416	19981120	CA19972511722	19970612	CA19962623342	19960806
CA19982312292	19980619	CA19972207763	19970613	CA20002293615	20000801
US19960754543	19961121	EP19980309551	19981123	US19960771962	19961223
US19950545399	19951019	US19980140218	19980826	US19970879910	19970620
US19940233909	19940428	US19940198129	19940217	US19970882323	19970625
US19990313848	19990518	US19960673398	19960628	US19950511945	19950807
US19940233090	19940428	US19970786662	19970121	US19930018897	19930217
US19930018897	19930217	WO1995CA00253	19950427	US20040007739	20041208
WO1998CA00601	19980619	WO1998CA00601	19980619	US20000517771	20000303
US20010843544	20010426	US20030689466	20031020	US20020252751	20020923
WO1994CA00082	19940216	WO1994CA00082	19940216		

Family:

Publication number	Publication date	Application number	Application date
AT159676 E	19971115	AT19940906808T	19940216
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AU199894122 A5	20000525	AU19980094122	19981124
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CA2189026 C	20010220	CA19952189026	19950427
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CA2254416 C	20080219	CA19982254416	19981120
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CA2312292 B	20131126	CA19982312292	19980619
CA2312292 C	20040224	CA19982312292	19980619
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CA2511722 C	20090331	CA19972511722	19970612

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CA2623342 C	20101214	CA19962623342	19960806	
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US5337635 A	19940816	US19930018897	19930217	
US5469767 A	19951128	US19940198129	19940217	
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US5699704 A	19971223	US19950545399	19951019	
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US5819609 A	19981013	US19970879910	19970620	
US5870933 A	19990216	US19960771962	19961223	
US5927163 A	19990727	US19960673398	19960628	
US5934162 A	19990810	US19970882323	19970625	
US5943926 A	19990831	US19970786662	19970121	
US6055891 A	20000502	US19980140218	19980826	
US6089132 A	20000718	US19990313848	19990518	
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US6453780 BB	20020924	US20010843544	20010426	
US6959630 BB	20051101	US20030689466	20031020	
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WO9419156 A1	19940901	WO1994CA00082	19940216	
WO9529794 A1	19951109	WO1995CA00253	19950427	
WO9900221 A1	19990107	WO1998CA00601	19980619	

Probable Assignee: SIMPSON STRONG TIE CO INC

Assignee(s):[(std)]**:** HABERMEHL G LYLE ; LYLE HABERMEHL G ; HABERMEHL LYLE G ; G LYLE HABERMEHL ; SIMPSON STRONG TIE CO INC

Assignee(s): HALE TROY D ; KEPLEY WILLIAM STACY ; SCHERER PAUL TOWNSEND ; HABERMEHL G ; HABERMEHL G L ; JII RAIRU HEIBAAMEERU ; SIMPSON STRONG TIE COMPANY INC ; HABERMEHL G LYLE GALLATIN TENN ; HABERMEHL G LYLE GALLATIN TENN US ; HABERMEHL G LYLE WHITES CREEK TENN US

Inventor(s):(std) HABERMEHL G L ; SCHERER PAUL TOWNSEND ; PAUL TOWNSEND SCHERER ; HABERMEHL LYLE G ; HABERMEHL LYLE ; HABERMEHL G LYLE ; G LYLE HABERMEHL ; KEPLEY WILLIAM STACY ; HALE TROY D

Inventor(s): HABERMEHL G LYLE WHITES CREEK TENN US ; SCHERER PAUL ; HABERMEHL G ; HABERMEHL G LYLE WHITES CREEK TENN ; JII RAIRU HEIBAAMEERU ; SCHERER PAUL T ; POORU TAUNSENDO SHIYAARAA ; SCHERER PAUL TOWNSEND LEXINGTON KENTUCKY 40514 US

Agent(s): WRAYS; RICHES MCKENZIE AND HERBERT LLP; VIERRA MAGEN MARCUS HARMON AND DENIRO LLP; VIERRA MAGEN MARCUS HARMON DENIRO LLP; VIERRA MAGEN MARCUS AND DENIRO 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 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): B23P19/06 B25B21/00 B25B23/04 B25B23/08 B65D85/24 F16B15/08 F16B25/00 F16B27/00 (Advanced/Invention);
B23P19/06 F16B27/00 (Advanced/Non–invention);
B25B23/02 F16B25/00 F16B27/00 (Core/Invention)

International class (IPC 1–7): B23P19/06 B25B21/00 B25B23/00 B25B23/02 B25B23/04 B25B23/06 B25B23/08 B65D73/00 B65D85/24 F16B15/08 F16B27/00

CPC: Y10S206/82 F16B25/00 B25B23/045 F16B27/00

European class: B25B23/04B F16B25/00 F16B27/00

US class: 206/347 206/820 222/136 227/136 81/434 81/434P 81/57.37

Classification Explorer

Cited documents: WO9724205 A1, US6453780 BB, US6244140 BA, US6089132 A, US5934162 A, US5927163 A, US5870933 A, US5758768 A, US5622024 A, US5570618 A, US5568753 A, US5544746 A, US5542323 A, US5531142 A, US5517883 A, US5473965 A, US5469767 A, US5452630 A, US5443345 A, US5409111 A, US5402695 A, US5402659 A, US5341706 A, US5339713 A, US5337635 A, US5303620 A, US5284074 A, US5231900 A, US5186085 A, US5168085 A, US5167174 A, US5083483 A, US5031489 A, US5027679 A, US4998452 A, US4930635 A, US4930630 A, US4809568 A, US4684022 A, US4625597 A, US4607761 A, US4581964 A, US4428261 A, US4404877 A, US4383608 A, US4367837 A, US4167229 A, US4146071 A, US4062388 A, US4040325 A, US4019631 A, US4018254 A, US4014488 A, US4014225 A, US3930297 A, US3920324 A, US3910324 A, US3885669 A, US3830364 A, US3826419 A, US3623646 A, US3601168 A, US3592339 A, US3587842 A, US3554246 A, US3550831 A, US3515271 A, US3167778 A, US2982595 A, US2009580 A, US197609 A, US1815594 A, US1815559 A, US1436161 A, GB2147873 A1, GB2132531 A1, FR2374225 A1, FR2364742 A1, EP0790103 A2, EP0738564 A1, EP0248101 A1, DE4340570 A1, DE4119925 A1, DE3144248 A1, DE3144248, DE3141248 A1, DE2750562 A1, DE2444457 A1, DE2363974 A1, CA1054982 A1, CA1040600 A1,

Forward Citations: WO9937504, WO9914017, WO9914017, WO9847668, WO17096391, WO13182415, WO11119904, WO07118002, WO05059378, WO04041481, WO03027517, USD704018, USD693210, USD677147, USD662808, USD567075, USD469344, USD469007, USD440137, US9713471, US9713468, US9573260, US9452514, US9416514, US9346157, US9283020, US9144896, US9120214, US9120141, US9051726, US8955210, US8925644, US8845649, US8820198, US8747043, US8672204, US8544369, US8480343, US8469252, US8453905, US8439244, US8413740, US8382414, US8356534, US8262669, US8152038, US7971768, US7866521, US7815086, US7565992, US7410084, US7406899, US7341146, US7249701, US7134367, US7111767, US7111767, US7104167, US7051875, US7032482, US7029220, US6981630, US6966476, US6959630, US6941847, US6915724, US6892922, US6862963, US6845693, US6843400, US6813977, US6769332, US6699255, US6676001, US6671946, US6655573, US6647836, US6601480, US6585113, US6568302, US6547120, US6494322, US6481611, US6453780, US6439085, US6431036, US6425306, US6407529, US6363818, US6331758, US6273316, US6244140, US6230594, US6212980, US6186385, US6186035, US6170366, US6164170, US6138535, US6123244, US6089132, US6085616, US6074149, US6055891, US5943926, US5934162, US5890405, US5870933, US5855151, US5826468, US5819609, US5531143, US2015158158, US2014331474,

US2014304973, US2013140053, US2013134204, US2012227256, US2012172885, US2012160890, US2012125971, US2012111919, US2012017728, US2011170985, US2011170984, US2011167757, US2010303583, US2010187283, US2010179559, US2010051490, US2010019014, US2009314143, US2009308207, US2009228055, US2009114697, US2009020582, US2008290128, US2008276761, US2008223898, US2008184854, US2008105725, US2008089760, US2007079672, US2007044291, US2007012744, US2006236815, US2005247751, US2005135898, US2005133392, US2005097999, US2005035172, US2005023323, US2005022634, US2004221692, US2004221691, US2004188490, US2004188489, US2004182208, US2004177729, US2004139822, US2004123704, US2004099105, US2004089118, US2004079206, US2004045999, US2004035906, US2003133768, US2002184978, US2001000404, TWI442990, KR100882524, JP5677614, JP4442080, JP4331448, JP2008264939, JP2007514900, JP2006505415, JP2003172325, JP2003136430, JP2003097529, GB2414222, GB2414222, GB2367779, GB2367779, GB2352668, EP2730374, EP2532479, EP2402118, EP2394791, EP2055437, EP1753582, EP1283091, EP1283091, EP1004404, EP0757935, DE10354294, DE10013793, CN106061683, CN105965430, CN105881440, CN105215914, CN105215914, CN105082043, AU759651, AU743441, AU702558, AU2015234392, AU2004299527, AU2003283141, AU2002300051,

Abstract:
Source: US2001017068A A screwdriver for driving collated screws including a slide body coupled to a housing for reciprocal displacement in a cycle including a retraction stroke and an extension stroke. A lever pivotably mounted to the slide body carries at one end a cam pin received in a cam slot in the housing with the other end of the lever advancing successive screws in the screwstrip, the cam slot having first and second camming surfaces for selective engagement by the cam pin to vary the relative positioning of the lever to be different for the same position if the slide body in the housing in the retraction strokes than in the extension stroke.

0) US2008236223A – KEY COMBINATION ELEMENT IN KEY BLANK AND KEY

11) Family number: 30610409 (US2008236223A) © PatBase

Title: KEY COMBINATION ELEMENT IN KEY BLANK AND KEY

Priority: EP20050718921 20050328 GB20040007196 20040330 GB200400196–5 20040330 IL20060178364 20060928 WO2005IL00348 20050328

Family:

Publication number	Publication date	Application number	Application date
AP200603780 A0	20061031	AP20060003780	20050328
AP2013 A	20090722	AP20060003780	20050328
AT415534 E	20081215	AT20050718921T	20050328
AU2005229301 AA	20051013	AU20050229301	20050328
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CA2559702 C	20110104	CA20052559702	20050328
CN1961127 A	20070509	CN200580010508	20050328
CN1961127 B	20110907	CN200580010508	20050328
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RS50719 B	20100831	RS20090000025	20050328
SI1738044 T1	20090430	SI20050030549T	20050328
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Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** BEN AHARON EFFI ; DANI MARKBREIT ; EFFI BEN AHARON ; MARKBREIT DANI ; MUL ; MUL T LOCK TECHNOLOGIES ; MUL T LOCK TECHNOLOGIES LTD ; MULT T LOCK TECHNOLOGIES LTD

Inventor(s):(std)**:** BEN AHARON ; BEN AHARON EFFI ; DANI MARKBREIT ; EFFI BEN AHARON ; MARKBREIT ; MARKBREIT DANI ; MARKBREITDANI DANI

Inventor(s): MARKBREIT DANI BEN AHARON EFFI

Agent(s): SPRUSON AND FERGUSON; BULL HOUSSER AND TUPPER LLP; WHITE DUNCAN ROHAN; DEKEL PATENT LTD; DAVID KLEIN DEKEL PATENT LTD; DAVID

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): E05B19/00 E05B19/06 E05B19/08 E05B27/00 E05B29/08 E05B31/00 E05B35/00 (Advanced/Invention); E05B19/00 E05B27/00 E05B35/00 (Advanced/Non–invention); E05B19/00 E05B27/00 E05B35/00 (Core/Invention); E05B (Subclass/Invention)

International class (IPC 1–7): E05B E05B19/00 E05B19/08 E05B27/00 E05B35/00

CPC: E05B19/0035 E05B27/00 E05B27/0085 E05B35/003 Y10T70/7565 Y10T70/7616 Y10T70/7802 Y10T70/7825 Y10T70/7876 Y10T70/7881 E05B35/004 E05B19/0058 E05B27/0042 E05B35/00

European class: E05B19/00K3 E05B27/00 E05B27/00F E05B27/00W E05B35/00F E05B35/00F2 P05B19/00K4M1

US class: 70/358 70/358P 70/395 70/395S 70/399 70/408 70/409 70/495

Classification Explorer

Cited documents: WO0057006 A1, WO0057006, US6681609 BA, US6508091 BA, US6490898 BA, US6257033 BA, US6257033, US5839308, US5784910, US5724841 A, US5724841, US5520035, US5437176 A, US5437176, US5170651 A, US4667495 A, GB2161204 A1, EP0416500 A1,

Forward Citations: WO13169760, WO12115887, WO11086546, WO09147660, WO09147660, WO08139475, WO08139475, WO06137070, US9523217, US9506272, US9151077, US9140034, US9103139, US8966949, US8950226, US8915107, US8746025, US8387425, US8336350, US8261587, US2017081879, US2015345177, US2015121977, US2015047398, US2015013404, US2013327102, US2013000368, US2011252846, US2011072867, TWI456109, GB2463289, EP2003272, CN105658885, CN103608537, CN102392556, CN102392556,

Abstract:
Source: US2008236223A A key blank including a generally elongate shaft portion defining first and second generally flat oppositely directed side surfaces, joined by edge surfaces, at least one of the first and second side surfaces cuttable to form key cuts that define a key combination surface, and at least one key combination element movably disposed in the elongate shaft portion and adapted for touching a lock combination element disposed in a cylinder lock plug, wherein the at least one key combination element has inherent energy for applying an urging force against the lock combination element. A key formed from the key blank and lock therefore are also disclosed.

0) US5520035A – LOCKING APPARATUS

12) Family number: 11262417 (US5520035A) © PatBase

Title: LOCKING APPARATUS

Priority: CA19942112851 19940105 IL19930104349 19930108 US19970961258 19971030 US19960613664 19960311 US19940340352 19941114 US19930009069 19930126

Family:

Publication number	Publication date	Application number	Application date
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AT154089 E	19970615	AT19930203734T	19931231
AU199453073 A1	19940714	AU19940053073	19940106
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CA2112851 AA	19940709	CA19942112851	19940105
CA2112851 C	19990518	CA19942112851	19940105
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ZA9309721 A	19940829	ZA19930009721	19931228	

Probable Assignee: MUL T LOCK LTD

Assignee(s):(std)**:** MUL LOCK LTD ; MUL T LOCK LIMITED ; MUL T LOCK LTD ; MURUUT LOCK LTD ; MUT T LOCK LTD ; MULT T LOCK LTD AN IZRAEL COMP ; MULT LOCK LTD ; MULT T LOCK LTD AN IZRAEL CO O ; MULT T LOCK LTD

Assignee(s): MUL T LOCK LTD YAVNE ; MULT LOCK LIMITED ; MUL T LOCK LTD YAVNE IL ; MULT T LOCK LTD AN IZRAEL COMPANY OF SOUTHERN INDUSTRIAL ZONE ; MULT T LOCK LTD AN IZRAEL CO OF SOUTHERN INDUSTRIAL ZONE ; MULT T LOCK LTD AN IZRAEL CO OF SOUTHERN INDUSTRIA ; MULT T LOCK LTD AN IZRAEL COMPANY OF SOUTHERN INDU ; MURUUTEII ROTSUKU LTD ; EIZEN NOACH ; MAL TI LOK LTD ; MAL−TI−LOK LTD. ; MARKBREIT DANI

Inventor(s):(std)**:** DANI MAAKUBUREITO ; DANI MARKBRAJT ; DANI MARKBREIT ; EIZEN NOACH ; MARKBRIT DANI ; NOA AJZEN ; NOACH EIZEN ; NOAKU EIZEN ; EIZEN NOAH ; MARKBREIT DANI

Inventor(s): MARKBREIT DANI AZOR 58003 IL ; EIZEN NOACH RISHON LEZION IL

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; BULL HOUSSER AND TUPPER LLP; ALESSANDRI; REINHOLD COHN AND PARTNERS

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

International class (IPC 8–9)**:** E05B19/00 E05B19/08 E05B19/10 E05B19/18 E05B19/22 E05B27/00 E05B27/04 E05B27/06 E05B27/10 E05B35/00 E05B67/24 H01L27/32 H01L51/50 H01L51/52 H05B33/12 H05B33/22 (Advanced/Invention);

E05B19/00 E05B27/00 E05B35/00 E05B67/00 H01L27/28 H01L51/50 H05B33/12 H05B33/22 (Core/Invention)

International class (IPC 1–7): A61K37/02 B21D53/42 E05B15/14 E05B18/00 E05B19/00 E05B19/02 E05B19/06 E05B19/08 E05B19/10 E05B19/12 E05B19/18 E05B19/22 E05B21/00 E05B21/06 E05B27/00 E05B27/04 E05B27/06 E05B27/10 E05B29/00 E05B35/00 E05B37/00 E05B61/00 E05B67/24 E05B9/00

CPC: Y10T70/7565 Y10T70/7571 Y10T70/7802 Y10T70/7819 Y10T70/7881 E05B19/00 E05B19/0023 E05B19/0058 E05B27/0007 E05B27/0014 E05B27/0021 E05B35/003 E05B67/24

European class: E05B19/00 E05B19/00K1 E05B27/00A3B E05B35/00F E05B67/24 P05B19/00K4M1 P05B27/00A1 P05B27/00A2 P05B27/00A3B

US class: 70/358 70/359 70/395 70/398 70/409

Classification Explorer

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Forward Citations: WO16161530, WO15004192, WO14107666, WO13169952, WO12115887, WO11135569, WO11086546, WO10027760, WO08111089, WO08111089, WO08015672, WO06092779, WO05085567, WO04048724, WO04001165, WO0177466, WO0065181, WO0057006, WO0053870, USD496707, US9631401, US9523217, US9359793, US9151077, US9140034, US9103139, US9045915, US8950226, US8915107, US8875552, US8794043, US8746025, US8671725, US8387425, US8336350, US8096155, US7392676, US7207200, US7181941, US7086259, US6912881, US6823702, US6681609, US6615628, US6490898, US6257033, US6125674, US6109081, US6101855, US5839308, US5823029, US5819566, US5784910, US2015121977, US2015013404, US2014352375, US2014190223, US2013327102, US2013298623, US2013192320, US2013061643, US2012192603, US2012055212, US2011252846, US2011214462, US2011146360, US2011072867, US2010050716, US2009113965, US2009078010, US2007220937, US2007113606, US2007051146, US2006272372, US2006260371, US2006027004, US2006021405, US2005210939, US2005204788, US2004172995, TWI456109, KR20110053384, KR101077872, JP2012502205, GB2463289, ES2331394, EP3184715, EP2998471, EP2868846, EP1921232, EP1738044, EP1728944, EP1728944, EP1593800, EP1355023, DE19823699, CZ299579, CN105408565, CN105102742, CN104831999, CH710950, BG001077, AU784184, AU2016201029, AU2011202516, AU2010235953, AU2009288413,

Abstract:
Source: US5520035A A key blank including a generally elongate shaft portion defining a key combination surface adapted to have formed thereon key cuts which define a key combination, the key blank including a movable pin element retained within the elongate shaft portion, the movable pin element being displaceable in a single direction, outwardly from the key combination surface.

0) US2005248914A – NOTEBOOK COMPUTER LOCKING BASE

13) 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
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US20140270085 20140505 US20140486470 20140915 US20150949067 20151123
US20170424950 20170206

Family:

Publication number	Publication date	Application number	Application date
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CA2787270 AA	20120716	CA20112787270	20110120
CN102782604 A	20121114	CN201180007078	20110120
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IN06119DN2012 A	20131129	IN2012DN06119	20120710
MX2012008396 A1	20120815	MX20120008396	20110120
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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
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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
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US9206626 BB	20151208	US20140486470	20140915
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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 ; MARSZALEK ANDRZEJ ; PETER ALLEN

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

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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, US9722355, US9717329, US9717328, 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.

14) Family number: 44517676 (US2011146360A) © PatBase

Title: MOVABLE KEY COMBINATION ELEMENT AND LOCK ASSEMBLY

Priority: EP20090736714 20090825 IL20080193931 20080907 WO2009US54835 20090825 US20110062011 20110303 US20130783431 20130304

Family:

Publication number	Publication date	Application number	Application date
AP201105632 A0	20110430	AP20110005632	20090825
AP3112 A	20150131	AP20110005632	20090825
AR073269 AA	20101028	AR2009P103348	20090901
AU2009288413 AA	20100311	AU20090288413	20090825
AU2009288413 BB	20150625	AU20090288413	20090825
BRPI0919299 A2	20151215	BR2009PI19299	20090825
CA2735742 AA	20110301	CA20092735742	20090825
CA2735742 C	20140429	CA20092735742	20090825
CL2011000486 A1	20111007	CL20110000486	20110307
CL49817 B	20140207	CL20110000486	20110307
CN101684697 A	20100331	CN200910173113	20090907
CN101684697 B	20131016	CN200910173113	20090907
CO6351818 A2	20111220	CO20110027446	20110307
CR20110122 A	20110607	CR20110000122	20110307
DE602009012256 D1	20130307	DE200960012256T	20090825
DK2329088 T3	20130408	DK20090736714T	20090825
EA018244 B1	20130628	EA20110000467	20090825
EA201100467 A1	20110830	EA20110000467	20090825
ECSP11010871 A	20110630	EC2011SP10871	20110304
EP2329088 A1	20110608	EP20090736714	20090825
EP2329088 B1	20121226	EP20090736714	20090825
ES2402202 T3	20130429	ES20090736714T	20090825
HK1152088 A1	20130712	HK20110106114	20110615
HN2011000694 A	20111222	HN20110000694	20110307
HR20130185 T1	20130531	HR20130000185	20130304
IL193931 A0	20090504	IL20080193931	20080907
IL193931 A1	20120131	IL20080193931	20080907
JP2012502205 T2	20120126	JP20110526107T	20090825
JP5587889 B2	20140910	JP20110526107T	20090825
KR101595320 B1	20160222	KR20117007986	20090825
KR20110053384 A	20110520	KR20117007986	20090825
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MX2011002458 A1	20110405	MX20110002458	20090825
NZ591537 A	20120629	NZ20090591537	20090825
PE09012011 A1	20120118	PE20110000450	20090825
PT2329088 T	20130328	PT20090736714T	20090825
TH139396 A	20150130	TH20091003989	20090904
TW201014955 A	20100416	TW20090129145	20090828
TWI456109 B	20141011	TW20090129145	20090828
UA101390 C2	20130325	UA20110003150	20090825
US2011146360 AA	20110623	US20090062011	20090825

US2014190222 AA	20140710	US20130783431	20130304	
US8387425 BB	20130305	US20090062011	20090825	
US8794043 BB	20140805	US20130783431	20130304	
VN13354 A1	20141225	VN20110000912	20090825	
WO10027760 A1	20100311	WO2009US54835	20090825	
ZA201101653 A	20120530	ZA20110001653	20110303	

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** BEN AHARON EFFI ; DANI MARKBREIT ; EFFI BEN AHARON ; MUL T LOCK TECHNOLOGIES LTD ; MARKBREIT DANI ; KLEIN DAVID ; MUL T LOCK TECH LTD

Assignee(s): MUL T LOCK TECHNOLOGIES LTD IL

Inventor(s):(std)**:** MARKBREIT DANI ; BEN AHARON EFFI ; EFFI BEN AHARON ; DANI MARKBREIT ; MARKBREIT DANNI

Inventor(s): BEN−AHARON, EFFI

Agent(s): SPRUSON AND FERGUSON; BULL HOUSSER AND TUPPER LLP; REGEHR HERBERT B; CLARO Y CIA; MARKS AND CLERK LUXEMBOURG LLP; WHITE DUNCAN ROHAN; DEKEL PATENT LTD; DAVID; KLEIN DAVID

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): E05B19/00 E05B19/02 E05B19/04 E05B19/08 E05B27/00 E05B27/06 E05B35/00 (Advanced/Invention); E05B19/00 E05B35/00 (Advanced/Non−invention); B25B13/00 E05B19/00 E05B27/00 E05B35/00 (Core/Invention); E05B19/00 (Core/Non−invention); E05B (Subclass/Invention)

International class (IPC 1−7): E05B35/00

CPC: E05B19/00 E05B35/00 Y10T70/7588 Y10T70/7802 Y10T70/7819 Y10T70/7825 Y10T70/7859 Y10T70/7864 Y10T70/787 Y10T70/7881 Y10T70/7893 E05B35/003

European class: E05B35/00F

US class: 70/395 70/398 70/399 70/405 70/405S 70/406 70/407 70/409 70/411 70/490 70/490P

Classification Explorer

Cited documents: US7086259 BB, US6508091 BA, US5894750 A, US5839308 A, US5784910 A, US5520035 A, US5437176 A, US5170651 A, US5131247 A, US5123268 A, US5024071 A, US4434636 A, US4377082 A, US3877267 A, US2011146360 AA, US2011072867 AA, US2003074939 AA, US195118 A, JP7011821 A2, JP2006511738 T2, JP2006511738 T2, GB2412689 A1, FR2759406 A1, FR2522053 A1, EP1728944 A2, EP0416500 A1, DE1093253 B, CN1961127 A,

Forward Citations: WO14127810, WO13169760, WO12125512, US9523217, US9205500, US9140034, US9103139, US8915107, US8794043, US8746025, US2017081879, US2015345177, US2015211255, US2013298623, US2013152352, US2011252846, US2011072867, TWI547632, EA026875, CN105102742, CN103608537, CN102677971, CN102677971,

Abstract:
Source: US2011146360A A key device for use with more than one lock, the key device including a shaft portion, and at least one movable key combination element retained within the shaft portion and including first and second portions adjacent one another, the first portion of the at least one movable key combination element being located along on the shaft portion and the second portion of the at least one movable key combination element being located offset to the first portion.

0) US2006243873A – TELESCOPING POLE MOUNT

15) Family number: 33583903 (US2006243873A) © PatBase

Title: TELESCOPING POLE MOUNT

Priority: US20050118734 20050429 US20050120286 20050502 US20050125700 20050510 US20070002445 20071217 US20070784214 20070405 US20070974707 20071015 US20080069219 20080208

Family:

Publication number	Publication date	Application number	Application date
US2006243873 AA	20061102	US20050120286	20050502
US2006255215 AA	20061116	US20050118734	20050429
US2006261221 AA	20061123	US20050125700	20050510
US2007246633 AA	20071025	US20070784214	20070405
US2008035805 AA	20080214	US20070974707	20071015
US2008093514 AA	20080424	US20070002445	20071217
US2008138152 AA	20080612	US20080069219	20080208
US7398952 BB	20080715	US20050125700	20050510
US7523911 BB	20090428	US20050120286	20050502
US7594633 BB	20090929	US20070974707	20071015
US7802768 BB	20100928	US20050118734	20050429
US8020828 BB	20110920	US20080069219	20080208
US8550013 BB	20131008	US20070002445	20071217

Probable Assignee: CARNEVALI JEFFREY D

Assignee(s):(std)**:** CARNEVALI JEFFREY D

Inventor(s):(std)**:** CARNEVALI JEFFREY D

Inventor(s): CARNEVALI JEFFREY

Agent(s): CHARLES J RUPNICK; RUPNICK CHARLES J; CHARLES J; CHARLES J RUPNICK ATTORNEY AT LAW

International class (IPC 8–9)**:** A47B11/00 A47F5/00 F16B1/00 F16B2/14 F16M11/00 F16M13/00 (Advanced/Invention); A47F5/00 F16B1/00 F16B2/02 F16M11/00 F16M13/00 (Core/Invention)

CPC: F16M11/2078 F16M2200/024 F16M2200/027 F16M2200/066 F16M2200/068 F16M11/14 Y10T403/7051 Y10T403/32501 Y10T403/7066 Y10T403/7056 Y10T403/7069 Y10T403/7075 F16M13/02 F16B13/0891 F16M11/046 F16M11/2014 F16M11/28 F16M2200/08 F16B7/1418 F16M13/00

European class: F16B7/14 F16M11/04 F16M11/04T2 F16M11/20A1 F16M11/28 F16M13/00 F16M13/02 R16B13/08W R16M200/08

US class: 108/137 108/143 248/125.8 248/125.9 248/157 248/157P 248/159 248/159P 248/161 248/188.5 248/288.31 248/346.03 248/404 248/407 248/412 248/413 248/544 248/544P 403/109.5 403/367 403/370 403/374.2 403/374.4 403/376 403/376P

Classification Explorer

Cited documents: US7537190 BB, US7398952 BB, US7380760 BB, US7032872 BB, US7007909 BB, US6959899 BB, US6835021 BA, US6796446 BB, US6695270 BA, US6609686 BB, US6386786 BA, US6378466 BA, US6378446 BA, US6371682 BA, US6226134 BA, US6203239 BA, US6189843 BA, US612489 A, US6045109 A, US5897268 A, US5845885 A, US5540457 A, US5423566 A, US5330302 A, US5323600 A, US5244133 A, US5233304 A, US5232304 A, US5197349 A, US4976721 A, US4928916 A, US4720071 A, US4706916 A, US4695021 A, US4650145 A, US4627602 A, US4274301 A, US4230335 A, US4113222 A, US3885882 A, US3866724 A, US376016 A, US3737136 A, US3023063 A, US3004743 A, US2850308 A, US2643143 A, US2507760 A, US2291747 A, US2006261221 AA, US2006255215 AA, US1859223 A, US1103839 A,

Forward Citations: WO17007874, WO14078493, USD786955, USD775684, USD736600, USD735595, US9700666, US9637942, US9631767, US9625792, US9567800, US9534731, US9527614, US9470315, US9423672, US9423066, US9388934, US9377157, US9322505, US9305475, US9261226, US9220533, US9180925, US9101398,

US9080585, US9046117, US9027950, US8979399, US8945128, US8939413, US8834467, US8783975, US8702046, US8641714, US8500357, US8500081, US8474206, US8382410, US8272604, US8114077, US8062293, US8057474, US8037904, US7967261, US7802768, US7594633, US2016363253, US2015273703, US2015182690, US2014376990, US2014175237, US2014151516, US2014084568, US2014042285, US2013149024, US2012235358, US2012123414, US2011271516, US2011233351, US2011042543, US2011027012, US2010300039, US2010123055, US2010098509, US2009198236, US2009198235, US2009198234, US2008092970, US2008035805, US2007127763, US2006255215, US2006175502, TWI365152, RU2469215, GB2507133, FR3012568, FR3012567, FR3011511, FR3006507, EP2860046, CN102537603, AU2009200332, AU2007237197,

Abstract:
Source: US2006243873A A telescoping pole mount having a clamping mechanism, formed of a substantially rigid platform forming a substantially planar contact surface and having a clearance hole therethrough that is substantially crosswise to the platform contact surface; a substantially rigid arm formed with spaced−apart opposing substantially planar proximal and distal contact surfaces and being formed with a clearance hole therethrough between the opposing contact surfaces; a substantially rigid columnar rod passing through the respective clearance hole in the platform and arm, the rod being formed with threads at an end thereof adjacent to the arm; a substantially rigid threaded actuator having a substantially planar contact surface and being threadedly coupled to the threads formed at the end of the rod; and a thrust bearing between the actuator contact surface and the arm distal contact surface.

0) US3840284A – PORTABLE TELESCOPE

16) Family number: 1431075 (US3840284A) © PatBase

Title: PORTABLE TELESCOPE

Priority: US19720229341 19720225 US19730229341 19730226 US19740508046 19740923

Family:

Publication number	Publication date	Application number	Application date
AR197981 A1	19740524	AR19730247074	19730315
AT171073 A	19780215	AT19730001710	19730226
AT346105 B	19781025	AT19730001710	19730226
AU197352612 A1	19740829	AU19730052612	19730226
BR7301424 A0	19740516	BR19730001424	19730226
CH563591 A	19750630	CH19730002757	19730226
DE2309487 A1	19730913	DE19732309487	19730226
DE2309487 C2	19830120	DE19732309487	19730226
ES412049 A1	19760516	ES19730412049	19730224
FR2173335 A1	19731005	FR19730006790	19730226
FR2173335 B3	19760305	FR19730006790	19730226
GB1380373 A	19750115	GB19730009094	19730223
IL41643 A0	19730430	IL19730041643	19730228
IL41643 A1	19751231	IL19730041643	19730228
IT979473 A	19740930	IT19730020850	19730226
JP48100148 A2	19731218	JP19730023028	19730226
NL7302662 A	19730828	NL19730002662	19730226
US3840284 A	19741008	US19720229341	19720225
US3942865 A	19760309	US19740508046	19740923
ZA7301342 A	19740327	ZA19730001342	19730226

Probable Assignee: RAND A E

Assignee(s):(std): RAND A ; RAND A E ; RAND ALAN ; RAND ALAN E ; RAND ALAN US

Assignee(s): RAND ALAN EDWARD ATLANTA GA ; RAND ALAN EDWARD ATLANTA GA US ; RAND ALAN EDWARD ; RAND A US ; ALAN E RAND ; ALAN EDWARD RAND

Inventor(s):(std): RAND A ; RAND ALAN E ; RAND ALAN EDWARD

Inventor(s): RAND ALAN EDWARD ATLANTA GA ; RAND A US ; ALAN EDWARD RAND ; EDWARD RAND ALAN

Agent(s): ABRAHAM COHEN ADV

International class (IPC 8–9): G02B23/00 G02B23/16 (Advanced/Invention) ; G02B23/00 G02B23/16 (Core/Invention)

International class (IPC 1–7): G02B21/16 G02B23/00 G02B23/06 G02B23/16

CPC: G02B23/00 G02B23/06 G02B23/165

European class: G02B23/00 G02B23/16 G02B23/16E S02B23/06

US class: 350/8.3 359/430

Classification Explorer

Cited documents: US2967458 A, US2725783 A, US1118564 A, US1045142 A, DE1940657 A1,

Forward Citations: WO10089532, WO09057163, WO06005181, USD506766, US9678300, US9223126, US9128292, US8848290, US8514489, US7605318, US7174982, US7048238, US7035005, US6519084, US6118579, US5956177, US5822116, US5537250, US5437427, US5062699, US4865424, US4764881, US4436421, US4362354, US4260253, US4159576, US2015362694, US2012307356, US2012257275,

US2012019642, US2010085638, US2009025530, US2008212175, US2004262866, US2004218267, US2003116684, JP63174010, JP63004508, JP61024771, JP61004973, JP61004972, JP61004971, JP61002679, FR2883076, FR2728695, ES2122889, EP0785453, EP0601565, DE102010053212, DE102010053212, CN104252035, CN104252035, CN102866496,

Abstract:
Source: US3840284A A portable telescope assembly comprising a telescope mounted on portable support means. The portable support means includes a polar axis shaft, means for aligning the polar axis shaft parallel to the polar axis of the earth, means for revolving the telescope about the polar axis shaft, and means for rotating the telescope about an axis normal to the polar axis shaft. In addition, the polar axis shaft is balanced both torsionally and longitudinally with the telescope supported at one end and to one side of the polar axis shaft, with a fulcrum intermediate the ends of the polar axis shaft, and counterweights supported at the other end and on the other side of the polar axis shaft. The portable support means includes an air suspension system so that the assembly can be transported between erection sites without substantial hazard of damage due to vibrations or shocks. 17 Claims, 10 Drawing Figures

17) Family number: 48147546 (US2011081496A) © PatBase

Title: PERFLUOROPOLYETHER COATING COMPOSITION FOR HARD SURFACES

Priority:

AU20100269150	20100712	AU20100269152	20100712	AU20100269155	20100712
AU20100269162	20100712	AU20100269169	20100712	AU20100269171	20100712
AU20160200533	20160129	AU20160203621	20160531	AU20160204516	20160629
AU20160204364	20160624	AU20100269202	20100712	AU20160250433	20161027
AU20160250396	20161027	AU20170200767	20170203	CN201080040401	20100712
EP20100797393	20100712	EP20100797395	20100712	EP20100797399	20100712
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Probable Assignee: MILUX HOLDING SA

Assignee(s):(std)**:** IYER SURESH ; IMPLANTICA PATENT LTD ; MEDICALTREE PATENT LTD ; MILUX HOLDING S A ; MILUX HOLDING SA ; MILUX HOLDINGS SA ; MILUXHOLDING SA ; FAN WAYNE W ; FORSELL PETER ; MILUX HOLDIND SA ; KIRK PROMOTION LTD ; FORSELL PETER MATS ; MILAKS KHOLDING S A ; 3M INNOVATIVE PROPERTIES CO ; PETER FORSELL

Assignee(s): 3M INNOVATIVE PROPERTIES COMPANY ; MILAKS KHOLDING SA

Inventor(s):(std)**:** FORSELL PETER ; FORSELL PETER MATS ; FORSELL PITER ; PETER FORSELL ; SURESH IYER ; IYER SURESH ; FAN WAYNE W

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; WRAYS PTY LTD; FETHERSTONHAUGH AND CO; KILBURN AND STRODE LLP; HOEGLUND LARS; HERZOG FIESSER AND PARTNER; CARPINTERO MARIO; YAMAKAWA MASAKI; KENT S; BERGENSTRAHLE AND LINDVALL AB; KOKKO KENT S 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): A61B1/00 A61B1/04 A61B1/06 A61B1/317 A61B17/06 A61B17/064 A61B17/16 A61B17/17 A61B17/32 A61B17/34 A61B17/56 A61B17/68 A61B17/74 A61B17/88 A61B18/04 A61B19/00 A61B6/00 A61B6/12 A61F2/08 A61F2/28 A61F2/30 A61F2/32 A61F2/34 A61F2/36 A61F2/38 A61F2/40 A61F2/46 A61L24/00 A61L27/04 A61L27/14 A61L27/16 A61L27/50 A61L31/04 A61L31/14 A61M25/00 A61M37/00 A61M5/00 A61M5/142 B05D3/02 B05D7/24 B29C45/26 B65D5/38 B65D6/06 B65D83/02 B65D85/22 C04B41/84 C08K3/00 C09D183/00 C09D183/04 C09D183/08 F16N1/00 (Advanced/Invention); A61B17/00 A61B17/02 A61B17/16 A61B17/56 A61B17/68 A61B17/74 A61B17/80 A61B17/86 A61B17/88 A61B18/04 A61F2/30 A61F2/32 A61F2/34 A61F2/36 A61F2/38 A61F2/46 A61F2/48 A61L27/14 A61L27/16 A61L27/58 A61L31/04 A61L31/14 A61M5/142 (Advanced/Non–invention)

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US class: 1/1 106/287.11 106/287.16 425/2 425/2S 427/387 427/387P 428/447 524/263 524/263S 524/858 524/869 600/104 600/109 600/249 600/424 604/131 604/131S 604/151 604/151P 604/175 604/175S 604/19 604/257 604/257S 604/264 604/264P 604/264S 606/14 606/80 606/80P 606/80S 606/81 606/86.00RP 606/86R 606/91 623/14.12 623/14.120P 623/16.11 623/18.11 623/18.110P 623/20.14 623/20.31 623/20.310P 623/20.35 623/20.350P 623/22.11 623/22.110P 623/22.12 623/22.13 623/22.15 623/22.150P 623/22.21 623/22.4 623/22.400P 623/23.11 623/23.110P 623/23.12 623/23.120P 623/23.13 623/23.14 623/23.140P 623/23.42 623/23.420P

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Forward Citations: WO16101184, WO15006937, WO14159561, WO13126208, WO13119779, WO12093140, US9700416, US9700292, US9668745, US9656999, US9655727, US9649194, US9630224, US9629646, US9597187, US9579324, US9566157, US9512107, US9492184, US9474779, US9474613, US9445905, US9434979, US9427321, US9421051, US9419250, US9353646, US9351840, US9340705, US9308094, US9296918, US9237949, US9226830, US9204971, US9144796, US9132015, US9119724, US9107754, US9095438, US9089432, US9039661, US9023112, US9005307, US8992627, US8920510, US8883438, US8853294, US8845743, US8840676, US8764836, US8639353, US8545255, US8540779, US8313531, US6160124, US6037359, US2017135820, US2016250485, US2016242910, US2016166387, US2016022255, US2015261922, US2015217123, US2015216669, US2015094727, US2015094726, US2015073489, US2015039095, US2014303631, US2014277558, US2014242343, US2014187666, US2014128988, US2014102651, US2014074250, US2013136928, US2013123930, US2012302962, US2012265318, US2012239160, US2012221115, US2012130504, US2012109327, US2012083896, US2012045918, US2011320005, US2011218638, US2011218637, US2011190061, US2011152868, RU2611950, JP6117204, JP2016195824, JP2015511174, JP2014531915, JP2014529463, JP2014515280, JP2014021316, JP2013521864, JP2013091790, JP2012532663, JP2011143070, ES2563877, EP3181646, EP3053547, EP2949714, EP2750633, EP2741714, EP2741714, EP2663091, EP2623050, DE102014008310, CN105764448, CN105748174, CN105531337, CN105524552, CN103906482, CN103275802, CN103239260, AU2013362290, AU2012249145,

Abstract:
Source: US2011081496A A composition and method of treating substrates, in particular substrates having a hard surface such as ceramics, metal or glass, to render them water, oil, stain, and dirt repellent is described.

- **search:** SS2 ft=telescop* and key and (blade or shaft) and (keyway or groove*) and lock (Results 335)
- List: SS2 1–50 (ft=telescop* and key and (blade or shaft) and (keyway or groove*) and lock) (Results 335)

0) US2015130256A – ROLLING FRICTION OR SUSPENSION FRICTION IMPACT ...

1) Family number: 53193063 (US2015130256A)

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Title: ROLLING FRICTION OR SUSPENSION FRICTION IMPACT MINING METHOD AND WEAR–RESISTANT IMPACT MINING MACHINE USING SAID METHOD

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Probable Assignee: LIU SU

Assignee(s):(std)**:** LIU SUHUA ; SUHUA LIU

Assignee(s): LIU SU ; LIU SUHUAXINYANZHEN INDUSTRIAL PARKYANZHOU HAIZHI MECHANICAL AND ELECTRICALSHANDONG272100YANZHOU272100CN ; LIU SUHUAYANZHOU HAIZHI MECHANICAL AND ELECTRICALTECHNOLOGY CO., LTDXINYANZHEN INDUSTRIAL PARKSHANDONG PROVINCE, 272100YANZHOUCN ; LIU SUHUAYANZHOU HALZHL MECHANICAL AND ELECTRICALTECHNOLOGY CO., LTDXINYANZHEN INDUSTRIAL PARKSHANDONG PROVINCE, 272100YANZHOUCN

Inventor(s):(std)**:** LIU SUHUA ; SUHUA LIU

Inventor(s): LIU SUHUAXINYANZHEN INDUSTRIAL PARKYANZHOU HAIZHI MECHANICAL AND ELECTRICALSHANDONG272100YANZHOU272100CN ; LIU SUHUAYANZHOU HAIZHI MECHANICAL AND ELECTRICALTECHNOLOGY CO., LTDXINYANZHEN INDUSTRIAL PARKSHANDONG PROVINCE, 272100YANZHOUCN ; LIU SUHUAYANZHOU HALZHL MECHANICAL AND ELECTRICALTECHNOLOGY CO., LTDXINYANZHEN INDUSTRIAL PARKSHANDONG PROVINCE, 272100YANZHOUCN

Agent(s): FB RICE; FB RICE PTY LTD; SHELSTON IP; SHELSTON IP PTY LTD; CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; LIU SUHUA; MIKHAILYUK VADIM MR; GOWLING LAFLEUR HENDERSON LLP; MBM INTELLECTUAL PROPERTY LAW LLP; NEXUS LAW GROUP LLP; LAPIENIS JUOZAS

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

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Abstract:
Source: US2015130256A A rolling friction or suspension friction impact mining method and a wear−resistant impact mining machine using said method. The mining machine comprises a reciprocating impact part (3). The reciprocating impact part comprises an impact drive device (4), a rolling reciprocating device, and an impact head (6). The rolling reciprocating device comprises a rubbing body (38), a rubbing body support (39), an impact guiding element (5.1), and a position−limiting mechanism. The rubbing body (5.3) are disposed between the robbing body support (39) and the impact guiding element (5.1), and inside of the position−limiting mechanism to form rolling guiding. The impact drive device is disposed with a damage−prevention mechanism, a rotary power buffer device, and a structural buffer device, such that the impact head reciprocatingly move and have rolling or suspending friction under the support of the impact guiding element, thereby preventing the damage−prevention force to damage a power drive device and a rolling channel guiding device, and preventing the impact vibration caused by the

reciprocating impact part to affect the machine body and other parts. The overall stability is therefore enhanced, and the service life is extended.

0) US2007028658A – LOCK AND KEY SYSTEM WITH IMPROVED TUMBLERS IN T...

2) Family number: 34194743 (US2007028658A) © PatBase

Title: LOCK AND KEY SYSTEM WITH IMPROVED TUMBLERS IN THE LOCK

Priority: EP20060769585 20060726 SE20050001782 20050805 WO2006SE00913 20060726

Family:

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Probable Assignee: WINLOC AG

Assignee(s):(std)**:** WIDEN BO ; WINLOC AG ; WINLOG AG

Assignee(s): BO WIDEN

Inventor(s):(std)**:** WIDEN BO ; WIBEN BO ; BO WIDEN

Agent(s): SPRUSON AND FERGUSON; OGILVY RENAULT LLP SENCRL SRL; NORTON ROSE OR SENCRL SRL LLP; SARGENT; BOEHMERT AND BOEHMERT ANWALTSPARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; MODIN JAN; KARLSTROEM LENNART; DE ELZABURU ALBERTO; SULEIMAN I AL AMMAR LAW OFFICE; PEARL COHEN ZEDEK LATZER BARATZ; 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 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 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 ZA ZM ZW

International class(IPC 8–9)**:** E05B19/04 E05B27/06 E05B15/00 E05B15/12 E05B15/14 E05B19/06 E05B27/00 E05B27/02 E05B27/04 (Advanced/Invention);
E05B15/12 E05B27/02 E05B27/10 (Advanced/Non–invention);
E05B15/00 E05B19/00 E05B27/00 (Core/Invention);
E05B (Subclass/Invention)

International class(IPC 1–7)**:** E05B15/12 E05B27/02

CPC: E05B27/00 Y10T70/7605 Y10T70/7701 Y10T70/7785 Y10T70/7881 E05B27/0017 E05B19/0023 E05B27/0039 E05B27/02 E05B17/2023

European class: E05B19/00K1 E05B27/00 E05B27/00A3 E05B27/00E

US class: 70/378 70/392 70/409 70/409S 70/493 70/493P

Classification Explorer

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Forward Citations: WO16188846, WO14148994, WO10026381, US8950226, US8931316, US8919160, US8720241, US8663991, US8621902, US8490446, US8448485, US8302439, US8117876, US8113020, US2011289990, US2011289989, US2011126600, US2010180650, US2009277239, JP2016518543, JP2016513765, EP2976481, EP2390031, EP2331779, EP2090726, EP2090726, DE202015003887, CN105247151, CN102535971, AU2014238501,

Abstract:
Source: US2007028658A A lock and key system is disclosed including locks of the kind comprising a cylindrical key plug (203) with locking tumblers (205) having a body part (206 a) and an integral key sensing part (206 b) for engagement with an associated key (100). The key sensing part (206 b) of each locking tumbler comprises at least two neighbouring key contacting portions (210 a, 211 a), confined within a limited region, for possible sliding engagement with a longitudinal code pattern of the associated key, at least one but not necessarily all of these key contacting portions of each locking tumbler actually engaging with a corresponding code portion of the associated key upon fully inserting the latter into the key slot of the lock.

3) Family number: 50963741 (US2014005683A) © PatBase

Title: HIGHLY ARTICULATED ROBOTIC PROBES AND METHODS OF PRODUCTION AND USE OF SUCH PROBES

Priority:

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Probable Assignee: MEDROBOTICS CORP

Assignee(s):(std)**:** ANDERSON ROBERT ; BETTENCOURT LUIS ; CALEF THOMAS ; CASTRO MICHAEL SALVATORE ; CALEF TOM ; DARISSE IAN ; DIDOMENICO ROBERT ; FRANGOLIS TODD ; FLAHERTY R MAXWELL ; DEGEORGE CHRISTOPHER P ; FLAHERTY CHRISTOPHER J ; FLAHERTY J CHRISTOPHER ; DARISSE IAN J ; DIDOMENICO ROBERT A ; CERIER JEFFREY ; CRUZ AMOS ; GROVER SIMON ; DALEY ERIC ; MEDROBOTICS CORP ; STAND JOSEPH A ; STRAFACE SAMUEL F ; OYOLA ARNOLD E ; WRIGHT CORNELL III ; WHIPPLE DALE ; KENNEFICK WILLIAM H ; OYOLA ARNOLD ; JOHNSTON GABRIEL ; STAND III JOSEPH A ; MEDROBOTICS ; HOLLOWAY JR ANTHONY RAY ; MALAQUAIS COREY ANTHONY ; RIENZIE ADAM ; LEWIS REYNALDO ; RUNYON JUSTIN S ; JOHNSTON GABRIEL A ; METROBOTICS CORP ; WITHERSPOON LELAND ; TULLY STEPHEN ; TRIGGS EMILY ; O KEEFE JONATHAN ; WALKER JR RICHARD ; WARNOCK DAVID ; PUNGOR ANDRAS ; ZUBIATE BRETT ; WRIGHT III CORNELL

Assignee(s): ANDERSON BOB ; KENNEDY KEVIN ; NUNES NANCY A ; MORDENTE ZACKERY ; MEDROBOTICS INC ; KARCSMAR JOSEPH ; STAND JOSEPH A III ; MEDROBOTICS CORP475 PARAMOUNT DRIVERAYNHAMMA02767US ; FLAHERTY MAXWELL R ; COHEN DAVID ; FLAHERTY J ; DARISSE IAN JOSEPH ; GILMARTIN KEVIN ; HOLLOWAY ANTHONY RAY JR ; CASTRO MICHAEL S ; CALEF THOMAS J ; CASTRO MICHAEL

Inventor(s):(std)**:** ANDERSON BOB ; ANDERSON ROBERT ; ARNOLD OYOLA ; BETTENCOURT LUIS ; BRETT ZUBIATE ; CALEF THOMAS ; CALEF TOM ; CASTRO MICHAEL ; CASTRO MICHAEL SALVATORE ; CRUZ AMOS ; DALE WHIPPLE ; DALEY ERIC ; DARISSE IAN

; DARISSE IAN J ; DEGEORGE CHRISTOPHER P ; DIDOMENICO ROBERT ; DIDOMENICO ROBERT A ; FLAHERTY CHRISTOPHER J ; FLAHERTY J CHRISTOPHER ; CERIER JEFFREY ; COHEN DAVID ; FLAHERTY MAXWELL R ; FLAHERTY R MAXWELL ; FRANGLOIS TODD ; FRANGOLIS TODD ; GROVER SIMON ; HALLOWAY JR ANTHONY RAY ; HOLLOWAY ANTHONY RAY JR ; HOLLOWAY JR ANTHONY RAY ; IAN J DARISSE ; JOHNSTON GABRIEL ; JOHNSTON GABRIEL A ; JOSEPH A STAND ; JOSEPH STAND ; KARCSMAR JOSEPH ; KENNEDY KEVIN ; KENNEFICK WILLIAM H ; LEWIS REYNALDO ; MALAQUAIS COREY ANTHONY ; MORDENTE ZACKERY ; NUNES NANCY A ; O KEEFE JONATHAN ; OYOLA ARNOLD ; PUNGOR ANDRAS ; RIENZIE ADAM ; ROBERT A DIDOMENICO ; ROBERT DIDOMENICO ; RUNYON JUSTIN S ; SALVATORE CASTRO MICHAEL ; STAND III JOSEPH A ; STAND JOSEPH ; STAND JOSEPH A ; STAND JOSEPH A III ; TRIGGS EMILY ; TULLY STEPHEN ; WALKER JR RICHARD ; WARNOCK DAVID ; WHIPPLE DALE ; WILLIAM H KENNEFICK ; WITHERSPOON LELAND ; WRIGHT CORNELL III ; WRIGHT LLL CORNELL ; WRIGTH CORNELL III ; ZUBIATE BRETT ; GILMARTIN KEVIN ; DARISSE IAN JOSEPH ; CASTRO MICHAEL S ; CALEF THOMAS J ; WRIGHT III CORNELL ; STRAFACE SAMUEL F ; OYOLA ARNOLD E ; SAMUEL F STRAFACE ; MICHAEL SALVATORE CASTRO ; J CHRISTOPHER FLAHERTY ; FLAHERTY CHRISOPHER J ; ARNOLD E OYOLA

Inventor(s): FLAHERTY J ; STAND JOSEPH AUS ; OYOLA ARNOLD EUS ; OYOLA ARNOLDUS ; JOHNSTON GABRIELUS ; IAN DARISSE ; FRANGOLIS TODDUS ; FLAHERTY R ; CORNELL WRIGTH III ; FLAHERTY J CHRISTOPHERUS ; DARISSE IAN JUS ; CASTRO MICHAEL SALVATOREUS ; BETTENCOURT LUISUS ; ANDERSON ROBERTUS

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; RICHES MCKENZIE AND HERBERT LLP; BITTNER BERNHARD; HANNKE CHRISTIAN; YKI PATENT ATTORNEYS; ONELLO AND MELLO LLP; ONELLO ANTHONY P JR ET AL; ONELLO JR ANTHONY P 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): A01B A61B A61B1/00 A61B1/005 A61B1/008 A61B1/01 A61B1/012 A61B1/04 A61B1/24 A61B1/273 A61B13/00 A61B17/00 A61B17/02 A61B17/24 A61B17/29 A61B17/34 A61B17/94 A61B18/02 A61B18/14 A61B18/22 A61B19/00 A61B34/00 A61B34/20 A61B34/30 A61B46/23 A61B90/00 A61B90/30 A61B90/50 A61B90/57 A61G13/10 A61M25/00 A61M25/06 A61M25/08 A61M25/092 B25J B25J13/00 B25J13/06 B25J17/00 B25J18/06 B25J19/00 B25J19/06 B25J3/00 B25J9/06 G02B23/24 H04L12/885 (Advanced/Invention); A61B17/00 A61B17/29 A61B17/34 A61B18/14 A61B34/00 A61B34/30 A61B90/00 A61B90/11 A61B90/50 B25J18/06 B25J3/00 (Advanced/Non–invention); A61B B25J (Subclass/Invention)

CPC: A61B2017/347 A61B2018/00577 A61B2017/2939 B25J9/06 B25J13/06 Y10S901/21 A61B17/3423 A61B2017/003 A61B2017/3409 A61B2017/3447 A61B1/00039 A61B18/02 A61B18/14 A61B34/70 A61B34/37 A61B2034/306 A61B90/361 A61B2090/306 A61B17/00 A61B2090/571 A61B2090/508 A61B2019/2242 A61B2019/2211 A61B17/00234 A61B2017/00296 A61B2017/00323 A61B2017/00535 A61B2017/2905 A61B2017/2908 A61B17/2909 A61B2017/00327 A61B1/018 A61B18/22 Y10T74/20323 A61B19/22 B25J9/1689 A61B34/25 A61B17/3421 A61B17/3403 A61B90/11 A61B2017/2906 A61B2017/3407 A61B17/29 A61B18/1445 A61B2017/291 A61B2017/2923 A61B2017/2929 A61B2017/2946 A61B13/00 A61B17/0206 A61B17/24 A61B2217/005 A61B2217/007 A61B1/005 A61B1/00149 A61B1/05 A61B1/0676 A61B1/0684 A61B1/0011 A61B1/00154 A61B1/0016 A61B1/0053 A61B1/0055 A61B1/0057 A61B34/76 A61B2017/00314 A61B2017/3445 A61B2034/715 A61B2034/742 A61B2090/064 A61B2090/3614 A61B2017/00473 A61B1/051 B25J9/065 A61B1/0056 A61B1/008 B25J18/06 A61B17/3417 A61B2034/301 A61B2034/305 A61B34/71 A61B18/1442 A61B34/30 A61B19/2203 A61B90/50 B25J13/00 B25J19/06 B25J17/00 A61B17/34 A61M25/01 A61B1/273 A61B2018/00488 A61B2018/00494 A61B2018/00595 A61B2018/00601

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Forward Citations: WO17077888, WO17025982, WO17009604, WO17002143, WO16172162, WO16084997, WO15188071, WO15081008, WO15042453, WO14201538, WO14179683, WO14136583, US9713873, US9629683, US9591964, US9550293, US9517557, US9517059, US9266029, US9144370, US2017144298, US2017086931, US2017014024, US2016213227, US2015367508, US2015352715, US2015196364, US2015174500, US2015141756, JP6093911, JP2016527927, JP2015523221, GB2546625, GB2540930, EP2996619, EP2996613, EP2984535, EP2943140, EP2929303, EP2777480, CN105105703, CN103817704, CN103817704,

Abstract:
Source: US2014005683A A highly articulated robotic probe comprises an outer sleeve and an inner core. The outer sleeve and inner core include a plurality of links. The links of the outer sleeve and inner core are configured to pivot relative to one another. Various characteristics of the links determine the overall pivot angle of the articulated probe. Each of the plurality of links may have one or more channels. The channels form a semi−continuous passage from link to link and are configured to receive an elongated member such as an inner core, tool or cable. One or more cables may be used to control the outer links of the outer sleeve and the inner links of the inner core. Various characteristics of the cables determine the overall performance of the articulated probe.

0) US2008236223A – KEY COMBINATION ELEMENT IN KEY BLANK AND KEY

4) Family number: 30610409 (US2008236223A) © PatBase

Title: KEY COMBINATION ELEMENT IN KEY BLANK AND KEY

Priority: EP20050718921 20050328 GB20040007196 20040330 GB200400196–5 20040330 IL20060178364 20060928 WO2005IL00348 20050328

Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** BEN AHARON EFFI ; DANI MARKBREIT ; EFFI BEN AHARON ; MARKBREIT DANI ; MUL ; MUL T LOCK TECHNOLOGIES ; MUL T LOCK TECHNOLOGIES LTD ; MULT T LOCK TECHNOLOGIES LTD

Inventor(s):(std)**:** BEN AHARON ; BEN AHARON EFFI ; DANI MARKBREIT ; EFFI BEN AHARON ; MARKBREIT ; MARKBREIT DANI ; MARKBREITDANI DANI

Inventor(s): MARKBREIT DANI BEN AHARON EFFI

Agent(s): SPRUSON AND FERGUSON; BULL HOUSSER AND TUPPER LLP; WHITE DUNCAN ROHAN; DEKEL PATENT LTD; DAVID KLEIN DEKEL PATENT LTD; DAVID

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): E05B19/00 E05B19/06 E05B19/08 E05B27/00 E05B29/08 E05B31/00 E05B35/00 (Advanced/Invention); E05B19/00 E05B27/00 E05B35/00 (Advanced/Non–invention); E05B19/00 E05B27/00 E05B35/00 (Core/Invention); E05B (Subclass/Invention)

International class (IPC 1–7): E05B E05B19/00 E05B19/08 E05B27/00 E05B35/00

CPC: E05B19/0035 E05B27/00 E05B27/0085 E05B35/003 Y10T70/7565 Y10T70/7616 Y10T70/7802 Y10T70/7825 Y10T70/7876 Y10T70/7881 E05B35/004 E05B19/0058 E05B27/0042 E05B35/00

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Classification Explorer

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Forward Citations: WO13169760, WO12115887, WO11086546, WO09147660, WO09147660, WO08139475, WO08139475, WO06137070, US9523217, US9506272, US9151077, US9140034, US9103139, US8966949, US8950226, US8915107, US8746025, US8387425, US8336350, US8261587, US2017081879, US2015345177, US2015121977, US2015047398, US2015013404, US2013327102, US2013000368, US2011252846, US2011072867, TWI456109, GB2463289, EP2003272, CN105658885, CN103608537, CN102392556, CN102392556,

Abstract:
Source: US2008236223A A key blank including a generally elongate shaft portion defining first and second generally flat oppositely directed side surfaces, joined by edge surfaces, at least one of the first and second side surfaces cuttable to form key cuts that define a key combination surface, and at least one key combination element movably disposed in the elongate shaft portion and adapted for touching a lock combination element disposed in a cylinder lock plug, wherein the at least one key combination element has inherent energy for applying an urging force against the lock combination element. A key formed from the key blank and lock therefore are also disclosed.

0) US2015345177A – ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION ...

5) Family number: 56882671 (US2015345177A) © PatBase

Title: ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION RESTRICTIONS FOR TELESCOPING PINS

Priority: EP20130829087 20131204 IL20130224111 20130102 IL20130224111 20130103 WO2013US72945 20131204

Family:

Publication number	Publication date	Application number	Application date
AP201508559 A0	20150630	AP20150008559	20131204
AR094302 AA	20150722	AR2013P105057	20131227
AU2013371518 AA	20140710	AU20130371518	20131204
AU2013371518 BB	20170202	AU20130371518	20131204
CA2894857 AA	20150611	CA20132894857	20131204
CL2015001816 A1	20151016	CL20150001816	20150623
CN104968874 A	20151007	CN201380069151	20131204
CO15306611 A2	20160630	CO20150306611	20151224
CR20150348 A	20151117	CR20150000348	20150702
DE602013013349 D1	20161208	DE201360013349T	20131204
DK2882912 T3	20170123	DK20130829087T	20131204
EA201500709 A1	20160129	EA20150000709	20131204
EP2882912 A2	20150617	EP20130829087	20131204
EP2882912 B1	20161026	EP20130829087	20131204
HK1210511 A1	20160422	HK20150111167	20151112
HR20170018 T1	20170224	HR20170000018	20170109
IL224111 A0	20130324	IL20130224111	20130103
IN06012DN2015 A	20160408	IN2015DN06012	20150709
JP2016502010 T2	20160121	JP20150551682T	20131204
KR20150102028 A	20150904	KR20157017086	20131204
LT2882912 T	20170125	LT20130829087T	20131204
MX2015008216 A1	20150929	MX20150008216	20131204
NZ709026 A	20161125	NZ20130709026	20131204
PH2015501510 A	20150928	PH20150501510	20150702
PL2882912 T3	20170428	PL20130829087T	20131204
PT2882912 T	20170123	PT20130829087T	20131204
SG11201504751P A1	20150730	SG20151104751	20131204
TR201700824 T4	20170221	TR20170000824T	20131204
TW201432128 A	20140816	TW20130146442	20131216
US2015345177 AA	20151203	US20130758832	20131204
WO14107254 A2	20140710	WO2013US72945	20131204
WO14107254 A3	20141016	WO2013US72945	20131204

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** KLEIN DAVID ; MUL T LOCK TECHNOLOGIES LTD ; MUL T LOCK TECH LTD

Assignee(s): TAYLOR S CO ; YITZHAK KAISER ; ZVI FRENKEL ; BEN AHARON EFFI ; EFFI BEN AHARON ; FRENKEL ZVI ; KAISER IZHAK

Inventor(s):(std)**:** BEN AHARON EFFI ; FRENKEL ZVI ; IZHAK KAISER ; KAISER IZHAK ; ZVI FRENKEL ; KAISER YITZHAK ; EFFI BEN AHARON ; BENAHARON EFFI

Inventor(s): YITZHAK KAISER

Agent(s):

SPRUSON AND FERGUSON; REGEHR HERBERT B; BULL HOUSSER AND TUPPER LLP; CLARO SWINBURN LUIS FELIPE; JORGE CHAVARRO ARISTIZABAL; WHITE DUNCAN ROHAN; TANI AND ABE PC; FULYA SUEMERALP; KLEIN DAVID

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): B24B27/02 B24B27/04 B62D E05B19/00 E05B19/08 E05B27/00 E05B27/10 (Advanced/Invention); E05B19/00 E05B27/00 (Core/Invention); E05B (Subclass/Invention)

CPC: E05B19/0017 E05B27/0003 Y10T70/7531 Y10T70/7842 E05B19/0023 E05B19/0035 E05B19/0058 E05B27/0017 E05B27/0021

US class: 70/352 70/402

Classification Explorer

Cited documents: WO10026381 A1, WO09019726 A1, WO04048724 A1, WO04001165 A1, US6516644 BA, US5819566 A, US2013327102 AA, US2013091910 AA, US2011146360 AA, US2009301144 AA, US2006207303 AA, JP2006507435 T2, JP2005530072 T2, GB2412689 A1, CN1714214 A, CN1662720 A, CN101743367 A,

Abstract:
Source: US2015345177A A key device (10) includes a generally elongate shaft portion (12) including a key combination surface (16) that has a plurality of key cut stations (18) for forming telescoping key cuts at each key cut station (18). Each key cut station (18) has a telescoping maximum adjacent cut specification (MACS) that defines a maximum depth of adjacent. The key device (10) also has a non−MACS key cut (20), formed at one or more of the key cut stations (18), for interfacing with a first pin (24) of a given telescoping plug pin. The non−MACS key cut (20) is dimensioned to leave material in the elongate shaft portion (12) for forming another key cut (20A) for interfacing with a second pin (26) of the given telescoping plug pin.

0) US2005248914A – NOTEBOOK COMPUTER LOCKING BASE

6) 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 ; MARSZALEK ANDRZEJ ; PETER ALLEN

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, US9722355, US9717329, US9717328, 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.

7) Family number: 46663700 (US2003167799A) © PatBase

Title: METHOD AND A MACHINE FOR THE PRODUCTION OF HOLLOW GLASSWARE ARTICLES

Priority:

AU20030209600 20030306
AU20090202275 20090605
US20020093431 20020307
US20050159792 20050622
JP20030572908 20030306
US20050159752 20050623
US20060385052 20060316
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WO2003IB01018 20030306
US20080156109 20080528
US20080154480 20080522
US20080156171 20080530

Family:

Publication number	Publication date	Application number	Application date
AR038908 AA	20050202	AR2003P100800	20030307
AU2003209600 AA	20030916	AU20030209600	20030306
AU2003209600 BB	20090702	AU20030209600	20030306
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CN1630620 B	20100526	CN20038004743	20030306
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RU2307077 C2	20070927	RU20040129735	20030306
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US2008190144 AA	20080814	US20080082701	20080411
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US2008223081 AA	20080918	US20080154404	20080521
US2008229785 AA	20080925	US20080156109	20080528
US2008264105 AA	20081030	US20080154480	20080522
US2008271492 AA	20081106	US20080152583	20080514
US2008314087 AA	20081225	US20080156171	20080530
US7024887 BB	20060411	US20050159792	20050622
US7073352 BB	20060711	US20020093431	20020307
US7610776 BB	20091103	US20080082702	20080411
US7721573 BB	20100525	US20080082701	20080411

US7779650 BB	20100824	US20060385052	20060316	
US7788950 BB	20100907	US20080082707	20080411	
US7793520 BB	20100914	US20080151485	20080506	
US7827826 BB	20101109	US20080156171	20080530	
WO03074433 A2	20030912	WO2003IB01018	20030306	
WO03074433 C1	20040212	WO2003IB01018	20030306	

Probable Assignee: VITRO SAB DE CV

Assignee(s):(std)**:** SADA TREVINO ADRIAN ; TIJERINA RAMOS VICTOR ; VITRO GLOBAL S A ; VITRO GLOBAL SA

Assignee(s): VITRO SAB DE CV ; COMPANIA VIDRIERA DE CV SA

Inventor(s):(std)**:** ADRIAN SADA TREVINO ; RAMOS VICTOR TIJERINA ; SADA TREVI UMLAUT OVER N O ADRIAN ; ADRIAN SADA TREVI O ; SADA TREVIN O ADRIAN ; SADA TREVINO ADRIAN ; TIJERINA RAMOS VICTOR ; TIKHERINA RAMOS VIKTOR ; TREVINO ADRIAN SADA ; VICTOR TIJERINA RAMOS

Inventor(s): TIJERINA ROMOS VICTOR ; SADA TREVIN'O ADRIAN ; ADRIAN SADA TREVI plus or minus O ; SADA TREVI{UMLAUT OVER (N)}O ADRIAN

Agent(s): SPRUSON AND FERGUSON; JAY S CINAMON ABELMAN FRAYNE AND SCHWAB; ABELMAN FRAYNE AND SCHWAB

Designated states: AT AU BE BG BR CH CN CY CZ DE DK EE ES FI FR GB GR HU IE IN IT JP LI LU MC MX NL PT RO RU SE SI SK TR

International class (IPC 8–9): C03B11/00 C03B11/06 C03B11/10 C03B11/16 C03B7/01 C03B9/00 C03B9/13 C03B9/16 C03B9/193 C03B9/197 C03B9/29 C03B9/30 C03B9/323 C03B9/335 C03B9/34 C03B9/347 C03B9/353 C03B9/36 C03B9/38 C03B9/40 C03B9/41 C03B9/44 C03B9/447 C03B9/453 (Advanced/Invention); C03B11/06 C03B11/16 C03B7/00 C03B9/00 (Core/Invention)

International class (IPC 1–7): C03B C03B0/00 C03B9/00 C03B9/16 C03B9/193 C03B9/20 C03B9/29 C03B9/30 C03B9/34 C03B9/347 C03B9/353 C03B9/36 C03B9/38 C03B9/44

CPC: C03B9/3866 C03B9/165 C03B9/1932 C03B9/1936 C03B9/292 C03B9/342 C03B9/347 C03B9/3535 C03B9/3618 C03B9/3627 C03B9/3645 C03B9/369 C03B9/3816 C03B9/3825 C03B9/3875 C03B9/40 C03B9/41 C03B11/10 C03B11/16

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US class: 65/157 65/158 65/159 65/161 65/167 65/170 65/172 65/173 65/207 65/215 65/224 65/225 65/227 65/229 65/230 65/232 65/233 65/235 65/236 65/239 65/240 65/241 65/243 65/260 65/261 65/266 65/266P 65/267 65/29.1 65/29.11 65/291.1 65/302 65/304 65/307 65/314 65/318 65/322 65/355 65/356 65/68 65/72 65/79 65/8 65/80 65/82

Classification Explorer

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Forward Citations: US9676647, US9656898, US9527761, US9334185, US9145322, US8549884, US8286448, US8166779, US8113016, US8047022, US7950619, US7845193, US7685842, US7648662, US7364688, US7326046, US7293980, US7252497, US2014109619, US2014054911, US2013145797, US2011315651, US2011296874, US2010223958, US2010018256, US2009250561, US2009217703, US2009205372, US2009139267, US2009107181, US2009000337, US2008314088, US2008282739, US2008209949, US2008184742, US2008141718, US2008135182, US2008000268,

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Abstract:
Source: US2003167799A A method and a machine for the production of hollow glassware articles, by the blow−and−blow, press−and−blow, press−and−blow paste mold and direct−press processes in a glassware forming machine including single or multiple machine sections each having single or multiple−cavity, comprising: forming a parison in an inverted orientation, into a blank mold and a first transferable and open−able neck ring mold held by an inverting apparatus having a first and a second diametrically opposed arms, each arm holding a transferable and open−able neck ring mold; inverting the parison held by the first transferable and open−able neck ring mold, by rotating the first arm 180 degrees to an upright orientation at an intermediate station, while the second arm with a second transferable and open−able neck ring mold is simultaneously placed at the parison forming station; transferring the first transferable and open−able neck ring mold holding the parison in an upright orientation, from the intermediate station, to a blow mold station, by a transference apparatus; releasing the first parison into a blow mold, and turning back the first transferable and open−able neck ring mold empty to the first arm of the inverting apparatus, at the intermediate station to be placed again at the parison forming station by rotating the first arm additional 180 degrees, completing a 360 degrees turn, while the second arm reaches to the intermediate station; blowing the parison into a blow mold to form a finished article; and transferring the finished article in an upright orientation, once the blow mold is opened, by a take out apparatus, to place it at a dead plate or at a carrying conveyor.

8) Family number: 48147546 (US2011081496A)

© PatBase

Title: PERFLUOROPOLYETHER COATING COMPOSITION FOR HARD SURFACES

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: MILUX HOLDING SA

Assignee(s):(std)**:** IYER SURESH ; IMPLANTICA PATENT LTD ; MEDICALTREE PATENT LTD ; MILUX HOLDING S A ; MILUX HOLDING SA ; MILUX HOLDINGS SA ; MILUXHOLDING SA ; FAN WAYNE W ; FORSELL PETER ; MILUX HOLDIND SA ; KIRK PROMOTION LTD ; FORSELL PETER MATS ; MILAKS KHOLDING S A ; 3M INNOVATIVE PROPERTIES CO ; PETER FORSELL

Assignee(s): 3M INNOVATIVE PROPERTIES COMPANY ; MILAKS KHOLDING SA

Inventor(s):(std)**:** FORSELL PETER ; FORSELL PETER MATS ; FORSELL PITER ; PETER FORSELL ; SURESH IYER ; IYER SURESH ; FAN WAYNE W

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; WRAYS PTY LTD; FETHERSTONHAUGH AND CO; KILBURN AND STRODE LLP; HOEGLUND LARS; HERZOG FIESSER AND PARTNER; CARPINTERO MARIO; YAMAKAWA MASAKI; KENT S; BERGENSTRAHLE AND LINDVALL AB; KOKKO KENT S 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)**:** A61B1/00 A61B1/04 A61B1/06 A61B1/317 A61B17/06 A61B17/064 A61B17/16 A61B17/17 A61B17/32 A61B17/34 A61B17/56 A61B17/68 A61B17/74 A61B17/88 A61B18/04 A61B19/00 A61B6/00 A61B6/12 A61F2/08 A61F2/28 A61F2/30 A61F2/32 A61F2/34 A61F2/36 A61F2/38 A61F2/40 A61F2/46 A61L24/00 A61L27/04 A61L27/14 A61L27/16 A61L27/50 A61L31/04 A61L31/14 A61M25/00 A61M37/00 A61M5/00 A61M5/142 B05D3/02 B05D7/24 B29C45/26 B65D5/38 B65D6/06 B65D83/02 B65D85/22 C04B41/84 C08K3/00 C09D183/00 C09D183/04 C09D183/08 F16N1/00 (Advanced/Invention); A61B17/00 A61B17/02 A61B17/16 A61B17/56 A61B17/68 A61B17/74 A61B17/80 A61B17/86 A61B17/88 A61B18/04 A61F2/30 A61F2/32 A61F2/34 A61F2/36 A61F2/38 A61F2/46 A61F2/48 A61L27/14 A61L27/16 A61L27/58 A61L31/04 A61L31/14 A61M5/142 (Advanced/Non–invention)

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Abstract:
Source: US2011081496A A composition and method of treating substrates, in particular substrates having a hard surface such as ceramics, metal or glass, to render them water, oil, stain, and dirt repellent is described.

0) ZA201102200A – "CYLINDER ASSEMBLIES AND KEYS FOR CYLINDER ASSE...

9) Family number: 42453282 (ZA201102200A) © PatBase

Title: "CYLINDER ASSEMBLIES AND KEYS FOR CYLINDER ASSEMBLIE"

Priority: GB20080016058 20080903 GB20080016060 20080903 GB20080016063 20080903 GB20080016061 20080903 WO2009GB02123 20090903

Family:

Publication number	Publication date	Application number	Application date
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GB2453626 B2	20090826	GB20080016063	20080903
NZ592048 A	20130628	NZ20090592048	20090903
WO10026381 A1	20100311	WO2009GB02123	20090903
ZA201102200 A	20120725	ZA20110002200	20110324

Probable Assignee: ASSA ABLOY LTD

Assignee(s):(std)**:** ASSA ABLOY AUSTRALIA PTY LTD ; ASSA ABLOY LTD ; MCCARTHY BRUCE PATRICK

Assignee(s): ASSA ABLOY LIMITED

Inventor(s):(std)**:** MCCARTHY BRUCE PATRICK

Inventor(s): BRUCE PATRICK MCCARTHY

Agent(s): PHILLIPS ORMONDE FITZPATRICK

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): E05B19/00 E05B27/00 (Advanced/Invention); E05B19/00 E05B27/00 (Core/Invention); E05B (Subclass/Invention)

CPC: E05B27/0021 E05B19/0023 E05B19/0052 E05B19/0017

European class: E05B19/00K E05B19/00K1 E05B27/00A3B P05B19/00K P05B19/00K1 P05B19/00K4M P05B27/00A3B

Classification Explorer

Cited documents: WO04001165 A1, US5222383 A, US3818732 A, US2653467 A, US2007028658 AA, US1095500 A, JP55126672 A2, GB2410292 A1, GB1586799 A, EP1394341 A1, EP0396492 A2, DE2038039 A1, AT395262 B,

Forward Citations: WO14148994, WO14107254, WO14107254, JP2016502010, CN104968874,

Abstract:
A pin tumbler cylinder assembly comprises a cylinder housing (501), a plug (502) rotatably mounted in the cylinder housing, a keyway extending along the longitudinal axis of the plug and open at a front end of the plug to allow insertion of a key, a plurality of tumbler pin passageways extending inwardly from the circumference of the plug (502) to the keyway, and a plurality of driver pin passageways extending outwardly from the interior of the cylinder housing (501), the tumbler pin passageways being aligned with the driver pin passageways in one rotational position of the plug (502). A plurality of tumbler pins (3) are slidably mounted in respective tumbler pin passageways. The tumbler pins (3) include telescopic tumbler pin assemblies including an outer pin and an inner pin slidably mounted in the outer pin. In one form of telescopic tumbler pin assembly an inner pin (3D) engages a dome (23) in a notch of a key blade; in another form of telescopic tumbler pin assembly an inner pin (3B) is received in a cavity (201) in a notch of a key blade.

0) US5520035A – LOCKING APPARATUS

10) Family number: 11262417 (US5520035A) © PatBase

Title: LOCKING APPARATUS

Priority: CA19942112851 19940105 IL19930104349 19930108 US19970961258 19971030 US19960613664 19960311 US19940340352 19941114 US19930009069 19930126

Family:

Publication number	Publication date	Application number	Application date
AP447 A	19960117	AP19940000604	19940103
AP9400604 A0	19940131	AP19940000604	19940103
AT154089 E	19970615	AT19930203734T	19931231
AU199453073 A1	19940714	AU19940053073	19940106
AU679946 B2	19970717	AU19940053073	19940106
BG61702 B1	19980331	BG19940098364	19940107
BG98364 A	19950929	BG19940098364D	19940107
BRPI9400056 A	19940726	BR1994PI00056	19940107
CA2112851 AA	19940709	CA19942112851	19940105
CA2112851 C	19990518	CA19942112851	19940105
CL1993000039 A1	19931215	CL19930000039	19930119
CL40092 B	19990823	CL19930000039	19930119
CN1092274 C	20021009	CN19941000632	19940108
CN1093432 A	19941012	CN19941000632	19940108
CR5011 A	19950515	CR19940005011	19940905
CZ293104 B6	20040218	CZ19940000030	19940106
CZ9400030 A3	19940713	CZ19940000030	19940106
DE69311288 D1	19970710	DE19936011288	19931231
DE69311288 T2	19971218	DE19936011288T	19931231
DK0605932 T3	19971222	DK19930203734T	19931231
ECSP941017 A	19940627	EC1994SP01017	19940103
EG20166 A	19970831	EG19940000001	19940101
EP0605932 A2	19940713	EP19930203734	19931231
EP0605932 A3	19950215	EP19930203734	19931231
EP0605932 B1	19970604	EP19930203734	19931231
ES2105090 T3	19971016	ES19930203734T	19931231
FI101732 B	19980814	FI19930005816	19931223
FI935816 A	19940709	FI19930005816	19931223
FI935816 A0	19931223	FI19930005816	19931223
GR3024778 T3	19980130	GR19970402004T	19970805
GT199400001 A	19950701	GT19940000001	19940107
HK1001568 A1	19980626	HK19980100468	19980120
HN1994000083 A	19970605	HN19940000083	19940106
HR940013 A2	19960831	HR19940000013	19940106
HR940013 B1	19980430	HR19940000013	19940106
HU213810 B	19971028	HU19940000044	19940107
HU67513 A2	19950428	HU19940000044	19940107
HU9400044 A0	19940530	HU19940000044	19940107
IL104349 A0	19930513	IL19930104349	19930108
IL104349 A1	19970110	IL19930104349	19930108
JP2905381 B2	19990614	JP19940000604	19940107

JP7011821 A2	19950113	JP19940000604	19940107	
LT1710 A	19940715	LT19930001710	19931230	
LT3172 B	19950227	LT19930001710	19931230	
LV11119 A	19960420	LV19940000005	19940107	
LV11119 B	19960820	LV19940000005	19940107	
MD1210 F2	19990430	MD19950000105	19941229	
MD950105 A	19960628	MD19950000105	19941229	
MX9400342 A1	19940831	MX19940000342	19940107	
MY131394 A	20070830	MY19930000084	19930119	
NO316182 B1	20031222	NO19940000052	19940106	
NO940052 A	19940711	NO19940000052	19940106	
NO940052 A0	19940106	NO19940000052	19940106	
NZ250631 A	19960326	NZ19940250631	19940106	
PL173395 B1	19980227	PL19940301815	19940107	
PL173669 B1	19980430	PL19940320189	19940107	
PL301815 A1	19940711	PL19940301815	19940107	
RO113670 B	19980930	RO19940000025	19940107	
RO113670 B3	19980930	RO19940000025	19940107	
RU2121557 C1	19981110	RU19940000133	19940110	
RU94000133 A1	19950927	RU19940000133	19940110	
SG47936 A1	19980417	SG19960005459	19931231	
SI9400004 A	19940930	SI19940000004	19940105	
SI9400004 B	20020228	SI19940000004	19940105	
SK1894 A3	19940810	SK19940000018	19940107	
SK281049 B6	20001107	SK19940000018	19940107	
SV1994000001 A	19950906	SV19940000001	19940107	
TR28890 A	19970717	TR19940000006	19940104	
TW228018 B	19940811	TW19930100427	19930119	
US5520035 A	19960528	US19940340352	19941114	
US5784910 A	19980728	US19960613664	19960311	
US5839308 A	19981124	US19970961258	19971030	
ZA9309721 A	19940829	ZA19930009721	19931228	

Probable Assignee: MUL T LOCK LTD

Assignee(s):(std)**:** MUL LOCK LTD ; MUL T LOCK LIMITED ; MUL T LOCK LTD ; MURUUT LOCK LTD ; MUT T LOCK LTD ; MULT T LOCK LTD AN IZRAEL COMP ; MULT LOCK LTD ; MULT T LOCK LTD AN IZRAEL CO O ; MULT T LOCK LTD

Assignee(s): MUL T LOCK LTD YAVNE ; MULT LOCK LIMITED ; MUL T LOCK LTD YAVNE IL ; MULT T LOCK LTD AN IZRAEL COMPANY OF SOUTHERN INDUSTRIAL ZONE ; MULT T LOCK LTD AN IZRAEL CO OF SOUTHERN INDUSTRIAL ZONE ; MULT T LOCK LTD AN IZRAEL CO OF SOUTHERN INDUSTRIA ; MULT T LOCK LTD AN IZRAEL COMPANY OF SOUTHERN INDU ; MURUUTEII ROTSUKU LTD ; EIZEN NOACH ; MAL TI LOK LTD ; MAL−TI−LOK LTD. ; MARKBREIT DANI

Inventor(s):(std)**:** DANI MAAKUBUREITO ; DANI MARKBRAJT ; DANI MARKBREIT ; EIZEN NOACH ; MARKBRIT DANI ; NOA AJZEN ; NOACH EIZEN ; NOAKU EIZEN ; EIZEN NOAH ; MARKBREIT DANI

Inventor(s): MARKBREIT DANI AZOR 58003 IL ; EIZEN NOACH RISHON LEZION IL

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; BULL HOUSSER AND TUPPER LLP; ALESSANDRI; REINHOLD COHN AND PARTNERS

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

International class (IPC 8–9)**:** E05B19/00 E05B19/08 E05B19/10 E05B19/18 E05B19/22 E05B27/00 E05B27/04 E05B27/06 E05B27/10 E05B35/00 E05B67/24 H01L27/32 H01L51/50 H01L51/52 H05B33/12 H05B33/22 (Advanced/Invention);

E05B19/00 E05B27/00 E05B35/00 E05B67/00 H01L27/28 H01L51/50 H05B33/12 H05B33/22 (Core/Invention)

International class (IPC 1–7): A61K37/02 B21D53/42 E05B15/14 E05B18/00 E05B19/00 E05B19/02 E05B19/06 E05B19/08 E05B19/10 E05B19/12 E05B19/18 E05B19/22 E05B21/00 E05B21/06 E05B27/00 E05B27/04 E05B27/06 E05B27/10 E05B29/00 E05B35/00 E05B37/00 E05B61/00 E05B67/24 E05B9/00

CPC: Y10T70/7565 Y10T70/7571 Y10T70/7802 Y10T70/7819 Y10T70/7881 E05B19/00 E05B19/0023 E05B19/0058 E05B27/0007 E05B27/0014 E05B27/0021 E05B35/003 E05B67/24

European class: E05B19/00 E05B19/00K1 E05B27/00A3B E05B35/00F E05B67/24 P05B19/00K4M1 P05B27/00A1 P05B27/00A2 P05B27/00A3B

US class: 70/358 70/359 70/395 70/398 70/409

Classification Explorer

Cited documents: WO9110796 A1, US939679 A, US5520035 A, US5170651 A, US5131247 A, US5123268 A, US4667495 A, US4662200 A, US4377082 A, US3877267 A, US3287945 A, US2587037 A, US2440428 A, US1438839 A, US1382826 A, JP58032261 A2, JP3119274 A2, JP1158185 A2, GB2161204 A1, FR2619149 A1, FR2561294 B1, FR2561294 A1, FR2561293 A1, FR2522053 A1, FR2521701 A1, FR2521201 B1, FR2521201 A1, FR2492872 A1, EP0472495 A1, EP0472485 A2, EP0436496 A1, EP0435496 A1, EP0431550 A1, EP0154755 A1, DE633936 A, DE3517660 A1, DE3424307 A1, DE2752550 A1, DE252237 A, DE196873 A, DE154306 A, DE1176516 B,

Forward Citations: WO16161530, WO15004192, WO14107666, WO13169952, WO12115887, WO11135569, WO11086546, WO10027760, WO08111089, WO08111089, WO08015672, WO06092779, WO05085567, WO04048724, WO04001165, WO0177466, WO0065181, WO0057006, WO0053870, USD496707, US9631401, US9523217, US9359793, US9151077, US9140034, US9103139, US9045915, US8950226, US8915107, US8875552, US8794043, US8746025, US8671725, US8387425, US8336350, US8096155, US7392676, US7207200, US7181941, US7086259, US6912881, US6823702, US6681609, US6615628, US6490898, US6257033, US6125674, US6109081, US6101855, US5839308, US5823029, US5819566, US5784910, US2015121977, US2015013404, US2014352375, US2014190223, US2013327102, US2013298623, US2013192320, US2013061643, US2012192603, US2012055212, US2011252846, US2011214462, US2011146360, US2011072867, US2010050716, US2009113965, US2009078010, US2007220937, US2007113606, US2007051146, US2006272372, US2006260371, US2006027004, US2006021405, US2005210939, US2005204788, US2004172995, TWI456109, KR20110053384, KR101077872, JP2012502205, GB2463289, ES2331394, EP3184715, EP2998471, EP2868846, EP1921232, EP1738044, EP1728944, EP1728944, EP1593800, EP1355023, DE19823699, CZ299579, CN105408565, CN105102742, CN104831999, CH710950, BG001077, AU784184, AU2016201029, AU2011202516, AU2010235953, AU2009288413,

Abstract:
Source: US5520035A A key blank including a generally elongate shaft portion defining a key combination surface adapted to have formed thereon key cuts which define a key combination, the key blank including a movable pin element retained within the elongate shaft portion, the movable pin element being displaceable in a single direction, outwardly from the key combination surface.

0) US2011146360A – MOVABLE KEY COMBINATION ELEMENT AND LOCK ASSEMB...

11) Family number: 44517676 (US2011146360A) © PatBase

Title: MOVABLE KEY COMBINATION ELEMENT AND LOCK ASSEMBLY

Priority: EP20090736714 20090825 IL20080193931 20080907 WO2009US54835 20090825 US20110062011 20110303 US20130783431 20130304

Family:

Publication number	Publication date	Application number	Application date
AP201105632 A0	20110430	AP20110005632	20090825
AP3112 A	20150131	AP20110005632	20090825
AR073269 AA	20101028	AR2009P103348	20090901
AU2009288413 AA	20100311	AU20090288413	20090825
AU2009288413 BB	20150625	AU20090288413	20090825
BRPI0919299 A2	20151215	BR2009PI19299	20090825
CA2735742 AA	20110301	CA20092735742	20090825
CA2735742 C	20140429	CA20092735742	20090825
CL2011000486 A1	20111007	CL20110000486	20110307
CL49817 B	20140207	CL20110000486	20110307
CN101684697 A	20100331	CN200910173113	20090907
CN101684697 B	20131016	CN200910173113	20090907
CO6351818 A2	20111220	CO20110027446	20110307
CR20110122 A	20110607	CR20110000122	20110307
DE602009012256 D1	20130307	DE200960012256T	20090825
DK2329088 T3	20130408	DK20090736714T	20090825
EA018244 B1	20130628	EA20110000467	20090825
EA201100467 A1	20110830	EA20110000467	20090825
ECSP11010871 A	20110630	EC2011SP10871	20110304
EP2329088 A1	20110608	EP20090736714	20090825
EP2329088 B1	20121226	EP20090736714	20090825
ES2402202 T3	20130429	ES20090736714T	20090825
HK1152088 A1	20130712	HK20110106114	20110615
HN2011000694 A	20111222	HN20110000694	20110307
HR20130185 T1	20130531	HR20130000185	20130304
IL193931 A0	20090504	IL20080193931	20080907
IL193931 A1	20120131	IL20080193931	20080907
JP2012502205 T2	20120126	JP20110526107T	20090825
JP5587889 B2	20140910	JP20110526107T	20090825
KR101595320 B1	20160222	KR20117007986	20090825
KR20110053384 A	20110520	KR20117007986	20090825
MA32612 B1	20110901	MA20110033673	20110304
MX2011002458 A1	20110405	MX20110002458	20090825
NZ591537 A	20120629	NZ20090591537	20090825
PE09012011 A1	20120118	PE20110000450	20090825
PT2329088 T	20130328	PT20090736714T	20090825
TH139396 A	20150130	TH20091003989	20090904
TW201014955 A	20100416	TW20090129145	20090828
TWI456109 B	20141011	TW20090129145	20090828
UA101390 C2	20130325	UA20110003150	20090825
US2011146360 AA	20110623	US20090062011	20090825

US2014190222 AA	20140710	US20130783431	20130304
US8387425 BB	20130305	US20090062011	20090825
US8794043 BB	20140805	US20130783431	20130304
VN13354 A1	20141225	VN20110000912	20090825
WO10027760 A1	20100311	WO2009US54835	20090825
ZA201101653 A	20120530	ZA20110001653	20110303

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** BEN AHARON EFFI ; DANI MARKBREIT ; EFFI BEN AHARON ; MUL T LOCK TECHNOLOGIES LTD ; MARKBREIT DANI ; KLEIN DAVID ; MUL T LOCK TECH LTD

Assignee(s): MUL T LOCK TECHNOLOGIES LTD IL

Inventor(s):(std)**:** MARKBREIT DANI ; BEN AHARON EFFI ; EFFI BEN AHARON ; DANI MARKBREIT ; MARKBREIT DANNI

Inventor(s): BEN−AHARON, EFFI

Agent(s): SPRUSON AND FERGUSON; BULL HOUSSER AND TUPPER LLP; REGEHR HERBERT B; CLARO Y CIA; MARKS AND CLERK LUXEMBOURG LLP; WHITE DUNCAN ROHAN; DEKEL PATENT LTD; DAVID; KLEIN DAVID

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): E05B19/00 E05B19/02 E05B19/04 E05B19/08 E05B27/00 E05B27/06 E05B35/00 (Advanced/Invention);
E05B19/00 E05B35/00 (Advanced/Non−invention);
B25B13/00 E05B19/00 E05B27/00 E05B35/00 (Core/Invention);
E05B19/00 (Core/Non−invention);
E05B (Subclass/Invention)

International class (IPC 1−7): E05B35/00

CPC: E05B19/00 E05B35/00 Y10T70/7588 Y10T70/7802 Y10T70/7819 Y10T70/7825 Y10T70/7859 Y10T70/7864 Y10T70/787 Y10T70/7881 Y10T70/7893 E05B35/003

European class: E05B35/00F

US class: 70/395 70/398 70/399 70/405 70/405S 70/406 70/407 70/409 70/411 70/490 70/490P

Classification Explorer

Cited documents: US7086259 BB, US6508091 BA, US5894750 A, US5839308 A, US5784910 A, US5520035 A, US5437176 A, US5170651 A, US5131247 A, US5123268 A, US5024071 A, US4434636 A, US4377082 A, US3877267 A, US2011146360 AA, US2011072867 AA, US2003074939 AA, US195118 A, JP7011821 A2, JP2006511738 T2, JP2006511738 T2, GB2412689 A1, FR2759406 A1, FR2522053 A1, EP1728944 A2, EP0416500 A1, DE1093253 B, CN1961127 A,

Forward Citations: WO14127810, WO13169760, WO12125512, US9523217, US9205500, US9140034, US9103139, US8915107, US8794043, US8746025, US2017081879, US2015345177, US2015211255, US2013298623, US2013152352, US2011252846, US2011072867, TWI547632, EA026875, CN105102742, CN103608537, CN102677971, CN102677971,

Abstract:
Source: US2011146360A A key device for use with more than one lock, the key device including a shaft portion, and at least one movable key combination element retained within the shaft portion and including first and second portions adjacent one another, the first portion of the at least one movable key combination element being located along on the shaft portion and the second portion of the at least one movable key combination element being located offset to the first portion.

0) US2001032485A – STEERING WHEEL LOCK

12) Family number: 30017498 (US2001032485A) © PatBase

Title: STEERING WHEEL LOCK

Priority: CA19892003946 19891127 EP19890120655 19891108 US19880287105 19881220
US19900478411 19900212 US19970942576 19971001 US19960686122 19960723
US20000728387 20001204 US20030682565 20031010 US20000494459 20000131
US19900627975 19901217 US20000519369 20000306

Family:

Publication number	Publication date	Application number	Application date
AT83987 E	19930115	AT19890120655T	19891108
AU599863 B1	19900726	AU19890044751	19891116
CA2003946 AA	19900620	CA19892003946	19891127
CA2003946 C	19950926	CA19892003946	19891127
DE58903177 D1	19930211	DE19895003177	19891108
EP0374453 A2	19900627	EP19890120655	19891108
EP0374453 A3	19901128	EP19890120655	19891108
EP0374453 B1	19921230	EP19890120655	19891108
ES2037937 T3	19930701	ES19890120655T	19891108
GR3007054 T3	19930730	GR19930400286T	19930211
HK65093 A	19930716	HK19930000650	19930708
JP2093421 C3	19960918	JP19890330915	19891220
JP3135862 A2	19910610	JP19890330915	19891220
JP7115628 B4	19951213	JP19890330915	19891220
KR930000288 B1	19930115	KR19890018955	19891220
MX168001 B	19930427	MX19890018495	19891127
PT92623 A	19900629	PT19890092623	19891219
PT92623 B	19950912	PT19890092623	19891219
SG9390355 A	19930709	SG19930090355	19930329
US2001032485 AA	20011025	US20000728387	20001204
US2004074268 AA	20040422	US20030682565	20031010
US4935047 A	19900619	US19880287105	19881220
US5865044 A	19990202	US19970942576	19971001
US6223568 BA	20010501	US19900627975	19901217
US6223569 BA	20010501	US20000494459	20000131
US6230527 BA	20010515	US20000519369	20000306
US6240753 BA	20010605	US19900478411	19900212
US6694784 BB	20040224	US20000728387	20001204

Probable Assignee: WINNER INT ROYALTY LLC

Assignee(s):(std)**:** DONNA SHII UINAA ; WINNER INT ROYALTY C ; JIEEMUSU II UINAA ; JAMES E WINNER Y DONNA C WINNE ; WINNER INT ROYALTY LLC ; WINNER DONNA C ; WINNER JAMES E ; WINNER INT ; WINNER JAMES EARL ; WINNER INT ROYALTY CO ; WINNER JR JAMES E

Assignee(s): WU JINN FU ; WINNER INT INC ; WINNER INT SHARON PA US ; WINNER INT ROYALTY CORP ; WINNER INT SHARON PA ; JAMES E WINNER Y DONNA C WINNER ; JAMES E WINNER ; PNC BANK NATIONAL ASSOC ; WINNER JAMES E JR ; PNC BANK NATIONAL ASSOCIATION ; DE CONSEIL DE RECHERCHES ET D APPLICATIONS ; DE CONSEIL DE RECHERCHES ET D APPLICATIONS SCIENTI ; DE CONSEILS DE RECHERCHES ET D APPLICATIONS SCIEN ; DE CONSEILS DE RECHERCHES ET D APPLICATIONS SCIENT ; DE CONSEILS DE RECHERCHES ET D APPLICATIONS SCIENTIFIQUES SAS SOC ; DE CONSEILS DE RECHERCHES ET D"APPLICATIONS SCIEN ; DE CONSEILS DE RECHERCHES ET D'APPLICATIONS SCIENT ; DE CONSEILS DE RECHERCHES ET D'APPLICATIONS SCIENTIFIQUES

	SAS SOC
Inventor(s):(std)	JIN FUU UU ; WU JINN F ; WU JINN FU ; JINN FU WU
Inventor(s):	WU JINN FU TAINAN TW
Agent(s):	SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; GOWLING LAFLEUR HENDERSON LLP
Designated states:	AT BE CH DE ES FR GB GR IT LI LU NL SE
International class (IPC 8–9):	B60R25/02 E05B65/12 (Advanced/Invention); E05B65/12 (Advanced/Non–invention); B60R25/02 (Core/Invention)
International class (IPC 1–7):	B60R25/02 B62D1/04 B62D1/06 E05B65/12 F16C3/00
CPC:	Y10T70/5765 Y10T70/5841 Y10T70/5889 Y10T70/5894 B60R25/0225
European class:	B60R25/022H
US class:	70/209 70/209P 70/226 70/237 70/238
Classification Explorer	
Cited documents:	USD289491 S1, US871047 A, US6694784 BB, US6240753 BA, US6230527 BA, US6223569 BA, US6223568 BA, US5865044 A, US5062282 A, US5052201 A, US5042278 A, US5042276 A, US5040388 A, US5031428 A, US5022246 A, US4935047 A, US4887443 A, US4856308 A, US4848110 A, US4829797 A, US4823573 A, US4768359 A, US4750341 A, US4747279 A, US4738127 A, US4304110 A, US4175410 A, US4103524 A, US3815391 A, US3807779 A, US3742743 A, US3664164 A, US3462982 A, US3245239 A, US3004164 A, US2528746 A, US1448658 A, US1364539 A, US1347463 A, US1327611 A, US1268137 A, TW75210218, TW75203861, TW75201666, TW74210699, TW74210218, TW34246 B, JP62100257 U1, JP62100257 U, JP49020666 U, JP49016023 U, GB2039840 A1, GB2024307 A1, GB1554593 A, GB1467816 A, GB1127524 A, FR2566348 A1, DK106072 A, DE9001288 U, DE2718291 A1, AU587164 B3, AU586805 A1, AU565999 B3, AU561885 B1, AU402771 B2, AU402771 A1, AU402771,
Forward Citations:	USD753981, USD616283, USD571636, USD571185, USD521357, USD516409, USD493692, USD493691, USD493354, USD475273, USD474099, USD472450, USD467491, USD465721, USD458529, US9222598, US9022337, US8783073, US8601840, US8275517, US7743634, US7628046, US7624604, US7213427, US7174752, US7111764, US7111764, US7071818, US6763690, US6734788, US6725695, US6725694, US6694784, US6679089, US6560999, US6553797, US6543263, US6539758, US6516642, US6503019, US6502437, US6490897, US6484543, US6477874, US6460385, US6282930, US6240753, US6230527, US6223569, US6173590, US6139235, US6116065, US6109076, US5996721, US5921115, US5908178, US5855128, US5842361, US5836186, US5755123, US5735149, US5673576, US5673575, US5635899, US5613383, US5600979, US5555753, US5488859, US5412963, US5406837, US5333478, US5327753, US5284037, US5277042, US5259222, US5253497, US5211041, US5179849, US5144822, US5142889, US5138853, US5131245, US5113673, US5107691, US5099664, US5092146, US5062282, US5052201, US5042278, US5040388, US5031428, US5022246, US2011297712, US2008282754, US2008275608, US2007074549, US2006191967, US2006179901, US2006032278, US2005098595, US2004261474, US2004148489, US2004074268, TWI432348, NL1038780, JP7144610, JP6219242, GB2263089, FR2698904, EP1535812, EP0630784, EP0603689, DE9300564, DE9011122, DE4231577, CN103213561, AU658747, AU634070, AU634070,

Abstract:
Source: US2001032485A A motor vehicle steering wheel lock for mounting diametrically across the rim of the steering wheel and having an extended portion adapted to block complete rotation of the steering wheel has locking means which simplify and reduce the number of manual manipulations required to mount and remove the steering wheel lock. A locking means is provided to permit only axial extension of the elongated steering wheel lock when in the locked condition, and to permit axial contraction of the elongated steering wheel lock only when in the unlocked condition.

0) US2440428A – KEY BIT

13) Family number: 29903274 (US2440428A) © PatBase

Title: KEY BIT

Priority: US19420425952 19420108 US19450572901 19450115 US19450572902 19450115 US19450572904 19450115 US19450572903 19450115 US19450572905 19450115 US19450572906 19450115 US19450572907 19450115

Family:

Publication number	Publication date	Application number	Application date
US2440428 A	19480427	US19450572901	19450115
US2440429 A	19480427	US19450572902	19450115
US2440430 A	19480427	US19450572903	19450115
US2440431 A	19480427	US19450572904	19450115
US2440432 A	19480427	US19450572905	19450115
US2440433 A	19480427	US19450572906	19450115
US2440434 A	19480427	US19450572907	19450115

Probable Assignee: ELLISON BEST FRANK

Assignee(s):(std)**:** ELLISON BEST FRANK

Inventor(s):(std)**:** ELLISON BEST FRANK

Inventor(s): BEST FRANK ELLISON

International class (IPC 8–9)**:** E05B19/00 E05B35/00 E05B35/10 (Advanced/Invention); E05B35/00 (Advanced/Non–invention); E05B19/00 E05B35/00 (Core/Invention)

International class (IPC 1–7)**:** E05B19/18 E05B35/10

CPC: Y10T70/7706 Y10T70/7802 Y10T70/7689 Y10T70/7684 Y10T70/7633 E05B35/00 Y10T70/765 E05B19/00 E05B35/003 E05B35/10 Y10T70/7881

European class: 68AB5 E05B19/00 E05B35/00 E05B35/10 P05B35/00F

US class: 70/366 70/369 70/375 70/376 70/379R 70/395 70/409

Classification Explorer

Cited documents: US978964 A, US947913 A, US577927 A, US524148 A, US293885 A, US2301755 A, US2179947 A, US2165202 A, US2049742 A, US2014233 A, US1964787 A, US195118 A, US1947443 A, US1905639 A, US1892419 A, US1863525 A, US1573791 A, DE381154 A,

Forward Citations: WO9314290, WO14107666, US9359793, US9045915, US9003845, US8365560, US7793528, US7788956, US7634930, US7552608, US5839308, US5784910, US5520035, US5211044, US4429555, US2945373, US2907197, US2011000267, US2010050718, US2009301148, US2008282755, US2008250830, US2008190153, JP4003971, JP2006046008, AT385077,

Abstract:
Source: US2440428A 1, In a separable' key bit consisting' of s. sub, stantielly rectangular block adapted to he' res leasably attached to a key blade In the formation of a multiple–element key, the combination of elements comprising an anvil side adapted ,toatlt a. flat surface, a bottom edge, adjacent ga1d's_nv:|_1 side, that is substantially strnighithroughuqt the length of said block, and s. groove in said bottom edge ada–Dted to cooperate with key means adapted to flt thereintu to detaohably retain said keybitinseidkeir. – ' ` ' degrees – ` f_ .–

0) US2006243873A – TELESCOPING POLE MOUNT

14) Family number: 33583903 (US2006243873A) © PatBase

Title: TELESCOPING POLE MOUNT

Priority: US20050118734 20050429 US20050120286 20050502 US20050125700 20050510 US20070002445 20071217 US20070784214 20070405 US20070974707 20071015 US20080069219 20080208

Family:

Publication number	Publication date	Application number	Application date
US2006243873 AA	20061102	US20050120286	20050502
US2006255215 AA	20061116	US20050118734	20050429
US2006261221 AA	20061123	US20050125700	20050510
US2007246633 AA	20071025	US20070784214	20070405
US2008035805 AA	20080214	US20070974707	20071015
US2008093514 AA	20080424	US20070002445	20071217
US2008138152 AA	20080612	US20080069219	20080208
US7398952 BB	20080715	US20050125700	20050510
US7523911 BB	20090428	US20050120286	20050502
US7594633 BB	20090929	US20070974707	20071015
US7802768 BB	20100928	US20050118734	20050429
US8020828 BB	20110920	US20080069219	20080208
US8550013 BB	20131008	US20070002445	20071217

Probable Assignee: CARNEVALI JEFFREY D

Assignee(s):(std)**:** CARNEVALI JEFFREY D

Inventor(s):(std)**:** CARNEVALI JEFFREY D

Inventor(s): CARNEVALI JEFFREY

Agent(s): CHARLES J RUPNICK; RUPNICK CHARLES J; CHARLES J; CHARLES J RUPNICK ATTORNEY AT LAW

International class (IPC 8–9)**:** A47B11/00 A47F5/00 F16B1/00 F16B2/14 F16M11/00 F16M13/00 (Advanced/Invention); A47F5/00 F16B1/00 F16B2/02 F16M11/00 F16M13/00 (Core/Invention)

CPC: F16M11/2078 F16M2200/024 F16M2200/027 F16M2200/066 F16M2200/068 F16M11/14 Y10T403/7051 Y10T403/32501 Y10T403/7066 Y10T403/7056 Y10T403/7069 Y10T403/7075 F16M13/02 F16B13/0891 F16M11/046 F16M11/2014 F16M11/28 F16M2200/08 F16B7/1418 F16M13/00

European class: F16B7/14 F16M11/04 F16M11/04T2 F16M11/20A1 F16M11/28 F16M13/00 F16M13/02 R16B13/08W R16M200/08

US class: 108/137 108/143 248/125.8 248/125.9 248/157 248/157P 248/159 248/159P 248/161 248/188.5 248/288.31 248/346.03 248/404 248/407 248/412 248/413 248/544 248/544P 403/109.5 403/367 403/370 403/374.2 403/374.4 403/376 403/376P

Classification Explorer

Cited documents: US7537190 BB, US7398952 BB, US7380760 BB, US7032872 BB, US7007909 BB, US6959899 BB, US6835021 BA, US6796446 BB, US6695270 BA, US6609686 BB, US6386786 BA, US6378466 BA, US6378446 BA, US6371682 BA, US6226134 BA, US6203239 BA, US6189843 BA, US612489 A, US6045109 A, US5897268 A, US5845885 A, US5540457 A, US5423566 A, US5330302 A, US5323600 A, US5244133 A, US5233304 A, US5232304 A, US5197349 A, US4976721 A, US4928916 A, US4720071 A, US4706916 A, US4695021 A, US4650145 A, US4627602 A, US4274301 A, US4230335 A, US4113222 A, US3885882 A, US3866724 A, US376016 A, US3737136 A, US3023063 A, US3004743 A, US2850308 A, US2643143 A, US2507760 A, US2291747 A, US2006261221 AA, US2006255215 AA, US1859223 A, US1103839 A,

Forward Citations: WO17007874, WO14078493, USD786955, USD775684, USD736600, USD735595, US9700666, US9637942, US9631767, US9625792, US9567800, US9534731, US9527614, US9470315, US9423672, US9423066, US9388934, US9377157, US9322505, US9305475, US9261226, US9220533, US9180925, US9101398,

US9080585, US9046117, US9027950, US8979399, US8945128, US8939413, US8834467, US8783975, US8702046, US8641714, US8500357, US8500081, US8474206, US8382410, US8272604, US8114077, US8062293, US8057474, US8037904, US7967261, US7802768, US7594633, US2016363253, US2015273703, US2015182690, US2014376990, US2014175237, US2014151516, US2014084568, US2014042285, US2013149024, US2012235358, US2012123414, US2011271516, US2011233351, US2011042543, US2011027012, US2010300039, US2010123055, US2010098509, US2009198236, US2009198235, US2009198234, US2008092970, US2008035805, US2007127763, US2006255215, US2006175502, TWI365152, RU2469215, GB2507133, FR3012568, FR3012567, FR3011511, FR3006507, EP2860046, CN102537603, AU2009200332, AU2007237197,

Abstract:
Source: US2006243873A A telescoping pole mount having a clamping mechanism, formed of a substantially rigid platform forming a substantially planar contact surface and having a clearance hole therethrough that is substantially crosswise to the platform contact surface; a substantially rigid arm formed with spaced−apart opposing substantially planar proximal and distal contact surfaces and being formed with a clearance hole therethrough between the opposing contact surfaces; a substantially rigid columnar rod passing through the respective clearance hole in the platform and arm, the rod being formed with threads at an end thereof adjacent to the arm; a substantially rigid threaded actuator having a substantially planar contact surface and being threadedly coupled to the threads formed at the end of the rod; and a thrust bearing between the actuator contact surface and the arm distal contact surface.

15) Family number: 32843968 (US2006084982A) © PatBase

Title: SYSTEMS AND METHODS FOR POSTERIOR DYNAMIC STABILIZATION OF THE SPINE

Priority:

US20040006495 20041206 US20040970366 20041020 US20050033452 20050110
US20060586849 20061025 US20060427736 20060629 US20060362366 20060223
US20050701660P 20050722 US20060427738 20060629 US20060436407 20060517
US20070726093 20070320 US20070801186 20070509 US20070801194 20070509
US20070801319 20070509 US20070920872P 20070330 US20070931811P 20070525
US20070994899P 20070921 US20070998620P 20071012 US20070005611P 20071206
US20070919198P 20070320 US20080011478P 20080116 US20080011478 20080116
WO2006US28586 20060720 US20080079676 20080328 US20080154540 20080523
WO2007US11573 20070515 WO2007US11597 20070515 US20080233212 20080918
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US20080329423 20081205 US20090355093 20090116 WO2005US38021 20051020
US20080063878P 20080206 US20090366089 20090205 WO2008US03677 20080320
WO2008US04098 20080328 US20080188976P 20080814 US20090540865 20090813
US20080063878 20080206 WO2008US06598 20080523 WO2008US05948 20080508
US20100966807 20101213 US20110099156 20110502 US20100966790 20101213
WO2008US76815 20080918 WO2009US31225 20090116 WO2009US33174 20090205
WO2009US53740 20090813

Family:

Publication number	Publication date	Application number	Application date
AU2005295209 AA	20060427	AU20050295209	20051020
AU2006272755 AA	20070201	AU20060272755	20060720
AU2007235543 AA	20071018	AU20070235543	20070223
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AU2007328463 AA	20080612	AU20070328463	20070515
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WO10019791 A3	20100514	WO2009US53740	20090813	

Probable Assignee: CHOICE SPINE LP

Assignee(s):[(std)]**:** EXACTECH INC ; KIM DANIEL H ; FLAHERTY J C ; HAYES STANLEY K ; GUTIERREZ ROBERT ; HARNAPP JEAN A ; HAYES STANLEY KYLE ; FLAHERTY J CHRISTOPHER ; ALTARAC MOTI ; FLAHERY CHRISTOPHER J ; GUTIERREZ ROBERT C ; HARNAPP JEAN ; FLAHERY J CHRISTOPHER ; UNIV LELAND STANFORD JUNIOR ; TRUSTEES FOR LELAND STANFO ; UNIV BOARD OF TRUSTEES OF ; UNIV THE BOARD OF TRUSTEES OF ; VERTIFLEX INC ; REGLOS JOEY CAMIA ; TEBBE SHAWN ; REGLOS JOEY C ; TRUSTEES FOR THE LELAND STANFO ; REGLOS JOEY CARNIA ; REGLOS JOEY

Assignee(s): THE BOARD OF TRUSTEES OF LELAND STANFORD JUNIOR UN ; THE BOARD OF TRUSTEES FOR THE LELAND STANFORD JUNI ; VERTIFFLEX INC ; THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY ; THE BOARD OF TRUSTEES OF LELAND STANFORD JUNIOR UNIVERSITY ; THE BOARD OF TRUSTEES FOR THE LELAND STANFORD JUNIOR UNIVERSITY ; R UNIVERSITY THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIO ; THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIO ; R UNIVERSITY THE BOARD OF TRUSTEES OF THE LELAND S ; R UNIV BOARD OF TRUSTEES OF LELAND STANFORD JUNIO ; FLAHERTY J ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; BOARD OF TRUSTEES FOR LELAND STANFORD JUNIOR ; BOARD OF TRUSTEES FOR LELAND STANFORD JUNIOR UNIV ; BOARD OF TRUSTEES OF LELAND STANFORD JUNIOR ; BOARD OF TRUSTEES OF LELAND STANFORD

JUNIOR UNIV ; CHOICE SPINE LP ; FLAHERY J

Inventor(s):(std)**:** FLAHERTY J C ; HAYES STANLEY K ; ALTARAC MOTI ; KIM DANIEL H ; TEBBE SHAWN ; REGLOS JOEY CARNIA ; REGLOS JOEY CAMIA ; HAYES STANLEY KYLE ; HARNAPP JEAN A ; GUTIERREZ ROBERT C ; GUTIERREZ ROBERT ; FLAHERTY J CHRISTOPHER ; REGLOS JOEY C ; REGLOS JOEY ; HARNAPP JEAN ; FLAHERY J CHRISTOPHER ; FLAHERY CHRISTOPHER J

Inventor(s): CHRISTOPHER J FLAHERY ; KIM DANIEL ; FLAHERY J ; HAYES STANLEY ; STANLEY KYLE HAYES ; FLAHERTY J ; JEAN A HARNAPP ; J CHRISTOPHER FLAHERY ; MOTI ALTARAC ; DANIEL H KIM ; J CHRISTOPHER FLAHERTY ; JOEY CAMIA REGLOS

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; SMART AND BIGGAR; GOUDREAU GAGE DUBUC; HAINES MILES JOHN LS; GOWSHALL JONATHAN VALLANCE; DOCHERTY ANDREW JOHN; BOZICEVIC FIELD AND FRANCIS LLP; RIMAS LUKAS VERTIFLEX INC; MEYERTONS HOOD KIVLIN KOWERT AND GOETZEL PC; ERIC B; LUKAS RIMAS

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 YU ZA ZM ZW

International class (IPC 8–9): A61B17/00 A61B17/04 A61B17/08 A61B17/14 A61B17/32 A61B17/34 A61B17/56 A61B17/58 A61B17/68 A61B17/70 A61B17/84 A61B17/86 A61B17/88 A61B17/90 A61B19/00 A61F2/30 A61F2/44 (Advanced/Invention); A61B17/70 (Advanced/Non–invention); A61B17/03 A61B17/04 A61B17/14 A61B17/32 A61B17/34 A61B17/56 A61B17/58 A61B17/68 A61B17/70 A61B17/88 A61B19/00 A61F2/30 A61F2/44 (Core/Invention); A61B A61F (Subclass/Invention)

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Abstract:
Source: US2006084982A Systems and devices for dynamically stabilizing the spine are provided. The systems include a superior component for attachment to a superior vertebra of a spinal motion segment and an inferior component for attachment to an inferior vertebral of a spinal motion segment. The interconnection between the two components enables the spinal motion segment to move in a manner that mimics the natural motion of the spinal motion segment. Methods are also provided for stabilizing the spine and for implanting the subject systems.

0) US2011265530A – KEY AND LOCK ASSEMBLIES

16) Family number: 49087352 (US2011265530A) © PatBase

Title: KEY AND LOCK ASSEMBLIES

Priority: EP20110774534 20110428 IL20110211024 20110203 US20100329121P 20100429
IL20110215111 20110913 US20100897564 20101004 US20100329121P 20100409
US20110097296 20110429 WO2011IL00339 20110428 WO2011IL00339 20110429

Family:

Publication number	Publication date	Application number	Application date
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PT2563996 T	20160623	PT20110774534T	20110428
SI2563996 T1	20160630	SI20110030812	20110428
US2011265530 AA	20111103	US20100897564	20101004
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Probable Assignee: RAV BARIACH 08 IND LTD

Assignee(s):(std)**:** NICOARA PETRISOR ; RAV BARIACH 08 IND LTD ; RAV BARIACH 8 IND LTD ; RAV BARIACH IND

Assignee(s): RAV BARIACH INDUSTRIES ; RAV BARIACH 08 INDUSTRIES LTD ; RAV BARIACH (08) IND LTD ; RAV BARIACH (08) INDUSTRIES LTD.

Inventor(s):(std)**:** NICOARA PETRISOR ; PETRISOR NICOARA

Agent(s): GELSING SANDER R; SARPI MAURIZIO; DIAZ JOAQUIN; APELFELD AND CO; GUY; BLUE FILAMENT LAW PLLC; AVERY N; APPELFELD AND CO

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):	E05B E05B1/00 E05B15/00 E05B15/14 E05B19/00 E05B19/02 E05B19/04 E05B19/06 E05B19/08 E05B19/26 E05B23/00 E05B27/00 E05B27/04 E05B27/06 E05B27/10 E05B29/02 (Advanced/Invention); E05B15/00 E05B19/00 E05B27/00 (Core/Invention); E05B (Subclass/Invention)
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European class:	E05B19/00K1 E05B27/00A3B E05B27/00F E05B35/00F E05B47/00B7 E05B47/00B9 P05B19/00K4M1
US class:	70/276 70/276P 70/344 70/344P 70/357 70/357S 70/395 70/398 70/399 70/405 70/405S 70/406 70/407 70/409 70/411
Locarno class:	08/07
Classification Explorer	
Cited documents:	WO09147660 A2, WO09135669 A2, WO08015672 A2, US7265470 BA, US6508091 BA, US6490898 BA, US6367297 BA, US5894750 A, US5799519 A, US5784910 A, US5520035 A, US5437176 A, US5123268 A, US5085062 A, US5024071 A, US4380162 A, US4377082 A, US4061004 A, US4026134 A, US3877267 A, US2011072867 AA, US2011048084 AA, US2009205385 AA, US2008236223 AA, US2006048554 AA, CN1961127 A, CN1323371 A, CN101160218 A,
Forward Citations:	WO15059723, WO15000966, WO14147654, US9523217, US9151077, US9140034, US9103139, US9045915, US8746025, US2017081879, US2016040698, US2016040695, US2015121977, US2015013404, US2014190223, US2013327102, US2013298621, US2013061643, US2011072867, TWI566075, ITBO20130122, ES2490015, EP3103943, EP2570571, CN105658885, CN105423088, CN104847170, AU2016100111,

Abstract:
Source: US2011265530A The present invention is directed to key assemblies and their mating locks, and more particularly, to keys with mutually compressible, actuating elements capable of being continuously positioned axially within apertures in a key blade.

17) Family number: 51114357 (US2012125513A) © PatBase

Title: CYLINDRICAL SURFACE SPIN WELD APPARATUS AND METHOD OF USE

Priority:

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US20100962943	20101208	US20100951558	20101122	EP20110843200	20110730
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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: COMMSCOPE TECHNOLOGIES LLC

Assignee(s):(std)**:** ADAMS SCOTT ; ADAMS SCOTT M ; ANDREW CORP ; ANDREW LLC ; FLEMING JAMES ; ISLAM NAHID ; HARWATH FRANK A ; HARWATH FRANK ; FLEMING JAMES P ; COMMSCOPE TECHNOLOGIES LLC ; VACCARO RONALD ; VAN SWEARINGEN KENDRICK ; WLOS JAMES ; VACCARO RONALD ALAN ; PAYNTER JEFFREY D ; MOE ALAN NEAL ; MOE ALAN N ; VEIHL JONATHON ; PAYNTER JEFFREY ; MOE ALLEN ; SWEARINGEN KENDRICK VAN ; VACCARO RONALD A ; WLOS JAMES J ; VEIHL JONATHON C ; COMMSCOPE TECH LLC

Assignee(s): COMMSCOPE INC OF NORTH CAROLINA ; WILMINGTON TRUST NATIONAL ASSOCIATION COLLATERAL AGENT AS ; VAN SWEARINGEN KENDRICK WOODRIDGE ; REDWOOD SYSTEMS INC ; SKY SOCKET LLC ; COMMSCOPE TECHNOLOGIES LLC HICKORY ; JPMORGAN CHASE BANK NA COLLATERAL AGENT AS ; ALLEN TELECOM LLC

Inventor(s):(std)**:** ADAMS SCOTT ; ANDREW CORP ; ANDREW CORPORATION ; COLAPIETRO JULIAN ; COLAPIETRO JULIAN ROCKWELL ; FLEMING JAMES ; FLEMING JAMES P ; FLEMMING JAMES P ; GUERIN MICHAEL ; GUERIN MICHAEL R ; HARWATH FRANK A ; ISLAM NAHID ; MOE ALAN NEAL ; MOE ALLEN ; PAYNTER JEFFREY ; PAYNTER JEFFREY D ; PAYNTER JEFFREY DAVID ; SWEARINGEN KENDRICK VAN ; VAC CARO RONALD ; VACCARO RONALD ; VACCARO RONALD A ; VACCARO RONALD ALAN ; VAN SWEARINGEN KENDRICK ; VEIHL JONATHON ; VEIHL JONATHON C ; WLOS JAMES ; WLOS JAMES J ; MOE ALAN N ; ADAMS SCOTT M ; HARWATH FRANK

Inventor(s): VAN SWEARINGEN KENDRICK WOODRIDGE

Agent(s): LIND URBAN ARVID OSKAR; AWAPATENT AB; KRANSELL AND WENNBORG KB; BABCOCK IP PLLC; MYERS BIGEL AND SIBLEY PA; MYERS BIGEL PA; BABCOCK ANDREW

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): B23K20/10 B23K20/12 B23K26/00 B23K26/28 B23K26/282 B23K26/32 B23K31/02 B29C65/00 B29C65/02 B29C65/06 B29C65/78 B29C65/80 B29L31/34 H01B11/00 H01B11/18 H01B12/00 H01B13/00 H01B13/016 H01B13/20 H01B7/02 H01B7/04 H01B7/08 H01B7/42 H01F10/00 H01G2/10 H01P3/06 H01P3/08 H01P5/02 H01Q1/00 H01R103/00 H01R11/22 H01R12/79 H01R13/11 H01R13/15 H01R13/213 H01R13/504 H01R13/52 H01R13/58 H01R13/622 H01R13/625 H01R13/629 H01R13/639 H01R13/64 H01R13/646 H01R13/6592 H01R24/00 H01R24/28 H01R24/38 H01R24/40 H01R24/44 H01R24/76 H01R4/02 H01R4/62 H01R43/00 H01R43/02 H01R43/04 H01R43/16 H01R43/20 H01R43/26 H01R9/05 H02G15/02 H02G15/08 H04B5/00 (Advanced/Invention); B23K20/12 B23K26/28 B23K26/32 B29C65/00 B29C65/06 B29C65/48 B29C65/64 B29C65/78 B29L31/34 H01B7/40 H01G4/12 H01P3/06 H01P5/02 H01R101/00 H01R103/00 H01R13/17 H01R13/18 H01R13/504 H01R13/58 H01R13/622 H01R13/625 H01R13/631 H01R24/38 H01R24/40 H01R4/62 H01R43/20 H01R9/05 (Advanced/Non–invention)

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US class: 1/1 156/433 156/433S 156/47 156/47P 174/115 174/70R 174/74R 174/75C 174/75R 174/82 174/82P 174/84C 174/84R 174/85 219/121.6 219/121.64 219/121.640S 228/111 228/111S 228/114 228/114.5 228/114.500S 228/114S 228/2.1 29/517 29/592 29/592.1 29/700 29/729 29/745 29/747 29/748 29/753 29/825 29/828 29/857 29/857S 29/860 29/860S 29/861 29/863 29/868 29/868S 29/874 29/874S 29/876 333/238 333/238 333/238 427/58 439/217 439/247 439/248 439/274 439/314 439/314P 439/315 439/317 439/320 439/372 439/378 439/429 439/449 439/449P 439/578 439/578P 439/578S 439/579 439/581 439/583 439/584 439/607.01 439/607.02 439/624 439/660 439/681 439/717 439/874 439/950

Classification Explorer

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Forward Citations: WO17078975, WO17050316, WO17016498, WO16167840, WO16146828, WO16116326, WO16093928, WO16091251, WO16054392, WO16040578, WO15184422, WO15134740, WO15069589, WO15026528, WO14144447, WO14100681, WO14074798, WO14074223, WO14074222, WO14059365, WO14055701, WO14055215, WO13171049, WO13071206, WO13071204, USD793470, USD788839, USD771569, US9712905, US9692174, US9666983, US9666958, US9653852, US9634475, US9633765, US9633761, US9627782, US9608343, US9589710, US9583847, US9570851, US9570849, US9559552, US9559471, US9543716, US9543629, US9509364, US9502016, US9495942, US9490052, US9472928, US9465183, US9450351, US9450334, US9450329, US9447259, US9428340, US9423481, US9407039, US9384872, US9356382, US9343847, US9327969, US9312609, US9306346, US9306317, US9258663, US9172421, US9172181, US9133031, US9107309, US9107292, US9099825, US9048527, US8957290, US8894439, US8888528, US8887379, US8876549, US8864388, US8827735, US8801460, US8747152, US8711577, US8704725, US8701278, US8657620, US8622768, US8622762, US8608507, US8556655, US8550859, US8550843, US8479383, US8302296, US2017201039, US2017179638, US2017155211, US2017153404, US2017133130, US2017033473, US2016336687, US2016322755, US2016322751, US2016276755, US2016268735, US2016218451, US2016197438, US2016149320, US2016062046, US2016049740, US2015333452, US2015126061, US2015104973, US2015099391, US2015061794, US2015038010, US2014377988, US2014352500, US2014334080, US2014273615, US2014148042, US2014134878, US2014134876, US2014134863, US2014127933, US2014094070, US2014004721, US2013316576, US2013294730, US2013276611,

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Abstract:
Source: US2012125513A A spin weld apparatus for spin welding a prepared end of a coaxial cable with a coaxial connector includes a cable clamp dimensioned to grip the coaxial cable and a drive collet dimensioned to enclose and rotationally interlock with a lateral surface of the coaxial connector. The drive collet is dimensioned to rotationally interlock with an interlocking portion of a spin welder. The spin welder is dimensioned to axially align the coaxial connector with the coaxial cable for spin welding when the drive collet is rotationally interlocked with the spin welder.

0) US1891590A – TYPEWRITING MACHINE

18) Family number: 29664915 (US1891590A) © PatBase

Title: TYPEWRITING MACHINE

Priority: US19310549772 19310627 US19310547694 19310627 US19310562788 19310627 US19310547382 19310914 US19310546858 19310627

Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: ROYAL TYPEWRITER CO INC

Assignee(s):(std)**:** ROYAL TYPEWRITER CO INC

Assignee(s): ROYAL TYPEWRITER COMPANY INC

Inventor(s):(std)**:** HANDLEY GEORGE F ; JOSEPH DOWD BERNARD ; MICHELSEN WILLIAM O ; MYERS LEWIS C

Inventor(s): DOWD BERNARD JOSEPH

International class (IPC 8–9)**:** B41J35/30 (Advanced/Invention); B41J35/00 (Core/Invention)

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Abstract:
Source: GB402484A [Class 100 (iv).] Ink–ribbon mechanism, particularly for use in duplicating–arrangements for typewriters, comprises one or more spools mounted on a shaft provided with spool–brakes and releasingmeans therefor, or comprises a number of spools associated with brakes and simultaneousrelease means therefor, or comprises means for locking the spools before or on completion of the feed–movement of the ribbons to hold taut

the ribbons and thereby prevent them from being dragged by the papers during line−spacing movement thereof. The manifoldingattachment for typewriters shown in Figs. 1 and 4 comprises, as described in Specifications 276,995, [Class 100 (iv), Typewriters and c.], and 367,768, feeding−means L for a number of ribbons K which are guided along the front of the platen C and are interleaved with webs H, the platen−carriage B being provided with a hand−lover 41 for operating the feeding−means L, and line−spacing mechanism for the webs. The ribbon spools S are revoluble on a shaft e fixed at the front in a frame F comprising front and rear plates a, b, and braces c, d, the rear plate having an opening for permitting removal of the spools. The frame is connected to the carriage B and is provided with a roller 14 running on a rail 10 secured to adjustable brackets 11 on the framework A of a typewriter. Each spool is, as shown in Figs. 17 and 18, formed with internal teeth 77 and a groove 76 co−operating with a locking−dog 84 and a spring urged brakeplunger 93 which are mounted in a groove 81 and a recess 80 respectively. A rock−shaft 99 mounted in the shaft e is formed with grooves 100, 101 receiving lugs 86 on the locking−dogs, and heads 96 on the brake−plungers respectively. Normally the brake plungers engage the spools, and the locking−dogs are held in disengaged position by the shoulder 102 of the groove 100. An arm 109, Figs. 4 and 16, on the shaft 99 carries a pivoted latch 121 having a shoulder 120 engaging a lug 116 on a loose arm 113. A roller 128 on the arm 113 engages a cam−slot 127 in a rocking plate 125 having a pin−and−slot connection 133 to a bell−crank 134 which is connected by linkage 135−140 to a bell−crank 143 operated by the cam 49 on the line−spacing lever 4. When the line−spacing lever is operated, the arms 113, 109 are swung downwards, the shaft 99 is rocked anti−clockwise and, before completion of the ribbon−feeding movement, the shoulder 103 moves the locking−dogs into engagement with the spools. The remainder of the ribbon−feeding movement is effective to remove slack from the ribbons and thereby prevent them from being dragged upwards by the webs during line−spacing movement thereof. To permit of removal of the spools, the lockingdogs and brake−plungers are retracted into the spools by rocking clockwise the shaft 99 and thereby causing the shoulders 102, 104 to engage the lugs 86 and heads 96. For this purpose, a loose bell−crank 149, co−operating with a lug 122 on the latch 121, is connected by a link 150 to an arm 153 on a rock−shaft 146 provided with a hand−lever 154 in the form of a plate. The rear end of the shaft e is normally supported by engagement of the coned end thereof with a hole in the hand−lever. On depression of the hand−lover, the bell−crank 149 is rocked clockwise, the latch is released from the lug 116 and engaged with a lug 112 on the arm 109, and the shaft 99 is rocked clockwise to retract the locking−dogs and brake−plungers, and thereby permit of the spools being moved axially along the shaft and removed from the machine. On return of the hand−lever the locking−dogs and brake−plungers are restored to normal position. The hand−lever has a cam lip 157 which rides over the coned end of the shaft e when the hand−lever is depressed or returned. The hand−lever is locked in normal position by co−operation of a hole therein with a springplunger mounted in a barrel 159 on the frame F. The spring−plunger is releasable by means of finger−operated plate 166 which is pivoted at 167 to the hand−lever 154 and has an aperture co−operating with the coned end of the springplunger.

0) US2002014951A – REMOTE CONTROL FOR A HOSPITAL BED

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Title: REMOTE CONTROL FOR A HOSPITAL BED

Priority:

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Probable Assignee: DRAEGER MEDICAL SYSTEMS INC

Assignee(s):(std)**:** REEDER RYAN A ; HORNBACH DAVID W ; RICHARDS JOHN H ; MCDERMOTT IAN ; MAHER PATRICIA ; JACQUES II WILLIAM L ; REEDER RYAN ANTHONY ; KRAMER KENNETH L ; BAGNELL JOSEPH P ; BOONE OTHO N ; DRAEGER MEDICAL SYSTEMS INC ; HILL ROM SERVICES INC ; ZERHUSEN ROBERT M ; WALKER MICHELLE L ; RILEY CARL W ; WILDMAN TIMOTHY D ; VOGEL JOHN D ; ST CLAIR NANCY ; STRECKER ROBERT J ; SCHUMAN RICHARD J ; WALKER MICHELLE LARSEN ; ZERHUSEN ROBERT MARK ; GEORGE CHRISTOPHER M ; CERIMELE MICHAEL E ; DRAEGER MEDICAL INFANT CARE IN ; JACQUES WILLIAM L

Assignee(s): LESTIENNE JAMES ; MAHER PATRICIA S ; DRAEGER MEDICAL INC ; DRAEGER MEDICAL INFANT CARE INC ; HAUSMAN PHILLIP ; CLAIR NANCY ST ; BOONE OTHO ; HILL ROM SERVICES INC A DELAWARE CORP ; HILL ROM SERVICES INC INDIANA CORP ; JACQUES WILLIAM L II ; HILL ROM SERVICES INC (INDIANA CORPORATION) ; HILL ROM SERVICES INC INDIANA CORPORATION ; HILL ROM SERVICES INC (A DELAWARE CORPORATION) ; HILL ROM SERVICES INC A DELAWARE CORPORATION ; JPMORGAN CHASE BANK NA COLLATERAL AGENT AS ; RILEY CARL WILLIAM ; ROTHWELL MICHAEL W

Inventor(s):(std)**:** CERIMELE MICHAEL ; CERIMELE MICHAEL E ; CLAIR NANCY ST ; ECKSTEIN GERALD D ; GEORGE CHRISTOPHER ; GEORGE CHRISTOPHER M ; GOULD RAYMOND C ; HAUSMAN PHILLIP ; BAGNELL JOSEPH P ; BOONE OTHO ; BOONE OTHO N ; HORNBACH DAVID W ; JACQUES II WILLIAM L ; JACQUES WILLIAM L ; JACQUES WILLIAM L II ; KRAMER KENNETH L ; LESTIENNE JAMES ; LESTINNE JAMES ; MAHER PATRICIA ; MAHER PATRICIA S ; MCDERMOTT IAN ; REEDER RYAN ; REEDER RYAN A ; REEDER RYAN ANTHONY ; RICHARDS JOHN ; RICHARDS JOHN H ; RILEY CARL ; RILEY CARL W ; RILEY CARL WILLIAM ; ROTHWELL MICHAEL W ; RUDOLPH KEN Q ; SCHUMAN RICHARD ; SCHUMAN RICHARD J ; ST CLAIR NANCY ; STRECKER ROBERT J ; VOGEL JOHN ; VOGEL JOHN D ; WALKER MICHELLE ; WALKER MICHELLE L ; WALKER MICHELLE LARSEN ; WILDMAN TIMOTHY ; WILDMAN TIMOTHY D ; ZERHUSEN ROBERT ; ZERHUSEN ROBERT M ; ZERHUSEN ROBERT MARK

Inventor(s): WILLIAM L JACQUES II ; TIMOTHY D WILDMAN ; RYAN A REEDER ; RYAN ANTHONY REEDER ; ROBERT J STRECKER ; ROBERT M ZERHUSEN ; RICHARD J SCHUMAN ; MICHAEL E CERIMELE ; MICHAEL W ROTHWELL ; NANCY ST CLAIR ; OTHO BOONE ; OTHO N BOONE ; PHILLIP HAUSMAN ; JACQUES WILLIAM LII ; JAMES LESTIENNE ; JOHN D VOGEL ; JOHN H RICHARDS ; JOSEPH P BAGNELL ; KENNETH L KRAMER ; KRAMER KENNETH ; JACQUES WILLIAM ; IAN MCDERMOTT ; CARL W RILEY ; HORNBACH DAVID

Agent(s): MACRAE AND CO; FINDLAY ALICE ROSEMARY; FINDLAY ALICE ROSEMARY ET AL; ISSHIKI AND CO; INTELLECTUAL PROPERTY GROUP, BOSE MCKINNEY AND EVANS LLP; INTELLECTUAL PROPERTY GROUP BOSE MCKINNEY AND EVANS LLP; BOSE MCKINNEY AND EVANS LLP, JAMES COLES; BOSE MCKINNEY AND EVANS LLP JAMES COLES; BARNES AND THORNBURG LLP; BOSE MCKINNEY AND EVANS LLP; CAESAR RIVISE BERNSTEIN COHEN AND POKOTILOW 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 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 VC VN YU ZA ZM ZW

International class (IPC 8–9): A47B1/03 A47B1/05 A47B23/00 A47B23/04 A47B23/06 A47B37/00 A47B9/20 A47C23/00 A47C31/00 A47F5/00 A61B19/00 A61B5/00 A61B5/0205 A61B5/0402 A61B5/08 A61B5/11 A61B5/145 A61G10/04 A61G11/00 A61G12/00 A61G5/00 A61G5/02 A61G7/05 A61H3/00 A61H3/04 A61J1/14 A61J7/04 A61M16/00 A61M5/00 A61N1/39 G01M1/38 G05B15/02 G06F1/00 G06F17/00 G06F19/00 G06F3/048 G06Q10/00 G06Q10/10 G06Q30/04 G06Q50/00 G06Q50/22 G06Q50/24 G08B13/00 G08B13/14 G08B21/02 G08B21/04 G08B23/00 G08B25/00 G08B25/04 G08B25/10 G08B3/10 G08B5/22 (Advanced/Invention);
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A47B23/00 A61B5/00 A61B5/0205 A61G10/00 A61G11/00 A61G12/00 A61G7/05 G06F19/00 G06Q10/00 G08B23/00 (Core/Invention);

A61B5/00 A61B5/021 A61B5/024 A61B5/08 A61G11/00 A61G5/00 A61G7/00 A61G7/002 A61M5/14 (Core/Non–invention)

International class (IPC 1–7): A47B1/03 A47B1/05 A47B23/00 A47B23/04 A47B9/20 A47C23/00 A47C31/00 A47F5/00 A61B19/00 A61B5/00 A61B5/0205 A61B5/021 A61B5/024 A61B5/0402 A61B5/08 A61B5/145 A61G10/02 A61G10/04 A61G11/00 A61G12/00 A61G5/00 A61G5/02 A61G7/018 A61G7/05 A61H3/00 A61H3/04 A61J1/14 A61J7/04 A61M16/00 A61M5/00 A61M5/14 A61N1/39 G05B23/00 G06F1/00 G06F17/00 G06F17/00 G06F17/60 G06F19/00 G06F19/00 G06F7/04 G08B1/00 G08B13/14 G08B13/14 G08B21/00 G08B21/02 G08B23/00 G08B25/00 G08B25/10 G08B3/00 G08B3/10 G08B5/22 G08B5/22

CPC: A47B9/20 A47B2200/0023 Y10S128/903 Y10S128/904 A61B5/743 A61B5/7445 G06F19/324 G08B5/222 G08B25/008 A61B5/0022 A61B5/002 A61G11/002 A61G11/003 A61G11/005 A61G11/006 A61G11/008 A61G12/002 A61G2203/70 A61B5/0205 A61B2562/222 G06F19/321 A61B5/6892 A61B5/021 A61B5/024 A61B5/0816 A61B5/1455 A61G7/0503 A61G10/04 A61G11/009 A61G2210/50 A61M5/1418 G06Q10/10 G05B15/02 G06F19/3462 A61G2203/723 A61B5/0002 A61B5/02055 A61B5/1113 A61B5/742 A61B5/7475 A61B2560/0242 A61B2560/0443 A61B2560/0456 A61G5/10 A61G11/00 A61G12/00 A61G2203/46 G06F19/322 G06F19/3418 G06F19/3425 G06F19/3456 G06F19/3481 G06F19/3487 A47B23/046 A61B5/1115 A61B5/1117 A61B5/4824 A61B5/7435 A61G7/001 A61G7/015 A61G7/018 A61G7/05 A61G7/0506 A61G7/0507 A61G7/05769 A61G12/001 A61G12/004 A61G12/005 A61G2203/12 A61G2203/16 A61G2203/20 A61G2203/80 A61G2205/10 A61M2205/505 G06F19/327 G06Q50/24 Y10S248/917 Y10S707/99939 G06Q30/04 G06F19/3406 G08B21/0453 G08B21/02 A61G7/0513 A61G7/0524

European class: A47B23/04E A47B9/20 A61B5/00B A61B5/0205 A61B5/0205B A61B5/11N A61B5/11P2 A61B5/48E A61B5/68F4 A61B5/74D A61B5/74D6 A61B5/74M A61G10/04 A61G11/00 A61G12/00 A61G12/00B A61G7/05 A61G7/05H A61G7/05S G06F19/32A G06F19/32C G06F19/32E G06F19/32G G06F19/34A G06F19/34C G06F19/34L G06F19/34N G06F19/34P G06Q10/10 G06Q50/24 G08B5/22C K47B200/00B20A2 K61B5/00B K61B5/0205B K61B5/021 K61B5/024 K61B5/08R K61B5/11N K61B5/11N4 K61B5/11P2 K61B5/1455 K61B5/48E K61B560/02F K61B560/04H K61B560/04J K61B562/22B2 K61G11/00 K61G11/00W K61G12/00B K61G203/12 K61G203/80 K61G210/50 K61G5/10 K61G7/00D K61G7/015 K61G7/018 K61G7/05 K61G7/057K K61G7/05S14 K61G7/05S4A K61M5/14R6 S06F19/32C S06F19/32E S06F19/32G S06F19/34A S06F19/34C S06F19/34E S06F19/34L S06F19/34N

US class: 1/1 108/140 108/141 108/143 108/147.2 108/147.200S 108/49 108/50.01 108/50.010P 108/50.02 108/50.020P 108/50.11 108/50.110P 128/903 128/904 128/922 128/922S 248/276.1 248/917 300/301 312/209 312/209S 312/298 312/298S 340/12.22 340/12.51 340/12.53 340/286.01 340/286.010S 340/286.06 340/286.07 340/286.070S 340/4.11 340/4.34 340/5.8 340/5.800P 340/501 340/506 340/506S 340/525 340/531 340/531S 340/539.12 340/539.13 340/539.23 340/540 340/540P 340/541 340/541P 340/573.1 340/573.100P 340/573.100S 340/573.4 340/573.400P 340/573.400S 340/58 340/691.6 340/691.600P 340/693.6 340/8.1 340/8.100S 340/815.49 340/815.69 340/825.19 340/825.49 340/825.52 340/825.69 340/9.1 345/26 345/733 348/159 348/827 361/600 361/600S 361/679.21 361/679.4 361/681 5/600 5/603 5/655 5/658 5/658P 600/21 600/21P 600/22 600/22P 600/300 600/301 600/483 600/523 700/275 705/3 705/3P 707/9 707/999.009 715/733 715/733S 715/835 715/835P 725/78 725/78S

Classification Explorer

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AU2005233945, AU2004224883,

Abstract:
Source: US2002014951A A remote control system includes beds, remote controls, and a master station in communication with the beds and the remote controls. Each bed is adapted to receive requests from a patient associated with the bed, and each remote control is adapted to present requests to a caregiver associated with the remote control. The master station is adapted to receive a nurse call request from a patient via a bed, to identify a remote control that is associated with a caregiver for the patient, and to transmit the nurse call request to the remote control identified as being associated with the caregiver for the patient.

0) US2003092552A – CUSHIONING CONVERSION MACHINE AND METHOD

20) Family number: 42720566 (US2003092552A) © PatBase

Title: CUSHIONING CONVERSION MACHINE AND METHOD

Priority:

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Probable Assignee: RANPAK CORP

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

Assignee(s): LENCOSKI MICHAEL J ; MURPHY DAVID V ; RATZEL RICHARD O ; GENERAL ELECTRIC CAPITAL CORP ; GENERAL ELECTRIC CAPITAL CORPROATION ; KEYBANK NATIONAL ASSOCIATION ; GOLDMAN SACHS LENDING PARTNERS LLC ; RANPAK CORP CONCORD ; RANPAK CORP CONCORD TOWNSHIP OHIO US ; GOLDMAN SACHS BANK USA ; GOLDMAN SACHS BANK USA COLLATERAL AGENT AS ; SIMMONS JAMES A ; SPECIAL SITUATIONS INVESTING GROUP INC ; AMERICAN CAPITAL FINANCIAL SERVICES INC ; AMERICAN CAPITAL FINANCIAL SERVICES INC AGENT AS ; ARMINGTON STEVEN E ; BANK OF AMERICA NA COLLATERAL AGENT AS ; GENERAL ELECTRIC CAPITAL AGENT AS CORP ; GENERAL ELECTRIC CAPITAL AGENT CORP AS

Inventor(s):(std)**:** AMINTON S E ; ARMINGTON S E ; ARMINGTON STEVEN ; ARMINGTON STEVEN E ; DAVID MURPHY ; DAVID V MURPHY ; JAMES A SIMMONS ; LANCOSKI M J ; LANCOSKI S E AMINTON R O RAYZE ; LENCOSKI M J ; LENCOSKI MICHAEL ; LENCOSKI MICHAEL J ; RATZEL R O ; RATZEL RICHARD ; RATZEL RICHARD O ; RAYZER R O ; RICHARD O RATZEL ; MURPHY DAVID ; MURPHY DAVID V ; O RATZEL RICHARD ; SIMMONS JAMES ; SIMMONS JAMES A ; STEVEN E ARMINGOTN ; MICHAEL J LENCOSKI ; STEVEN E RAMINGTON

Inventor(s): MJ LANCOSKI ; MJ LENCOSKI ; STEVEN E ARMINGTON ; R O RATZEL ; R O RAYZER ; RO RATZEL ; RO RAYZER ; S E AMINTON ; S E AMINTON R O RAYZER M J LANCOSKI ; S E ARMINGTON ; SE AMINTON ; SE AMINTON RO RAYZER MJ LANCOSKI ; SE ARMINGTON ; M J LANCOSKI ; M J LENCOSKI

Agent(s): SMART AND BIGGAR; SANFORD TCOLB AND CO

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 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): B31B1/14 B31D5/00 B31D5/04 B31F1/00 B31F1/10 B31F7/00 G06F3/02 (Advanced/Invention); B31D5/00 (Advanced/Non–invention);
B31B1/14 B31D5/00 B31F1/00 (Core/Invention);
B31D B31F B65B (Subclass/Invention)

International class (IPC 1–7): B31B1/00 B31B1/14 B31B7/02 B31D5/00 B31D5/02 B31D5/04 B31F1/00 B31F1/10 B31F5/02 B65B

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Abstract:
Source: US2003092552A A novel dunnage−creating machine and methodology characterized by various features including, inter alia, a modular construction, easier access to interior components, and a low cost cutting assembly. The machine comprises front and rear units having separate housings. The housing of the rear unit includes an outer shell having a converging chute surrounding a shaping member over which sheet−like stock material is drawn to form the stock material into a three−dimensional shape. The front unit includes in the housing thereof a feed mechanism for drawing the stock material over the shaping member and stitching the shaped material to form a strip of dunnage product. The front unit also includes a manual cutting mechanism for cutting the strip to form cut pieces, which manual cutting mechanism includes a readily replaceable blade assembly.

0) US2011120731A – TOOL POSITIONING AND LATCHING SYSTEM

21) Family number: 48961416 (US2011120731A) © PatBase

Title: TOOL POSITIONING AND LATCHING SYSTEM

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: MCR OIL TOOLS LLC

Assignee(s):(std)**:** BOELTE WILLIAM F ; ROBERTSON INTELLECTUAL PROPERTIES LLC ; ROBERTSON MICHAEL C ; STREIBICH DOUGLAS J ; MCR OIL TOOLS LLC

Assignee(s): ROBERTSON INTELLECTUAL PROPERITES LLC ; GRATTAN ANTONY F ; LAXALT MARCELO

Inventor(s):(std)**:**

BOELTE WILLIAM ; GRATTAN ANTONY F ; HUGGINS CORY ; HUGGINS CORY L ; LAXALT MARCELO J ; ROBERTSON MICHAEL ; STEPHENS AMY ; STREIBICH DOUGLAS ; STREIBICH DOUGLAS J ; ROBERTSON MICHAEL C ; BOELTE WILLIAM F

Inventor(s): MICHAEL C ROBERTSON ; DOUGLAS J STREIBICH ; WILLIAM F BOELTE

Agent(s): NORTON ROSE CANADA SENCRL SRL LLP; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; WIGHTMAN DAVID ALEXANDER; MATTIS JOCOB S; MCCUTCHEON TERRY L

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International class (IPC 8–9): B23B31/40 B23Q3/14 E21B10/32 E21B17/10 E21B19/10 E21B23/00 E21B23/01 E21B23/02 E21B23/03 E21B23/04 E21B23/14 E21B29/00 E21B29/02 E21B31/00 E21B31/06 E21B33/12 E21B34/06 E21B36/00 E21B41/00 E21B43/00 E21B43/11 E21B43/116 E21B43/1185 E21B43/119 E21B43/12 E21B43/26 E21B47/01 E21B47/024 E21B47/09 E21B7/06 E21B7/18 (Advanced/Invention)

CPC: E21B7/18 E21B47/09 E21B43/26 F04B47/08 E21B23/02 E21B10/32 E21B29/00 E21B29/005 E21B33/12 E21B34/06 E21B43/123 E21B2034/002 E21B2034/005 E21B31/002 E21B23/01 E21B31/06 E21B41/0078 E21B29/02 E21B47/01 E21B47/024 E21B43/11

European class: E21B23/02

US class: 1/1 166/117.5 166/117.500S 166/119 166/297 166/298 166/302 166/382 166/55 166/55.2 175/424 175/45 175/57

Classification Explorer

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Forward Citations: WO16179429, WO16118525, US9689247, US9574439, US9440341, US9435165, US9416609, US2015354350, US2015259995, US2015184476, US2015129230, US2014305707, US2014216721,

Abstract:
Source: US2011120731A A system and method for positioning a tool within a wellbore are described herein. The interior surface of a tubular string is provided with one or more pluralities of grooves, each defining a selected profile. A tool is lowered into the tubular string, having a blade in communication therewith. The blade includes a plurality of protruding members thereon, which define a profile complementary to at least one of the selected profiles formed by one of the pluralities of grooves. A biasing member in communication with the blade continually biases the blade toward the interior surface of the tubular string to cause the profile of the blade to engage within the corresponding complementary profile of the tubular string. Positioning a tool in this manner is especially advantageous for locating a cutting tool at a precise location to sever a tubular segment at a joint, releasing tensile forces from the joint.

0) US2007233140A – FEMORAL ADJUSTMENT DEVICE AND ASSOCIATED METHOD...

22) Family number: 38524553 (US2007233140A) © PatBase

Title: FEMORAL ADJUSTMENT DEVICE AND ASSOCIATED METHOD

Priority:

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Probable Assignee: BIOMET MFG LLC

Assignee(s):[(std)]**:** BELCHER NATHAN EMICK ; BEREND MICHAEL E ; BEREND KEITH R ; BIOMET MANUFACTRING CORP ; BIOMET SPORTS MEDICINE LLC ; BIOMET MFG LLC ; CATANZARITE JOSHUA B ; CANADA MICHAEL ; HAMMAN WILLIAM J ; HERSHBERGER TROY W ; FOX DUKE A ; BOLLINGER MARK A ; DONALDSON THOMAS ; CLOHISY JOHN C ; DEMING SCOTT ; DURCHOLZ BRADLEY T ; FRIEND CHRISTOPHER W ; DEMING J SCOTT ; GELAUDE FREDERIK ; CLIJMANS TIM ; BLOMET MFG LLC ; MERIDEW JASON D ; SCHMIDT KURT ; RAISH THOMAS C ; UTHGENANNT BRIAN A ; STONE KEVIN T ; MAY BRIAN M ; SIEBENECK TONY ; SMITH AARON P ; WHITE JOHN R ; MORRISON BRYAN ; WITT TYLER D ; SLONE W JASON ; VANASSE THOMAS M ; KATRANA NICHOLAS J ; LOMBARDI JR ADOLPH V ; KEPPLER LOUIS J ; MAXSON WILLIAM ; PIERCE ANDREW L ; SERBAN RADU ; MUNSTERMAN MATTHEW D ; WOLFE ALEXANDER P ; NAIRUS JAMES G ; NYCZ JEFFREY H ; KABATA TAMON ; SHEFFER GARRETT A ; WORRELL KAI ROBERT ; IBM ; MAUCH THOMAS J ; MITOLOGICS ; UNIV VERSAILLES SAINT QUENTIN EN YVELINES UVSQ ; SUSARABA JOHN M ; CENTRE NAT RECH SCIENT ; BEREND KEITH ; BELCHER NATHAN E ; CENTER NAT DE LA RECH SCIENT CNRS ; CENTRE NAT DE LA RECH SCIENT CNRS ; BORGNE SANCHEZ ANNIE ; BRENNER CATHERINE ; METZGER ROBERT ; SCHOENEFELD RYAN J ; PERRY LANCE D ; LOMBARDI ADOLPH V ; SHEEHAN ALEXANDER BRANTLEY ; SALYER BRIAN D ; KIPHART RORY ; BIOMET MFG CORP ; VANASSE THOMAS ; UNIV DE VERSAILLES SAINT QUENTIN EN YVELINES UVSQ ; UNIV DE VERSAILLES SAINT QUENTIN EN YVELINES ; JACOTOT ETIENNE ; UNIV VERSAILLES SAINT QUENTIN EN YVELINES ; UNIV VERSAILLES SAINT QUENTIN YVELINES UVSQ

Assignee(s): VERSAILLES SAINT QUENTIN YVELINES UVSQ UNIV ; UNIVERSITE DE VERSAILLES SAINT QUENTIN EN YVELINES ; UNIVERSITE VERSAILLES SAINT QUENTIN YVELINES UVSQ ; LA SOC THERAPTOSIS ; BIOMET MFG ; INT BUSINESS MACHINES CORP ; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE ; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS ETABLISSEMENT PUBLIC NATIONAL A CARACTERE SCIENTIFIQUE ET TECHNOLOGIQUE EPST ; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS PUBLIC NATIONAL A CARACTERE SCIENTIFIQUE ET TECHNOLOGIQUE EPST ETS ; BANK OF AMERICA NA ADMINISTRATIVE AGENT FOR SECURED PARTIES AS ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT FOR SECURE ; CROSS MEDICAL

PRODUCTS LLC ; EBI HOLDINGS LLC ; EBI LLC ; EBI MEDICAL SYSTEMS LLC ; ELECTR OBIOLOGY LLC ; DE VERSAILLES SAINT QUENTIN EN YVELINES UNIV ; CENTER NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS ; LVB ACQUISITION INC ; IMPLANT INNOVATIONS HOLDINGS LLC ; INTERPORE CROSS INT LLC ; INTERPORE SPINE LTD ; KIRSCHNER MEDICAL CORP ; DE VERSAILLES SAINT QUENTIN EN YVELINES UVSQ UNIV ; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS ; BIOMET MANUFACTURING LLC ; BIOMET INC ; BIOMET HOLDINGS LTD ; BIOMET INT LTD ; BIOMET LEASING INC ; BIOMET MICROFIXATION LLC ; BIOMET ORTHOPEDICS LLC ; BIOMET TRAVEL INC ; BIOMET MFG LLC WARSAW ; BIOMET MANUFACTURING CORP ; BIOLECTRON INC ; BIOMET 3I LLC ; BIOMET BIOLOGICS LLC ; BIOMET EUROPE LTD ; BIOMET FAIR LAWN LLC ; BIOMET FLORIDA SERVICES LLC

Inventor(s):(std)**:** ANNIE BORGNE SANCHEZ ; BELCHER NATHAN E ; BELCHER NATHAN EMICK ; BEREND KEITH ; BEREND KEITH R ; BEREND MICHAEL E ; BORGNE SANCHEZ ANNIE ; BRENNER CATHERINE ; BRIAN A UTHGENANNT ; BRIAN M MAY ; CANADA MICHAEL ; CATANZARITE JOSHUA B ; CATHERINE BRENNER ; CLIJMANS TIM ; CLOHISY JOHN C ; DEMING J SCOTT ; DEMING SCOTT ; DONALDSON THOMAS ; DONALDSON THOMAS K ; DUBEAU SERGE ; DUKE A FOX ; DURCHOLZ BRADLEY T ; ETIENNE JACOTOT ; FOX DUKE A ; FRIEND CHRISTOPHER W ; GELAUDE FREDERIK ; HAMMAN WILLIAM J ; HERSHBERGER TROY W ; JACOTOT ETIENNE ; JOSHUA B CATANZARITE ; KABATA TAMON ; KATRANA NICHOLAS J ; KEPPLER LOUIS J ; KIPHART RORY ; LOMBARDI ADOLPH V ; BOLLINGER MARK A ; LOMBARDI JR ADOLPH V ; MAUCH THOMAS J ; MAXSON WILLIAM ; MAY BRIAN M ; MERIDEW JASON D ; METZGER ROBERT ; MORRISON BRYAN ; MUNSTERMAN MATTHEW D ; NAIRUS JAMES ; NAIRUS JAMES G ; PERRY LANCE D ; PERRY LANCE DEAN ; PIERCE ANDREW L ; RAISH THOMAS C ; ROBERT METZGER ; RYAN J SCHOENEFELD ; SALYER BRIAN D ; SCHMIDT KURT ; NATHAN E BELCHER ; NICHOLAS J KATRANA ; NYCZ CHRISTOPHER J ; NYCZ JEFFREY H ; SCHOENEFELD RYAN JOHN ; SERBAN RADU ; SHEEHAN ALEXANDER BRANTLEY ; SHEFFER GARRETT A ; SIEBENECK TONY ; SLONE W JASON ; SLONE WILLIAM JASON ; SMITH AARON P ; STEGER SHON D ; STONE KEVIN T ; SUSARABA JOHN M ; THOMAS M VANASSE ; UTHGENANNT BRIAN ; UTHGENANNT BRIAN A ; VANASSE THOMAS ; VANASSE THOMAS M ; WHITE JOHN R ; WILLIAMSON DANIEL E ; WITT TYLER D ; SCHOENEFELD RYAN J ; WOLFE ALEXANDER P ; WORRELL KAI ROBERT

Inventor(s): WOLFE ALEXANDER P COLUMBIA CITY ; WOLFE ALEXANDER P WEST LAFAYETTE ; SCHOENEFELD RYAN J FORT WAYNE ; WITT TYLER D WARSAW ; SLONE W JASON SILVER LAKE ; NYCZ JEFFREY H WARSAW ; SCHOENEFELD RYAN ; NAIRUS JAMES G BOLTON ; NAIRUS JAMES G CONCORD ; MUNSTERMAN MATTHEW D WARSAW ; METZGER ROBERT WAKARUSA ; MERIDEW JASON D WARSAW ; LOMBARDI ADOLPH V NEW ALBANY ; KABATA TAMON KANAZAWA ; CLOHISY JOHN C ST LOUIS

Agent(s): FB RICE; FB RICE PTY LTD; BENOIT AND COTE ASSOCIES INC; BENOIT AND COTE INC; HASELTINE LAKE LLP; VENNER SHIPLEY LLP; GILES ASHLEY SIMON; MAYS JULIE; RICKMAN GEMMA CLAIRE; PEAUCELLE CHANTAL; DOWLING ANDREW; SAEZ ANA; HIBI NORIHIKO; KISHIMOTO EINOSUKE; WATANABE AKIRA; MATSUMURA NAOTO; HARAKENZO WORLD PATENT AND TRADEMARK; HARNESS DICKEY AND PIERCE PLC; SCHMEISER OLSEN AND WATTS; HARNESS DICKEY AND PIERCE (BIOMET); HARNESS DICKEY AND PIERCE BIOMET; HARNESS DICKEY; JOHN R; CONLEY ROSE PC; SCHWEGMAN LUNDBERG AND WOESSNER PA; WARNER RICHARD W ET AL; PEAUCELLE CHANTAL ET AL; ARORA SUNEEL 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): A01N43/54 A01N43/90 A61B17/00 A61B17/15 A61B17/16 A61B17/17 A61B17/56 A61B17/58 A61B17/60 A61B17/68 A61B17/74 A61B17/80 A61B17/84 A61B17/88 A61B17/90 A61B19/00 A61B34/10 A61B34/20 A61B5/05 A61B5/055 A61B5/103 A61B6/03 A61B90/00 A61F2/00 A61F2/02 A61F2/08 A61F2/28 A61F2/30 A61F2/32 A61F2/34 A61F2/36 A61F2/38 A61F2/46 A61F2/76 A61F5/00 A61K31/44 A61K31/4418 A61K31/4545 A61K31/517 A61K31/519 A61K45/00 A61K45/06 A61P35/00 A61P43/00 B23B47/28 B23B49/00 B23P11/00 B23P13/04 B23P17/04 C07D213/70 C07D213/85 C07D213/87 C07D239/72 C07D239/90 C07D239/91 C07D239/93 C07D239/95 C07D491/00 C07D495/00 C07D495/04 C07D495/14 C12N5/00 G01C1/00 G06F17/50 G06F19/00 G06F21/41 G06F21/44 G06K9/00 G06Q10/00 G06Q30/00 G06Q50/00

H04L29/06 H04L29/08 H04L9/00 (Advanced/Invention);
A61B17/00 A61B17/14 A61B17/15 A61B17/16 A61B17/22 A61B17/56 A61B17/68 A61B17/80 A61B17/92 A61B19/00 A61B34/00 A61B6/00 A61B6/12 A61F2/30 A61F2/34 A61F2/36 A61F2/38 A61F2/46 (Advanced/Non-invention);
A61B17/00 A61B17/14 A61B17/16 A61B17/58 A61B17/68 A61B17/88 A61B19/00 A61B5/055 A61B5/103 A61F2/02 A61F2/28 A61F2/30 A61F2/38 A61F2/46 A61F2/50 A61F5/00 A61K31/4523 A61K31/517 A61K31/519 A61P35/00 C07D213/00 C07D239/00 C07D495/00 G01C1/00 G06F17/50 G06F19/00 G06Q30/00 G06Q50/00 H04L9/00 (Core/Invention);
A61B19/00 A61B6/00 A61B6/12 (Core/Non-invention)

CPC:

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European class:

A61B17/15 A61B17/15C A61B17/15C2 A61B17/15K A61B17/15K2 A61B17/15K4 A61B17/16R A61B17/16S2C A61B17/17R A61B17/17S A61B17/17S2C A61B17/17S2F A61B17/17S4 A61B17/17S8 A61B17/80S A61B19/50 A61B5/107A A61F2/30C A61F2/30M2 A61F2/36A A61F2/36A1 A61F2/38 A61F2/38F A61F2/38K A61F2/38M A61F2/38T A61F2/46B5 A61F2/46M A61K31/4545 A61K31/517 A61K31/519 C07D239/91 C07D239/93 C07D495/04 C07D495/14 G06F19/32A G06F19/34A G06F19/34H G06F19/34N G06F21/33A G06Q30/0601 G06Q50/22 G06Q50/24 K61B17/00E K61B17/00M K61B17/00S25M K61B17/02J4 K61B17/14B K61B17/15C K61B17/15K2 K61B17/15K4 K61B17/16D2B K61B17/16S2C K61B17/17P K61B17/17R K61B17/17S8 K61B17/22A K61B17/56S K61B17/68D K61B17/74D2 K61B17/80H K61B17/92M K61B19/20B2 K61B19/20D K61B19/30F2 K61B19/44B K61B19/44H K61B19/46D K61B19/46H K61B19/46J K61B19/50 K61B19/50B2 K61B19/50B4 K61B19/50F K61B19/54L K61B19/56B K61B5/055 K61B5/103 K61B5/45K K61B6/00 K61B6/12 K61F2/00 K61F2/00Y1 K61F2/30A1N4 K61F2/30A1N6 K61F2/30A2Y1 K61F2/30A3W12 K61F2/30A3W24 K61F2/30A3W32 K61F2/30A3W32S K61F2/30A3W34 K61F2/30A5Q K61F2/30A5R K61F2/30B6A K61F2/30L2S K61F2/30L2S3 K61F2/30L2S9P K61F2/30M2 K61F2/30M2B K61F2/30M2C K61F2/30M2D K61F2/30M2R K61F2/30M2S K61F2/34 K61F2/36A1 K61F2/38B K61F2/38F K61F2/38T K61F2/46D2 K61F2/46M2 K61F2/46M6 K61F2/46P K61F2/46T K61F2/46Y K61F230/00Y1 K61F250/00N12 K61F250/00N2 K61F250/00W80 K61F250/00W82 K61F250/00W99A K61F310/00A2F K61F310/00A4 K61F310/00A66C

US class:

1/1 128/897 128/898 128/898S 29/428 29/428S 29/557 29/557S 29/592 29/592S 382/131 382/131S 408/241G 435/375 435/375S 514/260.1 514/260.100P 514/266.3 544/278 544/278S 544/285 600/414 600/414P 600/416 600/416P 600/425 600/425S 606/1 606/102 606/104 606/130 606/130S 606/280 606/280P 606/79 606/79S 606/80 606/80P 606/80S 606/81 606/86.00R 606/86.00RS 606/86R 606/87 606/87P 606/87S 606/88 606/88P 606/88S 606/89 606/89P 606/91 606/91P 606/91S 606/96 606/96P 606/96S 606/99 623/14.12 623/14.120P 623/16.11 623/16.110S 623/18.11 623/18.110S 623/20.11 623/20.14 623/20.21 623/20.32 623/20.320P 623/20.320S 623/20.33 623/20.35 623/20.350P 623/20.350S 623/20.36 623/20.360P 623/22.11 623/22.12 623/22.15

623/22.150P 623/22.21 623/22.210S 623/22.23 623/22.24 623/23.11 623/23.15 623/23.35 623/901 703/1 703/1S 705/2 705/26 705/26.1 705/26.100S 705/26S 705/2P 705/3 705/3S 709/227 709/229 713/171 713/171P 726/8

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Abstract:
Source: US2007233140A A femoral adjustment device to balance a flexion gap. The device includes a body attachable to a distal femur, the body having a cutting guide and an adjustment mechanism operable to balance the flexion gap, wherein upon balancing the flexion gap, the cutting guide is operable to guide at least one cut in the distal femur.

23) Family number: 34708595 (US2007151390A) © PatBase

Title: FORCE AND TORQUE SENSING FOR SURGICAL INSTRUMENTS

Priority:

EP20060850942 20061213 JP20080548797 20061213 JP20080548798 20061213
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Family:

Publication number	Publication date	Application number	Application date
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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 ; MCGROGAN ANTHONY K ; MOHR CATHERINE J ; MOHR CATHERINE ; KUMAR RAJESH ; MOHR PAUL W ; LILAGAN PAUL ; MUSTAFA TABISH ; LILAGAN PAUL E ; MITRA PROBAL ; MUSTUFA TABISH ; BLUMENKRANZ STEPHEN J ; COOPER THOMAS G ; DIOLAITI NICOLA ; DUVAL EUGENE F ; INTUITIVE SURGICAL INC ; INTUITIVE SURGICA INC ; INTUITIVE SURGICAL OPERATIONS ; SHAFER DAVID C ; SCHENA BRUCE ; ROSA DAVID J ; WILLIAMS MATTHEW R ; SCHENA BRUCE MICHAEL ; SCHENA BRUCE M ; TOGNACCINI MARC E

Assignee(s): INTUITIVE SURGICAL OPERATIONS, INC. ; MINTZ DAVID STEPHEN ; NIXON THOMAS ROBERT

Inventor(s):(std)**:** DUVAL EUGENE F ; HOFFMAN BRIAN D ; KUMAR RAJESH ; LARKIN DAVID ; LARKIN DAVID Q ; LOCKYER BRETT J ; MCGROGAN ANTHONY ; MCGROGAN ANTHONY K ; MINTZ DAVID ; MINTZ DAVID STEPHEN ; MOHR CATHERINE ; MOHR CATHERINE J ; MOHR PAUL W ; NIXON THOMAS ; NIXON THOMAS ROBERT ; ROGERS THEODORE W ; WILLIAMS MATTHEW R ; ZHAO TAO ; ZHAO WENYI ; ITKOWITZ BRANDON D ; HASSER CHRISTOPHER J ; HALABE DANIEL J ; DIMAIO SIMON ; DANIEL GOMEZ ; DIMAIO SIMON P ; WILLIAMS MATTHEW G ; WENYI ZHAO ; TOGNACCINI MARC E ; TAO ZHAO ; TABISH MUSTAFA ; SIMON DIMAIO ; RAJESH KUMAR ; NICOLA DIOLAITI ; MITRA PROBAL ; LILAGAN PAUL E ; LAKIN DAVID Q ; HOFFMAN BRIAN DAVID ; GOMEZ DANIEL H ; DANIEL J HALABE ; CATHERINE J MOHR ; BRIAN DAVID HOFFMAN ; PROBAL MITRA ; MUSTUFA TABISH ; MUSTAFA TABISH ; LARKIN DVID Q ; LILAGAN PAUL ; GOMEZ DANIEL ; ANTHONY MCGROGAN ; BLUMENKRANZ STEPHEN J ; ROSA DAVID J ; SCHENA BRUCE ; SCHENA BRUCE M ; SCHENA BRUCE MICHAEL ; COOPER THOMAS G ; DIOLAITI NICOLA ; SHAFER DAVID C

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); A61B1/00 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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European class: A61B1/005B4 A61B1/00C1D A61B1/00C6 A61B1/00C7B4 A61B1/00E4H1 A61B1/00E4H3 A61B1/00F A61B1/00H2 A61B1/00H4 A61B1/00P1 A61B1/00S4B A61B1/00S4H A61B1/04 A61B1/05 A61B1/313 A61B17/02E A61B19/20D A61B19/22 A61B19/22B A61B19/26 A61B19/46 A61B19/52 A61B19/52H12 A61B5/06E A61N1/00 B25J15/00B B25J9/16P3C B25J9/16P5 B25J9/16T4 B25J9/16T5 G05B19/19 G05B19/42B G06T7/00P G09B23/28E K61B1/005B6 K61B1/00S7 K61B1/018 K61B17/00C1L K61B17/00C2A K61B17/00E1T K61B17/00E3G K61B17/00E3G4S K61B17/00E3G6C K61B17/00E3G6C3 K61B17/00Q4 K61B17/29 K61B17/29F2 K61B17/29F6 K61B17/29F8 K61B17/29J2 K61B17/29J2R K61B17/30S K61B17/34G4M K61B17/34G4M2 K61B17/34K K61B19/20B K61B19/22B K61B19/22B10 K61B19/22B14 K61B19/22B16 K61B19/22B16B K61B19/22B4 K61B19/22D K61B19/22D2 K61B19/22F K61B19/22J K61B19/22N K61B19/22P K61B19/30 K61B19/30F2 K61B19/44H K61B19/46H K61B19/46H2 K61B19/46H4 K61B19/48H8 K61B19/50 K61B19/50B2 K61B19/50D K61B19/52D K61B19/52H K61B19/52H10 K61B19/52H12 K61B19/52H12B10 K61B19/52H12B12 K61B19/52H12B2 K61B19/52H12B4 K61B19/52H12B6 K61B19/52H12B8 K61B19/52H12F K61B19/52H12H K61B19/52H2 K61B19/52H8 K61B19/52L K61B19/52L2 K61B19/52L6 K61B19/56 K61B562/02L2 K61B562/08 S05B219/36432 S05B219/39083 S05B219/39096 S05B219/39449 S05B219/40607 S05B219/45117 S05B219/45123 S05B219/45169

US class: 1/1 128/898 128/898S 29/428 29/428S 318/568.11 318/568.2 318/568.21 345/633 382/128 600/102 600/104 600/104P 600/104S 600/106 600/106P 600/107 600/109 600/109S 600/111 600/111S 600/114 600/114P 600/117 600/118 600/118P 600/127 600/129 600/141 600/142 600/145 600/166 600/170 600/171 600/173 600/178 600/178P 600/204 600/204S 600/207 600/207P 600/407 600/424 604/264 606/1 606/10 606/108 606/108P 606/13 606/130 606/130P 606/130P 606/130S 606/15 606/16 606/1P 606/1S 606/205 606/205P 606/205S 700/245 700/245P 700/245S 700/247 700/248 700/250 700/253 700/254 700/254P 700/257 700/262 700/263 700/264 700/275 700/275S 73/862.041 73/862.044 73/862.045 73/862.045P 73/862.624 73/862.624S 74/490.01 74/490.010S 74/490.06 74/490.060P 901/14 901/14S 901/15 901/16 901/16S 901/28 901/28S 901/41 901/46 901/47 901/47S 901/9 901/9S

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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) US2005120715A – HEAT ENERGY RECAPTURE AND RECYCLE AND ITS NEW A...

24) Family number: 30545299 (US2005120715A) © PatBase

Title: HEAT ENERGY RECAPTURE AND RECYCLE AND ITS NEW APPLICATIONS

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST

Assignee(s):(std): CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST ; CHRISTION SCHOOL OF TECHNOLOGY ; LABRADOR GAUDENCIO A ; LABRADOR GAUDENCIO AQUINO ; GAUDENCIO LABRADOR ; LABRADOR GAUDENCIO ; CHRISTIAN SCHOOL OF TECHNOLOGY

Assignee(s): CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATI ; CHRISTION SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATI ; CHRISTION SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST

Inventor(s):(std): LABRADOR GAUDENCIO AQUINO ; LABRADOR GAUDENCIO A ; CHRISTIAN SCHOOL OF TECHNOLOGY

Inventor(s): GAUDENCIO AQUINO LABRADOR ; LABRADOR GAUDENCIO ; CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE

Agent(s):

ROGER SYN AND CO PATENT AND TRADE MARK ATTORNEYS; FURMAN AND KALLIO; OYEN WIGGS GREEN AND MUTALA LLP; GAUDENCIO AQUINO LABRADOR

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 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): B01D61/10 B63B1/10 B63B1/12 B63B35/00 B63B35/44 B63B39/06 B63B43/06 B63G1/00 B63G8/30 B63H19/02 B63H9/06 B63H9/10 B63J3/00 B64C31/04 B64C31/06 E02B3/06 F01K13/00 F01K23/10 F01K27/00 F02C1/00 F02C1/05 F02G5/00 F03B13/18 F03D11/04 F03D5/00 F03D5/04 F03G7/00 F24F5/00 F24F6/14 F28D5/00 (Advanced/Invention); B63B1/24 B63J1/00 F24F1/00 (Advanced/Non–invention); B01D61/02 B63B1/00 B63B35/00 B63B35/44 B63B43/00 B63H9/00 B63J3/00 E02B3/06 F01K23/10 F01K27/00 F02C1/00 F02G5/00 F03B13/00 F03D5/00 F03G7/00 (Core/Invention)

International class (IPC 1–7): B01D61/10 B63B17/00 B63B35/00 B63B7/00 F01K23/10 F03D5/02 F03D5/04 F03G7/00 F04B35/00 F24F6/14 F28D5/00

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US class: 114/102 114/267 114/382 114/39.1 114/39.2 114/39.26 114/39.29 114/39.31 210/136 210/170 210/259 210/321.87 244/153.00R 244/153R 244/24 405/76 415/5 416/8 417/330 417/332 60/39.01 60/506 60/618 60/618P 60/676 60/698 60/698P 60/772 62/304 62/310 62/314 623/40

Classification Explorer

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Abstract:
Source: US2005120715A What has been created is a plurality and a variety of processes and a variety of devices correspondingly supportive to each process, wherein, a new partnership between; (1) a heat absorbing radiator compressed air pipes/tubes and (2) a gas turbine engine or a reciprocating piston engine,–is used to recapture and reconvert the, otherwise wasted, heat energies expelled by engines, by factories, by smelting plants, by distillation plants, by chillers/coolers/freezers, by cooking ovens, by lamps/stoves, by trash burners, and the heat energies created by the solar heat on the desert/ocean water,–into electric power and finally into hydrogen–deuterium fuel,–by having the engine's tailpipes submerged in cold compressed air inside the heat absorbing radiator pipes in reverse air flow, to further drive and re–drive the same engine; wherein, in order to capture fusion heat energy the hydrogen bomb is detonated in the deep ocean to catch the flames by the water and the hot water is used to energize the compressed air inside the heat absorbing radiator pipes; wherein, in order to produce fusion energy, an abundant electric arc is passed across liquid deuterium or across gaseous deuterium by the electro–plasma torch and sparkplug in the internal combustion engine, and by detonating a dynamite inside a liquid deuterium; wherein diamond is produced by placing carbon inside the hydrogen bomb; and wherein, deuterium fusion flame is used first in smelting glass to large sizes before running an engine.

0) US2002035400A – IMPLANTABLE JOINT PROSTHESIS

25) Family number: 28292471 (US2002035400A) © PatBase

Title: IMPLANTABLE JOINT PROSTHESIS

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Probable Assignee: WARSAW ORTHOPEDIC INC

Assignee(s):(std)**:** BROWMAN RICHARD J ; BROWMAN RICK ; BRYAN VINCENT ; CLARK CHARLES R ; KUNZLER ALEX ; GIL CARLOS E ; FINAZZO ANTHONY ; ROULEAU JEFFREY P ; CONTA BOB ; FINAZZO TONY ; GIL CARLOS ; MARSHALL ELLIOTT ; CONTA ROBERT ; ROULEAU JEFF ; SPINAL DYNAMICS CORP ; TOKISH LEONARD ; TOKISH LEN ; YAGER DAVE ; SDGI HOLDINGS INC D B A MEDTRO ; SDGI HOLDINGS INC ; TOKISH LENONARD JR ; YAGER DAVID J ; WARSAW ORTHOPEDIC INC ; ALLARD RANDY

Assignee(s): BROMAN RICHARD J ; SDGI HOLDINGS INC D B A MEDTRONIC SOFAMOR DANEK I ; SDGI HOLDINGS INC D B A MEDTRONIC SOFAMOR DANEK INC ; TOKISH LEONARD JR ; YAGER DAVID ; MEDTRONIC SOFAMOR DANEK INC ; CONTA BOBERT

Inventor(s):(std)**:** BROMAN RICHARD ; BROMAN RICHARD J ; BROWMAN RICHARD J ; BROWMAN RICK ; BRYAN VINCENT ; CLARK CHARLES R ; CONTA BOB ; CONTA BOBERT ; CONTA ROBERT ; EDFAST JEFF ; FINAZZO ANTHONY ; FINAZZO TONY ; GIL CARLOS ; GIL CARLOS E ; KELLY AARON ; KUNZLER ALEX ; MARSHALL ELLIOTT ; ROULEAU JEFF ; ROULEAU JEFFREY ; ROULEAU JEFFREY P ; YAGAR DAVID ; YAGER DAVE ; YAGER DAVID ; YAGER DAVID J ; TOKISH JR LEONARD ; TOKISH LEN ; TOKISH LENONARD JR ; TOKISH LEONARD ; TOKISH LEONARD JR ; ALLARD RANDY

Inventor(s): BOB CONTA ; ALEX KUNZLER ; VINCENT BRYAN ; TONY FINAZZO ; RICK BROWMAN ; RANDY ALLARD ; LEN TOKISH ; ELLIOTT MARSHALL ; CARLOS GIL ; TOKISH ; ROBERT CONTA ; JEFF ROULEAU ; JR LEONARD

Agent(s): CALLINANS; FISHER ADAMS KELLY CALLINANS; FB RICE; FB RICE PTY LTD; GOWLING LAFLEUR HENDERSON LLP; FROST ALEX JOHN; KOBAYASHI YASUSHI; CHIBA AKIO; SAKUMA SHIGERU; MASUI CHUJI; KANDA FUJIHIRO; ONO SHINJIRO; HASHIMOTO MASAO; TAKEUCHI SHIGEO; SHAMOTO ICHIO; TOMITA HIROYUKI; UCHIDA HIROSHI; ITO TAKAMI; HAYNES AND BOONE LLP; MEDTRONIC,ATTN: NOREEN JOHNSON – IP LEGAL DEPARTMENT; MEDTRONIC ATTN NOREEN JOHNSON IP LEGAL DEPARTMENT

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): A61B1/32 A61B17/00 A61B17/02 A61B17/16 A61B17/17 A61B17/56 A61B17/66 A61B17/88 A61B19/00 A61B19/02 A61B5/055 A61B5/107 A61B6/04 A61B8/13 A61F2/00 A61F2/28 A61F2/30 A61F2/44 A61F2/46 B25B13/00 B25B5/00 F16M13/02 G01B5/18 G01B9/10 (Advanced/Invention);
A61B17/00 A61B17/32 A61B17/88 A61B19/00 A61F2/00 A61F2/28 A61F2/30 A61F2/46 B25G3/36 (Advanced/Non–invention);
A61B17/02 A61B17/16 A61B19/00 A61F2/00 A61F2/28 A61F2/30 A61F2/44 A61F2/46 (Core/Invention);
A61B19/00 A61F2/00 A61F2/30 A61F2/46 (Core/Non–invention)

International class (IPC 1–7): A61B1/32 A61B17/00 A61B17/02 A61B17/14 A61B17/16 A61B17/32 A61B17/56 A61B17/66 A61B17/88 A61B19/00 A61B5/055 A61B5/107 A61B6/04 A61B8/13 A61F2/44 B25B13/00 B25B5/00 G01B5/18 G01B9/10

CPC: A61B17/1664 A61B17/1675 A61B17/1684 A61F2310/00407 Y10T403/7141 F16M11/046 F16M11/2092 A61B90/10 A61B90/50 A61B2090/034 A61B50/20 A61B90/57 F16M13/022 A61F2002/30365 A61F2002/3037 A61F2002/30433 A61F2002/30571 A61F2220/0033 A61F2220/0041 A61F2310/00179 A61F2310/00796 A61F2002/30662 A61B17/02 A61B17/162 A61B17/1624 A61B17/1659 A61B17/1671 A61B17/1757 A61B2017/00867 A61B2017/0256 A61B2017/1602 A61B17/0293 A61B17/8866 A61F2/30742 A61F2/30744 A61F2/442 A61F2/4425 A61F2/4611 A61F2002/30204 A61F2002/30235 A61F2002/30474 A61F2002/30499 A61F2002/30528 A61F2002/30563 A61F2002/30578 A61F2002/30616 A61F2002/30673 A61F2002/30682 A61F2002/30769 A61F2002/30772 A61F2002/443 A61F2220/0025 A61F2230/0065 A61F2230/0069 A61F2310/00017 A61F2310/00023 A61F2310/00029 A61F2310/00203 A61F2310/00239

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US class: 403/391 600/227 600/227P 600/228 600/231 606/130 606/167 606/79 606/79P 606/80 606/80P 606/84 623/16.11 623/16.110S 623/17.13 623/17.130P 623/17.15 623/17.150P 623/17.150S 623/17.16 623/17.160P 623/17.160S

Classification Explorer

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Abstract:
Source: US2002035400A The invention relates to a surgical implant that provides an artificial diarthroidal−like joint, suitable for use in replacing any joint, but particularly suitable for use as an intervertebral disc endoprosthesis. The invention contains two rigid opposing shells, each having an outer surface adapted to engage the surfaces of the bones of a joint in such a way that the shells are immobilized by friction between their outer surfaces and the surfaces of the bone. These outer surfaces are sufficiently rough that large frictional forces strongly resist any slippage between the outer surface and the bone surfaces in the joint. They may be convex, and when inserted into a milled concavity, are immediately mechanically stable. Desirably, the outer surfaces of the shells are adapted to allow for bony ingrowth, which further stabilizes the shells in place. The inner surfaces of the shells are relatively smooth, and adapted to slide easily across a portion of the outer surface of a central body disposed between the shells. The central body has a shape that cooperates with the shape of the inner surface of the shell so as to provide a range of motion similar to that provided by a healthy joint. A flexible sheath extends between edges of the opposing shells. The inner surface of this sheath, together with the inner surfaces of the rigid shells, defines a cavity encasing the central body. At least a portion of this cavity is filled with a fluid lubricant, further decreasing the frictional force between inner surfaces of the shell and the surface of the central body.

0) US2004127818A – PRECISION DEPTH CONTROL LANCING TIP

26) Family number: 30692312 (US2004127818A) © PatBase

Title: PRECISION DEPTH CONTROL LANCING TIP

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Probable Assignee: ROCHE DIABETES CARE INC

Assignee(s):(std)**:** BEATY TERRY ; BEATY TERRY A ; CHAN FRANK ; CHAN FRANK A ; HOFFMANN LA ROCHE ; HILDEBRANDT WILHELM ; FORSTER RICHARD ; HANNANT MATT ; ROE STEVEN N ; ROCHE DIAGNOSTICS GMBH ; ROE STEVE N ; KUHR HANS JUERGEN ; SACHSENWEGER PETER ; ZIMMER VOLKER ; KRAEMER UWE ; WIEGEL CHRISTOPHER ; RANEY CHARLES C ; ROCHE DIAGNOSTICS OPERATIONS ; WONG DANIEL ; WEISS THOMAS ; WIEGEL CHRIS ; ROCHE DIABETES CARE INC ; JOSEPH ABNER DAVID

Assignee(s): HOFFMANN LA ROCHE INC ; F HOFFMANN LA ROCHE AKTIENGESELLSCHAFT ; AMIRA MEDICAL ; ROCHE DIABETES CARE GMBH ; ROCHE DIAGNOSTICS OPERATIONS INC ; FHOFFMANN LA ROCHE AG ; F HOFFMANN LA ROCHE AG

Inventor(s):(std)**:** CHRISTOPHER WIEGEL ; FORSTER RICHARD ; FRANK CHAN ; HANNANT MATT ; HILDEBRANDT WILHELM ; JOSEPH ABNER DAVID ; KRAEMER UWE ; KUHR HANS JUERGEN ; RANEY CHARLES C ; ROE STEVE N ; ROE STEVEN ; ROE STEVEN N ; BEATY TERRY ; CHAN FRANK ; CHAN FRANK A ; SACHSENWEGER PETER ; TERRY BEATY ; UWE KRAEMER ; VOLKER ZIMMER ; WEISS THOMAS ; WIEGEL CHRIS ; ZIMMER VOLKER ; WILHELM HILDEBRANDT ; THOMAS WEISS ; STEVEN N ROE ; STEVE N ROE ; RICHARD FORSTER ; PETER SACHSENWEGER ; MATT HANNANT ; HANS JUERGEN KUHR ; CHRIS WIEGEL ; WIEGEL CHRISTOPHER ; WONG DANIEL ; DANIEL WONG ; BEATY TERRY A

Inventor(s): WONG DANIEL SUNNYVALE ; RANEY CHARLES ; WIEGEL CHRIS SAN JOSE ; CHAN FRANK A SUNNYVALE ; ROE STEVEN N SAN MATEO

Agent(s):

OGILVY RENAULT LLP SENCRL SRL; NORTON ROSE CANADA SENCRL SRL LLP; NORTON ROSE OR SENCRL SRL LLP; ASAHINA SOHTA; AOKI ATSUSHI; TSURUTA JUNICHI; SHIMADA TETSURO; WOODARD EMHARDT MORIARTY MCNETT AND HENRY LLP; WOODARD EMHARDT MORIARTY MCNETT AND HENRY LLP ROCHE DIAGNOSTICS; ROCHE DIAGNOSTICS 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 TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61B10/00 A61B17/14 A61B17/32 A61B5/00 A61B5/145 A61B5/1468 A61B5/15 A61B5/151 A61B5/157 A61L2/00 A61L2/03 A61L2/08 A61L2/26 A61N5/00 B01J19/00 B01L3/00 B23P11/00 B65B51/10 B65B51/24 B65B55/02 B65B55/04 B65B55/12 B65B63/00 B65B9/00 B65D81/00 B67B7/00 C12Q1/00 G01N23/00 G01N33/48 G01N35/00 H01J27/00 H05K3/00 (Advanced/Invention); A61B10/00 A61B17/32 A61B17/3209 A61B5/00 A61B5/15 A61B5/151 A61B5/157 B65D81/00 G01N21/03 G01N31/00 G01N33/00 G01N33/48 G01N33/52 G01N35/00 (Advanced/Non–invention); A61B17/14 A61B17/32 A61B5/00 A61B5/145 A61B5/15 A61L2/00 A61L2/02 A61L2/08 A61L2/26 B65B51/10 B65B55/02 B65D81/00 B67B7/00 C12Q1/00 (Core/Invention); A61B (Subclass/Invention)

International class (IPC 1–7): A61B5/00 A61B5/145 A61B5/15

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European class: A61B5/145G A61B5/1468 A61B5/14B2 A61B5/151D A61B5/151M A61B5/157 A61B5/68D1B A61L2/08J B65B55/16 G01N33/487E2 K61B10/00A K61B17/3209F K61B5/00B K61B5/1486 K61B562/02S K61L202/181 K61L202/240

US class: 1/1 250/427 250/432.00R 250/432R 250/455.11 250/492.1 29/428 29/428S 29/829 422/1 422/22 422/22P 422/24 422/40 422/40S 422/410 422/430 422/50 422/66 435/4 435/4S 436/165 436/44 436/8 53/425 53/425P 53/426 53/428 53/428S 53/435 53/435P 53/450 53/463 53/463S 53/477 53/492 53/492S 600/181 600/182 600/183 600/309 600/309P 600/566 600/567 600/573 600/576 600/578 600/583 600/583P 600/584 600/584S 606/181 606/181P 606/181S 606/182

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DE19849539 A1, DE19819407 A1, DE19810407 A1, CN1579339, CN101365386, CN101132732, CN101115441 A, CA2564965 AA,

Forward Citations: WO13192179, WO13060428, WO12126945, WO12098071, WO12059205, WO11070149, WO11020598, WO11012645, WO11006913, WO10106020, WO10094428, WO10094427, WO10094426, WO10088948, WO10083878, WO10081529, WO10064998, WO10056869, WO10028803, WO10028803, WO10019734, WO10009870, WO10009870, WO09146774, WO09145920, WO09132517, WO09076247, WO08138587, WO08110287, WO08110287, WO08046637, WO08019028, WO08019028, WO07146913, WO06130482, WO06130482, WO06092309, WO06082439, USRE44695, USD774183, USD726321, USD726320, US9694144, US9694140, US9693713, US9687183, US9668682, US9668677, US9636068, US9636051, US9610034, US9610031, US9603557, US9585607, US9579053, US9572534, US9561000, US9560993, US9554741, US9521968, US9510782, US9504413, US9504162, US9498160, US9498159, US9480421, US9477811, US9475044, US9459228, US9451914, US9451910, US9451908, US9445760, US9445756, US9445755, US9439591, US9427532, US9420968, US9417229, US9414777, US9414774, US9402570, US9402544, US9399792, US9398882, US9386944, US9380974, US9380970, US9380963, US9375169, US9366636, US9351680, US9351669, US9339612, US9332938, US9332933, US9332932, US9328371, US9326716, US9326714, US9314793, US9314228, US9314194, US9307939, US9301715, US9295417, US9265453, US9261476, US9259175, US9248267, US9247901, US9247900, US9233206, US9226699, US9215992, US9192327, US9186468, US9186104, US9186099, US9186098, US9179872, US9173608, US9167992, US9155496, US9151742, US9144401, US9138179, US9131886, US9119581, US9119578, US9113836, US9101302, US9095292, US9089678, US9089294, US9078626, US9078607, US9072842, US9072477, US9066697, US9066695, US9066694, US9060742, US9060723, US9055901, US9044199, US9044178, US9042953, US9041541, US9034639, US9034250, US9033898, US9020573, US9014773, US9011502, US9011332, US9011331, US8998940, US8998859, US8989833, US8974386, US8969097, US8965476, US8961432, US8956518, US8956309, US8951377, US8945910, US8920455, US8920341, US8920319, US8919605, US8915850, US8915849, US8911369, US8905945, US8888804, US8888715, US8886272, US8880137, US8876846, US8870789, US8862198, US8858434, US8852124, US8852101, US8845550, US8845549, US8840553, US8834504, US8834503, US8828203, US8825127, US8821413, US8815175, US8815154, US8812072, US8808201, US8801631, US8801611, US8795201, US8792955, US8792954, US8792953, US8788007, US8788006, US8784335, US8777853, US8774887, US8765482, US8765059, US8764657, US8753289, US8750955, US8747355, US8747335, US8744545, US8738109, US8734365, US8734348, US8734346, US8731630, US8721671, US8721545, US8702932, US8702624, US8700117, US8690797, US8690796, US8690775, US8688188, US8684951, US8684949, US8679853, US8679033, US8676287, US8672844, US8670815, US8668656, US8668645, US8666469, US8663129, US8663109, US8660627, US8652831, US8652159, US8652158, US8652068, US8652043, US8649841, US8641644, US8641643, US8641619, US8636675, US8636674, US8636673, US8636672, US8628724, US8622930, US8622906, US8622905, US8621828, US8617071, US8615282, US8613892, US8613703, US8612159, US8608669, US8603126, US8602991, US8597189, US8591827, US8586373, US8583225, US8579831, US8574895, US8574255, US8574169, US8574168, US8571625, US8571624, US8565849, US8565848, US8562545, US8556829, US8551308, US8548551, US8545403, US8540647, US8529741, US8515519, US8515516, US8512243, US8509871, US8506740, US8496876, US8496602, US8496601, US8491500, US8483793, US8483791, US8480580, US8475373, US8473021, US8469985, US8465977, US8465425, US8463350, US8460524, US8457708, US8452368, US8444574, US8439872, US8435447, US8435190, US8430828, US8428678, US8423114, US8419657, US8417312, US8414609, US8414503, US8409131, US8403864, US8398567, US8396528, US8394021, US8391945, US8388552, US8388551, US8383040, US8382683, US8382682, US8382681, US8380273, US8372016, US8372005, US8366637, US8366614, US8360994, US8360993, US8360992, US8360991, US8357091, US8353848, US8353829, US8346337, US8346336, US8343075, US8337422, US8337421, US8337420, US8337419, US8333717, US8333716, US8333715, US8333714, US8333713, US8333710, US8328737, US8328736, US8328735, US8313434, US8306598, US8298828, US8296918, US8292826, US8290560, US8287703, US8287468, US8287454, US8287453, US8282577, US8282576, US8280475, US8275439, US8273022, US8268243, US8267870, US8265726, US8262614, US8260392, US8255031, US8251921, US8249684, US8247233, US8236242, US8235915, US8235896, US8234767, US8231547, US8231532, US8229534, US8226558, US8226557, US8226555, US8224413, US8222044, US8221334, US8221333, US8216154, US8211379, US8211037, US8211036, US8206319, US8206317, US8202232, US8202231, US8197423, US8197421, US8196374, US8187205, US8177716, US8175673, US8172866, US8162853, US8162830, US8162829, US8160671, US8160669,

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CN102735724, CN102481124, CN102458233, CN102458233, CN102389315, CN102379702, CN102355858, CN102355858, CN102325495, CN102292027, CN102282466, CN102149324, AU2013202358, AU2010214891, AU2004222739,

Abstract:
Source: US2004127818A A bodily fluid sampling device is operable to lance with a precise depth and express fluid from both fingertip and alternate sites. In one form, the device is operable to adjust the penetration depth of the lancet into the skin. The bodily fluid sampling device includes a lancet adapted to form an incision in skin. A skin contacting member has an orifice through which the lancet extends when lancing the skin. The orifice has a first opening size that is sized to flatten the skin around the lancet during lancing. The orifice has a second opening size that is larger than the first opening size after the incision is formed to express fluid from the incision.

0) US2013327102A – LOCK ASSEMBLY WITH MOVABLE ELEMENT

27) Family number: 49333718 (US2013327102A) © PatBase

Title: LOCK ASSEMBLY WITH MOVABLE ELEMENT

Priority: IL20110211697 20110313 WO2012US28669 20120311

Family:

Publication number	Publication date	Application number	Application date
AP201307165 A0	20131031	AP20130007165	20120311
AR085664 AA	20131016	AR2012P100801	20120312
BR112013022447 A2	20161206	BR20131122447	20120311
CA2826156 AA	20130730	CA20122826156	20120311
CL2013002340 A1	20140502	CL20130002340	20130812
CN102677971 A	20120919	CN201210112641	20120313
CN102677971 B	20160720	CN201210112641	20120313
CO6791593 A2	20131114	CO20130214735	20130910
EA026875 B1	20170531	EA20130001022	20120311
EA201301022 A1	20140228	EA20130001022	20120311
EP2686511 A1	20140122	EP20120716804	20120311
GT201300198 A	20150122	GT20130000198	20130812
IL211697 A0	20110531	IL20110211697	20110313
IL211697 A1	20150226	IL20110211697	20110313
IN06884DN2013 A	20141212	IN2013DN06884	20130802
MX2013008416 A1	20131017	MX20130008416	20120311
MX336449 B	20160120	MX20130008416	20120311
SG193294 A1	20131030	SG20130066402	20120311
TH141523 A	20150629	TH20131004871	20120311
TW201241289 A	20121016	TW20120108340	20120312
TWI539069 B	20160621	TW20120108340	20120312
UA113726 C2	20170310	UA20130009881	20120311
US2013327102 AA	20131212	US20120983569	20120311
US9140034 BB	20150922	US20120983569	20120311
WO12125512 A1	20120920	WO2012US28669	20120311

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** BEN AHARON EFFI ; EFFI BEN AHARON ; MUL T LOCK TECHNOLOGIES LTD ; KLEIN DAVID ; MUL T LOCK TECH LTD

Inventor(s):(std)**:** EFFI BEN AHARON ; BEN AHARON EFFI

Inventor(s): 1 BEN AHARON EFFI

Agent(s): BULL HOUSSER AND TUPPER LLP; REGEHR HERBERT B; LUIS FELIPE CLARO SWINBURN; WHITE DUNCAN ROHAN; DEKEL PATENT LTD; DAVID; KLEIN DAVID

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): E05B E05B15/00 E05B17/00 E05B19/02 E05B19/08 E05B27/00 E05B27/08 E05B27/10 E05B35/00 (Advanced/Invention); E05B27/00 (Advanced/Non–invention); E05B27/00 E05B35/00 (Core/Invention); E05B (Subclass/Invention)

CPC: E05B27/08 E05B27/0021 E05B27/0042 E05B35/003 Y10T70/7605

European class: E05B27/00F E05B35/00F P05B27/00A3B

US class: 1/1 70/493

Classification Explorer

Cited documents: WO10027760 A1, WO05014961 A2, WO0022263 A1, USRE35518 E, US8336350 BB, US7810365 BB, US7647799 BB, US7421869 BB, US6983630 BB, US6508091 BA, US6490898 BA, US6257033 BA, US6125674 A, US5839308 A, US5823030 A, US5784910 A, US5533369 A, US5531084 A, US5520035 A, US5457974 A, US5438857 A, US5437176 A, US5131249 A, US5123268 A, US5050412 A, US5010753 A, US4905489 A, US4753091 A, US4667495 A, US4638651 A, US4434636 A, US4377082 A, US4325242 A, US4213316 A, US4098103 A, US4078406 A, US2049548 A, US2011072867 AA, US2008236223 AA, TWM383612, TWM340328, TWM246403, TW434362, TW228018, DE3626553, DE3626552 A1, CN1323371 A, CN101684697 A, AT395262 B, AT395262,

Forward Citations: US2015345177, RU2595981, NL2013488,

Abstract:
Source: US2013327102A A lock assembly (10) including a plug (12) having a keyway (14) for inserting therein a key (16), the plug (12) arranged for movement in a bore (18) formed in a lock body (20) along a shear line (24) defined between an outer perimeter of the plug (12) and an inner perimeter of the bore (18), and at least one movable element (26, 28) slidingly disposed in an opening formed in the plug (12), wherein insertion of the key in the keyway (14) without movement of the plug (12) in the lock body (20) does not align the at least one movable element (26, 28) with the shear line (24), but movement of the plug (12) in the lock body (20) with the key (16) inserted in the keyway (14) aligns the at least one movable element (26, 28) with the shear line (24).

0) US2010133784A – VERSATILE, COLLAPSIBLE CART–TRAILER WITH MODULA...

28) Family number: 45102511 (US2010133784A) © PatBase

Title: VERSATILE, COLLAPSIBLE CART–TRAILER WITH MODULAR COMPONENTS

Priority: US20080200598P 20081201 US20090627241 20091130 US20090628573 20091201 WO2009US66069 20091130 US20120495546 20120613 US20130745396 20130118

Family:

Publication number	Publication date	Application number	Application date
US2010133784 AA	20100603	US20090628573	20091201
US2010135716 AA	20100603	US20090627241	20091130
US2011229253 A9	20110922	US20090627241	20091130
US2012313349 AA	20121213	US20120495546	20120613
US2013127136 AA	20130523	US20130745396	20130118
US8202017 BB	20120619	US20090627241	20091130
US8376381 BB	20130219	US20090628573	20091201
US8801322 BB	20140812	US20120495546	20120613
US8827304 BB	20140909	US20130745396	20130118
WO10065442 A2	20100610	WO2009US66069	20091130
WO10065442 A3	20100826	WO2009US66069	20091130
WO10065509 A2	20100610	WO2009US66208	20091201
WO10065509 A3	20100826	WO2009US66208	20091201

Probable Assignee: COMMONWHEEL VENTURES LLC

Assignee(s):(std)**:** COMMONWHEEL VENTURES INC ; COMMONWHEEL VENTURES LLC ; SHALABY NADIA ; VISENTIN MATTEO

Inventor(s):(std)**:** MATTEO VISENTIN ; NADIA SHALABY ; SHALABY NADIA ; VISENTIN MATTEO

Agent(s): MILLS AND ONELLO LLP; LATHROP AND GAGE LLP; STEVEN M; BURNS AND LEVINSON LLP; MILLS STEVEN 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 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): B60D1/00 B60D1/01 B60D1/07 B60D1/155 B62B1/00 B62B1/02 B62B1/12 B62B3/02 B62B3/12 B62B5/00 B62B7/06 B62D61/00 B62K27/00 B62K27/12 B62K27/14 E05B73/00 F16B2/06 F16B2/10 F16B21/07 (Advanced/Invention); B60D1/00 B62B1/00 B62B3/02 B62B5/00 B62D61/00 B62K27/00 E05B73/00 F16B2/02 F16B21/00 (Core/Invention)

CPC: B62K27/003 B62B5/00 B62B3/12 Y10T24/1418 Y10T24/142 Y10T403/32532 Y10T403/453 Y10T403/595 Y10T403/599 B62K27/12 Y10T70/411

European class: B62B3/12 B62K27/12

US class: 24/270 24/271 280/204 280/204S 280/38 280/400 280/400S 280/415.1 280/482 280/482P 280/493 280/493S 280/504 280/651 280/654 280/654S 280/656 403/110 403/110P 403/223 403/322.4 403/325 403/325S 70/19 70/19S

Classification Explorer

Cited documents: USD431635 S1, US8523219 BB, US8240695 BA, US7500681 BB, US7353731 BB, US7017939 BB, US6983947 BB, US6948878 BA, US6640396 BA, US6568838 BB, US6561529 BB, US6305703 BA, US6286847 BA, US6270100 BA, US6036215 A, US5944333 A, US5816349 A, US5810378 A, US5794957 A, US5791670 A, US5785334 A, US5669122 A, US5641173 A, US5636852 A, US5586367 A, US5540465 A, US5482304 A, US5470088 A, US5436810 A, US5375815 A, US5259634 A, US5242178 A, US5005847 A, US4969923 A, US4865346 A, US4759559 A, US4721320 A, US4717168 A, US4550930 A, US4381585 A, US4371184 A, US4342467 A, US4307893 A, US4174120 A, US4150500 A, US4128252 A, US4077646 A, US4037853 A,

US3829125 A, US3633956 A, US3533650 A, US3193796 A, US3157932 A, US3012796 A, US2004145147 AA, US1436317 A, KR200437559 Y1, KR200437559, JP3060071 U, JP3060071 A2, EP1600353 A2, EP0317673 A1,

Forward Citations: US9643672, US9615631, US9573639, US9445584, US9228377, US9102376, US9091099, US8814193, US8695992, US8651436, US8087683, US2016280297, US2016183636, US2016135630, US2016073618, US2014326026, US2014084561, US2012104212, US2011198825, FR2996207, ES2452525, AT510904, AT510904,

Abstract:
Source: US2010133784A A collapsible cart−trailer includes a folding mechanism that folds the cart−trailer into a small form factor, at least two wheels, modular, and removable and compartmentalized storage. The collapsible cart−trailer is operable in a cart mode and a trailer mode. In the trailer mode, the cart−trailer may be coupled to a movable object by a collapsible, length adjustable tow bar. In the cart mode, the cart−trailer includes a collapsible handle.

29) Family number: 30055786 (US2001000878A) © PatBase

Title: RETRACTABLE SCREEN SYSTEM AND IMPROVEMENTS THEREFOR

Priority:

CA19942116395	19940224	CA20002324815	20001030	CA20072579613	20070226
IL19950112773	19950224	IL19980112773	19980923	US19970954748	19971020
US19980184029	19981102	US20000740965	20001221	US19980035152	19980305
US19970962263	19971031	US19940362995	19941223	US19940281620	19940728
US20030188361F	20030819	US20000741348F	20001221	US20070826222	20070713
US20010769434	20010126	US20010860557	20010521	WO1995CA00098	19950223
US20000741348	20001221	US20060448851	20060608	US20060433445	20060515

Family:

Publication number	Publication date	Application number	Application date
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CA2116395 AA	19950825	CA19942116395	19940224
CA2116395 C	20010130	CA19942116395	19940224
CA2324815 AA	20020430	CA20002324815	20001030
CA2324815 C	20090120	CA20002324815	20001030
CA2579613 AA	20071208	CA20072579613	20070226
CA2579613 C	20140923	CA20072579613	20070226
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IL126309 A1	20020912	IL19950126309	19950224
US2001000878 AA	20010510	US20000740965	20001221
US2001011579 AA	20010809	US20010769434	20010126
US2001027621 AA	20011011	US20010860557	20010521
US2003070221 AA	20030417	US20000741348	20001221
US2006225847 AA	20061012	US20060433445	20060515
US2007284893 AA	20071213	US20060448851	20060608
US2008053623 AA	20080306	US20070826222	20070713
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US6209610 BA	20010403	US19980035152	19980305
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US6405781 BB	20020618	US20010769434	20010126
US6446696 BA	20020910	US19970962263	19971031
US6655444 BB	20031202	US20000741348	20001221
US6679002 BB	20040120	US20010860557	20010521
US7967345 BB	20110628	US20060448851	20060608
US8656978 BB	20140225	US20070826222	20070713
USD494401 S1	20040817	US20030188361F	20030819
WO9523270 A2	19950831	WO1995CA00098	19950223
WO9523270 A3	19951005	WO1995CA00098	19950223

Probable Assignee: 420820 ONTARIO LTD

Assignee(s):(std)**:** 420820 ONTARIO LIMITED ; 420820 ONTARIO LTD ; ONTARIO LTD 420820 ; PREFERRED ENGINEERING PRODUCTS ; DAVIES SEAN ; DAVIES BOB ; 420820ONTARIO C O B PR LTD ; DAVIES JOHN ROBERT ; GOLDENBERG SHAUL

Assignee(s):

420820ONTARIO LIMITED C O B PREFERRED ENGINEERING INC ; DAVIES JOHN ROBERTC/O 350 CREDITSTONE ROADUNIT 204VAUGHANO1L4K 3Z2CA ; KUPENTHIRARAJAN SINNATHAMBY ; 420820ONTARIO LIMITED C O B PREFERRED ENGINEERING ; PREFERRED ENGINEERING INC ; PREFERRED ENGINEERING PRODUCTS LTD ; 420820 ONTARIO LTD204–350 CREDITSTONE ROADVAUGHANO1L4K 3Z2CA ; 420820 ONTARIO C O B PREFERRED ENGINEERING INC LTD ; 420820 ONTARIO CARRYING ON BUSINESS AS PREFERRED E ; 420820 ONTARIO CARRYING ON BUSINESS PREFERRED ENGI

Inventor(s):(std)**:** BOB DAVIES ; DAVIES BOB ; DAVIES JOHN R ; DAVIES JOHN ROBERT ; DAVIES SEAN ; DAVIES SEAN JAMES ; DAVIES SHAWN ; GOLDENBERG SHAUL ; KUPENTHIRARAJAN SINNATHAMBY ; SEAN DAVIES ; SIMON CLIFF

Inventor(s): DAVIES JOHN ROBERTC/O 350 CREDITSTONE ROADUNIT 204VAUGHANO1L4K 3Z2CA ; DAVIES JOHN

Agent(s): HEENAN BLAIKIE LLP; MACDONALD SAGER MANIS LLP; RICHES MCKENZIE AND HERBERT LLP; SILBER GERBER AND LEWIN; IVOR M HUGHES BARRISTER AND SOLICITOR PATENT AND TRADEMARK AGENTS; NEIL H; IVOR M; MARCELO K; CAESAR RIVISE BERNSTEIN COHEN AND POKOTILOW LTD

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 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 TT UA UG US UZ VN

International class (IPC 8–9): A47K3/38 E05C1/06 E05C1/16 E05C9/04 E05C9/12 E05D15/00 E05D15/06 E05D15/22 E05D15/58 E05F7/00 E06B3/50 E06B9/00 E06B9/08 E06B9/52 E06B9/56 E06B9/58 G09F19/22 G09F23/00 G09F23/06 (Advanced/Invention);
E05B3/00 E05F7/00 (Advanced/Non–invention);
A47K3/28 E05C1/00 E05C9/00 E05D15/00 E05D15/06 E05D15/16 E06B3/32 E06B9/00 E06B9/52 E06B9/56 E06B9/58 G09F19/22 G09F23/00 (Core/Invention);
E05F7/00 (Core/Non–invention);
E06B (Subclass/Invention)

International class (IPC 1–7): A47H1/00 A47H23/00 A47H33/00 A47K3/38 E04F10/06 E05D15/06 E05D15/22 E05D15/58 E05F11/00 E05F11/38 E06B3/48 E06B3/50 E06B9/08 G09F23/00

CPC: G09F19/22 Y10S160/06 Y10S292/46 A47K3/38 E05C9/045 E05B65/0876 E05C9/10 E05C9/20 Y10T292/084 Y10T292/0843 Y10T292/57 E06B2009/543 E05D15/0604 E05D13/1253 E05D15/22 E05D2015/586 E05F7/005 E05Y2201/604 E05Y2201/62 E05Y2201/706 E05Y2201/716 E05Y2201/722 E05Y2900/132 E05Y2900/148 E06B3/50 E06B3/5018 E06B9/54 E06B9/68 E06B9/84 G09F23/00 G09F23/06 E06B9/52 E06B9/56 E06B9/58 E05Y2900/00 E05Y2900/106

European class: A47K3/38 E05B65/08F4 E05C9/04G E05C9/10 E05D15/06B E05D15/22 E06B3/50 E06B3/50A1 E06B9/52 E06B9/54 E06B9/56 E06B9/58 E06B9/68 G09F19/22 G09F23/00 G09F23/06 P05C9/20 P05D13/12G P05D15/58E P05F7/00C P05Y201/604 P05Y201/62 P05Y201/706 P05Y201/716 P05Y201/722 P05Y900/132 P05Y900/148 P06B9/84

US class: 160/100 160/100S 160/122 160/186 160/186S 160/201 160/23.1 160/23.100P 160/243 160/26 160/26P 160/27 160/271 160/27S 160/28 160/31 160/313 160/313S 160/31P 160/323.1 160/323.100S 160/405 160/DIG.6 292/336.3 292/336.300P 292/37 292/39 292/39S 292/DIG.46 4/558 4/558S 4/608 4/608P 49/158 49/159 49/162 49/260 49/261 49/322 49/348 49/349 49/360 49/360P 49/407 52/656.7 52/656.700S D6/580

Classification Explorer

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Abstract:
Source: US2001000878A A continuous roll of screen which may be payed out from said roll by an installer or manufacturer to a required predetermined window size, or alternatively patio door size, said screen comprising a free end which allows the installer to pay the screen off of the roll upon which the screen is accumulated course upon course, one end of said screen being disposed at the end of the courses accumulated on the roll from which the screening is payed off and the other end being a free end, said screen having side edges and preferably being manufactured from preferably vinyl−coated fiberglass, the edges of said screen having affixed thereto a generally preferably T−shaped key manufactured from a flexible material, for example polyvinyl chloride, which is affixed preferably by radio frequency welding (or RF welding) with the edges and preferably each of the edges, and in one embodiment at least one edge of said screen, wherein the vinyl coating provided on the screen melds with the polyvinyl chloride key to form a resilient anchor for the screen device within any screen roller assembly.

0) US4624309A – APPARATUS FOR MONITORING A PARAMETER IN A WELL ...

30) Family number: 30455530 (US4624309A) © PatBase

Title: APPARATUS FOR MONITORING A PARAMETER IN A WELL

Priority:

AU19850046299 19850819
AU19870075215 19870703
CA19850491379 19850923
GB19850021339 19850827
GB19870015062 19870626
US19870140197 19871231
US19860889825 19860724
US19840653585 19840924
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US19930045136 19930412
US19920948423 19920922
US19900537788 19900614
US19890411387 19890922
US19890367772 19890717

Family:

Publication number	Publication date	Application number	Application date
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AU198775215 A1	19880128	AU19870075215	19870703
AU198817545 A1	19880901	AU19880017545	19880609
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US4846269 A	19890711	US19880178068	19880405	
US5648555 A	19970715	US19930045136	19930412	

Probable Assignee: APPLIED BIOSYSTEMS LLC

Assignee(s):(std)**:** GEAR L A INC ; OTIS ENG CO ; L A GEAR INC ; L A GRAR INC ; OTIS ENG CORP ; L A GEAR ; QUEST SYSTEMS INC ; OTIS ENGINEERING CORP

Assignee(s): SCHNATZMEYER MARK A ; OTIS ENGINEERING CARROLLTON TX A CORPOF DE CORP ; OTIS ENGINEERING CARROLLTON TX A CORP OF DE CORP ; HALLIBURTON CO ; APPLERA CORP ; APPLIED BIOSYSTEMS INC ; APPLIED BIOSYSTEMS LLC ; BANK OF AMERICA NA AS COLLATERAL AGENT ; BANK OF AMERICA NA COLLATERAL AGENT AS ; BRONSTEIN IRENA Y ; EDWARDS BROOKS

Inventor(s):(std)**:** BRONSTEIN IRENA Y ; EDWARDS BROOKS ; GOLDSTON MARK R ; IRENA Y BRONSTEIN ; EDWARS BROOKS ; MARK A SCHNATZMEYER ; SCHNATZMEYER MARK A

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SMART AND BIGGAR

International class(IPC 8–9)**:** B01J31/02 C07B61/00 C07C241/00 C07C251/30 C07C41/00 C07C41/01 C07C43/178 C07C43/196 C07C43/215 C07C45/00 C07C49/84 C07C67/00 C07C69/00 C07C69/145 C07C69/157 C07D321/00 C07F9/12 C07F9/655 C07F9/6574 C07H15/203 C07H15/24 C07H15/26 C09K11/06 C09K11/07 C12Q1/34 C12Q1/42 C12Q1/44 C12Q1/68 E21B17/00 E21B23/00 E21B23/03 E21B47/00 E21B47/06 G01N21/76 G01N33/50 G01N33/535 G01N33/58 G01N33/76 H01R13/523 (Advanced/Invention); E21B17/00 E21B23/00 E21B47/00 E21B47/06 H01R13/523 (Core/Invention)

International class(IPC 1–7)**:** C07C119/14 C07C251/14 C07C251/16 C07C41/01 C07C43/00 C07C49/788 C07C69/527 C07D321/00 C07F9/12 C07F9/145 C07H15/20 C07H15/24 E21B23/00 E21B23/02 E21B23/03 E21B34/06 E21B47/00 E21B47/06 E21B7/06 G01N33/50 G01N33/53 H01R13/523

CPC: E21B17/003 E21B23/03 E21B47/00 E21B47/06 H01R13/523 C07C69/157 C07C43/1788 C07C43/196 C07C43/215 G01N33/535 G01N33/76 C07C2603/74 C07H15/203 C07C41/01 C07C67/29 C07D321/00 C07F9/12 C07F9/65512 C07F9/65742 C07H15/26 C12Q1/34 G01N21/76 G01N33/581 G01N33/582

European class: C07C41/01 C07C67/29 C07D321/00 C07F9/12 C07F9/655L60 C07F9/6574A1 C07H15/203 C07H15/26 C12Q1/34 E21B17/00K E21B23/03 E21B47/00 E21B47/06 G01N21/76 G01N33/535 G01N33/58B G01N33/58D G01N33/76 H01R13/523

US class: 166/117.5 166/123 166/178 166/181 166/250 166/250.11 166/65.1 166/66 339/94R 439/191 568/586 568/633 73/151 73/152.55

Classification Explorer

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Forward Citations: WO9849424, WO9848145, WO9846854, WO9737102, WO9737102, WO9718381, WO16071200, WO15106826, WO15094362, WO12049456, WO12049456, WO10122342, WO09051590, WO08157135, WO05045181, WO0123704, USRE46344, US9647381, US9416651, US9394754, US9140086, US9028264, US8757891, US8701506, US8668509, US8550722, US8550721, US8523454, US8511907, US8485837, US8137124, US8136588, US8069716, US7938178, US7654334, US7644760, US7641395, US7611290, US7594763, US7588080, US7556093, US7338297,

US7252437, US7228898, US7210856, US7191832, US7165892, US7138926, US7138926, US7115757, US7007541, US6938506, US6928864, US6913897, US6844453, US6798347, US6776636, US6776233, US6747160, US6677861, US6644403, US6612547, US6514717, US6484800, US6481495, US6450255, US6346615, US6334486, US6322727, US6302204, US6287767, US6260616, US6253848, US6230812, US6209640, US6124478, US6113816, US6065538, US6006832, US5937945, US5925825, US5906238, US5896924, US5863185, US5862859, US5740860, US5706892, US5662165, US5597042, US5535828, US5533722, US5503225, US5389003, US5355952, US5327971, US5237857, US5158331, US4997384, US4921438, US2016108692, US2014030904, US2013213670, US2013025845, US2011220414, US2010248525, US2010086257, US2008311776, US2008073084, US2007253665, US2007180934, US2007123072, US2007081768, US2006213659, US2006159400, US2005281511, US2005232548, US2005194150, US2005087638, US2005074210, US2005074196, US2005072564, US2004176611, US2003207329, US2003175838, US2003148672, US2003148636, US2003145646, GB2535361, GB2514096, GB2481558, GB2481558, GB2433123, GB2433123, GB2424237, GB2424237, GB2377951, GB2377951, GB2356416, GB2333792, GB2333792, GB2320731, GB2320731, GB2302349, GB2230656, GB2230656, GB2206627, GB2206627, GB2206626, GB2206626, GB2206625, GB2206625, GB2196410, GB2193239, GB2193239, EP0875661, EP0860907, EP0777033, EP0552087, EP0257155, AU743885, AU728634, AU615828, AU615827, AU615826, AU2011315327,

Abstract:
Source: US4624309A Apparatus including a side pocket mandrel for inclusion in a well tubing string for removably receiving an instrument in its offset receptacle bore for monitoring at least one parameter such as pressure, temperature or the like, at a downhole location, there being an electrical conductor (wire) extending from equipment at the surface downward to the side pocket mandrel and a plug in the lower end of the receptacle for electrically connecting the instrument in the receptacle with the conductor (wire) extending from the surface so that electrical energy may be transmitted downhole to power the instrument, that the instrument may generate electrical signals representing data sensed in the well and transmit them to the surface for processing and immediate display, printout, or storage.

0) US2011072867A – KEY, LOCK AND LOCKING MECHANISM

31) Family number: 44115860 (US2011072867A) © PatBase

Title: KEY, LOCK AND LOCKING MECHANISM

Priority: EP20090758004 20090601 IL20080191855 20080601 WO2009IL00540 20090601 IL20100209711 20101201

Family:

Publication number	Publication date	Application number	Application date
CN102112690 A	20110629	CN200980129935	20090601
CN102112690 B	20150513	CN200980129935	20090601
DE602009034362 D1	20151203	DE200960034362T	20090601
EP2307640 A2	20110413	EP20090758004	20090601
EP2307640 B1	20151021	EP20090758004	20090601
ES2559870 T3	20160216	ES20090758004T	20090601
HK1159716 A1	20160401	HK20110114005	20111228
IL191855 A0	20090211	IL20080191855	20080601
IL209711 A0	20110228	IL20090209711	20090601
IL209711 A1	20160531	IL20090209711	20090601
PT2307640 T	20160219	PT20090758004T	20090601
TR201600889 T4	20160222	TR20160000889T	20090601
US2011072867 AA	20110331	US20090995468	20090601
US8746025 BB	20140610	US20090995468	20090601
WO09147660 A2	20091210	WO2009IL00540	20090601
WO09147660 A3	20100318	WO2009IL00540	20090601

Probable Assignee: TORGEMAN ERIC

Assignee(s):(std)**:** AHARON MOSHE ; ASHER HAVIV ; EIRC TORGEMAN ; ERIC TORGEMAN ; HAVIV ASHER ; TORGEMAN ERIC ; MULTI KEY LTD RAV MAFTEAH LTD ; TORGEMA ERIC ; MOSHE AHARON ; SMARTER PLACE TECHNOLOGIES LTD ; SMARTER PLACE TECH LTD

Inventor(s):(std)**:** TORGEMAN ERIC ; HAVIV ASHER ; TORGEMA ERIC ; ERIC TORGEMAN ; ASHER HAVIV

Agent(s): DENNEMEYER AND ASSOCIATES S A; DENNEMEYER AND ASSOCIATES SA; ISERN JORGE; GE EHRLICH 1995 LTD; OKTAY SIMSEK; G E EHRLICH 1995 LTD 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): B23P11/00 E05B E05B19/00 E05B19/02 E05B19/08 E05B27/00 E05B27/02 E05B35/00 (Advanced/Invention); E05B19/00 E05B27/00 E05B35/00 (Core/Invention); E05B (Subclass/Invention)

CPC: Y10T29/49826 Y10T70/7559 Y10T70/7802 Y10T70/7819 Y10T70/7825 Y10T70/7842 Y10T70/7859 Y10T70/7864 Y10T70/787 Y10T70/7881 E05B35/003 E05B19/0058 E05B27/0017 E05B27/0042

European class: E05B35/00F P05B19/00K4M1 P05B27/00A3 P05B27/00F

US class: 29/428 29/428S 70/357 70/357P 70/395 70/398 70/399 70/402 70/402S 70/405 70/406 70/407 70/409

Classification Explorer

Cited documents: WO09147677 A1, WO09147660 A2, WO08015672 A2, WO05095738 A2, US8387425 BB, US8336350 BB, US7647799 BB, US7181938 BB, US7003994 BB, US6508091 BA, US5970760 A, US5839308 A, US5784910 A, US5711506 A, US5704234 A, US5520035

A, US5437176 A, US5170651 A, US5123268 A, US4377082 A, US3780549 A, US2013091911 AA, US2011072868 AA, US2011072867 AA, US2011048084 AA, US2010024499 AA, US2005275535 AA, US2003089148 AA, US1422515 A, US1422497 A, GB2298454 A1, FR2378925 A1, EP0237799 A2, EP0161654 A2, DE4317994 C1, DE3643188 A1, DE3424307 A1, DE29602680 U1, DE29602680,

Forward Citations: WO15059723, WO15001559, US9523217, US9140034, US9045915, US8820129, US8794043, US8746025, US8671725, US8387425, US8336350, US8261587, US2017081879, US2016160528, US2014190223, US2013327102, US2013298623, US2013091910, US2012055212, US2011146360, ITTO20120100, EP2626489, EP2563996, EP2563996, CN105658885, CN103243974, CN103243974, CN102392556, CN102392556,

Abstract:
Source: US2011072867A A key blank comprises a shaft and a head connected to the shaft, the shaft including first and second surface that are oppositely facing, wherein the surfaces are configured to include combination elements to operate a lock and a pair of coaxial operating elements, wherein one element of the pair is operative from the first surface of the shaft and the other element of the pair is operative from the second surface of the shaft, and wherein at least one of the operative elements is a resilient element mounted inside a bore provided in the shaft, wherein the resilient element is operative to exert a compressive force on a pin mechanism of the lock in response to the operative engagement and thereby release the pin mechanism from a lock position, without requiring any pressure on the coaxial element on the other side.

0) US2014076115A – METHOD AND APPARATUS FOR CUTTING ONE OR MORE GR...

32) Family number: 56019218 (US2014076115A) © PatBase

Title: METHOD AND APPARATUS FOR CUTTING ONE OR MORE GROOVES IN A CYLINDRICAL ELEMENT

Priority: US20120702093P 20120917 US20130029210 20130917 US20130841732 20130315 US20130842586 20130315 US20130810949P 20130411 US20130817954P 20130501 US20130843617 20130315 WO2013US60205 20130917 US20140535987 20141107 US20130901985P 20131108 US20150719438 20150522 US20170450892 20170306 US20170439071 20170222 US20150786877 20151023 WO2014US33602 20140410

Family:

Publication number	Publication date	Application number	Application date
AU2013315024 AA	20140320	AU20130315024	20130917
CA2884098 AA	20150304	CA20132884098	20130917
CN104684441 A	20150603	CN201380048357	20130917
EP2895036 A1	20150722	EP20130837043	20130917
EP2895036 A4	20160727	EP20130837043	20130917
IN01964DN2015 A	20160831	IN2015DN01964	20150311
JP2015531663 T2	20151105	JP20150532153T	20130917
US2014076115 AA	20140320	US20130841732	20130315
US2014076503 AA	20140320	US20130029210	20130917
US2014076505 AA	20140320	US20130843617	20130315
US2014076508 AA	20140320	US20130842586	20130315
US2015107788 AA	20150423	US20140535987	20141107
US2015272370 AA	20151001	US20150719438	20150522
US2017172333 AA	20170622	US20170450892	20170306
US2017181562 AA	20170629	US20170439071	20170222
US9095907 BB	20150804	US20130842586	20130315
US9095908 BB	20150804	US20130029210	20130917
US9615687 BB	20170411	US20150719438	20150522
WO14043711 A1	20140320	WO2013US60197	20130917
WO14043712 A1	20140320	WO2013US60203	20130917
WO14043713 A1	20140320	WO2013US60205	20130917

Probable Assignee: CURRENT PRODUCTS CORP

Assignee(s):(std)**:** CURRENT PRODUCTS CORP ; HOMERUN HOLDINGS CORP ; QMOTION INC

Assignee(s): OMOTION INC ; MATTHEWS DANIEL T ; MULLET WILLIS JAY ; LEE GERALD ASHLEY ; FOX MICHAEL D

Inventor(s):(std)**:** FOX MICHAEL D ; HAND RICHARD SCOTT ; LEE GERALD ASHLEY ; MATTHEWS DANIEL T ; MULLET WILLIS JAY

Agent(s): DAVIES COLLISON CAVE; AJ PARK; MACRAE AND CO; ROBIC; WALKER ROSS THOMSON; KITA AOYAMA INT PATENT BUREAU; ZARLEY LAW FIRM PLC; BROWNWINICK LAW FIRM; CHRISTOPHER A; PARKER JAMES S 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 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): A47H1/00 A47H1/02 A47H13/02 A47H23/00 A47H5/02 A47H5/06 B23B1/00 B23B29/26 B23B3/00 B23B5/08 B23Q1/76 E05F15/77 E06B7/082 E06B7/10 E06B9/24 E06B9/266 E06B9/322 E06B9/36 E06B9/388 E06B9/40 E06B9/56 E06B9/72 (Advanced/Invention)

CPC:

E06B9/40 E06B9/72 A47H1/02 B23Q1/766 B23B3/00 B23B5/08 B23B29/26 B23B2215/72 B23B2220/12 B23B2220/445 B23B2260/024 Y10T82/10 A47H5/06 B23B1/00 A47H5/0325 A47H23/00 Y10T29/49826 A47H13/02 A47H2001/0215

US class: 1/1 160/108 160/121.1 160/310 160/405 160/7 160/84.02 160/84.06 29/428 82/1.11

Classification Explorer

Cited documents: WO8602970 A1, USRE36058 E, USRE31793 E, USD714132 S1, USD553965 S1, USD5178 S1, USD418741 S1, USD41567 S1, USD391476 S1, USD355587 S1, USD355353 S1, USD324645 S1, USD324328 S1, USD315415 S1, USD25521 S1, USD22271 S1, USD041567 S1, USD025521 S1, USD022271 S1, USD005178 S1, US9161649 BB, US9074401 BB, US9045939 BB, US9038697 BB, US8968900 BB, US8919419 BB, US8892262 BB, US8757239 BB, US8723455 BB, US8659246 BB, US8575872 BB, US8540005 BB, US8498747 BB, US8469078 BB, US8413557 BB, US8371358 BA, US8368328 BB, US8340975 BA, US8299734 BB, US8125167 BA, US7975748 BB, US7931068 BB, US7832052 BB, US7757591 BB, US7729807 BB, US7690414 BB, US7673667 BB, US7590433 BB, US7438111 BB, US7389806 BB, US7356041 BB, US7350736 BB, US7346016 BB, US7337825 BA, US7299848 BB, US7281561 BB, US7259485 BB, US7240716 BB, US7231953 BB, US7222655 BB, US7193502 BB, US7137530 BB, US7111659 BB, US7104305 BA, US7033695 BB, US6994145 BB, US6979962 BB, US6967565 BB, US6959748 BB, US6935403 BB, US6870338 BB, US6850017 BA, US6827121 BB, US6736186 BB, US6733413 BB, US6708750 BB, US6680594 BB, US6606072 BA, US6603644 BB, US6550733 BA, US6533017 BA, US6497267 BA, US6489169 BA, US6433498 BA, US6376832 BA, US6369530 BB, US6286579 BA, US6259218 BA, US6212221 BA, US6189592 BA, US6181089 BA, US6181089 B1, US6152205 A, US6144177 A, US6125907 A, US6085826 A, US6082433 A, US6069465 A, US6060852 A, US6055885 A, US6024156 A, US6020829 A, US6004298 A, US5990646 A, US5960847 A, US5929580 A, US5907227 A, US5905442 A, US5899255 A, US5889377 A, US5883480 A, US5813447 A, US5793174 A, US5785105 A, US5760558 A, US5752557 A, US5729103 A, US5714855 A, US5655343 A, US5655342 A, US5566736 A, US5547008 A, US5509239 A, US5482100 A, US5467808 A, US5462105 A, US5445209 A, US5434487 A, US5419010 A, US537681 A, US5301733 A, US5278480 A, US5271446 A, US5133399 A, US5133330 A, US5123079 A, US5070927 A, US5054605 A, US4979582 A, US4958112 A, US4956588 A, US4926922 A, US4878528 A, US4867020 A, US4865107 A, US4832104 A, US4831509 A, US4827199 A, US4819708 A, US4807686 A, US4773464 A, US4766941 A, US4731965 A, US4724885 A, US4644244 A, US4572467 A, US4532194 A, US4495978 A, US4492262 A, US4427050 A, US4399855 A, US4305448 A, US4278374 A, US4223714 A, US4171845 A, US4160348 A, US4131831 A, US4125057 A, US4096903 A, US4023609 A, US3999110 A, US3930738 A, US3853166 A, US3774665 A, US3631659 A, US3561520 A, US3208507 A, US2801690 A, US2256008 A, US2135647 A, US2016143470 AA, US2014014281 AA, US2013333848 AA, US2013204408 AA, US2013199735 AA, US2013160956 AA, US2013153162 AA, US2013112899 AA, US2013068406 AA, US2012279075 AA, US2012181979 AA, US2012031571 AA, US2011146922 AA, US2011056630 AA, US2011048655 AA, US2010269988 AA, US2010200178 AA, US2009127369 AA, US2007295175 AA, US2007284053 AA, US2007277944 AA, US2007261801 AA, US2006196614 AA, US2006162877 AA, US2006086874 AA, US2006021714 AA, US2006000565 AA, US2004169116 AA, US2004045419 AA, US1949512 A, US1823909 A, US1509620 A, US1339353 A, KR20100006476 A, KR100903201 B1, JP7003453 U, JP60176610 A2, JP58024287 U1, JP5084275 U, JP43002078 B4, JP2011206147 A2, JP2011062497 A2, JP2010194279 A2, JP2010119805 A2, JP2009034301 A2, JP2006314389 A2, JP2006304984 A2, JP1232911 A2, JP1133475 U1, JP10192130 A2, GB2138672 A1, GB182223 A, GB153436 A, DE3402122 A1, CN2912436 Y, CN1069402 A, CN101999835 A, CH657031 A,

Forward Citations: USD791364, US9722220, US9614475, US9540873, US9480357, US2017059104, US2016206128, US2016206127, US2016143470, US2016037953, US2015179994, US2015136338, US2014158312, US2013097058,

Abstract:
Source: US2014076115A Embodiments of the subject invention relate to a method and apparatus for cutting one or more grooves in a cylindrical element. In specific embodiments, the one or more grooves are cut into an outer surface of the cylindrical element. The cylindrical element can be solid, or can have one or more hollow portions. In a specific embodiment, the cylindrical element is a hollow tube. Embodiments also pertain to a cylindrical element having one or more grooves cut in an outer surface of the cylindrical element. Further specific embodiments are directed to cylindrical elements having one or more grooves that can be utilized as a drapery or curtain tube, where the one or more grooves, in combination with rotation of the cylindrical element, can be used for moving the drapery to one or more positions along the tube, such as from an open position for the drapery or curtain to a closed position for the drapery or curtain, by engaging an interconnecting element between the drapery or curtain and the one or more grooves while rotating the tube.

33) Family number: 12653058 (US5431650A) © PatBase

Title: Vortex hand piece shroud for automatic smoke evacuator system for a surgical laser apparatus and method therefor

Priority: US19920989238 19921211 US19940196802 19940215 US19970931817 19970916 US19970971011 19971114 US19960726820 19961007 US19950500045 19950710 US19980189556 19981111 US20000608073 20000630

Family:

Publication number	Publication date	Application number	Application date
US5431650 A	19950711	US19940196802	19940215
US5693044 A	19971202	US19950500045	19950710
US5836944 A	19981117	US19960726820	19961007
US6099525 A	20000808	US19970931817	19970916
US6142995 A	20001107	US19980189556	19981111
US6149648 A	20001121	US19970971011	19971114
US6458125 BA	20021001	US20000608073	20000630

Probable Assignee: IC MEDICAL INC

Assignee(s):(std)**:** I C MEDICAL INC

Assignee(s): IC MEDICAL INC ; COSMESCU IOAN

Inventor(s):(std)**:** COSMESCU IOAN

International class (IPC 8–9)**:** A61B18/00 A61B18/14 (Advanced/Invention); A61B18/20 (Advanced/Non–invention)

International class (IPC 1–7)**:** A61B17/36 A61B17/39 A61B18/18

CPC: A61B18/042 A61B18/14 A61B18/1402 A61B18/20 A61B2017/00296 A61B2218/008 A61B18/00

European class: A61B18/00 A61B18/00B A61B18/04B A61B18/14B K61B17/00E3E K61B18/04B K61B18/14 K61B18/20 K61B218/00D4D

US class: 604/22 604/34 604/35 606/13 606/31 606/32 606/41 606/42 606/45 606/49

Classification Explorer

Cited documents: US5836944 A, US5720745 A, US5693044 A, US5496314 A, US5431650 A, US5413575 A, US5409484 A, US5360427 A, US5330469 A, US5318565 A, US5269781 A, US5244462 A, US5242442 A, US5234428 A, US5224944 A, US5197963 A, US5192267 A, US5181916 A, US5154709 A, US5085657 A, US5071418 A, US5055100 A, US4919129 A, US4850352 A, US4719914 A, US4060088 A, US3906955 A,

Forward Citations: WO9714364, WO9618348, WO17095983, WO17007506, WO16069123, WO16065336, WO15164676, WO15150769, WO15085108, WO14138366, WO14032163, WO13067747, WO11115751, WO08030343, WO08030343, WO06020798, WO05110260, WO05110260, WO05046498, WO05046498, WO05041800, WO03030714, WO03030714, WO0232332, WO02102453, WO02102453, WO0028908, USRE44834, USD761962, USD723687, USD723686, USD720070, USD709196, USD700324, USD700323, USD680220, USD679014, USD649249, USD598543, USD592746, USD578216, USD521641, USD495052, USD495051, USD494270, USD493888, USD493530, US9655674, US9603653, US9603652, US9585716, US9579145, US9554843, US9554841, US9549775, US9539053, US9510889, US9492225, US9486562, US9463067, US9427285, US9375271, US9375270, US9375254, US9375253, US9375252, US9364247, US9345535, US9326810, US9314301, US9265552, US9259260, US9247988, US9241763, US9216058, US9198720, US9198717, US9149331, US9149323, US9144453, US9120558, US9113940, US9113905, US9113903, US9113898, US9107672, US9101363, US9095347, US9060765, US9044219, US9028493, US9023043, US8968314, US8945127, US8945126, US8945125, US8945124, US8939973, US8932292, US8932286, US8899529, US8898888, US8882768, US8882767, US8882766, US8858554, US8858550, US8852228, US8845616, US8834462, US8795274, US8784417, US8764748, US8740901, US8734443, US8696667, US8690872, US8679114, US8668689, US8668688,

US8663219, US8663218, US8647341, US8641713, US8636761, US8636733, US8632536, US8623276, US8623017, US8597297, US8597296, US8597292, US8591509, US8591506, US8568444, US8551091, US8540711, US8535312, US8523898, US8518018, US8506565, US8496656, US8486107, US8469957, US8469956, US8460291, US8460290, US8460289, US8454602, US8454600, US8449540, US8444641, US8425504, US8414578, US8394096, US8394095, US8382754, US8374669, US8366709, US8361072, US8361071, US8348948, US8343090, US8333765, US8317787, US8303586, US8303582, US8298232, US8298228, US8286339, US8277447, US8267936, US8267935, US8257387, US8257352, US8251996, US8251995, US8241284, US8241283, US8241282, US8237599, US8236025, US8235993, US8235992, US8235987, US8231620, US8226644, US8226643, US8226642, US8221416, US8211105, US8211103, US8197633, US8197479, US8192433, US8162973, US8162940, US8162937, US8157795, US8147489, US8142473, US8128624, US8128622, US8123744, US8123743, US8100902, US8095241, US8070746, US8057470, US8034052, US8016827, US8016824, US7963965, US7959633, US7959632, US7955332, US7955330, US7955327, US7951150, US7951149, US7947041, US7935109, US7935052, US7931649, US7927330, US7922953, US7922718, US7909823, US7896878, US7887536, US7887535, US7879035, US7879033, US7877853, US7877852, US7857812, US7846161, US7846158, US7837685, US7833222, US7828799, US7828798, US7828794, US7819872, US7815638, US7811283, US7799028, US7789878, US7776037, US7776036, US7771425, US7766910, US7761188, US7753909, US7744615, US7731717, US7722607, US7708735, US7691102, US7686827, US7686804, US7655007, US7648503, US7641653, US7628791, US7628787, US7621909, US7611510, US7597693, US7594916, US7582244, US7582087, US7578818, US7578817, US7572255, US7553312, US7549990, US7540872, US7537594, US7517347, US7513898, US7510556, US7503917, US7500975, US7500974, US7491202, US7491201, US7491193, US7481810, US7458972, US7445621, US7442194, US7393354, US7323646, US7311707, US7311706, US7244257, US7241294, US7235072, US7235071, US7156844, US7156842, US7122035, US7122035, US7060064, US7060064, US7004939, US6986768, US6918902, US6911029, US6852112, US6755825, US6747218, US6702812, US6666865, US6616658, US6558383, US6524307, US6518538, US6458125, US6402748, US6391027, US6355034, US6193712, US6146353, US6142995, US6120498, US6102907, US6099525, US6063084, US6019599, US5846182, US5836944, US5709675, US5674219, US2015157390, US2015013999, US2014276763, US2014257260, US2014142568, US2014039481, US2013296846, US2013035680, US2012203223, US2012101497, US2011230878, US2011128085, US2010327111, US2010312402, US2010274242, US2010211069, US2010211068, US2010211067, US2010205802, US2010125172, US2010114096, US2010094283, US2010042142, US2009292282, US2009138012, US2009062791, US2009048594, US2009036765, US2008082100, US2008058801, US2008039834, US2008004616, US2007203485, US2007149970, US2007149968, US2007093868, US2007049924, US2007034211, US2007000501, US2006276783, US2006265149, US2006264928, US2006257355, US2006231374, US2006189977, US2006178671, US2006122595, US2006058778, US2006052771, US2006036239, US2005273098, US2005273063, US2005267553, US2005240172, US2005192643, US2005149017, US2005113824, US2005107786, US2005080413, US2004236323, US2004167517, US2004153055, US2004092927, US2004044342, US2003114804, US2003065324, US2002123722, JP2015077407, JP2009160440, JP2007536963, JP2007513695, GB2524742, GB2455037, GB2455037, GB2452392, GB2406793, GB2398742, EP3181084, EP3069737, EP3067003, EP2968711, EP2965704, EP2948084, EP2910214, EP2862533, EP2692306, EP2449992, EP2392278, EP2392278, EP2389888, EP2314242, EP2181661, EP1902682, EP1832243, EP1800612, EP1691716, EP1681025, EP1607060, EP1450714, EP1127551, DE10327237, DE102015101621, DE102015016070, DE102008039751, CN105431099, CN105407936, CN105363135, CN105120782, CN104546116, AU784494, AU759906, AU2012255070,

Abstract:
Source: US5431650A A electrosurgical unit (ESU) apparatus is disclosed in which an improved handpiece and smoke evacuation shroud apparatus and method provides efficient smoke collection without obstructing the surgeon's view of the surgical site through use of a smoke evacuation shroud design which controls the velocity and direction of the evacuating air flow in the vicinity of the surgical site by forming a vortex. This vortex creates a "funnel cloud" type action like that of a tornado or cyclone which contains the smoke immediately as it is generated by the cutting and coagulating action of the operating tip of the ESU surgery handpiece. The action of this vortex is a key advantage of the invention since generated smoke is immediately contained, and removed thereby avoiding obstructing the view of the surgeon.

0) WO14091488A1 – LOCKING SYSTEM AND KEY THEREFOR SYSTEME DE VER...

34) Family number: 53422563 (WO14091488A1) © PatBase

Title: LOCKING SYSTEM AND KEY THEREFOR

Priority: IL20120223616 20121213

Family:

Publication number	Publication date	Application number	Application date
IL223616 A0	20130203	IL20120223616	20121213
WO14091488 A1	20140619	WO2013IL51024	20131212

Probable Assignee: ASHER HAVIV

Assignee(s):(std)**:** ASHER HAVIV ; HAVIV ASHER ; HNTA HOLDINGS LTD ; RACHELSON 2007 LTD

Inventor(s):(std)**:** HAVIV ASHER

Inventor(s): ASHER HAVIV

Agent(s): VAPNIARSKY ANDREY

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): E05B E05B19/00 (Advanced/Invention); E05B (Subclass/Invention)

CPC: E05B19/0058 E05B17/0062 E05B17/042 E05B27/0021 E05B35/003

Classification Explorer

Cited documents: US2011072868 AA, US2009193862 AA, IL137053 A1,

Forward Citations: CN105370101,

Abstract:
A key and locking system are disclosed. The key includes a shaft having a keyway portion, with first and second oppositely facing surfaces. The keyway portion includes a plurality of recesses furnishing the first surface, at least one active element, disposed on the first surface and at least one auxiliary notch, on the second surface of the keyway portion, where auxiliary notch is adapted to accommodate an auxiliary locking pin. The diameter of the auxiliary notch is substantially larger than the diameter of the auxiliary pin; hence the mechanical strength of the shaft is purposefully weakened, rendering the shaft prone to break upon application of force thereto and conferring to the key an enhanced resistance to forceful burglary techniques.

0) US2004173356A – SUBSEA RISER DISCONNECT AND METHOD

35) Family number: 15774419 (US2004173356A) © PatBase

Title: SUBSEA RISER DISCONNECT AND METHOD

Priority: EP20010933077 20010507 US20000569609 20000510 WO2001US14566 20010507 US20060367820 20060303 US20030382762 20030306

Family:

Publication number	Publication date	Application number	Application date
AT389779 E	20080415	AT20010933077T	20010507
AU2001259532 AA	20011120	AU20010259532	20010507
AU2001259532 BB	20050804	AU20010259532	20010507
AU200159532 A5	20011120	AU20010059532	20010507
BRPI0110939 A	20040427	BR2001PI10939	20010507
BRPI0110939 B1	20121030	BR2001PI10939	20010507
CA2408807 AA	20021112	CA20012408807	20010507
DE60133272 D1	20080430	DE20016033272	20010507
EP1282757 A1	20030212	EP20010933077	20010507
EP1282757 A4	20050223	EP20010933077	20010507
EP1282757 B1	20080319	EP20010933077	20010507
EP1676975 A2	20060705	EP20060008540	20010507
US2004173356 AA	20040909	US20030382762	20030306
US2006157252 AA	20060720	US20060367820	20060303
US6557637 BA	20030506	US20000569609	20000510
US7040406 BB	20060509	US20030382762	20030306
US7591315 BB	20090922	US20060367820	20060303
WO0186110 A1	20011115	WO2001US14566	20010507

Probable Assignee: TIW CORP

Assignee(s):(std)**:** BRADDICK BRITT O ; DORE EDDIE E ; TIW CORP

Inventor(s):(std)**:** BRADDICK BRITT ; BRADDICK BRITT O ; DORE EDDIE ; DORE EDDIE E

Inventor(s): EDDIE E DORE ; BRITT O BRADDICK

Agent(s): SPRUSON AND FERGUSON; FINLAYSON AND SINGLEHURST; LOCKEY ROBERT ALEXANDER ET AL; LOREN G HELMREICH; BROWNING BUSHMAN 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 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): E21B15/04 E21B17/01 E21B17/08 E21B21/00 E21B21/10 E21B29/12 E21B34/04 E21B43/01 E21B49/08 E21B7/12 (Advanced/Invention); E21B34/00 (Advanced/Non–invention)

International class (IPC 1–7): E21B015/04 E21B043/01 E21B15/04 E21B17/01 E21B17/08 E21B21/00 E21B21/10 E21B34/04 E21B43/01 E21B49/08 E21B49/09 E21B7/12

CPC: E21B33/038 E21B17/01 E21B17/085 E21B21/001 E21B21/106 E21B34/04 E21B2034/002 E21B17/021 E21B21/10 E21B34/06

European class: E21B17/01 E21B17/02B E21B17/08A E21B21/00A E21B21/10 E21B21/10S E21B33/038 E21B34/04 E21B34/06 P21B34/00B

US class: 166/338 166/345 166/350 166/358 166/359 166/367 166/367S

Classification Explorer

Cited documents: US6557637 BA, US5894890 A, US5785125 A, US5769167 A, US5765756 A, US5758723 A, US5685373 A, US5657823 A, US5044442 A, US4732214 A, US4615544 A, US4593937 A, US4436157 A, US4411455 A, US4307902 A, US4234047 A, US3974875

A, US3488031 A, US3241864 A,

Forward Citations: WO14046859, WO14035375, WO13022541, WO11161415, WO10008956, WO10008956, WO08113979, WO06033580, WO05059297, WO05059297, USD552628, USD551682, US9657536, US9631440, US9587446, US9540892, US9506324, US9482072, US9359832, US9291017, US9284795, US9260931, US9212525, US9157285, US9151138, US9121250, US9091127, US9051790, US9022125, US8950501, US8919447, US8794312, US8789605, US8783361, US8783360, US8757274, US8733448, US8720584, US8689885, US8684088, US8555981, US8555976, US8550169, US8464788, US8443895, US8393397, US8210264, US8181704, US7992638, US7849926, US7597151, US7591315, US7062960, US7040406, US7021402, US6962215, US2013133895, US2013092369, US2012205117, US2012132433, US2012132430, US2012125635, US2012067589, US2011284237, US2011268509, US2011232917, US2011232916, US2011226482, US2011198096, US2011127041, US2011042095, US2010282474, US2010175870, US2008105435, US2007012457, US2006157252, US2005126790, US2005034854, US2004173356, US2003000693, RU2624469, GB2473967, GB2473967, GB2437186, GB2437186, FR2952399, EP2079896, EP1947290, DE102011076210, CN104074474, CN104074474, CN102591217, CN102418481, CN102066689, AU2004201728,

Abstract:
Source: US2004173356A A subsea riser disconnect assembly 10 may be actuated from a drilling rig DR by axial movement of an upper riser 35 relative to a lower riser 28, for disconnecting the upper riser 35 from the lower riser 28. A subsea riser valve assembly 20 may be actuated from the drilling rig DR by axial movement of the upper riser 35 relative to the lower riser 28, for sealing an interior portion of the lower riser 28 and well bore WB below the subsea riser valve assembly 20. A drill pipe disconnect 30 may be actuated from a drilling rig DR, either onshore or offshore, for disconnecting an upper portion of drill pipe 236 from a lower portion of drill pipe 240. The drill pipe disconnect 30 may be actuatable by hydraulic and/or mechanical forces applied to the drill pipe disconnect 30 from the drilling rig DR. The drill pipe disconnect 30 may be compatible for use with or without the subsea riser disconnect assembly 10 and/or the subsea riser valve assembly 20. The component assemblies of this invention may improve the efficiency and lower the cost of recovering hydrocarbons by reducing drilling costs and time requirements. Also, the ability to relatively quickly disconnect a floating rig from a well may enhance the safety of persons and equipment facing hostile weather conditions or other emergency situations.

0) US5443435A – ADJUSTABLE LENGTH, ADJUSTABLE WEIGHT, ADJUSTABL...

36) Family number: 11055452 (US5443435A) © PatBase

Title: Adjustable length, adjustable weight, adjustable shock absorption, multi–purpose exercise/sport poles

Priority: US19920846053 19920305 US19920941304 19920904 US19940341013 19941117 US19960690575 19960731 US19940301069 19940906 US19940200916 19940222

Family:

Publication number	Publication date	Application number	Application date
US5443435 A	19950822	US19940200916	19940222
US5490825 A	19960213	US19940301069	19940906
US5586957 A	19961224	US19920941304	19920904
US5628713 A	19970513	US19940341013	19941117
US5788608 A	19980804	US19960690575	19960731

Probable Assignee: WILKINSON WILLIAM T

Assignee(s):(std)**:** WILKINSON WILLIAM T

Assignee(s): WILKINSON WILLIAN T ; WILLOW GROVE BANK

Inventor(s):(std)**:** WILKINSON WILLIAM T ; WILKINSON WILLIAN T

International class (IPC 8–9)**:** A45B3/00 A63B15/00 A63B21/072 A63B71/00 (Advanced/Invention)

International class (IPC 1–7)**:** A63B21/06 A63B23/12 A63B71/00

CPC: A63B21/0724 A63B71/00 A63B21/072 A45B3/00 A63B15/00 A63B69/0028 A63B71/0622 A63B2208/02

European class: A45B3/00 A63B15/00 A63B21/072 A63B21/072B K63B208/02 K63B69/00J K63B71/06D2

US class: 482/109 482/3 482/50 482/51 482/74 482/93

Classification Explorer

Cited documents: US83228 A, US605474 A, US5308299 A, US5267929 A, US5246413 A, US5207624 A, US5149092 A, US5121925 A, US5031906 A, US4958386 A, US4756524 A, US4733861 A, US4688788 A, US4665373 A, US4664373 A, US4571680 A, US4537394 A, US4510485 A, US4351348 A, US4316610 A, US4218057 A, US4062371 A, US3371930 A, US2275330 A, FR2656814 A1, DE4318482 A1, DE3247161 A1, DE2407464 A1, CH680771,

Forward Citations: WO17066551, WO16200286, WO16190768, WO15100106, WO09142711, WO05025688, WO03090661, WO03090661, USD736863, USD655356, USD583883, USD562913, USD518122, USD460515, USD444191, US9707426, US9663191, US9586073, US9457216, US9375619, US9364057, US9252573, US9199119, US9114279, US9101818, US9044072, US8985802, US8900067, US8500609, US8491408, US8453661, US8418705, US8308209, US8231510, US8177692, US8118716, US8075461, US7997952, US7967021, US7959539, US7918772, US7857735, US7854693, US7850581, US7789815, US7771330, US7726900, US7708671, US7678026, US7641566, US7557286, US7549950, US7543426, US7448987, US7381165, US7357762, US7353780, US7175575, US6964634, US6898891, US6898824, US6887187, US6860842, US6745786, US6544099, US6432028, US6423962, US6402670, US6366869, US6290387, US6120073, US5893817, US5778914, US5691510, US2017127774, US2017001098, US2016244129, US2015297939, US2015282577, US2015141872, US2015141204, US2014349822, US2014287884, US2014287852, US2014187360, US2014060341, US2014045660, US2014014148, US2014009915, US2013331240, US2013327367, US2013264809, US2012322632, US2012187353, US2012142506, US2012083391, US2012029696, US2012015785, US2011251026, US2011177922, US2011175338, US2011081984, US2010261587, US2010255963, US2010255962, US2010255961, US2010254751, US2010179029, US2010152002, US2010075815, US2010051077, US2009229642, US2009181788, US2009054209, US2009038663, US2008202317, US2008167167, US2008121260, US2008072940, US2008032873, US2007293372, US2007270289, US2007250313, US2007249472, US2007238590, US2007184938, US2007137588, US2007127983, US2007123398, US2007042875, US2007042874, US2006281608,

US2005272572, US2005211284, US2005176558, US2005143229, US2005143186, US2005137063, US2004250845, US2004185990, US2004033867, US2004009826, US2003073547, US2003054925, US2002082102, KR100789177, JP6007807, JP2014149014, GB2490168, GB2415898, GB2415119, GB2415119, GB2318510, EP1943919, EP1736072, EP1550488, CN104821063, CN103156348,

Abstract:
Source: US5443435A An exercise device having at least one shaft, and a weight attached to the shaft. The weight may be attached in a variety of ways, and the amount of weight may be varied, depending on the users needs.

0) US2001025658A – MULTIPORT GATE VALVE ASSEMBLY

37) Family number: 30959209 (US2001025658A) © PatBase

Title: MULTIPORT GATE VALVE ASSEMBLY

Priority:

EP20010920763 20010322 US20000192124P 20000324 US20000192124P 20000324
US20010815394 20010322 US20010815351 20010322 US20010815391 20010322
US20000200239P 20000428 US20010268329P 20010212 US20010268329P 20010212
US20030637175 20030808 US20020213541 20020805 US20010815436 20010322
US20010815431 20010322 US20010815430 20010322 US20010815395 20010322
US20020155099 20020524 US20030444361 20030523 US20030683936 20031010
US20030391846 20030318 US20020213749 20020805 US20010815437 20010322
WO2001US09597 20010322 WO2001US09596 20010322 WO2001US09608 20010322
WO2001US09359 20010322 US20030687313 20031015 WO2001US09606 20010322
WO2001US09607 20010322 WO2001US09350 20010322 WO2001US09357 20010322
US20040817391 20040402 US20060506629 20060818

Family:

Publication number	Publication date	Application number	Application date
AU2001245985 AA	20011008	AU20010245985	20010322
AU2001245986 AA	20011008	AU20010245986	20010322
AU2001247784 AA	20011008	AU20010247784	20010322
AU2001247784 AB	20040701	AU20010247784	20010322
AU2001247784 BB	20050224	AU20010247784	20010322
AU2001247785 AA	20011008	AU20010247785	20010322
AU2001247785 AB	20030227	AU20010247785	20010322
AU2001247785 BB	20050303	AU20010247785	20010322
AU2001247786 AA	20011008	AU20010247786	20010322
AU2001249385 AA	20011008	AU20010249385	20010322
AU2001249385 AB	20040701	AU20010249385	20010322
AU2001249385 BB	20050526	AU20010249385	20010322
AU2001249391 AA	20011008	AU20010249391	20010322
AU2001249391 AB	20040701	AU20010249391	20010322
AU2001249391 BB	20050303	AU20010249391	20010322
AU2001249392 AA	20011008	AU20010249392	20010322
AU200145985 A5	20011008	AU20010045985	20010322
AU200145986 A5	20011008	AU20010045986	20010322
AU200147784 A5	20011008	AU20010047784D	20010322
AU200147785 A5	20011008	AU20010047785	20010322
AU200147786 A5	20011008	AU20010047786	20010322
AU200149385 A5	20011008	AU20010049385	20010322
AU200149391 A5	20011008	AU20010049391	20010322
AU200149392 A5	20011008	AU20010049392	20010322
BRPI0109579 A	20030128	BR2001PI09579	20010322
BRPI0109579 B1	20091201	BR2001PI09579	20010322
BRPI0109580 A	20030128	BR2001PI09580	20010322
BRPI0109756 A	20030204	BR2001PI09756	20010322
BRPI0109756 B1	20101019	BR2001PI09756	20010322
BRPI0109756 B8	20151222	BR2001PI09756	20010322
BRPI0109761 A	20030204	BR2001PI09761	20010322
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Probable Assignee: FMC TECHNOLOGIES

Assignee(s):(std)**:** FMC CORP ; FMC TECHNOLOGIES INC ; FMC TECHNOLOGIES ; FMC TECHNOLOGES INC ; WILSON MICHAEL E ; TIERNEY MICHAEL R

Assignee(s): PATRICK MAXWELL JAMIE ; ROGALA STANLEY J ; WILSON MICHAEL E JR ; BARLETT CHRISTOPHER D ; BARTLETT CHRISTOPHER D ; CUNNINGHAM CHRISTOPHER E ; FMC A DELAWARE CORP ; HERGARDEN THOMAS L ; GOGGANS TIMOTHY R ; JOAN SYLVESTER A ; HERNANDEZ PHILIP S ; GATHERAR NICHOLAS ; KENT RICHARD D ; GLIDDEN GREGORY L ; HARROLD DAVID

Inventor(s):(std)**:** BARTLETT CHRISTOPHER D ; BARTLETT CHRISTOPHER DOUGLAS ; BARTLETT D ; CHRISTOPHER D BARTLETT ; CHRISTOPHER E CUNNINGHAM ; CUNNINGHAM CHISTOPHER E ; CUNNINGHAM CHRISTOPHER E ; CUNNINGHAM E ; DAVID HARROLD ; GATHERAR NICHOLAS ; GLIDDEN GREGORY L ; GLIDDEN L ; GOGGANS TIMOTHY R ; NICHOLAS GATHERAR ; PATRICK MAXWELL JAMIE ; PHILIP S HERNANDEZ ; RICHARD D KENT ; ROGALA STANLEY J ; THOMAS L HERGARDEN ; TIERNEY MICHAEL R ; TIERNEY MICHAEL ROBERT ; TIERNEY R ; WILSON E ; WILSON JR MICHAEL E ; WILSON MICHAEL E ; WILSON MICHAEL E JR ;

HARROLD DAVID ; HERGARDEN L ; HERGARDEN THOMAS L ; HERNANDEZ PHILIP S ; HERNANDEZ S ; JOAN SYLVESTER A ; KENT D ; BARLETT CHRISTOPHER D ; KENT RICHARD D ; MICHAEL E WILSON

Inventor(s): MICHAEL R TIERNEY ; BARTLETT CHRISTOPHER ; KENT RICHARD ; TIMOTHY R GOGGANS ; SYLVESTER A JOAN ; STANLEY J ROGALA ; JAMIE PATRICK MAXWELL ; MICHAEL E WILSON JR ; GREGORY L GLIDDEN ; CUNNINGHAM CHRISTOPHER

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; HERBERT SMITH FREEHILLS; FPA PATENT ATTORNEYS PTY LTD; FREEHILLS PATENT ATTORNEYS; SIM AND MCBURNEY; HENRY C QUERY JR; HENRY C; QUERY JR HENRY 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 UZ VN YU ZA ZW

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Abstract:
Source: US2001025658A The invention is directed to a gate valve assembly which comprises an elongated body

having a longitudinal bore extending therethrough; a plurality of gates slidably disposed in the longitudinal bore across respective flow passages which each extend laterally through the body between corresponding inlet and outlet ports; each gate being movable between an open position wherein an opening in the gate is aligned with its respective flow passage and a closed position wherein the opening is offset from its respective flow passage; and an actuator for moving the gates simultaneously between a first position, wherein at least one of the gates is in its open position, and a second position, wherein the at least one gate is in its closed position.

0) US2005135838A – REMOVABLE TONER CARTRIDGE UNIVERSAL ADAPTER

38) Family number: 32021031 (US2005135838A) © PatBase

Title: REMOVABLE TONER CARTRIDGE UNIVERSAL ADAPTER

Priority:

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Family:

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US7221886 BA	20070522	US20060382593	20060510	

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WO05067440 A3	20060119	WO2004US27687	20040826	
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WO05098550 A1	20051020	WO2005US11177	20050401	

Probable Assignee: ADVANCED CARTRIDGE TECHNOLOGIES LLC

Assignee(s):(std)**:** CARTRIDGE CORP OF AMERICA IN ; CARTRIDGE CORP OF AMERICA INC ; CARTRIDGE OF AMERI CORP ; MILLER STEVEN ; SCHNELL HERMAN ; SOFTWARE CORP OF AMERICA INC

Assignee(s): CARTRIDGE OF AMERICA IN CORP ; INNOVATIVE CARTRIDGE TECHNOLOGIES ; INNOVATIVE CARTRIDGE TECHNOLOGIES INC ; STATIC CONTROL COMPONENTS INC ; IMAGING TECHNOLOGIES HOLDING LLC ; GLOBAL INNOVATIONS LLC ; WHITNEY NATIONAL BANK ; UNIVERSAL IMAGING HOLDINGS LLC ; UNIVERSAL IMAGING PROPERTIES LLC ; CARTRIDGE OF AMERICA INC CORP ; STEVEN MILLER ; SOFTWARE OF AMERICA INC CORP ; CARTRIDGE CORPORATIONS OF AMERICA INC ; ADVANCED CARTRIDGE TECHNOLOGIES LLC ; AMERICAN IMAGING CARTRIDGE LLC

Inventor(s):(std)**:** CARTRIDGE CORPORATION OF AMERI ; MILLER STEVEN ; SCHNELL HERMAN ; CARTRIDGE OF AMERI CORP

Inventor(s): CARTRIDGE OF AMERICA INC CORP ; STEVEN MILLER ; CARTRIDGE CORPORATION OF AMERICA INC

Agent(s): FINLAYSON AND SINGLEHURST; MEISSNER BOLTE AND PARTNER; MEISSNER BOLTE AND PARTNER GBR; SMITH AND HOPEN PA; SMITH HOPEN PA; STEVEN MILLER; JESSE DELCAMP; THOMAS E; TONER THOMAS E; DELCAMP JESSE; JESSE; JESSE E

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 B41J2/41 B41J29/393 F16H1/20 F16H55/02 F16H57/00 G01D15/28 G03G15/00 G03G15/04 G03G15/06 G03G15/08 G03G15/10 G03G21/00 G03G21/12 G03G21/16 G03G21/18 G03G9/00 G03G9/08 G06F3/12 (Advanced/Invention); B41J2/41 B41J29/393 G01D15/00 G03G15/00 G03G15/04 G03G15/08 G03G15/10 G03G21/00 G03G21/18 G03G9/08 (Core/Invention)

International class (IPC 1–7): G03G15/00 G03G15/08 G03G21/18

CPC: G03G15/0863 G03G21/1892 G03G15/0855 G03G15/0865 G03G15/0868 G03G15/0877 G03G15/0856 G03G15/0862 G03G15/0889 G03G15/0875 G03G2215/0695 G03G2215/0634 G03G2215/0802 G03G21/1857 G03G2221/1624 G03G15/0898 G03G15/0817 G03G2221/166 G03G15/0896 G03G21/1867 G03G21/181 G03G21/1821 G03G2215/085 G03G2215/0888 G03G21/12 G03G15/0894 G03G21/1652 G03G21/1878 G03G21/1896 G03G2215/0697 G03G2215/0852 G03G2221/1815 G03G2221/1823 Y10T29/49826 Y10T74/19642

European class: G03G15/08F6 G03G15/08H2 G03G15/08H3 G03G15/08H3B G03G15/08H3D G03G15/08R G03G15/08S G03G15/08S1 G03G15/50F G03G21/12 G03G21/16C2 G03G21/18C2 G03G21/18C4C G03G21/18H2 G03G21/18H3 G03G21/18L1 G03G21/18L2 S03G215/06B S03G215/06C8 S03G215/06C8E S03G215/08A S03G215/08A5 S03G215/08A5A S03G215/08D S03G221/16C2 S03G221/16K3 S03G221/18C S03G221/18E

US class: 29/428 29/428S 347/152 347/19 358/1.15 358/1.150P 399/103 399/105 399/107 399/107P 399/109 399/109P 399/110 399/110P 399/111 399/111P 399/113 399/113P 399/114 399/117 399/117P 399/119 399/12 399/120 399/120P 399/12P 399/13 399/167 399/222 399/24 399/25 399/254 399/254P 399/258 399/258P 399/260 399/262 399/262P 399/262S 399/263 399/27 399/360 399/360P 399/61 399/90 399/90P 74/412.00RP 74/412R

Classification Explorer

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Forward Citations: WO17083223, WO17002355, WO15039432, WO15030812, WO15016875, WO14110384, WO14107369, WO14004189, WO14003828, WO13184102, WO13120441, WO12024355, WO12024355, WO11127820, WO11110044, WO11091025, WO11053426, WO11016895, WO10068612, WO09110693, WO09097258, WO06020217, USD627389, USD597129, USD590012, USD590011, USD580968, USD578155, USD560713, US9703258, US9690230, US9658590, US9645546, US9619663, US9599945, US9581938, US9575460, US9563169, US9557684, US9551974, US9542222, US9535373, US9529319, US9519243, US9494914, US9494913, US9465351, US9429899, US9417603, US9395684, US9389582, US9360835, US9360834, US9357091, US9342047, US9335656, US9329525, US9298130, US9291989, US9280124, US9280084, US9250590, US9207632, US9203980, US9195207, US9170559, US9152080, US9141816, US9128444, US9128443, US9128414, US9104134, US9098216, US9098015, US9079410, US9069327, US9069286, US9063506,

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Abstract:
Source: US2005135838A A universal adapter for a toner cartridge enables a single toner cartridge to be used with printers made by different manufacturers and differing printer models made by a common manufacturer. The toner cartridge includes a waste bin having a leading end that is sculpted to mate with the cartridge−receiving cavities of a large number of printers. Additional improvements include an improved planar having a common thickness along its extent, the elimination of a pivotal motion between the waste bin and the hopper, an enhanced interconnection between the waste bin and the hopper, improved ergonomics along a trailing edge of the waste bin to facilitate its handling, a structure that prevents mounting of a circuit board over a host circuit board, reduced friction media guide ribs, an improved circuit board mounting pad, and a microswitch actuating tab that functions even in a printer with worn hinges and latches.

0) US4215557A – LOCK WITH KEY SLOT MANIPULATION BARRIER

39) Family number: 1366753 (US4215557A) © PatBase

Title: LOCK WITH KEY SLOT MANIPULATION BARRIER

Priority: CA19790326246 19790424 US19780946818 19780928

Family:

Publication number	Publication date	Application number	Application date
AU197947721 A1	19800403	AU19790047721	19790604
AU519119 B2	19811105	AU19790047721	19790604
CA1092843 A1	19810106	CA19790326246	19790424
JP1193613 C3	19840312	JP19790066730	19790529
JP55045990 A2	19800331	JP19790066730	19790529
JP58026472 B4	19830602	JP19790066730	19790529
PH16623 A	19831128	PH19790022737	19790703
US4215557 A	19800805	US19780946818	19780928

Probable Assignee: EMHART IND

Assignee(s):(std)**:** EMHART IND

Assignee(s): EMHART IND INC ; EMHART INDUSTRIES INC ; GERLACH JOHN R ; KWIKSET CORP ; EMHART INC ; EMHART INC A DELAWARE CORP

Inventor(s):(std)**:** JIYON AARU GAARAKU ; GERLACH JOHN R ; GERLACH J R

Inventor(s): J R GERLACH ; JOHN R GERLACH ; JON AARU GAARAKU ; JR GERLACH

Agent(s): FETHERSTONHAUGH AND CO

International class (IPC 8–9): E05B15/00 E05B15/16 E05B27/04 (Advanced/Invention); E05B15/00 E05B27/00 (Core/Invention)

International class (IPC 1–7): E05B15/00 E05B17/14 E05B27/00 E05B27/02 E05B27/04 E05B63/00

CPC: Y10T70/7684 Y10T70/7921 E05B15/1614

European class: E05B15/16B

US class: 70/375 70/417

Classification Explorer

Cited documents: US3410123 A, US3319443 A, US1422519 A, NL7602479 A,

Forward Citations: USD518353, US2008087060,

Abstract:
Source: US4215557A A rotatable lock plug having a key slot formed entirely axially therethrough has a barrier secured in the lock plug adjacent the key slot inner end between an inner end of a key received in the key slot and a torque blade operably connected to the lock plug inner end for providing a barrier denying surreptitious access through the key slot. The barrier has edge portions received in appropriate lock plug recesses and preferably a flat portion transversely spanning the key slot. In one form, the barrier may be an axially slotted pin receiving the key end within the slot, and in other forms may be edge secured, flat plates.

0) US5657066A – THERMAL DEMAND PRINTER

40) Family number: 29378723 (US5657066A) © PatBase

Title: THERMAL DEMAND PRINTER

Priority:

CA19932141869 19930930 CA19932259798 19930930 CA19932259798 19930930
CA19932259801 19930930 CA19932259825 19930930 JP19940509317 19930930
EP19930923748 19930930 EP19970202416 19930930 CA19932259821 19930930
CA19932452166 19930930 JP19940509317T 19930930 JP19990342328 19930930
US19970789950 19970127 US19990283459 19990401 US19970790673 19970123
US19990288131 19990407 US19970789166 19970124 US19970791448 19970127
US19970789123 19970127 WO1993US09327 19930930 US19990282494 19990331
US19870789166 19870124 US19920957262 19921002

Family:

Publication number	Publication date	Application number	Application date
CA2141869 AA	19950206	CA19932141869	19930930
CA2141869 C	19990601	CA19932141869	19930930
CA2259798 AA	19940414	CA19932259798	19930930
CA2259798 C	20031104	CA19932259798	19930930
CA2259801 AA	19940414	CA19932259801	19930930
CA2259821 AA	19940414	CA19932259821	19930930
CA2259825 AA	19940414	CA19932259825	19930930
CA2259825 C	20040330	CA19932259825	19930930
CA2452166 AA	19940414	CA19932452166	19930930
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DE69331557 D1	20020321	DE19936031557	19930930
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DE69331559 D1	20020321	DE19936031559	19930930
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EP1000764 A3	20000823	EP20000200033	19930930
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WO9407702 A1	19940414	WO1993US09327	19930930	

Probable Assignee: ZIH CORP

Assignee(s):(std)**:** ADAMS VINCENT C ; DONATO DANIEL F ; ENSINGER JAMES W ; HAMMAN WILLIAM J ; KAUFMAN JEFFREY R ; MONNIER DAN E ; NAEGELE KENNETH V ; PLATT MICHAEL K ; POOLE DAVID L ; WEST DAVID A ; ZEBRA TECHNOLOGIES CORP ; ZIH CORP ; ZEBRA TECHNOL CORP ; ZUBRISKI DAVID S ; ZWIER THOMAS P

Assignee(s): ZIH CORP WILMINGTON ; ZEBRA TECHNOLOGIES CORP VERNON HILLS ILL US ; MORGAN STANLEY SENIOR FUNDING INC COLLATERAL AGENT AS

Inventor(s):(std)**:** ADAMS VINCENT C ; DONATO DANIEL F ; ENSINGER JAMES W ; HAMMAN WILLIAM J ; KAUFMAN JEFFREY R ; NAEGELE KENNETH V ; PLATT MICHAEL K ; POOLE DAVID L ; WEST DAVID A ; ZUBRISKI DAVID S ; ZUBRISKI DAVIS S ; MONNIER DAN E ; ZWIER THOMAS P ; ZWIR THOMAS P

Inventor(s): MONNIER E ; ZUBRISKI S ; KAUFMAN R

Agent(s): SMART AND BIGGAR

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): B41J15/16 B41J17/02 B41J17/24 B41J17/32 B41J17/42 B41J2/32 B41J2/325 B41J2/35 B41J2/355 B41J2/36 B41J2/365 B41J25/304 B41J25/316 B41J29/00 B41J29/02 B41J29/13 B41J29/38 B41J29/393 B41J29/46 B41J3/36 B41J3/407 B41J33/14 B41J33/16 B41J33/22 B41J33/34 B41J35/08 B41J5/30 B65C11/02 B65H18/00 B65H19/12 B65H75/22 G07B1/00 (Advanced/Invention); B41J29/393 B41J35/04 (Core/Invention)

International class (IPC 1–7): B41J11/42 B41J11/46 B41J15/16 B41J17/02 B41J17/24 B41J17/32 B41J17/42 B41J2/32 B41J2/325 B41J2/35 B41J2/355 B41J2/36 B41J2/365 B41J2/38 B41J25/304 B41J25/308 B41J25/312 B41J25/316 B41J25/34 B41J29/00 B41J29/02 B41J29/13 B41J29/38 B41J29/46 B41J3/36 B41J3/407 B41J33/14 B41J33/16 B41J33/22 B41J33/34 B41J33/52 B41J5/30 B65H18/00 B65H19/12 B65H75/22 F16D7/02 G07B1/00

CPC: B41J29/393 B41J35/08 B41J3/407 Y10T16/525 Y10T16/5257 B41J2/325 B41J2/355 B41J2/365 B41J17/02 B41J17/24 B41J17/42 B41J25/304 B41J25/316 B41J29/02 B41J29/38 B65C11/0289 B65C2210/0027 B65C2210/0029

European class: B41J17/02 B41J17/24 B41J17/42 B41J2/325 B41J2/355 B41J2/365 B41J25/304 B41J25/316 B41J29/02 B41J29/38 B41J29/393 B41J3/407 B41J35/08 B65C11/02C L65C210/00B8B L65C210/00B8B2

US class: 16/225 16/227 242/415.1 242/571 242/571.4 242/571.5 242/573.9 347/171 347/186 347/188 347/194 347/198 347/217 347/218 347/222 400/225 400/234 400/236 400/236.2

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Classification Explorer

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Forward Citations: WO16104562, WO16035291, WO15049811, WO14148061, WO13177931, WO13022718, WO12178025, WO12178025, WO05096724, WO03029005, USRE44220, USD552165, USD536730, USD525283, USD501502, US9701137, US9676216, US9545802, US9539833, US9481186, US9454335, US9296214, US9219836, US9193552, US9079435, US9079423, US9061527, US9024988, US8882374, US8842143, US8842142, US8829481, US8810617, US8783981, US8736650, US8730287, US8720242, US8687032, US8667276, US8646770, US8434953, US8425132, US8305198, US8301886, US8184138, US8139095, US8099187, US8063924, US8035672, US8022973, US8016504, US7963630, US7936252, US7934881, US7878505, US7857414, US7830560, US7805808, US7793353, US7699550, US7664257, US7620815, US7559710, US7542060, US7537404, US7502042, US7490055, US7452145, US7399131, US7344325, US7290146, US7256805, US7237485, US7182259, US7156308, US7154519, US7137000, US7128291, US7128236, US7128236, US7112001, US7018117, US6991130, US6969134, US6942403, US6857714, US6764234, US6609041, US6604803, US6588624, US6557961, US6226023, US6201255, US6179030, US6095704, US6068419, US6053648, US5908251, US2013272768, US2013064592, US2012045266, US2011169615, US2011074553, US2011041580, US2010284531, US2010247222, US2010123752, US2009262177, US2009097194, US2008180042, US2008172947, US2008158328, US2008145085, US2008049091, US2007257981, US2007248395, US2007147938, US2007110491, US2007086823, US2007019062, US2007013941, US2006279779, US2006216097, US2006210754, US2006191022, US2006180737, US2006177631, US2006176358, US2006118571, US2006071420, US2006007296, US2005281607, US2005271449, US2005271439, US2005210610, US2005131733, US2005121528, US2005082376, US2005025553, US2005019078, US2005002720, US2004114981, US2004109715, US2004050854, US2004050497, US2003227528, US2003063001, US2003062131, US2002141804, JP2015074096, JP2015074095, EP2739480, EP2723572, EP2723572, EP2363294, EP2133208, EP2110255, EP2014475, EP1444099, EP1204535, DE10306274, DE10306274, CN105073433, CN103009827, CN103009827, CN102729659, CN102336068,

Abstract:
Source: US5657066A A thermal demand printer for printing on media is a novel system which includes a case structure including a hinged cover panel, easily removable guide structures and media hanger, and a single central support wall to which the various components are attached. The printer includes a power supply circuit for receiving power from an external source and conditioning it for operation of the printer. An input device is provided for receiving command signals related to the operation of the printer. A control circuit for processing the command signals and generating corresponding control signals for controlling the operation of the printer and a printhead assembly for processing the control signals and generating corresponding control signals for controlling the operation of the printer are mounted in the case structure and coupled to the input device and the power supply circuit. The printhead assembly includes a printhead support structure which controls the printhead. A ribbon take−up spindle, method of operating the take−up spindle using a PMDC motor, and a spring wrap clutch device help to control the tension in the transfer ribbon used in the printer. The printer also includes a medial sensor and a method of sensing media by way of detecting the opacity of the media passing through the sensor. The printer includes a method of printhead control using double data loading and a method of accelerating and decelerating media relative to the printhead using pulse width modulation.

0) US2001004148A – PORTABLE CART

41) Family number: 28116123 (US2001004148A) © PatBase

Title: Portable cart

Priority:

AU20010072110	20010914	CA20012352979	20010713	US20000233138P	20000918
US19990226838	19990107	CA20042483954	20041004	CA20012357300	20010913
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US20030686948	20031015	US20000745116	20001221	US20060545343	20061010
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US20090387175	20090428	US20100925227	20101015		

Family:

Publication number	Publication date	Application number	Application date
AT414645 E	20081215	AT20000903214T	20000107
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WO0040447 A2	20000713	WO2000US00570	20000107	
WO0040447 A3	20020829	WO2000US00570	20000107	

Probable Assignee: VALIANT ROCK LLC

Assignee(s):(std)**:** CHARLES DARLING III ; CHARLES W DARLING II ; CHARLES W DARLING III ; DARLING CHARLES W ; DARLING CHARLES W II ; DARLING CHARLES W III ; DARLING II CHARLES W ; DARLING III CHARLES ; DARLING III CHARLES W ; DARLING III CHARLES WESLEY ; NORTH COAST OUTFITTERS LTD ; VALIANT ROCK LLC

Inventor(s):(std)**:** CHARLES W DARLING II ; DARLING CHARLES W ; DARLING CHARLES W II ; DARLING III CHARLES WESLEY ; III CHARLES W DARLING ; DARLING III CHARLES W ; DARLING CHARLES W III ; CHARLES W DARLING III

Inventor(s): DARLING CHARLES WIII ; DARLING CHARLES

Agent(s): PATENT ATTORNEY SERVICES; MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP; MCFADDEN FINCHAM INC; SKONE JAMES ROBERT EDMUND; ALFRED M WALKER; ALFRED M; WALKER ALFRED M

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 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): A61G1/00 A61G1/013 A61G1/02 A61G13/00 B60P3/10 B62B1/00 B62B1/12 B62B1/14 B62B13/18 B62B3/02 B62B5/00 B62D63/06 F16L3/08 F16L3/12 (Advanced/Invention); A61G1/00 A61G13/00 B62B1/00 B62B13/00 B62B3/02 B62B5/00 B62D63/00 F16L3/08 F16L3/12 (Core/Invention); A61G B62B (Subclass/Invention)

International class (IPC 1–7): A45C13/38 A45F3/15 A61G1/00 A61G1/013 A61G1/02 A61G13/00 B60P3/10 B62B1/00 B62B1/12 B62B1/14 B62B1/20 B62B3/02 B62B3/04 B62B5/00 B62D63/06 B62K13/00

CPC: B62B5/0083 A61G1/0212 A61G1/0225 A61G1/0231 A61G1/0287 B62D63/061 B63C13/00 A61G1/0293 A61G1/013 A61G13/105 A61G2210/30 A61G2220/10 B62B1/002 B62B1/008 B62B1/12 B62B3/02 B62B5/0023 B62B5/0079 B62B13/18 B62B2202/403 B62B2202/42 B62B2205/006 B62B2205/04 B62B2205/10 B62B2206/02 B62B2501/065 B62D63/064 A61G1/06 A61G7/0005 A61G2203/78 Y10T24/44504 Y10T24/44598 Y10T24/44966 Y10T24/44974 A61G1/02

European class: A61G1/013 A61G1/02 A61G1/02P A61G1/06 A61G1/06B A61G7/00B B62B1/00C B62B1/12 B62B13/18 B62B3/02 B62B5/00H B62B5/00S B62D63/06B B62D63/06C2 B63C13/00 K61G1/02P K61G1/06 K61G1/06B K61G13/10P K61G210/30 K61G220/10 L62B1/00P L62B202/403 L62B202/42 L62B205/00D L62B205/04 L62B205/10 L62B206/02 L62B5/00P8 L62B501/06P

US class: 224/627 24/514 24/525 24/568 24/568P 24/569 248/228.5 248/230.5 248/231.61 248/316.6 248/49 248/68.1 248/74.4 280/204 280/292 280/3 280/30 280/30P 280/30S 280/35 280/35P 280/414.2 280/414.200S 280/47.18 280/47.21 280/47.24 280/47.240S 280/47.25 280/47.26 280/47.33 280/47.331 280/47.331S 280/47.34 280/64 280/640 280/640P 280/646 280/651 280/651P 280/651S 280/652 280/652P 280/657 280/657P 280/7.12 280/7.120S 280/79.2 280/79.200P 296/20 5/626 5/627 D8/396 D8/72

Locarno class: 08/08

Classification Explorer

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Abstract:
Source: US2001004148A A portable cart, for use in camping, hunting and other outdoors activities carries canoes, small boats, game, injured parties or hauled cargo by hand. The portable cart can be converted to a canoe or boat cart which can be folded down and transported within the canoe or boat, or to a game cart for transporting game over long, rough terrain, or to a cargo hauling gear cart, all of which can broken down into a carrying position, by hand or by back. The portable cart can be carried by hand or as a backpack over rough terrain. Its width can be varied to accommodate watercraft of varying widths. The cart has optional removable clamps for clamping a conventional transportable carrier, such as a stretcher or stokes−type rescue carrier bed, thereto. Another optional bicycle pull clamp includes an ant−tipping attachment resisting centrifugal force urging said cart to tip over during a directional turn of the cart−hauling bicycle. It is collapsible, so that it can be disassembled and carried in a canoe or small boat, and then reassembled at another destination along the canoe or boat's journey.

0) US3220571A – SELF–CONTAINED CARGO HANDLING APPARATUS FOR SHI...

42) Family number: 23103508 (US3220571A) © PatBase

Title: Self–contained cargo handling apparatus for ships, vehicles and stationary plants

Priority: FR19620907092 19620816 FR19620920189 19621229 FR19630940761 19630708 FR19630926940 19630305 FR19630936792 19630531

Family:

Publication number	Publication date	Application number	Application date
ES290837 A1	19631201	ES19630290837	19630814
FR1449567 A	19660506	FR19620907092	19620816
FR92601 E	19681206	FR19620920189	19621229
FR92602 E	19681206	FR19630926940	19630305
FR92603 E	19681206	FR19630936792	19630531
FR92604 E	19681206	FR19630940761	19630708
GB1043175 A	19660921	GB19630030741	19630802
US3220571 A	19651130	US19630299963	19630805

Probable Assignee: MAC GREGOR COMARAIN SA

Assignee(s):(std)**:** MAC GREGOR COMARAIN SA ; MAC GREGOR COMARIN

Assignee(s): MACGREGOR COMARAIN ; MAC GREGOR COMARAIN

Inventor(s):(std)**:** HENRI KUMMERMAN

Inventor(s): KUMMERMAN HENRI

International class(IPC 8–9)**:** B63B27/12 B66C13/12 B66C17/00 B66C7/00 (Advanced/Invention); B63B27/00 B66C13/00 B66C17/00 B66C7/00 (Core/Invention)

International class(IPC 1–7)**:** B63B27/12 B66C11/16 B66C13/12 B66C17/00 B66C5/04

CPC: B63B27/12 B66C7/00 B66C2700/012 B66C2700/035 B66C13/12 B66C17/00 B66C2700/01

European class: B63B27/00 B63B27/12 B66C13/12 B66C17/00 B66C7/00 L66C700/01 L66C700/01B L66C700/03D2F

US class: 414/141.5

Classification Explorer

Cited documents: US3077992 A, US2984367 A, US2788905 A, US2555297 A, US2396143 A, US2363797 A,

Forward Citations: WO9012729, WO09003554, US9302745, US9061738, US8651790, US7909558, US7850412, US7753637, US7708514, US2014321951, US2013220204, US2008213073, US2008075569, US2008075568, US2008075566, US2005220573, FR2648448, EP2634080, DE202011108867,

Abstract:
Source: GB1043175A 1,043,175. Overhead travelling cranes on ships. MACGREGOR – COMARAIN. Aug. 2, 1963 [Aug. 16, 1962; Dec.,29, 1962; March 5, 1963; May 31, 1963;.July 8, 1963], No. 30741/63. Heading B8B. A ship 1, Fig. 1, has rails 7 on which run gantries 11 supporting telescopic beams 12, Fig. 3, and crabs 13. The gantries may be parked at the stern of the ship. Fig. 4, when not in use and in an alternative construction, Fig. 5. a section of rail 502a may be lowered and the gantries lowered to this level by a hoist 504. Each gantry 11, Fig. 6, supports a telescopic beam 12 by means of rollers 23 and guide rollers 22. The crab 13 runs on rollers 512. 513 on rails 26, 30 on the gantry and beam respectively. Pinions 516, 518 engage each other and racks 514, 515 to move the beam or the crab. The pinions 516 are moved up and down into and out of engagement with the rack 514 by levers 520 which also move pins 527 into locking engagement with holes 528 in the gantry 11. The crab supports winding gear 52 and a crab drive motor 46. Current is fed to the crab via a cable winder 69, Fig. 8, or the gantry and a winder 71 on the beam. A pin 74, Fig. 6, locks the beam to the gantry. Fig. 9 shows an arrangement in which the pinions driving the crab and the girder are constantly in mesh. Pinion 148 meshes with rack 149 on the beam 101 and a loose pinion 150 meshes with a rack 151 on the gantry 102. The pinion 150 may be caused to turn by a clutch 154 which is disengaged by an electromagnet 163. As shown in Fig. 10, a beam 101 may run inside a gantry 102 on rollers 185, 186 whilst the crab 103 runs on rollers 188, 189. The crab and beam are moved by a sprocket 195 and chain 197 which passes round the beam. To move the beam 101 to the left from the

position shown in Fig, 17, the crab is first driven to the right–hand end by the sprocket 195 and locked to the beam in this position. Rotation of the sprocket 195 now causes the beam to move to the left, Fig. 20, extra chain being paid out from a tensioning device 202. Instead of using a telescopic beam the crab runway may be extended by providing hinged sections 167, Fig. 22. Alternatively, the sections may be hinged about vertical axes which may be slightly inclined to allow overlapping if the folding sections are more than half as long as the centre section. The longitudinal runways may be retracted by sliding each section down grooves in the supporting posts which may then be folded down. The racks 304, 305, Fig. 36a, on which the gantries run and discontinuous across the tops of the posts and to provide a continuous drive two pinions 306, 307 are provided so that one is always in a rack–engaging position. These pinions are resiliently mounted on their driving shafts to allow for the teeth on adjacent racks not registering exactly with each other. To obviate the case in which a pinion tooth meets a rack tooth end to end and causes jamming, an auxiliary sharp–toothed pinion 333, Fig. 42, is coupled to the driving pinion and engages a rack 326 provided with teeth 328, 329, 330 which ensure that this condition cannot arise. Fig. 44 shows a crab 407 which carries a motor 411 for moving it along the girder, but the winding gear 405 is on the gantry 403. Level movement of the load may be accomplished by synchronizing the travel and hoisting motors.

0) US2169333A – POWER–TRANSMITTING CLUTCH AND OPERATING MEANS T...

43) Family number: 21349038 (US2169333A) © PatBase

Title: POWER–TRANSMITTING CLUTCH AND OPERATING MEANS THEREFOR

Priority: US19350029335 19350701

Family:

Publication number	Publication date	Application number	Application date
US2169333 A	19390815	US19350029335	19350701

Probable Assignee: ZERK

Assignee(s):(std)**:** ZERK

Inventor(s):(std)**:** ROLAND VANNEMAN DANIEL ; ZERK OSCAR U

Inventor(s): VANNEMAN DANIEL ROLAND

International class (IPC 8–9): F16D11/10 F16D23/12 (Advanced/Invention); F16D11/00 F16D23/00 (Core/Invention)

International class (IPC 1–7): B60K23/02

CPC: F16D23/12 F16D11/10 Y10T74/20468

European class: F16D11/10 F16D23/12

US class: 123/195A 192/103R 192/114R 192/69 192/99S 62/244 62/323.4 74/11 74/503

Classification Explorer

Forward Citations: WO05075237, US2891746, US2520005, FR2865515,

Abstract:
Source: US2169333A We claim: 1. A clutch device for coupling a pair of rotatable shafts, comprising a tubular clutch element reoiprocable axially on a rotatable shaft means, means preventing relative rotation of the said element and its shaft means, a pair of diametrically opposite aligned bores extending through the wall of the tubulin' clutch element, a third bore in the shaft means aligned with one of the said element bores, pins in the element bores, a ring oircumscribing the clutch element supported on the pins, a spring constraining the ring and pins in one diametral direction, a weight on the ring to move it by centrifugal force in the other direction when rotated at speeds above a predetermined maximum to project a pin into the third bore to lock the tubular clutch element to the shaft means. 2. A clutch device for coupling e,~pair of rotatable shafts, comprising a tubular clutch e1e~ ment reciprocable axially on tt rotatable shaft means, means preventing relative rotation of the said element and its shaft means, a pair of diarnetrieally opposite aligned bores extending through the wall of the tubular clutch element, a third bore in the shaft means aligned with one of the said element bores, pins in the element bores, a ring eircuniscribing the clutch element supported on the pins, a pair of posts on the ring, an annular groove in the clutch element, a spring in the groove engaging the posts at opposite ends to constraimtlie ring and pins in one diametral direction, a Weight on the ring to move it by centrifugal force in the other direction when rotated at speeds above a predetermined maximum to project a pin into the third bore to lock the tubular clutch element to the shaft means. 3. A clutch device for coupling a pair of rotatable shafts, comprising a tubular clutch element reciprooable axially on a rotatable shaft means, means preventing relative rotation of the said element and its shaft; means, a. pair of diametrically opposite aligned bores extending through the' wall of the tubular clutch element, a third bore in the shaft means aligned with one of the said element bores, pins in the element bores, a ring circumscribing the clutch element supported on the pins, a spring constraining the ring and pins in one diametral direction, a weight on the ring to move it by centrifugal force in the other direction when rotated at speeds above a predetermined maximum to project a pin into the third bore to lock the tubular clutch element to the shaft means, and a second weight on the clutch element to dynamically balance the device at predetermined rotational speeds. 4. In a clutch device for coupling a pair of rotatable shafts, an externally hexagonal clutch element rigidly connected to one shaft, an externally hexagonal sleeve rigidly connected to the other shaft, an internally hexagonal tubular clutch element axially movable on the sleeve, a groove in the movable clutch element for shifting it axially, a pair of aligned radially extending bores in the sleeve and movable clutch element. a bore in the movable clutch element diametrically aligned with the said bore therein, pins in the said movable element bores, a ring supported on the pins, a weight on the ring operable by centrifugal force at rotary speeds above a predetermined maximum to project a pin into the bore in the sleeve to lock the movable clutch element to the sleeve, and resilient means to normally hold the said pin withdrawn from the bore in the sleeve. 5, A clutch device for coupling a pair of'rotatable shafts, comprising a tubular clutch element reoiprocable axially on a rotatable shaft means, means preventing relative rotation of the said, element and its shaft means, a pair of diametrically opposite aligned bores extending through the wall of the tubular clutch element, a third bore in the shaft means aligned with one of the said clement bores, pins in the element bores, a connector connecting the pins, a spring constraining the connector and pins in one diametral direction, a weight on the connector to move it by centrifugal force in the other direction when rotated at speeds above a predetermined maximum to project a pin into the third

bore to lock –the tubular clutch element to the shaft Dfl€'B.l'1S. 61 A clutch device– for coupling et pair of rotatable shafts, comprising a tubular clutch clement reciprocable axially on a rotatable shaft means, means preventing relative rotation oi the said element and its shaft means, at pair of diametrically oppositie aligned bores extencliug through the wall of the tubular clutch element, a third bore in the shaft means aligned with one of the said element bores, pins inthe element bores, a connector connecting the pins, a pair of posts on the connector, a spring engaging the posts at opposite ends to constrain the connector and pins in one diametral direction, a weight on the connector to move it by centrifugal force in the other direction, when rotated at speeds above a predetermined maximum to project a pin into the third bore to lock the tubular clutch element to the shaft means. 7. A clutch device for coupling a pair of rotatable shafts, comprising a. tubular clutch element reciprocable axially on a rotatable shaft means, means preventing relative rotation of the said element and its shaft means, a pair of diametrically opposite aligned bores extending through the wall of the tubular clutch element, a third bore in the shaft means aligned with one of the said element bores, pins in the element bores, a connector connecting the pins, a spring constraining the connector and pins in one diametral direction, a weight on the cqpnector to move it by centrifugal force, in the other direction when rotated at speeds above a predetermined maximum to project a pin into the third–bore to lock the tubular clutch element to the shaft means, 2,1e9,sss and a second weight on the clutch element to dynamically balance the device at. predetermined rotational speeds. 8. In a, clutch device for coupling a. pair of rotatable shafts, an externally hexagonal clutch element rigidly connected to one shaft, an externally hexagonal sleeve rigldly connected to the other shaft, an internally hexagonal tubular clutch element axially movable on the sleeve, a groove in the movable clutch element for shifting it axially, a pair of aligned radially extending bores in the sleeve and movable clutch element, a bore in the movable clutch element diametrically aligned with the said bore therein, pins in the said movable element bores, a connector connecting the pins, a weight on the connector operable by centrlfugal force at rotary speeds above a predetermined maximum to project a pin into the bore in the sleeve to lock the movable clutch element to the sleeve, and resilient means to normally hold the said pin withdrawn frnm the bore in the sleeve. ' 9. In combination with a rotary shaft, a clutch element rotatably locked with the shaft splined for axial movement therealong, means to axially move the clutch element, 9. radially movable key element comprising a. ring encircling the clutch element having radially extending portions slidably engageable therewith and movable to lock the clutch element with the shaft against axial movement, spring means for maintaining the said portions out of locking position, and the ring being bodily movable radially due to centrifugal force above a. predetermined speed to lock the clutch element with the shaft. – 10. In a clutch mechanism for coupling a. pair of shaft means, a clutch element on one shaft means, a reciprocable clutch element on the other shaft means, a pin adapted to be projected through the reciprocable clutch element into its shaft means to lock it against axial movement thereon, and a centrifugal device for projecting the pin at shaft means rotational speeds above a predetermined maximum comprising an element constrained to move radially of the clutch element and secured to the pin. 11. In s. clutch mechanism for coupling a pair of shaft means, a. reciprocable clutch element on one shaft means, 8, pin radially reciprocably supported cn a reciprocable clutch element and adapted to be projected through the reciprocable clutch element into its shaft means to lock it. against axial movement thereon, a. centrifugal device for projecting the pin at shaft means rotational speeds above n. predetermined maximum, said device comprising an eccentrically weighted element encircling the clutch element and restricted to radial movement relative thereto, and resilient means to normally maintain the pin in non–projected position at speeds below the predetermined maximum. J 12. In a clutch mechanism for coupling 9, pair of shaft means, a, clutch element on one shaft means, a reciprocable clutch element on the other shaft means, locking means adapted to be projected through the reciprocable clutch element intn its shaft means to lock it against axial movement thereon, and a. centrifugal device for DIOjectiug the locking means at Sh%f!i megn; rotational speeds above 9. predetermined maximum, said device comprising an element carried by the clutch element to rotate therewith in encircling relation and restricted to radial movement relative to the clutch element. 13. lu a clutch mechanism for coupling a pair of shaft means, a clutch element rigidly connected to one shaft means, a reciprocable clutch element on the other shaft means adapted to telescope over the other clutch element, a. pin adapted to be projected through the reciprocable clutch. element into its shaft means to lock it against axial movement thereon, and a, centrifugal device for projecting the pin, at shaft means rotational speeds above the predetermined maximum. 14. In a. clutch mechanism for coupling a. pair of shaft means, s, clutch element rigidly connected to one shaft means, a reciprocable clutch element on the other shaft means, a. pin radially reciprocably supported on the reciprocable clutch element adapted to be projected through the reciprocable clutch element into a shaft means to lock it against axial movement thereon, a. centrifugal device for projecting the pin at shaft means rotational speeds above a predetermined maximum comprising a. ring movable eccentrically of the shaft means axis, and resilient means to normally maintain the pin in non–projected position at speeds below the predetermined maximum. 15. In a. clutch device for coupling a pair of rotatable shafts, a. clutcli element rigidly connected with one shaft, a reclprocable clutch element splined for axial movement on the other shaft, a transverse pin radially reclppocably supported on the reciprocable clutch element adapted to lock the splined clutch element with its shaft and normally maintained out of locking position by a spring. and s, centrifugal device for moving the pin into locking position comprising a ring movable eccentrically of the shaft. 16. In combination with a. rotary shaft, a clutch element rotatably fixed to the shaft and splined for axial movement thereon, means to operatively axially move the clutch element, a. radially movahle key element movable bodily by centrifugal force to change the center of mass relative to the shaft axis to lock the clutch element against axial movement on its shaft, a. spring maintaining it out of locked position, and a. centrifugal device for moving it into locked position, comprising an eccentrically Weighted ring Hxed to the key element. 1'7. In combination with a rotary shaft, a clutch element rotatably locked with the shaft and axially movable therealong, means to axially move the clutch element manually, a key element rotatable with the clutch ‘element and bodily movable radially relative thereto to lock the clutch element with the shaft against axial movement along the shaft, a single spring means for maintaining the key element out of locked position, and the key element being movable by centrifugal force at a. predetermined speed to overcome the spring means to radially move the key element to locking 'position by an eccentrically weighted element encircling the clutch element and iixed to the key element

0) US5544542A – SHOCK ABSORBING STEERING DEVICE AND METHOD OF M...

44) Family number: 16215860 (US5544542A) © PatBase

Title: Shock absorbing steering device and method of manufacturing the device

Priority: JP19930036373U 19930608

Family:

Publication number	Publication date	Application number	Application date
DE69400783 D1	19961128	DE19946000783	19940606
DE69400783 T2	19970227	DE19946000783T	19940606
EP0629540 A1	19941221	EP19940108621	19940606
EP0629540 B1	19961023	EP19940108621	19940606
JP2593420 Y2	19990412	JP19930036373U	19930608
JP7004253 U1	19950120	JP19930036373U	19930608
US5544542 A	19960813	US19940255715	19940607

Probable Assignee: KOYO SEIKO CO LTD

Assignee(s):(std)**:** KOYO SEIKO CO

Assignee(s): KOYO SEIKO CO LTD ; KOYO SEIKO CO LTD OSAKA JP

Inventor(s):(std)**:** NAKAJIMA TERUKAZU ; NAKAJIMA TERUKAZU C O KOYO SEI

Inventor(s): NAKAJIMA TERUKAZU C O KOYO SEIKO CO ; NAKAJIMA TERUKAZU C O KOYO SEIKO CO LTD ; NAKAJIMA TERUKAZU C O KOYO SEIKO CO LTD OSAKA 542 ; NAKAJIMA TERUKAZU C O KOYO SEIKO CO LTD OSAKA...

Designated states: DE FR GB IT

International class(IPC 8–9)**:** B60Q5/00 B62D1/19 F16F7/12 (Advanced/Invention); B60Q5/00 B62D1/19 F16F7/12 (Core/Invention)

International class(IPC 1–7)**:** B62D1/18 B62D1/19

CPC: B60Q5/003 B62D1/192 F16F7/125

European class: B60Q5/00S2 B62D1/19B F16F7/12F

US class: 188/371 74/492 744/920

Classification Explorer

Cited documents: US4098141 A, US4006647 A, US3696891 A, US3392599 A, JP57201761 A2, GB1164146 A, EP0109749 A1, DE2918179 A1, DE1630005 B2, DE1630005 A1,

Forward Citations: US6293872, US6039350, US5984354, FR2809368, FR2773532, DE19801166, DE19617561,

Abstract:
Source: US5544542A Rotation of a steering wheel (7) is transferred to a steering gear (17) via a pipe–like first shaft (2) and a second shaft (3), which is inserted in the first shaft (2) so that transfer of rotation between the two shafts (2), (3) and relative axial movement between the two shafts (2), (3) are allowable. A ball (23) inserted in a through hole (20) formed through the first shaft (2) is held by a recess (21) formed on the outer surface of the second shaft (3), so that a portion of the ball (23) is projected from the outer surface of the second shaft (3). The inner surface of the first shaft (2) is plasticly deformed by the ball (23) by displacing the recess (21) away from the through hole (20) to form a groove (25).

0) US5334198A – SURGICAL INSTRUMENT

45) Family number: 8581525 (US5334198A) © PatBase

Title: Surgical instrument

Priority: AU19940053230 19931007 US19920959121 19921009 WO1993US09571 19931007 US19940182853 19940118 US19940234642 19940428 WO1995US05277 19950427

Family:

Publication number	Publication date	Application number	Application date
AU199453230 A1	19940509	AU19940053230	19931007
AU199524629 A1	19951129	AU19950024629	19950427
AU199654710 A1	19960829	AU19960054710	19960603
AU669759 B2	19960620	AU19940053230	19931007
CA2124854 AA	19940525	CA19932124854	19931007
EP0618784 A1	19941012	EP19930923294	19931007
EP0618784 A4	19941207	EP19930923294	19931007
JP3565849 B2	20040915	JP19940510115T	19931007
JP7501965 T2	19950302	JP19940510115T	19931007
US5334198 A	19940802	US19920959121	19921009
US5545170 A	19960813	US19940234642	19940428
US5618304 A	19970408	US19940182853	19940118
WO9408521 A1	19940428	WO1993US09571	19931007
WO9529636 A1	19951109	WO1995US05277	19950427

Probable Assignee: INNOVASIVE DEVICES INC

Assignee(s):(std)**:** INNOVASIVE DEVICES INC

Assignee(s): NICHOLSON JAMES E ; RICE JOHN T ; WINTERS RICHARD M ; HART RICKEY D

Inventor(s):(std)**:** NICHOLSON JAMES E ; RICE JOHN T ; HART RICKEY D ; WINTERS RICHARD M

Inventor(s): JAMES E NICHOLSON ; JOHN T RICE ; RICHARD M WINTERS ; RICKEY D HART

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO

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

International class (IPC 8–9)**:** A61B17/04 A61B17/28 A61B17/30 A61B17/32 A61B17/3201 A61B18/00 A61B18/12 A61B18/14 (Advanced/Invention); A61B17/28 A61B17/32 A61B18/00 A61B18/12 (Advanced/Non–invention); A61B17/04 A61B17/32 A61B18/12 A61B18/14 (Core/Invention); A61B17/28 A61B18/00 (Core/Non–invention)

International class (IPC 1–7)**:** A61B17/00 A61B17/08 A61B17/12 A61B17/30 A61B17/32 A61B17/36 A61B17/39 A61B17/40 A61B18/12

CPC: A61B18/1442 A61B10/02 A61B17/0467 A61B17/0469 A61B17/320016 A61B17/3201 A61B2017/2931 A61B2018/1253 A61B2018/1861

European class: A61B17/04C A61B17/04E A61B18/14F K61B10/02 K61B17/29J4 K61B17/3201 K61B17/32E K61B18/12G8A K61B18/18M6

US class: 606/139 606/144 606/148 606/205 606/41 606/49 606/51 606/52

Classification Explorer

Cited documents: US5334198 A, US5318579 A, US5314424 A, US5282800 A, US5258006 A, US5257637 A, US5196023 A, US5147357 A, US5089007 A, US5026370 A, US4949717 A, US4872456 A, US4819633 A, US4763668 A, US4686980 A, US4674501 A, US4674499 A, US4669470 A, US4478221 A, US4393872 A, US4370980 A, US4271838 A, US4232676 A, US4174715 A, US4054143 A, US4018228 A, US4005714 A, US4003380 A, US3938527 A, US3763860 A, US3404677 A, US2113246 A, US1813902 A, EP0066465 A2, DE1266446 B,

Forward Citations: WO9853749, WO9641574, WO9641574, WO16178598, WO05112795, WO03035140, WO03035140, WO0027294, USD748962, USD711712, USD685907, USD457958,

US9713507, US9707027, US9707004, US9706988, US9700343, US9700339, US9668808, US9649126, US9649106, US9642644, US9642616, US9636135, US9623237, US9572623, US9566083, US9545290, US9522004, US9510891, US9510850, US9510816, US9504855, US9504483, US9498245, US9486236, US9445832, US9439669, US9439668, US9427255, US9427249, US9414853, US9408622, US9398907, US9393037, US9375268, US9351754, US9339289, US9326788, US9326764, US9314620, US9314294, US9283045, US9277957, US9271702, US9254169, US9254165, US9241731, US9241728, US9241701, US9237921, US9233241, US9232979, US9226772, US9226767, US9226766, US9220527, US9220526, US9198714, US9131938, US9095367, US9078662, US9066747, US9049987, US9028483, US9023069, US9011431, US9005220, US9005198, US8992570, US8992526, US8986333, US8986287, US8986199, US8956341, US8939897, US8906035, US8900232, US8888792, US8882785, US8858572, US8840617, US8834543, US8834501, US8828031, US8828017, US8771260, US8758336, US8690898, US8679003, US8663270, US8652150, US8608652, US8579897, US8568410, US8529563, US8518091, US8506564, US8496574, US8491600, US8480689, US8480657, US8469975, US8460284, US8449538, US8425505, US8414616, US8409200, US8403926, US8398618, US8361112, US8361066, US8353487, US8337394, US8328824, US8317806, US8267957, US8262680, US8262655, US8262563, US8252057, US8251989, US8241204, US8221458, US8221449, US8211125, US8206284, US8197497, US8172772, US8167890, US8157840, US8157834, US8128649, US8114131, US8114119, US8114072, US8105351, US8100922, US8100920, US8096995, US8096994, US8092459, US8075573, US8075572, US8070759, US8062295, US8057489, US8057386, US8037591, US8029567, US8029504, US8012165, US8007494, US7998208, US7993368, US7993342, US7985246, US7955392, US7951157, US7927354, US7905892, US7896907, US7867264, US7837631, US7815662, US7749221, US7655004, US7651495, US7572265, US7468041, US7465302, US7422589, US7399304, US7220266, US7208005, US7144400, US7144395, US7074203, US7037315, US7025775, US7011668, US6989016, US6984237, US6916314, US6915804, US6902566, US6860890, US6780180, US6733509, US6723107, US6660023, US6626929, US6565561, US6561988, US6527794, US6506208, US6494877, US6482202, US6447502, US6443963, US6416509, US6364877, US6358268, US6306134, US6293942, US6277114, US6261286, US6234178, US6210405, US6193671, US6190399, US6142957, US6109500, US6099483, US6093186, US6090106, US6056746, US6053877, US6027501, US6015406, US6013076, US6004319, US6001096, US5980556, US5968044, US5951488, US5944715, US5935129, US5913874, US5911721, US5895361, US5891140, US5871453, US5860993, US5840043, US5836960, US5827279, US5810744, US5792139, US5769841, US5752951, US5725529, US5645075, US5638827, US5637110, US5637108, US5618304, US5609601, US5571100, US5558100, US5545170, US5542432, US5480409, US5472451, US2017172649, US2014319197, US2013345701, US2013053835, US2012283734, US2012184946, US2010292716, US2010152757, US2009306684, US2009247995, US2009043305, US2008177298, US2008125762, US2008108997, US2008085490, US2008071296, US2008064982, US2008051894, US2008039853, US2008027552, US2008027433, US2008021278, US2007299526, US2007282340, US2007233076, US2007225807, US2007225735, US2007185373, US2007179525, US2007049922, US2007032811, US2007010829, US2006202242, US2006129186, US2006041253, US2006041252, US2006041251, US2005076915, US2005075652, US2005004571, US2004267164, US2004230221, US2004210238, US2004181169, US2004103900, US2004082906, US2003120272, US2003109828, US2003065358, US2001020170, NL1014885, EP2227149, EP0994675, DE4444025, DE4444025, DE19702447, DE19702447, DE19700605, DE19700605, DE19512559, DE10297857, DE102004030030, CN104825202, CN104411253, CN103584912, AU672060,

Abstract:
Source: US5334198A An improved surgical tool of the type comprising a handle assembly having a movable tool−operating handle member, a tool head having first and second tissue−engaging members movable between open and closed positions relative to one another, and a mechanism coupling the tool head to the handle assembly for causing opening and closing movement of the tissue−engaging members in response to manipulation of the movable tool−operating handle member. The improved tool is characterized by an inner shaft secured to a stationary part of the handle assembly, and a hollow outer shaft disposed in telescoping relation to the inner shaft, with the tool head being secured to the inner shaft and the outer shaft being movable axially relative to the inner shaft by manipulation of the movable tool−operating handle member, with the outer shaft causing opening and closing of the tissue−engaging members as it undergoes telescoping movement. Preferably an opaque tubular member surrounds the hollow outer shaft so as to conceal movement of the outer shaft. The tool also may include a manually−operated mechanism for selectively rotating the tool head relative to the handle assembly.

0) US2002112443A – METHOD OF CONNECTING PARTITION PANELS

46) Family number: 28851481 (US2002112443A) © PatBase

Title: METHOD OF CONNECTING PARTITION PANELS

Priority:

EP19950944656	19951226	US19940188329	19940126	US19940366061	19941229
US19960628992	19960410	US19950450253	19950525	US19940367804	19941230
US19950579614	19951226	US19940367802	19941230	US19950578089	19951226
US19980178266	19981023	US19970870773	19970516	US19980015047	19980128
US19960701664	19960822	US19980092571	19980605	US19980071268	19980501
US19960687724	19960726	US19990272043	19990318	US19980067731	19980428
US19980132129	19980810	US19980071264	19980501	US19960755904	19961126
WO1995US16918	19951226	WO1997US13956	19970812	US19990435801	19991108
US20000699697	20001030	WO1995US16918	19951228	US20000577755	20000523
US19990471970	19991223	US19990471960	19991223	US19990334971	19990617
US19990432358	19991103	WO1995US16869	19951226	US20020124284	20020417
US20000585877	20000601	US19990335026	19990617	US19990335373	19990617

Family:

Publication number	Publication date	Application number	Application date
AR009272 AA	20000412	AR1997P103768	19970819
AU199646462 A1	19960724	AU19960046462	19951228
AU199647424 A1	19960724	AU19960047424	19951226
AU199740561 A1	19980306	AU19970040561	19970812
AU702876 B2	19990311	AU19960047424	19951226
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BRPI9510185 A	19971014	BR1995PI10185	19951226
BRPI9711337 A	19990817	BR1997PI11337	19970812
CA2208564 AA	19970617	CA19952208564	19951226
CA2208583 AA	19970617	CA19952208583	19951226
CA2263096 AA	19990210	CA19972263096	19970812
CL1995001942 A1	19960816	CL19950001942	19951218
CL1995001943 A1	19960910	CL19950001943	19951218
CL1997001543 A1	19980408	CL19970001543	19970730
CO4440673 A1	19970507	CO19950062157	19951228
CO4440674 A1	19970507	CO19950062158	19951228
CO4750611 A1	19990331	CO19970047436	19970819
EP0800604 A1	19971015	EP19950944656	19951226
EP0800604 A4	20000816	EP19950944656	19951226
EP0867574 A2	19980930	EP19980201794	19951226
EP0867574 A3	20000816	EP19980201794	19951226
EP0928149 A1	19990714	EP19970938172	19970812
EP0928149 A4	20021127	EP19970938172	19970812
JP10512026 T2	19981117	JP19960521118T	19951226
JP2000516512 T2	20001212	JP19980510782T	19970812
KR19970700721 A	19970212	KR19960704035	19960725
MX9704467 A1	19980228	MX19970004467	19951226
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US5746034 A	19980505	US19940367802	19941230	
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US5746035 A	19980505	US19950579614	19951226	
US5746035 B1	20001114	US19950579614	19951226	
US5784843 A	19980728	US19940367804	19941230	
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US5816001 A	19981006	US19960687724	19960726	
US5816001 B1	20000606	US19960687724	19960726	
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US5899036 A	19990504	US19960755904	19961126	
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US6128873 A	20001010	US19980092571	19980605	
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US6173543 BA	20010116	US19990435801	19991108	
US6173545 BA	20010116	US19990432358	19991103	
US6266935 BA	20010731	US19990471960	19991223	
US6276102 BA	20010821	US20000577755	20000523	
US6286276 BA	20010911	US19990471970	19991223	
US6378255 BA	20020430	US20000699697	20001030	
US6397532 BA	20020604	US20000585877	20000601	
US6530181 BA	20030311	US19980071264	19980501	
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WO9621070 A1	19960711	WO1995US16869	19951226	
WO9807357 A1	19980226	WO1997US13956	19970812	

Probable Assignee: STEELCASE INC

Assignee(s):(std)**:** STEELCASE DEV CORP ; SHIPMAN DAVID A ; SHAW BENJAMIN G ; SEIBER CHARLES A ; STEELCASE INC ; STEELCASE DEVELOPEMENT INC ; STEELCASE DEV INC

Assignee(s): TINGELY MICHAEL ; TANIS JACK A ; SEGAL LEON D ; SIEBERT PAUL B ; STEELCASE DEVELOPMENT CORP ; STEELCAS INC ; STEELCASE DEVELOPMENT INC ; STEELCASE DEVELOPMENT INC A OF MICHIGAN CORP ; STEELCASE DEVELOPMENT INC A CORP OF MICHIGAN ; ACKERLY ANNE C ; ARKO ROBERT P ; CORCORRAN SEAN M ; DRAUDT GREGG R ; DRAUDT GREGG ROBERT ; ELDON JAMES B ; LUCHETTI ROBERT J ; LADA CHRISTOPHER O ; MINAMI DON S ; HOBSON PHILLIP M ; MCCLANAHAN DAVID D ; GREER ERNEST P ; MEAD KARL J ; KING JONATHAN J ; FRIEDMAN FRANK ; POPPE ROBERT P ; HOBSON PHILLIP MICHAEL ; ELDON JAMES B III

Inventor(s):(std)**:** ANNE C ACKERLY ; ARKO ROBERT P ; BATTEY JOYLENE M ; BENDER ELDON JAMES III ; BENJAMIN G SHAW ; CHRISTOPHER O LADA ; CHURCHILL DAVID P ; CORCORRAN SEAN M ; DAMMERMAN KURT P ; DAMMERMANN KURT ; CHARLES A SEIBER ; DAVID A SHIPMAN ; DAVID D MCCLANAHAN ; DEAN MCCLANAHAN DAVID ; DRAUDT GREGG R ; DRAUDT GREGG ROBERT ; EICH THOMAS B ; ELDON III JAMES B ; ELDON III JAMES BENDER ; ELDON JAMES B ; ELDON JAMES B III ;

ERNEST P GREER ; GREGG R DRAUDT ; GREGG ROBERT DRAUDT ; HOBSON PHILIP M ; HOBSON PHILLIP MICHAEL ; HOFMAN WILLIAM K ; JACK A TANIS ; JAMES B ELDON ; JAMES B ELDON III ; FRANK FRIEDMAN ; FREIDMAN FRANK ; FRIEDMAN FRANK ; GOODMAN STEVEN F ; GORTSEMA STEVEN C ; FELDPAUSCH MICHAEL J ; FELDPAUSCH STEPHEN J ; JONATHAN J KING ; KING JONATHAN J ; KING JONATHAN K ; LADA CHRISTOPHER O ; LEON D SEGAL ; KARL J MEAD ; LINDALE MICHELLE L ; LUCHETTI ROBERT J ; LYON DOUGLAS G ; LYON LADENE S ; MACDONALD DOUGLAS B ; MCCLANAHAN DAVID D ; MCCLANAHAN DAVID DEAN ; MEAD KARL J ; MICHAEL TINGLEY ; MINAMI DON S ; MUSCULUS JEFFREY A ; PAUL B SIEBERT ; PHILLIP MICHAEL HOBSON ; POPPE ROBERT P ; ROBERT J LUCHETTI ; ROBERT P ARKO ; ROBERT P POPPE ; SCHIPMAN DAVID A ; SEAN M CORCORRAN ; SEGAL LEON D ; SEIBER CHARLES A ; SEIBER CHARLES ANTHONY ; SELBERT GERHARD DR ; SHAW BENJAMIN G ; SHIPAMAN DAVID A ; SHIPMAN DAVID A ; SIEBERT PAUL B ; STACHOWIAK ANTHONY A ; SWAW BENJAMIN G ; TINGLEY MICHAEL ; TANIS JACK A ; SIEBER CHARLES A ; HOBSON PHILLIP M ; GREER ERNEST P ; ACKERLY ANNE C ; TINGELY MICHAEL ; MILES MICHAEL E ; IMRICH STEVEN ; HOUDA JAMES D ; ELDON JAMES BENDER III

Inventor(s): ELDON ; DAVID DEAN MCCLANAHAN ; DAVID A SCHIPMAN ; ACKERLY AC ; ROBERT DRAUDT GREGG ; JAMES III BENDER ELDON ; III JAMES B ; TANIS JA DRAUDT GR ; TINGLEY ; Shipman ; SHIPMAN DA ; SEAN MCORCORRAN ; ROBERT PARKO ; Robert J. ; PAUL BSIEBER ; Luchetti ; LUCHETTI RJ ; KARL JMEAD ; LEON DSEGAL ; JONATHAN JKING ; FRANK FRIED MAN ; Greer ; GREER EP ; JAMES BENDER ELTON III ; Ernest P. ; etc. ; DR GERHARD SELBERT ; DAVID DEAN MACCLANAHAN ; David A. ; CHARLES ASEIBER ; DAVID A SHIPAMAN ; BENJAMIN G SWAW

Agent(s): GRIFFITH HACK; BORDEN LADNER GERVAIS LLP; JOHANSSON; IGNACIO ESCOBAR URIBE; LUIS PATINO LEYVA; PRICE HENEVELD COOPER DEWITT AND LITTON

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 GN GR HU 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): A47B21/00 A47B47/02 A47B5/00 A47B57/42 A47B83/00 A47B83/04 A47B87/00 A47B96/02 A47B96/04 A47B96/06 A47B97/00 A47F10/00 E04B2/74 E04B2/76 E04B2/78 E04C2/00 E04C2/30 E04C2/52 E04F11/00 E04F15/024 E04H1/00 E04H1/06 E06B3/50 F24F13/08 (Advanced/Invention); A47B87/00 C08J11/04 C08J11/08 C08L95/00 E04C2/30 F24F13/08 (Advanced/Non–invention); A47B47/00 A47B57/00 A47B83/00 A47B87/00 A47B96/00 A47B96/06 A47B97/00 E04B2/74 E04C2/30 E04C2/52 E04F11/00 E06B3/32 F24F13/08 (Core/Invention)

International class (IPC 1–7): A47B05/00 A47B1/00 A47B5/00 A47B83/00 A47B83/04 A47B97/00 A47F10/00 E04B02/76 E04B1/00 E04B2/00 E04B2/74 E04B2/76 E04B2/78 E04B2/82 E04C2/30 E04C2/52 E04F19/04 E04G21/00 E04H1/00 E04H1/06 E04H3/00 E05F11/00

CPC: E04B2/745 F24F13/08 F24F13/082 H02G3/288 E04B2002/7464 E04F15/024 A47B47/025 E04B2/7401 Y10S52/13 Y10T403/557 Y10T403/591 Y10T403/4662 E04B2/7424 A47B57/425 A47B96/04 A47B96/06 E04B2/7425 E04B2/7433 E04B2/7448 E04B2/7453 E04B2/7455 E04B2002/7461 E04B2002/7462 E04B2002/7466 E04B2002/747 E04B2002/7483 E04B2002/7487 E04B2002/749 E04F11/00 E06B3/5045 A47B21/06 A47B21/00 A47B83/001 A47B96/02 A47B96/022 A47B96/067 A47B2021/066 A47B2037/005 A47B2200/0069 A47B2200/01 E04B2/7422 E04B2002/7488

European class: A47B21/00 A47B21/06 A47B47/02R A47B47/02R6 A47B57/42B A47B83/00B A47B96/02 A47B96/02C A47B96/04 A47B96/06 A47B96/06R E04B2/74B E04B2/74C3D E04B2/74C3D1 E04B2/74C3D2 E04B2/74C3E E04B2/74C4 E04B2/74C4B E04B2/74C5 E04B2/74C5B E04F11/00 E04F15/024 E06B3/50F F24F13/08 H02G3/28W2 K47B200/00D1B K47B200/01 K47B21/06E K47B37/00L P04B2/74F P04B2/74F2 P04B2/74F2A P04B2/74F3 P04B2/74F5 P04B2/74P P04B2/74Q P04B2/74R P04B2/74S R24F13/08C

US class: 160/196.1 211/26 361/826 40/605 40/606 403/252 403/297 403/322 403/322.1 5/222.07 5/223.81 52/126.3 52/126.4 52/220.7 52/220.700S 52/238.1 52/239 52/241 52/243 52/271 52/284 52/36.1 52/36.4 52/36.5 52/36.6 52/481.2 52/483.1 52/489.2 52/506.01 52/582.1 52/584.1 52/653.1 52/656.9 52/713 52/714 52/745.1 52/745.12 52/745.13 52/745.130P 52/DIG.13 522/410 522/840 527/140

Classification Explorer

Cited documents: USRE34381 E, USRE34381, USRE25628 E, USD350401 S1, USD350401, USB14876835, USB14876835, US735618 A, US726732 A, US6179136 BA, US6082065 A, US6076308 A, US6044612 A, US6009676 A, US5931429 A, US5901513 A,

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Forward Citations: WO9964691, WO9946454, WO9946454, WO16195966, WO15077075, WO13029779, WO11075394, WO10148043, WO09154983, WO09154983, WO08150717, WO08150717, WO08041872, WO05091920, WO05091920, WO04057121, WO03104581, WO03104581, WO0235021, WO0235021, WO0220916, WO0075575, WO0057004, WO0015918, WO0012831, WO0012831, USD778653, USD777474, USD764841, USD761048, USD761029, USD758777, USD758776, USD758115, USD754991, USD753943, USD752893, USD743712, USD742537, USD734627, USD733323, USD718966, USD690118, USD670107, USD664268, USD661112, USD660021, USD655427, USD653773, USD648449, USD642814, USD641494, USD610847, USD599137, USD596874, USD591075, USD584542, USD584074, USD581695, USD578327, USD465049, USD464160, USD463601, USD463061, USD462548, USD449748, USD446659, USD446028, USD441566, USD433151, USD426644, US9677272, US9670669, US9661778, US9650785, US9622570, US9617732, US9611641, US9593484, US9562359, US9524804, US9509244, US9493961, US9493940, US9474366, US9427083, US9424375, US9424374, US9414678, US9410318, US9398771, US9382709, US9380867, US9357878, US9353543, US9347218, US9340976, US9332864, US9303401, US9284729, US9265343, US9249567, US9222255, US9210999, US9206600, US9200457, US9194149, US9185974, US9133867, US9125486, US9084489, US9081916, US9051728, US9049905, US9032682, US9010034, US9010033, US9009011, US9003731, US8973315, US8967054, US8960102, US8925270, US8882065, US8881467, US8844210, US8833034, US8820018, US8776446, US8776445, US8733798, US8707630, US8689705, US8689519, US8688411, US8667908, US8636256, US8628389, US8621818, US8621786, US8615936, US8613168, US8601764, US8601749, US8590246, US8583481, US8528294, US8499699, US8474193, US8434629, US8407962, US8393122, US8327589, US8313067, US8296990, US8276302, US8273978, US8220220, US8215072, US8196526, US8176695, US8171858, US8151527, US8132496, US8113607, US8104850, US8099837, US8091301, US8091184, US8046957, US8033059, US7942485, US7913459, US7908805, US7891148, US7882676, US7862341, US7856777, US7850727, US7842083, US7841142, US7827920, US7818932, US7810294, US7765754, US7752813, US7735939, US7707795, US7707790, US7703230, US7699631, US7677182, US7676992, US7644552, US7621096, US7617628, US7603821, US7600340, US7540115, US7506469, US7487575, US7464509, US7461484, US7392611, US7340438, US7269925, US7249624, US7150127, US7116350, US7055287, US7051482, US7048320, US6968661, US6951087, US6910306, US6889477, US6883277, US6860073, US6855062, US6851226, US6848230, US6820388, US6817478, US6817149, US6807776, US6805185, US6772567, US6754998, US6751914, US6748710, US6729085, US6722096, US6719384, US6711871, US6701677, US6688048, US6684929, US6678516, US6675538, US6658805, US6625935, US6591563, US6591555, US6578498, US6574928, US6571519, US6561499, US6557310, US6550195, US6546684, US6536858, US6530181, US6510663, US6497075, US6490829, US6481169, US6464288, US6415567, US6397533, US6393783, US6393782, US6386723, US6378255, US6374548, US6359217, US6354043, US6351917, US6349911, US6341457, US6339907, US6336564, US6301847, US6295764, US6286276, US6282854, US6279643, US6272803, US6272795, US6266935, US6260324, US6250020, US6250019, US6247272, US6230459, US6230445, US6226849, US6223485, US6223478, US6202381, US6202374, US6189268, US6173545, US6173536, US6161347, US6158179, US6148567, US6131347, US6128877, US6115977, US6112472, US6101773, US6094872, US6082066, US6082065, US6076323, US6076308, US5943834, US5930963, US5836112, US2016348359, US2016251851, US2016115732, US2015300008, US2015240491, US2015167333, US2015107064, US2015075085, US2015068134, US2015034574, US2014259975, US2014190089, US2014102316, US2014102021, US2013327256, US2013170902, US2012273641, US2012255925, US2012167500, US2012159869, US2012073233, US2011209425, US2011209336, US2011202396, US2011197519, US2011146201, US2011072744, US2011023388, US2010288168, US2010281931, US2010257799, US2010223857, US2010205868, US2010199876, US2010193060, US2010175920, US2010175919, US2010146903, US2010126797, US2010064597, US2010050662, US2010011997, US2009293402, US2009293391, US2009282759, US2009282663, US2009242150, US2009224642, US2009173016, US2009151300, US2009145047, US2009091228, US2009084058, US2009064471, US2009056249, US2009031642, US2008315734, US2008307744, US2008302054, US2008293314, US2008289275, US2008284292, US2008282622, US2008276560, US2008258523, US2008251115, US2008148991, US2008148990, US2008148988, US2008115434, US2008115433, US2008110112, US2008104926, US2008104895, US2008098680, US2008086955, US2008085641, US2008074015, US2008047224, US2008047207, US2008045060, US2008042528, US2008040982, US2008035034, US2008035031, US2007294953, US2007284062, US2007251165, US2007236115, US2007199262, US2007184723, US2007163190, US2007130868, US2007120954, US2007095000, US2007033894, US2007023373, US2007011853,

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Abstract:
Source: US2002112443A A freestanding portable partition panel system is provided for open office spaces and the like. Each panel includes a partition frame having vertical upright frame members positioned adjacent opposite side edges thereof, and multiple horizontal frame members attached to the upright frame members in a vertically spaced−apart relationship to rigidly interconnect the same. One or more horizontal rows of discrete slots are defined in each of the horizontal frame members. Cover panels are mounted on the partition frames that permit access to the slots, and off−module connectors with hooks are provided for engaging the slots for interconnecting furniture units in off−module positions. For example, the hooks of the connectors are engaged with selected slots to hold a furniture unit, such as a partition panel, perpendicular to a second partition panel in an off−module position on its face.

0) US2007235246A – VEHICLE STEERING SYSTEM AND ASSEMBLING METHOD T...

47) Family number: 32519545 (US2007235246A) © PatBase

Title: VEHICLE STEERING SYSTEM AND ASSEMBLING METHOD THEREOF

Priority: JP20040180202 20040617 JP20040180208 20040617 KR20067026423 20061215 JP20040181755 20040618 WO2005JP11155 20050617

Family:

Publication number	Publication date	Application number	Application date
CN1968846 A	20070523	CN200580019792	20050617
EP1772347 A1	20070411	EP20050751427	20050617
EP1772347 A4	20071219	EP20050751427	20050617
JP2006001423 A2	20060105	JP20040180202	20040617
JP2006001424 A2	20060105	JP20040180208	20040617
JP2006001475 A2	20060105	JP20040181755	20040618
KR20070022751 A	20070227	KR20067026423	20061215
US2007235246 AA	20071011	US20050629860	20050617
WO05123485 A1	20051229	WO2005JP11155	20050617

Probable Assignee: NSK LTD

Assignee(s):(std)**:** KAWAIKE YUJI ; NEGISHI TAKESHI ; NSK LTD ; NSK STEERING SYS CO LTD ; NSK STEERING SYSTEMS CO LTD ; SANJI HIROAKI

Assignee(s): NSK STEERING SYSTEMS CO

Inventor(s):(std)**:** KAWAIKE YUJI ; NEGISHI TAKESHI ; SANJI HIROAKI ; TAKESHI KAWAIKE YUJI SANJI HIR ; MITSUHARU HIROAKI

Inventor(s): SANJI HIROAKI C O NSK STEERING SYSTEMS CO LTD ; NEGISHI TAKESHI C O NSK STEERING SYSTEMS CO LTD ; KAWAIKE YUJI C O NSK STEERING SYSTEMS CO LTD ; KAWAIKE YUJI SANJI HIROAKI NEGISHI TAKESHI

Agent(s): SUGHRUE MION 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 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): B60R25/02 B60R25/021 B62D1/16 B62D1/19 B62D5/00 B62D5/04 B62D6/10 G01L3/10 G01L5/22 (Advanced/Invention);
B60R25/02 B62D5/00 B62D5/04 (Advanced/Non–invention);
B60R25/02 B62D1/16 B62D1/19 B62D5/04 B62D6/08 G01L3/10 G01L5/22 (Core/Invention)

International class (IPC 1–7): B60R25/02 B62D5/04

CPC: B60R25/02105 B62D1/16 B62D5/04 B60R25/0215 B62D1/184 E05B81/76

European class: B60R25/021B B62D1/16 B62D5/04

US class: 180/400 180/400S 180/443

Classification Explorer

Cited documents: US7267018 BB, US7145264 BB, US6705422 BB, US6379158 BA, US5685180 A, US4674352 A, US4629024 A, US2947278 A, US2004065163 AA, JP8253105 A2, JP2004181755, JP2004180208, JP2004180202, JP2004156961 A2, JP2004132748 A2, JP2003072566 A2, JP2003072566, JP2002316652 A2, JP2002292575 A2, JP2001180443 A2, JP2000318626 A2, JP2000085596, JP2000002603 A2, JP10119796 A2, EP1288106 A2,

Forward Citations: US9616848, US9266502, KR101098627, JP5104707, JP2010105653, JP2010089709, CN102770675, CN102770675,

Abstract:
Source: US2007235246A A vehicle steering system includes: a sensor mechanism having a sensor coil 13; an antitheft device which has a key lock collar 4 and is disposed on the rear side of the sensor mechanism, in which the outer diameter of the key lock collar 4 of the antitheft device is larger than the inner diameter of the sensor coil 13 of the sensor mechanism; and a member 15 which has a diameter larger than the inner diameter of the sensor coil 13 and which is disposed on the front side of the sensor mechanism, wherein a steering shaft 3 or 6 to which the member 15 having the large diameter is fixed is inserted to the sensor coil 13 and then the key lock collar 4 is fitted to the steering shaft 3 or 6.

48) Family number: 19913603 (GB682923A) © PatBase

Title: IMPROVEMENTS IN OR RELATING TO HYDRAULIC APPARATUS FOR PREVENTING CHECKING OR CONTROLLING RELATIVE MOVEMENT BETWEEN ASSOCIATED BODIES

Priority: GB19510009522 19510424

Family:

Publication number	Publication date	Application number	Application date
GB682923 A	19521119	GB19510009522	19510424

Probable Assignee: KAC LTD

Assignee(s):(std): KAC LTD

Assignee(s): K A C LIMITED ; K A C LTD

Inventor(s):(std): LOVE JOHN

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Abstract:
Source: GB682923A 682,923. Dashpots. K.A.C., Ltd. Oct. 22, 1951 [April 24, 1951; Sept. 7, 1951], Nos. 9522/51 and 21165/51. Addition to 667,769. Class 108 (iii). [Also in Group XXXIII] The invention relates to an improvement in the means for automatically restricting the liquid flow in the hydraulic apparatus forming the subject of the parent Specification. According to the invention, a control unit for the apparatus comprises a push–rod 9 (Fig. 1) which co–operates with a check–valve 8, loading means 26 adapted to urge the push–rod in a valveopening direction, and a control shaft 13 connected by linkage means 22, 23 to the push–rod 9 in such a manner that rotation of the shaft 13 causes translational movement of the pushrod in a valve–opening or valve–closing direction with a degree of lost motion, whereby for a predetermined setting of the shaft 13 (shown), the valve 8 is free to (at least partially) close under liquid pressure against the action of the loading means 26, the linkage means 22, 23 being adapted to restrain the push–rod 9 from movement in a valve–opening direction subsequent to such closure of the valve. The valve 8 is disposed in a conduit 2, 2<1> which as in the parent Specification is connected to either side of the piston of an hydraulic cylinder or to the two respective chambers formed by a rotating vane in a liquid–filled casing. The piston or vane may be connected to the harness of a pilot (see Group XXXIII), the cylinder or casing being rigid with the airframe. The loading means 26 comprises a coiled spring, the precompression of which can be controlled by screw adjustment of an abutment 27. The push–rod 9 is of stepped tubular form and is slidable in the casing 10 of the control unit. The push–rod 9 is slotted at 12 so as to clear the shaft 13 which is journalled in the casing 10. A crank 22 is mounted with lostmotion on the shaft 13 by virtue of a Woodruff key 21 on the shaft which engages an elongated keyway 20 in the crank 22. A link 23 is connected between the crank 22 and the push–rod 9 at 32. In operation, with the shaft 13 in the position shown, normal forward movements by the pilot, result in liquid flow from right to left of the conduit 2, 2<1> which is insufficient to close the valve 8 against the resistance of the push–rod 9 acted on by the spring 26. This setting of the shaft 13 corresponds to the " Auto–Lock " setting of the apparatus in the parent Specification. If the liquid pressure is sufficient to close the valve 8, the resultant movement of the push–rod 9 draws the link 23 and crank 22 into the dead–centre position (the slot 20 moving over the stationary key 21). Springs 31 connected between push–rod at 32 and the crank 22, then draw the crank 22, two degrees past the dead centre to the position of Fig. 2 (not shown), in which the upper end of the keyway engages the key and a nub 34 on the link 23 engages a surface 35 of the crank 22. In this position, the push–rod 9 is locked against movement to the right and the valve 8 remains closed under liquid flow of the slightest pressure from right to left in the conduit 2, 2<1>. The valve is free to open under flow in the reverse direction. The linkage 22, 23 may be brought back into the position of Fig. 1 by clockwise rotation of the shaft 13. The key 21 then prevents movement of the linkage back to the dead–centre position and the valve 8 is unable to close, however great the pressure of flow. This corresponds to the " Forced Unlock " position of the parent Specification. The shaft 13 may then be moved back to the " Auto–Lock " position, or may be rotated further to a " Manually Locked " setting in which the key 21 travels to the lower end of the keyway 20 and draws the crank over the dead–centre position. The springs 31 may be dispensed with, or alternatively the spring 26 may be omitted, its function being fulfilled by the springs 31. In the construction shown in Fig. 4, the push–rod 9<1> is connected by a link 38 to a crank 37 mounted with lost–motion on a shaft 13<1> in a similar way to the crank 22 of Fig. 1. In this case a key 21<1> on the crank operates in a keyway 20<1> in the shaft. The

crank 37 is connected by a spring link 41 to the casing 101. The link 41 comprises telescopic members 42, 43 surrounded by a compression spring 46 and has a ball–joint connection at 44, with a member 45 normally rigid with, but adjustable relative to, the casing 10. In the " Auto–Lock " setting (shown) of the shaft 131 the spring 46 acts via the crank 37 and link 38 on the push–rod 9<1> to maintain the valve open. Closure of the valves under sufficient liquid flow results in the crank and spring link 41 passing the dead–centre position, the movement being limited by the travel of the key 21<1> and the engagement of the top of the shaft 13<1> by the link 38, Fig. 5 (not shown). The shaft 131 may be rotated to " Forced Unlock " and " Manually Locked positions as before. In a further modification (not shown), the shaft 13 is disposed parallel to the axis of the casing 10 and carries a swash–plate which acts on the push–rod 9. Alternatively the shaft 13 may be disposed at an angle to the axis of the casing 10 and may carry an oblique crank. As in the parent Specification, the shaft 13 is rigid with a drum which is urged by a spiral spring into the " Manually Locked " position, the drum is connected by a flexible cable to a piston reciprocable within a tubular casing adjacent the pilot. The piston is slotted for pivotal connection with a lever, one end of which is pivoted to the casing the other end being formed with a handle. The casing may be slotted to form a gate for the lever.

0) US2001029384A – ANASTOMOSIS INSTRUMENT AND METHOD

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Title: Anastomosis instrument and method

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Probable Assignee: TYCO HEALTHCARE GROUP LP

Assignee(s):(std)**:** HINCHLIFFE PETER ; MANZO SCOTT E ; MILLIMAN KEITH ; ORBAN JOSEPH P III ; HINCHLIFFE PETER W J ; MILLIMAN KEITH L ; NICHOLAS DAVID A ; MATULA PAUL A ; TYCO HEALTHCARE GROUP LP ; SMITH ROBERT C ; US SURGICAL ; STOWELL JAMES RICHARD GEORGE ; SNIFFEN KEVIN ; SNIFFIN KEVIN ; TYCO HEALTHCARE ; HEATON LISA W ; UNITED STATES SURGICAL CORP

Assignee(s): SURGICAL UNITED STATES CORP ; UNITED STATES SURGICAL CORP NORWALK ; RATCLIFF KEITH ; UNITED STATES SURGICAL ; HINCHLIFFE PETER WJ ; COVIDIEN LP ; GREEN DAVID T ; GRESHAM RICHARD D ; SURGICAL CORP ; SURGICAL DYNAMICS INC ; HINCHLIFFE PETER W ; ORBAN JOSEPH P

Inventor(s):(std)**:** GREEN DAVID T ; GRESHAM RICHARD D ; HEATON LISA W ; HINCHLIFFE PETER W J ; MATULA PAUL A ; NICHOLAS DAVID ; NICHOLAS DAVID A ; ORBAN JOSEPH P III ; RATCLIFF KEITH ; SMITH ROBERT ; SMITH ROBERT C ; SNIFFEN KEVIN ; SNIFFIN

KEVIN ; STOWELL JAMES RICHARD GEORGE ; SCOTT E MANZO ; PETER W J HINCHLIFFE ; ORBAN JOSEPH P ; MILLIMAN KEITH ; LISA W HEATON ; KEVIN SNIFFIN ; KEITH L MILLIMAN ; JOSEPH P ORBAN III ; HINCHLIFFE PETER W ; HINCHLIFFE PETER ; DAVID A NICHOLAS ; MILLIMAN KEITH L ; RICHARD D GRESHAM ; PETER WJ HINCHLIFFE ; PETER HINCHLIFFE ; KEVIN SNIFFEN ; KEITH RATCLIFF ; KEITH MILLIMAN ; HINCHCLIFFE PETER ; DAVID T GREEN ; NICOLAS DAVID A ; MANZO SCOTT E

Inventor(s): HINCHLIFFE PETER WJ ; PETER HINCHCLIFFE ; ORBAN III JOSEPH P ; MANZO SCOTT ; PAUL A MATULA

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP; EDWARDS ANTONY C; HOFFMANN EITLE; UNITED STATES SURGICAL , A DIVISION OF TYCO HEALTHCARE GROUP LP; UNITED STATES SURGICAL A DIVISION OF TYCO HEALTHCARE GROUP LP; TYCO HEALTHCARE GROUP LP

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): A61B17/04 A61B17/064 A61B17/068 A61B17/08 A61B17/10 A61B17/11 A61B17/115 A61B17/128 A61B17/14 A61B17/28 A61B17/32 A61B17/34 A61F2/06 B01D17/02 B01D17/028 (Advanced/Invention);
A61B17/02 A61B17/064 A61B17/08 A61B17/11 A61B17/115 A61B17/122 A61B17/128 A61B17/28 A61B17/32 (Advanced/Non–invention);
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A61B17/02 A61B17/064 A61B17/12 A61B17/28 A61B17/32 (Core/Non–invention)

International class (IPC 1–7): A61B17/00 A61B17/04 A61B17/064 A61B17/08 A61B17/10 A61B17/11 A61B17/115 A61B17/128 A61B17/32 A61B17/34 C02F1/40

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European class: A61B17/064D A61B17/11 A61B17/115B A61B17/128E A61B17/3205G B01D17/02F K61B17/00R4 K61B17/02R K61B17/064A K61B17/064D K61B17/08 K61B17/08C K61B17/115 K61B17/115B K61B17/11B K61B17/11P K61B17/122 K61B17/128E K61B17/29H6C4 K61B17/3205G

US class: 206/340 210/521 210/538 210/DIG.5 227/175.1 227/175.2 227/176.1 227/179.1 227/180.1 227/19 606/139 606/139P 606/139S 606/142 606/143 606/143P 606/149 606/149S 606/151 606/151P 606/151S 606/153 606/153P 606/153S 606/167 606/184 606/213 606/219 623/1.23

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Abstract:
Source: US2001029384A A surgical instrument for performing an anastomosis includes a housing having a proximal end and a distal end; a shaft extending from the housing distal end; and a disposable loading unit configured and dimensioned to retain a plurality of surgical fasteners, the disposable loading unit extending from the shaft and forming a juncture with the shaft, the disposable loading unit including: i) opposed split−sections pivotably connected to facilitate movement of the opposed split−sections between open and closed configurations, the opposed split sections being movable through a firing stroke from a first position to a second position and back to the first position to form a plurality of surgical fasteners; and ii) a pivot lockout member including a latch portion which extends between the opposed split−sections, the latch portion including a contact surface which interacts with a corresponding surface formed on at least one of the opposed split−sections to retain the opposed split−sections in the closed configuration, wherein upon return of the fastener pusher member to the first position from the second position, the pivot lockout member is displaced relative to the opposed split sections to an unlocked configuration.

0) WO08111089A2 – INTERACTION BETWEEN KEY COMBINATION ELEMENT AND...

50) Family number: 42163885 (WO08111089A2) © PatBase

Title: INTERACTION BETWEEN KEY COMBINATION ELEMENT AND LOCK COMBINATION ELEMENT

Priority: IL20070181847 20070311

Family:

Publication number	Publication date	Application number	Application date
AR065678 AA	20090624	AR2008P100985	20080310
CN101265756 A	20080917	CN200810083871	20080311
IL181847 A0	20070704	IL20070181847	20070311
IL181847 A1	20131031	IL20070181847	20070311
TW200900568 A	20090101	TW20080108390	20080310
WO08111089 A2	20080918	WO2008IL00448	20080330
WO08111089 A3	20081224	WO2008IL00448	20080330

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** EFFI BEN AHARON ; MARKBREIT DANI ; MARKBREIT DANY ; MUL T LOCK TECHNOLOGIES LTD ; BEN AHARON EFFI ; DANY MARKBRCIT

Assignee(s): DANY MARKBREIT

Inventor(s):(std)**:** BEN AHARON EFFI ; MARKBREIT DANI ; MARKBREIT DANY ; DANI MARKBREIT

Inventor(s): EFFI BEN AHARON ; DANY MARKBREIT ; BEN–AHARON, EFFI

Agent(s): DEKEL PATENT LTD; KLEIN DAVID

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 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): E05B19/00 E05B21/06 E05B35/00 (Advanced/Invention); E05B19/00 E05B35/00 (Core/Invention); E05B (Subclass/Invention)

International class (IPC 1–7): E05B29/00

CPC: E05B35/003

European class: E05B35/00F

Classification Explorer

Cited documents: US5520035 A, FR2521201 A1, DE3424307 A1,

Forward Citations: WO15000966, WO14147654, WO13141785, ITTO20120161, ITBO20130122, CN104220684, CN104220684, CN104179399, AU2013235854,

Abstract:
A lock including a cylinder lock housing, a plug disposed in the cylinder lock housing, arranged for rotation relative thereto along a shear line and having a keyway, a key including a generally elongate shaft portion having a surface formed with key cuts that define a key combination surface, wherein at least one key combination element is movably disposed in the elongate shaft portion, and a lock combination element disposed in the plug and including grabbing structure for grabbing the at least one key combination element.

0) US2002108407A – PIN LOCKING DEVICE AND METHOD OF LOCKING

51) Family number: 28240237 (US2002108407A) © PatBase

Title: PIN LOCKING DEVICE AND METHOD OF LOCKING

Priority: US20010780536 20010212 WO2002US03184 20020204

Family:

Publication number	Publication date	Application number	Application date
AU2002243810 AA	20020828	AU20020243810	20020204
CA2437869 AA	20030811	CA20022437869	20020204
CN100482913 C	20090429	CN20028008059	20020204
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MXPA03007184 A1	20031204	MX2003PA07184	20020204
TW513509 B	20021211	TW20020102439	20020208
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US6862905 BB	20050308	US20010780536	20010212
WO02064922 A1	20020822	WO2002US03184	20020204

Probable Assignee: MASTER LOCK CO LLC

Assignee(s):(std)**:** MASTER LOCK CO ; ZAPUSHEK JOHN B

Assignee(s): MASTER LOCK CO LLC ; MASTER LOCK COMPANY

Inventor(s):(std)**:** JOHN B ZAPUSHEK ; ZAPUSHEK JOHN B

Agent(s): RIDOUT AND MAYBEE LLP; CALFEE HALTER AND GRISWOLD 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 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 ZM ZW

International class (IPC 8–9): B60D1/60 B60R25/06 B62D43/00 E05B15/00 E05B67/36 F16B21/00 (Advanced/Invention); B60D1/00 B62D43/00 E05B67/00 F16B21/00 (Core/Invention)

International class (IPC 1–7): B60R25/06 E05B15/00 E05B67/36

CPC: Y10T70/40 Y10T70/443 Y10T70/5009 E05B67/36 B60D1/60 B62D43/007

European class: B60D1/60 B62D43/00D E05B67/36

US class: 70/14 70/34 70/340 70/58

Classification Explorer

Cited documents: USD447043 S1, USD444050 S1, USD439827 S1, USD428795 S1, US6402181 BA, US6364339 BA, US6055832 A, US5960653 A, US5794465 A, US5676258 A, US5664445 A, US5540065 A, US5467619 A, US5447045 A, US5284038 A, US5272894 A, US5269161 A, US5216903 A, US5197314 A, US5152160 A, US5063763 A, US5050413 A, US5027630 A, US5022243 A, US5004133 A, US4964285 A, US4888967 A, US4730468 A, US4711106 A, US4637234 A, US4619122 A, US4576021 A, US4440005 A, US4438642 A, US4298212 A, US4277961 A, US4236395 A, US4226100 A, US4198026 A, US4141232 A, US3999414 A, US3963264 A, US3911761 A, US3908415 A, US3902339 A, US3843160 A, US3783657 A, US3721112 A, US3652114 A, US3605457 A, US3559429 A, US3453846 A, US3197239 A, US3139291 A, US2677261 A, US2541638 A, US1617204 A, US1566473 A, SU1633073 T, GB639639 A, GB2248650 A1, GB1205190 A, FR695446 A, EP0415355 A2, EP0242277 A1, DE342074 A, DE2425386 A1,

Forward Citations: WO13023794, WO13023794, WO10025123, WO04057138, USD729608, USD724930, USD724929, USD724928, USD703023, USD511292, US9423823, US8842422, US8763433, US8607600, US8302435, US7698916, US7568718, US7448236, US7353671, US7338065, US7225649, US6997658, US2012212000, US2011154868, US2011122551, US2010043508, US2008178640, US2008061530, US2007180871, US2007137266, US2007044523, US2005022618, US2005000255, US2004211230, CN104145069, CN104145069, CN102149891,

Abstract:
Source: US2002108407A A locking device for locking one or more objects together includes a lock stud defined by an elongated shaft having a head at a first end and an annular recess at a second end, and a lock body that slides over and locks onto the second end. The lock body includes an outer housing having an aperture for receiving the second end of the elongated shaft. A cylinder lock mechanism is positioned in the outer housing, and the cylinder lock is rotatable between a locked an unlocked position. The cylinder lock is rotationally coupled to a locking disc that is eccentrically disposed in the outer housing with respect to the aperture of the outer housing. The locking disc has an aperture therein that engages the annular recess in the elongated shaft when the cylinder lock is rotated to the locked position. The locking device also includes a sleeve that is dimensioned to slide over the elongated shaft to allow the locking device to be used for locking through several different sized apertures.

0) US5520034A – TRAILER WHEEL LOCKING AND ANTI–THEFT DEVICE

52) Family number: 12556145 (US5520034A) © PatBase

Title: TRAILER WHEEL LOCKING AND ANTI–THEFT DEVICE

Priority: US19950432948 19950501

Family:

Publication number	Publication date	Application number	Application date
US5520034 A	19960528	US19950432948	19950501

Probable Assignee: JME PRODUCTS CORP

Assignee(s): EDMONDSON JACK M ; JME PRODUCTS CORP

Inventor(s):(std)**:** EDMONDSON JACK M

International class (IPC 8–9)**:** B60R25/00 (Advanced/Invention); B60R25/00 (Core/Invention)

International class (IPC 1–7)**:** B60R25/00

CPC: B60R25/09 Y10T70/5841 Y10T70/5867 Y10T70/5889

European class: B60R25/09

US class: 188/32 70/226 70/232 70/237

Classification Explorer

Cited documents: US5410897 A, US5375442 A, US5137121 A, US4878366 A, US4856308 A, US4819462 A, US4747279 A, US4738127 A, US4723426 A, US4688408 A, US4649724 A, US3828590 A, US2960857 A, US1386414 A, US1347262 A, FR1240446 A,

Forward Citations: USD513975, US8733140, US8590674, US7278341, US7264092, US6796154, US6408658, US5927108, US5724839, US2011226565, US2006144649, US2005147466, US2004089036, GB2350594,

Abstract:
Source: US5520034A A wheel–locking device has a nut shield (13) with a wheel–bolt orifice (17) on an attachment–plate (18) end of the nut shield. The nut shield is positioned on a wheel bolt (14) between a wheel (5) and a wheel nut (15) that is tightened onto the wheel bolt. Walls (37, 39) of the nut shield have lock–rod keyholes (12, 51) that are sized and shaped to receive a keyhole shaft (11) having lock extensions (19, 40, 49, 50) positioned in line with keyhole bays (20) in the lock–rod keyholes. Then a lock rod (6) can be rotated to a locking position in which the lock extensions are not in line with the lock bays of the lock–rod keyholes. In this locking position, the lock rod is then locked onto a wheel clamp (1) that hooks over a wheel. This prevents the wheel from being rotated and prevents unlocking rotation of the lock rod in the keyholes, and prevents removal of wheel nut which thus prevents removal of the wheel from the hub, thereby providing a form of locking mechanism for a vehicle on which the wheel is positioned.

0) US5666835A – KEY AND INSTALLATION DOUBLE CYLINDER FOR A SECU...

53) Family number: 8548672 (US5666835A) © PatBase

Title: KEY AND INSTALLATION DOUBLE CYLINDER FOR A SECURITY LOCK

Priority: CA19922079205 19920925 CA19952143794 19950302 CH19940000654 19940304

Family:

Publication number	Publication date	Application number	Application date
AT160199 E	19971115	AT19950810101T	19950216
AU199512308 A1	19950914	AU19950012308	19950216
AU680081 B2	19970717	AU19950012308	19950216
BRPI9500802 A	19951024	BR1995PI00802	19950303
CA2143794 AA	19950905	CA19952143794	19950302
CA2143794 C	20050412	CA19952143794	19950302
CZ289889 B6	20020417	CZ19950000304	19950207
CZ9500304 A3	19951213	CZ19950000304	19950207
DE59500961 D1	19971218	DE19955000961	19950216
EP0670401 A1	19950906	EP19950810101	19950216
EP0670401 B1	19971112	EP19950810101	19950216
ES2091031 T3	19961016	ES19930920624T	19930922
ES2109074 T3	19980101	ES19950810101T	19950216
FI104198 B	19991130	FI19950000973	19950302
FI950973 A	19950905	FI19950000973	19950302
FI950973 A0	19950302	FI19950000973	19950302
GR3025505 T3	19980227	GR19970403154T	19971126
HU220288 B	20011128	HU19950000651	19950302
HU71439 A2	19951128	HU19950000651	19950302
HU9500651 A0	19950428	HU19950000651	19950302
JP2721130 B2	19980304	JP19950033382	19950222
JP7259399 A2	19951009	JP19950033382	19950222
PL176482 B1	19990630	PL19950307492	19950301
PL307492 A1	19950918	PL19950307492	19950301
SG44547 A1	19971219	SG19960092041	19950216
SK20095 A3	19951108	SK19950000200	19950213
SK284911 B6	20060202	SK19950000200	19950213
US5666835 A	19970916	US19950388979	19950215

Probable Assignee: KESO AG

Assignee(s):(std)**:** HYAL PHARMA CORP ; KELLER ; KELLER ERNST

Assignee(s): KELLER ERNST RICHTERSWIL CH ; KESO AG ; HYAL PHARMACEUTICAL CORP ; ERNST KELLER ; ERUNSUTO KERAA

Inventor(s):(std)**:** ERUNSUTO KERAA ; FALK RUDOLF EDGAR ; KELLER ERNST ; ASCULAI SAMUEL SIMON ; TURLEY EVA ANNE

Inventor(s): ERNST KELLER ; KELLER ERNST RICHTERSWIL CH

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; OGILVY RENAULT LLP SENCRL SRL

Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

International class (IPC 8–9)**:** A61K31/185 A61K31/375 A61K31/70 A61K31/715 A61K31/728 A61K45/00 A61P43/00 A61P9/00 A61P9/08 A61P9/10 A61P9/14 E05B15/14 E05B19/00 E05B27/10 E05B35/12 E05B9/04 E05B9/10 (Advanced/Invention);
A61K31/185 A61K31/375 A61K31/70 A61K31/715 A61K31/726 A61K45/00 A61P43/00 A61P9/00 E05B19/00 E05B27/00 E05B35/00 E05B9/00 (Core/Invention);

	A61K (Subclass/Invention)
International class (IPC 1–7):	A61K31/725 A61K31/73 E05B15/14 E05B19/00 E05B19/02 E05B19/08 E05B25/00 E05B27/00 E05B27/08 E05B27/10 E05B35/12 E05B63/14 E05B9/10
CPC:	A61K31/715 Y10S70/60 Y10T70/7808 Y10T70/7814 E05B9/045 E05B15/1614 E05B19/18 E05B35/08
European class:	A61K31/715 E05B19/18 E05B35/08 E05B9/04C P05B15/16B
US class:	70/396 70/397 70/DIG.6 70/DIG.60
Classification Explorer	
Cited documents:	US5479801 A, US4292824 A, US4195504 A, US4120184 A, US4068510 A, US4031729 A, US3974671 A, US3533254 A, US160660 A, US149191 A, US1438525 A, NL7800771 A, DE487691 A, DE4201170 A1, DE3828354 A1, DE3125796 A1, CH397463 A,
Forward Citations:	WO16135717, WO16135290, WO14199224, WO13019281, WO08029391, US8650919, US8640515, US8347678, US8291735, US8099988, US8033150, US8001817, US7946144, US7698920, US7637131, US7428836, US7181937, US7059160, US6532781, US2016108642, US2014216114, US2010319421, US2010154497, US2010011822, US2009031774, US2009013734, US2008236224, US2008223096, US2008168813, US2008087060, US2008053175, US2007214851, US2007163315, US2005274162, US2004148989, US2004003634, US2003159483, JP2007284878, GB2535783, EP2987930, DE10302887, CN104563607, CN104453388, CN104453388, CN104405188, CN103967341, CN103967341, CN103334641, CN102677972, CN101949243,

Abstract:
Source: US5666835A A key and an installation double cylinder for a security lock is disclosed with two cylinder halves, a cylinder core and tumblers which are constructed as core pins and housing pins and can be brought into line by means of the key, which can be inserted into the keyway to release the cylinder core for rotation. The key has, at its bit, a lengthening element by which the tumblers in an oppositely located cylinder half can be brought into line for free turning. The cylinder half on the outside of the door can have a solid rotor of hardened steel which protects the cylinder half on the inside.

0) US2012083826A – SURGICAL DEVICE AND METHODS

54) Family number: 47025687 (US2012083826A) © PatBase

Title: SURGICAL DEVICE AND METHODS

Priority: EP20100759172 20100405 US20090166654P 20090403 US20100314595P 20100317 US20090187078P 20090615 US20090173147P 20090427 US20110251265 20111002 WO2010US01036 20100405 US20160094797 20160408

Family:

Publication number	Publication date	Application number	Application date
AU2010232921 AA	20101007	AU20100232921	20100405
AU2010232921 BB	20160428	AU20100232921	20100405
BRPI1013655 A2	20170606	BR2010PI13655	20100405
CA2757822 AA	20101007	CA20102757822	20100405
CN102438537 A	20120502	CN201080014442	20100405
CN102438537 B	20141126	CN201080014442	20100405
DE602010031227 D1	20160428	DE201060031227T	20100405
EP2413827 A1	20120208	EP20100759172	20100405
EP2413827 A4	20131016	EP20100759172	20100405
EP2413827 B1	20160316	EP20100759172	20100405
IN04141KN2011 A	20120629	IN2011KN04141	20111007
JP2012522576 T2	20120927	JP20120503435T	20100405
JP5489187 B2	20140514	JP20120503435T	20100405
KR101716520 B1	20170327	KR20117026111	20100405
KR20120007522 A	20120120	KR20117026111	20100405
MX2011010439 A1	20120703	MX20110010439	20100405
MX345296 B	20170124	MX20110010439	20100405
SG174985 A1	20111128	SG20110071198	20100405
US2012083826 AA	20120405	US20110251265	20111002
US2016287232 AA	20161006	US20160094797	20160408
US9308011 BB	20160412	US20110251265	20111002
WO10114634 A1	20101007	WO2010US01036	20100405

Probable Assignee: UNIV LELAND STANFORD JUNIOR

Assignee(s):(std)**:** DONG ZHI CHEN ; JOU RONALD ; BREWER REUBEN ; DUGGAN BRYAN J ; PELL CHRISTOPHER STEVEN ; CHAO KEVIN ZI JUN ; MAGEE GREG ; DUGGAN BRYAN ; ROOP JOHN AVI ; UNIV LELAND STANFORD JUNIOR ; RUBY THOMAS ; BOARD OF TRUSTEES OF LELAND STANDFORD JUNIOR UNIV ; BOARD OF TRUSTEES OF LELAND STANFORD JUNIOR UNIV

Assignee(s): BOARD OF TRUSTEES OF LELAND STANFORD JUNIOR UNIV STANFORD ; BOARD OF TRUSTEES OF LELAND STANFORD JR UNIV ; THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY

Inventor(s):(std)**:** AVI ROOP JOHN ; BREWER REUBEN ; BRIAN J DUGGAN ; BRYAN J DUGGAN ; CHAO KEVIN ZI JUN ; CHEN DONG ZHI ; CHRISTOPHER STEVEN PELL ; DONG ZHI CHEN ; DUGGAN BRYAN ; DUGGAN BRYAN J ; GREG MAGEE ; JOHN AVI ROOP ; JOU RONALD ; KEVIN ZI JUN CHAO ; MAGEE GREG ; PELL CHRISTOPHER STEVEN ; REUBEN BREWER ; RONALD JOU ; ROOP JOHN AVI ; RUBY THOMAS ; STEVEN PELL CHRISTOPHER ; THOMAS RUBY ; ZHAO ZI JUN ; ZHI CHEN DONG ; ZI CHAO KEVIN JUN

Inventor(s): ROOP JOHN ; PELL CHRISTOPHER ; DONG ZHI ; CHAO KEVIN

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; SMART AND BIGGAR; MCLEISH NICHOLAS ALISTAIR MAXWELL; BOULT WADE TENNANT; VISTA IP LAW GROUP LLP; WILLIAM A; ENGLISH WILLIAM A

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 A61B17/02 A61B17/122 A61B17/128 A61B17/28 A61B17/29 A61B17/34 A61B17/94 A61B18/14 A61M25/01 (Advanced/Invention); A61B17/34 A61B18/14 (Advanced/Non–invention)

CPC: A61B17/122 A61B17/1285 A61B2018/1422 A61B17/0218 A61B18/1482 A61B2017/00464 A61B2017/00477 A61B2017/2931 A61B2017/294 A61B17/00234 A61B17/29 A61B18/1445 A61B2017/00283 A61B2017/00296 A61B2017/00473 A61B2018/1495 A61B2218/007

European class: A61B17/00E A61B17/02E A61B17/122 A61B17/128E A61B17/29 A61B18/14F2 A61B18/14R K61B17/00E3E K61B17/00H2 K61B17/00H6 K61B17/00K K61B17/02E K61B17/29J4 K61B17/29J6L2 K61B18/14C10 K61B18/14R K61B18/14X K61B218/00D4

US class: 1/1 606/205 606/205P

Classification Explorer

Cited documents: WO11089565 A1, WO06099425 A1, US7862553 BB, US7699835 BB, US7429259 BB, US7241290 BB, US7122028 BB, US6916314 BB, US6723043 BB, US6607475 BB, US6558318 BA, US6309397 BA, US6074408 A, US5893875 A, US5792165 A, US5792165, US5782748 A, US5618303 A, US5593402 A, US5441059 A, US5441059, US5368606 A, US5352219 A, US5336238 A, US5308358 A, US4572038 A, US2011208007 AA, US2011087266 AA, US2011087265 AA, US2010298774 AA, US2010249700 AA, US2008287926 AA, US2008243106 AA, US2008015552 AA, US2007027469 AA, US2005165449 AA, US2003130693 AA, US2003060687 AA, JP9511412 T2, JP9511412 T2, JP2007098130 A2, JP2007098130, EP1989990 A1,

Forward Citations: WO16128873, WO15026643, WO14145595, WO14145595, WO14133747, WO14129362, WO13129635, WO13036024, WO12142442, WO12142442, WO12112622, WO12112622, WO11089565, USD770616, USD765243, US9706991, US9700310, US9693777, US9690362, US9687237, US9668807, US9668765, US9655624, US9649110, US9629814, US9629650, US9629629, US9603618, US9592089, US9592054, US9592053, US9585658, US9526516, US9456872, US9451937, US9413896, US9326785, US9295485, US9291663, US9289226, US9283040, US9282879, US9277939, US9186203, US9186167, US9138207, US9125681, US9028520, US8992566, US8961551, US8721539, US2016175050, US2014343365, US2014243868, US2014188148, US2014094854, US2014074135, US2014025071, US2013338534, US2013331646, US2011208007, US2010298774, KR101708047, KR101379525, JP6023725, JP5883117, JP2014512888, JP2013129635, EP3097873, EP2983598, EP2853220, EP2848203, EP2777562, EP2675374, EP2675374, EP2522285, CN105263434, CN104042282, CN103857350, AU2013200993, AU2010259131,

Abstract:
Source: US2012083826A A system and method for abdominal surgery is disclosed. The system can have one or more end effectors that can be attached to an introducer and/or tray and inserted into the abdomen through a large puncture through the patient's umbilicus. The end effector can have a surgical tool, such as a grasper. The system can have a manipulatable control arm that can be inserted into the abdomen through a small puncture through the patient's body wall. The end effector can be attached to the control arm and simultaneously or concurrently detached from the introducer or tray. The control arm can then manipulate the end effector to perform the surgery.

0) US2006219496A – RESIDUAL MAGNETIC DEVICES AND METHODS

55) Family number: 33431870 (US2006219496A) © PatBase

Title: RESIDUAL MAGNETIC DEVICES AND METHODS

Priority:

EP20060749065	20060330	EP20060758248	20060330	US20050093739	20050330
US20050093721	20050330	US20050094786	20050330	US20050093761	20050330
US20050094787	20050330	US20050094800	20050330	US20050094804	20050330
US20050280983	20051116	US20050094818	20050330	US20050094801	20050330
US20050094843	20050330	US20050094802	20050330	US20060343942	20060131
US20060343943	20060131	WO2006US12016	20060330	WO2006US12015	20060330
WO2006US12093	20060330	WO2006US12393	20060330	WO2006US12010	20060330
WO2006US12012	20060330	WO2006US44449	20061116	US20110169225	20110627
US20060343941	20060131	US20130776827	20130226		

Family:

Publication number	Publication date	Application number	Application date
CN101163620 A	20080416	CN200680001946	20060330
CN101163620 B	20110914	CN200680001946	20060330
CN101283155 A	20081008	CN200680001948	20060330
CN101283155 B	20110316	CN200680001948	20060330
CN101360627 A	20090204	CN200680050989	20061116
CN101389514 A	20090318	CN200680001949	20060330
CN101536295 A	20090916	CN200680001978	20060330
CN101584014 A	20091118	CN200680001939	20060330
CN101584014 B	20130109	CN200680001939	20060330
DE602006043204 D1	20141113	DE200660043204T	20060330
DE602006044676 D1	20150416	DE200660044676T	20060330
EP1863991 A2	20071212	EP20060740441	20060330
EP1863991 A4	20140108	EP20060740441	20060330
EP1863992 A2	20071212	EP20060749065	20060330
EP1863992 A4	20130109	EP20060749065	20060330
EP1863992 B1	20141001	EP20060749065	20060330
EP1863993 A2	20071212	EP20060749066	20060330
EP1863994 A2	20071212	EP20060749083	20060330
EP1863995 A2	20071212	EP20060758248	20060330
EP1863995 A4	20090603	EP20060758248	20060330
EP1863995 B1	20150304	EP20060758248	20060330
EP1863996 A2	20071212	EP20060824684	20060330
EP1863996 A4	20090603	EP20060824684	20060330
EP1948467 A2	20080730	EP20060837742	20061116
US2006219496 AA	20061005	US20050094787	20050330
US2006219497 AA	20061005	US20050280983	20051116
US2006219498 AA	20061005	US20060343942	20060131
US2006219499 AA	20061005	US20060343941	20060131
US2006219513 AA	20061005	US20060343943	20060131
US2006220393 AA	20061005	US20050093721	20050330
US2006225973 AA	20061012	US20050094804	20050330
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US2006226939 AA	20061012	US20050093739	20050330
US2006226941 AA	20061012	US20050094818	20050330
US2006226942 AA	20061012	US20050094843	20050330
US2006227488 AA	20061012	US20050094802	20050330

US2006237959 AA	20061026	US20050094800	20050330	
US2006238284 AA	20061026	US20050093761	20050330	
US2006238285 AA	20061026	US20050094786	20050330	
US2011248588 AA	20111013	US20110169225	20110627	
US2013201591 AA	20130808	US20130776827	20130226	
US7401483 BB	20080722	US20050093739	20050330	
US7969705 BB	20110628	US20050094802	20050330	
US8149557 BB	20120403	US20110169225	20110627	
US8403124 BB	20130326	US20050094801	20050330	
WO06105423 A2	20061005	WO2006US12010	20060330	
WO06105423 A3	20071115	WO2006US12010	20060330	
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WO06105428 A2	20061005	WO2006US12015	20060330	
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WO06105449 A3	20090423	WO2006US12093	20060330	
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WO06105513 A3	20090423	WO2006US12393	20060330	
WO07030144 A2	20070315	WO2006US12016	20060330	
WO07030144 A3	20071129	WO2006US12016	20060330	
WO07059261 A2	20070524	WO2006US44449	20061116	
WO07059261 A3	20071018	WO2006US44449	20061116	
WO07089693 A2	20070809	WO2007US02370	20070130	
WO07089693 A3	20071213	WO2007US02370	20070130	
WO07089850 A2	20070809	WO2007US02653	20070130	
WO07089850 A3	20080131	WO2007US02653	20070130	

Probable Assignee: STRATTEC SECURITY CORP

Assignee(s):(std)**:** DIMIG STEVEN J ; FEUCHT MICHAEL G ; ORGANEK GREGORY J ; PAULSON MARK S ; STRATTEC SECURITY CORP

Assignee(s): STRATTEC SECURITY CORP MILWAUKEE

Inventor(s):(std)**:** DIMIG STEVEN J ; FEUCHT MICHAEL G ; ORGANEK GREGORY J ; PAULSON MARK S

Inventor(s): DIMIG STEVEN ; ORGANEK GREGORY J WHITEFISH BAY ; PAULSON MARK ; FEUCHT MICHAEL G MENOMONEE FALLS ; ORGANEK GREGORY ; DIMIG STEVEN J PLYMOUTH ; FEUCHT MICHAEL

Agent(s): MITSCHERLICH PATENT U RECHTSANWAELTE PARTMBB; SAMSON AND PARTNER PATENTANWAELTE MBB; LAWRENCE JOHN; MICHAEL BEST AND FRIEDRICH LLP; MICHAEL BEST AND FRIEDRICH; FELLOWS GERALD L 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 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 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): B60K26/00 B60L7/00 B60L7/10 B60R25/021 B60R25/08 B60T11/00 B62D15/02 E05B47/00 E05B47/02 E05B53/00 E05B65/12 E05C17/00 E05C19/16 F16D121/20 F16D125/36 F16D13/75 F16D19/00 F16D23/00 F16D27/00 F16D27/02 F16D27/06 F16D27/14 F16D37/02 F16D43/20 F16D55/08 F16D63/00 F16D65/18 F16D65/28 F16F15/03 F16F9/32 H01F13/00 H01F7/00 H01F7/04 H01F7/08 H01F7/121 H01F7/18 H01H47/00 H01H47/28 H01H9/00 H02K21/26 H02K41/00 H02K49/00 H02K49/10 H02P15/00 (Advanced/Invention); F16D121/20 F16D125/36 (Advanced/Non–invention);

B60L7/00 B62D15/00 E05B47/00 F16D19/00 F16D23/00 F16D27/00 F16D37/00 F16D43/00 H01F7/08 H01H47/00 H01H9/00 H02K21/00 (Core/Invention)

CPC: B60L7/00 B60R25/0222 B60R25/04 B60R25/2063 F16D2121/22 F16D2127/02 F16D2129/08 H02K33/16 Y02T10/641 B60G2300/60 B60R25/005 B62D1/184 H01F13/003 H01F13/006 H01F38/14 B60R25/02 H01F7/124 H01F7/14 B60N2/444 B60T13/02 H01F7/1638 H01F7/18 Y10T292/11 Y10T70/7062 Y10T70/7073 Y10T70/7079 Y10T70/7102 F16D49/20 F16D2027/008 F16D2127/06 F16D2127/08 H01F7/13 B60N2/442 F16D27/112 B60R25/08 B60R25/021 B60R25/02147 E05B47/0004 E05B47/0005 E05B47/0006 E05B47/02 E05B53/008 E05B81/00 E05B81/08 E05B81/14 E05B85/26 E05B2047/0073 E05B2047/0076 E05C17/003 E05C19/166 F16D27/004 F16D27/025 F16D27/06 F16D63/006 F16D65/186 F16D2121/20 F16D2125/36 H01F7/04 H01F7/08 H01F7/121 H01F13/00 H02K33/02

European class: B60L7/00 B60N2/44M B60N2/44M3K B60R25/00G2B B60R25/02 B60R25/021 B60R25/021F B60R25/022D B60R25/04 B60R25/08 B60R25/20N B60T13/02 B62D1/184 E05B81/00 E05C19/16E F16D27/02C F16D27/06 F16D27/112 F16D49/20 F16D63/00H F16D65/14P4D2 F16D65/18D H01F13/00 H01F13/00B H01F7/04 H01F7/08 H01F7/121 H01F7/14 H01F7/16B H02K33/02 H02K33/16 L60G300/60 P05B47/00A1B1 P05B47/00A1B2 P05B47/00A1C P05B47/00F1 P05B47/00F2 P05B47/02 P05B53/00P P05B81/08 P05B81/14 P05B85/26 P05C17/00V R16D121/20 R16D121/22 R16D125/36 R16D127/02 R16D127/06 R16D127/08 R16D129/08 R16D27/00C R16D27/00F T01F13/00 T01F13/00B T01F13/00C T01F38/14 T01F7/04 T01F7/121 T01F7/124 Y02T10/64B

US class: 188/161 188/164 188/72.7 188/72.700S 192/56.41 192/56.410S 192/84.1 192/84.100P 192/84.9 192/84.900P 280/776 280/776P 292/251.5 292/251.500P 310/93 310/93P 335/205 335/205P 335/220 335/220P 335/266 335/266S 335/270 335/270P 335/285 335/289 335/296 361/143 361/143P 361/146 70/277 70/277S 70/278.2 70/278.3 70/278.7

Classification Explorer

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US2003165395 AA, US2003155823 AA, US2003137000 AA, US2003106758 AA, US2003079948 AA, US2002110646 AA, US2002104494 AA, US2002100646 AA, US2002073752 AA, US2002059839 AA, US2002023579 AA, US2002014181 AA, US2001043450 AA, US2001030589 AA, US1352772 A, TW442608, SU640077, JP8247276, JP6284688 A2, JP2193871, JP2003297623, JP2003137000, GB2317992 A1, GB1144360 A, FR2685411, EP1352772, EP1160400, EP1077359, EP0943508, EP0825356 A2, EP0810384 A1, DE4116212, DE4034819, DE3013996, DE2918438, DE2504521, DE10315642, CN101163620,

Forward Citations: WO16057675, WO15110622, WO15090745, WO12123091, WO11094736, WO11082188, WO11070303, WO10101902, WO08071241, WO08052799, WO07030144, WO07030144, WO06105428, WO06105428, US9475534, US9415792, US9396860, US9341283, US9267563, US9228558, US9102349, US9032835, US9000706, US8985521, US8892287, US8860273, US8729842, US8573086, US8528950, US8403124, US8269589, US8262133, US8157689, US8149557, US8106735, US8104823, US8087476, US8028552, US7969705, US7955886, US7676310, US7537224, US7472005, US7401483, US7352267, US2016265602, US2015337913, US2015162858, US2015151779, US2015135883, US2015091272, US2015090544, US2015020639, US2014360597, US2014263915, US2014246928, US2014174245, US2013319163, US2013146011, US2013103242, US2011219895, US2011157942, US2011156522, US2011149618, US2011146650, US2010325967, US2010311016, US2010289606, US2010253169, US2010224410, US2010000274, US2009318266, US2009302980, US2009267339, US2009033150, US2009031767, US2008309120, US2008309118, US2008295283, US2008133087, US2008067027, US2007140782, US2007063798, US2007021888, US2006238285, US2006238284, US2006227488, US2006226942, US2006226941, US2006226939, US2006225985, US2006225973, US2006220778, US2006220393, US2006219513, US2006219499, US2006219498, US2006219497, US2006219496, KR101747988, FR2953978, FR2945998, EP2514644, EP2096330, EP2020519, EP1953774, DE202012008127, CN103562020, CN103119667, CN103119667, CN102414471, CN102414471, CN101966729,

Abstract:
Source: US2006219496A Residual magnetic locks, brakes, rotation inhibitors, clutches, actuators, and latches. The residual magnetic devices can include a core housing and an armature. The residual magnetic devices can include a coil that receives a magnetization current to create an irreversible residual magnetic force between the core housing and the armature.

0) US4100777A – LOCKING DEVICES

56) Family number: 1263411 (US4100777A) © PatBase

Title: LOCKING DEVICES

Priority: FR19750022512 19750718

Family:

Publication number	Publication date	Application number	Application date
AR209666 A1	19770513	AR19760263918	19760712
BE843838 A1	19770106	BE19760168680	19760706
BR7604654 A	19770802	BR19760004654	19760716
CA1042224 A1	19781114	CA19760256660	19760709
CH610046 A	19790330	CH19760009125	19760716
DE2631674 A1	19770120	DE19762631674	19760714
DE2631674 C2	19860403	DE19762631674	19760714
FR2318294 A1	19770211	FR19750022512	19750718
FR2318294 B1	19771209	FR19750022512	19750718
GB1548679 A	19790718	GB19760028296	19760707
IT1071128 A	19850402	IT19760068764	19760714
JP52013999 A2	19770202	JP19760085193	19760719
US4100777 A	19780718	US19760704667	19760712

Probable Assignee: FREDON PIERRE

Assignee(s):(std)**:** FREDON P ; FREDON P A G ; FREDON PIERRE ; FREDON PIERRE A G ; FREDON PIERRE AG ; HAMEAU DES TILLEULS LE COULON

Assignee(s): PIEERU ANDORE GASUTON FUREDON ; FREDON PIERRE ANDRE GASTON ; FREDON PIERRE ANDRE GASTON THIAIS FR

Inventor(s):(std)**:** FREDON P ; FREDON PIERRE A G ; FREDON PIERRE ANDRE GASTON ; PIEERU ANDORE GASUTON FUREDON

Inventor(s): PIERRE ANDRE GASTON FREDON ; FREDON PIERRE ANDRE GASTON THIAIS FR ; GASTON FREDON PIERRE ANDRE ; FREDON PIERRE AG

International class (IPC 8–9): E05B19/06 E05B19/12 E05B27/08 E05B29/08 E05B35/00 (Advanced/Invention); E05B19/00 E05B27/00 E05B35/00 (Core/Invention)

International class (IPC 1–7): E05B19/00 E05B19/02 E05B19/06 E05B19/12 E05B25/00 E05B27/00 E05B27/08 E05B27/10 E05B29/00 E05B29/08

CPC: Y10T70/7593 Y10T70/7819 E05B35/003 E05B27/083

European class: E05B27/08B E05B35/00F

US class: 70/363 70/398 70/491

Classification Explorer

Cited documents: US3738136 A, US3380268 A, US1387442 A, US1037543 A, FR383909 A, DE356747 A, DE2400550 A1,

Forward Citations: WO04111369, US8438890, US8365559, US7712342, US7694542, US7614268, US7260965, US6681609, US6584819, US6386006, US5402660, US5261259, US4899565, US4621510, US2012011908, US2010194527, US2010194526, US2010083718, US2009280862, US2006016232, JP63278301, JP2002101947, GR1007325, GB2161204, FR2910517, FR2812328, FR2696776, FR2604206, EP0262059, DE3534448, CN103171403, AU2004205148, AU2004200498,

Abstract:
Source: US4100777A The disclosure relates to a key, which is dynamic, and a lock to be operated by the dynamic key. The key has a shaft with a key bit and a manual grip at opposite ends thereof. Mounted on the shaft is a bush spring loaded towards the key bit. A radial projection on the shaft engages a pair of mutually intersecting internal grooves in the bush, namely, one straight groove running parallel to the shaft axis and one annular groove encircling the shaft, so that when the bush is fixed the shaft can be constrained to move only parallel to its axis by engagement of the projection in the straight groove, and to move only rotationally about its axis by engagement of

the projection in the annular groove. At its end facing the key bit the bush bears a number of pegs to be engaged in a corresponding number of holes in a fixed member of the lock. Located in and spring biased outwardly of these holes are two sets of pins. When the key is fully inserted in the lock, the pegs on the bush push the sets of pins back in the holes until the division between the two sets coincides with an interface surface between the fixed member of the lock and a rotor rotatably mounted thereto. The rotor also receives the key bit and can be turned by manual rotation of the key shaft which, when the key is thus fully inserted, is free to rotate in the bush, the radial projection being in this condition located in the annular groove and the bush being fixed by the engagement of the pegs in the holes in the fixed member of the lock.

0) US2011132946A – UPRIGHT BIKE MOUNT

57) Family number: 47809284 (US2011132946A) © PatBase

Title: UPRIGHT BIKE MOUNT

Priority:

AU20100256372	20100607	AU20100260146	20100615	AU20130224647	20130903
AU20140203589	20140701	EP20100743263	20100615	AU20160203420	20160525
US20090184691P	20090605	US20100795280	20100607	US20100795463	20100607
US20100816121	20100615	US20090187605P	20090616	US20090185152P	20090608
US20090187197P	20090615	US20100817032	20100616	WO2010US37624	20100607
WO2010US38704	20100615	US20120682665	20121120	US20130030050	20130918
US20140451348	20140804	US20160201387	20160702		

Family:

Publication number	Publication date	Application number	Application date
AU2010256372 AA	20101209	AU20100256372	20100607
AU2010260146 AA	20101223	AU20100260146	20100615
AU2013224647 AA	20131003	AU20130224647	20130903
AU2013224647 BB	20160616	AU20130224647	20130903
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AU2014203589 AA	20140717	AU20140203589	20140701
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CN102458927 A	20120516	CN201080027934	20100607
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MX2011013653 A1	20120402	MX20110013653	20100615
TW201109204 A	20110316	TW20100118097	20100604
TW201111201 A	20110401	TW20100118106	20100604
TW201114630 A	20110501	TW20100119245	20100614
US2011132946 AA	20110609	US20100795280	20100607
US2011139838 AA	20110616	US20100795463	20100607
US2011139841 AA	20110616	US20100816121	20100615
US2011139842 AA	20110616	US20100817032	20100616
US2013175308 AA	20130711	US20120682665	20121120
US2014166710 AA	20140619	US20130030050	20130918
US2015076197 AA	20150319	US20140451348	20140804
US2017036613 AA	20170209	US20160201387	20160702
US8496145 BB	20130730	US20100817032	20100616
US8556146 BB	20131015	US20100795463	20100607
US9381866 BB	20160705	US20140451348	20140804
WO10141944 A1	20101209	WO2010US37624	20100607
WO10144369 A1	20101216	WO2010US37643	20100607
WO10148011 A1	20101223	WO2010US38704	20100615

Probable Assignee: YAKIMA PRODUCTS INC

Assignee(s):(std)**:** BUCKROYD JAMES ; ELDER ZAC ; ELLIOTT JOHN MARK ; FJELLAND DOUG ; KRAEUTER CHARLES ; SAUTTER CHRIS ; YAKIMA PRODUCTS INC ; YAKIMA INNOVATION DEV CORP

Assignee(s): YAKIMA PRODUCTS INC BEAVERTON ; WELLS FARGO BANK NATIONAL ASSOCIATION ; YAKIMA PRODUCTS ; YAKIMA INNOVATION DEVELOPMENT CORP

Inventor(s):(std)**:** CHRIS SAUTTER ; CONDON DAVE ; CONDON DAVID ; BUCKROYD JAMES ; DAVE CONDON ; ELDER ZAC ; FJELLAND DOUG ; JAMES OWEN ; JOHN MARK ELLIOTT ; KRAEUTER CHARLES ; MARK ELLIOTT JOHN ; OWEN JAMES ; ELLIOTT JOHN MARK ; SAUTER CHRIS ; SAUTTER CHRIS

Agent(s): CREATE IP; CREATEIP; ROBERT SNOEP TRADING CREATEIP AS; SCHAEBERLE STEFFEN; KOLISCH HARTWELL PC; VAN RYSSELBERGHE PIERRE C; VAN RYSSELBERGHE PIERRE 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 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): B60R9/00 B60R9/04 B60R9/045 B60R9/048 B60R9/052 B60R9/055 B60R9/058 B60R9/08 B60R9/10 (Advanced/Invention);
B60R9/04 B60R9/052 B60R9/08 B60R9/10 (Core/Non–invention)

CPC: B60R9/08 B60R9/04 B60R9/048 B60R9/10 B60R9/045 B60R9/055

European class: B60R9/045 B60R9/048 B60R9/055 B60R9/08 B60R9/10

US class: 1/1 224/281 224/315 224/319 224/321 224/324 224/325 224/558 224/564 224/924 248/229.12 248/615 248/618

Classification Explorer

Cited documents: WO9810959 A1, WO9624509 A1, WO10148011 A1, WO10144369 A1, WO10141944, WO09158360 A1, WO05021332 A1, USD386145 S1, US8556146 BB, US8496145 BB, US8444033 BB, US8245893 BB, US8210407, US8136709 BB, US8136708 BB, US8021169 BA, US8020737 BB, US7726528 BB, US7416098 BB, US7367481 BB, US7357283 BB, US7234617 BB, US7131561 BB, US7051909 BB, US7044347 BA, US7036698 BB, US7000811 BB, US6972042 BB, US6918521 BB, US6868998 BB, US6793186 BB, US6769292, US6715653 BB, US6681971 BB, US6622898 BA, US6561398 BA, US6494351 BA, US6460743 BB, US6439397, US6422441 BA, US6385822 BA, US6357643 BA, US6283310, US6193252 BA, US6189868 BA, US6164507 A, US6131781 A, US6053336 A, US6015074 A, US5996736 A, US5992805 A, US5951231 A, US5868621 A, US5854828 A, US5845828 A, US5833074 A, US5810226 A, US5806735 A, US5779119 A, US5775557 A, US5769292 A, US5769291 A, US5758810 A, US5738258 A, US5701628 A, US5692659 A, US5657913 A, US5647522 A, US5628336 A, US5617617 A, US5598959 A, US5582044 A, US5535930 A, US5526971 A, US5516017 A, US5492258 A, US5456396 A, US5445300 A, US5442840 A, US5416957 A, US5388938 A, US5360150 A, US5346355 A, US5275320 A, US5226570 A, US5217149 A, US5215233 A, US5181639 A, US5137195 A, US5136709 A, US5131669 A, US5123147 A, US5119654 A, US5118020 A, US4997332 A, US4976123 A, US4961524 A, US4960356 A, US4895096 A, US4892279 A, US4848794 A, US4830249 A, US4817838 A, US4751891 A, US4717165 A, US4630990 A, US4589622 A, US4402442 A, US4358037 A, US4350380 A, US4326655 A, US4085763 A, US4081118 A, US4058243 A, US4034879 A, US4023761 A, US4022362 A, US3993167 A, US3976213 A, US3946917 A, US3892455 A, US3861533 A, US3828993 A, US3826390 A, US3777922 A, US3740034 A, US3737083 A, US3642157 A, US3596788 A, US3469810 A, US3460694 A, US3276085 A, US3190587 A, US3186569 A, US3155249 A, US3113642 A, US3042240 A, US3005213 A, US3001679 A, US2988253 A, US2816672 A, US2729499 A, US2723005 A, US2573187 A, US2551218 A, US2536797 A, US2444422 A, US2302300 A, US2248170 A, US2013175308, US2012234881 AA, US2011139842, US2011139841 AA, US2011139838 AA, US2011132946 AA, US2010147914 AA, US2010078454 AA, US2009120982 AA, US2008193265 AA, US2008164292 AA, US2008029563 AA, US2008000940 AA, US2007164065 AA, US2007119888 AA, US2006289577 AA, US2006273124 AA, US2006273122 AA, US2006000859 AA, US2005145639 AA, US2005077335 AA, US2003071097, US2002125282 AA, US1789458 A, US1433741 A, JP2000318538 A2, GB886743 A, GB2257463, FR2624808, FR2600953 A1, FR2519305, FR2501601 A1, FR2481209 A1, FR1400231, EP2443006, EP1442940 A1, EP0894672 A1, EP0511179 A1, EP0482650 A1, EP0019873 B1, EP0019873, DE4229268, DE3912692 A1, DE2940095 A1, DE20309766 U1, DE20309766 U, CN2902805 Y,

CN2445963 Y, CN24445963, CN201677818 U,

Forward Citations: WO13040267, WO13022749, USD759570, USD739990, USD731400, USD703605, USD670349, US9694757, US9533624, US9505353, US9440777, US9409527, US9381866, US9376065, US9290131, US9283899, US9266478, US9187047, US9156410, US9126539, US9079534, US9073492, US8915411, US8695581, US8556146, US8496145, US2017028930, US2017028929, US2016023615, US2016023612, US2015197204, US2015076197, US2015053732, US2015027175, US2015026935, US2015021371, US2014144958, US2013270412, US2013032679, US2012205410, US2011139842, US2010120038, TWI540978, ITMO20110269, EP3106351, EP2974910, EP2586661, DE102013111233, CN106132776, CN105774677, CN105452062, CN104786950,

Abstract:
Source: US2011132946A A bike mount has an elongate body for supporting a bike. A front end of the bike mount may include a pair of hoop structures for gripping the front wheel of a bike. One of the hoop structures may have a ramp for causing rotation of the hoop structure as a bike rolls on to the ramp. One or more clamps are included for fastening the bike mount to one or more crossbars.

0) US2013019512A – FIREARM SAFETY LOCK

58) Family number: 52824441 (US2013019512A) © PatBase

Title: FIREARM SAFETY LOCK

Priority: US20110187435 20110720 US20130740815 20130114

Family:

Publication number	Publication date	Application number	Application date
US2013019512 AA	20130124	US20110187435	20110720
US2013125441 AA	20130523	US20130740815	20130114
US8418391 BB	20130416	US20110187435	20110720
US8881443 BB	20141111	US20130740815	20130114

Probable Assignee: INTELLIGUN LLC

Assignee(s):(std)**:** COPE CLINTON D ; INTELLIGUN LLC ; KEMMERER JASON ; MENDELSOHN YISHAI

Inventor(s):(std)**:** COPE CLINTON D ; KEMMERER JASON ; MENDELSOHN YISHAI ; WESTWOOD WILLIAM ROBERT

Agent(s): STETINA BRUNDA GARRED AND BRUCKER

International class (IPC 8–9)**:** F41A17/00 F41A17/02 F41A17/06 F41A17/20 F41A17/22 F41A17/24 F41A17/28 F41A17/56 (Advanced/Invention)

CPC: F41A17/02 F41A17/20 F41A17/28 F41A17/066

US class: 42/70.05 42/70.11

Classification Explorer

Cited documents: WO03098537 A1, US8418391 BB, US7757420 BA, US7707229 BB, US7703229 BB, US7698845 BB, US7631452 BA, US6941692 BA, US6785995 BB, US6563940 BB, US6510639 BB, US6487804 BA, US6442880 BA, US6438886 BA, US6415702 BA, US6405471 BA, US6363647 BB, US6343140 BA, US6321478 BA, US6293039 BA, US6269576 BA, US6237271 BA, US5946840 A, US5903994 A, US5461812 A, US5448847 A, US5361525 A, US5090147 A, US4967502 A, US4763431 A, US4682435 A, US4563827 A, US4467545 A, US4136475 A, US3128570 A, US2012291327 AA, US2011061280 AA, US2010162607 AA, US2008216376 AA, US2007119087 AA, US2004111945 AA, US2004031180 AA, US2003136043 AA, US2003089016 AA, US2002056359 AA, US2001032405 AA, US2001016999 AA,

Forward Citations: USD777283, USD758519, USD732629, USD716898, USD716397, USD716396, US9658017, US9599423, US9551546, US9488427, US9448030, US9441905, US9377259, US9354010, US9341425, US9341424, US9291416, US9279629, US9261320, US9234721, US9222740, US9175915, US9032656, US8966797, US8919024, US8904690, US8893420, US8881443, US8756843, US8555539, US2017184373, US2016091267, US2016084601, US2015204628, US2015198404, US2015192386, US2014366419, US2014259841, US2014215882, US2013180147, US2013125441, US2012204462,

Abstract:
Source: US2013019512A A lock for a firearm with a grip safety, and a sear engageable to a biased hammer in a cocked position and releasable by a trigger is disclosed. The lock has a housing defining a first bore within which a mainspring that biases the hammer is received, as well as a second bore. There is a locking pin retractable into and extendible out of the second bore of the housing. When the locking pin is in an extended position, the grip safety is restricted to an engaged state, blocking movement of the trigger. An actuator disposed in the housing and cooperatively linked to the locking pin provides the motive force for retracting and extending the locking pin.

0) US2013186153A – STEERING DEVICE

59) Family number: 50664774 (US2013186153A) © PatBase

Title: STEERING DEVICE

Priority: EP20110790844 20110713 JP20100184974 20100820 WO2011JP65942 20110713

Family:

Publication number	Publication date	Application number	Application date
CN102448795 A	20120509	CN201180001070	20110713
CN102448795 B	20141022	CN201180001070	20110713
DE602011025026 D1	20160519	DE201160025026T	20110713
EP2607202 A1	20130626	EP20110790844	20110713
EP2607202 A4	20141022	EP20110790844	20110713
EP2607202 B1	20160406	EP20110790844	20110713
JP2012040985 A2	20120301	JP20100184974	20100820
JP5429110 B2	20140226	JP20100184974	20100820
US2013186153 AA	20130725	US20110376969	20110713
US9248804 BB	20160202	US20110376969	20110713
WO12023367 A1	20120223	WO2011JP65942	20110713

Probable Assignee: NSK LTD

Assignee(s):(std)**:** NSK LTD ; TANAKA TAKAHIRO

Inventor(s):(std)**:** TAKAHIRO TANAKA ; TANAKA TAKAHIRO

Agent(s): HOFFMANN EITLE PATENT U RECHTSANWAELTE PARTMBB; HOFFMANN EITLE; CROWELL AND MORING LLP; AMANO MASAKAGE 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 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): B60R25/02 B60R25/021 B62D1/16 B62D1/18 B62D1/184 B62D1/185 (Advanced/Invention); B62D1/18 (Advanced/Non–invention)

CPC: B60R25/02115 B60R25/0211 B62D1/184 Y10T70/5668

European class: B60R25/021C

US class: 1/1 70/187

Classification Explorer

Cited documents: WO06011378 A1, WO04031018 A1, WO04007253 A1, US8904901 BB, US8596160 BB, US7823426 BB, US7703309 BB, US7328596 BB, US7316138 BB, US7310979 BB, US2012096907 AA, US2010242665 AA, US2010212377 AA, US2008178644 AA, US2008105009 AA, US2006021399 AA, US2006021398 AA, JP6211137 A2, JP58181657 U1, JP58181657 U, JP2009196562 A2, JP2009137309 A2, JP2007331530 A2, JP2006111124 A2, JP2004237973 A2, JP2002337663 A2, EP1790550 A1, EP1533201 A1, CN1712294 A, CN101468658 A, CN101304904 A,

Forward Citations: US9283982, US8882149, US2016318541, US2014311274, US2013047773, JP2015051655, CN104110418,

Abstract:
Source: US2013186153A In a steering device having a steering lock device and a telescopic clamp device, the strength of a column in a key–locked state and the force of telescopic clamping are secured. A flange section and ribs are formed between a through hole which a lock pin comes in and leaves and a slit for reducing the inner circumferential diameter of an outer column so as to increase the strength of the outer column. Hence, both the strength of the outer column against the bending moment applied to the lock pin in a key–locked state and the strength of the outer column against telescopic clamping effected by reducing the inner peripheral diameter of the outer column can be secured.

0) GB701207A – IMPROVEMENTS IN OR RELATING TO MACHINES SUITABL...

60) Family number: 20596548 (GB701207A) © PatBase

Title: Improvements in or relating to machines suitable for use in the manufacture of shoes

Priority: GB19500007941 19500330

Family:

Publication number	Publication date	Application number	Application date
GB701207 A	19531223	GB19500007941	19500330

Probable Assignee: BRITISH UNITED SHOE MACHINERY

Assignee(s):(std): BRITISH UNITED SHOE MACHINERY

Assignee(s): BRITISH UNITED SHOE MACHINERY CO LTD ; THE BRITISH UNITED SHOE MACHINERY COMPANY LIMITED

International class (IPC 8–9): A43D21/12 (Advanced/Invention); A43D21/00 (Core/Invention)

International class (IPC 1–7): A43D21/14

CPC: A43D21/12

European class: A43D21/12

Classification Explorer

Forward Citations: GB2160758, FR2566634,

Abstract:
Source: GB701207A [March 30, 1950], No. 7941/50. Classes 17(1) and 89(3) A shoe–upper lasting and fastener–in serting machine has means for wiping the margin of a toe–end portion of a shoeupper inwardly across an insole and means for inserting fastenings through the margin while the upper is held after the lasting operation, the fastener–inserting means being moved stepwise along the margin to insert fasteners at spaced positions around the whole of the toe–end of the shoe. The wipers are apertured at spaced positions for the passage of the fasteners (tacks) and two tackers work in conjunction with one another to and from the toe respectively along the margins of the upper at opposite sides of the shoe. The tackers are advanced to and withdrawn from the margin of the upper at each tacking operation. The wipers advance lengthwise of the shoe without substantial closing movement until they commence to urge the margin of the upper inwardly at the toe end of the shoe, after which they close across the insole without substantial lengthwisemovement and then finally advance lengthwise without further closing movement. Interchangeable cams may be provided to' enable the tackers to insert tacks at the desired distance from the insole edge on shoes of different styles or sizes. Tacking is effected by fluid–pressure and is initiatedby contact between a part of the tackerand the wipers. The two tackers have raceways for the supply of tacks, these raceways being brought alternately, during consecutive operations of the machine, into alignment with a commonsupply raceway. Shoe–clamping. The machine described has a clutch 2, Fig. 1, driving through gearing 6 a cam shaft 8, one revolution of which corresponds to a cycle of operations. 'The clutch is engaged by a treadle 10 and automatically disengaged by a stop–cam 12 on the shaft 8 the clutch gear being generally as disclosed in Specification 520,194, except that the cam 12 provides only one pause in each cycle, viz.: to allow the tackers to operate while the upper is held in lasted condition. After insertion of the tacks, the treadle is again operated for the completion of the cycle. The bottom of the forepart of the,insole is positioned by the operator against a shoe–bottom plate 26, Fig. 47, the shoe being clamped against the plate 26 by upward movement of a toerest 30, this clamping being effected generally as described in Specification 540,174. The toe–rest 30, Fig. 10, is floatingly mounted by springs 58 and leaf–springs 64, so that the toe–rest may accommodate itself to the wiper movements. A heelrest 66, Fig. 3, is applied to the shoe shortly after the beginning of a cycle of operations, the heel–rest having a stem 72 turnable in a cross–bar 74 so that the heel–rest may adjust itself to the shoe. The opposite ends of the cross bar 74 are coupled to adjustable rods 84, locked in the adjusted positions relatively to holders 86 by pivoted latches 88 engageable with slots 90 in the rods. The holders 86 are adjustably mounted on arms 92, Fig. 1, as generally described in Specification 520,194, the arms 92 being mounted, with provision for lateral swinging movement, but spring–urged to a central position, on arms 94, the heel–rest thus having free selfadjustment to the shoe heel. When pressure is applied to the heel–rest, however, interlocking teeth prevent swinging movement of the heel–rest during the lasting operation. ' Pressure on the heel–rest is applied through the rods 94, Fig. 2, linkage 108, 110 and spring 114 when a drop in the cam 136 on the camshaft 8 releases a linkage to allow the spring 114 to act. At the required point in the cycle of operations a cam–lever 130 actuates a pin–andslot linkage connection 128 to actuate an arm 118, and thus the arm 110, in a clockwise direction to release the heel–rest. The rods 94 are hydraulically locked to prevent endwise displacement of the shoe during lasting, the rods being of telescopic construction to permit adjustment for shoes of different sizes and each being locked in set position by a transverse pin. The hydraulic locking mechanism for the rods 94, described with reference to Figs. 8, 9 (not shown) includes duplicate cylinders 164, Figs. 1, 2, each containing a valve controlled by a lever 188 actuated by a bar 192 carried by the toe–rest support 54. When the

toe−rest moves upwardly to clamp the shoe, the bar 192 moves clear of the lever 188, thus allowing the valves within the cylinders 164 to close, after which only one−way movement of the rods 94 is possible, to move the heel−rest support 92, and so advance the heel−rest 66, Figs. 1, 3 to clamp the shoe. On downward movement of the toe−rest 30 near the conclusion of the cycle of operations, the bar 192 re−opens the valves within the cylinders 164 and allows the heel−rest to be withdrawn to initial position by the cam 136. The caps 96, Figs. 1, 2 at the forward ends of the rods 94 are supported on guides 198 to prevent downward−springing of the rods 94 during the lasting operation. Lasting. The toe−wipers 16, Figs. 6, 7, are operated generally as described in Specification 520,194. The two toe−wipers are each detachably mounted by a springpressed pin 202, Fig. 7, in a holder 200 guided by a projection 212 and cam groove in a carrier 208 which is mounted at its forward end on a link 216, Fig. 4, and at its rear end on a bell−crank 248 carried by a further bell−crank 228 mounted on a lever 218 actuated by a cam 224. The bellcranks 228 are yieldable against the thrust of springs 240 and the arm 254 of each bellcrank 248 is controlled by a cam−track 258 carried by an arm 264 adjustable about the shaft 220 by a hand wheel 284, Figs. 2, 6 and screw gear 270, 266. The cam−track 258 and its associated gear enables the position of the wipers, lengthwise of the last, at the times when they wipe the upper heightwise, to be readily adjusted to suit varying upper−materials. The cam 294, Fig. 4, controls the movement of the wipers heightwise of the last first to wipe the upper and later to increase the pressure of the wipers downwardly on the marginal portion of the upper over the insole. The closing movement of the wipers widthwise of the shoe is effected by a cam 338, Fig. 4, and linkage 334, 330, 326, 320 the upper fork of the lever 320 being coupled by links 318, Fig. 6, to a crossbar 314 actuating a slide 302 linked by yieldable rods 296 to the wiper holders. The rods 296 yield only a definite amount determined by a pin−andslot connection 306, 308, so that the wipers close to a definite position when wiping the margin of the upper inwardly over the insole whereby the holes 340 in the wipers are correctly positioned for the fastenerinserting operation. In this position, the nipples 204, Figs. 6, 7, carrying the spring pins 202 for securing the wipers, are located at one end of the slots 214 in the wiper carriers 208. The wipers are changed to suit shoes of substantially different sizes. The shoe is steadied against lateral displacement during lasting by a leatherfaced resilient metal toe band 344 the ends of which are secured to blocks 350 coupled by non−parallel links 352 to the wiper carriers. The plate 26, Fig. 47, against which the insole is clamped prior to lasting, is adjustable about axes extending both longitudinally and transversely of the shoe, and is bodily adjustable vertically by screw−gear 398, 396, Fig. 15. The margin of the insole is pressed down on to the last when the wipers begin to wipe the upper inwardly over the insole by a holddown 422 curved in plan generally to the toe−end curvature and detachably latched in a carrier 428 which is guided along an inclined path through the mounting of the shoe−bottom plate 26, by toothed−gearing and levers under the control of a cam plate 464 actuated by rod−and−cam mechanism 466, 468, 474, 476, 478, 484, Fig. 1. A retarder 28, Fig. 47, curved to extend about the toe−end of the shoe and which assists in determining approximately the correct position of the toe−end of the last laterally with respect to the wipers, controls the upper−material outspread around the toe on the wipers during upwipe, the retarder being tilted about a transverse axis during this movement to ensure that tension is applied to the upper at the sides as well as at the end of the toe. A cam plate 590, Fig. 47, angularly settable about an axis 558 relatively to a lever 582 and coacting with a lever arm 596, controls the degree of bodily movement of the retarder away from the end of the last, while the retarder is tilting at the end of upwipe, grip being maintained on the upper during this movement by the spring 522 acting through the lever 516. The upward movement of the substantially parallel linkage 514, 578 then moves the retarder−carrier 512 heelwardly to make room for the movement of the fastening−inserting mechanism into operative position. A plate 604 on the retarder, engages with the top faces of the wipers to prevent damage to the machine if it is operated without any shoe therein. Fastener inserting mechanism. The fastener−inserting mechanism is carried by a tacker−support 606, Figs. 1, 22, pivotably mounted on blocks 612 which are guided lengthwise of the shoe, the swinging and longitudinal movements of the tackersupport being effected by crank−arms 616, Fig. 1, fast on the shaft 470. Two plates 626, Fig. 22, curved approximately to the curvature of the toe−end portion of the shoe are secured to the tacker−support and carry stops 624 comprising strong springs 636, Fig. 26, and plunger 638 which engage fixed brackets on the frame when the tacker−support swings down to position the tackers, lost motion being provided to permit further movement of the crank arms 616 after arrest of the tacke

0) US2008148512A – WET/DRY FLOOR CLEANING DEVICE

61) Family number: 41930376 (US2008148512A) © PatBase

Title: WET/DRY FLOOR CLEANING DEVICE

Priority: EP20070855150 20071213 EP20070856695 20071213 US20070956178 20071213 US20090506704 20090721 US20070519048 20071213 US20060869797P 20061213 WO2007EP10949 20071213 WO2007US87464 20071213

Family:

Publication number	Publication date	Application number	Application date
BRPI0720239 A2	20131231	BR2007PI20239	20071213
CN101557748 A	20091014	CN200780046266	20071213
CN101557748 B	20111005	CN200780046266	20071213
CN101657135 A	20100224	CN200780051230	20071213
CN101657135 B	20120808	CN200780051230	20071213
DE602007028601 D1	20130418	DE200760028601T	20071213
DE602007041602 D1	20150709	DE200760041602T	20071213
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EP2117402 A4	20130515	EP20070855150	20071213
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MX2009006351 A1	20091012	MX20090006351	20071213
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US2009276975 AA	20091112	US20090506704	20090721
US2010083460 AA	20100408	US20070519048	20071213
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WO08074014 A2	20080619	WO2007US87464	20071213
WO08074014 A3	20080731	WO2007US87464	20071213
WO08074014 C2	20080912	WO2007US87464	20071213

Probable Assignee: ELECTROLUX AB

Assignee(s):(std)**:** BESKOW JONAS ; ELECTROLUX AB ; HAEGERMARCK ANDERS ; VINES BRIAN ; SEPKE ARNIE ; ELECTROLUX HOME CARE PROD NA ; ELECTROLUX AB SE

Assignee(s): AB ELECTROLUX ; AKTIEBOLAGET ELECTROLUX ; ELECTROLUX HOME CARE PRODUCTS INC

Inventor(s):(std)**:** ANDERS HAEGERMARCK ; BESKOW JONAS ; BRIAN VINES ; HAEGERMARCK ANDERS ; JONAS BESKOW ; SEPKE ARNIE ; VINES BRIAN

Inventor(s): VINES BRIAN BIRMINGHAM

Agent(s): SAMZELIUS ROGER MIKAEL; HUNTON AND WILLIAMS LLP, INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS LLP,INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS; HUNTON AND WILLIAMS LLP; RATNERPRESTIA; LAURIN MAGNUS; PHELPS MICHAEL P F 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):	A47L11/30 A47L11/40 A47L5/00 A47L7/00 A47L9/00 A47L9/02 A47L9/04 A47L9/10 (Advanced/Invention); A47L5/00 A47L7/00 A47L9/00 A47L9/02 A47L9/04 A47L9/10 (Core/Invention)
CPC:	A47L9/0477 A47L11/302 A47L11/4041 A47L11/4044 A47L9/04
European class:	A47L9/04
US class:	15/322 15/331 15/347 15/347P 15/350 15/350P 15/368 15/378 15/383 15/383P 15/410 15/415.1 15/415.100S 15/416 15/419

Classification Explorer

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WO9943250 A1, WO07008770 A2, WO05018402 A2, WO04014209 A1, WO0228257 A1, WO0141618 A1, WO0059360 A1, USRE37905 E, US853525 A, US7979952 BB, US7725984 BB, US7725984 B1, US7146679 BB, US7146679 B1, US6957473 BB, US6681442 BB, US6681442 B1, US6662402 BB, US6662402 B1, US6591447 BB, US6514356 BB, US6514356 B1, US6055703 A, US5794305 A, US5617611 A, US5584095 A, US5400467 A, US5323510 A, US5287581 A, US5241724 A, US5189757 A, US5168599 A, US4951346 A, US4498214 A, US4423534 A, US4138762 A, US4129920 A, US3932912 A, US3106733 A, US3079626 A, US2904818 A, US2530886 A, US2397537 A, US2348861 A, US2009056068 AA, US2009056063 AA, US2009056059 AA, US2009056058 AA, US2009056057 AA, US2007271724 AA, US2006236494 AA, US2006156509 AA, US2006123587 AA, US2006080803 AA, US2005071948 AA, US2005039296 AA, US2003131440 AA, US2001008036 AA, US1992986 A, US1355553 A, US1139736 A, JP2007105244 A2, JP2006346293 A2, GB2422094 A1, GB2241430 A1, GB143690 A, EP1782724 A2, EP1647219 A2, EP1468637 A1, EP1228734 A2, EP1013212 A2, EP0909546 A2, EP0708613 A1, EP0338780 A2, EP0313403 A2, DE3420698 A1, DE3038668 A1,

DE202005010880 U1

DE19945281 A1, DE19525796 A1,

DE102007040961 A1

BE905711 A1,

Forward Citations:

WO13106762, WO13106762, WO10075526, USD789632, USD780390, USD762992, USD745759, US9713411, US9668628, US9392921, US9351617, US9345371, US9282866, US8918957, US8756755, US8667644, US8650703, US8438694, US8402600, US8060977, US2016183749, US2016107415, US2015225101, US2015020347, US2014165325, US2014154118, US2014041153, US2013232702, US2012246866, US2012030897, US2011119860, US2011119859, US2011107550, US2011010873, US2010162515, US2010083460, US2010050373, US2008307597, CN105361808, CN105030147, CN105030147, CN104127156,

Abstract:
Source: US2008148512A A cleaning device with an elongated housing having a grip at one end and a cleaning head at another end, a dirt collection device and a vacuum source. The cleaning head has a rotary agitator, a first inlet opening having a first cross−sectional area, and a second inlet opening having a second cross−sectional area. The second cross−sectional area may be substantially less than the first cross−sectional area. The second inlet opening may be above the first inlet opening. There also may be a fluid supply tank and an associated pump, and the pump and agitator may be driven by the same motor.

0) US5636538A – VEHICLE ANTI–THEFT DEVICE SEPARATELY SIMULTANEO...

62) Family number: 11243116 (US5636538A) © PatBase

Title: VEHICLE ANTI–THEFT DEVICE SEPARATELY SIMULTANEOUSLY LOCKING TO THE VEHICLE'S STEERING WHEEL AT EACH OF TWO LOCATIONS

Priority: US19950514238 19950811 US19960647242 19960509 US19970897811 19970721

Family:

Publication number	Publication date	Application number	Application date
US5636538 A	19970610	US19950514238	19950811
US5836185 A	19981117	US19970897811	19970721

Probable Assignee: OPENIANO RENATO M

Assignee(s): OPENIANO RENATO M

Inventor(s):(std)**:** OPENIANO RENATO M

International class (IPC 8–9): B60R25/02 (Advanced/Invention); B60R25/02 (Core/Invention)

International class (IPC 1–7): B60R25/02

CPC: Y10S70/63 Y10T70/5765 Y10T70/5841 Y10T70/5889 B60R25/0225 Y10T70/5885

European class: B60R25/022H

US class: 70/209 70/226 70/236 70/237 70/DIG.63

Classification Explorer

Cited documents: US5678433 A, US5566561 A, US5491990 A, US5457972 A, US5299438 A, US5297406 A, US5267458 A, US5257518 A, US5199284 A, US5197308 A, US5144822 A, US5142889 A, US5138853 A, US5052201 A, US4747279 A, US4103524 A, US3245239 A, US3138038 A, US3138036 A, US1443009 A, US1411728 A, FR925217 A, FR2639591 A3,

Forward Citations: US8966945, US7624604, US7043947, US6901781, US6880375, US6679089, US6477874, US6334345, US6282930, US6199415, US6016674, US5956982, US5887464, US5778709, US5765415, US2010005841, US2009031765, US2002121816, GB2423969,

Abstract:
Source: US5636538A A vehicular steering wheel security device, having three major members A,B,C each of which is telescoping relative to the others, and also key locks for each of A–B and B–C, separately simultaneously locks onto a steering wheel at rim positions (i) at and about a point where a spoke joins the rim, and (i) from this point across the diameter of the steering wheel to an opposite point. An elongate central member preferably has a double hook that selectively engages and protects not only an interior portion arcuate portion of the steering wheel's rim, but also the steering wheel's spoke. First and second members having single hooks telescope relative to, respectively, first and second ends of the central member for selectively engaging, respectively, (i) the rim of the steering wheel in position about the spoke and (ii) the rim of the steering wheel opposite to the spoke. The impediment presented by the locked device to turning the steering wheel is not subject to being defeated merely by cutting through either the steering wheel, or the device itself, at any single location.

63) Family number: 3549610 (WO8402376A1) © PatBase

Title: GEAR MECHANISM FOR PUSHER ROD WITH RADIAL, RESPECTIVELY AXIAL, COUPLING FOR RING PISTON OF A MACHINE ROTATING AT AN INTERMITTENT SPEED

Priority: DE19823245677 19821210 DE19823249546 19821210 DE19823249547 19821210 WO1983DE00201 19831208

Family:

Publication number	Publication date	Application number	Application date
AU198423313 A1	19840705	AU19840023313	19831208
DE3245677 A1	19840614	DE19823245677	19821210
DE3249546 A1	19841108	DE19823249546	19821210
DE3249547 A1	19841108	DE19823249547	19821210
WO8402376 A1	19840621	WO1983DE00201	19831208

Probable Assignee: POPP E

Assignee(s):(std)**:** POPP E ; POPP EUGEN

Inventor(s):(std)**:** EUGEN POPP ; POPP EUGEN

Inventor(s): VERZICHT DES ERFINDERS AUF NENNUNG

Designated states: AU BR DK FI HU JP KP NO RO SU US

International class (IPC 8–9): F01C1/073 (Advanced/Invention); F01C1/00 (Core/Invention)

International class (IPC 1–7): F01C1/04 F01C1/073 F03C2/02 F04C2/04

CPC: F01C1/073

European class: F01C1/073

Classification Explorer

Cited documents: US4148292 A, US2670688 A, GB191424 A, DE73454 A, DE228791 A, DE12895 A, DE10360 A, BE464517 A,

Abstract:
Ring piston machine (K) rotating at an intermittent speed, comprising a stator (S) and a rotor (R). The stator has stator thrust grooves (SW) and the rotor has rotor drive grooves (RM). Transversally to its displacement direction, each piston comprises a pusher rod (T) effecting a reciprocating motion. A piston (or a set of pistons) rotates, owing to the engagement of its pusher rod (T) in the rotor drive groove (RM), with the rotor (R), while the other piston (or set of pistons) remains stationary due to the engagement of its pusher rod in the stator thrust groove (SW). In the course of the following phase, owing to the change of the pusher rod coupling, the first piston will rotate with the rotor and the other piston will remain motionless.

0) US5067834A – INPUT KEYBOARD APPARATUS FOR INFORMATION PROCES...

64) Family number: 8499834 (US5067834A) © PatBase

Title: Input keyboard apparatus for information processing device and other keyboard devices

Priority: CA19912093014 19910808 US19890376690 19890707 US19940292488 19940818 US19930039266 19930408 WO1991US05657 19910808

Family:

Publication number	Publication date	Application number	Application date
AU199191554 A1	19930302	AU19910091554	19910808
AU657509 B2	19950316	AU19910091554	19910808
CA2093014 AA	19930330	CA19912093014	19910808
CA2093014 C	19981027	CA19912093014	19910808
EP0552315 A1	19930728	EP19920903219	19910808
FI931588 A	19930604	FI19930001588	19930407
FI931588 A0	19930407	FI19930001588	19930407
JP6501330 T2	19940210	JP19920501784T	19910808
KR100191454 B1	19990615	KR19930071054	19930407
NO931203 A	19930518	NO19930001203	19930331
NO931203 A0	19930331	NO19930001203	19930331
US5067834 A	19911126	US19890376690	19890707
US5466078 A	19951114	US19940292488	19940818
WO9302865 A1	19930218	WO1991US05657	19910808

Probable Assignee: HEALTH CARE KEYBOARD CO

Assignee(s):(std)**:** HEALTH CARE KEYBOARD CO ; SZMANDA JEFFREY P ; SZMANDA WILLIAM J

Assignee(s): HEALTH CARE KEYBOARD COMPANY ; PAUNACK ROBERT R ; GRAHAM WILLIAM T

Inventor(s):(std)**:** SZMANDA JEFFREY P ; SZMANDA WILLIAM J

Inventor(s): WILLIAM J SZMANDA ; JEFFREY P SZMANDA

Agent(s): SANDERCOCK AND COWIE; BORDEN LADNER GERVAIS LLP

Designated states: AT AU BE CA CH DE DK ES FI FR GB GR IT JP KR LI LU NL NO SE US

International class (IPC 8–9): B41J5/10 F16M11/14 G06F3/02 G06F3/023 H01H13/702 H01H13/84 (Advanced/Invention); B41J5/00 F16M11/02 G06F3/02 G06F3/023 H01H13/70 (Core/Invention); B41J (Subclass/Invention)

International class (IPC 1–7): B41J B41J5/10 F16M13/00 G06F3/02 G06F3/023 H01H13/70

CPC: B41J5/10 F16M11/14 G06F3/0216 G06F3/0219 H01H13/84 H01H2217/028 H01H2223/05 F16M11/28 F16M2200/022 F16M2200/08 Y10S248/918

European class: B41J5/10 F16M11/14 F16M11/28 G06F3/023A5 G06F3/02A4 G06F3/02A5 H01H13/70C H01H13/84 R16M200/02A1 R16M200/08 T01H217/028 T01H223/050

US class: 248/181.1 248/918 341/22 361/679.11 361/680 400/472 400/489 400/82

Classification Explorer

Cited documents: WO8400518 A1, US5228791 A, US4690362 A, US4661005 A, US4640485 A, US4597681 A, US4562988 A, US4550666 A, US4402624 A, US4378553 A, US4365561 A, US3990565 A, US3830352 A, JP63168525 B4, JP63159426 B4, JP63135422 B4,

Forward Citations: WO9525334, WO9501879, WO9301054, WO16077242, WO15156824, WO14106959, WO12042317, WO09010586, WO05082108, WO05082108, WO0150608, WO0115907, WO0034824, USRE43485, USD585063, USD524820, US9335794, US9329638, US9329637, US8956068, US8900009, US8894305, US8858103, US8686945, US8649164, US8550442, US8487872, US8462103, US8454254, US8308114, US8289684, US8033744, US8025262, US7828489, US7729493, US7354209, US7336258, US7246781, US7193614, US7131781, US7099149, US6984081, US6894894, US6875913, US6822854, US6781077, US6757159, US6756968,

US6712533, US6697055, US6670948, US6641316, US6632038, US6580421, US6573843, US6549191, US6549189, US6529369, US6404621, US6381128, US6379060, US6344967, US6288706, US6286806, US6266234, US6256018, US6215419, US6176915, US6151012, US6147673, US6086207, US6039478, US6005496, US5974389, US5949643, US5892499, US5833378, US5800085, US5790053, US5788386, US5774384, US5717431, US5706167, US5670991, US5662422, US5660488, US5659307, US5646817, US5644338, US5638062, US5619394, US5612691, US5596480, US5543790, US5543787, US5535091, US5531529, US5527116, US5519570, US5502460, US5457452, US5456542, US5454652, US5439304, US5426449, US5424728, US5416498, US5410333, US5393150, US5388921, US5361082, US5351066, US5342005, US5339097, US5336001, US5318367, US5278779, US5267127, US5228791, US5198991, US5137384, US2014198445, US2014198444, US2014191941, US2014186084, US2013126689, US2013078855, US2012168593, US2010252978, US2010156832, US2010085308, US2009138637, US2008304892, US2008156947, US2007285395, US2007159465, US2006263136, US2005100382, US2005059132, US2005052419, US2004257758, US2004228084, US2004164965, US2004015021, US2003142471, US2003103791, US2003026066, US2002109667, JP2014017014, GB2332074, GB2309009, GB2285013, GB2283705, GB2283705, FR2739484, EP2017034, EP0592984, DE19531525, DE19505907, CN103348173, CN103348173,

Abstract:
Source: US5067834A An input keyboard unit includes a left and right keyboard. A separate universal pivot support unit is secured one to each keyboard and to a base support plate. Each universal pivot unit includes a telescopic shaft with a releasable connector for holding of the shaft in desired extended position. One end of the shaft or post unit is secured to the keyboard through a mounting plate. A ball and socket unit is secured to the opposite end and through a tongue and groove connection to a base plate for lateral positioning of the pivot units and the attached keyboard relative to each other. The ball and socket unit allows universal pivoting of the keyboard about the mounting to the base plate and thereby permits the optimal positioning of the keyboard with respect to the hands of the operator. In one embodiment, the two separate keyboard boards are generally rectangular members. A universal pivot units interconnects the top inner corners of the two keyboards whereby a generally inverted V−shaped spacing is provided between the two keyboards with each keyboard having a front−to−back inclination and a lateral side inclination with the universal pivot units of the keyboards permitting the precise optimal setting for any given individual or group of individuals. The keyboard connecting pivot unit is releasable to allow lateral spacing of the keyboards where desired or necessary for any given individual.

0) US2014083217A – RADIALLY RECIPROCATING LOCK

65) Family number: 56033485 (US2014083217A) © PatBase

Title: RADIALLY RECIPROCATING LOCK

Priority: US20120706642P 20120927 US20130022208 20130909

Family:

Publication number	Publication date	Application number	Application date
CA2828067 AA	20140327	CA20132828067	20130923
CN103697072 A	20140402	CN201310446170	20130926
CN203604456 U	20140521	CN201320598395U	20130926
US2014083217 AA	20140327	US20130022208	20130909

Probable Assignee: KAN CUI

Assignee(s):(std)**:** CUI KAN ; KAN CUI ; LIU MARGARET C ; LIU SAMUEL K

Inventor(s):(std)**:** CUI KAN ; KAN CUI ; LIU MARGARET C ; LIU SAMUEL K ; MARGARET C LIU ; SAMUEL K LIU

Agent(s): OSLER HOSKIN AND HARCOURT LLP

International class (IPC 8–9)**:** F16B21/00 F16D1/06 F16H21/22 (Advanced/Invention)

CPC: F16H21/22 F16D1/0876 Y10T74/18208

US class: 74/44

Classification Explorer

Cited documents: US9103419 BB, US9068634 BB, US7954225 BB, US7918111 BB, US4493199 A, US4355917 A, US4342207 A, US4233913 A, US3709508 A, US3573876 A, US3158017 A, US3115798 A, US2480429 A, US2015122060 AA, US2015122059 AA, CA2828067 AA,

Forward Citations: US9068634, US2015122059, US2014083217,

Abstract:
Source: US2014083217A The radially reciprocating lock includes an elongate, hollow cylindrical housing having a locking mechanism disposed therein. The locking mechanism includes an axially extending lock shaft and at least one crank disk attached to the shaft. A recess is formed in at least one end of the lock shaft for insertion of a key or tool to rotate the lock shaft and the crank disk. At least one endcap is provided to securely cover an exposed end of the housing. The endcap includes a center hole for passage of the lock shaft end. At least one locking member is operatively connected to the crank disk to radially reciprocate between an extended, locked position and a retracted, unlocked position through respective slots on the housing. A crank linkage mechanism and a cam mechanism are provided to reciprocate the at least one locking member.

0) US6257033B – CYLINDER LOCK WITH ROTATABLE PINS

66) Family number: 20670215 (US6257033B) © PatBase

Title: CYLINDER LOCK WITH ROTATABLE PINS

Priority: IL20010145327 20010906 US19990263852 19990308 WO2000IL00135 20000307

Family:

Publication number	Publication date	Application number	Application date
AU200029379 A5	20000928	AU20000029379D	20000307
EP1159501 A1	20011205	EP20000907919	20000307
EP1159501 A4	20020814	EP20000907919	20000307
IL145327 A1	20061005	IL20000145327	20000307
US6257033 BA	20010710	US19990263852	19990308
WO0053870 A1	20000914	WO2000IL00135	20000307

Probable Assignee: DOLEV MOSHE

Assignee(s):(std)**:** AMIR ZIV AV ; DOLEV MOSHE ; ZIV AV AMIR

Assignee(s): MOSHE DOLEV

Inventor(s):(std)**:** ZIV AV AMIR

Inventor(s): AMIR ZIV AV

Agent(s): EDWARD LANGER

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 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): E05B19/06 E05B27/00 E05B27/10 E05B35/00 (Advanced/Invention); E05B19/00 E05B27/00 E05B35/00 (Core/Invention)

International class (IPC 1–7): E05B19/06 E05B27/00 E05B27/06 E05B27/10

CPC: Y10T70/761 Y10T70/7616 Y10T70/7881 E05B27/0021 E05B27/0039 E05B35/003

European class: E05B27/00A3B E05B27/00E E05B35/00F

US class: 70/409 70/494 70/495 704/940

Classification Explorer

Cited documents: WO9627724 A1, WO8704749 A1, US5931036 A, US5839308 A, US5682779 A, US5570601 A, US5502991 A, US5457974 A, US5131249 A, US4723427 A, US4235086 A, US4222252 A, US4208894 A, US4098104 A, US4098103 A, US2021185 A, NL7317470 A, FR2492872 A1, EP0431550 A1, DE1093253 B,

Forward Citations: WO13141785, WO06017658, WO06017408, WO05095738, WO05095738, WO03001011, WO03001011, US9416561, US9140034, US8915107, US8820129, US8635022, US8448485, US8266937, US7958760, US7698921, US7647799, US7421869, US7392676, US7207200, US7181941, US6823702, US6508091, US2014352375, US2013327102, US2013061643, US2011252846, US2011214462, US2010319422, US2010199731, US2009193862, US2008236223, US2007220937, US2007051146, US2007028658, US2006207303, US2006042335, US2006027004, US2006021405, US2005210939, KR101170298, JP2007530840, EP1921232, EP1910632, EP1738044, EP1327735, EA8788, EA008788, AU2005229301,

Abstract:
Source: US6257033B A cylinder lock has a plug deployed within a bore in a cylinder housing. The plug defines a keyway which communicates with a number of pin channels. Disposed within the channels are a number of pins which are displaceable along, and rotatable about, their axis. Each pin has an engagement end, proximal to the keyway, formed with at least two engagement features projecting parallel to, but displaced from, the pin's axis, and separated by at least one depression. Each pin is free to rotate through 360 degrees about it axis. The cylinder lock preferably also includes a key for insertion into the keyway. The key has a seat located to come into alignment with a pin, the seat being formed with at least two depressions separated by an intermediate ridge. The configuration of the seat is such that the pin is rotated by contact with the seat to an angularly aligned position in

which its engagement features are aligned with the depressions of the seat.

0) US5577544A – EXTENSION SPRING SYSTEM FOR AN OVERHEAD DOOR

67) Family number: 20178713 (US5577544A) © PatBase

Title: EXTENSION SPRING SYSTEM FOR AN OVERHEAD DOOR

Priority: US19940262135 19940616 US19940288328 19940810 WO1995US07540 19950613 US19970846891 19970501 US19950435586 19950505 US19950435965 19950505 WO1995US07614 19950616

Family:

Publication number	Publication date	Application number	Application date
AU199528281 A1	19960105	AU19950028281	19950613
AU199528609 A1	19960105	AU19950028609	19950616
CA2191102 AA	19961122	CA19952191102	19950613
CA2191102 C	20000125	CA19952191102	19950613
CA2191103 AA	19961122	CA19952191103	19950616
CA2191103 C	19990427	CA19952191103	19950616
DE69512058 D1	19991014	DE19956012058	19950613
DE69512058 T2	20000127	DE19956012058T	19950613
DE69514660 D1	20000224	DE19956014660	19950616
DE69514660 T2	20000831	DE19956014660T	19950616
EP0765425 A1	19970402	EP19950923860	19950613
EP0765425 B1	19990908	EP19950923860	19950613
EP0765426 A1	19970402	EP19950923896	19950616
EP0765426 B1	20000119	EP19950923896	19950616
US5577544 A	19961126	US19940288328	19940810
US5615723 A	19970401	US19950435965	19950505
US5632063 A	19970527	US19940262135	19940616
US5636678 A	19970610	US19950435586	19950505
US5964268 A	19991012	US19970846891	19970501
WO9534733 A1	19951221	WO1995US07540	19950613
WO9534734 A1	19951221	WO1995US07614	19950616

Probable Assignee: CLOPAY BUILDING PRODUCTS CO INC

Assignee(s):(std)**:** CLOPAY BUILDING PRODUCTS INC ; CLOPAY BUILDING PRODUCTS CO IN ; CLOPAY BUILDING PROD CO ; CLOPAY BUILDING PRODUCTS CO

Assignee(s): JP MORGAN CHASE BANK NA ; GOLDMAN SACHS LENDING PARTNERS LLC COLLATERAL AGEN ; CLOPAY BUILDING PRODUCTS COMPANY INC ; CLOPAY BUILDING PRODUCTS CO INC ; GOLDMAN SACHS LENDING PARTNERS LLC COLLATERAL AGENT AS ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; LIN TONY Y ; LEIST ALAN R ; CLOPAY BUILDING PRODUCTS R AND D CO INC ; AGIN THOMAS E ; CARPER GEORGE S ; CARPER KENNETH E

Inventor(s):(std)**:** AGIN E ; AGIN THOMAS E ; ALAN R LEIST ; CARPER E ; CARPER GEORGE S ; CARPER KENNETH E ; CARPER S ; GEORGE S CARPER ; KENNETH E CARPER ; LEIST ALAN R ; LEIST R ; LIN TONY Y ; LIN Y ; THOMAS E AGIN ; TONY Y LIN ; LIN TONY ; LEIST ALAN ; CARPER KENNETH ; CARPER GEORGE ; AGIN THOMAS

Agent(s): MACRAE AND CO

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 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): E05D13/00 E05D15/24 E05F1/16 E05F11/00 E05F15/16 F16F1/04 F16F1/14 (Advanced/Invention);
E05D13/00 E05D15/24 E05F15/16 (Advanced/Non–invention);
E05D13/00 E05D15/16 E05F1/00 E05F11/00 E05F15/16 F16F1/02 (Core/Invention)

E05D13/00 E05D15/16 E05F1/08 E05F11/00 F16F1/14

International class (IPC 1–7):

CPC: E05F15/00 E05Y2800/424 Y10S16/01 Y10S16/07 F16F1/041 E05Y2400/818 E05Y2600/528 E05Y2600/53 E05Y2600/60 Y10T16/641 Y10T16/64 E05D13/1215 E05D13/1223 E05D15/24 E05Y2201/492 E05Y2201/67 E05Y2201/704 E05Y2800/692 E05Y2900/106 F16F2236/04 F16F1/14 E05D13/1261 E05D13/1269

European class: E05D13/12D2 E05D13/12D4 E05D13/12G2 E05D13/12G4 F16F1/04A F16F1/14 P05D13/12G4 P05D15/24 P05Y201/492 P05Y201/67 P05Y201/704 P05Y400/818 P05Y600/528 P05Y600/53 P05Y800/692 P05Y900/106 R16F236/04

US class: 16/197 16/198 16/DIG.1 16/DIG.7 160/191 160/201 254/343 49/197 49/200

Classification Explorer

Cited documents: WO9425713 A1, US5636678 A, US5632063 A, US5445364 A, US5419010 A, US5365993 A, US5275223 A, US5239777 A, US5135040 A, US5036899 A, US4981165 A, US4976168 A, US4930182 A, US4921033 A, US4882806 A, US4815515 A, US4757853 A, US4731905 A, US4686739 A, US4681307 A, US4640049 A, US4628981 A, US4590639 A, US4522245 A, US4316493 A, US4301623 A, US4191237 A, US4175475 A, US4082133 A, US4057219 A, US4003102 A, US3958367 A, US3921761 A, US3876184 A, US3876183 A, US3860226 A, US3635277 A, US3412423 A, US3265362 A, US3240484 A, US3047905 A, US2932057 A, US2858946 A, US2786231 A, US2660753 A, US2643714 A, US2630597 A, US2314015 A, US2097242 A, US2083467 A, US2032951 A, US1994142 A, US1992006 A, US1183254 A, DE4003218 A1, DE3440139 A1, BE755995 A1, BE755995, AU250577 A1,

Forward Citations: WO9964706, WO9939071, WO13070671, WO13040715, WO09145658, WO05083220, WO05083220, WO0194731, USRE39504, USD442471, USD442197, USD434639, USD434304, USD431770, US9708842, US9688390, US9534434, US9296280, US9273504, US8936063, US8893765, US8567567, US8528622, US8375635, US8281845, US8160287, US8056174, US8006338, US7784521, US7717155, US7686061, US7576504, US7537042, US7296607, US7282883, US7254868, US7234502, US7061197, US7059379, US6959751, US6837296, US6745814, US6742564, US6672691, US6655088, US6644378, US6615897, US6606762, US6561256, US6554047, US6527035, US6453975, US6442897, US6408925, US6401793, US6401792, US6327744, US6302179, US6279268, US6263947, US6263942, US6263541, US6212826, US6164014, US6134835, US6125582, US6086025, US5964268, US5950701, US5931212, US5865235, US2014265082, US2014230804, US2014027072, US2011215691, US2011047877, US2010296683, US2009194627, US2009115366, US2009014131, US2008314533, US2007289217, US2007283525, US2007215292, US2006290307, US2006191205, US2006137138, US2006096720, US2006086468, US2005189080, US2005139332, US2005133171, US2003230389, US2003213566, US2003201077, NL1036426, GB2373555, GB2373555, GB2369857, GB2369857, FR2863001, EP2208844, EP1972745, EP1818488, EP1595052, EP1536093, EP1536093, EP1524395, EP1086287, EP0947656, DE10101560, CN104159469, CN103930735,

Abstract:
Source: US5577544A An extension spring overhead door system in which the spring may be quickly and easily placed in tension with the door in a closed position. A spring tensioning device is provided which eliminates the need for multiple installers to lift the full weight of the door and then clamp or otherwise prop the door in an open position. An extension spring containment tube is also provided which surrounds the entire periphery of the spring to fully contain the entire length of the extension spring.

0) US2012234127A – STEERING APPARATUS FOR VEHICLE

68) Family number: 51930834 (US2012234127A) © PatBase

Title: STEERING APPARATUS FOR VEHICLE

Priority: EP20120158631 20120308 JP20110054992 20110314

Family:

Publication number	Publication date	Application number	Application date
DE602012003536 D1	20141204	DE201260003536T	20120308
EP2500241 A2	20120919	EP20120158631	20120308
EP2500241 A3	20130306	EP20120158631	20120308
EP2500241 B1	20141029	EP20120158631	20120308
JP2012188055 A2	20121004	JP20110054992	20110314
JP5750949 B2	20150722	JP20110054992	20110314
US2012234127 AA	20120920	US20120413088	20120306
US8733201 BB	20140527	US20120413088	20120306

Probable Assignee: JTEKT CORP

Assignee(s):(std)**:** JTEKT CORP ; OKANO RYOTA ; OSUKA AKIO

Assignee(s): JTEKT CORP OSAKA SHI

Inventor(s):(std)**:** OKANO RYOTA ; OSUGA AKIRO ; OSUKA AKIO

Inventor(s): OSUKA AKIO OSAKA SHI ; OKANO RYOTA OSAKA SHI

Agent(s): WINTER BRANDL FUERNISS HUEBNER ROESS KAISER POLTE PARTNERSCHAFT MBB; WINTER BRANDL FUERNISS HUEBNER ROESS KAISER POLTE PARTNERSCHAFT; WINTER BRANDL FUERNISS HUEBNER ROESS KAISER POLTE PARTNERSCHAFT MBB; OLIFF PLC

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): B60R25/02 B60R25/021 B62D1/16 B62D1/184 B62D1/185 B62D1/19 (Advanced/Invention)

CPC: B62D1/185 B60R25/02 B62D1/184

European class: B62D1/184 B62D1/185

US class: 280/775 74/492 74/493

Classification Explorer

Cited documents: WO03035452 A1, US8596160 BB, US8459401 BB, US8272291 BB, US7234328 BB, US7097205 BB, US6776251 BB, US5992191 A, US5813699 A, US5718132 A, US5485376 A, US5242195 A, US2011239809 AA, US2010242665 AA, US2010242665, US2005029795 AA, JP2010052648 A2, JP2010052648, JP2009137309 A2, JP2009137309, JP2007099260 A2, JP2007099260, JP2003327134 A2, JP2003327134, FR2937598 A1,

DE102009055021 A1

Forward Citations: US9669863, US9022426, US2016257333, US2016068181, US2016059880, US2014182410, CN104554421,

Abstract:
Source: US2012234127A It is an object of the present invention to provide a steering apparatus for a vehicle mounting a steering lock device to an upper tube by small numbers of constructing parts. A guide supporting mechanism guiding and supporting a upper tube in relation to a lower housing along an axial direction of the upper tube includes a guide bracket portion fixed to the upper tube, and a guide portion mounted in the lower housing to guide and support the guide bracket along the axial direction of the guide tube. A steering lock device locking and unlocking rotation of the upper shaft includes a lock housing guiding a cylinder in back and forth direction, and a lock bracket portion mounted in a shape of grasping the upper tube by the lock housing therewith. The guide bracket and the lock bracket portion are formed to one piece as a whole.

0) US2195509A – MOTOR VEHICLE DRIVE

69) Family number: 21210301 (US2195509A) © PatBase

Title:	MOTOR VEHICLE DRIVE
Priority:	US19350013753 19350329

Family:

Publication number	Publication date	Application number	Application date
US2195509 A	19400402	US19350013753	19350329

Probable Assignee:	TIMKEN AXLE CO DETROIT
Assignee(s):(std):	TIMKEN AXLE CO DETROIT
Assignee(s):	TIMKEN DETROIT AXLE CO ; THE TIMKEN DETROIT AXLE COMPANY
Inventor(s):(std):	RAY BUCKENDALE LAWRENCE
Inventor(s):	BUCKENDALE LAWRENCE RAY
International class (IPC 8–9):	B60K17/04 F16H1/14 (Advanced/Invention); B60K17/04 F16H1/04 (Core/Invention)
International class (IPC 1–7):	B60K17/08 B60K5/00
CPC:	B60K17/04 F16H1/14
European class:	B60K17/04 F16H1/14
US class:	180/292
Classification Explorer	
Forward Citations:	WO8606688, US8074532, US4534442, US3563328, US2669316, US2569341, US2540859, US2532057, US2008314178, EP1965095, DE3938080, DE102005024909,

Abstract:
Source: US2195509A 1. ilot ring 25 is secured to flange 15, it will be snugly locked in place. It is by reason of this locking ring 3| that bearing 2| is positioned–relative to the outer fading of the clutch bell–housing I I and which in turn positions the bevel gear |9. Meshing with the bevel gear– I9 and at right angles thereto is a second bevel gear 33 which may be of the same slze and have the same number of teeth as the bevel gear IS, or it may be larger having more teeth, or smaller with less teeth, depending upon design requirements. The gear 33 is _provided with an internal bore in its hub portion so that it may be received upon a sleeve 95. The gear 33 is non–rotatably positioned on the sleeve I5 by suitable means, such as a key 31. Adjacent the outer side ol' the gear 33 is a' bearing 39 the`in.ner race member of which is received upon the sleeve 35 substantially in abutting relationship with the hub `of the gear 33. Adjacent the outer side of the ,bearing 39 and the inner side of said gear 33 circular grooves are provided in 'the sleeve for the insertion of locking rings 4| and 43 respectively. It Ls by means of said locking rings that the gear 33 and bearing I9 are positioned laterally upon the sleeve 35. _ _ – The opposite end of the sleeve 35 is formed to provide gears 45 and 41. 'It will he understood, however, that gears 45 and 41 may beseparate parts secured to the sleeve in a suitable manner if required by conditions of individual design–. Adjacent the gear 45 is a bearing 4| the inner race member of which is piloted on a 'slightly enlarged portion of sleeve 35. The outer race member of the bearing 43 is carried in a circular bossof a partition 5| in the transmission casing 9. The teeth of the gear 41 are of less wldthand of a smaller diameter than the teeth ofgear 45 and are provided for a purpose which will be evident hereinafter. The inside diameter of the sleeve 35 is substantly uniform throughout its length, but is enlarged at its gear end for the insertion of a bearing 5| which rotatably supports' the sleeve 35 on 9. shaft 53 the latter serving as the 1na|n'sha.ft of the transmission. _ _ The b88.l'l!1§ 39 for the sleeve 35 is seated within –the cylindrical interior 54 of a bearing cage and is retained in position by means of an internal shoulder 51 at the inner extremity of the cylindrical interior of the cage and a lock ring 59 inserted into an. annular groove. The cage 55 has an outer"radla.l Binge ll and a cylindrical portion 52: The dange 5| is provided with a series of clrcularly spaced apertures for the insertion of cap–screws 53 which are threaded intckthreaded apertures providedvtbaretor in an' end ot the casing I. The cylindrical portion' II nts into the end of the casing I. and serves to position the parts concentrlcally. The lntenneshing of the bevel gears 83 and ll .ls controlled by adjusting the bevel gear 38 longitudinally of the transmission casing by the Insertion or renewal of shlms I9 between flange Bl and the end of transmission casing. _ The end of the main .shaft 53 adjacent the gear 33 is journaled in a bearing 1| carried by a bearing cage member 12. Thecage member 12 includes a radial Hange 13 and a cylindrical portion 1| within which the bearing 1| is re– `ce|ved. The cylindrical portion 14 of the cage member flts within the interior 54 of the bearing cage 55. _A circular series of capscrews serve to secure the radial ilange 13 to the bearing cage 55. The bearing 1| is retained in position within the cylindrical portion 14 by means of a shoulder 15 and a lock ring 11. A lock ring' 5| is seated in a groove in the shaft 53 at one side of the bearing 1| and the other side of said bearing abuts the hub portion of a propeller shaft companion flange 53. The companion ilange is non–rotatably secured to the main shaft 53 by any suitable means, such as splines 85. The

companion flange and the bearing 1| are longitudinally secured on shaft 53, against lock ring 9| by means of nut and washer assembly 81. It is to be noted that the addition or substractlon of shlms 59, moves the shaft 53 as well as the gear, 33 with respect to the transmission casing 9. A cylindrical boss on the end of the bearing case, member 12 encircles the outer portion of the hub of companion ilange I3 and is provided with suitable lubrication and dust sealing means, such as the grooves 892 – The driven shaft 53 extends the entire length of the transmission casing 9 and isirotatably supported at three spaced points. Two of the supporting bearings 5| and 1| have previously been described and the third bearing 9| 'ls located adjacent the end of the shaft opposite the bearing 1| and is housed in the outer end of casing 9. Adjacent the bearing 9| and at the extreme outer end portion of shaft f53 is a speedometer gear 93 non–rotatably secured to said shaft by suitable means, such as key 95. '1'he speedometer pinion gear 91 is rotatably journaled in transmission cover 99 in a sultable manner (not shown) and said cover is removably secured to casing 9 by means of capscrews |0l. ‘ ' The end of the shaft 58 adjacent the bearing 9| ls splined 'as indicated at »|U2 and receives an internally splined. slidable gear |03 which rotates with the shaft. A groove |04 ln. the hub of the gear receives a shifter fork |95 (Figure 7) by' which theigear may be moved axially along' the splines IM. Adjacent the gear |03 and abutting theends of the splines |02 is a gear ||l1. This gear ls free to rotate on the shalt 53 and includes `a bearing bushing |||5. Integral with the gear |l|1 and on the side adjacent the gear 41 on the sleeve 35 is a second gear |59 which is identical ,with the gear 41. Non–rotatably secured 'to shaft 53 by suitable means, such as a key '|||, and adjacent the gear |09 isthe portion II3 of a clutch ||5. Said portion II3 and the gear llfl are longitudinally positioned on shaft 53 by means of a, locking ring ||5 insertedlnto a groove in the shaft. The portion ||3 of the clutch ||5 is externally spllned and the internally spllned slidable clutching member H8 of the clutch is slidable thereon. 'I‘he clutch member Ill Ls provided with a groove HS– adapted to receive a shifter_ fork or similar device by means of which it may be moved axially. The external splines on the portion III are identical with the teeth of gears 41 and Ill. Therefore, if the' slidable member ||l of the clutch ||5 is moved toward the ‘left so that fits internal splines mesh with the teethof the gear A1, the sleeve .35 will be clutched to the, shaft 53. If the slidable member of theclutch ||5 is moved toward the right so that the teeth of the gear 109 –are engaged by its internal splinez, the gear |08 will be clutched to the shaft 58. Parallel to and beneath the shaft 53 is a nonrotatable shaft |20 which ls secured in suitable supports in the transmission casing 5 (Figure 7) . A hollow member |2l is rotatably mounted on the shaft' |20 by means of bearings |22 which are separated by a spacer I23. The hollow member I 2| serves as a countershaft and is formed to provide four axially spaced integral gears. The first and largest of these gears |24 is adapted to be –constantly in mesh with the gear 45 on sleeve 35. The second and smaller gear |25 is adapted to be in constant mesh with the gear |l1. The third gear |21 is smaller than the, soar |25 and is adapted to engage the gear |05 when it is shifted to the left as viewed in Figures 6 and 7. ThE smallest gear |29 is in constant mesh with an idler gear ,(not shown) which idler gear is adapted to mesh with gear_ |03 when lt is shifted in the opposite direction to–that required to mesh with gear |21. Thrust washers |30 and |32 are provided between the ends of the hollow member |2| and the transmission casing 9. The shifter fork |05 for the gear |03 and the fork or other device which is engaged in the groove H9 to move the clutch member Ill are carried by slidable rods ISS, one of which appears in Figure 7. The rods |33 are moved by the means designated generally by the reference character ISI which is under control of a lever ISS. If the transmission `is` located in a vehicle at a point remote from the driver thereof, suitable remote control devices may be used to operate the lever IBS. _ ` It is 'to be understood that the particular arrangementof the speed–changing gears and also the means by which they are shifted may be revised to suit the particular desires or require–_ ments of the user and such revlslons are considered within the scope of the present invention. The arrangement shown herein ls illustrative of one type of transmission embodying the present invention. . " – Q In operation, power from the engine is–transmitted through the clutch in the casing ll to the shaft I1 –and thence through the bevel gears ssll and.33 to the sleeve 35 and the gear li. In the position of the parts illustrated in Figure 7, .no power can be transmittedto the main shaft II, as the parts are in what is generally known ‘as “neutral.” To shift into first or low gear, gear |03 is moved toward the left as viewed on Figures 6 and '7 so that it meshes with thegear |21. Then the gear 45 will drive the gear III, and the gear |21. The gear |21 being in mesh with the gear |03 drives the latter and the main shaft ll. It is noted that the gears 45 and |21 are of less size than the gears |2| and |03 respectively with which theyare in mesh, and hencea reduction in speed and increase in power is obtained. Reversal of the direction of rotation of the shaft II is obtained by moving the sliding gear Ill to the right as viewed on Figure 'I so that lt comes into mesh with the idler gear which is driven from the gear I 29. 'I‘he idler gear which is thus interposed in the gearing causes the gear |03 and main shaft 53 to be driven in the opposite direction of rotation. ' When the vehiclehas attained sulllcient speed in low gear, the transmission is shifted to second or intermediate gear in the usual manner by manipulation of the clutch and the transmission control |35. To obtain the intermediate position of the transmission mechanism, gear |03 ls moved toward the right out of mesh with the gear |21 and the sliding clutch member HI is moved toward the right so that it overlaps the gear |0S. In this position of the parts. power that is transmitted to the gear |2l'by the gear is transmitted through gears |25 and |01 to the shaft 53. It ,is to be noted that the gear |25 is larger than the gear |21 and that gear ,|01 is smaller than gear I03. Therefore, there will still be~a reduction in speed of shaft 53 with respect to sleeve 35, 'but this speed reduction will not be as great as with the mechanism in low gear. ‘ _ . . When the vehicle has attained sufiicient speed in second gear, the mechanism is shifted into high gear or direct drive. This is accomplished by moving the clutch member I I8 to the left out of mesh with gear |09 and into mesh with the gear 41. With the parts in Bus position, the gear I5 will still drive the gear |2|, but the gear |01 which is driven by gear |25 will freely rotate on the shaft 53. Power then is transmitted directly from the gear 45 to the shaft 53 by means of the clutching engagement of the internal spllnes of the member | Il with the teeth |1_ The shaft 53 will then rotate at the same speed as the sleeve 35. V ' _ While I have confined the description of the transmission mechanism of my invention to a transmission having its longitudinal axis at right angles to the power in–put shaft lt is evident that this angle may be varied by changing the angularlty of the bevel gearing IS and 23. Such an arrangement is contemplated in the transmission mechanism Ii of Figures 4 and 5. From the foregoing description it will be seen that by' my present invention I provide a very compact transmission mechanism having a power ln–put shaft, the axis of which is coincident with the longitudinal axis of the driving means, but which is other than parallel to or co–incidental with the _longitudinal axis of the transmission. It is also evident that I have provided a translnlssion

for use in a motonvehlcle and particularly ln a vehicle employing a transversely mounted motor at either end of the vehicle, in which the transmission–bevel gearing is at the power in~put end of the transmission, thereby reducing the size of such gears and increasing their factor of safety. , ' _` The invention may be embodied in ,other speclnc forms without departing from the spirlt or essential characteristics thereof. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appendedclaims rather than by the foregoing de– ` scrlptlon, and all changes–which come withinthe range of equivalency of the claims are therefore intended to be embraced therein. ` What ls claimed and desired to be secured by United States letters Patent is– ' _gt; IC _ s,1es,so9 ll ln a. change speed transmission comprlalng a pair of telescoped independently rotatable shafts, a drlvlng shaft and a. gear thereon, a driven gear on one of said telescoped shafts mesh–_gt; ` ing with said driving gear, a, casing for mid transmlsslon, a bearing housing mounted on said 09.5– lng and a pair of bearings lndependently supporting sald nested shafts within said housing, and means to permit adjustment of the posltlon of said bearlng housing ln said caslng whereby to simultaneously move sald bearings and the telescoped shafts axially and thereby effect adjustment of the meshing _engagement of said gears.

0) US2002152662A – GUN LOCK

70) Family number: 28308151 (US2002152662A) © PatBase

Title: Gun lock

Priority: US20010839353 20010420

Family:

Publication number	Publication date	Application number	Application date
US2002152662 AA	20021024	US20010839353	20010420
US6796071 BB	20040928	US20010839353	20010420

Probable Assignee: LANE KENNETH M

Assignee(s):(std)**:** LANE KENNETH M ; LANE WOODROW W

Inventor(s):(std)**:** LANE KENNETH M ; LANE WOODROW W

International class (IPC 8–9): F41A17/44 (Advanced/Invention); F41A17/00 (Core/Invention)

International class (IPC 1–7): F41A17/00

CPC: F41A17/44

European class: F41A17/44

US class: 42/70.01 42/70.11 42/701.1

Classification Explorer

Cited documents: US6041536 A, US5699687 A, US5664358 A, US5628136 A, US5491918 A, US5488794 A, US5357704 A, US5289653 A, US5138785 A, US4969284 A, US4908971 A, US4783924 A, US4512099 A, US3710490 A, US3360880 A, US3022598 A, US2887807 A, US2479107 A, US2327334 A,

Forward Citations: WO06052440, WO06052440, USD646345, US9228791, US9207030, US8677668, US8567381, US8443637, US7849625, US2017184362, US2014130389, US2012099925, US2011214656, US2011173860, US2006162221, US2006101696, DE202010013858, DE102010000644, DE102010000644,

Abstract:
Source: US2002152662A A safety lock for a firearm. The safety lock has an engagement member moveable between a locked and an unlocked position. The lock is secured within a gun by inserting the lock in the barrel of the gun, and then moving the engagement member from the unlocked position to the locked position. In the locked position, the engagement member engages structure in the firing chamber of the gun, thereby securing the safety device within the firearm.

0) AU2002302091A – SCAVENGER ENERGY CONVERTER SYSTEM ITS NEW APPLI...

71) Family number: 31799603 (AU2002302091A) © PatBase

Title: Scavenger energy converter system its new applications and its control systems

Priority: AU20020302091 20021122

Family:

Publication number	Publication date	Application number	Application date
AU2002302091 AA	20040610	AU20020302091	20021122

Probable Assignee: GAUDENCIO LABRADOR

Assignee(s):(std)**:** GAUDENCIO LABRADOR

Assignee(s): LABRADOR GAUDENCIO A

Inventor(s):(std)**:** LABRADOR GAUDENCIO A

Inventor(s): GAUDENCIO A LABRADOR

Agent(s): CHRYSILIOU IP

International class (IPC 8–9): F03D9/00 F03G6/00 (Advanced/Invention); F03D9/00 F03G6/00 (Core/Invention)

International class (IPC 1–7): F03D9/00 F03G6/00

CPC: Y02B10/22 Y02B10/30 Y02B10/70 Y02E10/46 Y02E10/725

European class: Y02B10/22 Y02B10/30 Y02B10/70 Y02E10/46 Y02E10/72H

Classification Explorer

Forward Citations: WO14020367, US9287753, US8928160, US8164204, CN104813022,

Abstract:
Source: AU2002302091A What has been invented is a series of scientific applications of the wideface energy converter device, be it in the form of a wideface solar heat receiver or a wideface fluid impeder device. The wider is the solar heat receiver, the more solar power is available for conversion. The wider is the sail of the boat, the more wind is available to push the boat. Wherefore, the wideface solar trap made up of multi–layer transparent roofs covering a heat insulated box is used to heat up a radiator tubings that contain water. The multilayer transparent roof, having spaces in between sheets, prevents solar heat from backing out hence the trap becomes hotter and hotter because the inner sheet is not in contact with the cold wind. This solar trap is now used to heat up radiator pipes of compressed air coming from a gas turbine engine and then returned back to the exhaust turbine of same engine. Applying the principle of the wind sail, the turbine blades of the compressor and the turbine blades of the exhaust turbine are made wideface as much as possible to produce maximum impedance against the expanding exhaust hot air and to produce maximum push upon the fresh air being compressed. This wideface fluid impeder is now expanded into an underwater platform from One Acre or much more and attached to floating hotels, large/small boats, and floating sea walls, to prevent oscillation by the surfs. 36 9 Fig.1 104 Fig.l

0) US4620429A – CYCLE LOCK

72) Family number: 2191946 (US4620429A) © PatBase

Title: CYCLE LOCK

Priority: US19850796773 19851112

Family:

Publication number	Publication date	Application number	Application date
AU198664562 A1	19870514	AU19860064562	19861029
AU568256 B2	19871217	AU19860064562	19861029
DE3638567 A1	19870723	DE19863638567	19861112
FR2600700 A1	19871231	FR19860014995	19861028
GB2183286 A1	19870603	GB19860026583	19861106
GB2183286 B2	19890215	GB19860026583	19861106
GB8626583 A0	19861210	GB19860026583	19861106
JP62121283 A2	19870602	JP19860267431	19861110
US4620429 A	19861104	US19850796773	19851112

Probable Assignee: QUILLEN JOHN

Assignee(s):(std)**:** JIYON DEII KUIREN ; QUILLEN D J D ; QUILLEN J D ; QUILLEN JOHN DEE ; QUILLEN JOHN D ; QUILLEN JOHN

Assignee(s): QUILLEN JD ; JOHN DEE QUILLEN

Inventor(s):(std)**:** JIYON DEII KUIREN ; QUILLEN JOHN D ; QUILLEN JOHN DEE

Inventor(s): D QUILLEN JOHN ; JOHN D QUILLEN ; JOHN DEE QUILLEN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD

International class (IPC 8–9): E05B21/06 E05B29/00 E05B35/08 (Advanced/Invention); E05B29/00 (Advanced/Non–invention); E05B21/00 E05B29/00 E05B35/00 (Core/Invention)

International class (IPC 1–7): E05B25/00 E05B25/08 E05B29/00 E05B29/02 E05B35/10 E05B37/12 E05B9/04

CPC: Y10T70/7633 Y10T70/7695 Y10T70/7734 Y10T70/7864 Y10T70/7893 Y10T70/7944 E05B35/083 E05B21/06

European class: E05B21/06 E05B35/08B

US class: 70/366 70/377 70/383 70/406 70/411 70/421

Classification Explorer

Cited documents: US3439516 A, US3255620 A, DE3034998 A1,

Forward Citations: USRE45627, US9003845, US7634930, US7181409, US7047778, US6975997, US6967567, US6947881, US6941197, US6850898, US6850153, US6696981, US6553801, US4966021, US4723427, US2008282755, US2003154753, FR2875835, EP1470306, EP0304636,

Abstract:
Source: US4620429A A cycle lock having at least one plurality of disc–like tumblers loosely mounted on a shaft parallel with the axis of rotation of the key rotated lock cylinder. Each tumbler has a two spaced lobes which, in the neutral state of the tumbler, contact the arcuate surface of the cylinder but one of the lobes may drop into the key slot in the cylinder if not occupied by a high segment on the key. A key is initially inserted into the lock at a special location at which all tumblers are in their neutral state, and the rotation of the key to its normal position of insertion and removal will set the lock tumblers according to the key coding. In one embodiment particularly useful for hotels, etc., two sets of tumblers are employed: one set for transient or guest keys, a second set for service personnel keys, and a third key, a grand master key, operates the second tumbler set and can reset both sets of tumblers for accepting new keys with different codings thereon.

0) WO07036592A1 – VERSATILE JAMONERO HAM HOLDER SUPPORT A JAMBON ...

73) Family number: 34367132 (WO07036592A1) © PatBase

Title: VERSATILE JAMONERO HAM HOLDER

Priority: ES20050000437 20050222

Family:

Publication number	Publication date	Application number	Application date
ES2268957 AA	20070316	ES20050000437	20050222
ES2268957 BA	20080216	ES20050000437	20050222
ES2285945 AA	20071116	ES20060002977	20050222
ES2285945 BA	20081116	ES20060002977	20050222
ES2285946 AA	20071116	ES20060002978	20050222
ES2285946 BA	20081116	ES20060002978	20050222
ES2288136 AA	20071216	ES20060002979	20050222
ES2288136 BA	20081116	ES20060002979	20050222
WO07036592 A1	20070405	WO2006ES70019	20060222

Probable Assignee: PEREZ GULIAS JAVIER

Assignee(s):(std)**:** PEREZ GULIAS FCO JAVIER ; PEREZ GULIAS FRANCISCO J ; PEREZ GULIAS FRANCISCO JAVIER ; PEREZ GULIAS JAVIER

Assignee(s): FCO JAVIER PEREZ GULIAS

Inventor(s):(std)**:** PEREZ GULIAS FCO JAVIER ; PEREZ GULIAS FRANCISCO JAVIER ; PEREZ GULIAS JAVIER ; PEREZ GULIAS FRANCISCO J

Inventor(s): FCO JAVIER PEREZ GULIAS

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): A47J43/18 A47J47/00 B65D43/18 B65D47/00 (Advanced/Invention); A47J47/00 (Core/Invention)

CPC: A47J43/18 A47J47/005 A47J47/00

European class: A47J43/18 A47J47/00 A47J47/00A

Classification Explorer

Cited documents: ES2213442 AA, ES2190693 AA, ES2167169 AA, ES1057134 UA, ES1053978 UA, ES1053978, ES1053450 UA, ES1053450, ES1050076 UA, ES1048956 UA, ES1048244 UA, ES1039887 UA, ES1039887, ES1023011 UA, ES1017806 UA, ES1017806,

Forward Citations: WO14072546, ES2560702, ES2489294, ES2467491, ES2383185, ES2374128,

Abstract:
The invention relates to a versatile jamonero ham holder which is formed by an L–shaped structure or support consisting of a long horizontal base (2) on which it rests, a shorter vertical segment (3) comprising one or more bars and an angular reinforcing support (42) which is solidly connected to a rotational and/or translational shaft (18) which can be used to rotate and move the ham holder, said holder also comprising the necessary means for fixing and securing the ham. The aforementioned means take the form of upper fixed or moving hoof clamps (5, 6) and lower hind–quarter clamps (9), which can be inclined and telescopically extended and which are equipped with prongs on the inner face thereof. Said clamps are also provided with quick clamping levers (13, 14). The invention also comprises telescopically–extendible vertical cutting–prevention protectors (17), end–of–travel and anti–stain protectors (16) and a magnetised groove (52) in the form a receptacle for the cutting knife among other improvements. The inventive ham holder can take the form of an independent item, can be built into a piece of furniture or can be equipped with means for fixing same to an existing structure.

0) US4730632A – CANE WITH HANDLE FEATURING GRIPPING AIDS

74) Family number: 3006289 (US4730632A) © PatBase

Title: CANE WITH HANDLE FEATURING GRIPPING AIDS

Priority: US19860853131 19860417 US19880150752 19880201 US19880157957 19880219

Family:

Publication number	Publication date	Application number	Application date
US4730632 A	19880315	US19860853131	19860417
US4834127 A	19890530	US19880157957	19880219

Probable Assignee: BEIERSDORF AG

Assignee(s):(std)**:** JUNG CORP ; KENDALL AND CO

Assignee(s): KENDALL CO ; KENDALL CO A CORP OF DE ; MANUFACTURERS HANOVER TRUST CO ; MANUFACTURERS HANOVER TRUST CO AGENT AS ; MANUFACTURERS HANOVER TRUST CO A OF NEW YORK CORP ; BARRIER FREE ENVIRONMENTS INC ; BEIERSDORF AG ; JUNG A CORP OF OH CORP

Inventor(s):(std)**:** MACE RONALD L ; VAN SICE DAVID P

International class (IPC 8–9)**:** A45B9/02 (Advanced/Invention); A45B9/00 (Core/Invention)

International class (IPC 1–7)**:** A45B9/02 B62K21/26

CPC: A45B9/02 Y10T74/20828 Y10T403/559 Y10T403/7021

European class: A45B9/02

US class: 135/72 135/76 403/298 403/356 74/551.9

Classification Explorer

Cited documents: US84457 A, US768452 A, US71460 A, US666646 A, US605708 A, US566306 A, US4454699 A, US4288101 A, US4018370 A, US3995650 A, US3992570 A, US3966339 A, US3883258 A, US3883257 A, US3851980 A, US3482586 A, US3363639 A, US3269399 A, US3177884 A, US3157187 A, US3142200 A, US3093402 A, US3029828 A, US298115 A, US2778395 A, US2742936 A, US272007 A, US2696233 A, US2618986 A, US2606584 A, US2604130 A, US2520890 A, US2435650 A, US2409365 A, US2361256 A, US231043 A, US2309816 A, US2282902 A, US2269029 A, US2146495 A, US1952980 A, US1930501 A, US192068 A, US187842 A, US1719458 A, US157634 A, US156369 A, US1375912 A, US1329915 A, US1086310 A, GB2067257 A1, DE2739101 A1, DE126477 A, DE1014469 B, CH73402 A, CH73402,

Forward Citations: WO16061364, WO11041417, WO11041417, WO03009720, USD783267, USD697783, USD682068, USD625510, USD621602, USD547542, USD539193, USD528780, USD522232, USD521720, US8695617, US8393342, US8082936, US7921860, US7896013, US7828305, US7673641, US7621288, US7540296, US7510361, US7509966, US7334592, US7261114, US7261113, US6520194, US6282745, US5778914, US5711334, US5669727, US5458145, US5417234, US5351703, US5343589, US5331989, US5271196, US5100162, US4971088, US2011319929, US2011126871, US2011073145, US2011073144, US2010282282, US2010154849, US2010071738, US2009235967, US2009044847, US2008173340, US2008017228, US2007267054, US2007267053, US2007210595, US2007020064, US2006181093, US2006169308, US2006162754, US2005268954, US2004134527, US2004055629, JP2001178515, ITPR20110083, EP2043748,

Abstract:
Source: US4730632A A cane having a one piece molded handle with a roughened area on the handle's top surface to increase gripping friction with the user's hand, upstanding shoulders at the front and rear ends of the handle that prevents the user's hand from slipping off the handle, and index finger support ribs to enhance control of the cane during use. The handle is preferably connected to a tubular shaft by a fastenerless lock that includes a stub shaft formed integral with the handle, that stub shaft having a series of lock flanges oriented generally normal to the stub shaft's axis that, prior to assembly, are of a slightly greater outside diameter than the inside diameter of the tubular shaft, so that the lock flanges are deformed upwardly in generally dish–shaped configuration when the handle's stub shaft is inserted into the tubular shaft.

0) US3043925A – ELECTRICAL CONNECTOR WITH MULTIPLE RELEASE MECH...

75) Family number: 203429 (US3043925A) © PatBase

Title: ELECTRICAL CONNECTOR WITH MULTIPLE RELEASE MECHANISM

Priority: FR19590805764 19590922 US19580763382 19580925

Family:

Publication number	Publication date	Application number	Application date
BE592894 A7	19610112	BE19600592894	19600712
DE1415103 A1	19681003	DE19591415103	19590923
FR1236377 A	19600715	FR19590805764	19590922
GB934442 A	19630821	GB19590030081	19590903
US3043925 A	19620710	US19580763382	19580925

Probable Assignee: CANNON ELECTRIC CO

Assignee(s):(std): CANNON ELECTRIC CO ; INT STANDARD ELECTRIC CORP

Assignee(s): INTERNATIONAL STANDARD ELECTRIC CORP ; CANNON ELECTRIC COMPANY

Inventor(s):(std): EVERETT WILSON ROBERT ; WILSON ROBERT E ; WILSON ROBERT EVERETT

Inventor(s): ROBERT EVERETT WILSON

International class (IPC 8–9): H01R13/635 (Advanced/Invention); H01R13/703 (Advanced/Non–invention); H01R13/633 (Core/Invention); H01R13/70 (Core/Non–invention)

International class (IPC 1–7): H01R13/633

CPC: H01R13/635 H01R13/703

European class: H01R13/635 T01R13/703

US class: 200/323 200/51.02 200/51.12 200/51R 439/152

Classification Explorer

Cited documents: US2904771 A, US2853690 A, US2775745 A, US2748229 A, US2736870 A, US2710384 A, US2697212 A, US2683194 A, US2545395 A, US2466370 A, US2457119 A, US2127473 A, US1580825 A, DE707578 A, DE637067 A, AT99574 B,

Forward Citations: WO11059452, US8398436, US4684190, US4316304, US4264115, US4155109, US4001653, US3786208, US3598935, US3496519, US3437978, US3436602, US3360764, US3336562, US3335391, US3167373, US3159444, US3156513, US3156512, FR2418969, EP0234339, EP0234339, EP0234339, DE10231394, CN103280665,

Abstract:
Source: US3043925A 934,442. Two–part couplings. CANNON ELECTRIC CO. Sept. 3, 1959 [Sept. 25, 1958], No. 30081/59. Class 38 (1). A plug–and–socket connector comprising shells 16, 15 respectively enclosing pin–andsocket contact–carrying pairs of insulating blocks 25, 26 and 43, 44 has a releasable locking device 35 for securing the plug– and–socket members together. As shown, the socket member has a further pair of socket contact – carrying blocks 49 slidable on bolts 52 and spring– urged away from the blocks 43, 44 but which can be drawn towards the latter blocks by the locking device to engage the contacts 18 carried thereby with rearwardlyextending pins 48 on the contacts 19 carried by blocks 43, 44. The locking device comprises a screw–threaded socket 115 carried by the blocks 49 and engageable by a stud 111 having a stem 112 locked in the end of a tubular shaft 82, which extends through a barrel 36 carried by the plug member, by keys 108, Fig. 5, which are held in engagement with a groove 113 in stem 112 by cam surfaces 104 on the barrel. The shaft and barrel are movable relatively to each other either by means of a lanyard 125 attached to a collar 74 carried by the inner end of the barrel, or by fluid pressure acting on a piston 83 carried by the shaft and slidable in the collar 74. Thus the cam surfaces 104 may be withdrawn from locking engagement with the keys 108 to release the stud 111. In engaging the plug–and–socket members, the plug with the stud 111 locked thereto is engaged with the contacts 19 and the barrel 36 and shaft 82 are rotated by means of a knob 88, thereby causing the stud to draw the socket 115 and blocks 49 towards the blocks 43, 44 against the biasing springs to complete the circuit through the connector and at the same time lock the coupling members together. To release these, the stud 111 is unlocked as described above, either by the lanyard or fluid pressure, thus allowing the blocks 49 to retract and disengage contacts 18, 19 such movement being assisted by a spring–loaded rod 101 in the shaft 82. The plug member may then be removed leaving the stud attached to the socket member from which it may be

subsequently removed when the members are to be re−connected. The blocks 49 and further set of socket contacts 18 may be omitted in which case the socket 115 will be carried by the blocks 43, 44 and release of the locking device will cause the rod 101 to eject the plug member from the socket member.

0) US2003079564A – VARIABLE LENGTH AUTOMOTIVE GEAR SHIFTER

76) Family number: 28627883 (US2003079564A) © PatBase

Title: VARIABLE LENGTH AUTOMOTIVE GEAR SHIFTER

Priority: US20010055486 20011029

Family:

Publication number	Publication date	Application number	Application date
US2003079564 AA	20030501	US20010055486	20011029

Probable Assignee: THIENGTHAM PETE P

Assignee(s):(std)**:** THIENGTHAM PETE P

Inventor(s):(std)**:** THIENGTHAM PETE P

International class (IPC 8–9): F16H59/02 G05G1/06 (Advanced/Invention); F16H59/02 G05G1/04 (Core/Invention)

International class (IPC 1–7): G05G1/04

CPC: G05G1/06 F16H59/0278 Y10T74/20624

European class: F16H59/02M G05G1/06

US class: 74/525

Classification Explorer

Forward Citations: US9003917, US7575510, US7131349, US7007569, US7000497, US2013220051, US2007204718, US2006057952, US2004045391, FR2863555, DE102004060303, DE102004060303, DE102004054489, CN104885028,

Abstract:
Source: US2003079564A A variable length gear shifter for an automobile transmission includes at least two hollow elongated telescoping members movable relative to one another along a longitudinal axis and a releasable lock for locking the telescoping members telescoped together in a selected one of a plurality of predetermined locking positions. One of the telescoping members has an end that is adapted to be attached to a shaft extending from a transmission and another of the telescoping members extends to a free end for grasping by a human hand. Each locking position determines a different distance between the end of the one telescoping member and the free end of the other telescoping member.

0) US2005177152A – CROSS LINK SYSTEM

77) Family number: 32141925 (US2005177152A) © PatBase

Title: CROSS LINK SYSTEM

Priority: US20040776732 20040210

Family:

Publication number	Publication date	Application number	Application date
US2005177152 AA	20050811	US20040776732	20040210
US7104993 BB	20060912	US20040776732	20040210

Probable Assignee: ATLAS SPINE INC

Assignee(s):(std)**:** ATLAS SPINE INC

Assignee(s): BAYNHAM BRET O ; BAYNHAM G C ; BAYNHAM MATTHEW G ; CAMPBELL DAVID R ; DEVELOPMENT 72 LLC ; INNOVATIVE SPINAL DESIGN

Inventor(s):(std)**:** BAYNHAM BRET O ; BAYNHAM G C ; BAYNHAM G CLAY ; BAYNHAM MATTHEW G ; CAMPBELL DAVID R

Inventor(s): CAMPBELL DAVID ; BAYNHAM BRET ; BAYNHAM MATTHEW ; BAYNHAM G

Agent(s): MCHALE AND SLAVIN PA

International class (IPC 8–9): A61B17/56 A61B17/70 (Advanced/Invention); A61B17/56 A61B17/70 (Core/Invention)

International class (IPC 1–7): A61B17/56

CPC: A61B17/7052

European class: A61B17/70D4

US class: 606/252 606/53 606/61

Classification Explorer

Cited documents: US6887241 BA, US6761721 BB, US6761721 BA, US6736817 BB, US6736817 BA, US6602253 BB, US6602253 BA, US6524315 BA, US6306137 BB, US6306137 BA, US6302882 BA, US6283967 BA, US6010503 A, US5947966 A, US5928233 A, US5702393 A, US5693053 A, US5275600 A, US2004133203 AA, US2004116928 AA, US2003153917 AA, US2003114853 AA, US2002111625 AA,

Forward Citations: US9629663, US9526524, US9504500, US9486247, US9387014, US9387013, US9339309, US9295495, US9247964, US9198696, US9131964, US9060813, US8961572, US8940021, US8920471, US8920470, US8920469, US8870921, US8852234, US8828055, US8608780, US8591550, US8556937, US8491642, US8480712, US8430914, US8425563, US8419771, US8414614, US8372120, US8372119, US8361117, US8353934, US8348952, US8298266, US8246657, US8197512, US8118837, US8100949, US8048129, US8021400, US7918876, US7837714, US7722648, US7717938, US2016183985, US2015134002, US2012158064, US2011106161, US2010298882, US2010274286, US2010198259, US2009299413, US2009259256, US2009234390, US2009216277, US2009157120, US2007270809, US2007270808, US2007225713, US2007225712, US2007219556, US2007173829, US2006241598, CN105496532,

Abstract:
Source: US2005177152A A cross link system provides stability to spinal rods by maintaining a set distance between the rods. The cross link has a bar with connectors on each end formed with grooves that engage each of the spinal rods. Each of the connectors has a cam that can be manipulated to obstruct the groove and provide a friction fit between the spinal rod and the cross link. The cams have locking nuts that prevent disengagement of the cam and rod. The bar has two shafts interconnected by a bifurcated pin with upstanding ends. a piston is located between the upstanding ends and diverts shear forces along the longitudinal axis of the bar.

78) Family number: 34033549 (WO06137070A1) © PatBase

Title: SLANTED KEY COMBINATION ELEMENT IN KEY BLANK AND KEY

Priority: IL20050169371 20050623

Family:

Publication number	Publication date	Application number	Application date
IL169371 A1	20090922	IL20050169371	20050623
WO06137070 A1	20061228	WO2006IL00734	20060622

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** AVI TAL SHLOMO ; AVITAL SHLOMO ; MUL T LOCK TECHNOLOGIES LTD

Assignee(s): SHLOMO AVITAL

Inventor(s):(std)**:** AVI TAL SHLOMO ; AVITAL SHLOMO

Inventor(s): SHLOMO AVITAL

Agent(s): DEKEL PATENT LTD

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 ZA ZM ZW

International class (IPC 8–9): E05B35/00 (Advanced/Invention); E05B35/00 (Core/Invention)

CPC: E05B35/003

European class: E05B35/00F

Classification Explorer

Cited documents: WO05095738 A2, WO0242582 A1, WO0057006 A1, FR2619149 A1, EP1355023 A1, EP0472495 A1,

Abstract:
A key blank (and/or key made therefrom, and lock provided therefor) including a generally elongate shaft portion defining first and second generally flat oppositely directed side surfaces, joined by edge surfaces, at least one of the first and second side surfaces cuttable to form key cuts that define a key combination surface, the shaft portion having a longitudinal axis that extends along a length thereof and a transverse axis that extends along a width thereof, and at least one key combination element movably disposed in the elongate shaft portion and adapted for touching a lock combination element disposed in a cylinder lock plug, characterized by the at least one key combination element including a resilient arm disposed in a recess formed in the elongate shaft portion, the resilient arm and recess being slanted at a non–zero angle with respect to both longitudinal and transverse axes of the shaft portion.

0) US2011196192A – HEART HELP DEVICE, SYSTEM, AND METHOD

79) Family number: 44896173 (US2011196192A) © PatBase

Title: HEART HELP DEVICE, SYSTEM, AND METHOD

Priority:

AU20090302932	20091012	AU20090302939	20091012	AU20090302945	20091012
AU20160200523	20160129	AU20090302944	20091012	AU20160202255	20160412
JP20110530988	20091012	CN200980149795	20091012	JP20110530988T	20091012
AU20160203623	20160531	JP20130216383	20091012	JP20160033883	20160225
AU20170202799	20170427	JP20160033883	20091012	SE20080002135	20081010
SE20080002136	20081010	SE20080002139	20081010	SE20080002140	20081010
SE20080002141	20081010	SE20080002142	20081010	SE20080002143	20081010
SE20080002144	20081010	SE20080002157	20081010	SE20080002150	20081010
SE20080002146	20081010	US20080021461	20081010	SE20080002129	20081010
US20090123151	20091012	SE20080002141	20081012	SE20080002141	20081020
US20090202380P	20090224	US20090202382P	20090224	US20090202383P	20090224
US20090202406P	20090225	US20090202407P	20090225	US20090202393P	20090225
US20090202404P	20090225	US20090202405P	20090225	US20090213157P	20090512
US20090213155P	20090512	US20090213158P	20090512	US20090123232	20091012
US20090123436	20091012	US20090123667	20091012	US20090123446	20091012
US20090123182	20091012	US20090123197	20091012	US20090123284	20091012
US20090123587	20091012	US20090123586	20091012	US20090123402	20091012
US20090123394	20091012	US20110123587	20110411	US20130924146	20130621
US20110123284	20110408	US20130930865	20130628	US20110123586	20110411
US20140228253	20140328	US20110123446	20110408	US20110123232	20110407
US20110123182	20110407	US20110123667	20110411	WO2009SE00446	20091012
WO2009SE00458	20091012	WO2009SE51150	20091012	WO2009SE00459	20091012
WO2009SE00453	20091012	WO2009SE00456	20091012	WO2009SE51153	20091012
WO2009SE00449	20091012	WO2009SE00450	20091012	WO2009SE00454	20091012
WO2009SE00455	20091012	WO2009SE51148	20091012	WO2009SE00441	20091012
WO2099SE00446	20091012	US20150791533	20150706	US20150684473	20150413
US20160284582	20161004	US20160180130	20160613	US20160262063	20160912
US20160224699	20160801	US20160276820	20160927		

Family:

Publication number	Publication date	Application number	Application date
AU2009302904 AA	20100415	AU20090302904	20091012
AU2009302904 BB	20160303	AU20090302904	20091012
AU2009302932 AA	20100415	AU20090302932	20091012
AU2009302932 BB	20170202	AU20090302932	20091012
AU2009302939 AA	20100415	AU20090302939	20091012
AU2009302939 BB	20160303	AU20090302939	20091012
AU2009302944 AA	20100415	AU20090302944	20091012
AU2009302945 AA	20100415	AU20090302945	20091012
AU2009302945 BB	20151029	AU20090302945	20091012
AU2009302945 CA	20160421	AU20090302945	20091012
AU2016200523 AA	20160218	AU20160200523	20160129
AU2016202255 AA	20160505	AU20160202255	20160412
AU2016203623 AA	20160616	AU20160203623	20160531
AU2017202799 AA	20170518	AU20170202799	20170427
CA2776422 AA	20100415	CA20092776422	20091012
CA2776444 AA	20120402	CA20092776444	20091012
CA2776450 AA	20100415	CA20092776450	20091012
CA2776458 AA	20120402	CA20092776458	20091012
CA2776475 AA	20100415	CA20092776475	20091012
CN102245225 A	20111116	CN200980149795	20091012
CN102245225 B	20150916	CN200980149795	20091012
CN105079898 A	20151125	CN201510494805	20091012
EP2344106 A1	20110720	EP20090819470	20091012
EP2344106 A4	20151104	EP20090819470	20091012

EP2346548 A1	20110727	EP20090819473	20091012	
EP2346548 A4	20160928	EP20090819473	20091012	
EP2349095 A1	20110803	EP20090819475	20091012	
EP2349096 A1	20110803	EP20090819512	20091012	
EP2349097 A1	20110803	EP20090819513	20091012	
EP2349097 A4	20150826	EP20090819513	20091012	
EP2349098 A1	20110803	EP20090819514	20091012	
EP2349381 A1	20110803	EP20090819463	20091012	
EP2349381 A4	20161116	EP20090819463	20091012	
EP2349382 A1	20110803	EP20090819466	20091012	
EP2349382 A4	20160928	EP20090819466	20091012	
EP2349383 A1	20110803	EP20090819467	20091012	
EP2349383 A4	20160928	EP20090819467	20091012	
EP2349384 A1	20110803	EP20090819471	20091012	
EP2349384 A4	20160914	EP20090819471	20091012	
EP2349385 A1	20110803	EP20090819472	20091012	
EP2349385 A4	20150805	EP20090819472	20091012	
EP2349386 A1	20110803	EP20090819476	20091012	
EP2349386 A4	20161116	EP20090819476	20091012	
IN01935KN2011 A	20121026	IN2011KN01935	20110509	
JP2012505015 T2	20120301	JP20110530987T	20091012	
JP2012505016 T2	20120301	JP20110530988T	20091012	
JP2014054549 A2	20140327	JP20130216383	20131017	
JP2016116931 A2	20160630	JP20160033883	20160225	
JP2017094157 A2	20170601	JP20170007457	20170119	
JP5395183 B2	20140122	JP20110530988T	20091012	
JP5580319 B2	20140827	JP20110530987T	20091012	
JP5894134 B2	20160323	JP20130216383	20131017	
JP6082142 B2	20170215	JP20160033883	20160225	
RU2011114563 A	20121120	RU20110114563	20091012	
SE200802129 A1	20100411	SE20080002129	20081010	
SE533311 C2	20100824	SE20080002129	20081010	
US2011196192 AA	20110811	US20090123284	20091012	
US2011196193 AA	20110811	US20090123436	20091012	
US2011196476 AA	20110811	US20090123151	20091012	
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WO10042017 A8	20110714	WO2009SE00454	20091012	
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Probable Assignee: KIRK PROMOTION LTD

Assignee(s):(std)**:** CARLSSON MAGNUS ; FORSELL PETER ; KIRK PROMOTION LTD ; MILUX HOLDING SA ; MILUX HOLDING S A ; MILUX HOLDINGS S A ; MILUX HOLDINGS SA

Assignee(s): MAGNUS CARLSSON

Inventor(s):(std)**:** FORSELL PETER ; PETER FORSELL ; FOFSELL PETER ; CARLSSON MAGNUS

Inventor(s): MAGNUS CARLSSON

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; WRAYS PTY LTD; FETHERSTONHAUGH AND CO; AXELL KRISTINA; YAMAKAWA MASAKI; NIXON AND VNADERHYE PC; NIXON AND VANDERHYE PC; GABRIELA B; BERGENSTRAHLE AND PARTNERS AB; BERGENSTRAHLE AND LINDVALL AB; ESTREEN LARS; LARS ESTREEN

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): A61B1/018 A61B1/04 A61B17/32 A61B17/68 A61B5/00 A61B5/07 A61F2/00 A61F2/02 A61F2/06 A61F2/24 A61F7/00 A61H31/00 A61M1/00 A61M1/10 A61M1/12 A61M27/00 A61M29/00 A61M39/00 A61M39/02 A61M5/00 A61N1/362 A61N1/365 A61N1/37 A61N1/372 A61N1/378 (Advanced/Invention); A61B5/07 A61F2/30 (Advanced/Non–invention); A61B17/68 A61F2/00 A61F2/24 A61H31/00 A61M1/00 A61M1/10 A61M27/00 A61M29/00 A61M5/00 (Core/Invention)

CPC: A61F2/2421 A61M1/1053 A61M2039/0081 A61M2039/0205 A61M2039/0211 A61M2039/0214 A61M2039/0238 A61F7/00 A61F7/0085 A61F2007/0039 A61F2007/0054 A61F2007/0093 A61F2007/0296 A61F2002/30538 A61F2250/0002 A61F2250/0006 A61F2250/0013 A61B1/018 A61B1/04 A61B17/320016 A61M1/1096 A61M2205/3303 A61M2230/04 A61F2/2403 A61B5/076 A61B5/6846 A61F2210/009 A61F2250/0001 A61M1/1008 A61N1/3627 A61N1/3962 A61F2/2427 A61F2/2409 A61M1/101 A61M2205/32 A61M2205/33 A61M2205/8243 A61M1/1049 A61M1/1051 A61M1/1055 A61M1/106 A61M1/1068 A61M1/1086 A61M1/12 A61M1/122 A61M1/127 A61M1/1048

European class: A61B5/68D A61F2/24B A61F2/24F A61M1/10E4H A61M1/10E50B A61M1/12 K61B5/07D K61F2/00W92 K61F2/02G1 K61F2/30A3W2A K61F210/00Q K61F250/00D K61F250/00D2 K61F250/00G1 K61F250/00G10 K61M1/10E4A K61M1/10E4A5 K61M1/10E4B K61M1/10E4H K61M1/12C K61M39/00S11 K61M39/02A4 K61M39/02B10 K61M39/02B2 K61M39/02B2S

US class: 1/1 600/16 600/16P 600/16S 600/17 600/17P 607/17 623/1.24 623/1.240P 623/2.11 623/2.17 623/2.170P 623/3.1 623/3.100P 623/3.11 623/3.110P 623/3.12 623/3.120P 623/3.16 623/3.160S 623/3.17 623/3.170S 623/3.2 623/3.200P 623/3.21 623/3.210S

Classification Explorer

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Forward Citations: WO16079159, WO16036967, WO14140282, WO13102465, US9694165, US9636116, US9603984, US9572651, US9526649, US9452045, US9451965, US9402718, US9370656, US9364595, US9289281, US9247942, US9220824, US9192461, US9180235, US9149277, US9107669, US9095344, US9072907, US9060771, US9017351, US9005104, US8984733, US8961448, US8944987, US8886311, US8874215, US8852082, US8795150, US8764627, US8734318, US8696745, US8690959, US8678997, US8636809, US8602966, US8600510, US8574310, US8545384, US8509894, US8475355, US8469874, US8313423, US8290594, US8287444, US2016166418, US2015157836, US2015126833, US2013197597, US2012116536, US2012059218, US2011202129, US2011201871, US2011201870, US2011196486, US2011196483, US2011196482, US2011196481, US2011196476, US2011196192, US2010312164, US2010217067, EP3020373, DE102013200153, CN103854544, CN103854544,

Abstract:
Source: US2011196192A A medical device for assisting in the maintaining of an opening created in the thoracic diaphragm is provided. The medical device comprises a diaphragm contacting part adapted to be placed in contact with the thoracic diaphragm and thereby assist in the maintaining of the opening created in the thoracic diaphragm. A pericardial drainage device for draining a fluid from the pericardium of a patient is further provided. The drainage device comprises a conduit; the conduit comprises a first and second section. At least a portion of the first section is adapted to receive a fluid inside of the pericardium. The second section of the conduit is adapted to be positioned outside of the pericardium of a patient and enable the exhaust of said fluid received from said pericardium through at least a portion of said second section.

0) US5655692A – DISPENSING MECHANISM WITH QUICK–CONNECT AUGER S...

80) Family number: 13177276 (US5655692A) © PatBase

Title: DISPENSING MECHANISM WITH QUICK–CONNECT AUGER SHAFT COUPLING

Priority: US19960704087 19960828

Family:

Publication number	Publication date	Application number	Application date
US5655692 A	19970812	US19960704087	19960828

Probable Assignee: SPEE DEE PACKAGING MACHINERY INC

Assignee(s):(std)**:** SPEE DEE PACKAGING MACHINERY I

Assignee(s): SPEE DEE PACKAGING MACHINERY INC

Inventor(s):(std)**:** HILL DAVID J ; NAVIN JAMES P

International class (IPC 8–9)**:** B65G65/46 B65G65/48 (Advanced/Invention); B65G65/00 (Core/Invention)

International class (IPC 1–7)**:** G01F11/20

CPC: B65G65/463 Y10T403/5781 Y10T403/587 Y10T403/7005

European class: B65G65/46B B65G65/48A

US class: 222/413 403/312 403/319 403/348

Classification Explorer

Cited documents: US5170914 A, US4483400 A, US2901258 A, US2328988 A, US2192844 A, US1900258 A, US1792363 A, US1479583 A, US1171380 A, FR646819 A,

Forward Citations: WO07017448, WO07017448, WO0153714, US9556914, US9357693, US9105893, US9080241, US8666608, US8469231, US8267279, US7021817, US7011292, US6935534, US6691895, US6652180, US6568567, US6543204, US5996856, US5931355, US2013164642, US2012011906, US2008302835, US2008286398, US2006076368, US2004194636, US2004108334, US2004076479, FR2889479, CN104773529,

Abstract:
Source: US5655692A A quick–connect coupling facilitates the connection of an auger of a dispensing mechanism to the drive shaft of the dispensing mechanism so as to firmly lock the auger from radial, axial, or rotational movement with respect to the drive shaft while inhibiting contamination and facilitating cleaning. The coupling includes a male portion provided on the auger shaft and including one or more pins, a female portion formed in the adapter shaft and including one or more axial and peripheral slots, and a key which firmly locks the pin in the peripheral slot. The key includes a retainer which is affixed to a sleeve or other device serving as a guide and support for the retainer. Upon downward movement of the sleeve along the drive shaft, the retainer acts as a cam to lock the pins in position. If the dispensing mechanism employs an adapter shaft as the drive shaft, an improved quick–connect coupling may also be provided to attach the adapter shaft to the drive mechanism output shaft.

0) US2011247881A – INTELLIGENT CONTROLLED PROCESS FOR WELL LATERAL...

81) Family number: 44967569 (US2011247881A) © PatBase

Title: INTELLIGENT CONTROLLED PROCESS FOR WELL LATERAL CORING

Priority: WO2008RU00678 20081031

Family:

Publication number	Publication date	Application number	Application date
CA2741682 AA	20110426	CA20082741682	20081031
CA2741682 C	20160614	CA20082741682	20081031
GB201108704 A0	20110706	GB20110008704	20081031
GB2478455 A1	20110907	GB20110008704	20081031
GB2478455 B2	20130410	GB20110008704	20081031
JP2012507648 T2	20120329	JP20110534418T	20081031
JP5379858 B2	20131225	JP20110534418T	20081031
NO20110695 A	20110530	NO20110000695	20110510
RU2011121814 A	20121210	RU20110121814	20081031
RU2482274 C2	20130520	RU20110121814	20081031
US2011247881 AA	20111013	US20080124444	20081031
US8678109 BB	20140325	US20080124444	20081031
WO10050840 A1	20100506	WO2008RU00678	20081031
WO10050840 A8	20110616	WO2008RU00678	20081031

Probable Assignee: SCHLUMBERGER CA LTD

Assignee(s):(std)**:** ORBAN JACQUES ; PRAD RES AND DEV LTD ; SCHLUMBERGER CA LTD ; SCHLUMBERGER SERVICES PETROL ; SCHLUMBERGER HOLDINGS ; VERCAEMER CLAUDE ; SCHLUMBERGER TECHNOLOGY BV ; SCHLUMBERGER TECHNOLOGY CORP ; VERCAEMER CLAUDE JOSEPH

Assignee(s): SCHLUMBERGER HOLDINGS LTD ; SCHLUMBERGER CANADA LTD ; SHLJUMBERGER TEKNOLODZHI BV ; SCHLUMBERGER CANADA LIMITED ; SERVICES PETROLIERS SCHLUMBERGER ; SCHLUMBERGER HOLDINGS LIMITED ; SCHLUMBERGER TECHNOLOGY B V ; PRAD RESEARCH AND DEVELOPMENT LIMITED ; SCHLNMBERGER HOLDINGS LIMITED ; SCHLNMBERGER HOLDINGS LTD

Inventor(s):(std)**:** ORBAN JACQUES ; ORBAN ZHAK ; VERCAEMER CLAUDE ; VERCAEMER CLAUDE J ; VERCAEMER CLAUDE JOSEPH ; VERKAMER KLOD

Inventor(s): CLAUDE VERCAEMER ; JACQUES ORBAN

Agent(s): SMART AND BIGGAR; INO SARI; KUMAKURA YOSHIO; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; CHADWICK A; BRIGITTE; PROKOFIEVA ZHANNA SERGEEVNA

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): E21B21/08 E21B23/03 E21B25/00 E21B25/04 E21B25/10 E21B45/00 E21B47/024 E21B47/04 E21B47/047 E21B47/053 E21B47/08 E21B47/085 E21B47/09 E21B47/092 E21B47/095 E21B47/098 E21B47/12 E21B47/125 E21B47/13 E21B47/135 E21B49/02 E21B49/06 E21B7/06 G01V1/40 G01V3/18 G01V5/12 (Advanced/Invention)

CPC: E21B25/00 E21B7/061 E21B49/06

European class: E21B25/00 E21B49/06 E21B7/06B

US class: 175/244 175/61

Classification Explorer

Cited documents: WO9119075 A2, WO200472437, WO199119075, WO1991019075, WO07027683 A2, WO04072437 A1, WO04072437, US6712158 BB, US5954131 A, US5887655 A,

US5667025 A, US4714119 A, US4463814 A, US4354558 A, US3517756 A, US2708103 A, US2594292 A, US2382933 A, US2148373 A, US2011247881 AA, US2007215349 AA, US2006081398 AA, US2006054354 AA, US2003034177 AA, SU732519 T, SU1617137 T, SU1617137, SU0732519, SU01617137, SU00732519, RU2180388 C2, RU2086749 C1, EP1780372 A1,

Forward Citations: WO16097307, WO14200963, US9580985, US9541670, US9512680, US9328573, US9145737, US8854044, US8797035, US8678109, US2015198009, US2015136486, US2014033885, US2013308753, CN104895516,

Abstract:
Source: US2011247881A A system for coring an underground formation surrounding a borehole, comprising: a tool body that can be positioned in the borehole near the formation to be cored, the tool body including a motor; a rotary drive head connected to the motor; a rotary tool connected to the rotary drive head and one end and carrying a drill bit at the other end; a drive mechanism including an operable anchor for anchoring in the borehole and an axial drive for advancing tool body and the rotary tool; and a guide for urging the rotary tool laterally from the borehole into the surrounding formation; wherein the rotary tool is a tubular coring tool conveying an annular drill bit.

0) GB412599A – IMPROVEMENTS IN OR RELATING TO THE HEELING OF B...

82) Family number: 19952964 (GB412599A) © PatBase

Title: Improvements in or relating to the heeling of boots or shoes

Priority: GB19320027289 19321001

Family:

Publication number	Publication date	Application number	Application date
GB412599 A	19340702	GB19320027289	19321001

Probable Assignee: CYRIL HARRY JAMES

Assignee(s):(std): CYRIL HARRY JAMES ; WILLIAM ISAAC BACON ; GEORGE HAZELTON ; WILLIAM RODERICK BARCLAY ; ARTHUR BATES ; BRITISH UNITED SHOE MACHINERY

Assignee(s): BRITISH UNITED SHOE MACHINERY CO LTD ; THE BRITISH UNITED SHOE MACHINERY COMPANY LIMITED

International class (IPC 8–9): A43D87/00 (Advanced/Invention); A43D87/00 (Core/Invention)

International class (IPC 1–7): A43D87/00 A43D95/08

CPC: A43D87/00

European class: A43D87/00

Classification Explorer

Abstract:
Source: GB412599A 27289/32, 35636/32, and 18703/33. [Classes 17 (i) and 17 (ii).] Heels.–Relates to shoes having heels built up of superposed lifts which heels are shaped to final form around their side and rear surfaces before they are attached to the shoes, and consists in methods of making wherein the heels are first trimmed to a predetermined shape under templet control, then, if desired, scoured under templet control to ensure retention of the shape to which they have been trimmed, and, finally attached. The soles do not extend to the rear end of the heels, and the rear end of the sole and the attaching face of the heel are shaped to complementary form only lengthwise of the shoe, the wings of the rear end of the sole being trimmed flush with the sides of the heel after attachment. To shape the attaching face of the heel, a cutting tool is used which operates simultaneously across the whole width of the heel and forms a ledge adapted to support the heel end of the sole extending across the full width of the heel and located below the general plane of the periphery of the attaching face of the heel. The heel is first built up and compressed, the dies being shaped to form a flattened peripheral rim at the attaching face and a recess at a predetermined position in this face to facilitate positioning in the trimming and scouring machines. The heel is then trimmed in a machine such as that described in Specification 411,448 and scoured in a machine such as that described in Specification 411,143, [Group XXIII]. The attaching face may then be shaped to conform with the bevelled end of a sole in a machine comprising a driven cutter 1035 shaped as a frustum of a cone and positioned adjacent to a work–supporting plate 1037, inclined at some 16 to the perpendicular to the axis of the cutter. The plate is adjustable towards or away from the cutter by an adjusting screw 1045, substantially in the line of the axis of the cutter by a screw 1053, and is clamped in adjusted angular position by a bolt 1057. A pair of fingers 1061, 1063 have hooked ends for engaging the breast edges of a heel and are mounted on stems 1065, 1067, respectively, formed with rack teeth engaging a pinion 1069, so that the fingers move simultaneously inwards towards each other or outwards. To adjust the distance apart of the fingers, the ends of the stem 1065 are screw–threaded and provided with nuts 1071, 1073, the latter backed by a spring. A fibre block 1079 engages the work adjacent the cutter. The fingers are bevelled to grip the heel and ensure it being withdrawn laterally from the cutter when the cut has been made. Alternatively, the heel and the rear end of the sole may have their engaging parts shaped to complementary form. The heel end of the sole is shaped to correspond with the cut made by the knife 1035, but left wider than the heel. The projecting wings are reduced flush with the side surfaces of the heel after attachment, the machine described in Specification 181,099 being suitable. If the uppermost lift of the heel should be of board instead of leather, it is preferable to harden the edge surface, after attachment, by the pressure of a smooth–surfaced roller. In another modification, the uppermost lift of the heel may be skived before the heel is built to agree with a skive of some #–inch width at the rear end of the sole. Specifications 181,099, [Class 17 (i)], 278,976, 305,276, [both in Class 17 (ii)], 306,192, 310,822, 331,934, 339,935, [all in Class 17 (i)], 398,845, and 408,210 also are referred to.

0) US3033121A – PUMP HOUSING

83) Family number: 22943198 (US3033121A) © PatBase

Title: Pump housing

Priority: US19600065195 19601026 US19610094049 19610307

Family:

Publication number	Publication date	Application number	Application date
US3033121 A	19620508	US19610094049	19610307
US3109380 A	19631105	US19600065195	19601026

Probable Assignee: GIRTON MFG COMPANY INC

Assignee(s):(std): GIRTON MFG CO INC ; GIRTON MFG COMPANY INC

Assignee(s): GIRTON MANUFACTURING COMPANY INC

Inventor(s):(std): GIRTON PAUL K

International class (IPC 8–9): F04D29/04 F04D29/044 F04D29/24 F04D29/62 (Advanced/Invention); F04D29/04 F04D29/18 F04D29/60 (Core/Invention)

International class (IPC 1–7): F04D1/00 F04D29/22

CPC: F04D29/044 F04D29/247 F04D29/628

European class: F04D29/044 F04D29/04B F04D29/24B F04D29/62P

US class: 415/113 415/141 415/201

Classification Explorer

Cited documents: US2986095 A, US2898861 A, US2856806 A, US2841946 A, US2798438 A, US2784673 A, US2745351 A, US2569308 A, US2537523 A, US2500914 A, US2291797 A, US1817169 A, US1297995 A, US1296042 A, US1107881 A, US1074794 A, GB302953 A, FR1177409 A, FR1092549 A, FR1085189 A, DE338186 A, AT177661 B,

Forward Citations: US3814086, US3304875,

Abstract:
Source: US3033121A (Claim 1) 1. A centrifugal pump, comprising, in combination, a cylindrical support surface for a pump housing, a pump housing of substantially cylindrical configuration and havin,–. a centrally apertured rear head portion and having a cen.trally apertured front head portion spaced from and parallel to and axially aligned with said centrally apertured rear head portion and also having a side wall portion, said front head portion being substantially flat and substantially circular and said rear head portion being circular and having parallel flat front and rear faces, said side wall portion comprising a cylinder the outer surface of which has a unitary radius equal to the maximum radius of the rear face of said rear head portion, said side wall portion being coaxial with said front head portion and with said rear head portion and forms there– w:.th a substantially cylindrical pumping chamber wherein said side wall portion and said rear head portion abut one against the other, the outermost periphery of said rear head portion and the outer surface of said side wall portion being aligned axially and boing radially supported by a cylindrical support surface, annular seal means sealiiigly engaging adjacent surfaces of said side wall and said rear head portion and being radiallycompressed inwardly and outwardly by said last mentioned adjacent surfaces, drive shaft means axially aligned witli the aligned apertures in said front head portion and said rear head portion and extending into said pumping chamber through the aper–ture in said rear head portion, circular inlet means communicating with and axially aligned with the aperture in said front head portion, seal means for sealing the space intermediate said drive shaft means and the adjacent edge of the aperture in said rear head portion, and rotatable and rigid impeller means releasably carried by said drive shaft means within said pump– ing chamber.

0) WO0065181A1 – ANTI–THEFT APPARATUS APPAREIL ANTIVOL

84) Family number: 14921714 (WO0065181A1) © PatBase

Title: ANTI–THEFT APPARATUS

Priority: IL19990129563 19990422 WO2000IL00225 20000417

Family:

Publication number	Publication date	Application number	Application date
AU200039855 A5	20001110	AU20000039855D	20000417
IL129563 A0	20000229	IL19990129563	19990422
IL129563 A1	20000813	IL19990129563	19990422
WO0065181 A1	20001102	WO2000IL00225	20000417

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** MUL T LOCK TECHNOLOGIES LTD ; YAACOBI SHAUL HAIM

Inventor(s):(std)**:** YAACOBI SHAUL HAIM

Inventor(s): SHAUL HAIM YAACOBI

Agent(s): SANFORD TCOLB AND CO

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 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): B60R25/00 B60R25/24 B60R25/25 E05B49/00 G07C9/00 (Advanced/Invention); B60R25/00 G07C9/00 (Core/Invention)

International class (IPC 1–7): B60R25/00 B60R25/04 E05B49/00

CPC: B60R25/24 B60R25/252 G07C9/0069 G07C2009/00761 G07C2009/00769

European class: B60R25/24 B60R25/25B G07C9/00E12C4 S07C9/00E14B S07C9/00E14C

Classification Explorer

Cited documents: US5784910 A, US5706399 A, US5552777 A, EP0886024 A2, EP0849422 A1,

Abstract:
A key assembly (10) including a key shaft portion (12) adapted to be inserted into a keyway (14), a key head portion (16), and an electronic key (18) located at least partially within at least one of the key shaft portion (12) and the key head portion (16) and being adapted for interaction with an electronic lock (20) for opening thereof, characterized by a user authorization input interface (40) located at least partially within at least one of the key shaft portion (12) and the key head portion (16), the input interface (40) being adapted for inputting a user authorization input which causes deactivation of a vehicle immobilizing system, and upon the deactivation, causes operation of the electronic key (18).

0) US5076602A – SEATING SYSTEM FOR A WHEEL CHAIR

85) Family number: 11963334 (US5076602A) © PatBase

Title: SEATING SYSTEM FOR A WHEEL CHAIR

Priority: US19900515119 19900427 US19900515120 19900427 US19920937831 19921218 US19900516057 19900427 US19900612859 19901114 US19900516048 19900427 WO1991US02797 19910426

Family:

Publication number	Publication date	Application number	Application date
AU199177744 A1	19911127	AU19910077744	19910426
EP0526597 A1	19930210	EP19910920942	19910426
EP0526597 A4	19930804	EP19910920942	19910426
JP5507006 T2	19931014	JP19910508672T	19910426
US5076602 A	19911231	US19900515119	19900427
US5131672 A	19920721	US19900516057	19900427
US5143391 A	19920901	US19900612859	19901114
US5176393 A	19930105	US19900516048	19900427
US5421598 A	19950606	US19920937831	19921218
WO9117077 A1	19911114	WO1991US02797	19910426

Probable Assignee: GF HEALTH PRODUCTS INC

Assignee(s):(std)**:** EVEREST AND JENNINGS ; MEDICAL COMPOSITE TECHNOLOGY

Assignee(s): MEDICAL COMPOSITE TECHNOLOGY A CORP ; IBJ SCHRODER BANK AND TRUST CO AGENT AS ; MEDICAL COMPOSITE TECHNOLOGY A CORP OF CA ; GRAHAM FIELD EXPRESS DALLAS INC ; GRAHAM FIELD EXPRESS PUERTO RICO INC ; MEDICAL COMPOSITE TECHNOLOGY PO BOX 2528 APTOS CA ; PRISTECH INC ; MEDICAL SUPPLIES OF AMERICA INC ; RABSON MEDICAL SALES LTD ; SMITH AND DAVIS MFG ; MUL ACQUISITION CORP ; ZENS DATA SYSTEMS INC ; MUL ACQUISITION CORP II ; SMITH AND DAVIS MFG CO ; EVEREST AND JENNINGS INTERNSATIONAL LTD ; EVEREST AND JENNINGS INT ; GF HEALTH PRODUCTS INC ; GRAHAM FIELD BANDAGE INC ; EVEREST AND JENNINGS INC ; GRAHAM FIELD DISTRIBUTION INC ; EVEREST AND JENNINGS INTERNATIONAL LTD ; EVEREST AND JENNINGS INT LTD ; GRAHAM FIELD EXPRESS (DALLAS) INC ; GRAHAM FIELD EXPRESS (PUERTO RICO) INC ; MCT ACQUISITON CORP ; IBJ SCHRODER BANK AND TRUST CO ; GRAHAM FIELD HEALTH PRODUCTS INC ; GRAHAM FIELD INC ; GRAHAM FIELD EXPRESS INC ; GRAHAM FIELD TEMCO INC ; LABAC SYSTEMS INC ; HEALTH CARE WHOLESALERS INC ; LUMEX BASIC AMERICAN HOLDINGS INC ; LUMEX MEDICAL PRODUCTS INC ; KUSCHALL OF AMERICA INC ; LUMEX SALES AND DISTRIBUTION CO INC ; GRAHAM FIELD SALES CORP ; HC WHOLESALERS INC ; BASIC AMERICAN MEDICAL PRODUCTS INC ; BASIC AMERICAN SALES AND DISTRIBUTION CO INC ; CONGRESS FINANCIAL CORP ; CRITICAL CARE ASSOCIATES INC

Inventor(s):(std)**:** ROBERTSON A SCOTT ; GEIGER RICHARD ; LISHMAN ROBERT W

Inventor(s): ROBERTSON A ; ROBERT W LISHMAN ; RICHARD GEIGER ; A SCOTT ROBERTSON

Designated states: AT AU BE CA CH DE DK ES FR GB GR IT JP KR LU NL SE US

International class (IPC 8–9): A61G5/00 A61G5/02 A61G5/08 A61G5/10 A61G5/12 (Advanced/Invention); A61G5/12 (Advanced/Non–invention); A61G5/00 (Core/Invention)

International class (IPC 1–7): A61G5/00 B62D17/00 B62M1/14

CPC: Y10S297/04 Y10S180/907 A61G5/045 A61G2203/723 A61G5/085 A61G5/0891 A61G5/1089 A61G5/1097 A61G5/128 A61G5/0875 A61G5/1054 A61G5/1059 A61G5/00 A61G5/08 A61G5/1075

European class: A61G5/00 A61G5/08 A61G5/10S14 A61G5/10S2 K61G5/04A6 K61G5/08A6 K61G5/08D K61G5/08R K61G5/10H K61G5/10Z5 K61G5/10Z8 K61G5/12H

US class: 180/907 280/250.1 280/304.1 280/650 280/661 280/86.751 297/310 297/338 297/378 297/378.12 297/423.26 297/423.28 297/423.3 297/423.35 297/423.36 297/433 297/440.22

297/DIG.4 301/111 301/111.04 D12/131 D12/133

Classification Explorer

Cited documents: USRE32242 E, USRE2242 E, US887826 A, US774042 A, US5176393 A, US5143391 A, US5131672 A, US5076602 A, US5060962 A, US5020816 A, US4997154 A, US4966379 A, US4921271 A, US4917395 A, US4891176 A, US4889355 A, US4887830 A, US4887826 A, US4863771 A, US4852899 A, US4840390 A, US4813693 A, US4805925 A, US4805711 A, US4770432 A, US4768797 A, US4754987 A, US4749064 A, US4744585 A, US4730842 A, US4721321 A, US4693490 A, US4691933 A, US4679816 A, US4676519 A, US4664441 A, US4648619 A, US4607860 A, US4598921 A, US4595212 A, US4593929 A, US4592570 A, US4589525 A, US4572756 A, US4572576 A, US4570756 A, US4542918 A, US4506901 A, US4500112 A, US4500102 A, US4494889 A, US4489955 A, US4486048 A, US4483653 A, US4477117 A, US4477098 A, US4428594 A, US4422660 A, US4421336 A, US4405142 A, US4392690 A, US4380343 A, US4371183 A, US4360213 A, US4351540 A, US4350227 A, US4243339 A, US4169626 A, US4166631 A, US4165127 A, US4101143 A, US4082348 A, US4046418 A, US4033624 A, US3937490 A, US3882949 A, US3865427 A, US3794380 A, US3761126 A, US3486727 A, US3416837 A, US3337261 A, US3243194 A, US3189385 A, US3123401 A, US2869614 A, US2859837 A, US2797738 A, US2694437 A, US2022348 A, US2010306 A, US1851843 A, US1620675 A, US1620657 A, GB939012 A, GB451392 A, GB2206088 A1, GB2098935 A1, FR883578 A, EP0312969 A2, DE2532485 A1, DE2517418 A1, CA501986 A,

Forward Citations: WO9411236, WO16061693, WO10017644, WO09094695, WO09039503, WO05007053, WO05007053, WO03104028, WO0189442, WO0126598, WO0066060, WO0044610, WO0029278, USD770946, USD770334, USD765839, USD765563, USD765562, USD761605, USD756156, USD756155, USD755552, USD755551, USD755549, USD754569, USD752890, USD749019, USD738640, USD737587, USD735021, USD722286, USD720550, USD718549, USD716574, USD712185, USD699160, USD691384, US9707139, US9700470, US9603762, US9598095, US9370455, US9364377, US9358166, US9358164, US9346335, US9308143, US9180061, US9150230, US9149398, US9050226, US9010470, US8973939, US8925943, US8910975, US8801090, US8801020, US8794359, US8636089, US8622409, US8573341, US8534679, US8490994, US8474849, US8336904, US8297388, US8272461, US8262117, US8256785, US8172016, US8172015, US7967374, US7845665, US7597163, US7537237, US7510200, US7472767, US7404567, US7374002, US7353566, US7293801, US7278653, US7231689, US7219755, US7207403, US7192043, US7140055, US7134678, US7100716, US7083195, US7066290, US7055634, US7040429, US6994364, US6935448, US6923280, US6886843, US6851711, US6846042, US6786496, US6769705, US6640916, US6607470, US6607250, US6565112, US6530598, US6511131, US6394476, US6341657, US6331036, US6315319, US6302429, US6270105, US6247717, US6199647, US6186252, US6182992, US6168177, US6155586, US6139037, US6129165, US6089587, US6062600, US6027132, US5944131, US5884928, US5769442, US5762356, US5667235, US5634650, US5605345, US5603520, US5590893, US5575348, US5556120, US5503773, US5503416, US5496050, US5421598, US5382036, US5379866, US5366277, US5360224, US5333894, US5320373, US5301964, US5284350, US5188383, US2017007478, US2015374565, US2015048600, US2014097599, US2013300083, US2012292879, US2012080246, US2011043004, US2011043003, US2011018222, US2011018221, US2010194071, US2010193278, US2010102529, US2010101882, US2010090437, US2010084209, US2010038880, US2010013172, US2010004820, US2009146389, US2009088300, US2009078482, US2008208394, US2008106060, US2007227787, US2007164539, US2006255581, US2006244249, US2006213705, US2006138835, US2006131833, US2006076747, US2006071531, US2006021806, US2005225040, US2005151360, US2005125900, US2005077698, US2005046129, US2005028319, US2004159476, US2004150204, US2004094944, US2004084230, US2004060748, US2004032119, US2004003482, US2003197345, US2003168265, US2003168264, US2003161941, US2003122332, US2003075365, US2003030243, JP2007007116, JP2006340753, JP2006051367, JP2003093446, GB2347655, FR2747305, ES2552738, EP2213269, EP2177193, EP1894528, EP1894528, EP1797853, EP1797852, EP1797851, EP1575787, EP1575787, EP1156958, EP1116480, EP0841052, CN102805694, CN102805694,

Abstract:
Source: US5076602A A seating system is provided for a wheel chair including a chassis, two drive wheels, and two swivel mounted casters. The seating system comprises a frame which is adjustably mountable to the chassis. The frame includes two side members and at least one cross−brace member. A seat is removably mounted to the frame for seating a user. The seat may be padded, have webbing material, be sling−back, or be of molded construction. A back rest is mounted to the frame and may include a locking mechanism cooperating with the frame for locking the back rest at an adjustable upright position. A leg rest including a foot rest is adjustably mounted to the frame and includes a leg rest clamping mechanism for clamping the leg rest at a fixed angular orientation relative to the frame. The foot rest may be pivoted to adjust the ankle angle of the user.

0) GB265208A – IMPROVEMENTS IN OR RELATING TO CASH REGISTERS O...

86) Family number: 18304777 (GB265208A) © PatBase

Title: Improvements in or relating to cash registers of the key–set and key–operated type

Family:

Publication number	Publication date	Application number	Application date
GB265208 A	19270630	GB19270002342	19270127

Probable Assignee: NCR CO

Assignee(s):(std)**:** NCR CO

Assignee(s): THE NATIONAL CASH REGISTER COMPANY ; NATIONAL CASH REGISTER CO

International class (IPC 8–9): G06C7/10 (Advanced/Invention); G06C7/00 (Core/Invention)

International class (IPC 1–7): G06C7/06

CPC: G06C7/10

European class: G06C7/10

Classification Explorer

Abstract:
Source: GB265208A Cash registers of the key set and operated type are provided with a line of multiple–totalizers adapted by means of keys to be selected and moved into engagement with the actuators for item–entering and for taking (by printing) totals and subtotals. Differential actuating–mechanism. The amount keys 35, Fig. 2, of usual construction co–operate with a number of couplers (one for each denomination) fixed to the shaft 56 and have differential cam slots 47 for controlling the extent of movement of the actuating–racks 112. For this purpose the slots for each denomination engage a roller 107 on a lever 108 the other end of which has a pin 111 to limit the counterclockwise travel of the rack when this is driven by mechanism as follows. The rack together with a complementarily driven plate 113, Fig. 22, is pivoted at 75 and the rack and plate are adapted to be displaced in opposite directions at each operation of the machine. The rack has an extension 114 slotted to engage a pin 116 on an arm 117 of a plate 122, and the plate 113 has a similar arm 118 engaging a pin 120 on another arm 121 of the plate 122. This plate is slidably mounted on the pivot 75 and is provided with a slot 124 engaged by a roller 125 carried by a lever 126 loose on the shaft 56 and rocked up and down at each operation of the machine by a cam 135 pinned to a shaft 138 oscillated from the coupler shaft 56. When, therefore, in an item–entering operation the coupler is rocked, the roller 125 raises the plate 122 so as first to rock the actuating rack to the left until it is stopped by the differentially–positioned pin 111 and then to displace the plate 113 to the right to a complementary extent. Unless a key in the denomination concerned has been operated the actuatingrack is kept stationary by an abutment arm 147, Fig. 2, connected to a yoke 149 adapted to be engaged by a projection 151 of a key when operated. The racks in addition to actuating the totalizer wheels position item type–wheels through pinions 165 and the usual nested sleeves. Full–stroke mechanism. To compel full operation of the key counter shaft 56, a ratchet plate 59, Fig. 13, fixed on the end of the shaft cooperates with a pivoted tooth 60 controlled by a spring 64 tending to maintain it in normal position. Transaction and total control keys. The total keys 37, 37, Fig. 9, co–operate with a. coupler 71 fixed to the shaft 56 and the transaction keys 36, Fig. 5, with a coupler 72 loose on this shaft. A transaction key must be depressed before any amount or total keys and for this purpose the coupler 71 is normally locked by a shouldered arm 74 pivoted at 75 and connected by a yoke 77 with another arm 79 engaging the coupler 72 so that operation of a transaction key rocks the arm 74 counterclockwise to free the couplers for the other groups of keys. Moreover the transaction key depressed is locked down until an amount or total key is depressed, for the transaction coupler 72 when raised is upheld by a latch 86, Fig. 5, spring–drawn to the left. Depression of a key in one of the other groups of keys rocks an arm 91 hub–connected to the latch so as to displace this to free the transaction coupler. As this coupler is only loosely mounted on shaft 56 it is necessary to provide means for the return of the coupler simultaneously with the other couplers. To this end a plate 93 slidably mounted on the total coupler 71 is drawn by a spring 97 into contact with the fixed rod 40 and an enlargement contains a slot 98 with an offset portion 100 to receive a pin 99 projecting from the adjacent transaction coupler 72. When a transaction key is depressed the pin rises in the slot, but when the coupler 71 ascends owing to depression of an amount key or total key the plate will slide to the left and the pin 99 will be received by the offset 100 so that the couplers will be temporarily locked together and will therefore ascend in unison. Totalizers. In this machine there are four totalizers allotted respectively to the usual four kinds of transaction and arranged in denominational groups on the one shaft 174, Fig. 2, supported by arms 175 from a shaft 177. The totalizer shaft 174 is shifted axially, to select the totalizer for engagement with the actuatingracks, by means of a cam drum 184, Fig. 5, rotatably set from the transaction keys by the action of the cam surface of the keys upon rollers 180 carried by arms 181 rigid with a toothed sector 182 gearing with a spur–wheel on the drum. The cam groove of the latter is engaged by a roller on a duplicated arm 187 fixed to a rod 188 connected by an arm with the totalizer shaft 174. Engagement of totalizer for item–entering, controlling. The shaft 177 is rocked to engage the selected totalizer pinions with the actuatingracks by connection through an arm 203, Fig. 9, with a roller 202 engaging a cam slot 200, Fig. 17, in a primary plate 201 pivoted on the shaft 75. A secondary plate 204

is similarly pivoted and the two plates receive complementary movements in opposite directions by means similar to those used in connection with the actuating racks and comprising the slidable plate 205 and the roller 214 mounted on the oscillated arm 215. In item−entering, the primary plate 201 is held against movement until near the end of the downward stroke of the keys whereupon it is released so that by its clockwise motion it may cause the totalizer to engage for actuation during the return of the actuating−racks. This temporary obstruction of the primary plate 201 is effected by a spring−controlled pawl 225 pivoted at 226 and normally blocking a pin 228 on the plate 201. When the driving pin 214 ascends therefore the secondary plate 204 moves first and at the end of its stroke a pin 232 upon it strikes against the pawl to free the pin 228 and allow the primary plate to perform its clockwise movement and cause the engagement of the totalizer. At the end of this movement the plate 201 is held again by a pawl 234 springing in rear of the pin 228 and thus remains in its totalizer−engaging position until towards the end of the return stroke of the keys when the plate 204 having reached its home position a pin 236 on it displaces the pawl 234 and so frees the plate 201 for its return movement. Totalizer−aligning mechanism. The totalizer wheels are normally aligned by bifurcated members such as 244, Fig. 2, pinned to a shaft 246 carried by the totalizer−supporting arms 175. Secured to one end of this shaft is a forked arm 247, Fig. 25. straddling a fixed pin 248, the effect of which provision is that tha upper aligning plate remains in engagement with the totalizer pinions through their travel towards the actuating−racks until the lower fork abuts against the pin whereupon the upper plate becomes stationary. The lower plate then receives the pinions but is slotted in the plane of the racks to permit rotation of the engaged pinions. Transfer−mechanism. A trip arm 252, Fig. 22. is connected by a hub to an arm 257 having two notches 258, 259, the outer of which is normally engaged by a pin 260 on an arm 261 serving as a stop limiting the return to home position of the actuating−rack 112. At transfer the tooth 297 on the totalizer wheel rocks the trip arm 252 and notched arm 257 to free the stop arm 261 which thereupon is pulled to the right by a spring 262 and is then held with its pin 260 in the other notch 258. Consequently when the rack returns clockwise to perform the actuation it is free to move one tooth beyond home position and so to effect transfer. The extra movement of the rack in this way is rendered possible by a preliminary displacement of the complementary plate 113 due to the action of the driving roller 125 on the cam edge of arm 141. At the end of the operation of the machine the shaft 253 is given a counterclockwise displacement to release the stop arm 261 which together with the rack 112 is then restored to normal position by the complete return of plate 113 acting through a pin 269. The rocking movement of the shaft 253 are derived from the coupler shaft 56 through a one−way pawl and a link. Printing totals and sub−totals.−To take these totals the corresponding total−control key 38 or 37, Fig. 9, is depressed subsequently to operation of a transaction key for selecting the totalizer. The depression of the sub−total key 37 effects through a cam slot 285 the counterclockwise displacement of a pivoted plate 288, Fig. 11, a pin 290 on which thus frees a spring−controlled pawl 291 to enable it to rock counterclockwise to obstruct a pin 296 on the plate 204. This plate being held therefore, the driving roller 214 causes the plate 201 to move first with the result that the totalizer is engaged with the actuating−racks at the beginning of the operation. The plate 201 is normally held against such movement, however, by a pawl 227 engaging a pin 228, but the shifting of arm 288 by the key rocks the pawl by means of a pin 284 so as to release the plate. The retaining pawl 291 is rocked to free the plate 204 again by a pin 298 on plate 201. The total having been transmitted by the driving of the racks as limited by the abutment of the transfer teeth with the trip arms 252, it is necessary on the return stroke to maintain the engagement of the totalizer with the racks and therefore the plate 201 must be held displaced until the amounts have been restored. This is accomplished by the pawl 234 which, as in item−entering operations, takes behind the pin 228 and holds the plate 201 until release is effected by the return of the plate 204 acting through the pin 236. The obstructing arm 147, Fig. 2, has to be removed to allow the movement of the actuating−rack 112 and this is effected by a link 155 pivoted to an arm 157 fixed to a shaft 158 rocked by connections 306, 309, Fig. 9, with

0) US2003112703A – SHAFT SEALING ASSEMBLY HAVING REPLACEABLE SEALI...

87) Family number: 28666439 (US2003112703A) © PatBase

Title: SHAFT SEALING ASSEMBLY HAVING REPLACEABLE SEALING SLEEVE

Priority: US20010017233 20011213

Family:

Publication number	Publication date	Application number	Application date
US2003112703 AA	20030619	US20010017233	20011213
US6616326 BB	20030909	US20010017233	20011213

Probable Assignee: CUSTOM METALCRAFT INC

Assignee(s):(std)**:** CUSTOM METALCRAFT INC

Inventor(s):(std)**:** WHITE JAMES E

International class (IPC 8–9): F16J15/32 (Advanced/Invention); F16J15/32 (Core/Invention)

International class (IPC 1–7): B01F7/00 B01F7/02 F16J15/16

CPC: Y10S366/608 F16J15/3268

European class: F16J15/32E3

US class: 277/571 366/331 366/608

Classification Explorer

Cited documents: US5735603 A, US5700086 A, US4878677 A, US4850723 A, US3773336 A, US3612546 A,

Forward Citations: WO07038379, US9621078, US9473048, US9156674, US9015933, US8939645, US8933596, US8915158, US8884474, US8689899, US8282284, US8159107, US8134276, US8122973, US7878463, US7354191, US7237778, US7121716, US7121716, US2013044969, US2012167377, US2010096150, US2008087478, US2008061655, US2008049296, US2008048519, US2008043304, US2008042520, US2007221792, US2007070806, US2005242520, FR3021887,

Abstract:
Source: US2003112703A An improved shaft sealing assembly (18) for use with an elongated, axially rotatable shaft (14) typically forming a part of a blender (10) or similar device is provided, which permits rapid, easy seal repair without the need for complete breakdown of the blender (10). The assembly (18) includes a tubular sleeve adapted to be disposed about the shaft (14) at the region of a shaft/blender wall interface, with an annular sealing body (42) disposed about the sleeve (40) in a sealing position and supporting a seal (66) which engages the sleeve (40) at a first sealing location (66a) thereon. A lock device (48) operably to maintain the sealing body (42) in its sealing position is provided, and the sleeve (40) is selectively movable relative to shaft (14) and sealing body (42) so as to change the sealing location from the first location (66a) to a second, different sealing location (66b). The sleeve 40 can also be easily replaced if desired.

0) US2012291584A – STEERING DEVICE

88) Family number: 50664641 (US2012291584A) © PatBase

Title: STEERING DEVICE

Priority: EP20110790843 20110713 JP20100184973 20100820 WO2011JP65941 20110713

Family:

Publication number	Publication date	Application number	Application date
CN102448794 A	20120509	CN201180001069	20110713
CN102448794 B	20140312	CN201180001069	20110713
DE602011019669 D1	20151022	DE201160019669T	20110713
EP2607201 A1	20130626	EP20110790843	20110713
EP2607201 A4	20140723	EP20110790843	20110713
EP2607201 B1	20150909	EP20110790843	20110713
JP2012040984 A2	20120301	JP20100184973	20100820
JP5429109 B2	20140226	JP20100184973	20100820
US2012291584 AA	20121122	US20110376975	20110713
US8869646 BB	20141028	US20110376975	20110713
WO12023366 A1	20120223	WO2011JP65941	20110713

Probable Assignee: NSK LTD

Assignee(s):(std)**:** NSK ; NSK LTD ; TANAKA TAKAHIRO

Inventor(s):(std)**:** TAKAHIRO TANAKA ; TANAKA TAKAHIRO

Agent(s): HOFFMANN EITLE PATENT U RECHTSANWAELTE PARTMBB; HOFFMANN EITLE; CROWELL AND MORING LLP; AMANO MASAKAGE 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 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): B60R25/02 B60R25/021 B62D1/16 B62D1/18 B62D1/184 B62D1/185 (Advanced/Invention); B62D1/18 (Advanced/Non–invention)

CPC: B60R25/0211

European class: B60R25/021C

US class: 280/775 280/777 280/779 74/493 74/494 74/495

Classification Explorer

Cited documents: WO04031018 A1, WO04007253 A1, US8678437 BB, US8534705 BB, US8505408 BB, US8047096 BB, US7635149 BB, US6990874 BB, US2014076091 AA, US2013213173 AA, US2013133460 AA, US2013014606 AA, US2012319388 AA, US2012318092 AA, US2012299281 AA, US2012169035 AA, US2008229865 AA, US2007013180 AA, US2006005658 AA, US2005121895 AA, US2004245760 AA, US2002171235 AA, JP6211137 A2, JP58181657 U1, JP58181657 U, JP2009196562 A2, JP2009137309 A2, JP2007331530 A2, JP2007196784 A2, JP2006111124 A2, JP2002337663 A2, EP1533201 A1, DE19707067 C1,

Forward Citations: US9463773, US8882149, US2016318541, US2013047773, US2011088501, CN104245438, CN104245438,

Abstract:
Source: US2012291584A In a steering device having a steering lock device, the stress applied to around a through hole formed in a column to which the steering block device is attached is reduced. Since there is a slight clearance formed, in the vehicle height direction, between the outer periphery of the lock pin and the through hole and also between the guide groove and the engaging convex part, the clamping force is born by the flange section and first ribs and also by the flange section and second ribs without any force applied to the through hole. The engaging convex part is not fitted in the through hole, so that the through hole is only required to be large enough to allow the lock pin whose cross–sectional area is smaller than that of the engaging convex part to come in and out. This makes it possible to reduce the cross–sectional area of the through hole and thereby increase the

strength of the outer column.

0) US2214567A – SPEED CONTROL MECHANISM

89) Family number: 21304747 (US2214567A)

© PatBase

Title:	SPEED CONTROL MECHANISM
Priority:	US19360090331 19360713

Family:

Publication number	Publication date	Application number	Application date
US2214567 A	19400910	US19360090331	19360713

Probable Assignee:	ZONE O TROL PIERCE INC
Assignee(s):(std):	ZONE O TROL PIERCE INC
Inventor(s):(std):	LAWRENCE ROSENTHAL
Inventor(s):	ROSENTHAL LAWRENCE
International class (IPC 8–9):	B60K31/18 (Advanced/Invention); B60K31/18 (Core/Invention)
International class (IPC 1–7):	B60K31/00
CPC:	B60K31/185
European class:	B60K31/18S
US class:	180/173 200/43.04 200/43.22 200/52R 200/56R

Classification Explorer

Forward Citations: US3802531, US3268027, US3164220, US3077239, US2851552, US2494422, US2484038, EP0043709, EP0043709,

Abstract:
Source: US2214567A 1. The described operative connection of the accelerators 28 and 30 to the plunger element 1| of the separable device 21, as effected through the slotted planar end 12 of the plunger and the furcated levers 36 and 43 associated respectively, with the accelerators 28 and 30, is preferred in the present example, but it is to be understood that any other suitable manner of effecting an operative connection of the accelerators to the plunger element 1| may be utilized, as desired. 'I‘he cylinder 5| and plunger 1| which are preferably and conveniently concentrlcally arranged, as shown in Figs. 2 and 4, comprise the operative elements of the separable connection or device referred to generally by the numeral 21 in the description of Fig. 1. During normal operation of the vehicle below a preselected speed limit, determined at will by means–forming a part of this invention and hereinafter to be described, a substantial part of the plunger element 1| is disposed within the bore 52 of the element 5|, and these two elements are detachably interconnected or locked together, as by an electromagnetic latchlng device presently to be described, for operation as a unit, in the control of the throttle arm 24 by either of the accelerators and 30. As shovm in Fig. 2, an electromagnet of any suitable type, referred to for convenience as a relay and denoted generally by the numeral 95, is secured in any desired manner (not shown) to an exterior portion of the cylinder 5|, the location of the relay on the cylinder being between the cylinder supports 58. The relay being carried by the cylinder 5|, will, of course, move with this element when the latter is slidingly actuated. The movable armature 91 of the relay carries a lock element or tongue 98 which normally extends through a suitable slot 99 in a portion of the cylinder wall, and into a recessed seat portion such as groove |00 formed in the plunger 1l. With the tongue seated in the plunger slot, the element 5| and plunger 1| will be locked together, by reason of the fact that the tongue 98 is carried by the element 5|, through the relay 96 mounted thereon. As will be readily observed, the tongue may be retracted from such locking position, upon the energlzation of the relay to attract the armature 91. A compression spring |0| is arranged to act against the lower end |02 of the armature 81 to urge the armature upwardly so as to tend to seat the tongue 99 in the plunger groove I00. In the described locking position of the tongue element 98, the plunger 1| and cylinder 5| will be constrained to move as a unit, so as to provide for the normal control of the engine throttle. When the relay 95 is energized, however, through an energizing circuit later to be described, its armature 91 will be actuated to withdraw or retract the tongue 98 from its normal locking engagemgit with the plunger 1|. In the latter instance, the elements 5| and 1| will no longer act as a unit, but will be conditioned for relative movement, so that movement of the plunger 1| as effected by either of the accelerators 20 and 30, will not be transmitted to the element 5| so as to effect any control movement of the throttle arm 24. .It is noted here that, upon the retraction of the tongue 90, the spring 68 acting on the element 5| will effect a sliding movement thereof to the position shown in Fig. 2, and this in turn will effect through the bar 26, a movement of the arm 2| to its throttle–closed or idling position, this position of the arm being shown in Fig. 1. Thus it will be readily observed from the`foregoing description, that as long as the tongue is seated in the plunger recess or gToove |00, the elements 5| and 1| will act as a unit, so that speed control movements of either of the accelerators Z0 and 30 will be transmitted therethrough, to the throttle actuating arm 24. Also, it will be observed that upon the retraction of the tongue 90, resulting from the energization of the relay 96, the elements 5| and 1| will be disconnected so that they will no longer act as a unit

serving to operatively connect the accelerator controls with the throttle arm. As a result of the retraction of the tongue' EIB, speed control movements of the accelerators 28 and 30 are rendered ineffective to actuate the throttle regulating arm 24. In this instance, the arm 24 will be automatically actuated by means of the spring 68, to its throttle–closed position, so as to reduce the engine speed to idling. As will be later described, the relay 96 is energized only when the speed of the vehicle equals or exceeds a predetermined speed limit, whereupon the tongue 58 is retracted after the manner of disengaging a clutch, and serving to break the operative connection between the accelerator controls and the throttle arm 24. When the speed of the vehicle has been reduced below the predetermined speed limit, the tongue 98 may again engage the plunger groove |00, but this will occur only when the groove In the plunger 1| is in register with the tongue. Therefore, in order to effect a re–locking of the plunger and cylinder elements to enable further speed control of the vehicle, the plunger must be slidingly actuated within the bore 52 of the cylinder 5| until the tongue and groove are in register, when the tongue will seat in the groove._ This may be accomplished by permitting the accelerator controls 20 and 30 to move toward their throttleclosed positions, as effected by their respective biasing springs 00 and 95, so as to allow the spring 11 to \n'ge the plunger into the bore 52 until the tongue and groove are again brought into interlocking or latching engagement, whereupon, if the relay is de–energized, the tongue 98 will engage the groove |00, under the Innuence of the relay spring l0|. In this manner the reseating of the tongue 98 in the groove |00 may be readily and quickly effected, and this may be done before the speed of the vehicle has decreased to any appreciable extent below the predetermined speed limit thereof. As is usual in automotive practice, the accelerators 20 and 30 are arranged for independent control of the throttle arm 24, the independency of the control in the present example being attained through the provision of the slots 15 and 16 in the end 12 of the plunger 1|. For example, in the actuation of the cylinder and plunger unit 5|–1| by the foot accelerator 20, through the lever 36 and the pin 82 in the Slot 15 of the plunger end 12, so as to eflect a longitudinal movement of the unit to the left, as viewed In Fig. 2, the pin 9| and its associated accelerator will be uuatlected by reason of the slot 18. In this instance, the plunger end 12 will simply move by the pin 9|, by reason of the pin slot 10, as will be readily observed. In a similar manner, actua– tion of the accelerator 30 will not affect the aocelerator 2l|. However, control of the throttle arm 24 by either of the accelerators may be taken over or assumed by the other accelerator In any control position of the plunger end 12, this being made possible by reason of the provision of the longitudinally extending slots 'll and Tl, as will be readily seen. _ Control of the energlzatlon of the relay 8| is eifected by means of an energizing circuit which includes a novel circuit–closing device now to be described. The circuit–closing device is adapted to be operated responsively to the speed of travel of the vehicle. To this end, the device is by preference, operatively associated with means which is directly responsive to the vehicle speed, such means in the present example being found in a speed indicating mechanism or speedometer |04 of suitable type, mounted on the vehicle Instrument board IB. Referring particularly to Figs. 5 and 6, the mechanism (not shown) of the speedometer |04 is enclosed by the housing |05, the forward or front end |0501 which is secured in any suitable manner to a flanged portion |51 of 'thc dash board |B. The speedometer drive cable |08 is enclosed in a conduit llll and extends. by preference, from the rear of the housing IDE to a suitable drive connection I I0 associated with the vehicle whee1'2| _gt; (Fig, 1), the drive connection shown being of a well known type and including a pinion I I | operatively secured to the end of the speedometer cable IDB, with the pinion' enrneshing with a gear H2 driven by the wheel Il. If desired, the cable IDB may be driven from the vehicle drive shaft I2, as by a suitable connection thereto, the details of which are not shovm as this connection may be of any well known type.. The end I5 of the housing is formed to provide an annular, cushioned seat ||5 in which is mounted a plate or disc IIB of glass or other rigid transparent material suitable for the purpose. Spaoed from the glass plate HB and lnwardly of the housing IGB, Is a dial plate | I1 upon the face | IB of which are formed suitable graduatlons I I9 and speed indicia |20. The speed indicia |25 may consist oi appropriate numerals indicating directly the speed of the vehlcle in miles per hour. Centrally of the dial and extending therethrough, is a shaft element Iil Whichls operated by the speedometer mechanism (not shown) . Secured to the end of the shaft Iil so as to be operated thereby, is a speed indicating hand or point; er |2Z`whlch cooperates with the graduatlons and speed indicia on the face of the dial HI. The pointer |22 which is formed of a suitable electrical conducting material, carries an electrical contact element |24 which is in arcuate register with a like contact element |25 carried by an adjustable arm or pointer Ill. The pointer 525 which is also formed of conducting nlaterlal, is arranged 'so that it may be positioned with its pointer end |28 opposite any one. of the speed indicia or graduations thereof, the particular disposition of the pointer determining the powered speed limit of the vehicle In s. manner later to be described. _ . The mounting of the adjustable pointer Iil on the speedometer HM is effected in the following preferred manner. 'Ijhe glass plate Ill isycentrally apertured as at |23 to receive a bushing |30 which is formed of a suitable insulating material, such ,as hard rubber. The bushing Is formed with a flanged head |32 which. together with a washer element |33 of resilient material, is seated against the inner marginal portions of the glass about the opening Ill. The body of the bushing which Is externally tlrreaded. extends through the opening Ill and outwardly of the glass Ill in the manner shownfln Fig. 5. The bushing is retained in ‘assembly with the glass by a securing member ISI formed of suitable Insulating material, such as hard rubber. The member Ill is provided with an internally threaded central bore Ili, the threaded portion of which threadedly engages the bushing II5. The outer end portion |81 of member Ill extends outwardly beyond the end III of the bushing, and is, by preference, of a diameter less than that of the inner end portion H5 of the member. The end portion |I1 is provided with a shouldered seat IH and a central bore |41 for a purpose presently to appear. The bore Ill conimunicates with the bore Ill and is of smaller sectional area than that of bore IIB. – The bushing |I5 is formed to provide a longitudinally extending bore IM centrally thereof, in which Is frlctionally seated a shaft |45, TheInIwr end HI of this shaft is threaded and carries a terminal element |48 and the hub portion H9 of the adjustable pointer |25, the hub |58 being disposed between a nut |50 threadedly engaging the shaft end |48 and a washer |52 and nut 258, the latter nut also threadedly engaging the shaft end. In this manner the pointer |20 is operatively secured to the shaft end Ili so that it may be positioned relative to the dial face Illvby the actuation of shaft III. As a means for operating the shaft, the outer end |54 thereof which extends into the bore |42 in member ISA, is formed to receive a shaft turning key, such as the key |56 shown in Fig. '7. A Thus. by engaging the shaft end IM with the key |5|5, the shaft may be turned so as to position the pointer |26 relative to the graduatlons on the dial face IIB. The shaft |45 is frictionally retained in the bushing il|I by the nuts |50 and |53 on the shaft end |45

and by an annular projection |51 on the shaft, the projection' |51 frlctlonally seating in a depression |58 formed ln the end I as of the bushlrlg"|S0. Thus when the shaft has been rotated, as by the key |55, so as to position the pointer |26 with its end |28 in register mth a desired speed indicia or graduation on the dial face ||B, the shaft and its pointer are maintained in such adjusted position by .reason of the frictional seating of the shalt projection |51 in the seat |58 and also, by reason of the frictional clamping effect obtained through the cooperation of the projection |51 with the nuts |55 and |58 on the shaft end MB. Once the pointer |25 has been adjusted relative to the dial face IIB, further unintended adjustment thereol' may be prevented by the provision of a cap |50 which closes the outer end of the bore ||2 in the member IM, ,so as to prevent the, Insertion of the key |58 to operate the shaft Ill. The cap engages the shouldered seat portion Ill in the end |51 of the member |3|, in the manner shown in Fig. 5. The cap Ill] and shouldered seat portion Ml are provided,respectively, with registering or' nlngs or eyes IGI and |82 (Fig. 8) which are arranged diametrically of the_ elements, the eyes being provided for the reception of a wire sealing element II! with which cooperates a lead or other soft metal ,seal Ill. Thus with the cap and seal in pls,ce,'s.ny,_'unWarrantsd adjustment of or tampering with _the setting ot the pointer |15 is effectively prevented. It ls to be understood of cou.rse,'that the cap and seal may be dispensed with if deslredpths provision ol these elements being made so that un− der particular circumstances, the speed limit of the vehicle determined by the setting of the pointer |26, may be maintained in spite of any desire of the operator of the vehicle to alter the speed limit setting of the pointer. In the control of the speed of the vehicle, the pointers |22 and |26 and the cooperating contacts |2| and |25 carried thereby, respectively, serve as contact−making elements for an electric control circuit. Accordingly, the adjustable pointer |26 and its contact |25 are electrically associated, through the terminal element |48 and a conductor |65, with one terminal |66 of the relay 96 controlling the separable device 21 (Figs. 1 and 2) _ The conductor |65 is, by preference, enclosed in a suitable insulating cable |68, The opposite terminal |65 of the relay 95 is connected by a conductor |10 with one pole_of a source of current, such as the battery I12, shown diagram.− matlcally. If desired, the battery |12 may be the usual vehicle battery provided for supplying current to the engine ignition system, the vehicle lights, etc. The opposite pole of the battery may be grounded, as at I13, to any suitable metallic part of the vehicle, according to the usual practice. The control circuit ls completed through a conductor | 11| connecting the speedometer shaft |2| with the grounded pole of the battery I12, as by the ground connection |15 made to any metallic part of the vehicle which is conductively associated with the battery ground I13. In the operation of the speed control mechanism embodying the improved features of this Invention, the adjustable pointer |28 is nrst set so that its end |28 registers with a desired speed indicia on the speedometer dial face HB. In the position of the pointer |28 shown in Fig. 6, the speed limit of the vehicle is set for 40 miles per hour. With the relay 96 de−energized, the tongue S8 will be seated in the plunger groove ||II!, so that the plunger 1| and cylinder 5| will be locked together to form an operating unit ln the control of the throttle arm 24 by the accelerators 28 and 30. With the elements of the mechanism related as described, the vehicle may be operated with the speed thereof controlled by the accelerators 2B and 30. As the speed of the vehicle is increased responsively to the actuation of either of the accelerators, the speedometer pointer |22 will be actuated over the face | IB of the dial |−|1 in a direction approaching the stationary pointer |26. When the vehicle speed is such as to cause the pointer |22 to move to a. point adjacent the pointer |28 so that the contact |24 engages the contact |2i, the energizing circuit for the relay 96 will be C0l11pleted, whereupon the relay will effect a retraction of the tongue SB from its seat in the groove |00 of plunger 1|. In this instance, the plunger 1| and cylinder 5| will be disconnected so that they will no longer act as a. unit, thereby breaking the operative connection of the accelerator controls with the throttle arm 24. At the same time, the spring G8 will actuate the cyl.. inder 5| to the right as viewed in Fig. 2, this movement of the cylinder effecting through the rod 26, movement of the throttle arm. 24 to its throttle−closed or idling position, whereby to reduce the engine speed and hencethe speed of the vehicle. As the speed of the vehicle decreases below the predetermined speed limit, the speedometer pointer |22 will be actuated as a consequence thereof, so as to separate the contacts I 2|−|25, whereupon the relay 96 will be deenerglzed. With the de−energizatlon of the relay, the tongue 9| will be conditioned for a reseating ln the plunger groove |00 when the groove is registered with the tongue. The registering of the groove`|II|) with the tongue may be effected readily and easily, in the manner heretofore described, as by pcrmitting the accelerators 28 and 30 to move toward their throttle−closed positions, thus allowing the plunger spring 11 to actuate the plunger 1| inwardly of the cylinder 5| until the desired re−engagement of the tongue 93 with the groove ||J|J is attained. Thereafter, the accelerators 18 and 3B may be again actuated to control the throttle arm 24. Thus, from the foregoing description, it will be readily observed that the powered speed of travel of the vehicle cannot be any greater than the limit set by the pointer |2|i. Moreover, it will be noted that if the adjustable pointer |26 is positioned so that its contact |25 engages the contact |24 on the speedometer pointer |22 when the latter pointer is disposed in the position indicated in Fig. 6, wherein the speedometer pointer is in its initial or zero speed position, the energizing circuit for the magnet at will be completed so− as to effect a retraction of the lock element 98 for the separable device 21. In this instance, the device 21 will be ineffective to transmit speed control movements of the accelerators 28 and 30 to the engine throttle arm 24. Thus, with the engine operating at idling speed, the powered speed of travel of the vehicle cannot, be greater than the minimum speed produced by the engine operating at its idling speed. This minimum or idling speed of the vehicle is usually not greater than 10 miles per hour, and is determined by the idling speed for which the engine is set and by the load on the engine in propelling the vehicle. It is desired to point out particularly that the operation of the improved speed control mechanism of this invention, to render the accelerator devices such as the foot accelerator 28 and the hand accelerator 30, ineffective to regulate the engine speed, is elfected responsively to the speed of travel of the vehicle, and this is true whether the vehicle speed is produced by the operation of the engine, or produced by some agency other than the engine, as when the vehicle is permitted to move under its own momentum, or is permitted to coast down grade. The preferred embodiment of this invention herein described and illustrated fully attains the foregoing objects and advantages, and further, presents an improved method and means for positively and automatically regulating the powered speed of travel of an automotive or like vehicle, so as to limit, selectively, the speed range of the vehicle to that desired. For example, by utilizing the control mechanism of this invention, the powered speed range of the vehicle may be regulated. so that the upper speed limit of the vehicle cannot be greater than say, 40 miles per hour. Thus, the powered speed range of the vehicle would be from a. minimum speed up to but not greater than miles per hour. Unlike many of

the heretofore prevailing speed control systems provided for limiting the powered speed range of vehicles, the control system of this invention is independent of engine speed and is operated only in response to the speed of vehicle travel. This arrangement presents a distinct advantage, in that when the speed limiting mechanism is set to limit the vehicle to a. maximum powered speed of travel of say 40 miles per hour, the mechanism will positively render the engine accelerating means inedective to cause the engine to accelerate in speed upon the vehicle B, 4 . a,»u,sa'1 “ ' attaining the speed limit of 46 miles per hour, and this result will obtain independently of the engine speed and of the speed ratio between the engine and the vehicle dlllve shaft IS, as determined by the transmission control~ Thus. when the vehicle transmission control is operated to effect a low speed but lush torque power transmission from the engine to the drive shaft ll, as when the control is actuated to the so–called "first or low speed" position, the speed of the engine may he very high or near the maximum speed of which the engine is capable, while the speed of travel of the vehicle may he fairly slow and well below the upper limit set by the speed control mechanism. From this, it may be seen that the engine speed may be varied between the minimum and maximum speed limits thereof, and that during such engine speed variation, the control of engine speed by the accelerators will be out oil’ only upon the vehicle attalnlnfa certain predetermined speed of travel. While the improved speed control mechanism of this invention is preferably described by way of an example of its application, as operatively associated with a fuel throttle valve forming a part of a carburetor assembly, and With the accelerator controls for the valve, it ls to be understood that the control mechanism may be utilized with equal facility, in fuel feeding systems of types other than that described.. For example, ln connection with a travellns unit which ls propelled by an engine of the solldfhlel injection type, as a Diesel engine or the like, Wherein the fuel feeding system for this time of enslue includes a fuel injection Dlllflp, and further, wherein the engine speed is v01‘1t1'0lled bv resulatins thS fuel output of the injection pump, the novel separable device 27 of this invention and the control mechanism theretor, may be readily utlllsed in the resulatlorrof the output of the fuel pump. so as to limit the powered speed of travel of the vehicle to Rf predetermined desired value. ' although the invention–is described as applied to an automotive vehicle, it ls not to be limited thereto, as »it may be successfully utilized with any moving unit lmpelled by similar means. It ls to ‘oe understood further, that although a slnsle embodiment Df the invention has been described and illustrated herein, it may be altered or modiiied without departing from_ the spirit and lntended scope of the invention. as detlned by the hereunto appended claims. I ==lHlf!?=;,_, 1; A speed control meellanlam for a traveling unit. Dmvelllns means for the unit. control mesh. anlsm associated with said propelling means and includine a plurality of relatively movable elements, a member normally connecting the elements in a positive manner to preclude their relative movement, and means responsive to the speed of travel of the unit, adapted for actuating said connecting member to silent an operative disconlneotloupf said elements, whereby to render –said control mechanism ineHectlve to control the operation ot said propelling means.

90) Family number: 20636537 (GB460228A) © PatBase

Title: Improvements in or relating to shoe upper conforming machines

Family:

Publication number	Publication date	Application number	Application date
GB460228 A	19370125	GB19350020982	19350724

Probable Assignee: UNITED SHOE MACHINERY CORP

Assignee(s):(std)**:** UNITED SHOE MACHINERY CORP

International class (IPC 8–9)**:** A43D21/12 A43D21/16 A43D21/18 (Advanced/Invention)

International class (IPC 1–7)**:** A43D21/12

CPC: A43D21/125 A43D21/16 A43D21/18

European class: A43D21/12P A43D21/16 A43D21/18

Classification Explorer

Abstract:
Source: GB460228A 460,228. Shoe – making machines. UNITED SHOE MACHINERY CORPORATION. July 24, 1935, No. 20982. Convention date, July 28, 1934. [Classes 17 (i) and 89 (iii)] Lasting and pulling–over; nailing.–Relates to machines of the kind described in Specification 419,938 and consists in detail improvements. The fore part of the shoe is supported in a predetermined position both heightwise and laterally of the machine by a plate, the margin of which abuts against the inside of the insole lip. An end gauge acts as a stop or abutment for the toe–end of the last, depression of a treadle releasing the fore–part –supporting plate to the action of springs which urge it forward. The same treadle causes a heel support to move up to the shoe, this support being, later, forced, by power, more firmly against the shoe and locked against retraction. Modified grippers are described, which open wide and close quickly, both jaws moving towards and from each other while closing and opening, respectively. Provision is made for the correct positioning of the tip seam. The side grippers are arranged to receive the margin of the upper with the ends of the tip seam presented in a definite relation to their jaws, a definito foredraw is then imparted to these grippers and the intermediate portion of the seam positioned by a pull at the toe end. A tip gauge is then moved into contact with the upper so that the position of the seam may be checked, and, if necessary, rectified by manual movements of the grippers. Prior to the actuation of the wipers a shoe holder clamps the forepart of the upper firmly against the last, the toe gripper then imparting a further pull to assist the heightwise wiping of the wipers. The side grippers, after their release of the upper, are swung inwardly, widthwise of the shoe, to avoid interference with the tacking means. Means for feeding binder wire to a groove in the inner edges of the wipers is mounted on one of the wiper carriers, and the binder is secured to the shoe by fasteners inserted by mechanisms mounted on the wiper carriers to move relatively to the wipers to positions determined by stop faces on the wipers. A fore–part support 2, Fig. 6, is secured by dowel–pins to a slide 10 adjustable longitudinally of the shoe by a thumb nut 22 with respect to a slide 24 urged rearwardly by springs 28 but normally held forwardly by a latch 34 connected by links 40, 52 and 60, Fig. 3, with a treadle 62, depression of which frees the slide which is moved rearwardly by its springs until the toe of the last abuts against a stop 4, Fig. 6. Later, this stop is removed to out–of–the–way position by a cam. Depression of the treadle also advances a heel support 96, which is slid rearwardly by a rack 104, Fig. 3, actuated by a pinion 100 gearing with a sector 106 linked to a lever 114 actuated by a rod 122 resiliently connected to a bar 132 moved longitudinally by an arm 136 actuated by the treadle. A pawl 152 holds the mechanism in operative position. To ensure against displacement of the shoe during the toelasting operation, the heel support is given a positive thrust during the power operation of the machine by a cam–operated lover 182 pivoted to the bar 132 and carrying a pair of pawls 158 which at this time are in engagement with rack teeth on the yoke member of. the bar 122. To assist in positioning the shoe, a pivoted arm 78 carries at its free end a horizontal bar spring pressed upwardly to a limit such that the too end of the shoe properly seats on the toe–plate. The slide 24, Fig. 6, carries a second latch 68 for holding it in operative position against the thrust of the wipers, the tip of the latch co–operating with a notch in a bar 72. A bell–crank lever 1354 frees the latch prior to the end of the machine's cycle. Each of the grippers comprises a casing 234, Fig. 13, guiding a jaw 236 movable axially of the casing and a jaw 238 pivoted to the casing and provided with a roll engaging cam surfaces on the shank of the other jaw. The first jaw is urged upwardly by a spring 254 threaded over a rod carrying a pin 260 engaging a slot in the slide to which the jaw is secured, the rod projecting from a slide 250 formed at its lower end with a spiral track engaging a similar track on a member 278 rotated as described in the prior Specifications to open and close the grippers. The slide 250 is positively depressed on reverse rotation of the member 278 by an axial rod carried by this member and provided with a pin engaging a spiral slot in the upper member. The three grippers at the end of the shoe are operated to pull the upper heightwise of the last by a lever 350, Fig. 6, connected by links 362, Fig. 63, to a sleeve 364 slidable on an enlarged portion of a rod 373, the sleeve and enlarged portion being engaged by a washer urged upwardly by a spring 374 threaded over the rod and confined by a nut on the rod. A cam–actuated lever 380 moves the rod 372 longitudinally to exert a pull on the upper through the spring, the strength of the spring being adjusted by turning a cap 398 in which the rod can slide but not rotate. The position of the nut member 378 and, therefore the setting of

the spring strength, is indicated by a pointer 402. For adjusting the tip seam manually, if necessary, the forked arm 410 of a lever is connected to the links 362 and to a rotatably supported member 422, Fig. 3, normally disconnected from a hand lever 428 so that the power pull of the grippers will not swing the hand lever with possible danger to the operator. A hand grip 436 controls a plunger which can connect the member 422 with the handle, and when these are connected the toe grippers may be moved manually to adjust the tip seam. A lug on the casing of each of the side grippers actuates a bellcrank lever to swing the grippers inwardly under the shoe to out−of−the−way position as they are pulled downwardly after they have released the upper. Fore−draw is imparted by mechanism similar to that described in the prior Specification, but to all the grippers instead of only those at the side of the shoe. To adjust the amount of fore−draw a screwed rod 672, Fig. 3, serves as a stop to a bell−crank lever 674 pivoted to an arm which moves as the gripper rock−shafts swing to produce foredraw in the manner described in the prior Specification. The rod 672 is rotated by a handle 706, Fig. 39, and to indicate the position of its end, and, therefore the amount of foredraw given, teeth are formed on its upper end gearing with a pinion 712 which drives an indicator 708 provided with numbers and graduations visible through an opening in a cover plate provided with an arm. When the toe wipers begin to move inwardly over the insole the lever 674 is swung to allow a short further fore−draw. Near the end of the pulling−over operation, a tip−seam gauge is carried into engagement with the shoe, so that the position of the seam may be adjusted, if necessary. The gauge comprises a graduated plate 720, Fig. 43, adjustably clamped to a slide 726 formed with teeth gearing with a pinion actuated by a segment 748 moved by a spring 752 on release of a latch 754 provided with a tail 766 co−operating with a finger 764 carried by the wiper carrier. The gauge is returned by a plate 800 carried by an arm 776 on which the fore−part pad described in the prior Specification is mounted, the plate engaging a member 802 on the gear sector as the pad is moved to operative position. The wipers 844, Fig. 16, are detachably secured in slots in wiper carriers 846 by spring−pressed pins having heads 852. The pins engage holes in the wipers, and can be entered only when spring−pressed plungers in the slots have been pushed inwardly by the edges of the wipers. The wipers are closed by bars 882 slidable in blocks 890 swivelled to a camactuated cross−bar 892, springs 896 allowing yield to the wiper carriers. The forward end of the wiper carrier is supported by a rod 914, Fig. 49, threaded into a member engaging an eccentric portion of a pin 918 supported by lugs on the wiper head, the lower end of the rod extending through a pin 920 carried by a cam−actuated lever 922. Surrounding the rod is a heavy spring 926 and a light spring 934, the first abutting against a nut 928 on the rod and a member 930 engaging a flange on the rod, and the second against a ring 936 threaded on the nut and a cylindrical member 938 mounted on the pin 920. The pin 918 carries a worm wheel rotatable by a worm having a head 948 for adjusting the eccentric. The construction provides a light pressure through the spring 934 while the wipers are wiping over the feather of the insole, and a heavy pressure through the spring 926 at the end of the inward movement of the wipers. The left−hand wiper carrier supports means for feeding binder wire into a groove in the wipers, situated near the top face of the wipers and in their wiping edges. The wire w, Fig. 21 is drawn from a reel and over a guide wheel 997 to feed wheels provided with thin peripheral flanges entering the groove and driven by gear wheels 1012. The pressure of the feed wheels on the wire is adjusted by a screw 1014 at the end of a lever carrying the feed wheel 994 at its other end. These wheels are driven by a rod 1018, Fig. 16, having a slidable connection with a sleeve 1022 driven by a rod 1026 passing through a bearing pivoted to the wiper carrier and driven through a second telescopic connection by bevel gearing 1048, Fig. 29, driven by a worm wheel 1076 on the shaft of the electric motor driving the machine. Normally, the drive to the gears 1048 is interrupted by a clutch having a spring 1088 controlled by a lever 1086 adjustably linked to a lever 1096 actuated by a cam 1102 adjustable by slots 1103 on a cam shaft 810. By adjusting the length of the link 1092 by a nut 1094 the length of wire fed to the wipers can be regulated. A brake stops the feed when the clutch is released. A shear member 982, Fig. 21, is automatically reciproca

0) US4993298A – APPARATUS FOR MOUNTING A NOTCHING BLADE

91) Family number: 3469606 (US4993298A) © PatBase

Title: APPARATUS FOR MOUNTING A NOTCHING BLADE

Priority: US19890417035 19891004 WO1990US05668 19901004

Family:

Publication number	Publication date	Application number	Application date
CA2066680 AA	19920325	CA19902066680	19901004
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EP0494964 A4	19920729	EP19900915627	19901004
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US4993298 A	19910219	US19890417035	19891004
WO9104817 A1	19910418	WO1990US05668	19901004

Probable Assignee: ALPHA IND INC

Assignee(s):(std)**:** ALPHA IND INC

Assignee(s): ALPHA INDUSTRIES INC ; CHAMULAK STEVEN A ; SKVARCE DENNIS H ; ALPHA IND

Inventor(s):(std)**:** CHAMULAK STEVEN A ; SKVARCE DENNIS H

Agent(s): RIDOUT AND MAYBEE LLP

Designated states: AT BE CA CH DE DK ES FR GB IT JP KR LI LU NL SE

International class (IPC 8–9)**:** B23D21/00 B23D25/04 B23D35/00 (Advanced/Invention); B23D21/00 B23D25/00 (Core/Invention)

International class (IPC 1–7)**:** B23D21/00 B23D25/04 B23D35/00 B26D7/26

CPC: Y10S83/917 B23D21/00 Y10T83/0596 Y10T83/476 Y10T83/9473

European class: B23D21/00

US class: 83/319 83/54 83/698 83/698.71 83/917

Classification Explorer

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Forward Citations: US7687855, US6897526, US5893315, US5690011, US5231908, US2005156209,

Abstract:
Source: US4993298A Apparatus for mounting a notching blade assembly specifically for use in a double–cut die set of the type used to cut tubing continuously emanating from the tube mill. The present invention is directed toward the notching blade assembly used in conjunction with the vertical guillotine blade of the cut–off die set to notch the upper surface of the tubing prior to the shearing cut. The subject device includes a clamp plate secured to the carriage of the double–cut die set, a key–shaped transverse bore extending through the clamp plate and carriage body so that the notching blade having a corresponding key–shaped bore can be placed betwen the clamp plate and carriage, a locking stud having a locking pin on one end thereof is inserted through the key–shaped transverse bore and rotated away from the channel groove portion of the keyhole–shaped bore to clamp the notching blade between the clamp plate and carriage assembly.

92) Family number: 28823168 (US5499680A) © PatBase

Title: Diverter, diverter retrieving and running tool and method for running and retrieving a diverter

Priority:

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CA19952156981 19950825
CA19952156984 19950825
CA19952156982 19950825
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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: HALLIBURTON ENERGY SERVICES INC

Assignee(s):(std)**:** FREEMAN TOMMIE AUSTIN ; GANO JOHN C ; LONGBOTTOM JAMES R ; NIVENS HAROLD WAYNE ; JACQUIER RICHARD CHARLES ; HOLBROOK PAUL DAVID ; MILLS DAVID H ; MCDONALD DONALD ; REIGLE JOHN A ; REESING DAVID LYNN ; JONES DESMOND ; HALLIBURTON CO ; HALLIBURTON ENERGY SERV INC ; BALDWIN DONALD D ; COX DON C ; WELCH WILLIAM R ; WHITE PAT M ; SETTERBERG JOHN RICHARD ; WILLIAMSON JIMMIE ROBERT ; WALTER JEFFREY S

Assignee(s): FLEET CAPITAL CORP ; ADVANCED TECHNICAL PRODUCTS INC ; BACKBAY CAPITAL FUNDING LLC ; HALLIBURTON ENERGY SERVICES INC ; HALLIBURTON COMPANY

Inventor(s):(std)**:** BALDWIN DONALD D ; COX DON C ; FREEMAN TOMMIE AUSTIN ; FRREMAN TOMMIE AUSTIN ; GANO JOHN C ; HOLBROOK PAUL DAVID ; JACQUIER RICHARD CHARLES ; JONES DESMOND ; LONGBOTTOM JAMES R ; LONGBOTTON JAMES R ;

MCDONALD DONALD ; MILLS DAVID H ; NIVENS HAROLD WAYNE ; NIVENS WAYNE RAY ; REESING DAVID L ; REESING DAVID LYNN ; REIGLE JOHN A ; REIGLE JOHN ALDEN ; SETTERBERG JOHN RICHARD ; WALTER JEFFREY S ; WELCH WILLIAM R ; WELCH WILLIAM RICHARD ; WHITE PAT M ; WHITE PAT MURPHY ; WILLIAMSON JIMMIE R ; WILLIAMSON JIMMIE ROBERT

Agent(s): OGILVY RENAULT LLP SENCRL SRL; SWABEY OGILVY RENAULT

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

International class (IPC 8–9): E21B17/00 E21B17/02 E21B17/08 E21B17/10 E21B17/22 E21B23/00 E21B23/02 E21B23/03 E21B23/12 E21B29/06 E21B33/10 E21B33/12 E21B33/129 E21B33/1295 E21B41/00 E21B43/10 E21B43/14 E21B47/09 E21B7/06 E21B7/08 F16L7/00 F16L9/16 (Advanced/Invention); E21B17/00 E21B23/00 E21B33/12 E21B41/00 E21B43/02 E21B7/04 F16L7/00 F16L9/00 (Core/Invention); E21B (Subclass/Invention)

International class (IPC 1–7): E21B17/00 E21B17/02 E21B17/08 E21B17/10 E21B23/00 E21B23/02 E21B23/03 E21B23/12 E21B29/06 E21B33/10 E21B33/12 E21B33/128 E21B33/129 E21B33/1295 E21B33/14 E21B41/00 E21B43/00 E21B43/10 E21B43/12 E21B43/14 E21B43/30 E21B47/09 E21B7/06 E21B7/08 F16L9/12

CPC: E21B17/1078 E21B7/061 E21B17/00 E21B17/1007 E21B17/22 E21B23/002 E21B23/02 E21B23/03 E21B33/1295 E21B41/0042 F16L7/00 F16L9/16 E21B43/10 E21B17/10 E21B17/1085 E21B23/00 E21B29/06 E21B33/1293

European class: E21B17/00 E21B17/10 E21B17/10A E21B17/10T E21B17/10W E21B17/22 E21B23/00 E21B23/00D E21B23/02 E21B23/03 E21B29/06 E21B33/1295 E21B33/129L E21B41/00L2 E21B43/10 E21B7/06B F16L7/00 F16L9/16

US class: 166/117.6 166/134 166/208 166/241.6 166/242.1 166/285 166/313 166/377 166/381 166/382 166/387

Classification Explorer

Cited documents: WO9406996 A1, WO9403702 A1, US5564503 A, US5535822 A, US5425419 A, US5398754 A, US5388648 A, US5353876 A, US5337808 A, US5332049 A, US5330007 A, US5325924 A, US5322127 A, US5318122 A, US5318121 A, US5311938 A, US5311936 A, US5309988 A, US5301760 A, US5289876 A, US5193620 A, US5188190 A, US5163522 A, US5159980 A, US5131467 A, US5115872 A, US5113938 A, US5101897 A, US5085275 A, US5074362 A, US5052482 A, US5042600 A, US5012877 A, US4926936 A, US4921044 A, US4880067 A, US4834175 A, US4811785 A, US4807704 A, US4793411 A, US4771830 A, US4742871 A, US4714117 A, US4696345 A, US4662441 A, US4653583 A, US4614233 A, US4606408 A, US4603743 A, US4588030 A, US4573541 A, US4515213 A, US4510797 A, US4498534 A, US4495997 A, US4493372 A, US4488595 A, US4444276 A, US4440223 A, US4440222 A, US4429741 A, US4420049 A, US4415205 A, US4402551 A, US4397360 A, US4396075 A, US4369840 A, US4364430 A, US4304299 A, US4291724 A, US4288082 A, US4224987 A, US4160481 A, US4074762 A, US4068729 A, US3982590 A, US3978933 A, US3976133 A, US38090195, US38076895, US3807498 A, US3741302 A, US3516448 A, US3351136 A, US3330349 A, US3255819 A, US3205945 A, US3064729 A, US3002454 A, US29694194, US29694194, US2858107 A, US2851112 A, US2839270 A, US2804926 A, US2797893 A, US2726847 A, US2726722 A, US2699920 A, US2670797 A, US2509144 A, US2492079 A, US2452920 A, US2404341 A, US2397070 A, US2362529 A, US2331293 A, US2328840 A, US2281414 A, US2211803 A, US2201433 A, US2171020 A, US2111793 A, US1959368 A, US1959367 A, US1900164 A, US1896212 A, US1751997 A, US1645461 A, US1336684 A, SU1645428 T, GB2272718 A1, GB2255366 A1, GB2234278 A1, GB2086962 A1, GB2079821 A1, EP0664372 A2, EP0619414 A1, EP0574326 A1,

Forward Citations: WO9950528, WO9939073, WO9939073, WO9845571, WO9813578, WO9809054, WO9809053, WO9809053, WO9748268, WO9748268, WO9741331, WO9704208, WO17099777, WO15160540, WO15051417, WO15051414, WO15030843, WO14123517, WO14037125, WO14037125, WO07121306, WO05003509, WO04016905, WO03087524, WO02099245, WO0190533, WO0053887, WO0032902, US9689514, US9650858, US9644476, US9598913, US9574428, US9556994, US9556687, US9551209, US9447650, US9404317, US9394763, US9376871, US9284802, US9273525, US9249559, US9234613, US9234409, US9175560, US9175533, US9175523, US9062496, US9057261, US9057230, US8978775, US8893780, US8863834, US8844624, US8839850, US8832906, US8813840, US8800605, US8770280, US8763690, US8662166, US8651192, US8602097, US8511372, US8505621, US8505620, US8479812, US8469119, US8464784, US8434568, US8418772, US8393402, US8376054, US8376052, US8376039, US8371399, US8371368, US8360161, US8336635, US8333245, US8316966, US8312923, US8302692,

US8297377, US8297350, US8291974, US8287005, US8286713, US8286708, US8286699, US8276677, US8235127, US8215400, US8196654, US8127858, US8113276, US8069920, US8069915, US8025105, US8020621, US7997336, US7971645, US7766082, US7721611, US7604047, US7571771, US7458617, US7455127, US7422057, US7419223, US7419001, US7401665, US7373984, US7360595, US7353877, US7353867, US7337841, US7299864, US7264048, US7222670, US7219746, US7216700, US7207395, US7207390, US7163063, US7134494, US7100687, US7090009, US7082998, US7073599, US7073595, US7066270, US7048049, US7036584, US7025154, US7025144, US7025137, US7011151, US6991048, US6991047, US6988548, US6986388, US6976533, US6964308, US6964298, US6942030, US6935428, US6883610, US6848508, US6830106, US6789628, US6786283, US6766859, US6758269, US6752206, US6732802, US6732801, US6732792, US6729405, US6725922, US6712148, US6708764, US6688388, US6681855, US6679334, US6675901, US6668932, US6668918, US6662870, US6651750, US6648068, US6626243, US6622792, US6604580, US6598686, US6585040, US6575235, US6564871, US6561288, US6550550, US6547006, US6533034, US6530574, US6508305, US6494264, US6478085, US6454006, US6439320, US6439312, US6427777, US6425448, US6419021, US6401815, US6390198, US6382323, US6374924, US6336507, US6334485, US6318472, US6315044, US6311776, US6308783, US6308782, US6286599, US6286597, US6279659, US6263968, US6260623, US6253852, US6244340, US6237683, US6230806, US6230804, US6209649, US6209648, US6209644, US6209636, US6202752, US6196321, US6186233, US6158513, US6155349, US6145591, US6135206, US6125937, US6123150, US6116344, US6095248, US6092602, US6092601, US6092593, US6089320, US6079494, US6079493, US6076602, US6073697, US6073691, US6070667, US6070665, US6065540, US6059037, US6056056, US6056051, US6053254, US6047774, US6044909, US6035939, US6035937, US6024169, US6024168, US6019173, US6015012, US6012527, US6003621, US6003601, US5992525, US5992524, US5988300, US5979560, US5975208, US5964287, US5960874, US5954130, US5944124, US5944109, US5944102, US5937955, US5927401, US5918669, US5896927, US5894889, US5887668, US5887655, US5884704, US5881816, US5862862, US5836387, US5833003, US5832997, US5829518, US5826651, US5823263, US5816324, US5813465, US5806600, US5806590, US5803176, US5787987, US5787978, US5771972, US5735350, US5730221, US5727629, US5706894, US5704437, US5697445, US5680901, US5678634, US5620051, US2016115743, US2015218899, US2015176378, US2013192840, US2012279709, US2012103687, US2011226467, US2011192596, US2011186291, US2011186289, US2011146971, US2010326671, US2010300678, US2010294512, US2010252275, US2010252274, US2010218956, US2010212901, US2010200291, US2010186953, US2010175888, US2010170677, US2010101807, US2010101806, US2010078173, US2010039879, US2009308615, US2009301706, US2009211761, US2009139708, US2009102702, US2009025929, US2009011247, US2008264629, US2008249720, US2008156478, US2008073073, US2008060807, US2008060806, US2007240876, US2006266521, US2006260816, US2006260799, US2006201715, US2006201714, US2006191688, US2006131026, US2006131024, US2006096755, US2006066102, US2005211445, US2005189114, US2005183859, US2005167156, US2005133219, US2005103490, US2005100414, US2005087340, US2005039915, US2005023002, US2004244974, US2004194960, US2004194954, US2004168809, US2004168808, US2004159436, US2004154802, US2004149432, US2004144535, US2004079530, US2004055787, US2004050552, US2004035582, US2004035581, US2004031609, US2004026090, US2003221834, US2003217842, US2003075334, US2003042024, US2002011340, RU2623406, RU2612772, RU2612186, GB2466715, GB2466715, GB2463187, GB2463187, GB2449802, GB2449802, GB2440815, GB2440815, GB2417269, GB2417269, GB2407601, GB2407601, GB2403494, GB2403494, GB2396632, GB2396632, GB2396168, GB2396168, GB2391883, GB2391883, GB2386627, GB2386627, GB2373520, GB2373520, GB2365897, GB2365897, GB2363142, GB2360536, GB2360536, GB2359578, GB2351099, GB2348908, GB2348908, GB2346911, GB2346911, GB2339585, GB2339585, GB2334047, GB2334047, GB2333788, GB2333788, GB2309718, GB2309718, GB2307496, GB2307496, GB2304760, GB2304760, GB2302109, GB2302109, EP3039222, EP3039222, EP2986807, EP1983153, EP1841948, EP1559866, EP1559866, EP1129272, EP1068425, EP1008719, EP0945586, EP0937861, EP0928877, EP0921267, EP0859123, EP0846837, EP0839254, EP0810348, EP0792997, CN103597165, CN103597165, CN101787856, AU765109, AU754360, AU751270, AU723934, AU720750, AU708930, AU2013394895, AU2011323842, AU2001262535,

Abstract:
Source: US5499680A A diverter for a subterranean well, a diverter retrieving tool and methods of diverting objects traversing the well and retrieving the diverter. The diverter comprises: (1) a body having a lower portion adapted to be coupled to a diverter anchoring structure and an upper portion having a slanted diverting surface, the diverter adapted to be placed within a main borehole of the subterranean well at a predetermined location and orientation proximate a junction of a lateral borehole with the main borehole, the slanted diverting surface adapted

to redirect an object having a particular diameter and coming into contact with the diverter into the lateral borehole and (2) a compliant spring member associated with the slanted diverter surface. The spring member is resiliently retractable toward the slanted diverter surface to allow the object to traverse the junction and enter the lateral borehole, the diverter therefore dynamically adjustable to compensate for an insufficient minimum diameter of a selectable one of the main borehole, junction and lateral borehole. The diverter is configured to receive a flexible finger of the retrieving tool into a central longitudinal shaft therein to engage and retrieve the diverter without having to orient the retrieving tool.

0) US2004134011A – WIPER BLADE

93) Family number: 28617301 (US2004134011A) © PatBase

Title: WIPER BLADE

Priority: DE20011057130 20011121 DE20021095475 20021014 DE20025008022 20021014 WO2002DE003874 20021014 WO2002DE03874 20021014 WO2002DE03874 20040322

Family:

Publication number	Publication date	Application number	Application date
AU2002347079 AA	20030610	AU20020347079	20021014
BRPI0206578 A	20031216	BR2002PI06578	20021014
BRPI0206578 B1	20110517	BR2002PI06578	20021014
CN1278892 C	20061011	CN20028006911	20021014
CN1498174 A	20040519	CN20028006911	20021014
DE10157130 A1	20030605	DE20011057130	20011121
DE10295475 D2	20041014	DE20021095475	20021014
DE50208022 D1	20061012	DE20025008022	20021014
EP1448414 A1	20040825	EP20020782716	20021014
EP1448414 B1	20060830	EP20020782716	20021014
JP2005510401 T2	20050421	JP20030547217T	20021014
JP4038178 B2	20080123	JP20030547217T	20021014
KR100928904 B1	20091130	KR20047004168	20021014
KR20040058186 A	20040703	KR20047004168	20021014
RU2003120449 A	20050210	RU20030120449	20021014
RU2293034 C2	20070210	RU20030120449	20021014
US2004134011 AA	20040715	US20030474476	20031009
US7203990 BB	20070417	US20030474476	20031009
WO03045746 A1	20030605	WO2002DE03874	20021014

Probable Assignee: ROBERT BOSCH GMBH

Assignee(s):(std)**:** BOSCH GMBH ROBERT ; MAYER STEPHAN ; ROBERT BOSCH GMBH

Assignee(s): ROBERT BOSH GMBKH

Inventor(s):(std)**:** MAJER SHTEFAN ; MAYER S ; MAYER STEPHAN ; S MAYER ; STEPHAN MAYER

Agent(s): MICHAEL BEST AND FRIEDRICH 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 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 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 ZM ZW

International class (IPC 8–9): B60S1/00 B60S1/32 B60S1/38 B60S1/40 B60S1/42 (Advanced/Invention); B60S1/40 (Advanced/Non–invention); B60S1/00 B60S1/32 B60S1/38 (Core/Invention)

International class (IPC 1–7): B60S1/00 B60S1/32 B60S1/38 B60S1/40 B60S1/42

CPC: B60S1/32 B60S1/3497 B60S1/38 B60S1/3894 B60S2001/3822 B60S1/40

European class: B60S1/32 B60S1/34Z B60S1/38 B60S1/38R8D L60S1/38F6

US class: 15/250.31 15/250.32 15/250.351 15/250.43 152/503.2

Classification Explorer

Cited documents: WO9905009 A1, WO02060730 A1, US6820302 BB, US6415473 BA, US3832751 A, US3123849 A, SU1572869 T, DE3829343 A1, DE3744237 A1, DE19738232 A1, DE19731683 A1, DE19605428 A1, DE10103889 A1,

Forward Citations: USD777079, US9649913, US9616855, US9604597, US9505380, US9457768, US9333948, US9108595, US8806700, US2016207377, US2008263805, US2005217057, RU2608984, RU2604912, RU2595730, RU2574510, RU2555249, RU2548691, KR101355500, JP2007276774,

Abstract:
Source: US2004134011A The invention starts with a wiper blade (20) comprised of a wiper strip support (22) and a wiper strip (24) that is guided laterally by a device (28) with a connecting rod (32, 74) vis–a–vis a wiper arm (10), whereby one end of the connecting rod (32, 74) is fixed so that it can pivot on an articulated part (12) of the wiper arm (10) approx. vertically to the windshield (26), and the connecting rod (32, 74) having lateral guide surfaces is adjacent to a part of the wiper blade (20). It is proposed that a pivot bearing (86, 88) be arranged on both ends of the connecting rod (32, 74), one of which permits a movement in the longitudinal direction of the wiper arm (10) or the wiper blade (20).

0) US4441343A – HIGH SECURITY LOCKS AND KEY

94) Family number: 4303351 (US4441343A) © PatBase

Title: HIGH SECURITY LOCKS AND KEY

Priority: US19820394446 19820701 US19840570992 19840116

Family:

Publication number	Publication date	Application number	Application date
US4441343 A	19840410	US19820394446	19820701
US4483164 A	19841120	US19840570992	19840116

Probable Assignee: OLSON MFG CO

Assignee(s):(std): OMCO INC

Assignee(s): OMCO INC HOLDEN INDUSRIAL PARK HOLDEN MA 01520 A C ; OMCO INC HOLDEN INDUSRIAL PARK HOLDEN MA 01520 A CORP OF MA ; OLSON MFG ; OLSON MFG CO

Inventor(s):(std): HOYT RICHARD E ; NIELSEN JR ANKER J

International class (IPC 8–9): E05B19/12 E05B67/36 (Advanced/Invention); E05B19/00 E05B67/00 (Core/Invention)

International class (IPC 1–7): E05B19/12 E05B25/00 E05B67/36

CPC: E05B67/365 Y10T70/443 Y10T70/7751 E05B67/36 Y10T70/7819 Y10T70/7825

European class: E05B67/36 E05B67/36B

US class: 70/34 70/386 70/398 70/399

Classification Explorer

Cited documents: US4394820 A, US4155232 A, US4040279 A, US3835674 A, US3478548 A, US3186196 A,

Forward Citations: US8047027, US7934406, US7913526, US7712342, US7694542, US7434426, US7424812, US7021092, US6813918, US6619078, US6237376, US6161403, US5732989, US5343720, US5301524, US4840049, US4635452, US4543807, US4519225, US4513592, US4513591, US2014053386, US2014026385, US2013160502, US2008134729, US2004025546, EP0565929,

Abstract:
Source: US4441343A A high security lock and a high security key for locking and unlocking said lock. The lock has a resilient O–ring seated in the bore of a hollow plunger and a retainer sleeve fixed in the bore of the hollow plunger and bearing against the rear surface of the O–ring. A center pin with an enlarged forward head extends rearwardly through the bore of the plunger, the O–ring gripping the periphery of the center pin and yieldably resisting center pin reciprocal movement within the plunger bore. The key has elongated outer expanding fingers and an inner coaxially arranged center pin. When the key is fully inserted into the lock and the key handle is operated, the expanding fingers are initially radially expanded to grip the inner surface of the lock plunger bore, and are then longitudinally retracted to draw the plunger rearwardly. Simultaneously, the key center pin is prevented from retracting and holds the lock center pin stationary permitting the lock to unlock.

0) US2004059331A – UNILATERAL FIXATOR

95) Family number: 30398796 (US2004059331A) © PatBase

Title: UNILATERAL FIXATOR

Priority: JP20040538201 20030917 US20020411291P 20020917 US20020426439P 20021114 US20070841091 20070820 US20100967957 20101214 WO2003US29435 20030917 US20030714225 20031114 US20030664769 20030917 WO2003US36590 20031114

Family:

Publication number	Publication date	Application number	Application date
AU2003272557 AA	20040408	AU20030272557	20030917
AU2003272557 BB	20081218	AU20030272557	20030917
AU2003297280 AA	20040615	AU20030297280	20031114
AU2003297280 BB	20100408	AU20030297280	20031114
CA2499373 AA	20050317	CA20032499373	20030917
CA2505744 AA	20050513	CA20032505744	20031114
CA2505744 C	20120529	CA20032505744	20031114
EP1549235 A2	20050706	EP20030754744	20030917
EP1549235 A4	20100505	EP20030754744	20030917
EP1567046 A2	20050831	EP20030811627	20031114
EP1567046 A4	20100825	EP20030811627	20031114
JP2006507041 T2	20060302	JP20040538201T	20030917
JP2006507056 T2	20060302	JP20040553768T	20031114
JP2010142647 A2	20100701	JP20090291283	20091222
JP4490821 B2	20100630	JP20040538201T	20030917
JP4505333 B2	20100721	JP20040553768T	20031114
JP4945791 B2	20120606	JP20090291283	20091222
US2004059331 AA	20040325	US20030664769	20030917
US2004097922 AA	20040520	US20030714225	20031114
US2007282338 AA	20071206	US20070841091	20070820
US2011103676 AA	20110505	US20100967957	20101214
US7282052 BB	20071016	US20030664769	20030917
US8388619 BB	20130305	US20070841091	20070820
US8419732 BB	20130416	US20030714225	20031114
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WO04026103 A3	20050203	WO2003US29435	20030917
WO04045377 A2	20040603	WO2003US36590	20031114
WO04045377 A3	20050113	WO2003US36590	20031114

Probable Assignee: AMDT HOLDINGS INC

Assignee(s):(std)**:** VISIONMED L L C ; VISIONMED LLC ; EBI LP ; EXTRAORTHO INC ; SIXFIX INC ; MULLANEY MICHAEL W ; EBI L P

Assignee(s): EBI LLC ; EVI LLC ; LVB ACQUISITION INC ; MORAN DAN ; AMDT HOLDINGS INC ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT FOR SECURE ; BANK OF AMERICA NA ADMINISTRATIVE AGENT FOR SECURED PARTIES AS ; BIOMET INC

Inventor(s):(std)**:** MULLANEY MICHAEL W

Inventor(s): MICHAEL W MULLANEY ; MULLANEY MICHAEL

Agent(s): FB RICE; FB RICE PTY LTD; FINLAYSON AND SINGLEHURST; HARNESS DICKEY AND PIERCE PLC; HAYNES AND BOONE 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 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 UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61B17/00 A61B17/56 A61B17/58 A61B17/60 A61B17/64 A61B19/00 A61B6/00 A61F5/01 G06K9/00 G06T1/00 (Advanced/Invention); A61B17/56 A61B17/66 A61B19/00 A61F5/01 (Advanced/Non–invention)

International class (IPC 1–7): A61B1/00 A61B17/56

CPC: A61B34/10 A61B2090/376 A61B90/36 A61B2034/2068 A61B2090/364 A61B17/6458 A61B17/66 A61B2017/564

European class: A61B17/64K A61B19/52 K61B17/56M K61B17/64K K61B17/66 K61B19/50 K61B19/52H10 K61B19/52H12D K61B19/52L

US class: 382/132 382/132P 606/53 606/53P 606/54 606/59 606/59P

Classification Explorer

Cited documents: WO03086213 A2, WO02094112 A1, WO0185041 A1, US7282052 BB, US66476903, US6520961 BA, US6514254 BA, US6491694 BA, US6491358 BB, US6461358 BA, US6348053 BA, US6340361 BA, US6277119 BA, US6277118 BA, US6245071 BA, US6200317 BA, US6176860 BA, US6176860 B1, US6171309 BA, US6171309 B1, US6171308 BA, US6171308 B1, US6162224 A, US6146390 A, US6129727 A, US6102911 A, US6080153 A, US6056748 A, US6036691 A, US6030386 A, US6023850 A, US6017341 A, US5976134 A, US5976133 A, US5976124 A, US5971984 A, US5962515 A, US5961515 A, US5951556 A, US5951475 A, US5944719 A, US5941879 A, US5928230 A, US5897555 A, US5891144 A, US5846245 A, US5843081 A, US5803924 A, US5788695 A, US5776132 A, US5752954 A, US5746741 A, US5738684 A, US5728095 A, US5713357 A, US5702389 A, US5690633 A, US5688271 A, US5683389 A, US5662651 A, US5658283 A, US5653707 A, US5601551 A, US5545162 A, US5501684 A, US5454810 A, US5437667 A, US5429637 A, US5393161 A, US5314426 A, US5207676 A, US5160335 A, US5074866 A, US5019077 A, US4991579 A, US4973331 A, US4922896 A, US4895141 A, US4730608 A, US4680628 A, US4628919 A, US4621627 A, US4570625 A, US4502473 A, US4483334 A, US4375814 A, US4308863 A, US3727610 A, US2250417 A, US2007282338 AA, US2004097922 AA, US2002147455 AA, JP5060940 B2, JP2063455 A2, JP2002515285 T2, GB2110094 A1, EP0314021 A2, DE10129942 A1,

Forward Citations: WO16154107, WO16025375, WO15183226, WO15183226, WO15183225, WO14048447, WO13034877, WO11146703, WO10143938, WO08070826, WO06102168, USD720853, USD704840, USD683461, USD682426, USD663030, USD633207, US9681892, US9675382, US9642649, US9610103, US9524581, US9517107, US9474551, US9456849, US9443302, US9402651, US9381042, US9351763, US9301782, US9295493, US9282997, US9273715, US9259242, US9220533, US9155559, US9101398, US9078700, US9066756, US9050135, US9044271, US9039706, US8961567, US8945129, US8945128, US8906020, US8864763, US8864750, US8858555, US8834467, US8827998, US8808289, US8795210, US8758343, US8702705, US8685023, US8654150, US8641714, US8603017, US8574232, US8568457, US8548252, US8506566, US8419732, US8382755, US8353933, US8333789, US8333766, US8257353, US8246658, US8172840, US8114077, US8062293, US8057474, US8055487, US8043234, US7942835, US7722609, US7632271, US7588571, US7575575, US7507240, US2016042571, US2016038184, US2016022315, US2015310171, US2014350558, US2014135764, US2014066931, US2012150181, US2012143191, US2012109209, US2011208187, US2011137347, US2011103676, US2011082458, US2011066151, US2011033118, US2011004199, US2010305568, US2010234844, US2009248026, US2009198236, US2009198235, US2009198234, US2009093820, US2009036892, US2008221622, US2008139977, US2008015477, US2007232963, US2007225704, US2007219470, US2007055233, US2006241590, US2006229605, US2006195198, US2006177264, US2004097922, US2004073211, RU2588316, JP2013526377, JP2012081268, EP3069673, EP2767252, EP2438869, EP2417924, EP2417923, EP1690506, EP1690506, CN104983455, CN103429180, CN103126755, CN102883671, CN102883671, CN102858262, CN102283732, AU2011226864,

Abstract:
Source: US2004059331A A unilateral external fixator device that allows for gross manipulation and fine adjustment of deformities in six degrees of freedom. The device may comprise a strut assembly and two compound movable joints, one at each end of the strut assembly. One compound movable joint may comprise two revolute joints, each containing a gear reduction mechanism and may rotate about the strut. The second compound movable joint may contain two revolute joints, each containing a gear reduction mechanism, and may move along the length of the strut assembly. The gear reduction mechanisms may comprise helical spline assemblies that allow for gross and fine adjustment of the fixator.

96) Family number: 304417 (GB1284393A) © PatBase

Title: IMPROVEMENTS IN OR RELATING TO VEHICLE ANTI–THEFT DEVICES AND WARNING MEANS INCORPORATING SUCH DEVICES

Priority: GB19680030283 19680625 GB19680048278 19681011 GB19690005268 19690130 GB19690024389 19690513

Family:

Publication number	Publication date	Application number	Application date
DE1932220 A1	19700102	DE19691932220	19690625
FR2014223 A1	19700417	FR19690021385	19690625
GB1284393 A	19720809	GB19690024389	19680625

Probable Assignee: WILMOT BREEDEN LTD

Assignee(s):(std)**:** WILMOT BREEDEN LTD

Assignee(s): WILMOT BREEDEN LIMITED

Inventor(s):(std)**:** DAVID ROGERS WILFRID ; EDGAR NEEDHAM THOMAS ; FRANK ORDIDGE EDWARD ; JOHN SMITH PETER ; SMITH PETER JOHN ; ROGERS WILFRED DAVID ; ORDIDGE EDWARD FRANK ; NEEDHAM THOMAS EDGAR

Inventor(s): EDWARD FRANK ORDIDGE ; PETER JOHN SMITH ; WILFRED DAVID ROGERS ; THOMAS EDGAR NEEDHAM

International class (IPC 8–9): B60R25/02 B60R25/021 (Advanced/Invention); B60R25/02 (Core/Invention)

International class (IPC 1–7): B60R25/00 B60R25/02 E05B27/10 E05B47/00 E05B65/00 E05B65/12 H01H27/00

CPC: B60R25/02126

European class: B60R25/021C2B

Classification Explorer

Forward Citations: US4248070, EP2559599, EP2559599,

Abstract:
Source: GB1284393A 1284393 Anti–theft devices WILMOTBREEDEN Ltd 6 Sept 1969 [25 June 1968 11 Oct 1968 30 Jan 1969 13 May 1969] 30283/68; 48278/68 5268/69 and 24389/69 Heading B7J [Also in Division E2] A key–operated vehicle anti–theft device has a housing 1 containing a mechanism operable when the device is fitted in a vehicle to disable the vehicle, and a tumbler lock structure 6 including a plug 8 containing the lock tumblers and rotatable by an inserted key to operate said mechanism, a pair of electrical contacts 24, 25; 52, 53 or 73, 76 being disposed in the housing to be placed in electrical communication as a result of insertion of the key and without the key being turned. In a first form of the device, Fig. 2, the housing is a die–cast body 1 which is split into two parts so that it can be mounted on and around a vehicle steering column by means of clamp bolts 3 which have heads which shear off when the bolts are tightened. The disabling mechanism includes a bolt 4 which is slidable radially of the column in use, the bolt being moved by a slide 5. The lock structure 6 includes a cylinder 7 slidably but non–rotatably mounted in one side of the body 1 and which contains the plug 8 which is rotatably coupled to a non– circular stem 9 of the disabling mechanism which passes through the slide 5; the stem also provides a drive–shaft for a switch mechanism 10; it controls the slide 5 by means of a cam section, the slide being biased by a spring (not shown) into engagement with the cam section and towards the locking position. The plug has four positions, i.e. an off position in which the steering is locked, an auxiliary position in which the vehicle auxiliary circuits are energized, an ignition position and a start position; the lock structure has to be depressed inwardly in order to turn it to the locking position and is spring– loaded to return it from the start position to the ignition position. The body 1 mounts a spring– loaded pawl 13 and the plug carries a coupling member 15 attached to its inner end which includes a radial projection 14 which engages the pawl 13. The pawl 13 and projection 14 have inclined end surfaces and when the plug cylinder is rotated by the key from the lock position to the auxiliary position these engage and the pawl is depressed against the bias of its spring 16 to allow the movement without depressing the lock structure; to move the plug to the lock position the lock structure must be depressed against the bias of the spring 16 so that the projection clears the pawl 13. In the outer end portion of the plug 8 there is a radial slot 21 which breaks into a key slot 22 in the plug and in the slot is a plunger 23 which is retained therein by an end cap 19 for the plug. The plunger has a chamfered nose 23a which projects into the key slot 22 so that it is engaged by the key as the key is inserted and is moved outwardly by the key along the slot 21 for operation of the pair of contacts 24 and 25. The contact 24 is in the form of a spring strip which is wrapped around the plug 8 and an end portion of which is disposed in a peripheral groove 26 in the plug. The radial slot 21 opens into the groove 26 so that the outer end of the plunger 23 engages the end portion of the contact 24 to

move it into engagement with the contact 25 as the key is inserted. The contact 25 is mounted in a peripheral recess 29 in an insulating sleeve 17 which is secured to the outer end portion of the plug, the recess having an arcuate aperture through which the contact 24 can engage the contact 25. The angular extent of the aperture 30 governs the range of lock positions in which the contacts are in engagement and thus the range in which a warning circuit which includes the contacts is operative. The contact 25 is connected to an external electrical terminal 33 mounted on the body 1 via a spring blade 38 which projects through an aperture 39 in the body 1 for engagement with the contact 25. The contact 24 being connected to the plug is effectively connected to the vehicle earth. In a second embodiment, Fig. 8, the bolt 4 is operated as before by a slide 5 and a stem 9 with a cam section and the spring loaded pawl 13 and projection 14 are again provided; in place of the contacts 24 and 25 and the sleeve 17, however, a disc–like insulation plate 50 is provided which surrounds and turns with the stem 9 and is held against the cam section of the stem by a return spring of the lock structure 6; the plate 50 carries an external conducting ring segment 52 which extends an angle slightly greater than the angle of movement between the lock and auxiliary positions; contact with the segment 52 is made by a wiper contact 53 which is slidable in an insulating mounting block 54 which projects at the side of the body 1 and is mounted in a stepped bore in the body; at its outer end the block has an external terminal 55. The stem 9 has a blind bore in which a contact assembly is slidable against the return spring 58. The assembly includes a rod 59 which makes electrical contact with the plug 8 and which is engaged by the tip of the key when the latter is inserted to displace the assembly axially of the lock structure into the stem 9 against the spring 58; the assembly also includes an insulating sleeve 60 which is mounted on the rod 59 and slides freely in the stem 9 and a contact provided by a brass plunger 62 is slidably mounted in the plate 50 and urged by a spring 63 towards the sleeve 60; thus when the assembly 57 is depressed inwards, the plunger 62 registers with an elongated aperture in the sleeve through which it contacts the brass rod 59 to complete, in use, an electrical circuit. In a third embodiment, Fig. 9, the bolt 4 is operated by a cam section of the stem 9 via the slide 5 as previously described although in this embodiment the lock plug has five positions in that a garage position is interposed between the auxiliary position and the ignition position; the construction makes it necessary to depress the lock structure axially in the auxiliary position before the plug can be moved to the lock position, a pawl and projection (not shown) being provided to prevent movement to the lock position before the axial depression; in addition there is a raised pad (not shown) in the body 1 which is engaged by the cam section to block rotation of the latter if an attempt is made to turn the stem line to the lock position with a lock structure and stem depressed before the auxiliary position is reached. Of the two contacts the fixed contact 73 is mounted centrally in an insulating end closure plate 74 of the housing of the switch and the movable contact 76 is mounted in line with the lock structure axis and is slidable in a stepped bore of the stem 9, the step providing an abutment for return spring 77 which urges the contact 76 away from the fixed contact 73 to a normally open position; the contact 76 is in the form of a telescopic assembly comprising two telescopic parts 78 and 79 and a spring 18; the part 78 is of hollow shell–like form and remote from the contact 73 and the part 79 has its end portion disposed in the part 78, the spring 80 being trapped between the two parts; when the key is inserted into the plug its tip engages the part 78 and moves it axially in the bore of the stem 9 against the pressure of the spring 77. The part 79 is moved into contact with the fixed contact 73 by the spring 80; the telescopic assembly allows the axial depression of the lock structure necessary to enable the plug to be moved by the key to the lock position.

0) US2016031414A – STEERING LOCK APPARATUS

97) Family number: 57610532 (US2016031414A) © PatBase

Title: STEERING LOCK APPARATUS

Priority: WO2013JP61523 20130418

Family:

Publication number	Publication date	Application number	Application date
CN104245438 A	20141224	CN201380001448	20130418
CN104245438 B	20160706	CN201380001448	20130418
EP2998171 A1	20160323	EP20130820706	20130418
EP2998171 A4	20161221	EP20130820706	20130418
US2016031414 AA	20160204	US20130003432	20130418
US9463773 BB	20161011	US20130003432	20130418
WO14170991 A1	20141023	WO2013JP61523	20130418

Probable Assignee: NSK LTD

Assignee(s):(std)**:** MATSUSHIMA TOORU ; NSK LTD ; SADAKATA KIYOSHI

Inventor(s):(std)**:** MATSUSHIMA TOORU ; SADAKATA KIYOSHI

Agent(s): CABINET MORELLE AND BARDOU SC; CROWELL AND MORING LLP; KIWA INT

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): B60R25/02 B60R25/021 E05B79/02 (Advanced/Invention)

CPC: B60R25/02126 E05B79/02 B60R25/02 B60R25/021 B60R25/0211

US class: 1/1 70/252

Classification Explorer

Cited documents: WO12023366 A1, WO04007253 A1, US9254860 BB, US9145161 BB, US5974841 A, US5730011 A, US5730010 A, US2015114054 AA, US2015107399 AA, US2015107398 AA, US2014197293 AA, US2012291584 AA, US2011204610 AA, US2011132048 AA, US2009229325 AA, US2005268739 AA, JP8295202 A2, JP2012030622 A2, JP2010105495 A2, JP2010100246 A2, JP2010036724 A2, JP2009190680 A2, JP2008265646 A2, JP2008184055 A2, JP2008179216 A2, JP2002337663 A2, EP2468584 A1, EP0365423 A1, CN102448794 A, CN101052554 A,

Abstract:
Source: US2016031414A A protruding wall section 17 is provided on the outer circumferential surface of a steering column 2b around a lock hole 11a, a concave groove 20 that engages with the protruding wall section 17 is provided in a portion that surrounds a guide section 13a of a butting surface 19 of a lock unit 12a, and by engaging the protruding wall section 17 with the concave groove 20, and preferably, by engaging concave sections 18 that are provided in the steering column 2b with convex sections 21 that are provided on the lock unit 12a so that the lock unit 12a is supported by and fastened to the steering column 2b, the occurrence of damage such as cracking of the steering column 2b is prevented even when there is an attempt to rotate a steering wheel by large force when an ignition key is turned OFF.

0) US2449320A – LAND AND WATER VEHICLE

98) Family number: 21750308 (US2449320A) © PatBase

Title:	LAND AND WATER VEHICLE
Priority:	US19440565865 19441130

Family:

Publication number	Publication date	Application number	Application date
US2449320 A	19480914	US19440565865	19441130

Probable Assignee:	GAETANO RAIMONDI
Assignee(s):(std):	GAETANO RAIMONDI
Inventor(s):(std):	GAETANO RAIMONDI
Inventor(s):	RAIMONDI GAETANO
International class (IPC 8–9):	B60F3/00 (Advanced/Invention); B60F3/00 (Core/Invention)
International class (IPC 1–7):	B60F3/00 B63B35/72
CPC:	B60F3/0007
European class:	B60F3/00B
US class:	440/12.68
Classification Explorer	
Cited documents:	US904998 A, US1752200 A,
Forward Citations:	US6860772, US3114384, US2960056, US2705539, US2003073360, ITVI20130127,

Abstract:
Source: US2449320A 1. The hull (chassis) lil is mounted by springs to a housing 21 extending transversely of the hull Ill. At the center of this housing there is a housing 28 connected to the housing 21 by webs 29. Steering wheel IG has a shaft 3| with a portion 33 in housing 28 (see Fig. 4) having a miter gear 34 at its inner end which drives a miter gear 35 which turns a shaft 36 journalled in housing ZS. Shaft Is .connected to one end of a long casing 37 extended in the housing 21. Housing 21 terminates at each of its ends in a large box 38 Del"– mitting the casings 31 to swing about pivots at their inner ends. One of these pivots is the shaft 36 and the other pivots are other shafts similar to shaft 36. The two top shafts are connected by a chain drive and the two bottom shafts are connected by a chain drive, see Fig. 5. Rollers 39 secured to the top and bottom walls of casings 31 rollably support the outer ends of casings 31 in boxes 38. When casings 31 pivot, the wheels turn, as the wheels are rotatably mounted on the casings, as will presently appear. Thus the front wheels can be turned by the steering wheel I6 in much the same manner as the front wheels of an automobile can be turned. The rear wheels do not have this steering mechanism as they, similar to automobile wheels, can not be steered. The drive for rotating the front wheels will now be described. As aforesaid, the wheels include a hub or drum 20 which is mounted on the shaft 2| having a miter gear 22 at its inner end. Rotation of this shaft will rotate the wheel. This shaft may be driven in any desired manner and connected up with an internal combustion engine of the vehicle in any desired manner. The shaft 2| is shown in Fig. 5 geared, by means of its gear 22 to a miter gear AD, on the shaft 4| .iournalled in casing 31 and therefore adapted to move ,therewith so that the wheels are rotated even when in a turned position. Shaft 4| has a sprocket 42 connected by a chain 43 to a sprocket 44 on a shaft 45 journalled in housing 28. This shaft will be the shaft connected up with the source of power. As may be seen, shaft 45 is in the same axial position as the adjacent bottom shaft 36 and therefore shaft 35 is loosely mounted (telescoped) on shaft 45. There are four shafts 35, the vertically aligned pairs each forming a pivot for the correlated casing 31. While only one shaft has been described it will be understood that there is a shaft 45 on each side of the longitudinal center line of the vehicle. The usual clutch, transmission etc. will be provided for connecting shafts 45 with the internal combustion engine. Each of the rear wheels are similar to the front Wheels and have the paddles 24, the drum 20, the shaft 2| and the mechanism connecting up shaft 2| with rear drive shafts 45. Therefore no further description thereof is deemed necessary. There remains to be described the operating mechanism for the paddles. A11 eight paddles are controlled from the same source, which is the control |1. This control has a wheel |1' Which, when rotated, turns a gear 46, the wheel being geared (not shown) to a rod 41 geared to gear 46. Gear 45 is mounted on a shaft 48 having sprocket 49 connected by a chain 58 to two sprockets 5|, one for each casing 31. In other words, sprocket 49 is midway between sprockets 5| and is secured thereto by a common chain. Sprockets 5| are each secured on al shaft 52. Each shaft 52 has a miter gear 53 at its bottom in mesh with a miter gear 54 of a worm shaft 55. Worm shaft 55 is at one side of the shaft 2| and nmilar worm shaft 56 is at the other side. This shaft 55 is driven from shaft 52 by a chain 51 connecting a sprocket 58 on a shaft 52 and a sprocket 59 on a shaft 65 geared by bevel gears to shaft Worms Sli' are mounted on shafts 55 and 56, and each meshes with a rack 6| formed on the outside of a cylinder E2 mounted in a housing 68 secured in casing 31, shaft 2| passing

through cylinder 52. Cylinder E2 is best shown in Fig. 9. It has oil holes and top and bottom longitudinal tongues E4 sliding in grooves G5 formed in the housing 63. A lantern gear G6 is secured to the front end of cylinder 62. The racksil of the cylinder extend through slots 81 in the housing 63. Casing 31 has a front wall provided with a cam 58, best shown in Fig. 12. Rotation of control wheel |1' when the mechanism is in the position shown in Fig. 5, rotates the worms BU', drawing the cylinder 62 inwardly and pulling the lantern gear out of mesh with gears 69 (see Fig. 8) which it drives. The gears E9 areeach secured to a shaft which has a key way for synchronizing the gears mounted on it and each shaft 10 has a miter gear 1| in engagement with one of the paddle gears 23. Thus as the wheels rotate, gears 59 run around the lantern gears, turning the paddles, but when the lantern gears are disengaged from ,the gears 69, rotation of the wheels does not aiieot rotati–on of the paddles. Consequently, the lantern gears and gears E9 will be in mesh in water and out of mesh on land, the lantern gear forming a clutch. Rotation of the wheels also rotates the drum 20 relative to the cam BH. Each drum 20 h–as a slide 12 mounted on its »t–op and bottom faces, which are fiat. Each slide has a roller 13 engaging the ,cam and springs 14 urging the roller into such engagement. A dog is connected to each slide and each dog is adapted to coact with a gear 23 so that when the rollers ride on the cam low parts, the dogs engage the gears and lock them but when the rollers ride .on the high part, the dogs are disengaged from the gears 23. A wing nut bolt. 13e, passing through the outer face of the drum 20, may be €I1”1lJ10yed for holding the springs 14 compressed and the roller 13 in neutral or inoperative position, the wing nut bolt controlling a fork for retracting the slide. Each of the paddles has s. two part cen_ ,ter shaft 15 (Fig. 14) connected by a tumbuckle 'i,1,_~i=;fi§ibiiii§ the`iiyaé1t1lés'to he 'asseiiih1é_ in the siiolies of the wheel. _gt; V A _V Gears 'Ida are also idrovided on shafts ;'l~_`fa§1_lt;d these gears 'Ma of eachyclriye vgiill heir; inesh with an idler seal' _lt;not,shcwn)_ which holds the –EW6 adjacent shafts 'ill rotating but 'of their correct relative position, The cam B8 liasa single High part; which is desjgnedjb`a1teinatc1y,1.l1'1¥ lockthe, dogs, so that the paddles will be alter? nia.te1y`shif–ted to propelling 15osltion`and but of Droiielliné position., , _ ` I H K _ ; I _ _ ,The oiaération df the vehicle, in surhrxiztry, is as i'ofll§§ws: _, _ ` , ,_ _ V _ The tiiheelsyutate antifthe front yvheeieturn in Ehesargie, manner on lanti 3.1'ldN_l1f1 the v_gt;_, ytater. The only ,diitefeiice between operation of thej§fc¢ hiéle in the water over its operation `on Aland is fhat the inaadies are er¢iii»giig`iiitti'oi=e1f§~ti.§ii. , a A On land, the`vehic1é is`driven‘sixi1i1air,`t6 arix' ai1tbin6bi1e_. _ That is, the 'engine ‘is stai–ted, and fhéAs,haf13s'¢!5 are rdtiatérl as iifcresaid, tIié1jéb3'}fQ'1 téiltiné Eheshafts –2l,ah_1,2i,'land thereby rotating the Wheels. When it is desired to turn the front Wheels., the steering wheel iii) is]Ju1'riéd,,£i.i;‘riing gear 35 and Lh'ere7o$f the shafts 36, Qliereby piviol;irig,the casings 33. As the ca$i1‘l§S_3`Z swing,_';he Wheels turn, as the Wheels are secured tothe outer é1ssii`1§_0f the casiiigs 31. ` V (_ Whéfl_ChB vehicle is to travel, in Water, seine 15i'e1;aii‘atioi‘1 I1'!.1}SiiJ be inade That is, While on land, the paddles are held ‘fiona turning as _by chaining tifieni bbiihé spokes or rim of the wheels. and thelfefore they iéédiddlés riiust be unchained. Also the lantern gears are not_`o1:ie1ja,tive on land é,hC1_they must, he meshed ivithythe gears. This is done by turning the control Wheel l'l', rotating shaft IT and thereby gear MS. The description of the various a.ppa1‘atu;s,broug,fht into play by turning the gear 45 has alread_ been covered in die# tail, with the successiwte steps that take place in order ,136 move the lantern gears ‘initio or out of mesh with their gears 55. The lantern gears are stationary and the wheels' rotating with the gears ad in mesh with the stationary iantern gears ef; fects rotation of the gears 69 and turning ofthe paddles, The locon‘io'tion produced by the paddles is'\ 51 course, »1:iz‘oduced by the (rotation, of _thc xi/lieels. The lantern gear only controls rotation o'f_t;–iepaddlcs agroimd their axes. ' _ ` I I Before thegv–ehicle descends into the watézt it is iidipérative that the operator stop the vehicle as tihe baddles are all' in the li'1?i§lOf the wheels. ,The iéhéiinis must be refnoued and the'ipaddlés_i‘EidVed`tc iiheiif coricctgéosition, the Wi1'sg'ri1.it and fork being efri‘iploye'd. The`pii;i;lc11'eis`are arranged so that the upbemiost are in the line' of the wheels and the lovqeriirost are tra.nsver.§e of .the wheels, _ The ffoijeéoinrg description of th`é_struc1:ure of ltlie i7ehicl'e eiribbdying the iiresent i;ivei'itie1i`_has been somewhalt' brief, only thoaa D_1Lf;3 'essential toa Hill understanding .pf the irwcntioiq h–avizig been described in detail. ,ffhc 'dra.wi`n§s are séruel ¢}'h`é;t diagrammatic, showing only sufficient of the structure to illustrate the present invention, which, as aforesaid, is the driving mechanism' and the steering rnéchauiéni. It Will Lmdersiioébl, aforesaiid. that the niechanisiiaslioivn in the lflgufcs will be connected 1115 with an internal coinHusi3iti1i‘engine ai1§lf_a longitudinal dxiiiie éhafijfin any `d`es‘ired and well–known nf1anne1f,,1ss[o showin? of 1;l‘1`e'4 structure or description ‘Ehéreof being deemed neiciessary. _gt; Fiiitherinofé, only’ –the mechanismss associated' viitii; the ifrqi–it ivnéeis has been oesciibea; june ;¢i’réclianism‘ for the fear Wheels being essentially the §aii;fé,§1§t`2§h§i§ée%i éliéhtliifdueiiosstile–3fé;_lt;3t £5316 nii steeiiné iriechanisin is _needed ,This i rea? mechanism has not been §i'16\'il!1li.`§T Qeslcribeo, as it \ii5‘%19 Wieifgeli' $1 i"®éfissii1?ii Of _1i5_df"YiW}1l§S and i–ii–fgcapniuhfif the giant W1‘léé1iss11échi351'll$l¥1; _gt; , It1’che`fo1fegi5i:ig d‘es¢ription,_a deisailelgl désé1~i15L tibia ci ueaiiegsi maiiiig siipisbits iiiia iitiiéisiiiii. lar _baits iia.ve_`np‘g been" given; ,sifgiiiarw the inetiioiipi asseiiqipiine E»i_fabripatini;q the varitiiis paitsiiasiiet been aesiiiiiiea., Referring ii; i=~ig;,5 Wl'ii§31_ if5_`551f1"15§‘fh_i35,,_?é.31”5_lt;ff1f¥15»i5i_~.fit. WUI We 56% t1iai»ii~_y nares have bcéll sifnnttedyiqtiieii tkwoniti iactuallii be eiiiiiiqifea –in ii flnishedistructure. For i¥¥§i?%Yi§§9F !5f}§_gt;_?111l§,,§¢2S1ii§ E455 lf15USi1?é§ W9“1d;Bé m=f»i1_'W=itEftieht by ari1=r¥1r2f~i2=i©_ nlateé and eaék: iris; A159 ;i1¢ét1u2iei_lt;_s,i#f–fvéfiiiiiif we Shifii, or arkles 21 'ficoln inuitirig laterally outward hai/ie not bfffféli ,é¥i5Wf1_gt; 555 Qiiiiabie fi1iD1§Q%b1_i, T135 33,5135 `75;»_'¥€ ShUWf1 ,i1?.fi¥é!_..5 mdu11té_1_,1f1,thré_ nilefesi i11_1iG¥L¢§i1 hiftlle 11uI¥ilffé‘_gt;r 183 ”EheSe_plal;§s;ha\?e not been described as fiiiréticfi is obvious in the drawings. Fuftlier– 1if§if_lt;91»,¢ie%53511C¢S, §1?a¢,_S– and 0tl15?pfU\'iSLf5¥i€ for S1i_lt;1i¥1,g.=i“=1,tvft1ii1s ,dffhé V?i¥iTi€_gt;u§,_I_gt;2¥?”tS lib” U’3519_,_Q¥i5 1595 ii1. degrees !3!??i14 ib bein? ObV`i0ULS;D11‘f»U_U?_lt;5S?f I3aIjf;s_‘thai1_a1"e mgiva`ole_ gr_ slidtii7le_ aije_dispbsefi_i1'l Lluagzjters ariblncééd toiiermit siiitili‘slidii‘ig 'or moveWhile I have illustrated and dcscri}5ed_the neeferred em.bodiment_of m§,{'inve1 degrees it/ioiji,j§isto life tin# derstdojditlxatrl do not lirxility myseif_to`the `1;S11ecise .gcnstgquctiorg herein, disclosed giiii; Athcjiight 15 fe., serie; UP all Qhianaés Emi.H1Qdi1iQ_1'¢iQ`fiS.GDn5iF€ \f{if11.li'lV'§i'ii5‘§CQ1§§`Of the invention :is nleinéti in the 3_gt;9D?'§id?§ Claiizia _,,_ M ,,_, , _t . , , . . Having .thus _lt;?YéSGfi§¢H my 5T1Vélf‘§i?5i¥! _ii'1_atX' iclairifr gas new, ‘arid 'desire –to secure 155/" United S3555 ¥é"2_¢1Tf5 E3i¢?i1f iSE _ _` ., ,, . , pls ;f¥fi,.erf11=hibie2i' vé11f¢.1¢_,f¢r. uée be U0ih,1`a¥_gt;_l and ir; 17he»wé.f¢éi‘ co1jri';;irisii1§ éllxulli Wio front and We rear wheels secured tosaid hull, each htivf ixiga hubga tire,

spokes securing said tire to_s»éiiH hiilqf, and a paddle jo`urz;a»lled to said hiib _and tire and d_lt;isi3o‘se§:l between t§voVa;tlja;cen}t` sisfolaes, and séilsirate §:1l”iV:i11g"1jifIé`C1'lB.1'liSi1'Ké for rotating. each of saigtjvheels' and its paddle, and separate _driyihg Ihechanisins for yotatinig each of ` said iiaddléii aloouit its ,aiiis perpei~iclic`ula11` to the akisof its wheel, including gears in the hub of dtssiaid wheel and, a stationary 19§11te1fh_ges§r`with which, sara gears and a citizen fqii moving ealch_.of said lantern ‘gears out of 1'i:Lésh'With its‘c5i–ieiaiezi iitib g€3~1`S– , ,_ , , . ~ » ,_ , f. _ _ ,.

0) US2016325585A – CENTERLESS WHEEL ASSEMBLY

99) Family number: 63934553 (US2016325585A) © PatBase

Title: CENTERLESS WHEEL ASSEMBLY

Priority: US20150179357P 20150504 US20160146717 20160504 US20160146729 20160504 US20160146723 20160504

Family:

Publication number	Publication date	Application number	Application date
TW201700314 A	20170101	TW20160113865	20160504
US2016325585 AA	20161110	US20160146729	20160504
US2016346142 AA	20161201	US20160146723	20160504
US2016347166 AA	20161201	US20160146717	20160504
WO16179305 A1	20161110	WO2016US30817	20160504

Probable Assignee: ORBIS WHEELS INC

Assignee(s):(std)**:** ORBIS WHEELS INC

Inventor(s):(std)**:** WINDMILL MARTIN ; STREETER SCOTT ; RICE RICHARD ; LORIMORE BENJAMIN ; LEO GARY ; HAYS MARCUS ; HAYS MARCUS G

Agent(s): ISRAELSEN R BURNS 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): A61G5/04 A61G5/08 A61G5/10 B60B19/00 B60B21/02 B60B21/12 B60K7/00 B60L3/00 F16H15/02 (Advanced/Invention)

CPC: B60B21/12 B60K7/00 B60B21/02 B60K2007/0046 B60Y2200/84 A61G5/045 B60K7/0007 B60L3/00 A61G5/04 A61G5/10 A61G2203/10 B60B19/00 B60K2007/0061 A61G5/1054 A61G5/1089

US class: 180/65.51 301/6.1 301/6.5

Classification Explorer

Cited documents: US6871735 BB, US6135475 A, US5490719 A, US5419619 A, US4163567 A, US2014058600 AA, US2012299371 AA, US2006244227 AA, US2004036248 AA, US2003085065 AA, US1819924 A,

Abstract:
Source: US2016325585A The present disclosure may relate to a wheel that may include first and second exoskeleton plates. The wheel may also include first and second roller guide assemblies that each include one or more bearings, a roller guide coupled with the one or more bearings, and a shaft spanning the first and second exoskeleton plates and coupled with the roller guide such that the roller guide rotates around the shaft. The wheel may also include a tire and a centerless rim coupled with the tire. The centerless rim may be configured to have a shape that corresponds to a shape of the roller guide, and the roller guide may be configured to contact the centerless rim as the centerless rim rotates. The wheel may also include a first limiter to maintain contact between the centerless rim and the roller guide, and a second limiter.

0) US2012210758A – KEY BLANK, KEY AND CYLINDER LOCK WITH REDUCED C...

100) Family number: 51756544 (US2012210758A) © PatBase

Title: KEY BLANK, KEY AND CYLINDER LOCK WITH REDUCED COSTS

Priority: US20110031264 20110221 US20110206645 20110810 WO2012US25770 20120220

Family:

Publication number	Publication date	Application number	Application date
IL228282 A0	20131031	IL20120228282	20120220
US2012210758 AA	20120823	US20110206645	20110810
US9234370 BB	20160112	US20110206645	20110810
WO12115887 A2	20120830	WO2012US25770	20120220
WO12115887 A3	20130502	WO2012US25770	20120220

Probable Assignee: KLEIN DAVID

Assignee(s):(std)**:** ARTSIELY EYAL ; DOLEV MOSHE ; KLEIN DAVID

Assignee(s): MOSHE DOLEV

Inventor(s):(std)**:** ARTSIELY EYAL ; DOLEV MOSHE

Agent(s): DAVID; DEKEL PATENT LTD; KLEIN DAVID

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 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): E05B E05B19/02 E05B19/04 E05B19/08 E05B27/00 E05B27/08 E05B29/00 E05B29/04 E05B9/04 (Advanced/Invention); E05B15/02 E05B17/04 E05B63/00 E05B9/10 (Advanced/Non–invention)

CPC: E05B9/042 E05B9/10 E05B15/02 E05B17/04 E05B19/04 E05B27/0021 E05B27/0082 E05B29/0013 E05B29/0066 E05B63/006 E05B2009/046 Y10T70/7588 Y10T70/7621 Y10T70/7819

US class: 1/1 70/398 70/398S 70/490 70/490S 70/496 70/496P

Classification Explorer

Cited documents: US8033150 BB, US7712342 BB, US7698921 BB, US7694542 BB, US7647799 BB, US7530246 BB, US7322219 BB, US6776017 BB, US6170307 BA, US6170307 B1, US5839308 A, US5784910 A, US5520035 A, US5295376 A, US5123268 A, US4977767 A, US4856309 A, US4850210 A, US4723427 A, US4624119 A, US4603566 A, US4472953 A, US4044578 A, US3928992 A, US3585826 A, US3367155 A, US3293892 A, US3002268 A, US2563215 A, US2182588 A, US2023847 A, US2012118032 AA, US2012031156 AA, US2011011139 AA, US2010326150 AA, US2010031716 AA, US2010018267 AA, US2009277235 AA, US2008295548 AA, US2008105013 AA, US2006032280 AA, US1592091 A, FR2232947 A5, DE816657 A, DE1143735 B,

Forward Citations: WO14072570, USD770880, US9447607, US9376837, US8950226, US2016108642, US2014352374,

Abstract:
Source: US2012210758A An article including a key comprising a key head that slides along a key shaft, said key head being affixable to said key shaft with a fastener.

0) US1696526A – APPARATUS FOR HANDLING WELL CASINGS

101) Family number: 19439352 (US1696526A) © PatBase

Title:	APPARATUS FOR HANDLING WELL CASINGS
Priority:	US19270163770 19270126

Family:

Publication number	Publication date	Application number	Application date
US1696526 A	19281225	US19270163770	19270126

Probable Assignee:	CROSSEN CARL R
Assignee(s):(std):	CROSSEN CARL R
Inventor(s):(std):	CROSSEN CARL R
International class (IPC 8–9):	E21B31/20 (Advanced/Invention); E21B31/00 (Core/Invention)
International class (IPC 1–7):	E21B31/00
CPC:	E21B31/20
European class:	E21B31/20
US class:	294/116 294/86.22 294/96
Classification Explorer	
Forward Citations:	US6142487, US2661979, US2508285,

Abstract:
Source: US1696526A ' !1a~:u's agmnst a bull of al cup 40, the homing 41 215!i()CiL1tQd with the fiilllgil 42 1'otain}J1y 01ub1'M!111g in C0Uz\1‘i3 ul the shzuz func– 36, and thereby Cl’LRlSi1`lg4{‘\Q sp1'l1xg=lU to tion In yiel;{:1L_gt;l],f L11‘gi;1gth_lt;_gt; wha fi up \"\'u1';|iy to the positiam rahmvu in Figure T. A. lazlrrel ii iS L|\r_lt;=:ulo_lt;H3f crmuecival ui, Hs lower 0116! tw ihu L'()i\!1CU|.i]1£_f lnazalbel' EET. zum! in this b:u‘1‘o1 is CU11{ilii1CL1 a 1`(‘\'i‘1`rii11§ gsm: counx_gt;ci‘mu, llitqlllillllg zz iubuhu' casing £5 (,'U§.1f si'1'uQ–tea] to uu_lt;¢_lt;m|u_lt;w_lt;,,lurc a ffmmu –L6 lmvmg ar, collar 47 th1'ea\”1efl1y councuied to the my 42. Tlus ftraunc _lt;16 IS COTlSf'l'\1CL€d to ¥)l.'()Vl£]€ mouniings for stub slmfta 48 _lt;:z2;'1‘yir;§; planetayy pinion; 49 \Vh](’11 constantly mesh wiih bevel gears 50 and 51, is clearly shown in Figure Q, tlm upper end of 1–he driven shaft 36 extends into ihez huinv :md is sqlmred to receive the gear 50. The gear 51 is mo11ui,s,–il on the lower and squwcd onli of n, _lt;h'iving shaft 52, which likewise extends into the f]'ELl11l5– so that the :1dj:_lt;:_lt;~x1t– mils of the two shafts are in C0l1fl`()1\iQi1’1:1 i`i’§2E\U_lt;)T1 to _lt;‘:1_lt;'11 other. The driving shi: $11 is 1_gt;1'o\'l~;led with ax collar 53 rotumblc in ll cap 5% pL‘ovid_lt;_gt;_lt;! on the frzuue 46. The upper end of the CQlSIUQ 15 is provided with tuekh which ara aduptcxd To megl; with teeth on 21 cm§hu‘ formed at the loW¢_gt;1' and of am tubular _lt;'lri\;ing conucutm' The drlvirxg shaft extends into the dt‘?\'§m\' con11ec1m~ 58 :md is adapted for operative cozumctioil tlwruwit–11 by iwo kuys 59 :mail 60, either of \’v'hl'\fh is adapterl in engage wiihin any one of a]_gt;11`|]'!\1ilf–57 of groows 61. The CO1'1Stl'L`LCliOi'1 and n1'1~nng_»m,m t. of thi; ggrocves is clearly shown in Figuro The keys 59 and 60 arc disposed in pockeis 62 _F()l']l1(3(l in the shaft but are 11o1'1nallAy urged io [J`L'OjGCfQE!_ positions by zz !éDI'il1Q; The keys are nmunéod on 1‘€S`}H6!11_.4 arms 6% f=uuu1'cd t_lt;_gt; the. shaft and the oppcwite aids of the keys am llovokrd as irxclicwicrl at G53 in o§'_lt;§_lt;e1' Ln permit l1u1'est1'ir:t:\d 1m1giu|c1iL1;x1 move– 1l]€’1lt» of the driving (JOl11`1(%\?tUl' io engage or _lt;1iSr»1':gagc cithsr of the keys. The iccih of the oaamg 45 are also fl(–l1]){f(ssK1 fr: c_gt;11~ gage teeth (SU on ru stat–i_lt;u1m"y sleeve 67 sw cured Within ihe barrel 44 for ~a]_gt;u:'pi_gt;_e to be rlescribed 'hc1'Qiuafte1~. As shown in Figure Q, the upper emi of The bz:1'1'e] 44– l1hi'cmlucU}' COI1`[1€Cf,€d in :L collar GS ’d1ro11ffh which 1.–he d1~i\fins' Qon~ T, J necfm' SS cX€QndF, As sI1o»\~n Ju Fu.fu1'e 1. the upper and of the driving; lf0l1U_;ljL0`J' is thveadedly C01]]_lt;%_lt;`!iQ("d to z\ COUU.1` 69. the lah ter in turn being th1‘_ndmU_y _lt;:_lt;_gt;1xue~c1'f3d to a rotzmry drill pip_lt;»’70, A prmtifirm 71 is fra;–‘fxud in the collar 69 and provided with an opening nr,»1~u1zLi1y closed by an plug Tilq the opaeiv ing pr_lt;1vidiug means through which lubricant can be supplied interiorly uf E.–hc driving; connc_gt;n\?or 58 and, hvncte, to tha iN0\`Rb1Q ';[){l1’tS of –the ?l.1)L)211’i1tllS. The operation of thu za17p=u:x:f,_gt;\»~‘ he .rs fullQWS; As will IJQ guincri from mlm }_gt;:'erc'a1i:~; deSc1'iptio11, ilu: rI1'ivix1;1‘fJo1meQ%Ur Gu_lt;:|\gEx the I\1€_iUl11 435 ihv collar G9 is Mzipf;–ci Fw;– COI11`I§‘(’tiO§1 io Lbs lower and of fl 1`0iRl'y drill pipc, the pipe being; ut~€1§;;\_lt;\ £0 lowux' ihe zx]_gt;p:u'z1i–LIS into ilie well in O1'¢7¢f1' ilwii' Um insi1‘u1;1_lt;–uxt _lt;i¢::‘x‘ie_lt;1 T–h_lt;‘1'cby inziy lic i»xs_lt;%;'i_lt;\_lt;l in h{!‘,'(5}lél1!iUillQ` EE1g2\§§(‘l31l‘i\§ ii\1=m=x\ i–,h, ilu: 2i])i_)l1l‘i\(l1S is 1I_gt;‘.\`Bl'i’_lt;}, imc 21 well Il1(¥_lt;h‘i\`– uo1m_lt;zcT_lt;_gt;1‘ M3 01' Yflulifl' Um coiizzr if ov'– cupios the elevated um:;iiZf_gt;;1 shfuvvza in Gautzzllrl–_lt;!;1s11 H1105 in Figure 25 in \\`1li(‘l1 if gages the collzu' so thai 6510 ensirf, :appz tus is S`llS])?]1(]–id from the colizxr. In ihig pusiflun of the d1'iv511g con1m;i._lt;_gt;1–. if is Qu: of o]'_gt;omfi‘.'u C[)11]lf?Cf;!)l1 \R'it§\ ihv fT1i\fiw';_f;' shaft 525 so thai ejhuuld G10 f11"iH mips bv 1–=,_gt;L::LQ_lt;1 its motion WH! mob Im i`i31_[Ji!YfQ!{ io the wharf? 52, As the u;Jpz11'f1tL1:; is I_lt;_gt;‘»\'_lt;a1‘u_lt;15 the vents?– mg bull 29 liiialb' engages and pufwscvs uvcz' the HPEJCI' 01161 of fha Weil zfmsing, Cl1e;;‘_lt;~b3‘ cunteying ilu–2

l¢_gt;\\;vr and of the inSf;1'ume:=i/ \\=ii,h respect to The Upper cud of UIQ WGN Pzwiug. Continued ?0\VQ!'£`|\g with fha iuStL‘u1n"31L the r:_lt;mT1'actcrT pnsiéirm showxl in ?”3f§m'_lt;1 S 17(%l`1]]1fF3 the xnscrimlx of such 1nsir11z;1_lt;\ui min the wvll casing: iQ, being ull€lG]‘SfOU{| tim? the pzuris of the ;1{upm':z111s for f1C§Ll2!f§!1§1' The inSfi'|llHC`l1T– are in The ]_gt;o:sitiou_gt;: :5h4_gt;\\';: in u1'e~:= T and 8. To effcwt e_gt;;1;m1s;io11 of the imtlmuazeui Ln Cause, the Slips 15 to SE_lt;'\U`_lf/ grin E–be ~3:xf:i=x;#; to permit su1w§0q|u;ui \\'Ei];du1\'.'ni Oi' tim vmmg ov any svcixnn rhsreof. 11; ls :1ur:css;x1‘\' to (?1(§\'ElfO the CXD{1Df`!(?1` E9 ;!3!'O)l} 1;ll} p:»§i€i_lt;_gt;21 shown m F]QLli'_lt;) S tu that _;h_lt;_gt;\f;1 m iF1;f\|1'_lt;w 3. and this is ncecolmvlishud in the f_lt;:Ho==;31zg 1nan3_lt;~§‘: By ifll1`fh9E‘ 10'\‘FQl‘§11Q thc drill phvzx the driving C(!11HQCfO1` is 1(\\\`C1'lN} to thu position Sh_lt;,7\VI1i11 F7;{\11'13, Q to rauw iluss Evvih 56 of the coN:u‘ 5710 engage H29 teeth 55 of the casing and to cause éim key GO In vu– gage wikhin one of me gwoovei £32 _lt;1 »` €'fxr~ :yuh lar, li; will be nuierl Hmm ua Hue ;'_gt;0s;2T‘_lt;m mf' ihe (_{1`lVH1‘§ coiuxeciox' H19 wxzgght ni' vw F12– tire drill pipe i1B1)OH€%(_! on ého nzusinvj to force #hc Tz:t‘w1_' _lt;l0Wl)Y2'{11'Cu_‘,' fronss Nw pmsif–ion shown in Figure 7 to tha? Shnivtw In Figure 3, in whisflx HIC iooth 55 :QTG IHIQTUTX out of (%1]Qé`_§_l1‘1(¢l1f with the iserfth (355, vm! the casing now reposé–s rm the c'rmm~u1ix1fz' member 37. By now lvmwtifwg th? CHEN yipxu the l'l1(!X]1}`)(‘1‘ SS. as well as ihe d1'iT`iUEI Plmfl 52_ will he 1`O%Flf6%f\ in the s;1=u=f _lt;15x'f_\Ctift:1 thwohy causing 1‘Oi`M`–3031 of line »‘v\fQ1's1i11_lt;f gcav conncrffirm ues u uuii, Which. :ns H z;0,x_gt;fvqu_lt;_gt;nc_lt;_gt;, causes lviafinxx nl' £112 di–iwn 5h,1"¥; 36 in ths same Clirectimz that 05 Nw rlxivi1zgsl1m"€' Vfith the driven shafi 36 r_lt;_gt;f:ztimg, it Wil! be clam– that the 11112143 _gt;z 1: shi? ;w_lt;\=,\' fLll`lCf~iO1`L€ th1'ou;,gl1 Hs th1‘_:=.¢€_lt;efl c_lt;::'w=Qrw~;\ _lt; , wnth ihc stvm 20 to chvnre iho cX;_gt;=\m?:=r NoJneni, 19 to H19 e1c\'z!i1srl]7f7S!_I(}R shrwwu m Figure 3, \V1:~s1'eby t1l1'OH§h The lueclium oi' VJ T5 Bu S O5 lm) iii? lil! lil? Uk: EU J–1 AU G0 G5 the tongue»iuid»groove connections with the slips the latter are moved to expended position, Vllith the instrument in this expanded position; it will be clear that by elevating the entire 21]_)15§\1'1llZllSi through the niediuin of the drill pipe the well casing can he With– _lt;lr:z\vn ironi the well. To release thopwell casing while the lzztler is within the well or after it– has been \\'ith~ clramvn thorefroin, the iiistruineilt can be moved to the (‘(l`fll'1‘2l,Cl70Cl position shown in Figure 8 by elevating the collnir 57 through elevation of the drill pipe to the position shown in Figure 7, in which the key 59 cnguiges within one of the grooves G1 to provide an operative connection loetiveen the driving connector 58 and the (lriving shaft As the driving connector is elevated to this position, the weight of the drill pipe is reinovcd tfroin the cmsing 45, so that the spring 4–0 can now function to elevate the oatsing and the entire reversing gear connection lo the position shown in Figjiire T, in which the teeth 55 are moved into meshing relation to the teeth 66 of the sleeve 67, thus ellcoting locking of the casing agzxiusi rotation within the lmrrel. Upon rotet–ion ot the drill pipe, the rlriving; shaft 52 will he driven as before, hut as the casing 45 is now locked againsl rotiition the shaft will he treo to clrive its gear 51, thereby driving the pin ions i9 about their own ones und thus causing reverse rotation of the gear lil). In this Luzinner, lhe driven sliztlt 36 is rot_gt;il=ecl in the reverse direction from that of the shaft thereby cousing the tubular shaft 32 to feed the stein ii|ow1'iw;ii~clly to more the expander element to contracted position, and thereby permitting the witlidravml ot the instrinnent from the well casing. Although I have herein shown and de~ scribed only one torin of upperzitus for h:1n~ illing well r_lt;nsin_gs=: einhotlyiug uiy invention, it is to be xificliiislzootl that various changes and niodificntions nirzq' he nnirle therein with out departing from the spirit ol' the invention :ind the spirit and scope of the appended clainis. clfiiin as my invention: i. An eppfmitus of the cl1§tr:i_lt;fter descrilied coinprisino :in instriuncnt capable of two extreine positions, the instriuncnt, rotary the means in one dir–e_lt;z~ move the instifuinent to occupying either L–of means for actuating means for operarting tion or the other to one extreine position or the other. and inozins by which the roi.:i,r'y lueans adopted tor operative connection to at rotary drill, pipe in ri, niziniior to .be driven thereby in one _lt;lirec~ tion or the other in response to uriidirectionel rotation of the drill pipe, 2. An nppatrutus of the character flescriliecl comprising; on instruinent cupelile of occupying either ol' two extreme positions, screw means for sictiiating the instrument, ai two part shaft having a, part connected to the screw means, a reversing gear connection lie~ tween the shaft parts, and nieons by which the other part of the shaft is adapted tor opertitivo connection to ii, rotary drill pipe so an to utilize the uniclirectional rotation of the drill pipe to drive the shaft part or the reversing gear connection as an whole ivherehy the screw ineuns can loc zictueitecl to inove lhe instrument to either of its extreme positions. ’ 3. An apparatus of the clifuncter described comprising an instrinnenl, cupnhle of occupying either of two extreme positions, screw means for actuating the instrument, u two part shaft, one part having splined connection with the screw inenns to permit said port to occupy either of tivo ext–reine positions yet inaintaining s. driving connection therewith, ii, reversing goin' connection between the slizift ports, tt sstoothed casing for the reversing gear connection, a lined toothed, element, means for yielclnbly urging the czis~ ing to o position in which it has toothed engagement with the fixed element to cause the reversing gear connection to drive the splinecl shaft part in the some direction as the other shaft port, zi.driving nieinher liaiving ii toothed head, and incuns to effect and inziintain a driving connection between the other shaft part and the driving nienihcr in either of two positions of the latter, the driving ineinber adapted for operative connection to ti rotary drill pipe to he related lhereliy and movable by the drill pipe to one of its posi~ tions in which its head engages the casing and nioves the latter out of engsigeinent with the fixed element, or to the other position in which its head is out of engagement with the casing to allow the latter to engage the fixed element whereby the splinefl shaft part can loc driven in one direction or the other and the screw nieans actuated accordingly to Inove the instrument to one extreme position or the other. 4, In on zippzimtus of the clisiractei' described, ein instrument capable of being inserted into a well casing and movelile to one cupy one position in which it grips the casing :mil anotlici' position in ivhich it flisengages the casing to permit the witlidravvoil thereof, screw means for not–uatiiig the instrument, sn, driven slmtt for actiiztt–iizg the screw means, a driving shaft rotzrtulole in one direction and adopted to actuete the driven shaft, at reversing gear connection between the shafts including 21 toothed casing, o st–ationary toothed ineinber, a driving connector telescopically associated with the driving shaft to occupy t–wo positions, inenins providing an operative connection between the driving connector and the driving shaft when the former is in either of its two positions, yield~ able inczuis for urging; the reversing gear oon~ nection upwztrdly to cause tho toothed casing T5 S0 S5 UU U53 LOU ll() lil) U5 .il Lo eiiggagge the toothed inrn1l;L‘r for locking ilio raising against roiniion, and ii iioofliod olenien1~on the driving eonneetor mlsipteil to ezigage the toothed easing and to iiiove the hitter our of engageinezit with the toothed cle,–

nient when in one position oi rho dri ring connector \‘,'lieri1by holla the casing and gearing ofthe reversing geiir COI1_IflQCiiOll are di'i\fen as ii unit. 5. In un npparrztiis oi’ the el1u1'm¢€ei‘ described, an insiruineni capable or being inserted inio zi. well easing :uid iiioiwdile lo oeeupy one ponition in nhielz it grips the cosing and unorhcr position in which it disengziges the casing to periniri the \Vlil1Cl1‘El‘.V_I thereof, ineans for aetnatiiig the insrruinent, Ll driven shaft ior aotnnring said means, ri driving short adopted netware the driven Connection heiween shaft, a reversing gem' the shafts including :L causing, ai stntioriziiy ineinhcr, means on the coeing ;Lndnicii1iJoL' for profricli,zig an oporzdiro the two, ii, driving coixiiecwl' ;iio\fzi.izio io ooeupy t\vo positions, means providing an operative connection between the driving connector and driving shaft when the former is in either ol iis tu o positions? said i'evui's;in_ connection normally occupying one position in which said eo–acting means operatively mronnuc–is said casing and st»;zfi_oiia1~y incinbcr io lock l–he owning against roizdvioia, and niezimi on the driving connector iidirpized for operiitive connection Wiih said COssflCfIII§§ means on the easing iior providing an operasive conne'_lt;:tion hemveen rho Lwo and zidzipted io engage and nlove the easing to disrupt its operziiiife connection with said siatioiiiiry ineinhei' when the ¢_lrivin,g' connector is in one of its posit–ions; whereby hoih lho casing and gouring of said reversing rcoiineclioii are driven, us :L unit. 6. In an uppziratus of the eliaracter deserihed, an instrument capzihle. oi being inserted into ai Well easing and inovfihle to occupy one position in which it grips the cmsing and :ixiotlier position in which it disenguges the cesiing Lo poriiiic ihe ivitliclmwal thereof, means for acrniiting the instrument, ai 1;\vo part shaft, one part of ivhioh is inoviihlo to either of tivo positions, nienns for providing an operative eonnooti on hui Ween rho lirsi; nieeins and said shalt part in either of the lzilLer’s tivo posinionsi, a reversing gear conueeiion liervween the shaft' ports and including connection liotween ai easing, ri fixed element, niezms on éhe easing and ele1nent2co–acting to provide an operative connection between tho tivo, inc–anis lor urging the easing to zii position in which it has operurive connection with said fixed element to cziuse Sziid reversing gear connection to drivo said shaft part in the szune direction as Lho oihcr shaft part, ai. driving iiieiiiher, iiieuiis to efieel. :ind xuziiiimiizi :Ji rlriving COHllCC'[i(}1l between the other shaft part and ihe driving nieinher in eibher of tivo positions of the hiktor, the driving ineinher adapted for opomiive connection to ai rolfziry drill pipe Lo he roiss–ated tflioreby and niovzililu by the drill pipe to one of its posiliono in which it has operative euggzigeinenl; with eo–mining inezms on the casing and moves the latter our ol eiigzigeiiieiit wirh said iixed eleinem, or to the other posit–ion in which #ho driving ineinher is out of engngeiiieiii. with ihe casing to allow the latter to engage the fixed element whereby said iirst shaft– port win he driven in one direction or the other and said lirst means actuated £lC(J0l`Lll11giy to inove the iiistiiiineiii to one or the other of its positions. T. An zipparatus of the eliaracter _lt;les_lt;‘ribci.l comprising nu instrument capable of occupying either of iivo extreme positions, nieohzinical ineznis by which rotary inoiion ol’ ii drill pipe is adapted to be utilized to more the insivrniiieni, to either of its two extreme positions, sind inozins for controlling the iirst nieans adapted :For connection Lo the drill pipe and responsive to longitudinal inovement. of tho lzdior to cause the first nieans to iiiove the instrument either to one or the other oii is positions :recording as the drill pipe oecupies one position or another. 8. An apparatus of the (2ll2\.1'é1Cfi,l%l" descrihc_lt;l Comprising an instrument capable of oeeupying either of two c:;lrcrne positions, inezins for oetu:i,t.ing the instruinent, ai. two park shaft having zu part connected to the first iiiozins, :L reversing gear connection between the slmft ports, and incans by which the other part of Lhe shaft is :nlaiptod for operzitive– connection to n rotary drill pipe so as to utilize ihe unidirectional rotation of the drill pipe to drive the shaft part or the reversing gear connection as an whole whereby the lirsi rnezins can he actuated to move the instrument to ciihor of its extrenie positions

102) Family number: 31957198 (EP1536091A1) © PatBase

Title: Motorcycle lock with multi–stage locking and unlocking

Priority: EP20030027409 20031127

Family:

Publication number	Publication date	Application number	Application date
EP1536091 A1	20050601	EP20030027409	20031127

Probable Assignee: CHEN MENG FU

Assignee(s):(std)**:** CHEN MENG FU

Inventor(s):(std)**:** CHEN AN HUNG

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

International class (IPC 8–9)**:** E05B37/02 (Advanced/Invention); E05B37/00 (Core/Invention)

International class (IPC 1–7)**:** E05B37/02 E05B67/10

CPC: E05B37/025

European class: E05B37/02B

Classification Explorer

Cited documents: US5924313 A, US5791169 A, US2003066319 AA,

Forward Citations: US9279325, EP2019178,

Abstract:
Source: EP1536091A1 A multi–stage motorcycle lock indudes a locking seat 2, a guide rod 3, a combination lock 4 with numbers thereon, a retaining seat 5, a stopper 6, a protecting sleeve 7, a telescopic rod 8, a stud lock rod 9, etc. Each of plurality of eccentric holes 411, 421, 431, 441, 451 of the combination lock 4 is formed with a confining ring 410, 420, 430, 440, 450, and the locking means 80 of the telescopic rod 8 is eccentric. The eccentric design causes that the lock only has only correct number. The eccentric holes 411, 421, 431, 441, 451 are rotated through 180 degrees, the locking means 80 of the telescopic rod 8 is stopped by the confining rings 410, 420, 430, 440, 450 of the combination lock 4 so that the telescopic rod 8 can not protrude out or reduce inwards. Thereby, the effect of burglar–proof is achieved. There are two locking stages so as to have a preferred burglar–proof is achieved. The locking and unlocking of the present invention are not performed by using any key. Thus the operation is convenient.

0) US3597946A – BURGLAR FOILING LOCK

103) Family number: 964387 (US3597946A) © PatBase

Title: BURGLAR FOILING LOCK

Priority: US19700001364 19700108

Family:

Publication number	Publication date	Application number	Application date
US3597946 A	19710810	US19700001364	19700108

Probable Assignee: IRENE MIKKELSON

Assignee(s):(std)**:** IRENE MIKKELSON

Inventor(s):(std)**:** MIKKELSON IRENE

Inventor(s): IRENE MIKKELSON

International class (IPC 8–9)**:** E05B27/00 E05B27/04 (Advanced/Invention); E05B27/00 (Core/Invention)

International class (IPC 1–7)**:** E05B35/10

CPC: E05B27/0053 Y10T70/5832 Y10T70/7463

European class: E05B27/00M P05B27/00M

US class: 70/224 70/340 702/240

Classification Explorer

Cited documents: US3298211 A, US3196645 A, US3175377 A, US2194244 A, US2012912 A, US1788834 A, US1785634 A,

Forward Citations: US4319470, US2014196566, US2007051144,

Abstract:
Source: US3597946A 1. Burglar foiling means in a door lock or the like having a lock bolt actuator sleeve bidirectionally turnable for retracting the lock bolt or the like and including pilot lock means for locking the actuator sleeve against rotative movement and including a pilot lock releasing element turnably supported in the interior of said lock actuator sleeve and adapted to be turnably moved for releasing said pilot lock means and thereby permitting turning movement of the actuator sleeve, and including existing cylinder key lock structure including a cylinder body, a keyway lock cylinder turnably supported in said body with the mating surfaces thereof defining an imaginary shear line and including existing tumbler pin column means including at least one tumbler pin column including pin segments defining a column break line, existing lock key means insertable in said cylinder keyway and patterned for arranging said tumbler pin column break line in register with said shear line for turning said cylinder means, including shaft means interengaging said lock cylinder and pilot lock releasing element substantially in positive movement communication, including a hollow door knob unit having a sleeve portion configured for snug telescopic fit on said actuator sleeve and including structure defining an abutment adapted to engage said lock cylinder structure for restraining said cylinder structure against axial separation for said actuator sleeve, and including doorknob catch means releasably interengaging said knob sleeve and latch actuator sleeve for securing said door knob and actuator sleeve in assembled relation and including a catch release element substantially arranged within the interior of said actuator sleeve adapted to be manually displaced for releasing said catch means to an inactive disposition and permitting removal of said door knob and cylinder key lock means; key operative burglar foil means for rendering said doorknob catch means movable or immovable respectively for maintaining said door knob unit assembled or for permitting disassembly of said doorknob unit from said lock actuator sleeve comprising: additional coacting relatively movable lock cylinder and body means defining first and second shear lines radially spaced apart, additional tumbler pin column means defining a column break line, a first key member adapted for insertion in said cylinder keyway and having a tumbler actuating pattern adapted to simultaneously arrange said existing tumbler column pin means in a released disposition and arranging said additional tumbler pin means with said break line in register with said first shear line for permitting clockwise movement of said cylinder means relative to said cylinder body, means for stopping counterclockwise movement of said cylinder at a disposition whereat said tumbler column is in solid configuration and when said first key member is in the cylinder keyway, a second key member having a tumbler actuating pattern adapted for simultaneously arranging said existing tumbler column means in a released disposition and arranging said additional tumbler column means with the break line thereof in register with said second shear line for counterclockwise movement of said cylinder relative to said cylinder body, and buffer cam means arranged in positive movement connection with said lock cylinder for blocking releasing movement of said doorknob catch element when said lock cylinder is in a locked disposition and also when said lock cylinder is unlocked and turned clockwise by manipulation of said first key member, but permitting releasing movement of said door knob catch element when the unlocked cylinder in turned counterclockwise through manipulation of said second key member.

0) US3922005A – OCCUPANT–PROPELLED VEHICLE AND DRIVE SYSTEM THE...

104) Family number: 30341770 (US3922005A) © PatBase

Title: OCCUPANT–PROPELLED VEHICLE AND DRIVE SYSTEM THEREFOR

Priority: AU19740066268 19740305 CA19740151928 19740305 US19710183147 19710923 US19730338641 19730306

Family:

Publication number	Publication date	Application number	Application date
AU197246926 A1	19740426	AU19720046926	19720921
AU197466268 A1	19750901	AU19740066268	19740305
BE789200 A1	19730115	BE19720122346	19720922
BE811952 A4	19740701	BE19740141711	19740306
CA993470 A1	19760720	CA19720151928	19720918
DE2246813 A1	19730329	DE19722246813	19720923
DE2410679 A1	19740926	DE19742410679	19740306
FR2154211 A5	19730504	FR19720033685	19720922
FR2220413 A2	19741004	FR19740007495	19740305
FR2220413 B2	19780414	FR19740007495	19740305
GB1401788 A	19750730	GB19720043848	19720921
GB1462083 A	19770119	GB19740009912	19740305
IL40407 A0	19721128	IL19720040407	19720921
IL40407 A1	19760229	IL19720040407	19720921
IT1008398 A	19761110	IT19740049152	19740307
IT974806 A	19740710	IT19720052863	19720920
JP1079570 C3	19820125	JP19740026117	19740306
JP48041845 A2	19730619	JP19720095612	19720922
JP50035837 A2	19750404	JP19740026117	19740306
JP55046908 B4	19801127	JP19720095612	19720922
JP56015355 B4	19810409	JP19740026117	19740306
US3922005 A	19751125	US19730338641	19730306

Probable Assignee: MITSUI MINING AND SMELTING CO

Assignee(s)(std)**:** BUNDSCHUH R ; BUNDSCHUH R L ; BUNDSCHUH ROBERT ; BUNDSCHUH ROBERT L ; MITSUI MINING AND SMELTING CO ; BUNDSCHUH ROBERT LOUDEN ; BUNDSCHUH ROBERT L 41 FOX DEN ROAD WEST SIMSBURY ; PEDICAR CORP

Assignee(s): PEDICAR CORP US ; MITSUI MINING SMELTING CO LTD ; BUNDSCHUH ROBERT L 41 FOX DEN ROAD WEST SIMSBURY C ; MITSUI MINING AND SMELTING CO LTD ; BUNDSCHUH ROBERT L 41 FOX DEN ROAD WEST SIMSBURY CONNECTICUT E U A ; BUNDSCHUH ROBERT LOUDEN WEST SIMSBURY CONN VSTA ; BUNDSCHUH ROBERT LOUDEN WEST SIMSBURY CONN V ST A

Inventor(s)(std)**:** BUNDSCHUH ROBERT L ; BUNDSCHUH ROBERT LOUDEN ; ROBERT LOUDEN BUNDSCHUH

Inventor(s): BUNDSCHUH ROBERT LOUDEN WEST SIMSBURY CONN VSTA ; BUNDSCHUH ROBERT LOUDEN WEST SIMSBURY CONN V ST A ; LOUDEN BUNDSCHUH ROBERT

Agent(s): REINHOLD COHN AND PARTNERS

International class (IPC 8–9)**:** B62K5/00 B62K5/04 B62M1/00 B62M1/04 B62M11/04 B62M11/06 (Advanced/Invention); B62K5/00 (Advanced/Non–invention); B62K5/00 B62M1/00 B62M11/00 (Core/Invention)

International class (IPC 1–7)**:** B60K17/08 B60K19/02 B62K5/02 B62K5/04 B62K5/08 B62L3/04 B62M1/00 B62M1/04 B62M1/06 B62M11/04 B62M11/06 B62M25/02 B62M25/04 F16H1/16 F16H29/00 F16H3/08

CPC: B62K5/00 B62K5/05 B62M1/30 B62M1/28 F16H3/083

European class: B62K5/00 B62K5/05 B62M1/28 B62M1/30

US class: 280/237 280/251 280/254 280/282

Classification Explorer

Cited documents: US701747 A, US3512599 A, US3485509 A, US3175844 A, US2789831 A, US2538060 A, US2394112 A, US1792045 A, US1562553 A, US1503009 A, JP4004378 U1, JP30000316 Y1, JP11002394 U1,

Forward Citations: WO9212882, WO04026676, US8820186, US7077415, US6298740, US6241565, US6213487, US6199884, US5125677, US4373740, US4078816, US2013327171, JP55001581, JP55001573, JP51004476, GB2403698, GB2403698, GB2379426, GB2183751, ES2153266, EP1614616, EP1484241, EP0313690,

Abstract:
Source: US3922005A An occupant−propelled vehicle and a manually operated drive system therefor are described. Typically pedal operated, the drive system provides a substantially linear output torque, and makes it possible to apply at least twice the driving power to the vehicle wheel or wheels, for a given manual power input, than has heretofore been possible with pedal operated drives. The pedals or the like are arranged for substantially rectilinear movement and each drives the input shaft of a change speed transmission via the combination of a constant force spring returned reel and a one−way clutch. In preferred embodiments, two pedals can be operated independently, with constant torque supplied independently to two drive wheels of the vehicle.

0) US2014347814A – TABLET TRANSFORMER

105) Family number: 57879106 (US2014347814A) © PatBase

Title: TABLET TRANSFORMER

Priority: US20130813893P 20130419 US20130878491P 20130916 US20140255711 20140417
US20130906878P 20131120 US20140064216P 20141015 US20140060353P 20141006
US20160221401 20160727 US20140549225 20141120 US20140488054 20140916
US20150874713 20151005 US20150211085P 20150828 US20170434433 20170216

Family:

Publication number	Publication date	Application number	Application date
US2014347814 AA	20141127	US20140255711	20140417
US2017156465 AA	20170608	US20170434433	20170216
US9470356 BA	20161018	US20160221401	20160727
US9483083 BA	20161101	US20140488054	20140916
US9506281 BA	20161129	US20150874713	20151005
US9568141 BA	20170214	US20140549225	20141120
US9596914 BB	20170321	US20140255711	20140417

Probable Assignee: JZM INTELLECTUAL HOLDINGS INC

Assignee(s):(std)**:** JZM INTELLECTUAL HOLDINGS INC ; ZALOOM JOSEPH ; ZALOOM JOSEPH A

Inventor(s):(std)**:** ZALOOM JOSEPH ; ZALOOM JOSEPH A

Agent(s): NIXON AND VANDERHYE PC

International class (IPC 8–9)**:** A45C11/00 A45C13/36 E05D11/06 E05D11/10 E05D3/02 F16M11/04 F16M11/12 F16M11/20 F16M13/00 G06F1/16 G06F1/18 G06F3/02 H05K5/02 (Advanced/Invention)

CPC: G06F1/1626 G06F1/1679 A45C2011/003 A45C11/00 F16M11/125 F16M2200/022 G06F1/1681 F16M11/14 F16M11/2021 F16M11/2085 F16M11/24 F16M11/28 F16M11/42 E05D11/1028 E05D3/022 E05D11/1007 H05K5/0226 H05K5/0234 E05D2011/1035 F16M11/00 A45C13/36 A45C2200/15 G06F1/16 G06F1/166 G06F1/1669 G06F3/0208 G06F2200/1633 G06F2200/1634 F16M11/12 F16M13/00 F16M11/041 E05D7/1011 E05Y2900/606 G06F1/1613

US class: 1/1 206/45.24 220/4.02 248/688 248/689 361/679.56

Classification Explorer

Cited documents: WO11065624 A1, USD672783 S1, US9506281 BA, US9273503 BB, US8833716 BB, US872650 A, US8661618 BB, US8387930 BB, US8382059 BB, US8118274 BB, US8038116 BB, US7836623 BB, US7770862 BB, US7712719 BB, US7611117 BA, US7591604 BB, US7581290 BB, US7568915 BA, US7546996 BB, US7188818 BB, US7083155 BA, US6983514 BB, US6367760 BA, US5933996 A, US5168601 A, US5100098 A, US5074164 A, US5060904 A, US5058848 A, US5020763 A, US4436271 A, US3744085 A, US2101500 A, US2015293562 AA, US2015138713 AA, US2014347812 AA, US2014346311 AA, US2014328020 AA, US2014259532 AA, US2014153188 AA, US2014146458 AA, US2014116230 AA, US2014104782 AA, US2014063750 AA, US2014054426 AA, US2014036430 AA, US2014016799 AA, US2013277520 AA, US2013256478 AA, US2013233984 AA, US2013172055 AA, US2013100601 AA, US2013092811 AA, US2013092805 AA, US2013080670 AA, US2012326003 AA, US2012126088 AA, US2012111881 AA, US2012074272 AA, US2011228457 AA, US2011157804 AA, US2011102752 AA, US2011094058 AA, US2011075332 AA, US2010250789 AA, US2009183341 AA, US2009167691 AA, US2008314941 AA, US2008174943 AA, US2008156836 AA, US2008109993 AA, US2006197861 AA, US2006175484 AA, US2006137491 AA, US2006084585 AA, US2005155183 AA, US2005122671 AA, US2004084585 AA, US2004007649 AA, US2003038567 AA, US1166702 A, US104294 A, KRWO2011065624,

Forward Citations: WO16204776, USD740882, US9596914, US9591905, US9496102, US9451818, US9450430, US9382033, US9369170, US9348367, US9346309, US2016309009, US2016294433, US2016088749, US2016045812, US2015311941, US2015296946, US2015264825, US2015116927, US2015054273, US2014347814, US2014347793, US2014071606, TWI533111, JP6152410, JP2017117269, DK178872,

Abstract:
Source: US2014347814A Mechanisms for the integration of the form and function of a drafting and note–taking

tablet, a laptop computer, and a desktop computer with added enhancements for drop protection, portability, functionality, and ergonomics.

0) GB781777A – IMPROVEMENTS IN OR RELATING TO SHOE UPPER CONFO...

106) Family number: 20443986 (GB781777A) © PatBase

Title: Improvements in or relating to shoe upper conforming machines

Priority: GB19540030935 19541027

Family:

Publication number	Publication date	Application number	Application date
GB781777 A	19570828	GB19540030935	19541027

Probable Assignee: BRITISH UNITED SHOE MACHINERY

Assignee(s):(std): BRITISH UNITED SHOE MACHINERY

Assignee(s): THE BRITISH UNITED SHOE MACHINERY COMPANY LIMITED

International class (IPC 8–9): A43D21/12 A43D21/16 A43D21/18 (Advanced/Invention)

International class (IPC 1–7): A43D25/02

CPC: A43D21/125 A43D21/16 A43D21/18

European class: A43D21/12P A43D21/16 A43D21/18

Classification Explorer

Abstract:
Source: GB781777A 781,777. Shoe upper conforming machines. BRITISH UNITED SHOE. MACHINERY CO., Ltd. (United Shoe Machinery Corporation). Oct. 26, 1955 [Oct. 27, 1954], No. 30935/54. Class 17(1) A shoe upper conforming machine having a plurality of toe–part grippers movable heightwise to pull on upper on a last, toe embracing wipers to wipe the upper margins at the toe inwardly across the edge of an insole on the last bottom, and other wiping means to wipe marginal portions at opposite sides of the upper inwardly across the edge of the insole in locations where the edge of the shoe bottom curves inwardly towards the shank, has additional features, as follows: (1) Means to move the open grippers inwardly into position for the insertion of the upper margins between the jaws (2), means to move the grippers reversely outwardly as they pull the upper heightwise of the last (3), an additional toe end gripper which is engaged by the toe end of the last to position the latter (4), means to maintain some grippers retracted away from the last so that they do not operate on the upper when the other grippers operate (5) means to limit the heightwise pulling movement of some, at least, of the grippers, means to cause the grippers to release the upper after tensioning, and means to move the grippers further in the upper–pulling direction to out of the way position when they release the upper (6), means to move the toe wipers lengthwise of the shoe into position, means to move the other wipers thereafter heightwise of the shoe into its position, and members movable heightwise of the shoe with the other wipers to engage the insole and thus determine the operative heightwise position of the wipers and (7), the other wipers comprise at each side of the shoe a pair of wipers one of which lies more toe–ward, means to move both wipers of each pair into position to begin wiping near the ball, and means to cause the toe–ward wiper of each pair to move widthwise of the shoe and the other wiper to move obliquely, widthwise and lengthwise of the shoe whilst wiping the upper. The machine is used to last shoes the uppers of which have not been previously subjected to a pulling over operation. In operation, a last with an insole and a loose upper thereon is held in position with the insole margins engaging fingers 20, and 76, and the toe end engaging a plate 94 on the toe end gripper 92 which acts as an end gauge and aids the lateral adjustment of the last. The engagement of the heel end against pads 98 and plate 100 of the heel rest 96 move the heel rest into position. Treadle 636 (not shown), is then depressed to actuate valve 616 (Fig. 53), so that piston 576 is moved in cylinder 578 and through a pawl turns cam shaft 572 (not shown) with cams 570 (not shown) through 60 degrees. No. 1 cam then moves valve No. 1 so that fluid passes to cylinders 230, via 870, 872, to move pistons 228 which act on toggles 220 (Fig. 13), other than that of the central gripper 92 which acting as an end gauge is locked against movement endwise of the shoe, to swing the corresponding grippers into engagement with the periphery of the last. Valve 876 reduces the pressure so that toggles 220 do not close the grippers. Valve No. 2 is actuated and as a result piston 354 is moved raising locking members 342 (not shown) so that arms 334 (not shown), are freed and engage an abutment to position the arms relative to the position of the grippers, later locking of these arms preventing further inward movement of the grippers. Valve No. 7 is also actuated so that piston 174 is moved and held, and in turn moves plates 108 into engagement with extensions 180 to.prevent forward movement of the heel rest, detents 184 and teeth 182 lock to prevent upward displacement, and the ball–lasting units are advanced lengthwise to positions determined by the engagement of the heel rest with the shoe. The margin of the upper is then inserted in the forepart grippers 92, 202, 204 to an extent determined by plates 514. Treadle 636 is again depressed to turn shaft 572 a further 60 degrees, pistons 354 releasing locking members 342 which are then moved by springs to lock arms 334. Valve No. 3 is actuated and admits fluid under greater pressure, though still reduced by valve 882, via 870, 872 to operate toggles 220 to effect closing of the gripper jaws. To ensure that the grippers close firmly on the upper this pressure is increased by compression of spring 810 of relief valve 806, an effect of the second depression of treadle 636. At the same time valve 888 is operated by the treadle to open by–pass 886 to this increase of pressure to cylinder 230. Valve

882 is again in control when the treadle is released, valve 912 relieving the excess pressure. If readjustment is necessary knee pad 964 is pressed to move valve 918 which reduces the pressure. On release of pad 964 valve 882 resumes control, and spring 810 may be compressed to increase the pressure by operation of a knee pad 862 (not shown). On the third depression of the treadle shaft 572 is turned through a further 60 degrees, moving valves 4 and 5. Pistons 272 are thus actuated and via lever 262 impart an upper Dulling movement to the grippers, valve No. 4 being operated slightly before valve No. 5 so that the central gripper 92 and the two adjacent grippers pull the upper slightly before the other grippers, and pistons 518 act via lever 262 to retard these movements of the grippers. This retarding action is reduced by means of valve 672 which opens restricted outlets in cylinders 520. The pulling movements of the grippers about the toe are limited by stops which after the pull, may be rotated, some individually and some in groups to vary the positions of the grippers heightwise of the last and thus adjust the force of the pull or to adjust the upper' relatively to the last. The grippers may also be moved lengthwise to adjust the upper, the seven foremost grippers being moved in the same peripheral direction around the toe by means of a pair of hand levers 712 (not shown), and the two rearmost pairs of grippers moved independently lengthwise of the last by other hand levers 734 (not shown). To facilitate such movement of the stop members and grippers the force of the pull of the grippers may be reduced by means of lever 798 which moves valve 782 and through valves 742, 774, and 744 (not shown) opens restricted outlets for the fluid in cylinders 274. When operating on small shoes, some or all the grippers 204 may be latched in retracted positions outwardly of the shoe, the latches being releasable by an operator activated lever and then serving to determine the operating positions of those grippers. With the upper in proper relation to the grippers 1268 of the ball–lasting units, treadle 972 (not shown) is depressed to actuate a one revolution clutch resulting in the movement of cam shaft 976 which in one revolution serves to complete in three stages the revolution of cam shaft 572. Substantially at the beginning of movement of shaft 976 a cam thereon acts to move the toe rest 1192 to engage and clamp the shoe yieldingly against members 20, and 76, a flexible band 1096 (not shown) is applied to clamp the upper, the forepart grippers are opened by release of fluid from cylinders 230 and moved downwardly by piston 526, and further cams 1530, 1550 (not shown) cause the wiper support of the ball lasting units to swing upwardly until fingers 1534 engage the insole as in Fig. 57. Actuation of valve No. 6 admits fluid to cylinders 1404 whereupon both pistons 1400 (not shown) 1402' move to close the grippers 1268 firmly on the upper, then the smaller piston 1400 alone operates the gripper, with less force to pull the upper. At substantially the same time cams 1468 (not shown), 1460 (not shown) on shaft 976 act to operate the wiper carrying slides to move the pairs of ball wipers 1434, 1436 obliquely towards the shoe. In response to the resistance of the still tensioned upper to the wipers, valves 1424 are operated to release fluid from cylinders 1404 when the wipers are in position to press the upper against the edge of the insole. This causes grippers 1268 to release the upper, whereupon the wipers are moved inwardly wiping the upper margin, wipers 1436 being deflected to move more directly widthwise of the shoe while wipers 1434 continue in their oblique directions. The wipers swing fingers 1534 yieldingly inward and away from the insole out of the path of the wipers which are pressed more firmly up against the upper. In time relation to the movement of the ball–lasting units a carrier 1122 is operated by a track on shaft 976 to move the forepart wipers 1616 to the position where they have begun inward wiping (Fig. 61). A slide 1676 on the carrier is then operated by a cam 1660 (Fig. 13) and advances a crossbar 1680 which first through 1692, 1694, 1698 closes the wipers until they have adjusted themselves to the shoe, by engagement of their inwardly curved end portions with portions of the upper previously wiped over by the ballwipers, in response to resistance of the shoe to further closing of the wipers, pawls' 1700 are then swung to engage teeth 1702 on blocks 1704 preventing further swinging of the crossbar, and the wipers are further closed via 1692, 1698 and advanced lenthwise via 1700, 1704, 1706, 1726, 1626. The inwardly curved ends of the wipers 1616 acting on the inclined portions of the shoe bottom force the shoe slightly upwardly against the spring 1210 (not shown) controlling the toe rest. The wipers swing fingers 20, 76 inwardly and downwardly, the edge holddowns 84 are displaced, and the retarder 48 may be depressed against the resistance of its spring. Before the completion of wiping the toe rest pressure is increased to increase the pressure of the wipers on the upper margin. The ball–lasting wipers are swung downwardly from the path of wipers 1616. After the completion of wipin

107) Family number: 8741278 (WO9638643A1) © PatBase

Title: MULTIPLE TUMBLER COMBINATION FOR AXIAL PIN TUMBLER LOCK

Priority: US19950459707 19950602 WO1996US04410 19960329

Family:

Publication number	Publication date	Application number	Application date
AU199653806 A1	19961218	AU19960053806	19960329
WO9638643 A1	19961205	WO1996US04410	19960329

Probable Assignee: CHICAGO LOCK CO

Assignee(s):(std)**:** CHICAGO LOCK CO

Assignee(s): CHICAGO LOCK COMPANY

Inventor(s):(std)**:** STEINBACH ROBERT

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 LK LS 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 UG UZ VN

International class (IPC 8–9): E05B27/00 E05B27/08 (Advanced/Invention); E05B27/00 (Core/Invention)

International class (IPC 1–7): E05B27/08

CPC: E05B27/001 E05B27/083

European class: E05B27/00A1B E05B27/08B

Classification Explorer

Cited documents: US4858456 A, US4621510 A, US3267706 A, US1458520 A,

Forward Citations: WO15181838, WO06026809, US7254971, EP1799943,

Abstract:
An improved axial pin tumbler lock assembly (10) is disclosed. The improvement resides in the providing of a forward tubular spacer (35) accommodating eight tumblers (38), and an intermediate spacer (40) accommodating a series of eight tumblers (44) and a rear tubular sleeve (45) also accommodating eight tumblers (49). A control key (60) and reset key (70) respectively are utilized to select one of a series of 64 different tumbler combinations. An operational key (80) is then utilized to operate the lock with the selected tumbler combination, a total of 64 operating keys being made available to operate each of the 64 tumbler combinations selected.

0) CH179383A – SERRURE A POIGNEE. LOCK HANDLE. (MACHINE TRA...

108) Family number: 25888683 (CH179383A)

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Title: SERRURE A POIGNEE. LOCK HANDLE. (Machine translation)

Family:

Publication number	Publication date	Application number	Application date
CH179383 A	19350915		19331214

Probable Assignee: PAPST MAX

Assignee(s):(std)**:** PAPST MAX

Inventor(s):(std)**:** MAX PAPST

Inventor(s): PAPST MAX

International class (IPC 8–9): E05B65/26 (Advanced/Invention); E05B65/22 (Core/Invention)

International class (IPC 1–7): E05B65/26

Classification Explorer

Abstract:
Source: CH179383A REVENDICATION Serrure a poignee, applicable notamment aux portes d'automobiles, la poignee action nant un pene et pouvant etre amenee d'une po sition en saillie a une position enfoncee, et re ciproquement, par un deplacement axial, ca racterisee par le fait que ladite poignee se verrouille tant dans sa position enfoncee que –dans sa position en saillie et que ce ver rouillage s'accomplit des que la poignee ar rive dans une de ses positions extremes. SOUS–REVENDICATIONS 1 Serrure selon la revendication, caracte risee par le fait que le deverrouillage de la poignee dans ses positions extremes est accompli au moyen d'une serrure auxi liaire (fig. 1 A 3, 4 A 11, 12 A 14, 15, 28 et 29, 30 et 31, 32 A 35, 36 et 37, 43 A 47). 2 Serrure selon la revendication, caracteri see par le fait que le deverrouillage de la poignee dans ses positions extremes est ac compli par un organe d'actionnement:sans cle (fig. 16 A 20, 21 A 27, 50 A 55, 56 A 59, 60 A 63, 64 A 66). 3 Serrure selon la revendication et la sous– revendication 2, caracterisee par une ser rure auxiliaire pour bloquer la poignee dans sa position enfoncee (fig. 50 A 55, 56 A 59, 60 A 63, 64 A 66). 4 Serrure selon la revendication et la sous– revendication 2, caracterisee par le fait que des, dispositifs pour l'actionnement du deverrouillage de la poignee dans ses posi tions extremes et pour la faire sortir et rentrer sont fixes sur la paroi interieure et sur la paroi exterieure –de la porte (fig. 50 A 55, 56 A 59, 60 A 63, 64 A 66). 5 Serrure selon la revendication et les sous revendications 2 et 4, caracterisee par un organe d'actionnement qui, en traversant l'epaisseur de la porte, relie les deux dis positifs et actionne la sortie et la rentree –de la poignee, ainsi que le verrouillage et le deverrouillage de la poignee (fig. 50 A 55, 56 A 59, 60 A –63, 64 A 66). 6 Serrure selon la revendication et la sous revendication 2, caracterisee par un or gane d'actionnement qui, par ses mouve ments relatifs a la poignee, la deverrouille dans ses deux positions extremes, –ce de verrouillage se faisant dans la position en saillie:de la poignee, par un mouve ment de l'orgune d'aetionnement pendant que la. poignee est maintenue dans sa po sition et dans la position enfoncee –de la poignee par un mouvement de la poi gnee relatif 'a l'organe d'actionnement qui est maintenu dans sa position (fig. 50 A 55, 56 A 59). 7 Serrure selon la revendication, caracte risee par le fait que le verrouillage de la poignee est accompli au moyen d'au moins un verrou actionne par un ressort. 8 Serrure selon la revendication et la sous– revendication 7, caracterisee par le fait que le ressort est mis sous tension par le mouvement accompli par l'organe de ver rouillage pour deverrouiller la poignee (fig. 4 A 11, 12 A 14, and lt;B and gt;15, and lt;/B and gt; 16 a 20, 21 A 27, 28 et 29, 32 A 35, 36 et 37, 43 A 47, 50 A 55). 9 Serrure selon la revendication et la sous– revendication 7, –caracterisee par le fait que le ressort est mis sous tension par le deplacement axial de la poignee (fig. 1 A 3, 30 et 31, 56 A 59, 60 A 63, 64 A 66). 10,Serrure selon la revendication et les sous– revendications 2 et 7, caracterisee par le fait que le ressort est mis sous tension par le mouvement axial de l'organe –d'action– nement (fig. 21 A 27, 50 A 55). 11 Serrure selon la revendication et la sous– revendication 7, caracterisee par un seul organe de verrouillage qui verrouille et deverrouille la poignee dans ses positions extremes par –des mouvements en sens con traire. 12 Serrure selon la revendication et les aoiis– revendications 7 et 11, caracterisee par le fait que pour pouvoir etre actionne uans les deux sens contraires, l'organe –de ver rouillage, ainsi que son ressort, sont sus ceptibles d'avoir un mouvement rotatif (fig. 1 A 3, 50 A 55). 13 Serrure selon la revendication et les sous revendications 7 et 11, caracterisee par le fait que le verrou est soumis a l'action d'un ressort dont la tension est suscepti ble –de s'exercer dans deux directions –con traires (fig. 4 A 11, 12 A 14, 15, 16 A 20, 28 et 29, 50 A 55, 56 A 59, 60 A 63, 64 A 66). 14.Serrure selon la revendication et les sous– revendications 7, 11 et 13, caracterisee par le fait que ledit ressort est en forme de and lt;B and gt;U and lt;/B and gt; (fig. 28 et 29). 15 Serrure selon la revendication et la sous– revendication 7, caracterisee par deux or ganes –de verrouillage actionnes de telle maniere que le mouvement de dever rouillage –de l'un de ces organes prepare le mouvement de verrouillage de l'autre (fig. 30 et 31). 16 Serrure selon la revendication et la sous– revendication 7, caracterisee par le fait que la poignee est maintenue dans ses deux positions extremes par l'extremite enroulee d'un ressort plat, lequel est de place par.deux ergots decales angulaire– ment et dans le sens longitudinal (fig. 32 A 35). 17 Serrure selon la revendication et la sous– revendication 7, caracterisee par le fait que la poignee est maintenue dans ses deux positions extremes par l'extremite enroulee d'un ressort plat, lequel est de place par les aretes de deux trous decales –ulairement et

–dans le sens lonoitticli– i an., t and gt; nal d'un manchon renfermant la tige de poignee et tournant autour de son axe lon– gitudinal (fin –,. 36 et 37). 18 Serrure selon la revendication et la.sous– revendication 7, caracterisee par le fait qu'un cylindre de verrouillage, accompa gnant obligatoirement les deplacements axiaux de la tige de poignee, mais pouvant tourner par rapport a elle, comporte une rainure helicoidale qui transforme les –de placements rectilignes d'un organe de gui dage d'un bouton poussoir glissant dans ladite tige en mouvement de rotation du– dit cylindre (fig. 50 A 55, 56 A 59, 60 A 63, 64 A 66). 19 Serrure selon la revendication et les sous revendications 7 et 18, caracterisee par le fait qu'un espace intermediaire suffi sant est prevu entre les rampes de guidage helicoidales du cylindre de verrouillage, qui tourne sous l'action de l'organe de guidage, ledit espace intermediaire per mettant au –cylindre de verrouillage des rotations supplementaires (fig. 56 A 59, 60 A 63, 64 A 66). 20 Serrure selon la revendication et les sous– revendications 7 et 9, –caracterisee par le fait que des ressorts exercant.des efforts opposes et prealablement tendus par le ae– placement –de la poignee, se detendenr, en agissant sur le verrou et le cylindre fie verrouillage, qui lui est solidaire, lorsque la poignee arrive dans ses positions extre mes (fi;. 56 A. 59, 60 A 63, 64 A 66). 21 Serrure selon la revendication et la sous– revendication 2, caracterisee en ce que l'organe d'aetionnement est –compose de deux pieces qui peuvent rentrer les unes dans les autres telescopiquement et re viennent a leur position initiale sous l'action de ressorts (fig. 16 A 20, 21 A 27, 50 A 55, 56 A 59, 60 A 63, 64 A 66). 22 Serrure selon la revendication et la sous revendication 7, –caracterisee par le fait qu'une cuvette de logement de la poignee sert de guidage a l'organe de verrouillage (fig. 4 A 10, 12 A 14, 15, 16 A 20, 21 A 27.) 23 Serrure selon la revendication et la sous– revendication 7, caracterisee par un res sort actionnant un organe and actionnement de telle maniere que le mouvement de l'or gane d'actionnement dans un sens met sous tension le ressort dont le declenche ment provoque le mouvement de l'organe d'actionnement dans le sens contraire (fig. 60 A 63). 24 Serrure selon la revendication et les sous– revendications 7 et 23, caracterisee par le fait que, pendant que la poignee est dans sa position enfoncee, l'organe –de ver rouillage est fixe –dans une douille par un.cran et que l'organe de verrouillage est libere de ce cran par un commun mouve ment axial de la poignee et de l'organe –d'actionnement. 25 Serrure selon la revendication,,caracterisee par le fait qu'une douille pouvant tourner dans la porte supporte et guide la tige de poignee et l'organe de verrouillage, la noix etant commandee par la poignee et sa tige par l'intermediaire –de ladite douille (fig. 42). 26,Serrure selon la revendication, caracterisee par un organe d'actionnement unique re venant dans sa position initiale apres cha que deplacement d'un organe de ver rouillage, les deplacements.successifs du– dit organe d'actionnement amenant l'or gane de verrouillage dans ses positions de verrouillage (fig. 64 –A 66). 27 Serrure selon la revendication, –caracte risee par le fait que la poignee, dans sa po sition enfoncee, est appliquee eo–ntre la pa– roi de la porte et qu'une saillie que pre sente la porte penetre dans un trou de la poignee (fig. 38 A 41). 28 Serrure selon la revendication,.caracterisee par un organe interieur d'actionnement pour amener la poignee dans sa position enfoncee, cet organe servant en meme temps d'organe decommande de l'interieur pour tirer la porte pour la fermer (fig. 48 et 49). CLAIM lock a handful, especially applicable to car doors, the handle Action ing a pene and can be people brought a po sition projection has a depressed position and re reciprocally, by axial displacement, ca acterized by the fact said handle is locked in its depressed position so that –in its projecting position and that this is accomplished worm INHIBIT of the handle ar bank in one of its extreme positions. DEPUTY CLAIMS lock according to claim 1, charac laughing stock that the unlocking of the handle in its extreme positions is accomplished by means of a lock auxiliary staff (Fig. 1 A 3, 4 A 11, A 12, 14, 15, 28, 29, 30, 31, 32, 35, 36 and 37, 43 A 47). Lock according to claim 2, charac see that the unlocking of the handle is in its extreme positions ac compli by an actuator: without key (Fig 16 A 20 21 A 27 50 A 55, A 56. 59, 60 A 63 64 A 66). Lock according to claim 3 and the sub–claim 2, characterized by an auxiliary ser chloride to block the handle in its depressed position (Fig. 50 A 55 56 A 59 60 A 63 64 A 66). Lock according to claim 4 and under–claim 2, characterized by the fact that, devices for actuating the unlocking of the handle in its extreme posi tions and to get her out and back are fixed on the inner wall and the Exterior wall –of the door (Fig. 50 A 55 56 A 59 60 A 63 64 A 66). Lock according to claim 5 and the sub claims 2 and 4, characterized by an actuator which, through the thickness of the door, connects both said positive and operates the extension and retraction –of the handle, and locking and unlocking of the handle (Fig. 50 A 55, A 56 59 –63 60 A, 64 A 66). Lock according to claim 6 and in claim 2, characterized by a gold gane actuator which, through its MOTION ments relating to the handle, the unlocks in its two extreme positions, locking –this being done in the projecting position: of the handle, by a move ment of the aetionnement orgune while. handle is held in its po sition and in the depressed position –of the handle by movement of the POI relative panied has the actuating member which is held in position (fig. 50 to 55, 56 to 59). Lock according to claim 7, character rized in that the lock handle is accomplished by means of at least one bolt by a spring. Lock according to Claim 8 and the sub–claim 7, characterized in that the spring is tensioned by the movement performed by the INHIBIT worm member to unlock the handle (Fig. 4 to 11, 12 to 14, and lt; B and gt; 15 and lt; / B and gt; 16 to 20, 21, A 27, 28, 29, 32, 35, 36 and 37, 43 A 47 50 A 55). Lock according to claim 9 and the sub–claim 7, –caracterisee in that the spring is energized by the axial movement of the handle (Fig. 1 to 3, 30 and 31, 56 to 59, 60 to 63, 64 A 66). 10, A lock as claimed in claim and the dependent claims 2 and 7, characterized in that the spring is energized by the axial movement of the envi– –d'action– member (fig. 21 to 27, 50 TO 55).dropoff window Lock according to claim 11 and under–claim 7, characterized by a single locking member that locks and unlocks the handle in its extreme positions –the movements in a contrary direction. Lock according to claim 12 and aoiis– claims 7 and 11, characterized by the fact that to be UANS operates two opposite directions, the worm –the body INHIBIT and its spring, are known to have a movement ceptibles rotating (Fig. 1 to 3, 50 to 55). Lock according to claim 13 and dependent claims 7 and 11, characterized in that the latch is subjected to the action of a spring whose tension is suscepti ble –to be exercised in both directions trary –CON (Fig. 4 A 11 12 A 14 15, 16 20, 28, 29, 50 A 55 56 A 59 60 A 63 64 A 66). 14.Serrure claim and the sub claims 7, 11 and 13, characterized in that said spring is shaped and lt; B and gt; and U lt; / B and gt; (Fig. 28 and 29). Lock according to claim 15 and the sub–claim 7, characterized by two or gans –de actuatable locking such that the movement of Dever INHIBIT –In one of these bodies prepared the locking movement of the other (Fig. 30 and 31). Lock according to claim 16 and the sub–claim 7, characterized in that the handle is held in its two end positions with the end coiled flat spring, which is space par.deux lugs offset angularly and in the longitudinal direction (fig. 32 to 35).Lock according to claim 17 and the sub–claim 7, characterized in that the handle is held in

its two extreme positions by the coiled end of a flat spring, which is established by the edges of two offset holes –ulairement and –in the sense lonoitticli– year i, t and gt.; nal of a sleeve containing the handle shaft and rotating about its ion– gitudinal axis (end –,. 36 and 37). Lock according to claim 18 and la.sous– claim 7, characterized in that a locking cylinder, accompa Gnant necessarily the axial movements of the handle shaft, but rotatable relative thereto, has a helical groove which transforms –of the rectilinear investments of a pusher member mistletoe DAGE button sliding in said du rotational movement in said cylinder rod (fig. 50 A 55 56 A 59 60 A 63 64 A 66). Lock according to claim 19 and dependent claims 7 and 18, characterized in that a suffi cient interspace is provided between the helical guide ramps of the locking cylinder, which rotates under the action of the guide member, said intermediate space per putting the locking –cylinder of additional rotations (Fig. 56 A 59 60 A 63 64 A 66). Lock according to claim 20 and dependent claims 7 and 9, –caracterisee in that springs exercant.des opposed efforts and prior tensioned by the AE placement –In handle, detendenr, by acting on the bolt and the trust cylinder lock, integral therewith when the handle reaches its positions extre my (fi;. 56 A. 59, 60 A 63 64 A 66). Lock according to claim 21 and the sub–claim 2, characterized in that the member is aetionnement –compose of two parts which can go into each other telescopically and re come to their initial position under the action of springs (Fig. 16 A 20 21 A 27 50 A 55 56 A 59 60 A 63 64 A 66). Lock according to claim 22 and under Claim 7, –caracterisee in that a housing trough of the handle serves as a guide to the locking member (Fig. 4 A 10 12 A 14 15 16 20 21 to 27.) The lock of claim 23 and the sub–claim 7, characterized by a res fate actuating member and an actuator in such a way that the movement of gold actuating Gane in one direction energizes the spring which triggers ment causes movement of the actuating member in the opposite direction (Fig. 60 to 63). Lock according to claim 24 and dependent claims 7 and 23, characterized in that, while the handle is in its depressed position, the INHIBIT worm –in –the body is fixed by a sleeve and that un.cran locking member is frees this step by a common axial move ment of the handle and –d'actionnement body. The lock of claim 25,, characterized by the fact that a rotatable sleeve in the door supports and guides the handle rod and the locking member, the nut being commissioned by the handle and stem the intermediate –from said sleeve (Fig. 42). 26, lock according to claim, characterized by a single actuator re from its initial position after cha that displacement of a worm member INHIBIT, the du– deplacements.successifs said actuator causing the gold organ of locking in its locking position (Fig. 64 –A 66). Lock according to Claim 27, –caracte rized in that the handle, in its po sition pressed, is applied eo–etween the patient king of the door and a projection that penetrates the pre feel door into a hole in the handle (Fig. 38 A 41). Lock according to claim 28,.caracterisee by an actuating inner organ to bring the handle in position pressed, this body serving at the same time cancels body from the inside to pull the door shut (Fig. 48 and 49).

0) US4848113A – SPARE WHEEL LOCK CONSTRUCTION

109) Family number: 3080561 (US4848113A) © PatBase

Title: SPARE WHEEL LOCK CONSTRUCTION

Priority: US19880197384 19880523

Family:

Publication number	Publication date	Application number	Application date
US4848113 A	19890718	US19880197384	19880523

Probable Assignee: MCGARD LLC F K A DD AND D MI LLC

Assignee(s):(std)**:** MCGARD INC

Assignee(s): MCGARD INC A CORP OF NY ; MCGARD LLC ; MCGARD LLC (F K A DD AND D MI LLC) ; MCGARD LLC F K A DD AND D MI LLC ; KEYBANK NATIONAL ASSOCIATION

Inventor(s):(std)**:** PARKS JEFFERY R

International class (IPC 8–9)**:** B62D43/00 B62D43/04 F16B41/00 (Advanced/Invention); B62D43/00 F16B41/00 (Core/Invention)

International class (IPC 1–7)**:** E05B65/12

CPC: F16B41/005 B62D43/007 B62D43/045 Y10T70/5987 Y10T70/7802 Y10T70/8946

European class: B62D43/00D B62D43/04B F16B41/00C

US class: 70/259 70/395 70/465

Classification Explorer

Cited documents: US4674306 A, US4625947 A, US4613273 A, US4574602 A, US4544136 A, US4526021 A, US4492506 A, US4249682 A, US4228873 A, US4174797 A, US4059197 A, US4057985 A, US3952894 A, US3865264 A, US3542413 A, US3431756 A, US3372821 A, US2107834 A, US1983767 A, US1942176 A, US1821130 A, US1741314 A, JP23004077 A2, GB1274286 A, DE1014447 B, CA902011 A,

Forward Citations: WO16203386, WO16203384, US9416613, US7036405, US6067825, US6047574, US5943887, US5758523, US5426963, US5343722, US2016221162, US2010178131, US2005126349, JP5682954, JP2012127405, EP1544483,

Abstract:
Source: US4848113A A lock arrangement for a vehicle spare wheel hoist and storage construction including a lock member mounted on the input shaft of a winch and having a curvilinear groove therein, an elongated plastic tube having one end mounted on the lock member by a spring clip and the other end extending through an aperture in the frame of the vehicle, and an elongated shaft having a key mounted therein for insertion through the elongated plastic tube and into mating engagement with the curvilinear groove for turning the input shaft of the winch.

0) US2009057244A – MERCHANDISE DISPLAY WITH TIME DELAY MECHANISM

110) Family number: 42974815 (US2009057244A) © PatBase

Title: MERCHANDISE DISPLAY WITH TIME DELAY MECHANISM

Priority: US20070895956 20070828

Family:

Publication number	Publication date	Application number	Application date
EP2030535 A1	20090304	EP20080159068	20080626
US2009057244 AA	20090305	US20070895956	20070828

Probable Assignee: INVUE SECURITY PRODUCTS INC

Assignee(s):(std)**:** ALPHA SECURITY PROD INC ; INVUE SECURITY PRODUCTS INC

Assignee(s): ALPHA SECURITY PRODUCTS INC

Inventor(s):(std)**:** CONTI BRIAN V ; MOOCK ANDREW W ; SEDON NICHOLAS M ; ZHANG NINGSHENG

Agent(s): RAFFAY AND FLECK; ADAMS INTELLECTUAL PROPERTY LAW PA

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): A47F1/00 A47F5/08 (Advanced/Invention); A47F1/00 (Core/Invention)

CPC: A47F5/0861

European class: A47F5/08B5

US class: 211/7

Classification Explorer

Cited documents: US87985207 P, US7392673 BB, US7197902 BA, US7131542 BB, US7007810 BB, US6957555 BA, US6926159 BA, US6811128 BA, US6659291 BB, US60879852, US5711432 A, US5597150 A, US5542633 A, US5485930 A, US5375725 A, US5325616 A, US5123189 A, US5018627 A, US3785501 A, US3595434 A, US2006157431 AA, US1033915 A, NL1000796 C2,

Forward Citations: US9622596, US9339130, US9247833, US9167918, US8794453, US8684227, US8534469, US8523012, US8341987, US8307995, US8286454, US8281624, US2015001167, US2013105419, US2011127225, US2011036789, US2010300992, US2010223965, US2010170307, US2008169250,

Abstract:
Source: US2009057244A A merchandise display system for displaying items of merchandise on a support has vertically spaced first and second rods extending outwardly from the support. A time delay mechanism is mounted on the upper rod and includes a pair of pivotally mounted plates which are selectively moveable into and out of blocking engagement with the lower plate on which the items of merchandise are slidably supported. An item of merchandise is moveable past the forwardmost plate from a space between the plates for removal from a free end of the lower rod while the rearward plate prevents movement of another item of merchandise into the intervening space until the forward plate moves to the blocking position and the rear plate moves to an unblocking position. A magnetically actuated lock mechanism locks the rear plate in an adjusted linear position with respect to the front plate to adjust the intervening space.

0) US2002189302A – HINGE LOCK SAFETY CUFF

111) Family number: 28288796 (US2002189302A) © PatBase

Title: HINGE LOCK SAFETY CUFF

Priority: US20010883652 20010618 US20030895436 20030630

Family:

Publication number	Publication date	Application number	Application date
US2002189302 AA	20021219	US20010883652	20010618
US2005097929 AA	20050512	US20030895436	20030630
US6588240 BB	20030708	US20010883652	20010618
US7017234 BB	20060328	US20030895436	20030630

Probable Assignee: ANDERSON BRENT L

Assignee(s):(std)**:** ANDERSON BRENT L

Inventor(s):(std)**:** ANDERSON BRENT L

Inventor(s): ANDERSON BRENT

Agent(s): JAMES K POOLE ESQ; JAMES K

International class(IPC 8–9)**:** E05B75/00 E05D11/10 (Advanced/Invention); E05B75/00 (Core/Invention)

International class(IPC 1–7)**:** E05B75/00

CPC: Y10T16/54 E05B75/00 Y10T70/402 Y10T70/404 Y10T70/407 Y10T16/540257

European class: E05B75/00

US class: 16/319 16/327 16/332 294/53.5 294/57 7/116 70/15 70/16 70/160 70/16P 70/17 71/16

Classification Explorer

Cited documents: USD426436 S1, USD298205 S1, USD267468 S1, US6588240 BB, US6588240 BA, US6588240 B1, US6560805 BB, US6560805 BA, US6560805 B1, US6357067 BA, US5887921 A, US5799996 A, US5771588 A, US5697231 A, US5687593 A, US5676412 A, US5598723 A, US5507051 A, US5485655 A, US5461890 A, US5205142 A, US5138852 A, US5103520 A, US5063628 A, US4846042 A, US4840048 A, US4697441 A, US4424997 A, US4314466 A, US4300368 A, US4287731 A, US4138867 A, US4114216 A, US4023221 A, US3618345 A, US3473712 A, US3401971 A, US2966787 A, US1872857 A, US1509355 A, US1157135 A,

Forward Citations: WO08036537, WO08036537, WO07009075, USD723891, USD716118, USD691866, USD604015, USD563056, US9643266, US9532510, US9359799, US9119337, US9101095, US8959687, US8904832, US8776555, US8353183, US8230706, US8117745, US7677620, US7412799, US7316137, US7316136, US7316135, US7171829, US7124607, US7117697, US7065990, US7062943, US7017234, US7007519, US6886375, US2016252131, US2016067594, US2015284980, US2013198966, US2011139763, US2010175255, US2010162775, US2009165269, US2008047913, US2007284123, US2007193312, US2007056332, US2006272156, US2006162126, US2006130278, US2005262901, US2005262899, US2005262898, US2005262897, US2005262896, US2005262895, US2005262894, US2005262893, US2005262892, US2005262891, US2005262890, US2005262889, US2005262888, US2005097929, US2004261471, DE10305200,

Abstract:
Source: US2002189302A Folding handcuffs include a lockable hinge which permits folding the assembly for compact storage but automatically locks into a rigid assembly when fully unfolded. The hinge operates by the movement of a locking bar into locking groove(s) via a tensioning mechanism when the hinge components are aligned in the unfolded, extended configuration. The lockable hinges can also be used to connect the components of a variety of common tools including shovels, saws and the like.

0) US2001054643A – CURRENCY RECEIVING DEVICE AND METHOD

112) Family number: 28302213 (US2001054643A) © PatBase

Title: Currency receiving device and method

Priority: CA20002312275 20000623 US20000729283 20001205 US20020140191 20020508 WO2001CA00936 20010626 US20020140193 20020508

Family:

Publication number	Publication date	Application number	Application date
AU200170394 A5	20020108	AU20010070394D	20010626
CA2312275 AA	20011223	CA20002312275	20000623
CA2312275 C	20090915	CA20002312275	20000623
EP1292926 A2	20030319	EP20010949150	20010626
US2001054643 AA	20011227	US20000729283	20001205
US2002125309 AA	20020912	US20020140191	20020508
US2002129547 AA	20020919	US20020140193	20020508
US6553713 BB	20030429	US20020140193	20020508
US6659340 BB	20031209	US20000729283	20001205
WO0201514 A2	20020103	WO2001CA00936	20010626
WO0201514 A3	20020725	WO2001CA00936	20010626

Probable Assignee: NAMSYS INC

Assignee(s):(std)**:** CHIU CHUI WEN ; NAMSYS INC ; SIEMENS JOHN

Assignee(s): ARM S LENGTH HOLDINGS INC ; ARMOR SAFE TECHNOLOGIES LLC ; ARM'S LENGTH HOLDINGS INC ; ARM"S LENGTH HOLDINGS INC

Inventor(s):(std)**:** CHIU CHUI WEN ; SIEMENS JOHN

Inventor(s): JOHN SIEMENS

Agent(s): PIASETZKI AND NENNIGER 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 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): A01G13/04 A01G23/00 A01G9/16 G07D11/00 G07F19/00 (Advanced/Invention); A01G13/04 A01G23/00 A01G9/16 G07D11/00 G07F19/00 (Core/Invention)

International class (IPC 1–7): A01G25/00 A01G9/00 A01G9/02 G06F17/60 G06K17/60 G07D11/00 G07F19/00

CPC: G07D11/00 G07D11/0006 G07D11/009 Y02P60/40 A01G23/00 A01G9/16 A01G13/043

European class: A01G13/04B A01G23/00 A01G9/16 G07D11/00 G07D11/00D2 G07D11/00M

US class: 235/379 235/382 235/486 47/17 47/20.1 47/65.5 47/655 47/69 47/79 47/87 902/13 902/9

Classification Explorer

Cited documents: WO9111778 A1, WO8702808 A1, US6598374 BA, US6547493 BB, US6484654 BB, US6428240 BA, US6378247 BA, US6128598 A, US6085810 A, US6082519 A, US6067530 A, US6006471 A, US5975275 A, US5893260 A, US5669732 A, US5669177 A, US5601236 A, US5553320 A, US5538122 A, US5488801 A, US5412189 A, US5411249 A, US5161736 A, US4992648 A, US4754126 A, US4744468 A, US4714029 A, US4690585 A, US4592675 A, US4577763 A, US4462390 A, US4449847 A, US4396872 A, US4333265 A, US4306542 A, US4189133 A, US4031832 A, US3957098 A, US3886751 A, US3872621 A, US3806025 A, US3755962 A, US3446272 A, US3107912 A, US293577 A, US172039 A, GB2246899 A1, FR2604333 A1, EP0451682 A1, EP0307375 A2,

Forward Citations: WO12010681, WO10025371, WO09138355, WO09019410, WO08092754, WO08080101, WO08080101, WO07042308, WO07036915, USRE43888, USRE42820, US9495705, US9183690, US9105145, US9089097, US9024722, US8915427, US8857597,

US8844804, US8812394, US8812366, US8794511, US8790046, US8756158, US8600842, US8577802, US8571948, US8561885, US8556167, US8550338, US8534548, US8523235, US8453820, US8430303, US8419550, US8393612, US8346640, US8341077, US8280814, US8276810, US8229816, US8214257, US8210429, US8164451, US8123121, US8094021, US8078534, US8032415, US8025213, US7984567, US7982610, US7982604, US7965184, US7870996, US7850076, US7765135, US7712657, US7677443, US7635085, US7562681, US7520421, US7357303, US7347358, US7152744, US7140232, US7070093, US7011119, US6874682, US2015230411, US2014075839, US2013346135, US2013119126, US2013066799, US2011210826, US2011154742, US2011133613, US2011131117, US2010211437, US2010174640, US2010083520, US2010082443, US2010070392, US2010010904, US2009309729, US2009309694, US2009258411, US2009222381, US2009133986, US2009032580, US2009006249, US2008149706, US2008135608, US2008110133, US2007181668, US2007100750, US2007053752, US2007027800, US2006146839, US2006129484, US2006112007, US2006010069, US2005161111, US2005108164, US2005086140, US2005023341, US2005006198, US2004226493, US2004225407, US2004210515, US2004201472, US2004112117, US2004089712, US2003155209, JP2010515124, ITTO20121022, GB2440176, EP2736025, EP2690608, EP2319025, EP2221773, EP1258843, CN104472310, CN103416254, CN102027512, AU2007336740, AU2007336740, AU2005203843,

Abstract:
Source: US2001054643A A currency receiving device for receiving currency from a user, comprising a safe having a lockable access opening and a transfer slot, a local processor, operatively connected to said safe, said local processor having a user interface to communicate with the user, and being capable of communicating with a remote processor, a currency counter, operatively connected to said safe, to count the currency deposited by the user, and a removable currency receptacle, contained within said safe and operatively connected to said currency counter, to receive currency from the currency counter and to store said currency, said removable currency receptacle having a unique identifier, wherein, upon said currency receptacle being installed in said safe, said identifier is correlated with said count of currency deposited by said user.

0) US2947278A – STEERING MECHANISMS FOR BOATS, TRACTORS AND THE...

113) Family number: 20863173 (US2947278A) © PatBase

Title: STEERING MECHANISMS FOR BOATS, TRACTORS AND THE LIKE

Priority: US19580731271 19580428

Family:

Publication number	Publication date	Application number	Application date
GB907539 A	19621003	GB19590014459	19590428
US2947278 A	19600802	US19580731271	19580428

Probable Assignee: CURTISS WRIGHT CORP

Assignee(s):(std)**:** CURTISS WRIGHT CORP

Inventor(s):(std)**:** MAGILL JOHN J ; HUNGERFORD JR PHILIP C

Inventor(s): JR PHILIP C HUNGERFORD

International class (IPC 8–9)**:** B62D1/16 B62D3/02 B63H25/10 B66D1/26 F16B1/04 (Advanced/Invention); B62D1/16 B62D3/00 B63H25/06 B66D1/26 F16B1/00 (Core/Invention)

International class (IPC 1–7)**:** B63H21/14 F16D13/08

CPC: B62D1/16 B62D3/02 B63H25/10 B66D1/26 B66D2700/0175 F16B1/04

European class: B62D1/16 B62D3/02 B63H25/10 B66D1/26 F16B1/04 L66D700/01D10B

US class: 114/144R 188/134 440/62

Classification Explorer

Cited documents: US2819777 A, US2075567 A,

Forward Citations: US7681513, US7325507, US6546889, US4263994, US3774571, US3747556, US3422784, US3393777, US3193066, US3184991, US3110380, US2007235246, DE1300375, CN105782180, CN105674023,

Abstract:
Source: GB907539A 907,539. Non–reactive couplings. CURTISSWRIGHT CORPORATION. April 28, 1959 [April 28, 1958], No. 14459/59. Class 80 (3). Relates to a one–way or two–way non– reactive coupling in the steering shaft of a boat or tractor, wherein, on initial turning of an input shaft 11[1] relative to a concentric output sleeve 12[1], permitted by a lost–motion pin–andslot connection 51, 52, the pin end 51[1] acts on the axial end 5411 or 55[11] of one or other of two oppositely wound coil springs 54, 55 (or of a single spring for a one–way coupling) to contract that spring out of frictional lock engagement with a surrounding fixed brake sleeve 14, permitting further input turning to take along the output sleeve. In such a coupling the opposite end 54[1] of each spring seats in an anchor collar 15 which, for assembly adjustment, can be turned on the output sleeve 12[1] whilst a centralizing jig and feeler gauges are inserted into the clearances around the pin ends 51[1] to set the operating clearance, after which the anchor collars 15 and output sleeve 12[1] are drilled in situ for lock–pins 58. The output sleeve 12[1] carries a drum 35 having rudderconnected cables 39. The brake sleeve 14 is fixed against rotation by a pin 3 which may have a control knob for releasing the coupling brake when required. The device may be sealed at each end and enclosed in a plastics cover. Specification 881,008 is referred to.

0) GB1023459A – A MULTI–PURPOSE MACHINE FOR OPERATING ON A WORK...

114) Family number: 22941331 (GB1023459A) © PatBase

Title: A multi–purpose machine for operating on a workpiece

Priority: GB19590026832 19590806 GB19620034473 19620910 GB19660052003 19661121 AU19660002926 19660316

Family:

Publication number	Publication date	Application number	Application date
AU292666 A1	19670921	AU19660002926D	19660316
AU416517 B1	19710819	AU19660002926	19660316
GB1023459 A	19660323	GB19620034473	19620910
GB1174568 A	19691217	GB19660052003	19661121
GB951050 A	19640304	GB19590026832	19590806

Probable Assignee: RUSHTON CYRIL

Assignee(s):(std)**:** CYRIL RUSHTON ; RUSHTON CYRIL

Inventor(s):(std)**:** RUSHTON CYRIL

Inventor(s): CYRIL RUSHTON

International class (IPC 8–9)**:** B27C9/04 B27F5/06 (Advanced/Invention); B27C9/00 B27F5/00 (Core/Invention)

International class (IPC 1–7)**:** B27C9/00 B27F5/06

CPC: B27C9/04 B27F5/06

European class: B27C9/04 B27F5/06

Classification Explorer

Forward Citations: GB2187124, CN104290148,

Abstract:
Source: GB1023459A 1,023,459. Milling, turning, abrading, machine tool detents. C. RUSHTON. Dec. 9, 1963 [Sept. 10, 1962], No. 34473/62. Headings B3B, B3C, B3D, B3K and B3T. [Also in Division B5] A multi–purpose machine tool comprises a tubular body formed with a plurality of axial slots, a turret head slidable along the tubular body, a main drive associated with the tubular body, a plurality of subsidiary drives carried by the turret head and extending radially of the tubular body out of the axial slots, each for operating a tool, and clutch or gear means between the main drive and subsidiary drives and engageable to actuate one or more of the subsidiary drives at any one time. The machine is for operating on wood, metal or the like and is usable as a mortising and dovetailing machine, as a lathe, as a milling machine, as a circular saw or as a band saw. The basic component of the machine consists of a tube 69, Fig. 14, which has a plurality of slots 66 and slidably receives a collar 71. A plurality of tubes 76, 77, 78, 79, Fig. 20, extend radially from the collar and each receives a shaft 80, 81, 82, 83 which may be connected by a clutch to a bevel gear 84, 85, 86, 87 at its inner end. The bevel gears co–operate with a bevel gear 88 on a shaft 72 disposed within the tube 69 and driven directly or indirectly by a belt drive 121, Fig. 14, or flexible drive from a motor. The shaft 72 is slidably received within the gear and is formed of several parts connected together by universal joints to render the shaft flexible. The bevel gear 88 is rotatably mounted on a plate having radial arms 65, 66, 67, 68 extending through the slots in the tube 69 and adjustably connected by screws 176 to the collar 71 whereby the position of the gear can be adjusted laterally to engage with any one or all of the bevel gears 84, 85, 86, 87 to transmit rotation from the shaft 72 to any one of all of the shafts 80, 81, 82, 83 while permitting sliding movement of the collar on the tube, the movement of the collar being effected by a handle 90. In an alternative arrangement, the shaft 72 is replaced by a shaft 210, Fig. 34, which is disposed eccentrically of the tube and has worms 215 engaging wormgears on the radially–extending shafts 234, 235 extending through the collar. A chisel and auger attachment may be fitted on to one of the radially–extending drives and comprises a housing 561, Fig. 21, which can be fitted into one of the radial tubes, the housing having a pair of shafts 558, 559 interconnected by bevel gears 556, 557. Shaft 558 carries part of a coupling 562 for connection to the radial shaft, and shaft 559 carries an auger 566 which extends through a hollow square chisel 564, the auger being connected to the shaft by a coupling or chuck 567. In the machine shown in Fig. 24, a circular saw 179 is carried at the end of one of the radial tubes 76 and driven by a shaft connected by bevel gearing to the shaft 72 disposed within the vertical tube 69. The shaft 72 is driven by a belt 184 and motor P located within the base of the machine, a pulley 188 being provided to tension the belt. The tube 69 is movable along guideways 181, 190A on the base by a screw and nut arrangement 194 operated by a handle 196. The saw may operate on work on one of three supports A, B, or C. Support A comprises a plate 180A which is adjustably mounted in a support 180B and co–operates with a rear centralizing plate 180 adjustably mounted by a half–ring clamping device as described in Specification 951,050. The support B has a table 182 mounted on a full ring

clamping device also as described in Specification 951,050, and support C comprises a table 183 vertically adjustable on the tube 69 and securable in position by a hand wheel 183C. In another arrangement, the slotted tube is disposed in a horizontal position and a workhead 271, Fig. 47, is secured to the tube, the workhead carrying pulleys for a drive to a shaft 340 on which is mounted a circular saw 331. The saw extends through a slot 343 in a table 332 adjustably supported by a slotted plate 336 and slide 337 on a device 351 clamped to the tube 339, the device being provided with means 338 to adjust the height of the table. The table carries an adjustable fence 333, a work clamp 335, and an adjustable extension 334. The spindle 340 is provided with threads 350A to receive various attachments. In a further arrangement, the slotted tube 339, Figs. 51 and 53, acts as a support for a band saw attachment having a saw 385 guided over wheels 377, 378 and a wheel 360 secured to a shaft 362 connected to the beltdriven shaft 340 on the head 271. The tension of the belt is adjusted by a screw–device 374 acting on the wheel 378 and a device 370 which is operated by a screw 369 and has an oppositelyhanded threaded member 370 engaging members 371, 372 connected to the wheels 377 378 which are thereby moved towards or away from each other to adjust the band. The upper wheel is mounted on a stub axle which can be adjusted about a ball joint by a pair of screws to control the tracking of the band. The band saw attachment co–operates with a supporting table 332B which can be removed so that the attachment can be swung to a horizontal position 394. The machine may be arranged as a mortising machine by attaching a support 402, Fig. 56, such as described in Specification 951,050 to one of the radial tubes, the support having a chain 402 of the driving or cutting type engaging a lower sprocket 403 adapted to carry a cutter 407 of dovetail shape. A slotted bearing plate 408, Fig. 61, may be secured to the sprocket and cutter. Alternatively, the dovetail cutter 412, Fig. 63, may be mounted on a shaft which is rotatably supported in a cylindrical member adapted to fit one of the radial tubes 76, Fig. 14, and has a coupling 415 for connection to the shaft in the tube. A plurality of dovetails may be cut simultaneously by a number of dovetail cutters 474... 478, Fig. 72 carried by shafts which are rotatably mounted in brackets 482 and have bevel gears 469 engaging bevel gears 466 rotatably mounted in the brackets and splined to a shaft 464, the central bevel gear being driven by a bevel gear on a shaft 457 which is rotatable in a cylindrical member adapted to be mounted on one of the radial tubes and has a coupling for connection to the driven shaft in that tube. The brackets 482 are connected together by a lazy tong mechanism which is adjustable to vary the spacing between the cutters. A notched plate may be used to secure the cutters in their adjusted positions. If the distance apart of the cutters is not required to be adjustable, they may be mounted on shafts interconnected by spur gears. A single cutter 541, Fig. 79, may be mounted on a shaft which is transversely movable along a slot in a housing by a handle 550 and carries a bevel gear meshing with a further gear which is mounted in a bracket 539 movable with the cutter and is non– rotatably but axially movable along a shaft 537 driven by chain 545 and worm–gearing 547 from a shaft 546 connectable to the shaft in the radially extending tube 76, Fig. 14. As shown in Fig. 69, the dovetail cutter arrangement 440 is mounted on the radially extending tube 443 of the collar 71 which is disposed on the slotted tube. A clamp 521, such as described in Specification 951,050, is secured to the slotted tube and adjustably carries a table 522 having a fence 523 to each of which is secured a workpiece 524, 528 to be machined together by the cutter arrangement 440, the handle 441 being operable to move the cutter arrangement towards the workpieces. The machine may be used as a lathe by arranging the slotted tube 258, Fig. 38, on supports 260, 261 and mounting a headstock 270 on one end, the headstock having a pulley driven shaft 269 for a chuck or face plate 273 and a grinding wheel 266. A clamping device as described in Specification 951,050, is secured to the tube and incorporates means for adjusting the vertical height of a tool rest 276 which is adjustable transversely of the tube along a slideway 278. The collar 283 is slidable along the slotted tube by a handle 285 and carries attachments which may or may not be driven from the shaft 282A located within the tube. As shown, the collar carries an adjustable centre 286 Other attachments may be fitted in the radial tubes of the collar 283 and be brought into operation by rotating the slotted tube 258 and collar relative to the head 270. A domeshaped cover 293 may be fitted to the open end of the slotted tube when change gears are not fitted. In an arrangement incorporating a milling attachment, the slotted tube 69, Fig. 45, is mounted in a housing 299 also supporting a U–bracket for a pulley driven shaft 328, the housing being mounted on a slide adjustable along guideways in a vertical plate 294A. A clamping plate carried at the lower end of rods 315 for co–operation with a fixed plate 309 when tools carried and driven by the slotted tube are used, may be fixed against vertical movement so that when a hand wheel 311, which usually causes movement of the plate, is rotated, a lug 314 is vertically moved, the lug being connected to an arm 316 which acts as an outer support for a milling cutter spindle 316B and is carried by a vertically movable slide 317. A table support table 321 is adjustably secured to the plate 294A and carries a work–table 324 which is movable by a rack–and–pinion mechanism 323 operated by a hand wheel 326.

0) WO07110489A1 – SURVIVAL DEVICE IN THE CONTEXT OF NATURAL DISAS...

115) Family number: 38528463 (WO07110489A1) © PatBase

Title: SURVIVAL DEVICE IN THE CONTEXT OF NATURAL DISASTERS CONSISTING OF A DWELLING MODULE AND ITS ACCESSORIES

Priority: WO2006FR00482 20060303

Family:

Publication number	Publication date	Application number	Application date
EP2132389 A1	20091216	EP20060726019	20060303
WO07110489 A1	20071004	WO2006FR00482	20060303

Probable Assignee: FRANCH JEAN JACQUES

Assignee(s):(std)**:** FRANCH JEAN JACQUES

Inventor(s):(std)**:** FRANCH JEAN JACQUES

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)**:** E04H9/02 (Advanced/Invention); E04H9/02 (Core/Invention)

CPC: E04H9/02 E04H9/14 E04H9/145 Y02B10/30

European class: E04H9/02 E04H9/14 E04H9/14F Y02B10/30

Classification Explorer

Cited documents: WO9630602 A1, US6938381 BA, US5363610 A, US3916578 A, FR2580708 A1, DE660200 A,

Abstract:
The invention concerns a set of devices of a dwelling module for meeting emergency and extreme emergency requirements for coping with submarine quakes, standard earthquakes, floods and a plurality of natural disasters. Said set consists of several subassemblies, namely a dwelling module and other elements such as a foot, a heel, a leg, an emergency anti–seismic air lock, an extensible telescopic air lock, a protective shield, a horizontal wind turbine and the like.

116) Family number: 20293425 (GB776361A) © PatBase

Title: Improvements in or relating to machines suitable for operating on shoe soles

Priority: GB19540018625 19540625

Family:

Publication number	Publication date	Application number	Application date
GB776361 A	19570605	GB19540018625	19540625

Probable Assignee: BRITISH UNITED SHOE MACHINERY

Assignee(s):(std): BRITISH UNITED SHOE MACHINERY

Assignee(s): THE BRITISH UNITED SHOE MACHINERY COMPANY LIMITED

International class (IPC 8–9): A43D8/36 (Advanced/Invention); A43D8/00 (Core/Invention)

International class (IPC 1–7): A43D7/20

CPC: A43D8/36

European class: A43D8/36

Classification Explorer

Forward Citations: CN104872930,

Abstract:
Source: GB776361A 776,361. Cutting machines. BRITISH UNITED SHOE MACHINERY CO., Ltd. (United Shoe Machinery Corporation). June 23, 1955 [June 25, 1954], No. 18625/54. Class 31 (1). [Also in Groups XVI and XXIV] A machine for marking shoe soles has a pressure head carried by a parallel linkage and arranged to carry a marking tool and movable downwards to press the sole towards a second tool for marking the lower side of the sole, the machine including a toggle for actuating the pressure head, and means for adjusting the lowest position to which the head is moved when actuated by the toggle means. As shown, a worktable 30, Figs. 5 and 7, has gauge rolls 36 and 38 for positioning an insole S, Fig. 10, laterally of the worktable for a marking and/or impressing operation. A movable head 50, Figs. 1, 5 and 12, carries presser members 52, 54 and 56 which press the insole S into engagement with dies 42, 44 and 46 respectively. A toothed indenting tool 58 carried by the head 50 co–operates with a die 48 to form indentations in the insole S to mark the breast–line, while presser members 60 and 62 co–operate with the dies 44 and 46 when positioned rearwardly of the table 30. Knives 64 and 66 are also carried by the head 50 for making incising cuts in the surface of the insole S. The head 50 has arms 68 and 70, Figs. 1 and 5, pivotally connected by a pin 72 to an arm 74 supported by a pin 76. The lower end of the arm 68 is pivotally connected by a pin 82 to an arm 84 pivotally supported by a pin 86, while the arm 70 is connected by a pin 88, coaxial with the pin 82, to an arm 90. Thus, the head 50 is held vertical during movement, since the axes of the pins 72, 76, 86 and 82 define a parallelogram. An eccentric 92 on a driving shaft 94 is coupled, by a connecting rod 96, to a toggle pin 98 which connects a link 102 and an arm 106 and a link 104 and an arm 108 respectively, the arms 106 and 108 being formed on a yoke 100 mounted on a pin 110 secured in arms 84, 90. The links 102 and 104 are pivotally mounted on a pin 112 having a notched central portion 114 to clear the arm 74. The ends of the pin 112 are secured in arms 118, 120 mounted on trunnions 122, 124, coaxial with the pin 98 when the rod 96 is in its most rearward position, i.e. with the head 50 raised. The stroke of the head 50 is adjustable by angular adjustment of arms 118, 120 about the trunnions 122, 124 by a bracket 126 pivotally connected to a sleeve 134 engaged by an adjustable screw 136 rotatable by a hand wheel 142 to move axially through a nut 138 to vary the height of the pin 112 in accordance with the thickness of the workpiece to be impressed and/or marked, the setting being indicated by a pointer 152 co–operating with scale markings on a plate 150. The presser member 52, Fig. 12, is secured by a screw 154 to a bracket 156 secured to the head 50, the member 52 being adjustable vertically by means of a slot 160 and adjusting screw 162. The presser members 54, 56, 60 and 62 are threaded into the head 50, and retained by locking plates, not shown. The indenting tool 58 is clamped to a rod 176 adjustable vertically in the head 50. The knives 64 and 66 are similarly mounted on the head 50. The knife 66 is clamped to a block 188 by a screw 190 extending through a horizontal slot 192 to permit transverse adjustment. A leaf–spring 196 is disposed behind the knife 66 and acts as a stripper to force a workpiece off the knife after a cutting operation. The block 188 is adjustably clamped by a screw 198 to a block 202 to permit forward and rearward adjustment by screws 206, 208, the block 202 being secured to the head 50 by a tongue and groove engagement which permits vertical adjustment of the block 202. The knife 66, Fig. 30, is secured on the block 188, slidably adjustable on the block 202, while the knife 64, Fig. 31 (not shown), is mounted on a block 1188 slidable on a block 1202 vertically adjustable on the head 50. The knives 66 and 64 are moved forwardly and rearwardly by a pivoted lever 772, Fig. 30, connected to a link 776 pivotally connected to the block 188. A similar link 784, Fig. 31 (not shown), pivotally connects the lever 772 and block 1188. When the lever 772, Fig. 30, is rocked, by manually sliding a rod 792, the knife 66 is moved in the opposite direction to the knife 64. The pivot of lever 772 is secured in a lateral extension 804 of an L–shaped slide 806. A U–shaped slide,

comprising parts 818 and 820, and a part 816, Fig. 31 (not shown), is secured on the head 50, Fig. 30. Screws 834 and 832, Fig. 31 (not shown), threaded through the part 820, engage the rearward ends of links 784 and 786, Fig. 30, to determine the rearward positions of the knives. The die 42, Fig. 5, is mounted upon an electrically−heated block 216 supported on springs 222 to permit yielding and tilting under the pressure of the presser member 52. Each die 44 has a stem which fits into one of a plurality of holes formed in a slide 224 movable transversely of the machine to bring a selected die into an operating position beneath the appropriate presser member 54 or 60. The slide 224 can replace a blank slide 246 when it is required to position the dies 44 beneath the member 60. Size marking dies are carried by a wheel 228 secured to a shaft 234 rotatable to bring a required die into operative position by a hand wheel 236. The hand wheel is integral with a dial 238 carrying numbers corresponding to the size marking dies which register with a stationary pin 245, the hand wheel normally being held locked by a coil spring 242. The die 48 is fixedly mounted in a recess in the table 30. Positioning workpieces.−A heel end gauge 40, Figs. 7 and 10, is secured to a member 250 forming part of an H−shaped slide 252 also having members 254 and 256. The slide 252 is slidable along a lower slide 260. A block 274 has a pin 276, Fig. 5, carrying a rotatable block 278 engaging a worm 280 on the shaft 234, rotation of the shaft 234 by the hand wheel 236 causing sliding of the block 274. To permit adjustment of the heel end gauge 40 independently of the hand wheel 236, a key 288, Fig. 7, engages a slot 290 in the member 254 and is clamped at required positions along the slot by a screw 302, a pointer 298 on the slide 252 co−operating with a scale 300 to indicate such positions. Alternatively, a rack 600 and pinion 602, Fig. 17 (not shown), is provided for adjusting the slide 252, Fig. 7. Edgegauges 36 and 38 are mounted on arms 306 and 308 pivoted on pins 310 and 312 secured to the table 30, Fig. 10. The arms 306 and 308, urged together by a spring 324, have extensions 314 and 316, the extension 314 having a slot 322. A block 318 mounted on a pin 320 secured upon the extension 316 engages the slot 322 to co−ordinate movements of the arms 306 and 308. When use of the gauge roll 38 is not required its supporting bracket 340 is turned through 90 degrees about a screw 344; similarly the roll 36 may be turned to inoperative position. A latch 364 normally retains the roll 38 in operative position. Driving arrangements.−A driven pulley 372, Fig. 1, drives the shaft 94 through a clutch, not shown, controlled by mechanism 374, Fig. 21, tripped by a treadle on a rod 376 or, automatically by insertion of an insole in a gauging mechanism, not shown. A pin 472, parallel to the axis of the shaft 94, is rotatably mounted in a disc 474 keyed to the shaft 94. The pin 472 has a half−round extension which can enter any one of a plurality of half−round recesses in an inner cylindrical wall of a ring, not shown, carried by the pulley 372, Fig. 1, to couple the shaft 94 to the pulley. A spring− pressed plunger 478, Fig. 21, in the disc 474 engages a head 480 on the pin to rotate the pin 472 into engaging position, while a lever 482 normally holds the pin in disengaged position. A pawl 484 holds the disc against retrograde rotation. The lever 482 is pivoted on a pin 486 and urged into stopping position by spring 488. The clutch is engaged by withdrawing the lever 482 from the pin 472 by rocking a lever 498 carrying a latch 492 engaging the lever 482 and connected to a rod 502 pivotally connected to an armature 504 of a solenoid 506. The solenoid 506 is energized by an electric circuit closed by engagement of the heel end of an insole S, Fig. 20, with a finger 448 positioned in a notch 444 of a heel gauge 440. An arm 450 pivoted on a stud 452 on a bracket 454 is held in engagement with the finger 448 by a spring 462. A lug 460 on the arm 450 engages a button 466 of an electric switch in a casing 468. After engagement of the clutch, an arcuate cam 510, Fig. 21, on the disc 474 depresses the latch 492 to release the lever 482, thus disengaging the clutch by rotating the pin 472. A guard 380, Fig. 3, not shown, protects the operator's fingers and facilitates the introduction of workpieces, while a sector 390, Fig. 21, engages a latch 392 forming part of the clutch mechanism 374 to prevent operation while the guard is raised. Adjustment for varying thickness of work. pieces.−A crank−arm 700, Figs. 22 and 24, is secured on a trunnion 122^1 also carrying a yoke 116. A tension spring 702 is secured to the arm 700 and to an extension 704 of a pin 821. As the head 50 descends the spring 702 turns the arm 700 to swing the yoke 116 forward and downward about the trunnions 122^1 and 124. A spacing link 706 is pivoted to the arm 700 and has a slot 710 engaging the pin 821 which controls the position of the yoke 116 in relation to the head 50 during its downward movement. Thus, the head descends idly until the presser members engage the workpiece which upon continued downward movement of the head causes the pin 112 to rise. This raising movement is opposed by a locking mechanism which permits only forward and downward swinging movement of the togglesupporting yoke 116 which holds the pin 112 against upward movement when the presser members engage the workpiece. As the connecting rod 96 comple

0) GB818024A – CAM CLUTCH DEVICE

117) Family number: 20524758 (GB818024A) © PatBase

Title: Cam clutch device

Priority: 19560730

Family:

Publication number	Publication date	Application number	Application date
GB818024 A	19590812	GB19570015568	19570516

Probable Assignee: CHICAGO PNEUMATIC TOOL CO

Assignee(s):(std): CHICAGO PNEUMATIC TOOL CO

Assignee(s): CHICAGO PNEUMATIC TOOL COMPANY

International class (IPC 8–9): B25B23/14 F16D43/206 (Advanced/Invention); B25B23/14 F16D43/00 (Core/Invention)

International class (IPC 1–7): F16D7/06

CPC: B25B23/141 F16D43/206

European class: B25B23/14C F16D43/206

Classification Explorer

Forward Citations: WO14098832, US8852004, US4467902, TWI381911, GB2180181, GB2133093, FR2539193, FR2478344, DE3926208,

Abstract:
Source: GB818024A 818,024. Positive clutches. CHICAGO PNEUMATIC TOOL CO. May 16, 1957 [July 30, 1956], No. 15568/57. Class 80 (2). In a combination of a torque–responsive clutch with a secondary clutch, automatic means separate the driving and driven elements of the secondary clutch as the torque–responsive clutch re–engages. A power screwdriver has a drive spindle 32 splined to a tubular drive–shaft 36 on which are carried driving and driven clutch–plates 54,..55.–which are, respectively, axially free and rotatably free on the shaft 36. Between the clutch plates and located in a cage 76 is a series of balls 74 forming with pockets 73, 75 a ball cam clutch, axially loaded to disengage at predetermined torque by a spring 66 abutting the clutch–plate 54 and an adjustable stop 67 threaded on the drive–shaft 36. The lower face of the clutch–plate 55 is formed with dog teeth engageable with complementary teeth on a driven clutch–plate 56, this secondary clutch being urged into engagement by a spring 82 located between the plate 56 and a plate 83 located on a driven shaft 45 by a spring ring 84. The driven shaft 45, which is adapted to receive a tool at its lower end 47, has a longitudinal slot 88 to receive a driving key 87 which also seats in a slot 89 in the driven plate 56; the key is retained for axial movement in the shaft 45 by a spring–ring 93 and has a lug 86 which engages an internal shoulder 85 in the plate 56. Within the bore of the drive–shaft 36 and the driven shaft 45 is carried a quill shaft 42 having a reduced diameter upper portion 112 over which is located, for limited axial movement by a ball in a slot 120, a lock–out sleeve 109 urged downwardly by a spring 111, and carrying a radial pin 106 projecting through a slot 107 in the drive–shaft 36 to rest on a cup washer 105 on the upper face of the boss of clutch–plate 54. The portion 112 has three radial holes containing balls 114 which can be urged inwardly by a camming chamfer on the lower end of sleeve 109 and outwardly by a chamfer 117 on a lockout plunger 102 within the bore of the quill shaft 42. The quill shaft 42 has a shoulder 43 which can abut the lower end of the drive–shaft 36 and slides within a recess in the upper end of the driven shaft 45, this shoulder also engages an inwardly–projecting shoulder on the key 87. The quill shaft 42 is urged upwardly by two disengaging springs 95, 104 acting respectively between a shoulder 101 on the lock–out plunger 102 and a stop–ring 96 seating on a thrust collar 97 secured within the driven shaft 45, and the shoulder 101 and the end of the reduced bore of the quill shaft. Operation.–In the initial condition the driven shaft 45 is held downwardly by the springs 95, 104 and the clutch driven plate 56 is held disengaged through the action of the spring ring 93 and the key 87; rotation of the spindle 32 imparts rotation through the shaft 36, balls 64, driving plate 54 and ball cam–clutch 73, 74, 75 to the clutch plate 55. Pressure on the casing to engage the tool head 47 with the work–piece moves the driven shaft upwards together with the spring plate 83, spring 82, key 87 and clutch plate 56 to engage the clutch 56, 55 and also to compress the disengaging springs 95, 104 and start the lock–out plunger 102 on its upward movement. The plunger 102 moves until it is held by the engagement of the chamfer 117 with the balls 114 which cannot move radially outwards due to the locking sleeve 109. Under these conditions drive is imparted to the tool head 47. When the work is tightened to the predetermined torque, the ball cam clutch 54, 74, 55 disengages against the spring 66 and clutch plate 54 moves upwards as the balls 74 ride from the recesses 73, 75, this moves the cupped washer 105, pin 106 and the lockout sleeve 109 upwards and allows the lockout plunger 102 to move the balls 114 radially outwards to lock the quill shaft to the sleeve 109. As the clutch plates 54, 55 continue to rotate relatively, the recesses 73, 75 re–align and allow the plate 54 to move downwards, whereupon the spring 111 urges the lockout sleeve 109, balls 114, quill shaft 42 and key 87 downwards to disengage the dog clutch 55, 56 and stop the drive to the tool head 47. Removal of the tool head from the workpiece allows the driven shaft 45 to move downwards under the action of

104, 95 which causes the lock–out plunger 102 to move downwards until the chamfer 117 cleans the balls 114 to permit them to move radially inwards, whereupon the chamber on the lockout sleeve 109 cams the balls 114 out of engagement with the sleeve. Quill shaft 42 is thus released and moves upwards under springs 104, 95 to allow reengagement of the dog clutch, which restores the mechanism to its starting condition. The trailing edges of the recesses 73, 75 are slightly radiused to provide a lower separating torque in the forward drive condition than in reverse drive. In a modification, the recesses 73, 75 are joined by an arcuate annular groove to form tracks for the balls 74, and the cage 76 is omitted. In a second embodiment, Fig. 28a, upward movement of the tool head 164 produces engagement of a dog clutch 159, 157 and upward movement of a lock–out plunger 174, spring 173 and a lock–out sleeve 178 until the latter is stopped by engagement with balls 182 which are prevented from radial movement by the driving plate 139 of a ball cam clutch 139, 142, 137. On attainment of the predetermined torque, the driving plate 139, which is driven from a motor shaft 133 through a driving cup 134 having fingers 138 fitting grooves in the periphery of clutch plate 139, moves downwards under the cam action of the balls 142, against a spring 143, to disengage the drive. As the plate 139 moves it allows the balls 182 to move radially outwards under the action of a chamfer on the lock–out sleeve 178 into.recesses 184 in the plate, and so lock the plate to a quill shaft 151 carrying the dogclutch member 156. As the ball cam clutch re–engages, the quill shaft 151 moves upwards to disengage the clutch 156, 159 and disconnect the drive. Removal of the tool from the workpiece allows the lock–out pin 174 to move downwards, taking with it the lock–out sleeve 178 and freeing the balls 182 from the clutch plate 139. The dog clutch member 156 and quill shaft 151 then move downwards under the action of a spring 162 to reset the mechanism to its starting condition.

0) GB871803A – IMPROVEMENTS IN OR RELATING TO TORQUE LIMITING ...

118) Family number: 20760347 (GB871803A) © PatBase

Title: Improvements in or relating to torque limiting clutches

Priority: GB19580003036 19580130

Family:

Publication number	Publication date	Application number	Application date
GB871803 A	19610628	GB19580003036	19580130

Probable Assignee: BIRFIELD ENG LTD

Assignee(s):(std)**:** BIRFIELD ENG LTD

Assignee(s): BIRFIELD ENGINEERING LIMITED

Inventor(s):(std)**:** LAYTON ALFRED ARTHUR ; BISSETT LESLIE ; BASTOW DONALD

International class (IPC 8–9)**:** F16D43/202 F16D7/04 (Advanced/Invention); F16D43/00 F16D7/00 (Core/Invention)

International class (IPC 1–7)**:** F16D7/06

CPC: F16D7/048 F16D43/202

European class: F16D43/202 F16D7/04C

Classification Explorer

Forward Citations: US4919244, FR2316476, FR2316476,

Abstract:
Source: GB871803A 871,803. Slip couplings; overload release clutches; shafts. BIRFIELD ENGINEERING Ltd. Jan. 30, 1959 [Jan. 30, 1958], No. 3036/58. Class 80 (2). An overload slip coupling for a power takeoff shaft used in an agricultural tractor or the like connects the forks 3, 4 of two universal joints and comprises inner and outer telescoped tubes 1, 2, the inner tube carrying keys 5 biased radially outwards to engage grooves 8 in the outer tube by a stack of Belleville springs 12 acting axially through two frusto–conical wedges 9, 10. The keys 5 may be mounted in a cage 81 which, as shown, is rigid with the tube 1. In a modification, the cage 18 has a lost motion connection with the tube 1 and has a light frictional engagement with the surrounding tube 2, so that when overload occurs with consequent inward movement of the keys 5 to the disengaged position, the cage is turned over the keys, which are then held permanently radially inwards in the disengaged position until a reverse torque is applied to return the cage to its original position. The grooves 8 and the keys 5 are not spaced at equiangular positions around the tubes 2, 1, so that the coupling can only fully re–engage following disengagement on overload at the same relative angular positions between the universal joint forks 3, 4. The grooves 8 extend over substantially the whole length of the outer tube 2, in order that the keys 5 can slide axially therealong when telescopic motion of the two tubes takes place.

0) US2132695A – ROLL HOLDING CAMERA

119) Family number: 21395141 (US2132695A) © PatBase

Title: Roll holding camera

Priority: US19360108397 19361030 US19370149873 19370623

Family:

Publication number	Publication date	Application number	Application date
DE700305 A	19401217	DE1937K146718	19370529
US2090060 A	19370817	US19360108397	19361030
US2132695 A	19381011	US19370149873	19370623

Probable Assignee: KODAK AG

Assignee(s):(std)**:** EASTMAN KODAK CO ; KODAK AG

Assignee(s): EASTMAN KODAK COMPANY ; KODAK AKT GES

Inventor(s):(std)**:** JOSEPH MIHALYI ; MIHALYI JOSEPH

International class (IPC 8–9)**:** G03B17/42 G03B9/58 (Advanced/Invention); G03B17/42 G03B9/00 (Core/Invention)

International class (IPC 1–7)**:** G03B17/04 G03B9/22 G03B9/68

CPC: G03B9/58 G03B17/42

European class: G03B17/42 G03B9/58

US class: 396/389 396/401

Classification Explorer

Forward Citations: US2813470,

Abstract:
Source: US2132695A 1. In a roll holding camera, the combination with a camera body including a housing enclosing spool chambers and an exposure frame, mechanism for operating the camera enclosed in the housing including a rotatble shaft for turning a spool in a spool chamber, a one–way clutch between said shaft and camera housing preventing movement of the shaft in one direction, a lever for turning the film spool shaft, a one–way clutch between said lever and shaft, a handle on the outside of the casing for operating said lever, a spring operated shutter of the setting type carried by the camera and enclosed in the casing, a totally enclosed setting lever for tensioning the spring of the shutter, a shutter trigger extending through the shutter casing to the outside hereof, and totally enclosed lost motion connections between the hlm winding handle and shutter setting lever whereby the latter may only be operated by the former.

0) US2004093817A – REFINEMENTS TO THE CONSTRUCTION SYSTEMS FOR STR...

120) Family number: 28838032 (US2004093817A) © PatBase

Title: REFINEMENTS TO THE CONSTRUCTION SYSTEMS FOR STRUCTURES IN REINFORCED CONCRETE OR SOME OTHER MATERIAL BY MEANS OF HIGH–PRECISION INTEGRAL MODULAR FORMS

Priority: ES20020000264 20021118 ES20020002648 20021118 US20030697203 20031030 US20060495544 20060731

Family:

Publication number	Publication date	Application number	Application date
DE10353277 A1	20090507	DE20031053277	20031114
ES2281212 AA	20070916	ES20020002648	20021118
ES2281212 BA	20080816	ES20020002648	20021118
FR2850415 A1	20040730	FR20030005952	20030519
FR2850415 B1	20070406	FR20030005952	20030519
GB200310568 A0	20030611	GB20030010568	20030508
GB2395221 A1	20040519	GB20030010568	20030508
GB2395221 B2	20060104	GB20030010568	20030508
US2004093817 AA	20040520	US20030697203	20031030
US2006260238 AA	20061123	US20060495544	20060731

Probable Assignee: SIST S INDUSTRIALIZADOS BARCON

Assignee(s):(std): BARCONS SALVADOR P ; BARCONS SALVADOR PUJOL ; PUJOL BARCONS SALVADOR ; SIST S INDUSTRIALIZADOS BARCON

Assignee(s): SALVADOR PUJOL BARCONS ; SISTEMAS INDUSTRIALIZADOS BARCONS SL ; SISTEMAS INDUSTRIALIZADOS BARCONS S L POLIGONOINDU ; SISTEMAS INDUSTRIALIZADOS BARCONS S L ; SISTEMAS INDUSTRIALIZADOS BARCONS S L PUERTO DESANTA MARIA ; SISTEMAS INDUSTRIALIZADOS BARCONS S L POLIGONOINDUSTRIAL LAS SALINAS DE LEVANTE

Inventor(s):(std): BARCONS SALVADOR P ; BARCONS SALVADOR PUJOL ; PUJOL BARCONS SALVADOR

Inventor(s): SALVADOR PUJOL BARCONS

Agent(s): CABINET NETTER; CROWELL AND MORING LLP, INTELLECTUAL PROPERTY GROUP

International class (IPC 8–9): E02D27/01 E04B1/16 E04B1/18 E04G1/36 E04G11/02 E04G11/06 E04G11/08 E04G11/10 E04G11/20 E04G11/28 E04G11/38 E04G11/48 E04G13/00 E04G13/02 E04G13/04 E04G13/06 E04G15/00 E04G15/02 E04G15/06 E04G17/00 E04G17/04 E04G17/06 E04G17/14 E04G17/16 E04G19/00 E04G21/00 E04G21/02 E04G21/12 E04G25/00 E04G27/00 E04G9/02 E04G9/08 (Advanced/Invention); E02D27/01 E04B1/16 E04B1/18 E04G1/36 E04G11/00 E04G13/00 E04G15/00 E04G17/00 E04G17/04 E04G17/06 E04G17/14 E04G17/16 E04G19/00 E04G21/00 E04G21/02 E04G21/12 E04G25/00 E04G27/00 E04G9/02 E04G9/08 (Core/Invention)

International class (IPC 1–7): B28B7/22 E02D1/00 E04B1/00 E04F10/00 E04G1/00 E04G11/02 E04G21/00

CPC: E04G19/00 E02D27/01 E04B1/161 E04G1/36 E04G11/02 E04G11/087 E04G11/10 E04G11/20 E04G11/38 E04G11/48 E04G13/00 E04G13/02 E04G13/04 E04G13/06 E04G15/02 E04G15/06 E04G17/001 E04G17/002 E04G17/04 E04G17/06 E04G17/14 E04G17/16 E04G19/003 E04G19/006 E04G21/025 E04G21/122 E04G27/00 E04G15/00 E04G17/00 E04G25/00 E02D27/013 E02D27/016 E04G13/062 E04G13/066

European class: E02D27/01 E04B1/16A E04G1/36 E04G11/02 E04G11/08D E04G11/10 E04G11/20 E04G11/38 E04G11/48 E04G13/00 E04G13/02 E04G13/04 E04G13/06 E04G15/00 E04G15/02 E04G15/06 E04G17/00 E04G17/00B E04G17/00D E04G17/04 E04G17/06 E04G17/14 E04G17/16 E04G19/00A E04G19/00B E04G21/02B E04G21/12C E04G25/00 E04G27/00

US class: 249/13 52/294 52/414

Classification Explorer

Cited documents: WO9841714 A1, WO9728939 A1, WO0248479 A2, US6158710 A, US3357673 A, US2846749 A, US2526529 A, US2004079859 AA, US2003209648 AA, US1747036 A, FR622331 A, FR2384919 A1, FR1352779 A, ES2142222 AA, ES2120298 AA, EP0436392 A1, EP0123264 A2, DE3536523 C2, DE3536523 A1, DE3129838 A1,

Forward Citations: WO13023330, WO10112633, WO08145790, US9453345, US9441365, US9359780, US9315987, US9273479, US9273477, US9206614, US9080337, US8943774, US8844241, US8793953, US8763328, US8555590, US8458985, US8458969, US8326664, US7698866, US7658051, US7191528, US7055251, US2015191924, US2011301995, US2011131914, US2010223867, US2010119336, US2006207113, US2006107543, US2006042183, FR3045692, ES2308934, EP2461118, EP2461118, CN105019651, CN105019651, CN103470031, CN103276895, CN103276895, CN103195079, CN103104094, CN103104094, CN102720361, CN102425303, CN101942841,

Abstract:
Source: US2004093817A A foundation framework for structures in a reinforced setting material includes a foundation raft with a form having a plurality of modular panels and angular reinforcements for joining at least two faces of at least one right−angle dihedral formed by faces of the modular panels. A layout and positioning template is disposed on top of the form of the foundation raft for correctly dimensioning, positioning, and fitting walls, installations and reinforcements in the foundation raft. Adjustment legs for centering the layout and positioning template are provided, as well as self−centering clamps and a stabilizer having security pins and an anchorage mechanism for securing the form to a support surface.

0) US2816984A – CIRCUIT INTERRUPTER CONSTRUCTION

121) Family number: 20718927 (US2816984A) © PatBase

Title: Circuit interrupter construction

Priority: DE1957S051931 19570114 US19540412182 19540224 US19560569909 19560306 US19570661756 19570527

Family:

Publication number	Publication date	Application number	Application date
DE1114884 B	19611012	DE1957S051931	19570114
DE1135074 B	19620823	DE1957S052104	19570128
GB825913 A	19591223	GB19570000552	19570107
GB825914 A	19591223	GB19580040303	19570107
GB830542 A	19600316	GB19570000555	19570107
US2816978 A	19571217	US19540412182	19540224
US2816981 A	19571217	US19560569909	19560306
US2816984 A	19571217	US19570661756	19570527

Probable Assignee: S AND C ELECTRIC CO

Assignee(s):(std)**:** S AND C ELECTRIC CO ; S AND C ELECTRIC CO EINE NA ; S AND C ELECTRIC COMPANY EINE NA

Assignee(s): S AND C ELECTRIC COMPANY EINE NACH DEN GESETZEN DES STAATES DELAWARE ORGANISIERTE GESE ; S AND C ELECTRIC CO EINE NACH DEN GESETZEN DES STAATES DELAWARE ORGANISIERTE GESE ; S AND C ELECTRIC COMPANY EINE NACH DEN GESETZEN DE ; S AND C ELECTRIC COMPANY

Inventor(s):(std)**:** LINDELL SIGURD INGVALD ; LINDELL SIGURD I

International class (IPC 8–9)**:** H01H31/00 H01H33/76 (Advanced/Invention); H01H31/00 H01H33/70 (Core/Invention)

International class (IPC 1–7)**:** H01H3/32 H01H31/12 H01H31/28 H01H33/08 H01H33/14 H01H33/77 H01H85/00

CPC: H01H31/006 H01H33/76

European class: H01H31/00C H01H33/76

US class: 218/12 218/14 337/156 337/175 337/202 337/275 337/417

Classification Explorer

Cited documents: US444019 A, US2734966 A, US2709736 A, US2671145 A, US2671142 A, US2665415 A, US2658977 A, US2655576 A, US2651695 A, US2621271 A, US2591950 A, US2571492 A, US2555158 A, US2462283 A, US2449450 A, US2438746 A, US2434315 A, US2383795 A, US2351826 A, US2344113 A, US2331778 A, US2272717 A, US2239224 A, US2233826 A, US2228824 A, US2087744 A, US2046701 A, US1953807 A, US1910022 A, US1752575 A, US1410888 A, GB400716 A, FR1008867 A,

Forward Citations: US9704674, US7864023, US6965088, US5861595, US5650602, US4562324, US4491708, US4491707, US3235688, US3176100, US3094598, US3094597, US3090853, US3076076, US3075060, US3032630, US2985737, US2016013002, US2008237194, US2007144878, US2006006144, US2005127040, EP2133388,

Abstract:
Source: GB825913A 825,913. High–voltage switches; snap–action switches; switch cases; operating members for switches; arcing preventing in switches. S. and C. ELECTRIC CO. Jan. 7, 1957, No. 552/57. Class 38 (5). A mechanism for opening under load a high–voltage isolating device, e.g. a disconnecting switch or fuse 16, comprises a stick 37, a support member 30 rigidly mounted on the stick, an auxiliary circuit interrupter 27 flexibly mounted on the support member, contact means 28 on the interrupter for connection to a fixed contact 18 of the isolating device and contact means 29 on the support member 30 for connection to the moving contact 17 of the isolating device, the arrangement being such that on manipulation of the stick 37 the contacts 17, 18 are opened without arcing due to the shunt circuit through the interrupter 27 and the interrupter is then opened to break the load circuit. In the arrangement shown, a contact ring 28 on the interrupter 27 is engaged with a contact arm 24 on the fixed contact 18 and a stud 29 on the support 30 is engaged with a ring 19 extending from the moving contact 17, relative motion between the interrupter 27 and the support member 30 being permitted by a spring–biased universal joint 109. The stick is then pulled to disengage the contacts 17, 18 and to subsequently

open the interrupter 27. The interrupter 27 comprises outer and inner relatively movable insulating tubes 47, 73, the inner tube carrying a sleeve contact 95 and a conducting arm 106 and the outer tube carrying a cap 49 with the contact ring 28. A rod 51 extending from the cap 49 carries a cam member 54 and is connected by a conductor 56 to a contact 58 mounted on the lower end of a metallic tube 65. A tension spring 57 is fixed to the member 54 and the contact 58 and initially the tube 65 is engaged by pivoted latch 66 mounted on the inner insulating tube 73 and the contacts 58, 95 are in engagement. The initial downward movement of the stick 37 which opens the contacts 17, 18 causes the inner tube 73 and tube 65 to move downwardly so stretching the spring 57 while the contacts 58, 95 remain engaged. Then the cam member 54 releases the latch 66, Fig. 8, so that the spring is able to pull up the contact 58 and tube 65 to open the contacts 58, 95 with a snap action. The arc drawn between these contacts is extinguished by gas evolved from a liner 80 secured within the tube 73 and from a member 60 secured to the contact 58. The contact 95 is slotted so as to form contact fingers and the bottom portion of the liner 80 has a tapered groove 100, Fig. 12, over each finger for arc location purposes. The arc−gases escape through the contact 95 and vents 91, 104. A lower cap 103 is of light−transmitting material to permit the operator to observe the formation of the arc and its extinction before removing the mechanism. Specification 825,914 is referred to.

0) GB1171433A – AUTOMATICALLY–RETRACTIVE KEY HOLDER

122) Family number: 706479 (GB1171433A) © PatBase

Title: Automatically–Retractive Key Holder

Priority: GB19680002196 19680115

Family:

Publication number	Publication date	Application number	Application date
GB1171433 A	19691119	GB19680002196	19680115

Probable Assignee: RIVERS ELDEN LELAND

Assignee(s):(std)**:** RIVERS ELDEN LELAND

Assignee(s): ELDEN LELAND RIVERS

Inventor(s):(std)**:** RIVERS ELDEN LELAND

Inventor(s): ELDEN LELAND RIVERS

International class (IPC 8–9)**:** A45C11/32 (Advanced/Invention); A45C11/00 (Core/Invention)

International class (IPC 1–7)**:** B60R25/00

CPC: A45C11/328

European class: A45C11/32T2

Classification Explorer

Abstract:
Source: GB1171433A 1,171,433. Key holder. E. L. RIVERS. 15 Jan., 1968, No. 2196/68. Heading A4G. A key holder for automatically withdrawing a key from a lock is formed of a hollow cylinder 33 closed at the end having a chain hole 34 and with a bulbous part 30 diametrically slotted at 36 at the open end 35. A flattened finger annulus 45 slides over cylinder 33 until projections on part 30 engage grooves 50 permitting limited rotation of annulus 45. A plunger 38 slotted at 40 up to a bridge at one end and a spring 36 are held in the hollow cylinder by screws 43 passing through annulus holes 46 and short circumferential cylinder slots to enter the plunger slot 40 and abut the end bridge, plunger splines 41 entering slots 42 in part 30. A key has its head secured in slots 40 and 36 by screws 37 biting into the head through holes in part 30, the key blade then extending along plunger 38 in slot 40. Weakened end portions 44, 44[1] may be snapped off the plunger to accomodate different lengths of key blade and allow a small end portion of the blade to protrude. When the key blade is inserted in e.g. an automobile ignition cylinder lock the plunger is forced into cylinder 33 compressing spring 36. On turning the key in the lock, annulus 45 rotates slightly and engages screws 43 in plunger notches 48 to prevent spring 36 ejecting plunger 38 and possibly forcing the key out of the lock. On turning the key to switch off ignition, screws 43 leave notches 48, plunger 38 is ejected and forces the key out of the lock. In a modification, one screw 37 is used and may replace the splines 41 and slots 42.

0) US5937920A – PRODUCT DISPENSING SYSTEM

123) Family number: 12401500 (US5937920A) © PatBase

Title: Product dispensing system

Priority: US19970905638 19970804 US19990329037 19990609 WO1998US15216 19980723

Family:

Publication number	Publication date	Application number	Application date
AU199886604 A1	19990222	AU19980086604	19980723
AU746224 B2	20020418	AU19980086604	19980723
CA2297293 AA	20000121	CA19982297293	19980723
EP1042169 A1	20001011	EP19980937982	19980723
US5937920 A	19990817	US19970905638	19970804
US6092569 A	20000725	US19990329037	19990609
WO9906277 A1	19990211	WO1998US15216	19980723

Probable Assignee: LINK RES AND DEV

Assignee(s):(std)**:** LINK RES AND DEV ; LINK RES AND DEV INC

Assignee(s): LINK RESEARCH AND DEVELOPMENT INC ; SIMMEL THOMAS L ; AUERBACH DAVID R

Inventor(s):(std)**:** AUERBACH DAVID R ; SIMMEL THOMAS L

Inventor(s): THOMAS L SIMMEL ; DAVID R AUERBACH

Agent(s): GRIFFITH HACK; MACRAE AND CO

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 HR 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 UZ VN YU ZW

International class (IPC 8–9): B65B1/06 B65B1/36 B65B39/00 G01F11/24 (Advanced/Invention); B65B1/06 B65B1/30 B65B39/00 G01F11/10 (Core/Invention)

International class (IPC 1–7): B65B1/06

CPC: B65B1/06 B65B1/36 B65B39/001 G01F11/24

European class: B65B1/06 B65B1/36 B65B39/00A G01F11/24

US class: 141/100 141/18 141/2 141/231 141/346 141/351 141/352 141/354 141/9 222/438 222/452

Classification Explorer

Cited documents: US966270 A, US689468 A, US5765605 A, US5651398 A, US5495962 A, US5425404 A, US5379812 A, US5293913 A, US5094403 A, US4832235 A, US4174058 A, US4092046 A, US3995777 A, US3269612 A, US3251511 A, US3179303 A, US3080074 A, US3076580 A, US2877937 A, US2587598 A, US2110762 A, US1914766 A, US1335800 A, US1068067 A,

Forward Citations: WO02086428, USRE44310, USD456654, US9590229, US9194732, US9096018, US9091924, US9073269, US9051091, US8981921, US8932076, US8833614, US8517760, US8464766, US8439089, US8276624, US8181676, US8146622, US7959031, US7546857, US7451901, US6978914, US6796343, US6789581, US6415957, US6367517, US2015162595, US2014083557, US2011094620, US2011073214, US2010154925, US2010126595, US2009272737, US2009193937, US2009050232, US2009001104, US2008011785, US2007228083, US2007194056, US2007000953, US2005247371, US2005067439, US2004145803, KR100872432, EP2312281, EP1643220,

Abstract:
Source: US5937920A By employing a product dispensing head assembly securely mounted to a storage container, within which desired flowable material is retained, with the head assembly being movable into a plurality of alternate positions, the controlled, measured, dispensing and delivery of any desired flowable product is attained. In the preferred embodiment, the product dispensing head assembly incorporates automatic locking means which are automatically engaged when the product dispensing head assembly is in the closed position.

Furthermore, a special dispensing coupling is preferably employed to effectively disengage the locking means, thereby providing assurance that no individual can obtain unauthorized access to the flowable material stored within the closed and sealed container. In addition, the product dispensing head assembly is constructed with measuring means integrally formed therewith which is movable between a plurality of alternate positions, thereby dispensing precisely desired, measured quantities of the flowable material.

0) US2005245880A – MULTI–CHAMBER, SEQUENTIAL DOSE DISPENSING SYRIN...

124) Family number: 32384911 (US2005245880A) © PatBase

Title: MULTI–CHAMBER, SEQUENTIAL DOSE DISPENSING SYRINGE

Priority: AU20050243678 20050426 AU20120202861 20120516 US20040838101 20040503 US20050838101 20050426 US20060446779 20060605 US20080051717 20080319 US20060359304 20060221 US20050284504 20051122 WO2005US14299 20050426

Family:

Publication number	Publication date	Application number	Application date
AU2005243678 AA	20051124	AU20050243678	20050426
AU2005243678 BB	20120216	AU20050243678	20050426
AU2012202861 AA	20120607	AU20120202861	20120516
BRPI0510532 A	20071030	BR2005PI10532	20050426
CA2565531 AA	20061102	CA20052565531	20050426
CA2565531 C	20111011	CA20052565531	20050426
CN101559247 A	20091021	CN200910135639	20050426
CN1980706 A	20070613	CN200580021608	20050426
CN1980706 B	20100616	CN200580021608	20050426
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HK1105177 A3	20080206	HK20070113514	20071212
IN05306DN2006 A	20070803	IN2006DN05306	20060913
JP2007535987 T2	20071213	JP20070511414T	20050426
MXPA06012625 A1	20070619	MX2006PA12625	20050426
US2005245880 AA	20051103	US20040838101	20040503
US2006100590 AA	20060511	US20050284504	20051122
US2006142701 AA	20060629	US20060359304	20060221
US2006224105 AA	20061005	US20060446779	20060605
US2008319400 AA	20081225	US20080051717	20080319
US6997910 BB	20060214	US20040838101	20040503
US7048720 BA	20060523	US20050284504	20051122
US7101354 BB	20060905	US20060359304	20060221
US7998106 BB	20110816	US20060446779	20060605
WO05110516 A2	20051124	WO2005US14299	20050426
WO05110516 A3	20060504	WO2005US14299	20050426

Probable Assignee: INFUSIVE TECHNOLOGIES LLC

Assignee(s):(std)**:** HOWLETT MICHAEL ; HOWLETT MICHAEL W ; HOWLETT MICHAEL WALLACE ; INFUSIVE TECHNOLOGIES LLC ; MERCER JAMES V ; THORNE GALE H JR ; THORNE GALE H ; MERCER JAMES ; THORNE GALE JR ; SAN JUAN NESTOR R ; ROBINSON BRADLEY C ; THORNE JR GALE H ; MERCER JAMES VICTOR ; SAN JUAN NESTOR RODRIGUEZ ; ROBINSON BRADLEY CARLING

Assignee(s): BATEMAN IP LAW GROUP PC ; THORNE MEDICAL INC

Inventor(s):(std)**:** HOWLETT MICHAEL ; HOWLETT MICHAEL MERCER JAMES T ; GALE THORNE JR ; HOWLETT MICHAEL W ; MERCER JAMES V ; MERCER JAMES ; HOWLETT MICHAEL WALLACE ; JAMES MERCER ; THORNE GALE H JR ; THORNE GALE H ; THORNE GALE JR ; MERCER JAMES VICTOR ; THORNE JR GALE H ; SAN JUAN NESTOR R ; ROBINSON BRADLEY C ; SAN JUAN NESTOR RODRIGUEZ ; ROBINSON BRADLEY CARLING ; MICHAEL HOWLETT ; THORNE JR GALE

Inventor(s): THORNE GALE ; SAN JUAN NESTOR ; ROBINSON BRADLEY ; THORNE ; THORNE GALE HJR ; HOWLETT MICHAEL MERCER JAMES THORNE GALE JR... ; HOWLETT MICHAEL MERCER JAMES THORNE GALE JR THORNE ; JR GALE H ; GALE H

THORNE ; GALE JR THORNE

Agent(s): GRIFFITH HACK; CASSAN MACLEAN; YAMAZAKI KOSAKU; ONO SHINJIRO; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO; GALE H THORNE; HOLLAND AND HART LLP; GALE H

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 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): A61M1/00 A61M5/00 A61M5/19 A61M5/24 A61M5/28 A61M5/31 A61M5/315 (Advanced/Invention); A61M5/31 A61M5/315 (Advanced/Non–invention); A61M1/00 A61M5/00 A61M5/19 A61M5/24 A61M5/28 A61M5/31 A61M5/315 (Core/Invention); A61M5/31 A61M5/315 (Core/Non–invention); A61M (Subclass/Invention)

International class (IPC 1–7): A61M5/315

CPC: A61M5/284 A61M5/285 A61M5/286 A61M5/31596 A61M2005/1787 A61M2005/3128 A61M2005/3123 A61J1/2096 A61J1/201 A61J1/2058 A61J1/2062 A61J1/2075 A61J1/2082

European class: A61J1/00M6 A61J1/20F A61M5/28M A61M5/28S A61M5/315M K61J1/20A10A K61J1/20A2A K61J1/20A6C K61J1/20A6C1 K61J1/20A8B K61M5/178S K61M5/28S2 K61M5/315M K61M5/31A7 K61M5/31A9

US class: 604/191 604/191P 604/191S 604/218 604/218P 604/231 604/231P 604/32 604/32P

Classification Explorer

Cited documents: WO9521639 A1, WO04014533 A1, USRE34845 E, USH2027 H1, US7267668 BB, US7198619 BB, US7164133 BB, US7101354 BB, US7081107 BB, US7077826 BA, US7048720 BA, US7033339 BA, US7001362 BB, US7001362 BA, US7001362 B1, US6997910 BB, US6997910 B1, US6972005 BB, US6962576 BB, US6948522 BB, US6948522 B1, US6929126 BA, US6884231 BA, US6866653 BB, US6866653 BA, US6866653 B1, US6817987 BB, US6807797 BB, US6740062 BB, US6740062 BA, US6740062 B1, US6723074 BA, US6715520 BB, US6715520 B1, US6698622 BB, US6692468 BA, US6645179 BA, US6641561 BA, US6622721 BB, US6622721 BA, US6622721 B1, US660223 A, US6602223 BB, US6602223 BA, US6602223 B1, US6591876 BB, US6591876 B1, US6564972 BB, US6544233 BA, US6537263 BA, US6527019 BB, US6527019 B1, US6474375 BB, US6474375 B1, US6468250 BB, US6464667 BA, US6425885 BA, US6425880 BA, US6419656 BA, US6409708 BA, US6408897 BA, US6402716 BA, US6398031 BA, US6394314 BA, US6379328 BA, US6368306 BA, US6343629 BA, US6290680 BA, US6267154 BA, US6253804 BA, US6245046 BA, US6234997 BA, US6234190 BA, US6224568 BA, US6224561 BA, US6210361 BA, US6196016 BA, US6171220 BA, US6171220 B1, US6164144 A, US6161364 A, US6157036 A, US6149628 A, US6143573 A, US6142977 A, US6132400 A, US6123685 A, US6120478 A, US6090081 A, US6077252 A, US6070761 A, US6065645 A, US6056921 A, US6045004 A, US6040186 A, US6027481 A, US6027472 A, US5998217 A, US5993744 A, US5971953 A, US5971181 A, US5899889 A, US5899881 A, US5891087 A, US5876372 A, US5865799 A, US5865798 A, US5860739 A, US5851200 A, US5830193 A, US5827262 A, US5827233 A, US5819988 A, US5817955 A, US5817056 A, US5807323 A, US5795337 A, US5788670 A, US5785682 A, US5779668 A, US5766147 A, US5743890 A, US5743888 A, US5743886 A, US5716339 A, US5713857 A, US5704918 A, US5704520 A, US5695465 A, US5688252 A, US5685846 A, US5674195 A, US5665068 A, US5647845 A, US5643218 A, US5637087 A, US5630800 A, US5605542 A, US5599312 A, US5566729 A, US5549569 A, US5542934 A, US5542760 A, US5531683 A, US5522804 A, US5501371 A, US5496473 A, US5496284 A, US5489266 A, US5466219 A, US5445614 A, US5439452 A, US5429610 A, US5399170 A, US5395326 A, US5395325 A, US5372586 A, US5364369 A, US5360410 A, US5354285 A, US5338303 A, US5330426 A, US5329976 A, US5312336 A, US5308322 A, US5304137 A, US5298024 A, US5290259 A, US5290228 A, US5286257 A, US5271531 A, US5236420 A, US5213236 A, US5185007 A, US5171220 A, US5147324 A, US5139490 A, US5137511 A, US5122117 A, US5109160 A, US5080649 A, US5069670 A, US5062828 A, US5061252 A, US5039863 A, US5037402 A, US5037390 A, US5032117 A, US5026353 A, US5012845 A, US4986818 A, US4979652 A, US4968299 A, US4938063 A, US4936841 A, US4932944 A, US4932937 A, US4929230 A, US4874381 A, US4861335 A, US4857056 A, US4853546 A, US4834149 A, US4833329 A, US4792329 A, US4776704 A, US4773900 A, US4768568 A, US4738660 A, US4737150 A, US4722733 A, US4698055 A,

US4693706 A, US4673396 A, US4668223 A, US4655747 A, US4643721 A, US4610666 A, US4594073 A, US4589871 A, US4581015 A, US4576211 A, US4564054 A, US4563054 A, US4543094 A, US4540410 A, US4532969 A, US4515586 A, US4479578 A, US4464174 A, US4464173 A, US4412836 A, US4411275 A, US4405317 A, US4401432 A, US4356822 A, US4354507 A, US4331146 A, US4328802 A, US4323066 A, US4303070 A, US4296785 A, US4254768 A, US4210142 A, US4185628 A, US4180072 A, US4180070 A, US4159570 A, US4153057 A, US4133313 A, US4116240 A, US4085749 A, US4066080 A, US4061144 A, US4055177 A, US4048999 A, US4041945 A, US4036225 A, US4031895 A, US4031892 A, US4014332 A, US4014330 A, US3976068 A, US3946732 A, US3859985 A, US3326215 A, US2564977 A, US2009306621 AA, US2009198217 AA, US2009198211 AA, US2009194453 AA, US2009062740 AA, US2009057589 AA, US2007265577 AA, US2007265574 AA, US2007260176 AA, US2007255203 AA, US2007255200 AA, US2007249996 AA, US2007219492 AA, US2007208295 AA, US2007185438 AA, US2007167910 AA, US2007156102 AA, US2007073226 AA, US2007005022 AA, US2007005020 AA, US2006258977 AA, US2006224105 AA, US2006211995 AA, US2006200084 AA, US2006189943 AA, US2006184103 AA, US2006142701 AA, US2006118199 AA, US2006100590 AA, US2006100587 AA, US2006084914 AA, US2006079834 AA, US2006069356 AA, US2006052747 AA, US2005277891 AA, US2005261635 AA, US2005245880 AA, US2005240159 AA, US2005236063 AA, US2005234337 AA, US2005192543 AA, US2005182357 AA, US2005177100 AA, US2005119610 AA, US2005119609 AA, US2005113754 AA, US2005039417 AA, US2005028489 AA, US2005004530 AA, US2004254525 AA, US2004236273 AA, US2004215135 AA, US2004186437 AA, US2004127846 AA, US2004092864 AA, US2004064041 AA, US2004039344 AA, US2004006315 AA, US2003212372 AA, US2003199816 AA, US2003197024 AA, US2003195489 AA, US2003167041 AA, US2003105477 AA, US2003105433 AA, US2003088216 AA, US2003040701 AA, US2003036724 AA, US2003004467 AA, US2002192113 AA, US2002145007 AA, US2002082560 AA, US2002065490 AA, US2002055708 AA, US2002035351 AA, US2002022804 AA, US2002017196 AA, US2001034506 AA, US2001031948 AA, US2001009989 AA, US2001008962 AA, US1694767 A, JP8294532 A2, EP1698366 A1, EP1684822 A2, EP1652540 A2, EP1613367 A2, EP1602415 A1, EP1598088 A1, EP1553999 A2, EP1530978 A1, EP1520597 A1, EP1487521 A1, EP1450881 A2, EP1437150 A1, EP1365824, EP1213036 A1, EP1096963 A1, EP1092441 A1, EP1066847 A1, EP1019120 A1, EP1013299 A1, EP1011784, EP0983099 A2, EP0943349 A1, EP0925083, EP0882441 A2, EP0879611 A2, EP0878206 A2, EP0815886 A2, EP0796658 A2, EP0793973 A2, EP0781567 A2, EP0768905 A1, EP0728492 A2, EP0720857 A1, EP0718002 A2, EP0717611, EP0709106 A2, EP0703797 A1, EP0695555 A1, EP0692272 A1, EP0684848 A1, EP0616510 A1, EP0605541 A1, EP0600580 A2, EP0574524 A1, EP0568321 A2, EP0545324 A1, EP0540681 A1, EP0520618 A2, EP0519240 A1, EP0511402 A1, EP0470977, EP0453667 A1, EP0440846, EP0429052 A1, EP0363338 A1, EP0340880 A2, EP0328699, EP0298067 A1, EP0237636 A2, EP0212798 A1, EP0201611, EP0188981, EP0071288 A1, EP0047744, EP0028557,

Forward Citations: WO17069818, WO16179208, WO16172396, WO16116843, WO15177082, WO14099846, WO14093853, WO14001880, WO13151523, WO13112579, WO13021186, WO11077434, WO11056375, WO11035252, WO08150208, WO08091251, US9694134, US9675677, US9674811, US9662272, US9657902, US9615997, US9610217, US9597454, US9592343, US9592317, US9586008, US9581152, US9572613, US9561329, US9539397, US9526830, US9522097, US9457158, US9404490, US9351905, US9333290, US9289562, US9238107, US9205426, US9205075, US9180416, US9180249, US9180245, US9180172, US9173996, US9149581, US9132062, US9125995, US9114215, US9089475, US9022995, US8992505, US8992469, US8936577, US8894608, US8834449, US8822950, US8821436, US8777479, US8728054, US8708376, US8665998, US8657861, US8597232, US8585377, US8569713, US8562620, US8545445, US8544682, US8540723, US8529517, US8506527, US8496646, US8491570, US8454564, US8430843, US8414563, US8414522, US8403180, US8316898, US8267892, US8262616, US8257338, US8223028, US8162875, US8152778, US8142403, US8113244, US8075547, US8075533, US8066672, US8034026, US8016789, US7998106, US7927563, US7789862, US7503905, US7319725, US2015025456, US2015025455, US2015025454, US2014296791, US2014269160, US2014254303, US2014060664, US2013116657, US2012323173, US2012265171, US2012226238, US2012197218, US2012187308, US2012156178, US2012109076, US2011301539, US2011256590, US2011160664, US2011087164, US2011083978, US2011017777, US2010327007, US2010298811, US2010292672, US2010286750, US2010262152, US2010240004, US2010114068, US2010106139, US2010094222, US2010094215, US2010091606, US2010089475, US2010087786, US2010082015, US2010082013, US2009326475, US2009299289, US2009292290, US2009287184, US2009281497, US2009118680, US2009088724, US2009062740, US2008319400, US2008269668, US2008208137, US2007228071, US2007219597, US2007219496, US2007219480, US2007078392, US2007049870, US2006258977, US2006224105, US2006123962, US2002094041, KR20120077486, KR101691218, KR101504456, JP2009082715, CN102861369, CN102861369,

Abstract:
Source: US2005245880A A valve assembly is disclosed which effectively partitions a syringe into proximal and distal chambers to provide a multi−chamber, sequentially dispensing syringe apparatus. The valve assembly may be effectively used with a variety of standard, currently available commercial syringes and pre−filled syringes. Incorporated in the valve assembly is a valved stopper having a valve (which may be a slit valve), an impact sensor which opens the valve upon impact between the valve assembly and internal distal end of the syringe and a gas separator which separates liquid from gas disposed in the proximal chamber to assure gas is not delivered therefrom. The valve assembly is displaced as a plunger of the syringe is displaced via communication through fluid in the proximal chamber of the syringe. The actuator has a latching feature which latches the valve to an open state after being opened by the impact sensor. The gas separator has a proximally disposed orifice which facilitates priming. The valve assembly may be made from two parts. One part, a valved stopper, may be molded from the same rubber based material used in syringe plunger stoppers. The second part, the valve actuator, may be injection molded as a single part. A synthetic resinous material which is compatible with manufacture of living hinges my be used for the second part. Multiple valve assemblies may be used in a single syringe barrel.

0) GB190011414A – IMPROVEMENTS IN CALCULATING OR COMPUTING REGIST...

125) Family number: 36831893 (GB190011414A) © PatBase

Title: Improvements in Calculating or Computing Registers specially applicable to Type–writers.

Priority: 19000623

Family:

Publication number	Publication date	Application number	Application date
GB190011414 A	19010608		00000000

Probable Assignee: JARDINS BENJAMIN MYRRICK DES

Assignee(s):(std)**:** JARDINS BENJAMIN MYRRICK DES

Assignee(s): BENJAMIN MYRRICK DES JARDINS

Inventor(s):(std)**:** JARDINS BENJAMIN MYRRICK DES

Inventor(s): BENJAMIN MYRRICK DES JARDINS

Abstract:
Source: GB190011414A 11,414. Des Jardins, B. M. June 23. Type–writers and like machines.–Relates to calculating or computing registers specially applicable to typewriters. The register is enclosed in a cylindrical case 1 having a straight – slot or opening 14 and secured to the type–writer frame by a bracket. Six indicator bands or rings 3, representing units, tens, c. and graduated with large characters for addition and small characters for subtraction, are confined between annular flanges 8. Each ring, except the units ring, has internal teeth 20 to engage pinions 21 on the shaft 22. Each ring, except the last, has an annular flange 23 engaging a recess in the adjacent ring and carrying a double toothed segment 23 engaging one of the pinions 21. Alternate teeth on the pinions 21 are wider than the others and the flange 23 rests on two of the wide teeth, when the pinion is elevated, so as to prevent turning of the pinion unless the narrow teeth are engaged by the segment 23. The rings 3, except the first, have ten internal driving–teeth 24 to the left of the teeth 20. A pinionblock 25 and locking–plug 26 may be reciprocated but cannot turn in the casing. The block 25 is chamfered at 29 to receive the pinions 21 and the operating mechanism for the rising and falling carrying blade 30 engaging a slot 31. The pinion shaft 22 is connected by arms 32 to the blade 30 which has slotted lugs 33, engaging an operating–pin 34, and its sides are indented to ensure alignment of the pinions with the teeth 24. Cross–bars 36 have V–shaped ears 37 to align the teeth of the pinions 20 when these are lowered. The pin 34 is carried by a rocker–arm, rigidly connected to a shaft 38, which telescopes in a rockshaft 40 having slots 42 engaged by a pin 41. The locking–plug 26 has an external rib 43 to engage the teeth 24. A shaft 44, secured in place by a disc 46 and having a bearing in the right–hand end of the block 25, carries an annular driver 47 having a tooth 48 to engage any of the teeth 24. A collar 49, fast on the shaft 44, connects the several laterally–moving members together. A rod 50, connected to the head 25, is forced to the left by a spring 51. The shaft 44 telescopes in a shaft 53 to which it is connected by a pin and slots. The shaft 40 carries a rocker arm connected by a rod to the regulation carriage–shift bar of the type–writer, this bar being depressed by the ordinary key and space levers. A horizontal rod, fastened to the paper carriage has notches at intervals corresponding with the graduations on a scale on the type–writer. An angular pivoted arm bears against the head of the rod 50 and a sleeve adjustably connected, by a set–screw, to the notched rod. The sleeve carries a pivoted tripping–lug having steps or shoulders, the lowest of which drops by gravity against the top of a fixed frame except when a cam plate, adjustably connected to a fixed plate by a slot and screw, is encountered. The driver shaft 53 extends through a case 69, Fig. 15, and is driven by a clock–movement consisting of a gear 70, on a stud 71, and a pinion 72 on the shaft 53, and controlled by an escapement operated by the figure–key levers and the carriage–shift bar. A spring–actuated pawl 75 and a ratchet 76 are provided to enable the spring to be wound. The shaft 53 carries a wheel 68, having teeth on both sides, and a splined sleeve 77 carrying a loose stop disc 78 carrying pins 79, 80, and stops 81, 81, 81. A pivoted shifter 82 of bell–crank lever form is attached to the shift bar, its upper end being bifurcated. One bifurcation 82 normally engages one of the left–hand teeth of the gear 68, while the other bifurcation 82 engages a groove 77 in the sleeve 77. An extension from the case 69 lies in the path of the stop–pin 80 and is connected to the disc 78 by a spring which tends to retain the disc in its normal position. Ten rock shafts, in the bottom of the case 69, carry rocker arms, pivotally connected to the figure–key levers 1 by straps, cylinders, and plungers, each shaft being returned to normal position by a spiral spring. These shafts carry other rocker arms adapted to project rods into the path of the stops 81 c. A cut–out finger, adapted to engage the gear 68, is connected to a rock shaft and is held in engagement by a spring and released by a cut–out key engaging a stop on the frame. In a modification, the operating levers, carrying stops, are pivoted to a shaft under the type–writer key levers. Pins on the shaft engage recesses in the hubs of the levers, the size of each recess governing the extent of movement. An escapement shaft, arranged parallel to the operating shaft, carries a series of radial stop pins and a shaft in line with it, and actuating the adding machine, is operated by a motor and carries a slidably–connected escape wheel having ten teeth on each side and normally locked by a fixed stop. A pin on the escape shaft is normally held by a spring against a fixed stop. The escape wheel is moved, each time a key is depressed, by an elbow lever having a fork, engaging a groove in its hub, and an arm connected to the operating shaft. The adding arrangement may be thrown into action by a shift–lever normally depressed by a spring and carrying an arm engaging a pin on the key–shaft which carries a loose disc connected to it by a spiral spring and having an arm engaging a pin on the shaft and an arm to engage the arm on the shift–lever. Displacement of the escape–shaft while inoperative is prevented by a pin on

its end. The driving−wheel is moved longitudinally, so as to engage any one of the carrying wheels, by depressing keys on levers having toes to engage the frame and intercept an arm on the slide which moves the driver. The key−board is carried by levers carrying an arm connected to a rack, engaging a pinion used to wind−up the motor spring, and connected with a sector gear engaging a pinion on a vertical rock shaft. This shaft has an arm with a segmental slot engaged by a pin on a lever pivoted to the main frame and connected by a link with the slide, which carries two pawls acting on a vibrating rack forming an ordinary escapement, such as is used on type−writers. A spring tends to move the slide to the right. The rack is carried by a pivoted frame engaged by an arm on the type−writer key−shaft each time it is operated. The type−writer carriage is located at any desired point for tabulating figures or words by means of a pinion engaging a rack operating a pinion on a shaft carrying ten stepped radial pins to engage similar pins on a shaft having a bevel−wheel engaging a segment carried by a rock shaft carrying a tapered blade engaged by the stems of a series of controlling keys. Each carrying−wheel carries another wheel, engaged by a spring detent, and its carrying−tooth is pressed against a stop by a spring. The slide carries an index. When the spring is fully wound a pin raises the rack out of action, and when the spring is run down the pin operates a rod under the type−writer keys so as to lock them. In a modified form of the carrying−device, a lever pawl is pressed upwards by a spring and carries a loose pawl and the locking−device. The lever is held out of action by a trigger operated by a stud on the carrying−wheel. The pawl crank has a catch in the path of a projection on a rod. Each of the levers is re−set by a projection on the shaft.

0) US2006196237A – STEERING LOCK DEVICE

126) Family number: 31304166 (US2006196237A) © PatBase

Title: STEERING LOCK DEVICE

Priority: JP20030116894 20030422 JP20030145024 20030522 WO2004JP05533 20040419

Family:

Publication number	Publication date	Application number	Application date
CN100368238 C	20080213	CN200480010908	20040419
CN1777528 A	20060524	CN200480010908	20040419
EP1632411 A1	20060308	EP20040728260	20040419
EP1632411 A4	20061220	EP20040728260	20040419
JP2004094205 A1	20060713	JP20050505727	20040419
JP4491416 B1	20100630	JP20050505727T	20040419
JP4491416 B2	20100630	JP20050505727T	20040419
KR20050116906 A	20051213	KR20057019942	20040419
US2006196237 AA	20060907	US20050553888	20051024
WO04094205 A1	20041104	WO2004JP05533	20040419

Probable Assignee: NSK LTD

Assignee(s):(std)**:** HIBINO TADASHI ; KOJIMA HIDEKI ; KURITA KENJI ; NEGISHI TAKESHI ; NSK LTD ; NSK STEERING SYS CO LTD ; NSK STEERING SYSTEMS CO LTD

Assignee(s): NSK STEERING SYSTEMS CO

Inventor(s):(std)**:** HIDEKI HIBINO TADASHI NEGISHI ; KOJIMA HIDEKI ; KURITA KENJI ; NEGISHI TAKESHI ; TAKESHI NEGISHI ; TADASHI HIBINO ; KENJI KURITA ; HIDEKI KOJIMA ; HIBINO TADASHI

Inventor(s): HIBINO TADASHI NEGISHI TAKESHI KURITA KENJI ; HIBINO TADASHI NEGISHI TAKESHI KURITA KENJI KOJIMA ; HIBINO TADASHI NEGISHI TAKESHI KURITA KENJI KOJIMA HIDEKI

Agent(s): SUGHRUE MION 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): B60R25/02 B60R25/021 B60R25/0215 B62D1/18 B62D1/189 B62D5/04 (Advanced/Invention); B60R25/02 B62D1/16 (Advanced/Non–invention); B60R25/02 B62D1/18 B62D5/04 (Core/Invention)

International class (IPC 1–7): B60R25/02 B62D1/16

CPC: Y10T70/5664 B60R25/02 B60R11/0229 B60R25/02115 B60R25/02118 B60R2011/0005 B60R2011/0026 B60R2011/0056 B60R2011/0071 B60R2011/0075 G02B27/0149

European class: B60R25/02 B60R25/021C2 L60R11/00P1A L60R11/00P1K L60R11/00R4A5 L60R11/00R4B13 L60R11/00R4B9

US class: 70/186 70/186P

Classification Explorer

Cited documents: US6327882 BA, US6237376 BA, US5951031 A, US5685180 A, US5121616 A, US5117664 A, US4991458 A, US4907427 A, US4427967 A, US4400954 A, US4332306 A, US4250976 A, US3426560 A, US2003160413 AA, US2002029595 AA, JP8175328, JP7257322 A2, JP2001374 U1, JP2000168501 A2, FR2793749 A1, EP0630800 A1, DE19521731 A1,

Forward Citations: US7823426, US7703309, US2017106904, US2008178644, US2008178643, JP2011240874, JP2007155032, FR2889142,

Abstract:
Source: US2006196237A In a steering locking device comprising a locking device for automatically locking a steering shaft when a key of an ignition switch is withdrawn in a state in which the key is withdrawable, a key mechanism section and the locking device of the ignition switch are provided separately, and the locking device is provided at any portion on an output shaft of a steering wheel extending from the steering wheel to a steering gear section. Accordingly, a large space around knees can be secured while securing a sufficient collapse stroke, and a good steerability is maintained by preventing resonance of the steering wheel caused by lowering of a natural frequency vibration of a steering column while reducing the weight of the device.

0) US2005076683A – MULTI–STAGE MOTORCYCLE LOCK

127) Family number: 31811405 (US2005076683A) © PatBase

Title: MULTI–STAGE MOTORCYCLE LOCK

Priority: US20030681941 20031010

Family:

Publication number	Publication date	Application number	Application date
US2005076683 AA	20050414	US20030681941	20031010

Probable Assignee: CHEN MENG FU

Assignee(s):(std)**:** CHEN AN HUNG

Assignee(s): CHEN MENG FU

Inventor(s):(std)**:** CHEN AN HUNG

Agent(s): AN HUNG CHEN

International class (IPC 8–9)**:** E05B37/02 (Advanced/Invention); E05B37/00 (Core/Invention)

International class (IPC 1–7)**:** E05B37/02

CPC: E05B37/025 Y10T70/43

European class: E05B37/02B

US class: 70/28

Classification Explorer

Cited documents: US6675614 BB, US6539761 BB, US6523373 BA, US6386005 BA, US5924313 A, US5850751 A, US5791169 A, US5410895 A, US5142888 A, US5005384 A, US4805426 A, US4621509 A,

Forward Citations: US9279325, US7249475, US2006130539,

Abstract:
Source: US2005076683A A multi–stage motorcycle lock includes a locking seat, a guide rod, a combination lock with numbers thereon, a retaining seat, a stopper, a protecting sleeve, a telescopic rod, a stud lock rod, etc. Each of plurality of eccentric holes of the combination lock is formed with a confining ring, and the locking means of the telescopic rod is eccentric. The eccentric design causes that the lock only has only correct number. The eccentric holes are rotated through 180 degrees, the locking means of the telescopic rod is stopped by the confining rings of the combination lock so that the telescopic rod can not protrude out or reduce inwards. Thereby, the effect of burglar–proof is achieved. There are two locking stages so as to have a preferred burglar–proof is achieved. The locking and unlocking of the present invention are not performed by using any key. Thus the operation is convenient.

0) US3521368A – APPARATUS FOR CHECKING THE FLANKS OF GEARS,ESPE...

128) Family number: 152020 (US3521368A) © PatBase

Title: APPARATUS FOR CHECKING THE FLANKS OF GEARS,ESPECIALLY BEVEL GEARS

Priority: DE1967K062636 19670624 DE1967K063026 19670804

Family:

Publication number	Publication date	Application number	Application date
CH474043 A	19690615	CH19680004894	19680403
CH478400 A	19690915	CH19680004895	19680403
DE1623210 A1	19710805	DE1967K062636	19670624
DE1623210 B2	19721130	DE1967K062636	19670624
DE1623210 C3	19761230	DE1967K062636	19670624
DE1623211 A1	19720127	DE1967K063026	19670804
DE1623211 B2	19731004	DE1967K063026	19670804
DE1623211 C3	19770728	DE1967K063026	19670804
FR1579587 A	19690829		19680529
FR95409 E	19701106	FR19680155205	19680617
GB1189922 A	19700429	GB19680022808	19680514
GB1189923 A	19700429	GB19680023104	19680515
JP49021670 B4	19740603	JP19680043492	19680624
US3521368 A	19700721		19680621
US3546780 A	19701215	US19680738987	19680621

Probable Assignee: KLINGELNBERG SOEHNE FERD

Assignee(s):(std)**:** KLINGELNBERG SOEHNE FERD ; FERD KLINGELNBERG SOEHNE FA W ; FERD KLINGELNBERG SOHNE G M B

Assignee(s): FIRMA W FERD KLINGELNBERG SOEHNE ; KLINGELNBERG W FERD KLINGELNBERG SOEHNE ; W FERD KLINGELNBERG SOEHNE ; W FERD KLINGELNBERG SOEHNE 5630 REMSCHEID ; W FERD KLINGELNBERG SOHNE ; W FERD KLINGELNBERG SOHNE G M B H

Inventor(s):(std)**:** DR SEYBOLD ROLF ING ; KARL HEINZ WEBER ; SEYBOLD ROLF ; SEYBOLD ROLF DR ING ; WEBER KARL HEINZ

Inventor(s): ROLF SEYBOLD ; HEINZ WEBER KARL ; ING SEYBOLD ROLF DR

International class (IPC 8–9)**:** G01B21/20 G01B5/008 G01B5/16 G01B5/20 (Advanced/Invention); G01B21/20 G01B5/008 G01B5/14 G01B5/20 (Core/Invention)

International class (IPC 1–7)**:** G01B19/00 G01B5/20

CPC: G01B5/20

European class: 42B19 G01B5/20

US class: 33/501.14

Classification Explorer

Cited documents: US3321840 A, US3270425 A,

Forward Citations: US7997173, US2010275748, JP2008534918, JP2001174252, FR2947623,

Abstract:
Source: US3521368A ABSTRACT OF THE DISCLOSURE Apparatus for checking the tooth profiles of gears comprising; a support for the gear to be checked and a support for a feeler and a base common to said supports, said supports being adjustable angularly about an axis vertical to the base, each support comprising a carnage. A lever pivoted on the aforementioned axis interconnects the carnages for simultaneous movement. Movement of the carriage pertaining to the gear support causes rotation of the gear to be checked that is mounted thereon. Movement of the carriage pertaining to the support for the feeler causes rotation of the feéler. The supports are adjustable relatively to accommodate for diiferent types and sizes of gears and the feeler is adjustable on its support during rotation of the gear being checked and the feeler, the feeler follows the profile of a tooth of the

gear. _

0) US3546957A – VARIABLE RATIO STEERING GEAR

129) Family number: 737225 (US3546957A) © PatBase

Title: VARIABLE RATIO STEERING GEAR

Priority: GB19680018087 19680417

Family:

Publication number	Publication date	Application number	Application date
GB1266345 A	19720308	GB19680018087	19680417
US3546957 A	19701215	US19690816333	19690415

Probable Assignee: CAM GEARS LTD

Assignee(s):(std)**:** CAM GEARS LTD ; GEORGE W LUCKEY

Inventor(s):(std)**:** ADAMS FREDERICK J

Inventor(s): FREDERICK J ADAMS

International class (IPC 8–9)**:** B62D3/02 (Advanced/Invention); B62D3/00 (Core/Invention)

International class (IPC 1–7)**:** B62D1/20 B62D3/00

CPC: Y10T74/18792 Y10T74/18856 B62D3/02

European class: B62D3/02

US class: 280/93.513 74/497 74/89.14 74/96

Classification Explorer

Cited documents: US923583 A, US3422698 A, US1185721 A,

Forward Citations: WO8101396, US4613353, US4286761, US4270397, US4257619, US4240306, FR2432120, DE2831120,

Abstract:
Source: US3546957A ABSTRACT OF THE DISCLOSURE A transmission coupling, especially suitable for steer–ing gear, providing a desired ratio between input and I5 output shafts through an axially shiftable sleeve rotated by the input shaft, having a helical groove and follower connection with a housing to translate rotation into axial movement and having a helical groove and follower connection with the output shaft to convert the axial move– 20 ment into rotation of the output shaft. The followers are preferably of the pin type, the pitches of the helical grooves differ to provide a ratio of rotation between the shafts, and one helical groove preferably has a variable pitch to vary the ratio.

0) US3953869A – STEREOSCOPIC PHOTOGRAPHY APPARATUS

130) Family number: 1307185 (US3953869A) © PatBase

Title: Stereoscopic photography apparatus

Priority: AU19750084641 19750908 CA19750220702 19750225 CA19750236110 19750923 CA19770278740 19770519 FR19530647507 19530502 GB19530012314 19530504 US19720292796 19720927 US19730398990 19730920 US19760666865 19760315 US19740508823 19740924 US19740508810 19740924

Family:

Publication number	Publication date	Application number	Application date
AU197360718 A1	19750327	AU19730060718	19730926
AU197584641 A1	19770317	AU19750084641	19750908
AU197584902 A1	19770324	AU19750084902	19750917
AU197841772 A1	19790405	AU19780041772	19781121
AU207360718 A1	19750327	AU19730060718	19730926
AU486233 B2	19770908	AU19730060718	19730926
AU497854 B2	19790118	AU19750084641	19750908
AU500750 B2	19790531	AU19750084902	19750917
AU511753 B2	19800904	AU19780041772	19781121
BE519650 A	00000000		00000000
BE805297 A1	19740325	BE19730136033	19730925
BE833697 A4	19760322	BE19750160274	19750922
BE833699 A1	19760322	BE19750160276	19750922
BR7506186 A	19760803	BR19750006186	19750924
CA1007916 A1	19770405	CA19730181973	19730926
CA1019609 A1	19771025	CA19750220702	19750225
CA1020788 A1	19771115	CA19760252557	19760514
CA1032800 A1	19780613		00000000
CA1032800 A2	19780613	CA19770278740	19770519
CA1042252 A1	19781114	CA19750236110	19750923
CA1052160 A1	19790410	CA19780307698	19780719
CA1052160 A2	19790410	CA19780307698	19780719
CH592321 A	19771031	CH19730013791	19730926
CH601834 A	19780714	CH19750012308	19750923
CH616513 A	19800331	CH19750012307	19750923
DE2348700 A1	19740404	DE19732348700	19730927
DE2348700 B2	19790906	DE19732348700	19730927
DE2348700 C3	19800703	DE19732348700	19730927
DE2542159 A1	19760415	DE19752542159	19750922
DE2542159 B2	19800821	DE19752542159	19750922
DE2542159 C3	19810507	DE19752542159	19750922
FR1076632 A	19541028		19530502
FR1245502 A	19601110	FR19530647507	19530502
FR2200979 A5	19740419	FR19730034393	19730925
FR2286412 A1	19760423	FR19750029167	19750923
FR2286412 B1	19800808	FR19750029167	19750923
FR2286413 A2	19760423	FR19750029008	19750922
FR2286413 B2	19790629	FR19750029008	19750922
GB1445583 A	19760811	GB19730045325	19730927
GB1445584 A	19760811	GB19750048177	19730927

GB1445585 A	19760811	GB19750048178	19730927
GB1528362 A	19781011	GB19750037757	19750915
GB734321 A	19550727	GB19530012314	19530504
HK46080 A	19800829	HK19800000460	19800821
HK9279 A	19790302	HK19790000092	19790222
HK9379 A	19790302	HK19790000093	19790222
HK9479 A	19790302	HK19790000094	19790222
IT1004587 A	19760720	IT19730069836	19730926
IT1046550 A	19800731	IT19750067511	19750227
IT1047446 A	19800910	IT19750069361	19750923
JP1068159 C3	19811023	JP19730108859	19730927
JP1130793 C3	19830117	JP19750019499	19750218
JP1179297 C3	19831130	JP19750114404	19750923
JP49088520 A2	19740823	JP19730108859	19730927
JP51043140 A2	19760413	JP19750019499	19750218
JP51060524 A2	19760526	JP19750114404	19750923
JP56002692 B4	19810121	JP19730108859	19730927
JP57007422 B4	19820210	JP19750019499	19750218
JP58007981 B4	19830214	JP19750114404	19750923
MX172266 A	19931209	MX19750184204	19750923
MX172266 B	19931209	MX19750184204	19750923
NL109362 C	00000000		00000000
NL178036 B	19850801	NL19730013304	19730927
NL178036 C	00000000		00000000
NL178282 B	19850916	NL19750011064	19750919
NL178282 C	19860217	NL19750011064	19750919
NL181823 B	19870601	NL19750001301	19750204
NL181823 C	19871102	NL19750001301	19750204
NL230419 A	00000000		00000000
NL7313304 A	19740329	NL19730013304	19730927
NL7501301 A	19760326	NL19750001301	19750204
NL7511064 A	19760326	NL19750011064	19750919
NL93558 C	00000000		00000000
SE395552 B	19770815	SE19730013089	19730926
SE395552 C	19771124	SE19730013089	19730926
US3953869 A	19760427	US19740508823	19740924
US3960563 A	19760601	US19740508810	19740924
US4037950 A	19770726	US19760666865	19760315
US4063265 A	19771213	US19760666864	19760315
US4120562 A	19781017	US19760676385	19760412

Probable Assignee: NIMSLO TECHNOLOGY LTD

Assignee(s):[(std)]**:** DIMENSIONAL DEV CORP ; IONS EXCHANGE AND CHEMICAL COR ; NIMSLO TECHNOLOGY INC ; NIMS TECHNOLOGY INC ; NIMSLO TECHNOLOGY LTD ; YARDNEY INT CORP ; BERMUDAS NIMSLO INT ; BERMUDAS NIMSLO INT AS LTD

Assignee(s): DEIMENSHONARU DEV CORP ; NIMSLO TECHNOLOGY INC ATLANTA GA V ST A ; NIMSLO TECHNOLOGY INC ATLANTA GA US ; NIMSLO TECHNOLOGY TE HAMILTON BERMUDA LTD ; NIMSLO CORP ; NIMSLO INT LTD ; NIMSLO INT BANK OF BERMUDA BUILDING LTD ; NIMS JERRY C ; LO ALLEN KW ; NIMSLO TECHNOLOGY ; NIMSLO INT ; FAIRHAVEN CO LTD A BERMUDA CORP ; DIMENSIONAL DEVELOPMENT TE ATLANTA GEORGIA VER ST V AM CORP ; LO ALLEN K W ; DIMENSIONAL DEVELOPMENT TE ATLANTA GEORGIA VERSTVAM CORP ; DIMENSIONAL DEVELOPMENT CORP ; DIMENSIONAL DEVELOPMENT

CORP 2403 JOHNSON FERRY ROAD N E ATLANTA GEORGIE 30341 E U A ; JOHNSTON S READY CRUST CO ; FAIRHAVEN CO LTD ; FOTOTECHNIEK ELITE BV ; IONS EXCHANGE AND CHEMICAL CORP ; DIMENSIONAL DEVELOPMENT CORP US ; DIMENSIONAL DEVELOPMENT CORP ATLANTA GA V ST A ; DIMENSIONAL DEVEOPMENT CORP

Inventor(s):(std)**:** A K W LO ; AREN KEI DABURYUU RO ; LO A ; AREN UOO WAA ROO ; JERII KAACHISU EMUZU ; LO ALLEN KWOK WAH ; NIMS JERRY CURTIS ; LO A K WAH ; NIMS J ; LO ALLEN K W ; NIMS JERRY C ; LO ALLEN KOWK WAH ; NIMS J C ; LO A K W ; WAH LO ALLEN KWOK ; ALLEN KWOK WAHLO ; J C NIMS ; JERRY CURTIS NIMS ; WAHLO ALLEN KWOK

Inventor(s): NIMS JERRY CURTIS DUNWOODY GA ; LO ALLEN KW ; JC NIMS ; AK WAH LO ; LO ALLEN KWOK WAH ATLANTA ; NIMS JERRY CURTIS DUNWOODY GA US ; NIMS JERRY CURTIS DUNWOODY ; CURTIS NIMS JERRY ; ALLEN KWOK WAH LO ; A K WAH LO

Agent(s): PHILLIPS ORMONDE FITZPATRICK

International class (IPC 8–9)**:** A61L15/28 A61L15/46 A61L2/238 C07F1/00 C08B15/00 C08B15/05 C08F8/42 G02B27/22 G03B15/00 G03B17/00 G03B35/00 G03B35/02 G03B35/08 G03B35/24 H01M10/28 H01M2/14 H01M2/16 H04N13/00 (Advanced/Invention); G03B35/00 H01M10/04 (Advanced/Non–invention); A61L15/16 A61L2/16 C07F1/00 C08B15/00 C08F8/00 G02B27/22 G03B15/00 G03B17/00 G03B35/00 G03B35/18 H01M10/24 H01M2/14 H01M2/16 H04N13/00 (Core/Invention); H01M10/04 (Core/Non–invention)

International class (IPC 1–7)**:** C07F3/00 C08B15/05 G01J1/04 G02B27/22 G03B17/00 G03B27/32 G03B35/00 G03B35/02 G03B35/04 G03B35/06 G03B35/08 G03B35/10 G03B35/14 G03B35/16 G03B35/18 G03B35/24 G03C9/00 G03C9/02

CPC: G03B35/24 G03B35/00 G02B27/2214 G03B15/00 H01M10/281 A61L2/238 C07F1/005 C08B15/00 C08B15/05 C08F8/42 H01M2/14 H01M2/1653 H01M10/0413 H01M10/0459 H01M2300/0014

European class: 30I3B G02B27/22L G03B15/00 G03B35/00 G03B35/24 T01M300/00A4 Y02E60/12D

US class: 350/130 352/43 352/58 352/81 352/86 354/115 354/294 355/22 359/458 359/462 359/463 396/324 396/325 396/326 396/327 396/329 430/396 96/40

Classification Explorer

Cited documents: US962844 A, US765980 A, US3978500 A, US3800307 A, US3678833 A, US3666465 A, US3518929 A, US3508920 A, US3482913 A, US3380360 A, US3241429 A, US3225651 A, US2916962 A, US2860562 A, US2791950 A, US2384578 A, US1942638 A, US1918705 A, US1882424 A, US1542730 A, JP49000607 A2,

Forward Citations: WO9830473, WO9746913, WO9530928, WO9407182, WO9400798, WO9008343, WO17040784, WO16120719, WO12106222, WO0173497, WO0173497, WO0016158, USRE35029, US9380292, US9344701, US9185388, US8890940, US8885024, US8833663, US8818185, US8810635, US8805179, US8508580, US8441520, US8436893, US8334895, US8274552, US8169598, US8083152, US8025239, US7963449, US7866559, US7824029, US7815124, US7804982, US7798413, US7793846, US7789311, US7744002, US7744001, US7694887, US7661600, US7553023, US7429997, US7409153, US7347555, US7164786, US6947059, US6933966, US6817530, US6640004, US6466746, US6430373, US6331871, US6304263, US6301446, US6292634, US6259450, US6226093, US6200713, US6177217, US6154251, US6144809, US6072563, US6070349, US6052539, US5973700, US5946077, US5941382, US5892994, US5850913, US5850580, US5832325, US5825466, US5823344, US5782347, US5778268, US5769227, US5768643, US5752111, US5737655, US5727242, US5715489, US5697006, US5691805, US5681676, US5668605, US5659323, US5647151, US5625435, US5588526, US5583971, US5572633, US5568313, US5560799, US5554432, US5548362, US5539487, US5519794, US5500712, US5479229, US5465128, US5461495, US5457515, US5424801, US5412449, US5359454, US5349419, US5337096, US5330799, US5302989, US5279912, US5266995, US5192969, US5113213, US5111236, US5028950, US4903069, US4869946, US4852972, US4825234, US4800407, US4725863, US4650282, US4630913, US4598973, US4493551, US4480893, US4478639, US4475798, US4468115, US4440480, US4124291, US4101210, US4086585, US4059354, US2017034504, US2012127571, US2011164241, US2011109718, US2011045255, US2011025829, US2008316301, US2008191463, US2007187515, US2006056836, US2005242194, US2005160294, US2005141089, US2004213560, US2003206653, US2003183695, US2003117488, US2002063775, MY119673, JP8194273, JP8152693, JP7015594, JP57181573, JP3507165, GB2236400, GB2236400, EP1956414, EP0819927, EP0819927, EP0790524, EP0773475, EP0712032, EP0618480, EP0618480, EP0384768,

EP0384768, EP0384768, EP0328267, EP0328267, EP0273845, EP0009065, EP0002946, DE19736158, CN103443690, AU657271,

Abstract:
Source: US3953869A In the illustrative embodiments of the invention disclosed, autostereoscopic pictures are produced by taking a series of two−dimensional views of an object field and projecting them in an enlarger onto lenticular print film. Adjustable−focus and fixed−focus cameras are provided for taking the two−dimensional views, either simultaneously or sequentially, in a manner which automatically accounts for the effect of variation of the camera−to−object distance on the configuration of the enlarger−lenticular print film system, thereby allowing the parameters of the enlarger−print film system to be held constant. The number of enlarging lenses employed may correspond to the number of two−dimensional views to be projected, by virtue of which the stereoscopic picture may be composed in a single projection step, or a single enlarging lens may be used to project the two−dimensional views in sequence. As another feature of the invention, substantially uninterrupted and non−overlapping lineiform image bands of high image quality are formed on all areas of the lenticular film by scanning the projected images from each two−dimensional view over a predetermined distance along the photosensitive surface.

0) GB2463289A – A KEY WITH MOVABLE PORTION FOR USE IN MORE THAN...

131) Family number: 42475121 (GB2463289A) © PatBase

Title: A key with movable portion for use in more than one lock

Priority: GB20080016412 20080908

Family:

Publication number	Publication date	Application number	Application date
GB200816412 A0	20081015	GB20080016412	20080908
GB2463289 A1	20100310	GB20080016412	20080908

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** MUL T LOCK TECHNOLOGIES LTD

Inventor(s):(std)**:** BEN AHARON EFFI ; MARKBREIT DANI

Inventor(s): DANI MARKBREIT ; EFFI BEN AHARON

International class (IPC 8–9)**:** E05B35/00 E05B35/10 (Advanced/Invention)

CPC: E05B35/003 E05B19/0023 E05B19/0058 E05B27/0021 E05B35/10

European class: E05B19/00K1 E05B27/00A3B E05B35/00F E05B35/10 P05B19/00K4M1

Classification Explorer

Cited documents: US5520035, US5170651, GB2412689, FR2522053,

Abstract:
Source: GB2463289A A key device 10 for more than one lock with shaft portion 12 comprises movable key combination element 22 having adjacent first and second portions 24, 26, with the second portion 26 being located offset to the first portion 24; the at least one movable key combination element 22 being displaceable with respect to the shaft portion 12. The key fits at least two locks, figures 6A, 8A each comprising a rotatable plug 50 60, keyways 52 62, with pressing elements 59 66 arranged to press against the second portion 26 of the key to move auxiliary locking elements 54 64 to shear lines 57 67 allowing rotation of the plugs, wherein the pressing elements 59, 66 of the first and second locks press against two different locations on the second portion 26 of the key, which may be achieved by the offsetting of the pressing element 66 from the auxiliary locking element 64: figure 8A.

0) US3234765A – NESTED HANDLE CAM–TYPE DOOR LOCK ASSEMBLY

132) Family number: 22558847 (US3234765A) © PatBase

Title: NESTED HANDLE CAM–TYPE DOOR LOCK ASSEMBLY

Priority: US19630332108 19631220

Family:

Publication number	Publication date	Application number	Application date
US3234765 A	19660215	US19630332108	19631220

Probable Assignee: CHICAGO LOCK CO

Assignee(s):(std)**:** CHICAGO LOCK CO

Assignee(s): CHICAGO LOCK COMPANY

Inventor(s):(std)**:** KERR WILLIAM J

International class (IPC 8–9)**:** E05B5/02 (Advanced/Invention); E05B5/00 (Core/Invention)

International class (IPC 1–7)**:** E05B27/08

CPC: E05B5/003 Y10T70/5761

European class: E05B5/00B

US class: 70/208

Classification Explorer

Cited documents: US3089330 A, US3089329 A, US1944642 A, US1853564 A, US1819813 A,

Forward Citations: USD787915, USD458891, US9085919, US8621901, US8393187, US6981726, US6957556, US6719337, US6575503, US6422049, US6234101, US6113160, US5983820, US5921119, US5711506, US5586459, US5467619, US5272894, US5269161, US5197314, US5024073, US4854140, US4689976, US4552001, US4083211, US3382688, US2010171326, US2004145192, EP1483985,

Abstract:
Source: US3234765A (Claim 1) 1. In a lock assembly for a sealed cabinet door, in combination, a tubular open–ended cylindrical lock housing provided at its front end with a radial rim flange and at its rear end with an inturned bearing flange pre– senting a central bearing opening, said rim flange being provided with a shallow elongated recess in the forward end face thereof, a cylindrical sleeve coaxial with and rotatably disposed within said lock housing, means constraining said sleeve against axial shifting within the lock housing while allowing for free rotation thereof, a lock shaft on the rear end of said sleeve projecting through said bearing flange, an operating handle shaped conformably to the shape of the recess, positioned forwardly of the housing and having a tubular hub projecting rear– wardly therefrom and constituting a lock barrel, said lock barrel being telescopically slidable in said sleeve between a retracted position wherein the operating handle is nested within the recess and a projected position wherein said handle is projected out of the recess, means establishing a driving connection between the barrel and sleeve, and a locking cam on said lock shaft exteriorly of the lock housing.

0) US2784673A – CENTRIFUGAL PUMP

133) Family number: 22895178 (US2784673A) © PatBase

Title: CENTRIFUGAL PUMP

Priority: US19520310837 19520922 US19530346971 19530406

Family:

Publication number	Publication date	Application number	Application date
US2784673 A	19570312	US19520310837	19520922
US2963978 A	19601213	US19530346971	19530406

Probable Assignee: GIRTON MFG COMPANY

Assignee(s):(std)**:** GIRTON MFG CO ; GIRTON MFG COMPANY

Assignee(s): GIRTON MANUFACTURING COMPANY

Inventor(s):(std)**:** NAMUR CARL A

International class (IPC 8–9)**:** F04D29/04 F04D29/044 F04D29/24 F04D29/62 (Advanced/Invention); F04D29/04 F04D29/18 F04D29/60 (Core/Invention)

International class (IPC 1–7)**:** F04D13/06 F04D29/22 F04D29/70

CPC: F04D29/247 F04D29/628 F04D29/044

European class: F04D29/044 F04D29/04B F04D29/24B F04D29/62P

US class: 415/141 415/201 415/203

Classification Explorer

Cited documents: USRE22353 E, US807981 A, US2695747 A, US2671408 A, US2649706 A, US2644402 A, US2625883 A, US2537523 A, US2536638 A, US2459036 A, US2444249 A, US2427681 A, US2406499 A, US2351516 A, US2291797 A, US2245106 A, US2178405 A, US2150078 A, US2092351 A, US2079942 A, US2047330 A, US1835284 A, US1486312 A, US1382665 A, US1281698 A, IT453604 A, IT440751 A, GB302953 A, FR898840 A, FR897138 A, DE662032 A, AU109442,

Forward Citations: US4077751, US3597118, US3491696, US3384025, US3260214, US3238881, US3238880, US3115843, US3109380, US3081981, US3059582, US3048117, US3033121, US3033015, US2997957, US2969741, US2954739, US2928588, US2925783, US2909124, US2009056123, EP2031250, EP0166104,

Abstract:
Source: US2784673A (Claim 1) 1. in coinbination, a support, transversely extending shoulder–like means on said support, longitudinally extending shoulder–like ineans on said support, and two complementaiy and opposed sectional housing means slipported on said support, one section of said housing means havin a transversely extending peripheral portioii abutting against said transversely extending shoulder means and the other section of said housing means having a transversely extendiiig peripheral portion abutting against said lorigitudinally extending shoulder means, and both sections of said housing meaiis each having juxtaposed transVersely and longitudinally extending peripheral portions and being so constructed and arranged and each being of such dimensions as to overlap with one another along th6ir outermost peripheral portions both transversely and longitudinally with respect to said housing means.

0) US2005185398A – MULTIFUNCTION–ADAPTABLE, MULTICOMPONENT DEVICES...

134) Family number: 32192456 (US2005185398A) © PatBase

Title: MULTIFUNCTION–ADAPTABLE, MULTICOMPONENT DEVICES

Priority: US20040545939P 20040220 US20040560908P 20040410 US20040607961P 20040908 US20050062039 20050218 US20050101066 20050407 US20050218948 20050902 US20070801016 20070508 US20070801106 20070508 US20080283221 20080910

Family:

Publication number	Publication date	Application number	Application date
US2005185398 AA	20050825	US20050062039	20050218
US2005188853 AA	20050901	US20050101066	20050407
US2006154642 AA	20060713	US20050218948	20050902
US2007230197 AA	20071004	US20070801016	20070508
US2007268687 AA	20071122	US20070801106	20070508
US2009073694 AA	20090319	US20080283221	20080910
WO07027660 A2	20070308	WO2006US33650	20060829
WO07027660 A3	20071115	WO2006US33650	20060829

Probable Assignee: GLYNNTECH INC

Assignee(s):(std)**:** GLYNNTECH INC ; INSIGNIO TECHNOLOGIES INC ; SCANNELL ROBERT F ; SCANNELL ROBERT F JR

Assignee(s): SCANNELL ROBERT FJR

Inventor(s):(std)**:** SCANNELL ROBERT F JR ; SCANNELL ROBERT F ; SCANNELL JR ROBERT F

Inventor(s): SCANNELL ROBERT FJR ; SCANNELL ROBERT

Agent(s): KENNETH P GLYNN ESQ; KENNETH P GLYNN; DEIRDRA M MEAGHER

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 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): A01G9/02 B01D46/00 B65D6/00 F21L4/00 F21S2/00 F21S6/00 F21S8/00 F21V15/01 F21V19/02 F21V33/00 G06Q50/00 H04M11/04 H05K5/00 (Advanced/Invention); F21V33/00 H05K5/00 (Core/Invention)

International class (IPC 1–7): B01D46/00 F21S2/00

CPC: A01G9/02 F21S6/002 F21S6/005 F21V33/00 F21W2121/00 H05B37/0272 Y02W30/829 G08B21/24 A62B99/00 G06F19/3462 G06Q50/22 G08B7/066 G08B17/00 G08B21/14 G08B25/009 G08B25/012 G08B25/10 A47G7/06

European class: A01G9/02 A47G7/06 A62B99/00 F21S6/00D F21S6/00S F21V33/00 G06F19/34L1 G06Q50/22 G08B17/00 G08B21/14 G08B21/24 G08B25/00S G08B25/01B G08B25/10 G08B7/06P H05B37/02B6R R21W121/00

US class: 220/4.01 361/730 362/154 362/190 362/227 362/253 362/362 362/368 362/382 362/418 455/404.1 96/417

Classification Explorer

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Abstract:
Source: US2005185398A Devices with modular components have interchangeable parts that create and convert functional items to the same items having different features or to different items. Lamps, urns, planters, pots, containers and pedestals have modular, quick take−apart capabilities and may be reassembled with similar parts and/or additional or different parts. Multi−functional adaptability is provided, and these devices may include diverse electrical and electronic functions, including entertainment, communications, sensing, security, safety, environmental and other functions. Multiple electronic features could include receivers, transmitters, antennas, alarms, motion detectors, timers, device control and scent releasing functions. LAN, WAN, Internet, and other wired and wireless capabilities may be integrated into these devices.

0) US1711275A – DOUBLE–END TENONER

135) Family number: 19917714 (US1711275A) © PatBase

Title: DOUBLE–END TENONER

Priority: US19270186467 19270425

Family:

Publication number	Publication date	Application number	Application date
US1711275 A	19290430	US19270186467	19270425

Probable Assignee: GREENLEE BROS AND CO

Assignee(s):(std)**:** GREENLEE BROS AND CO

Assignee(s): GREENLEE BROS CO

Inventor(s):(std)**:** MANSFIELD JUDSON H ; WIKEN CHRISTY A

International class (IPC 8–9)**:** B27F1/06 (Advanced/Invention); B27F1/00 (Core/Invention)

International class (IPC 1–7)**:** B27F1/06

CPC: B27F1/06

European class: B27F1/06

US class: 144/131 144/203 144/242.1 144/250.17

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Abstract:
Source: US1711275A and also cause wear. However, we claim no invention in this feature of the machine. Meclumically operated oilers. (See Figs. 2, 1.4 a/nd 15.) – The feed and hold–down chains 18 and 20, respectively, are both suitably equipped with oilers o erated mechanically in the operation of the cliains. Such oilers, while not claimed in this application, are indicated in Fig. 2 at 101 and 102 on the side of ,the bed rail 33 and pressure bar 75, respectively, for the lubrication of the feed chain 18 and hold–down ch_ain 20. Inasmuch as they are practically of identical'construction and operate in substantially the same manner a description of the oiler 101 will suilice for both. Both oilers are operated through a driving connection 0 with a chain sprocket. The idler sprocket 93 for the feed chain 18. is mounted on a shaft 103 suitably received in hearings inthe rail 33 and has a gear 104 arranged to turn therewith whenever the same operates for the feeding of stock through' the machine. The gear 104 meshes with a gear 105 fixed on the shaft 106 received in a bearing in a side wall of the oil wel1107. A rotary dipper 108 is fixed on the inner end of the shaft 105 to scoop up a slug of oil in the pocket l09 from the well 107 once in each rotation of the dipper. The oil picked up flows by gravity through the duct 110 into a trough 111 provided alongside the dipper. The trough empties into a pipe 112 to conduct the oil to the oil hole 113 provided i_n a wiper 114 pivotally mounted at 115 for operation against the inside of the lower flight of the feed chain. The wiper is suitably fe ted to absorb the oil and deposit it uniformly in the V grooves 96' provided in the center links of the eed chain. The felt of the wiper 114 also serves to clean oil' any deposits of dust or dirt so that the chain will function properly on its ways. A spring 116 serves to exert a light pressure on the wiper toward the chain to insure the proper cooperation 'between the parts while an adjustable set screw 117 arranged to engage under a lug on the bed rail 33 limits the movement of the wiper so that it will not foul with the chain. It will be manifest that these oilers supply lubricant for the chains and their ways only to the extent required and only when the chains are operated. With any other type of oiler, as for example those that have to be turned on and off by the operator and are apt to be forgotten at times, there is the two–fold danger either that the oil Will be supplied in profuse amounts onto the chains or chain ways and be transmitted to the Work and be otherwise objectionable, or that the operator might forget to open the oilers or might not open them enough so that there would be insumcient lubrication. Other types of oilers also require too much attention and are always apt to get out of order. In shortgany oiler other than a. mechanically operated oiler is unsuited to use in a machine of the present character because it is not likely to furnish the .proper amount of lubricant but has always been found to furnish either too much or too little. ' Feed chain sprocket adjwstmem. (See Figs. A _– 6 and 11–13.) The two feed chains 18 are always operated in unison by the feed shaft 35 but the sprocket 92 is arranged to be adjusted angularl with respect to its companion drive sprocket so that the feed chain 18 may be offset endwise to a certain extent with relation to–the other feed chain 18'. In other Words, one of two feed dogs 19 which are normally in l_ine longitudinally of the machine is given a certain amount of lead with res ect to the other dog and the work fed thereby through the machine is caused to pass through at an angle to the normal longitudinal axis. In this way, the machine is adapted for the cutting of angles. It will be observed that the feed shaft 35_is splined. This is partly for the purpose of having a sliding driving connection with the companion sprocket for the sprocket 92 on the movable left hand, unit B so that the feed shaft has a driving connection with the feed chain 18' in all positions of adjustment of the movable unit. The spline, however, also provides a driving connection through a key 118 Witha

Worm gear 119. The latter has a worm 120 meshing therewith rotatable in bearings 121 in a collar 122 keyed as at 123 to the hub 124 of the drive sprocket 92. The latter is received in a bearing 125 provided on the bed rail 33. The worm 120 has a crank stud 126 whereby the worm may be turned to thread about the periphery of the Worm gear 119. The turning of the worm 120 in one direction will obviously adjust the sprocket 92 in a certain direction angula1~l_ with respect to the worm gear 119 und, of] course, the rotation of the worm in the opposite direction will produce adjustment of the sprocket in the reverse direction. Manifcstly the feed chain 18 may be thereby advanced or retarded' in relation to its companion feed chain 18'. After the adjustment has been made the sprocket 92 is arranged to be clamped with reference to the collar 122 and worm gear 119 by the tightening of screws 127 although, as a matter of fact, the parts are self–locking in their adjusted positions by reason of the worm meshing in the worm gear. The screws 127 pass through a cover plate 128 into the collar 122 and when tightened serve to clamp the worm gear 119 between the plate 128 and the side of the collar 122. The clamping of the parts together into a rigid unit insures against the likelihood of the adjustment being tampered _gt;_,_ , 1,71 1,275 7 with after the machine has been 'accurately set and also removes from the adjusting mechanism –the strains incident to the driving of the feed chain 18. The facility and accuracy with which adjustments may be made will no doubt be clear from the foregoing. The adjustment is of a simple and workmanlike construction. 'It will be manifest that the machine is considerably broadened in its possible range of uses by reason of the feed chain Sprocket adjustment. 1 _ Interconnected 'vertical adjustments for the ' ,top amd bottom teaaning heads. (See Figs. 1–5.) . The hand wheel 26" for the vertical adjustment of the tenoning head motors 26 were previously brietly refered to. It has been found that it is a very tedious operation to accurately adjust the heads both to the proper elevation and to the proper spaced relation. According to the present invention it is possible after the heads have been brought to a desired spaced relation, accurately to within a thousandth of an inch or so of any desired dimension to adjust them together to the proper elevation without danger of throwing the heads out of their accurately adjusted spaced relation. The upper and lower motors 26, as best appears in Figs. 3–5, are mounted on separate brackets 130 and 131, respectively, mounted on ways 132 inside the –hollow frame S1 on the side S0 thereof, the latter serving as a standard. It is with reference to the brackets 130 and 131 that the motors 26 have horizontal and tilting adjustment at 26" and 26". The vertical adjustments we secure by means of screws 133 and 134 threading in openings provided in the lugs 135 and 136 on the brackets 130 and 131, respectively. The screws 133 and 134 are fitted with spiral gears 137 and 138, respectively, meshing with spiral gears 139 and 140 onthe shaft 141 and sleeve 142, respective. The gear 139 is pinned, as indicated at 143, on the shaft 141, while the gear 140 is keyed on the sleev 142. This point is mentioned especially for the reason that it permits the locking together of t–he two wheels 26" by means of a nut 144 threading on the end of the shaft 141. The one wheel is keyed on the shaft 141 and the other wheel is keyed on the sleeve 142. VVhen the nut 144 is tightened the rims 145, arranged in facing relation on the two wheels 262 are pressed together to hold the faces 146 of the .two rims in tight frictional engagement so that when one wheel is turned the other wheel is turned with it; the two being locked together in absolutely any position of relative adjustment. In operation the nut 144 is normally loose so that the two wheels 265 may be adjusted independently of one another. Thus, the desired spaced relation between the two tenoning heads 25 may be secured with little or no difliculty as either bead may be raised or lowered independently of the other. Once the proper spaced relation between the heads has been secured, accuratel to within a thousandth of an inch or so of a desired dimension, the nut 144 is ti htened detachably to lock the Wheels together and thereafter the two heads may be adjusted together to the proper elevation. ' The advantage in this feature it is thought will be apparent since it eliminates considerable jogging of the heads with reference to one another to get them into proper position when the machine is being set up. M ounting of scoring saw motors on the heads. (See Figs. 3, it and 5.) _ The scoring saws 23, as shown in Fig. 6, have to be set in a certain position of horizontal adjustment with reference to the tcnoning heads 25 and it will also be manifest that they must be adjusted to a certain position in a vertical plane with reference to the tenoning heads in order that the scoring cut will be made at the inner end of the tenon to be cut and also to the proper depth, that is, at least to penetrate the veneer of the stock. For these reasons we prefer to mount the scoring saw motors 24 directly on the tenoning head motors 26 to facilitate the adjustment of the scoring saws with reference to the tenoniug heads, Then, once the scoring saws have been set they require no further attention in the setting of the tenoningheads in proper spaced relation and to the proper elevation. T11Cl¥10tDl`S 26 have vertical ways 147 provided on the side of thc housings thereof. Brackets 148 for mounting the motors 24 are received on said ways and arranged for vertical' adjust–ment relative thereto by means of the hand wheels 24", previously referred to. The latter operate worms 149 meshing with spiral gears 150 to operate screws 151. The screws 151 operate in threaded openings in lugs 152 provided on the brackets 148. It will now be clear how the scoring saws are adjusted vertically. In regard to the horizontal adjustment it will be noticed that the brackets 148 have horizontal ways' 153 thereon to receive the dovetailed bases 154 provided on the housings of the motors 24. The band wheels 24" simply operate screws 155 to communicate back and forth movement to the motor 24 relative to the brackets 148. The operation of the mechanism _just described is believed to be clear; the adjustment of the scoring saws with reference to the tenoning heads is entirely unaffected by any changes in the adjustment of the tenoning head either vertically, horizontally or anguiarly by reason of the fact that each scoring saw motor is a part of the same unit with the tenoning head motor related thereto. Hollow one–piece frames forvright and left lizmd unite. (See Figs.2–5.) , The fact that as many as six motors or even more have to be mounted in each unitfor the operation of the saws and cutter heads and that these motors have to be arranged in variable spaced relation necessarily presents a a serious problem as to the matter of properly supporting the same. According to the present invention we havegprovided in place of a pair of wparatestandards for each unit, one whcreon tovmount the trim saw motor and the other whereon to mount the tenoning head motors with the scoring saw motors ou one sideof the standard an – the coping head motor on the other side, a single onepiecc hollow frame of, generally rectangular form. This frame provides the two standards at the two sides thereof and the connecting arch between the two sides provides Sullicieut reinforcement so that it does not become necessaig to _make the framesnearly so massive. ence there is_a savinff inexpcnse and the machine is also of a mudli better appczxrance. As previously described. the frames refegred to are the frames 81 wherein the one side 80 provides one standard and the other side 89 the 'other standard, the side 80 having mounted thereon on one side within the frame the tenoning; head motors Q6

with the motors 24 astride t e same, while the coping head"motor 28 is mounted on the diametrically opposite side, the other side S9 of the frame providing ways ,on the outside of the frame for the– mounting of the trim saw motor 22S The two sides are joined by an integral connecting arch 156, thus rendering it unnecessary for either of the side standards–80 and'89 to be nearly as massive in construction as might otherwise be necessitated. The frame is cored ,out as far as possible, as indicated in Figs. 4 and 5, to further conserve in material, reduce weight and §£LVe eXp(;'l`lS€. It is believed the j foregoing description conveys a full understanding of the various objects and advantages of our invention. It will, no doubt, be understood that whereas the present description has made reference to one particular embodiment of our invention the invention is capable of adaptation in a great variety of forms. The claims are, therefore,` entitled to construction for the purpose of covering any and all modiiications and adaptations coming within the spirit and purpose of the invention. ~ ' We claim: ' ` 1. In a double–end machine of the characterdescribed, a base, right and left hand units mounted on said base, at least one of said tmits being slidably and adjustably mounted whereby to permit changing the spaced relationship of said units, an adjusting screw for changing the spaced relation of said units, means having connection with the screw for operating the same, an indicator having connection with the screw to be operated by the latter and serving to show the distance between the units at any point of adjustment, and means under manua control for 'controlling the operation of the screw operatin means, the indicator and the last mentioned means being disposed in close relationship substantially as and for the purposes described. ‘ 2. In a double–end machine ofthe character described, a base, right and left hand units mounted on said' base, at least one of said units being slidably and adjustably mounted whereby to permit ehanginrr the spaced relationship of said units, an adjusting screw for changing the .spaced relation of said –units, power– operated means 'having connection with said screw for operating –the same, ir manually operable device for controlling the operation of said power means, the said power means serving as a ‘ coarse adjustment mcans,“ manually operable means normall held yieldingly out of operative relation witli said screw but arranged to be forced into operative relation therewith to 'operate the same, a hand wheel for operating said means, the hand means constituting a fine adjustment means, 'and an indicator connected with the adjusting screw to be operated thereby, and serving to indicate accurately the distance between the units at any point of adjustment thereof, the said indicator being dis osed in one group with the hand wheel and tli)e handoperablc device substantially as and for the purposes herein described. ‘ _ 3. In a machine of the charaeterdescribed, the combination with a base, a pair of units mounted on said base, normally occupying fixed positions in s aced relation for operation on both ends og a piece of stock, and an adjusting screw having means for operating the same and arranged when operated to adjust the relation of the units with respect to one another for differeiit lengths of stock, of means operated through positive gearing from the adjusting screw when the spaced relation of the units is adjusted and arranged to indicate the distance between the units so as to indicate the length of stock which may be operated upon, said means including a part arranged to be released from connection with the positive gearing for manualioperation for manually adj ustingthe indicator independently of adjustment in the spaced relation of the units substantially as described. 4. In a machine of the character described, a base, a pair of units mounted on said base, normally occupying fixed positions in spaced relation for operation on both ends of a piece of stock but adapted for adjustment in relation to one another for different lengths of stock, ascrew for communicating the relative movement, power means for driving said screw for large adjustments and having a hand–operable control, hand operable means for small adjustments, and a pair of dials for indicating the distance between the units and J do ice os _ , 7 t,711,2'?5 ` 9 thereby indicate the length of stock that –may be operated upon,'one of which is graduated in large units and the other of which IS graduated in small units, said last mentioned dial having a. reduction driving connection with the first dial, the connection being such that the first dial is advanced step by step during continuous turning of the other dial. the control for the power means, the handopcrablc means, and thc pair of dials _being disposed in one group for convenience IH afljustment of the pairiof units, substantially as described. In a machine of the character described, the combination with a pair of units arranged to be placed in variable spaced relation for operation on opposite ends of a piece ofvstoek, the adjustment in spaced relation serving to adapt the machine to operation on different lengths of stock, and an adjust1ng'scre\v extending between the units for varying the spaced relation therebetween, and having means for operating the same, of an index Sllilfb be;1ring_an indicating dial, means providing a detachable driving connection between' said shaft and said screw, and means manually operable for operating said index shaft independently of the scre_lt;v`wl1en the shaft is detached from operating connection thercwitli. 6. In e machine of the character described, a standard ha ving cutter disposed thereon for operation on thc end of a pieee_of work fed past the same, a feed bed alongside the heads over which the vrorlc is ted and from which the end of the work projects toward the heads, a pressure bar above the feed bed for operation on top of the work near the_ end thereof to hold the same in proper position for operation thereon. the said pressure bar being therefore, immediately adjacentthe cutter heads, means for hingedly mounting said pressure bar relative to the standard on a vertical axisto permit swinging movement thereof in a horizontal plane away from the cutter heads, the said bar when swung to an out of the way inoperative position being arranged to be supported solely by its hinge inounting, and means normally holding said pressure bar in operative position. 7. A structure as set forth in claim 6 wherein the pressure har is supported on a bracket vertically adjustable on the standard to permit elevation of the pressure bar relative to the feed bed, the bracket being disposed intermediate the ends of the pressure bar and having an extension toward one end of the latter, the pressure bar being hingedly mounted on the outer end of said extension, and the means for fastening the pressure bar in operative position having engagement with the bracket proper at a point substantially spaced from the said hinge. S. In a machine of the character described, comprising a pair _of spaced units having means thereon for operating on the respectively opposite ends of a piece of work fed therebetween, and a feed bed between said units including a pair of feed chains having dogs thereon for engagement with the work to convey the same throu h the machine, the two –chains being spaced toward. opposite ends of thc feed bed for engagement with the respective ends of the work, the combination with a feed shaft, and one of the sprockets thereon for operating said chains, of means for rotatably adjusting the sprocket relative to the same in any degree ofadjustment comprising a gear fixed on and turning with one ot said elements, and a worm meshing therewith and rotatable in a part iixedon and turnine with the other of said elements, said worm having a part accessible for turning the same, the said adjustin means being ar. ranged to turn with “die

shaft and the sprocket as a unit and having the worm and gear thereof together with the part of the worm adapted to be operated for adjustment arranged so as to have operating clearance with adjacent parts of the machine. _ 9; A structure as set forth in claim 8 wherein the gear is fixed on and turns with the shaft, and the worm meshing therewith is rotatable in a part Hxed on and turning with the sprocket. 10. In a machine of the character described, the combination with a feed bed, of a standard alongside thesame havin tool–carrying slides above and below the plcime of the top of the bed for operation oftools on the top and under sides of a piece of stock fed thereto on the bed, separate means for adjustin the elevation of the top and bottom slides whereby to permit individual adjustment of either of the slides independently of the other and vary the spaced relation therebetween, and means 'for detachably interlocking the two last mentioned means frictionally whereby both may, when interlocked, be operated to like degrees by the operation of one, and they may be interlocked in any position of relative adj ustment. ' 11. In a machine of the character described, the combination with a feed bed, of a stand_ ard alongside the same having tool~carrying slides above and below the plane of the top of the bed for operation on the top and under sides of a piece of stock fed thereto on the bed, separate adjusting screws for changing the elevation of the slides, separate hand wheels for adjusting said screws, said hand Wheels being arranged co–axially alongside one another and arranged normally for individual operation each indepcndently of the other, and means for interlocking said wheels whereby the adjustment of one produces the same adjustment of both slides. 12. In a machine of the character described, the combination With a standard and 11 feed bed operating alongside the same to feed io work thereto, of devices mounted on the standard for operation above and below the plane of the top of the feed bed to operate on the work from the top and bottom sides thereof, me–ans for adjusting the elevation of certain of said devices in relation to the top side of the work, another means for adjusting the elevation of certain other devices inrehitionto the bottom side of the work, and means whereby the two last mentioned means may be dctachably locked together frictionally for the simultaneous adjustment of said devices, the frictional locking together of said moans permitting the same to be locked together in any position of relative adjustment of said devices., 13. In a tenoner machine, the combination of a feed bed for feeding work to bc operated upon, a standard alongside the same having a tenoning head mounted thereon normally at a different elevation from the plane of the bed to operate on one side of the work, a drive motor for said head, means for adjusting the elevation of said drive motor, a scoring saw arranged to operate in front of the tenoning head to mark oi! by scoring in the surface of the work the area to be operated uponiby the tenoning head, and a drive motor for said scoring saw, said motor being mounted on the first mentioned drive motor whereby a change in the elevation of the tenoning head correspondingly changes the elevation of the scoring saw. V V 14. In a structure as set forth in claim 13 wherein the scoring saw motor is normally fixed in relation to the tenoning head motor, the provision. of means for adjusting the elevation of the one motor relative to the other motor. » 15. In a, structure as set forth in claim 13 wherein the scorin saw motor is normal] g Y 'fixed in relation to the tenoning head motor, the provision of means for adjusting the elevation of the one motor relative to the tenoning head motor, and means for adjusting the one motor axially relative to the other motor. 16. In a multiple motored machine of the character described, the combination of a feed bed, a frame mounted alongside the same, and a plurality of tools mounted on said frame for operation on work fed thereto on the bed, said tools having s€parate drive motors for operating the same, and certain of said tools being arranged to operate in a predetermined relation to certain other tools, the motors of certain associated tools being mounted on the motors of thwgr related tools in the relationshi s re uire . 12. In] a tenoner machine, the combination with a feed bed, of a unit disposed alongside the same comprising a one–piece hollowframe providin two standards in fore and aft spaced rgation joined by a connecting ,reinforcing arch at the upper ends thereof, a motor mounted on one of said standards having a trim saw driven thereby for cutting stock to a desired length, a pair of motors mounted on one –side of the other standard"\ above and below the plane of the bed for operating tenoning heads for cutting a teiion of a thickness determined by the spaced relation of the heads, and another motor mounted on the last mentioned standard on the other side thereof for operatin a coping head for operation on the end of the tenon. V 18. In a double–end tenoner, the combination with –a feed bed, of right and left hand units at opposite sides of the bed, each of said units comprising a frame, a motor mounted in a forward position on said frame having a" trim saw operated thereby for cutting of stock to a predetermined length as it is fed past the same, a pair of co–related motors mounted on said frame above and below the plane of the bed rearwardly in relation to the first motor and having tenoning heads operated thcreby for operation on the top and bottom sides of the work to out a tenon the thickness 'of which is determined by the spaced relation of the heads, and another pair of motors between the last mentioned motors and _the first mentioned motor foroperating scoring saws in a predetermined relation both to the trim saw and to the tenoning heads to mark off by scoring in the top and bottom sides of the stock the areas to be operated upon by the tenoning heads. – 19. A machine as set forth in claim 18 wherein the scoring saw motors are mounted on the tenoning head motors for adjustment therewith while maintaining a predetermined relation between each scoring sawfand its related tenonin head. ` 20. Ina doubde–end tenoner, the combination with a feed bed, of right andleft hand units at opposite sides of the bed, each of said units comprising a frame, a motor mounted in a forward position on said frame having a trim saw operated thereby for cutting off stock to pa predetermincdlength as it is fed past the same, a pair of co–related motors mounted on said frame above and below the plane of the bed rearwardly in relation to the Hrst motor, and– having tenoning heads operated thereby for operation on the top and bottom sides of the work to cut a tenon the thickness of which is determined by the spaced relation of the heads, another pair of motors between the last mentioned motors and the first mentioned motor for operating scoring saws \in a predetermined relation both to the trim saw and to the tenoning heads to mark oif by scoring in the top and bottom sides of the stock the areas to be operated upon by the tenoning heads, andanother motor rearwardly disposed with respect to the tenoning head motors having a copinghead operated thereby in a predeter– mined relation to the tenoning heads and the ‘ bed for 'o ieration on the end of the tenon produced by the tenouing heads. – ' 21. In a double–end machine of the character _lt;lescribvd. a base. a unit fiscal on one end of said base, another unit slidably and :uljustably mounted on ways provided on said base for inoveinent towarr and away from the other end of said base, both of said units l`lll,\'lH§!` tools thereon for operat1ng_0ll both ends of a piece of work, an adjusting screw extending from the fixed unit to the movable unit for adjusting/the latter back and forth, one means for operating said–screw comprising a power means arranged for clutch

connection with the screw, and another screw»operating means manually operalile, normally held yieldingly out of operative relation to the screw but arranged to be forced into operative relation with the screw at will, the power means constituting a coarse adjustment means and the hand means a fine adjustment means. 22. A structure as set forth in claim 21, including a pair of dials driven through a connection with the screw, the one dial having a reduction driving connection with the other dial, the first dial indicating fine adjustments and the second dial coarse adjustments whereby to indicate roughly by means of the second dial during power operation of the screw the distance between the two units and whereby to indicate with precision by means of the first dial during hand adjustment the distance between the two units so as to enable setting the machine for different lengths of stock. ' 23. lin a machine of the character described, a base, a pair of units mounted on said base, normally occupying fixed positions in spaced relation for operation on both ends of a piece of stock but ada Jtcd for adjustment in relation to one another for different lengths of stock, a screw for communicating the relative movement, coarse and fine adjustment 'means adapted to operate the screw and a pair of dials operated by the screw for indicating' the distance between the units and thereby indicate the length of stock that may beoperatcd upon, one of which is graduated in large units and serves to indicate to within a small fraction of a unit the distance between the pair of units and the other of which is ,qrarluaterl in small units andserves to indicate small adjustments in the spacing of the pair of units, said last mentioned dial having a reduction driving connection with the first dial. the connection being such that the first dial is advanced step by step during continuous turning of the other dial. 24. In a machine of the character described, the combination with a pair of units arranged to be placed in variable spaced relation, and an adjusting screw extending between tlie units arranged when turned to produce relative movement between the units, of an index shaft for _operating a. gauge for indicating` the spaced relation between the units, means providing a driving connection between said shaft and screw comprising a pair of intermeshing gears, one of which turns the shaft and the other of which is arranged to be placed detaehubly in driving relation to the screw, means manually operable for operating the last mentioned gear when the same is detached from driving relation with the screw, and means providing a driving connection between said gear and said scre\v. 25. A structure as set forth in claim 24 wherein the pair of intcrmcshing gears provide a driving connection between the index shaft and the screw within a housing, and wherein the manually operable means for operating one of said gears comprises a part turning with the gear and projecting out of the housing to be accessible for turning by hand, the means providing a driving connection between the' gear und the screw coinprising a nut outside of the housing arranged to be–tightened toward the –last mentioned part and arranged detachably to fix the latter with said gear for rotation with the screw. 26. In a machine of the character described, the combination with a work support, of a tool support having a plurality of tool heads mounted thereon for operation on the work, separate adjusting screws having connection with the housings for said heads for moving the same, separate hand wheels for adjusting said screws, said hand wheels being arranged substantially coaxially and having bearing portions disposed for abutting relation, and means for forcing the wheels together to hold the same by their bearing portions 'for operation in unison whereby the adjustment of one produces like adjustments of all of said heads. 27. In a tenoner machine, the combination of a feed bed for feeding work to be operated upon, a standard alongside the same having a. tenoning head mounted thereon normally at a certain elevation with respect to the plane of the bed to operate on one side oi' the work, means having connection with the housing of said head for adjusting the elevation thereof, a scoring saw arranged to operate in front of the i8Il011Il1gh(‘t\(l–i0`1Tlk`l!`l{ oE_ by scoring in the surface of the work the area to be operated on by the tenoning head, and a housing; for said saw mounted on the housing for the head whereby a change in the elevation of the head correspondingly changes the elevation of the saw and docs 'not disturb the predetermined relation between the head and saw. 28. A structure as set forth in claim 27 including means for adjusting the one hous– ie so as es doo 1i5 1 2 y 1,711,275 V ing relative to the other whereby to vary the relation _between the scoring saw and the tenoning head. 29. A structure as set forth in claim 27 including nieans for adjusting the housing of the scoring saw on the housing of the tenoning head whereby to adjust the elevation of the scoring saw with respect to the head and the axial relation therebetween. 39. In a tenoncr machine, the combination with a feed bed, of a unit disposed alongside the same comprising a one–piece hollow frame providing two standards in fore ,and aft spaced relation joined by a connecting reinforcing arch at the upper ends thereof, a motor mounted on one of said standards having a trim saw driven thereby for cutting stock to a desired length, a pair of motors mounted on one side of the other standard above and below the plane ofthe bed for operating tenoniiig heads for cutting a tenon of a thickness determined by the spaced relation of the heads, a pair of motors mounted between the last mentioned motors and tho_first mentioned motor for operating scoring saws in a predetermined relation both to the trim saw and the tenoning heads to score the work at the point operated upon by the tenoning heads, and another motor mounted on the last mentioned standard on the other side thereof for operating a coping head for operation on the end of the tenon. `3l. A tenoner machine as set forth in claim wherein the scoring saw motors are adjustably mounted on the tenoning head motors whereby once a predetermined relation between the scoring saws and the tenoning heads is obtained the relation is not disturbed in the adjustment of said tcnoning heads. ` 32. In a tenoner machine, the combination with a feed bed, of a unit disposed alongside the same comprising a one–piece hollow frame providing two standards in fore and aft spaced relation joinedby a connecting reinforcing arch at the upper ends thereof, a motor mounted on one of said standards having a trim saw driven thereby for cutting stock to a desired length, and a pair of motors mounted on one side of the other standard above and below the plane of the bed for operating tenoning heads for cutting a tenon of a thickness determined by the spaced relation of the heads. 33. In a machine of the character described comprising a standard having cutter heads disposed thereon for operation on the end of a piece of work fed past the same, and a feed bed alongside the standard over which the work is fed to the heads, a ressure bar above the fed bed for holding tlile work in proper position for operation thereon by the heads, means for pivotally supporting the bar on a vertical axis near one end for swinging movement in a horizontal plane toward and away from the standard, said bar :when swung to an out of the way inoperative position being arranged to be supported solely by its pivot, and means spaced substantially from the aforesaid pivot toward the other cud of said bar for supporting anddctachably holding said bar in its normal operative position. , , 34. In a machine of the character described comprising a standard having cutter heads disposed thereon for operation on the end of a piece work fed past the same, and a feed bed alongside the standards over which the Work is fed to the heads, a pressure

bar above the feed bed for holding the work in proper position for operation thereon by the heads, means for pivotally supporting the bar on a vertical axis near one end for swingng movement in a horizontal plane toward. and away from the standard, said bar when swung to an out of the way inoperative position being arranged to be supported solely by its pivot said standard having two portions disposed alongside the bar in its normalposition intermediate the ends of the latter, and means on the bar arranged for engagement with both of said portions for supporting the bar at' two points in addition to the pivot support, said means providing a quickly detachable connection between said bar and both of said standard portions. ~ . 35. Ina machine of the character described comprising a standard having cutter heads disposed thereon for operation on the end of a piece of work fed past the same, and a. feed bed alongside the standard over which the work is fed to the heads, a bracket slidably supported on said standard for adjustment in elevation relative to the bed and also relative to the cutter heads, and a pressure bar mounted on said bracket to be adjusted therewith in elevation relative to the bed, said bar being pivoted near one end on a vertical axis on said bracket for swinginef movement relative to the standard in a horizontal plane, whereby when swung to an inoperative position the bar is supported solely by its pivot. 36. In a machine of the character described comprising a standard having cutter heads disposed thereon for operation on the end of a piece of work fed past the same, and a feed bed alongside the standard over which 'the work is pivoted near one end on a vertical axis on said bracket for swinging movement relative to the standard _ in a horizontal plane whereby when swung to an inoperative position the bar is supported solely by its pivot, and means providing a quickl _detachable connection between said bar andy said bracket at a point spaced substantially from said pivot toward the opposite end of said bar whereby in the normal operative position thereof the bar is supported and held at two points spaced longitudinally thereof. ~ 37. In a machine of the character described T0 comprising a base having a pair of units mounted thereon and arranged to be disposed in variable spaced relation, and a. feed bed including a pair of feed chains on said units for conveying work through the machine, a splined feed shaft extending –between said units, a pair of sprockets for operating said chains mounted on said shaft, one of said sprockets being splined for a sliding driving connection with said shaft and the other sprocket being rotatably adjustable on said shaft, and means foradjusting and locking the last mentioned sprocket to position the same in any degree of adjustment relative to the shaft, said means comprising a. worm gear splined on the shaft, a. collar turning with the sprocket, and a worm rotatably mounted in said collar and meshing with the worm gear. 38. A structure as set forth in claim 37 including a plate mounted on the collar and enclosing the worm and worm gear, said plate being arranged to clamp the worm gear to the collar so as to be fixed for rotation with the sprocket. J UDSON H. MANSFIELD

0) WO15001559A1 – KEY BLANK AND LOCK EBAUCHE DE CLE ET SERRURE

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Title: KEY BLANK AND LOCK

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Family:

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Probable Assignee: SMARTER PLACE TECHNOLOGIES LTD

Assignee(s):(std)**:** SMARTER PLACE TECHNOLOGIES LTD

Inventor(s):(std)**:** HAVIV ASHER

Agent(s): GE EHRLICH 1995 LTD ET AL

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International class (IPC 8–9): E05B35/00 (Advanced/Invention)

CPC: E05B35/003

Classification Explorer

Cited documents: WO0057006 A1, US5170651 A, US4377082 A, US2011072867 AA, GB2314582 A1, FR2651524 A1, EP2017411 A1, EP0431550 A1, DE3424307 A1,

Abstract:
A key blank for a key with teeth cuts and a pair of coaxial active elements mounted in a shaft of the key. The pair of coaxial active elements includes first active element that protrudes from a first surface of the shaft while no force is exerted on the first active element and a second active element that protrudes from a second opposite surface of the shaft while no force is exerted on the second active element. Each of the coaxial active elements is adapted to operate independently from the other of the pair and to exert a compressive force on a pin mechanism of a corresponding lock in response to operative engagement with the pin mechanism and thereby release the pin mechanism from a locked position of the lock, regardless of a positioning or force applied on the coaxial element protruding from the opposite surface of the shaft.

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Title: MODULAR DRIVE ARRANGEMENT FOR ADJUSTABLE BEDS AND THE LIKE

Priority: US19840576580 19840203

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US4545084 A	19851008	US19840576580	19840203

Probable Assignee: SUNRISE MEDICAL HHG INC

Assignee(s):(std)**:** JOERNS HEALTHCARE INC

Assignee(s): LOERNS HEALTHCARE INC ; LOERNS HEALTHCARE INC A CORP OF WI ; SUNRISE HABITAT INC ; SUNRISE MEDICAL CCG INC ; SUNRISE MEDICAL HHG INC ; BANKERS TRUST CO

Inventor(s):(std)**:** PETERSON WARREN J

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US class: 403/197 403/239 5/616 5/618 5/66 5/69 74/625

Locarno class: 5 /69

Classification Explorer

Cited documents: US4381571 A, US4376316 A, US4324010 A, US4271545 A, US3972081 A, US3898702 A, US3797273 A, US3593350 A, US3581319 A, US3281873 A, US3174161 A, US3096106 A, US3012253 A, US2755488 A, US2699688 A, US2617117 A, US2605481 A, US2560465 A,

Forward Citations: USRE43532, USRE43155, US9295598, US9248061, US9089459, US9009893, US8621686, US8286282, US8104122, US7703158, US7669263, US7523515, US7520006, US7506390, US7406731, US7296312, US7216384, US7000272, US6880189, US6684427, US6611979, US6496993, US6226816, US6212714, US6000076, US5685035, US5544375, US5392479, US5269031, US5095562, US5079995, US5076644, US4660236, US2014359942, US2012005828, US2006096030, US2004221391, US2004034936, FR2769498, EP1123690, EP0839508, AT405368,

Abstract:
Source: US4545084A A modular drive arrangement for adjustable beds, and the like, comprises interchangeable motor drive units, and manual crank units. The motor drive units have an output shaft at one end, with a coupling that releasably connects with the controller shafts of the bed to manipulate the adjustable sections of the bed. A first, quick–disconnect latch member is located on the bed frame, and mates with a second, quick–disconnect latch member on the opposite end of each motor drive unit to support the motor drive units on the bed frame. The manual crank units have a coupling at one end, which releasably connects with the controller shafts to rotate the same. The opposite end of each manual crank unit includes a bearing, with a third, quick–disconnect latch member thereon, which also mates with the first quick–disconnect latch member to support the manual crank units on the bed frame, whereby even relatively unskilled personnel, without tools, can remove a motor drive unit from the bed for off–site repair, and replace the same with a manual crank unit to insure uninterrupted operation of the bed, without disturbing the patient.

0) CA2203960A – VEHICLE ANTI–THEFT DEVICE SEPARATELY SIMULTANEO...

138) Family number: 11711141 (CA2203960A) © PatBase

Title: VEHICLE ANTI–THEFT DEVICE SEPARATELY SIMULTANEOUSLY LOCKING TO THE VEHICLE'S STEERING WHEEL AT EACH OF TWO LOCATIONS

Priority: US19960647342 19960509 CA19972203960 19970429

Family:

Publication number	Publication date	Application number	Application date
CA2203960 AA	19971109	CA19972203960	19970429

Probable Assignee: OPENIANO RENATO

Assignee(s):(std)**:** OPENIANO RENATO

Inventor(s):(std)**:** OPENIANO RENATO

International class (IPC 8–9): B60R25/02 B60R25/022 (Advanced/Invention); B60R25/02 (Core/Invention)

International class (IPC 1–7): B60R25/02

Classification Explorer

Abstract:
Source: CA2203960A Two parts telescope so as to selectively engage the steering wheel at a portion of its rim. A third part independently telescopes relative to the first two parts so as to span a remaining portion of the diameter of the steering wheel, and so as engage the rim of the wheel at a point opposite to the portion where are located the first and second parts. One single key lock suffices to lock all telescoping parts in position, selectively engaging or releasing the device from the steering wheel at two points. The impediment presented by the locked device to turning the steering wheel is not subject to being defeated merely by cutting through either the steering wheel, or the device itself, at any single location.

139) Family number: 1334119 (US3987654A) © PatBase

Title: METHOD AND APPARATUS FOR DECODING TWISTING TUMBLER LOCKS AND LOCKS RESISTANT THERETO

Priority: US19740516465 19741021

Family:

Publication number	Publication date	Application number	Application date
US3987654 A	19761026	US19740516465	19741021

Probable Assignee: LOCK TECHNOLOGY INC

Assignee(s):(std)**:** LOCK TECHNOLOGY INC

Inventor(s):(std)**:** IACCINO GEORGE V ; IDONI ROBERT A

International class (IPC 8–9)**:** E05B19/20 (Advanced/Invention); E05B27/00 (Advanced/Non–invention); E05B19/00 (Core/Invention); E05B27/00 (Core/Non–invention)

International class (IPC 1–7)**:** E05B27/00

CPC: E05B19/205 E05B27/0039 Y10T70/761 Y10T70/7701 Y10T70/7797 Y10T70/7932

European class: E05B19/20D P05B27/00E

US class: 70/364A 70/378 70/394 70/419 70/494

Classification Explorer

Cited documents: US3837197 A, US3499302 A, US2791840 A, US14958 A,

Forward Citations: WO15181838, WO08028267, US9353548, US8302439, US7775074, US7614158, US6173595, US6148652, US6138486, US6041629, US6021655, US5966973, US5956984, US5682779, US5450662, US5355701, US5133202, US4998426, US4932229, US4732022, US4723427, US4667494, US2007119065, US2006112748, US2005092048, AU589069,

Abstract:
Source: US3987654A Methods and apparatus for decoding twisting tumbler locks and improvements in such locks to resist such methods and apparatus. To determine depth of cut of bit for a given tumbler, a blade is inserted into key way to position a wirelike probe at tumbler to be decoded. Wirelike probe is advanced upwardly until it engages tit at top of tumbler. Depth of cut of key bit is function of length of tumbler and device can be calibrated to give direct readout of depth of bit cut. Angle of key bit can be measured by hooking a wirelike probe in side gate groove in tumbler and then twisting tumbler until tit engages key plug or shell. Amount of twist permitted is function of angular position required to register tumbler groove with side gate and device can be calibrated to give direct reading of such angle. To defeat depth of cut decoder, twisting tumbler lock wherein tits on tumblers are located at different distances from tops of tumblers is disclosed. Another form of modified twisting tumbler locks that will defeat decoding methods and apparatus herein is tumbler with side gates receiving grooves 180 degrees apart and with no tit.

0) US2006081720A – MULTI–TIER CHOCOLATE FOUNTAIN APPARATUS

140) Family number: 32433307 (US2006081720A) © PatBase

Title: MULTI–TIER CHOCOLATE FOUNTAIN APPARATUS

Priority: CA20052519819 20050915 GB20050018970 20050916 US20040942946 20040917 US20060520576 20060914

Family:

Publication number	Publication date	Application number	Application date
CA2519819 AA	20060317	CA20052519819	20050915
DE102005044060 A1	20060406	DE200510044060	20050915
FR2875493 A1	20060324	FR20050009406	20050915
GB200518970 A0	20051026	GB20050018970	20050916
GB2418233 A1	20060322	GB20050018970	20050916
ITUD20050144 A1	20060318	IT2005UD00144	20050915
US2006081720 AA	20060420	US20040942946	20040917
US2007007273 AA	20070111	US20060520576	20060914

Probable Assignee: ESNAULT MICHEL

Assignee(s):(std)**:** ESNAULT MICHEL

Assignee(s): MICHEL ESNAULT

Inventor(s):(std)**:** ESNAULT MICHEL

Inventor(s): MICHEL ESNAULT

Agent(s): EQUINOX; FRANZ BONSANG C O PROTECTIONS EQUINOX INTL INC

International class (IPC 8–9): A23G1/00 A23G1/04 A23G1/18 A23G1/20 A23G3/22 A47F10/06 A47J43/00 A47J43/04 B05B17/08 B67D3/00 B67D5/63 B67D7/82 F27D11/00 (Advanced/Invention); A47J37/10 (Advanced/Non–invention); A23G1/00 A23G1/04 A23G3/02 A47J43/00 A47J43/04 B05B17/00 B67D3/00 B67D7/80 F27D11/00 (Core/Invention); A47J37/10 (Core/Non–invention)

CPC: A23G1/042 A23G1/18 A23G3/22 A47J37/106 B05B17/085 A23G3/24

European class: A23G1/04K A23G1/18 A23G3/22 A23G3/24 B05B17/08F K47J37/10C

US class: 219/429 219/438 222/146.5 222/146.500 239/20

Classification Explorer

Cited documents: WO05044015 A1, USD528844 S1, USD523278 S1, USD182725 S1, US7182269 BB, US7118045 BB, US7095954 BB, US7021556 BB, US6681684 BA, US6123206 A, US4964520 A, US4847461 A, US4678089 A, US4099627 A, US4026417 A, US3722816 A, US3713583 A, US3691787 A, US3501973 A, US3451622 A, US3091474 A, US3071326 A, US2815852 A, US2372931 A, US2007241205 AA, US2007176014 AA, US2005092853 AA, US2005092852 AA, US1939803 A, US1928799 A, US1322803 A,

Forward Citations: WO10120947, WO10120947, WO09093055, WO09064129, WO06105608, USD765183, USD702982, US7743698, US7383764, US7367263, US7306166, US2010282861, US2010123290, US2008179422, US2008111002, US2007176014, US2005092853, KR101477669, KR100955047, JP2009022235, GB2456825, GB2435496, EP1929878,

Abstract:
Source: US2006081720A A fountain apparatus for use with a flowable food media includes a recipient for receiving the food media therein, an elongated post and a conveyor mechanism. The post defines first and second ends thereof and a passageway extending longitudinally there between. The first end mounts on the recipient to allow the passageway to be in fluid communication therewith. The conveyor mechanism operatively connects to the post for conveying the food media from the first end toward the second end through the passageway. The post has at least one shoulder that extends radially and outwardly there from for abuttingly supporting a tier thereon

0) US4660236A – FREE–ENGAGING DRIVE UNIT FOR ADJUSTABLE BEDS

141) Family number: 5265496 (US4660236A) © PatBase

Title: FREE–ENGAGING DRIVE UNIT FOR ADJUSTABLE BEDS

Priority: US19850782225 19850930

Family:

Publication number	Publication date	Application number	Application date
US4660236 A	19870428	US19850782225	19850930

Probable Assignee: JOERNS HEALTHCARE INC A CORP OF WI

Assignee(s):(std)**:** JOERNS HEALTHCARE INC

Assignee(s): JOERNS HEALTHCARE INC 5555 JOERNS DRIVE STEVENS POINT WI 54481 A CORP OF WI ; JOERNS HEALTHCARE INC A CORP OF WI

Inventor(s):(std)**:** PETERSON WARREN J

International class (IPC 8–9)**:** A61G7/018 (Advanced/Invention); A61G7/002 (Core/Invention)

International class (IPC 1–7)**:** A61G7/06

CPC: A61G7/018 Y10T403/19

European class: A61G7/018

US class: 403/26 5/53.1 5/53R 5/618 5/66 5/69

Locarno class: 5 /69

Classification Explorer

Cited documents: US4545084 A, US4225988 A, US3919727 A, US3571826 A, US3436769 A, US3281873 A, US3281872 A, US3271795 A, US3267493 A, US3237212 A, US3045256 A, US2913300 A, US2912704 A, US27966 A, US1775547 A, CA705064 A,

Forward Citations: USD719387, USD711177, US7302716, US7137160, US6862759, US6854141, US6662391, US5685035, US5544375, US5095562, US2006053550, US2004226091, US2004168253, US2004016056, US2003126683,

Abstract:
Source: US4660236A A free–engaging drive unit is provided for adjustable beds and the like of the type having a mattress support frame or bedspring supported by two detachable end panels. A crank is mounted on one of the end panels, preferably at the foot of the bed, and is positioned at a conveniently accessible height and location. The adjustable bed has at least one controller shaft, which is rotated to adjust an associated portion of the bed. The free–engaging drive unit includes a drive coupling mounted on the foot end panel and a mating driven coupling mounted on an adjacent portion of the bedspring. When the foot end panel is connected with the bedspring, the drive and driven couplings automatically mesh to operatively connect the crank with the controller shaft, and thereby effect bed adjustment.

0) US5044672A – METAL–TO–METAL SEALING PIPE SWIVEL JOINT

142) Family number: 30148788 (US5044672A) © PatBase

Title: METAL–TO–METAL SEALING PIPE SWIVEL JOINT

Priority: CA19912036936 19910222 GB19910004187 19910228 SG19940000844 19940628 SG19940000845 19940628 SG19940000846 19940628 NO19910000636 19910218 US19900497474 19900322 SG19940090844 19940628 SG19940090845 19940628 SG19940090846 19940628

Family:

Publication number	Publication date	Application number	Application date
BRPI9101082 A	19911105	BR1991PI01082	19910320
CA2036936 AA	19910923	CA19912036936D	19910222
CA2036936 C	19951010	CA19912036936	19910222
GB2242246 A1	19910925	GB19910004187	19910228
GB2242246 B2	19940420	GB19910004187	19910228
GB2268559 A1	19940112	GB19930017386	19930820
GB2268559 B2	19940330	GB19930017386	19930820
GB2268560 A1	19940112	GB19930017387	19930820
GB2268560 B2	19940330	GB19930017387	19930820
GB9104187 A0	19910417	GB19910004187	19910228
GB9317386 A0	19931006	GB19930017386	19930820
GB9317387 A0	19931006	GB19930017387	19930820
NO302629 B1	19980330	NO19910000636	19910218
NO303357 B1	19980629	NO19950004356	19951031
NO910636 A	19910923	NO19910000636	19910218
NO910636 A0	19910218	NO19910000636	19910218
NO954356 A	19910923	NO19950004356	19951031
NO954356 A0	19951031	NO19950004356	19951031
SG9490844 A	19941014	SG19940090844	19940628
SG9490845 A	19941014	SG19940090845	19940628
SG9490846 A	19941014	SG19940090846	19940628
US5044672 A	19910903	US19900497474	19900322

Probable Assignee: FMC TECHNOLOGIES INC

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

Assignee(s): FMC CORPORTION A CORP ; FMC CORPORTION A CORP OF DE ; FMC TECHNOLOGIES INC ; KRENEK MICHAEL J ; UNDERWOOD DONALD M ; SKEELS HAROLD B ; MOURET EDMUND M ; CUNNINGHAM CHRISTOPHER E

Inventor(s):(std)**:** CUNNINGHAM CHRISTOPHER E ; CUNNINGHAM CHRISTOPHER EDWARD ; KRENEK MICHAEL J ; KRENEK MICHAEL JOHN ; MOURET EDMUND M ; MOURET EDMUND MARCUS ; SKEELS HAROLD B ; SKEELS HAROLD BRIAN ; UNDERWOOD DONALD M ; UNDERWOOD DONALD MICHAEL

Inventor(s): MICHAEL JOHN KRENEK ; DONALD MICHAEL UNDERWOOD ; EDMUND MARCUS MOURET ; HAROLD BRIAN SKEELS ; CHRISTOPHER EDWARD CUNNINGHAM

Agent(s): SIM AND MCBURNEY

International class (IPC 8–9): E21B43/01 E21B43/013 E21B43/12 F16L17/03 F16L17/035 F16L27/08 F16L37/00 F16L39/04 (Advanced/Invention); F16L17/03 (Advanced/Non–invention); E21B43/00 F16L17/00 F16L27/00 F16L37/00 F16L39/00 (Core/Invention); F16L17/00 (Core/Non–invention)

International class (IPC 1–7): E21B17/12 E21B43/01 E21B43/013 E21B43/12 F16L17/03 F16L17/035 F16L27/00 F16L39/04

CPC: Y10S285/917 F16L17/035 E21B43/013 F16L27/0804 F16L37/002

European class: E21B43/013 F16L17/035 F16L27/08B F16L37/00B

US class: 166/344 166/347 277/236 277/329 277/531 285/184 285/273 285/330 285/351 285/917 285/98

Classification Explorer

Cited documents: US4863314 A, US4787655 A, US4178020 A, US2501639 A, US2240392 A, GB921841 A, GB2229507 A1, GB2221485 A1,

Forward Citations: WO12120259, WO11048005, WO10092326, WO10022167, WO06025746, US9644445, US9611712, US9556710, US9376882, US9291021, US9260944, US9157293, US9151133, US9115560, US8776893, US8776891, US8746332, US8733436, US8622142, US8622138, US8573306, US8561995, US8540018, US8469086, US8376057, US8297360, US8281864, US8272435, US8220535, US8205670, US8167049, US8122948, US8104541, US8091630, US8066076, US8066067, US8066063, US7992643, US7992633, US7770899, US7654583, US7614447, US7467799, US7032905, US6994628, US6915865, US6648335, US6176310, US6142708, US6032958, US6004072, US5997003, US5951061, US5370153, US5364110, US5325925, US5246236, US5224715, US5211226, US2016003386, US2014174764, US2013207349, US2011272607, US2011226483, US2011180275, US2010327532, US2010276162, US2010206576, US2010206575, US2010206547, US2010084143, US2010044038, US2009301728, US2009294125, US2009266542, US2009025936, US2006061047, GB2480164, GB2480164, GB2474988, GB2474988, GB2448824, GB2448824, GB2303221, GB2303221, EP2735694, EP0999339, EP0564223, CN102549233, CN102549233, AU775890,

Abstract:
Source: US5044672A A metal−to−metal sealing pipe swivel joint especially useful with a subsea well completion system to pivotally interconnect the subsea wellhead to a lay−away flowline, the swivel joint having an annular seal element with metallic sealing surfaces and inner and outer tubular elements, also with metallic sealing surfaces, that can be moved into or withdrawn from sealing engagement with the seal element sealing surfaces.

0) US4079580A – FAIL–SAFE LOCKING DEVICE FOR REEL CARRYING SYST...

143) Family number: 1455714 (US4079580A) © PatBase

Title: Fail–safe locking device for reel carrying systems

Priority: US19770774587 19770307 US19780878337 19780206 US19780878339 19780216

Family:

Publication number	Publication date	Application number	Application date
BE864610 A1	19780703	BE19780185705	19780306
BR7801361 A	19780926	BR19780001361	19780306
CA1064788 A1	19791023	CA19780297824	19780227
DE2809816 A1	19780921	DE19782809816	19780307
DE2809816 C2	19850530	DE19782809816	19780307
ES467580 A1	19791201	ES19780467580	19780306
FR2383109 A1	19781006	FR19780006460	19780307
FR2383109 B3	19801128	FR19780006460	19780307
GB1602483 A	19811111	GB19780008819	19780306
IT1155861 A	19870128	IT19780048306	19780306
IT7848306 A0	19780306	IT19780048306	19780306
JP53122831 A2	19781026	JP19780025056	19780307
MX146425 A	19820625	MX19780172663	19780306
US4079580 A	19780321	US19770774587	19770307
US4130985 A	19781226	US19780878339	19780216

Probable Assignee: CEECO MACHINERY MFG

Assignee(s):(std)**:** CEECO MACHINERY MFG ; CKECO MACHINERY MFG LTD

Assignee(s): VARGA JOSEPH A ; CEECO MACHINERY MFG LTD ; CEECO MASCHINERY MANUFACTURING LTD ; CEECO MACHINERY MANUFACTURING ; CEECO MACHINERY MANUFACTURING LIMITED ; CEECO MACHINERY MANUFACTURING LIMITED A CONCORD ONTARIO CANADA ; CEECO MACHINERY MANUFACTURING LTD ; CEECO MACHINERY MANUFACTURING LTD CONCORD ONTARIO ; CEECO MACHINERY MANUFACTURING LTD CONCORD ONTARIO CA

Inventor(s):(std)**:** VARGA J ; VARGA JOSEPH ; VARGA JOSEPH A ; JIYOSEFU BUAAGA

Inventor(s): JOSEPH VARGA ; VARGA JOSEPH TORONTO ONTARIO CA

International class (IPC 8–9): B65H49/20 B65H49/26 D07B3/02 D07B7/06 (Advanced/Invention); B65H49/00 D07B7/00 (Core/Invention); B21C (Subclass/Invention)

International class (IPC 1–7): B21C B21F B65H49/20 B65H49/36 B65H75/36 B66D1/54 D07B3/02 D07B7/02 D07B7/06 D07B7/08

CPC: B65H49/26 D07B7/06

European class: B65H49/26 D07B7/06

US class: 242/129.6 57/127.5 57/65

Classification Explorer

Cited documents: US3147702 A, US3026062 A, US2987870 A, US2958994 A, US2958178 A, US2860479 A, US2787884 A, US2773344 A, US2499246 A, DE6922787 U, DE2347348 A1, DE2100005 A1,

Forward Citations: US6247664, US4896495, US4506499, US4406423, US4369619, US4241573, US4208864, DE3028695, CN105129544,

Abstract:
Source: US4079580A A fail–safe locking device for reel support systems is described which is suitable for use with reels such as those used with wire stranders and similar machines. In the embodiments described, a pintle supporting shaft member is normally biased by a spring to an extended position. A safety plunger is provided which has a stepped exterior surface so as to define a recess or step. The safety plunger is normally biased by a

spring to a disabling position to urge a blocking member, such as a hardened steel ball or sphere, into the path of movement of an abutment surface of the shaft member to automatically and positively lock the shaft member and the pintle. In the locked condition, the plunger member and, therefore, the pintle, cannot accidentally release the reel. The shaft member and the safety plunger are provided with bearing surfaces against which a fluid medium under pressure may be applied by an operator of the machine to, firstly, move the safety plunger from the disabling to an enabling position to permit the ball or sphere to drop into the recess or notch and, therefore, out of the path of movement of the shaft member abutment surface. Once freed, the plunger member is urged by the fluid medium under pressure to a retracted or releasing position. Two opposing pintle assemblies may be mounted on a cradle typically used in wire stranders, and pneumatic pressure is used by the operator to release the fail−safe locking system to accept or release a reel from the cradle. Electrical means may be used for monitoring the position of the safety plunger and for disabling the machine or issuing an alarm upon movement of the safety plunger to its enabling position and, thereby, permitting the plunger member and pintle to move to a retracted position. The fail−safe locking device is also shown on other reel−supporting systems such as bobbin supporting shafts.

0) US2451123A – MULTIPLE DRILL TEMPLATE

144) Family number: 22541116 (US2451123A) © PatBase

Title: MULTIPLE DRILL TEMPLATE

Priority: US19440565628 19441129 US19480012031 19480228

Family:

Publication number	Publication date	Application number	Application date
US2441722 A	19480518	US19440565628	19441129
US2451123 A	19481012	US19480012031	19480228

Probable Assignee: H O SCHULTZ INC

Assignee(s):(std)**:** H O SCHULTZ INC

Inventor(s):(std)**:** SCHULTZ HENRY O

International class (IPC 8–9): B23B39/16 B23B47/28 (Advanced/Invention); B23B39/00 B23B47/00 (Core/Invention)

International class (IPC 1–7): B23B39/16 B23B47/30

CPC: B23B39/162 Y10T74/19023 Y10T74/19084 Y10T74/19098 Y10T74/19516 B23B47/28 Y10T408/08 Y10T408/96

European class: B23B39/16B1 B23B47/28

US class: 33/563 408/241.00R 408/241R 408/3 74/384 74/665GA 74/665GD 74/665R

Classification Explorer

Cited documents: US584910 A, US2337400 A, US1845123 A, US1449164 A,

Forward Citations: US6971824, US4361058, US4137125, US3491380, US3124977, US2892362, US2866366, US2827710, US2755685, US2745466, US2696675, US2608112, US2589485, US2551659, US2551658, US2527969, US2517910, US2004223821, CN104384565,

Abstract:
Source: US2451123A 1. I claim: – 15 LA iemplafte 'assemblage–fur–'use'withss'a' drili head wherein a plurality of drill spindles are adjustable laterally of each other, said template assemblage comprising, a. template having a com~ mon opening defining a, predetermined pattern, means for rigidly positioning said template with respect to said drill head whereby all of said spin– –dles are freely laterally movable within the common opening of said template for adjustment purposes, and

0) US2970493A – VARIABLE RATIO TRANSMISSION MECHANISM

145) Family number: 21950655 (US2970493A)

© PatBase

Title: VARIABLE RATIO TRANSMISSION MECHANISM

Priority: US19580771255 19581103

Family:

Publication number	Publication date	Application number	Application date
US2970493 A	19610207	US19580771255	19581103

Probable Assignee: RIESER JOHN D

Assignee(s):(std)**:** RIESER JOHN D

Inventor(s):(std)**:** RIESER JOHN D

International class (IPC 8–9): F16H57/05 F16H9/16 (Advanced/Invention); F16H57/05 F16H9/02 (Core/Invention)

International class (IPC 1–7): F16H9/12

CPC: F16H9/16 F16H57/05

European class: F16H57/05 F16H9/16

US class: 474/30 474/45

Classification Explorer

Cited documents: US2799176 A, US2797590 A, US2637215 A,

Forward Citations: US4515576, US3386299, US3362241, US3214997, EP0199832,

Abstract:
Source: US2970493A 1. In a variable ratio transmission mechanism including a housing, said housing having a tiuid inclosure and having operable mounting means for a motor, a pair of shafts in spaced parallel relationship, intermediate the spacing of said shafts, each side wall of said inclosure having an opening with a speed indicator scale bracket that includes surface means to form a closure for each said opening, variable effective diameter pulleys mounted in opposed cooperative positions on said shafts, each of said pulleys comprising a pair of sections having opposed inclined belt engaging faces externally beyond said inclosure and forming, by relative axial adjustment variable eifective diameters, for an endless V–belt in active driving relationship to said pulleys, spline means, said spline means being disposed externally on said shafts and correspondingly within hub members of said pulleys and forming the drive means between the pulleys and the shafts, control means for mechanically varying said ratio, a portion of said control means being disposed within said inclosure with linkage means operably attached thereto while extending between said control xneans portion and said pulleys, said portion including a nut member disposed intermediate of said shafts and having internal screw threads and a pair of oppositely inclined curved grooves, disposed in direction transverse to the longitudinal axis of said shafts, a thrust bearing with its casing and operably attached control roller mounted fixedly onto each of said hub members that extends into said inclosure, said nut member being mounted slidably onto a guide rod means, and each said control roller being disposed so as to extend into one of said pair of curved grooves, so that the side walls of each of said curved grooves form a sloped curved track for its respective control roller thereby, upon causing a transverse movement of said nut member its oppositely inclined curved grooves cause one of said control rollers to move toward said V–belt while simultaneously the other roller 2,Q7D,4Q§ is caused to move a correlative amount oppositely, _thereby causing said axial adjustment while maintaining said driving relationship, a lead screw, said lead screw extending threadingly through said nut member and being journally supported for rotation while being fixed against endwise movement, so that a rotative actuation of the lead screw causes said transverse movement, a speed indicator stem, said stem extending through said nut member aud having a spiral groove into which extends a dog point of a setscrew, that is anchored onto said nut member, so that etiecting said transverse movement causes a rotative movement of said stem by an external surface of said point engaging a side wall of said spiral grooveysaid stem, said rod means and said lead screw extending through and beyond each said bracket, and the outward ends of said stern mounting a pointer means; said pointer means indicating on the scale the transverse position of said nut member and consequent speed adjustment of said mechanism at each outward side of said inclosure, and the outward ends of said rod means being provided with screw threads and nuts so that upon tightening up of said nuts causes clamping of said surface means against corresponding surfaces adjacent to said openings and effect said closure, while on at least one of said outward ends of said lead screw is mounted means for effecting said rotative actuation, and a fluid lubricant within said inclosure, a Huid propulsion means mounted within said inclosure operably connected to at least one of said shafts, said propulsion means extending to said liuid so that upon operation of said mechanism it causes part of said fluid being continually propelled above the normal level of the fluid pool within the inclosure and thereby causing wetting of surfaces of said portion of the means and said indicator stern within said inby part of said propelled fluid. control closure

0) CO4180532A – APARATO DE CIERRE CLOSURE DEVICE (MACHINE TRA...

146) Family number: 43685475 (CO4180532A) © PatBase

Title: APARATO DE CIERRE CLOSURE DEVICE (Machine translation)

Priority: CO19940042351 19940919

Family:

Publication number	Publication date	Application number	Application date
CO4180532 A1	19950607	CO19940042351	19940919

Probable Assignee: MUL T LOCK LTD

Assignee(s):(std)**:** MUL T LOCK LTD

Inventor(s):(std)**:** EIZEN NOACH ; MARKBREIT DANI

Inventor(s): NOACH EIZEN ; DANI MARKBREIT

Agent(s): ERNESTO CAVELIER

International class (IPC 8–9): E05B27/00 E05B35/00 (Advanced/Invention); E05B27/00 E05B35/00 (Core/Invention)

International class (IPC 1–7): E05B27/00 E05B35/00

Classification Explorer

Abstract:
Source: CO4180532A 1. PIEZA DE LLAVE QUE INCLUYE: UNA PORCION DE EJE GENERALMENTE ALARGADA QUE DEFI– NE UNA SUPERFICIE DE COMBINACION DE LLAVE EN LA QUE SE PUEDEN FORMAR CORTES DE LLAVES QUE DEFINEN UNA COMBINACION DE LLAVE; Y POR LO MENOS UN ELEMENTO MOVIL DE INSERTO RETENIDO DENTRO DE LA PORCION DE EJE, PUDIENDO DESPLAZARSE EL ELEMENTO MOVIL DE INSERTO EN UNA SOLA DIRECCION HACIA FUERA DE LA SUPERFICIE DE COMBINACION DE LLAVE, PUDIENDI CONFIGURARSE SELECTIVAMENTE DICHO AL MENOS UNICO ELEMENTO MOVIL DE INSERTO PARA PRO– PORCIONAR COMBINACIONES MULTIPLES. 8. CERRADURA DE CILINDRO QUE INCLUYE: UNA CAJA EN LA QUE SE HA FORMADO UN AGUJERO; UN CILINDRO DISPUESTO DE MANERA QUE GIRE DENTRO DEL AGUJERO, TENIENDO EL CILINDRO UNA PLURALIDAD DE RANURAS ANULARES FORMADAS EN UNA SUPERFICIE EX– TERIOR DEL MISMO, ESTANDO DOTADO EL CILINDRO EN UNA BOCALLAVE QUE COMUNICA CON LA SUPERFICIE EXTE– RIOR; Y UNA LLAVE, INCLUYENDO EL AGUJERO POR LO MENOS UN SALIENTE CURVO YUXTAPUESTO POR LO MENOS AS UNA PLURALIDAD DE RANURAS ANULARES Y ESTANDO PROVISTA LA LLAVE DE POR LO MENOS UNA RANURA EN UNA SUPERFICIE DE BORDE QUE CORRESPONDE A POR LO MENOS UN SALIENTE Y REBA– JES DE COLOCACION DE PASADOR EN UNA DE LAS SUPER– FICIES EXTERIORES QUE ESTA PERPENDICULAR A SU SU– PERFICIE DE BORDE. 1. KEY PIECE including: a generally elongate shaft portion which defines a surface COMBINATION WRENCH IN THE COURTS THAT MAY BE KEY TO DEFINE A key combination; AND AT LEAST ONE ELEMENT MOBILE INSERT retained within the shaft portion, being movable MOBILE ELEMENT INSERT IN ONE DIRECTION OUT OF SURFACE key combination, PUDIENDI BE SET SEPARATELY said at least one insert MOBILE ELEMENT MULTIPLE COMBINATIONS provide. 8. cylinder lock comprising: a housing IN WHICH HAS FORMED A HOLE; A cylinder arranged for rotation within the bore, the cylinder having a plurality of grooves formed in a surface ANNULAR outer THEREOF, the cylinder being provided with a keyway communicating with the outer surface area; KEY AND INCLUDING AT LEAST ONE HOLE BOSS CURVO juxtaposed AS AT LEAST ANNULAR a plurality of slots and being provided KEY AT LEAST ONE SLOT IN AN AREA OF edge corresponding to at least one projection and recess JES PIN PLACEMENT IN ONE OF WHICH IS OUTSIDE surfaces perpendicular to its surface EDGE.

0) CN203201278U – INSTANT–UNLOCKING ANTI–BURGLARY BLADE LOCK

147) Family number: 54795922 (CN203201278U) © PatBase

Title: INSTANT–UNLOCKING ANTI–BURGLARY BLADE LOCK

Priority: CN201320184041U 20130413

Family:

Publication number	Publication date	Application number	Application date
CN203201278 U	20130918	CN201320184041U	20130413

Probable Assignee: WHENZHOU ANZHONG LOCK TECHNOLOGY CO LTD

Assignee(s):(std)**:** WHENZHOU ANZHONG LOCK TECHNOLOGY CO LTD

Assignee(s): WHENZHOU ANZHONG LOCK TECHNOLOGY CO

Inventor(s):(std)**:** SHAO WENWU ; ZHOU XIANGGUI

International class (IPC 8–9): E05B29/10 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN203201278U The utility model discloses an instant–unlocking anti–burglary blade lock. A plurality of blade grooves passing through a lock cylinder along a radial direction are arranged in parallel on the lock cylinder along an axial direction; the blade grooves are communicated with a key hole which is formed axially; an ejecting–pressing surface matched with the head of a key is formed at the tail end of the key hole of the lock cylinder; a pair of blades facing opposite directions are arranged in the blade grooves; each blade is provided witha middle tooth hole and a spring positioning block which is used for connecting a blade spring; each spring positioning block is arranged on the periphery of the corresponding blade; hole grooves are formed in a lock shell corresponding to the blade grooves of the lock cylinder; one side ends of the blades extend into the hole grooves in the lock shell; a first bump and a second bump extending towards a central tooth hole direction are arranged in the tooth holes in a first blade and a second blade corresponding to an inner tooth milling groove of the key respectively; and the first bump and the second bump are matched with teeth at corresponding positions of the key. According to the instant–unlocking anti–burglary blade lock, a telescopic lock cylinder unlocking way is adopted, and the moving direction of the lock cylinder is changed, so that the key is not required to be twisted during unlocking, and the problems of breakage of the key by twisting is solved.

0) US3609864A – SURGICAL BLADE HANDLE

148) Family number: 972069 (US3609864A) © PatBase

Title: SURGICAL BLADE HANDLE

Priority: US19690853368 19690827

Family:

Publication number	Publication date	Application number	Application date
GB1318776 A	19730531	GB19700040890	19700825
US3609864 A	19711005	US19690853368	19690827

Probable Assignee: BASSETT R C

Assignee(s):(std)**:** BASSETT R C ; ROY C BASSETT

Inventor(s):(std)**:** BASSETT ROY C

Inventor(s): ROY C BASSETT

International class (IPC 8–9)**:** A61B17/32 (Advanced/Invention); A61B17/32 (Core/Invention)

International class (IPC 1–7)**:** A61B17/32 B25G1/06 B25G3/08 B25G3/38 B26B1/04

CPC: A61B17/3213

European class: A61B17/3213

US class: 30/261 30/321 30/339 D24/147 D8/98

Classification Explorer

Forward Citations: WO8908429, WO11065453, USD418733, US8986307, US8945166, US8819943, US8801433, US8623037, US8597318, US8500767, US8361098, US8201942, US8171600, US7922719, US7909780, US7854742, US7824423, US7749228, US7748124, US7584542, US7500314, US6926727, US5431671, US5055106, US4960419, US4798000, US4788976, US4672964, US4389778, US2010293755, US2009254071, US2009204137, US2007123919, US2007078471, US2006179986, US2006106409, US2006106408, US2006074428, US2006074427, US2006036269, US2004148918, US2002120285, DE102013020296, DE102013020296,

Abstract:
Source: US3609864A ABSTRACT OF THE DISCLOSURE A surgical blade handle that can accept blades inserted by either a righthanded or a lefthanded person, and can rotate the blade at least 180 degrees in the plane of its cutting edge. One terminal end of the blade holding member is spherically shaped and is retained within a socket end of a handle tube which is slotted and has the form of a portion of a sphere. The blade is anchored firmly on the blade holder, and is held securely in position by a clamping rod which forces the spherical end of the blade holder into firm seated frictional engagement within the rounded spherically shaped socket end of the handle tube. The blade holding member may be of one piece construction on which the surgical blade snaps into place, or it can be of two−piece mating jaw construction with the surgical blade being clamped into place and being easily removed by having the mating jaws spring loaded to urge them apart. This invention relates to handle−holders for surgical blades, and particularly to handles capable of anchoring detachable surgical blades in angularly adjustable clamped positions. B

149) Family number: 10114483 (US4718197A) © PatBase

Title: Modular industrial blade grinding and honing machine

Priority: US19860875606 19860618

Family:

Publication number	Publication date	Application number	Application date
US4718197 A	19880112	US19860875606	19860618

Probable Assignee: RATH HANS M

Assignee(s):(std)**:** RATH HANS M

Inventor(s):(std)**:** RATH HANS M

International class(IPC 1–7)**:** B24B3/36

CPC: B24B3/485

European class: B24B3/48B

US class: 451/443 451/65 474/86 51/267 51/285 51/5D 51/80BS 51/81BS

Classification Explorer

Cited documents: US4447158 A, US4038782 A, US3977126 A, US2709874 A, US2692457 A, US2290964 A, US1902010 A, FR54714 E,

Forward Citations: US7029367, US6860796, US6386952, US2005136799, US2003027502,

Abstract:
Source: US4718197A A heavy duty modular blade strip grinding and honing machine is disclosed. The modular machine is constructed with a required number of grind and hone/strop stations, each having an A–frame base anchored to an underlying concrete mass having a coolant drainage system common to the several stations of the machine. Right and left hand grind stations and each hone/strop station include the same precision infeed mechanisms for the grinding wheels and the spiral interlocked honing wheels. Each grind station also includes a reciprocating diamond dressing wheel for the face of the grinding wheel at such station. Each hone station also includes a self compensating belt drive which eliminates all backlash and chatter in the honing wheels.

150) Family number: 13051584 (US5486188A) © PatBase

Title: KERATOSCOPIC SURGICAL INSTRUMENT FOR MAKING RADIAL AND ARCUATE CORNEAL INCISIONS

Priority: US19930151996 19931115 US19950574615 19951219 WO1994US13176 19941115

Family:

Publication number	Publication date	Application number	Application date
AU199511794 A1	19950606	AU19950011794	19941115
EP0729327 A1	19960904	EP19950902566	19941115
EP0729327 A4	19991124	EP19950902566	19941115
JP9506274 T2	19970624	JP19950514566T	19941115
US5486188 A	19960123	US19930151996	19931115
US5626594 A	19970506	US19950574615	19951219
WO9513768 A1	19950526	WO1994US13176	19941115

Probable Assignee: SEB SA

Assignee(s):(std)**:** ALAN D SMITH ; SMITH ALAN D

Assignee(s): SEB SA

Inventor(s):(std)**:** SMITH ALAN D

Inventor(s): ALAN D SMITH

Designated states: AM AT AU BB BE BG BR BY CA CH CN CZ DE DK ES FI FR GB GE GR HU IE IT JP KE KG KP KR KZ LI LK LT LU LV MC MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA US UZ VN

International class (IPC 8–9)**:** A61B3/10 A61B3/107 A61B3/12 A61F9/007 A61F9/013 (Advanced/Invention); A61B3/10 A61B3/12 A61F9/007 (Advanced/Non–invention); A61B3/10 A61B3/107 A61B3/12 A61F9/007 (Core/Invention)

International class (IPC 1–7)**:** A61B17/32 A61B3/10 A61B3/12 A61F9/00 A61F9/007

CPC: A61F9/013

European class: A61B3/107 A61F9/013

US class: 606/166 606/167

Classification Explorer

Cited documents: WO9405225 A1, WO9116023 A1, WO9014808 A1, WO8701272 A1, WO8502763 A1, WO8202485 A1, US5447517 A, US5290301 A, US5269795 A, US5152786 A, US4861155 A, US4815463 A, US4807623 A, US4768509 A, US4750489 A, US4744362 A, US4724837 A, US4705037 A, US4688570 A, US4674503 A, US4665914 A, US4619259 A, US4579457 A, US4526171 A, US4520815 A, US4429696 A, US4406285 A, US4205682 A, US4166695 A, US3384086 A, US3073310 A, SU1068118 T, GB2246874 A1, GB2242835 A1, FR9116023, FR8502763, EP0248569 A2,

Forward Citations: WO9728768, WO15034447, WO11150431, WO0041660, USD589614, USD546452, USD462443, US9597059, US9498231, US9320427, US9149254, US9039623, US8758252, US8732878, US8510883, US8496588, US8317709, US7780689, US7744614, US7645291, US7166117, US6919321, US6878694, US6716227, US6605099, US6582445, US6565584, US6540760, US6527788, US6491637, US6436113, US6371966, US6312439, US6296649, US6254619, US6143010, US6090119, US6051009, US6007553, US5972011, US5951579, US5843105, US5651782, US5624456, US2011099718, US2011060346, US2010004538, US2010004537, US2009192389, US2008077158, US2007244496, US2007083087, US2006287663, US2005209618, US2004236358, US2004097998, US2004002722, US2003144678, US2002077699, RU2523341, RU2523149, RU2523148, EP0957850, AU778883, AU706115,

Abstract:
Source: US5486188A An incision guide instrument for radial keratotomy has a lens positionable over a cornea, containing an incision guide slot adjacent to which is disposed two mirror surfaces within the lens. The mirrors are

angled to allow a surgeon to observe and control the blade depth penetration into the cornea. The slotted, mirrored lens is rotatable and has clip and notch means to locate any of sixteen different radial incision positions. Transverse arcuate cuts are also allowed by the rotatable lens, and a stop means prevents the transverse cuts from contacting the radial cuts. An annular cone disposed over the sclera defines a vacuum chamber for holding the eye in position relative to the lens.

0) US6189647B – ANTI–THEFT STEERING WHEEL FOR VEHICLES

151) Family number: 14963095 (US6189647B) © PatBase

Title: ANTI–THEFT STEERING WHEEL FOR VEHICLES

Priority: US19990407932 19990928

Family:

Publication number	Publication date	Application number	Application date
US6189647 BA	20010220	US19990407932	19990928

Probable Assignee: HORN III WILLIAM S

Assignee(s): HORN III WILLIAM S ; LEE RICHARD B

Inventor(s):(std)**:** HORN III WILLIAM S ; LEE RICHARD B

International class (IPC 8–9)**:** B60R25/02 (Advanced/Invention); B60R25/02 (Core/Invention)

International class (IPC 1–7)**:** B60R2/02

CPC: B60R25/0225 Y10T70/5765 Y10T70/5889

European class: B60R25/022H

US class: 180/287 70/209 70/237

Classification Explorer

Cited documents: US6006851 A, US5653132 A, US5557957 A, US5409077 A, US5031429 A,

Forward Citations: US6539758, US6454486, US6422050, CN103303251,

Abstract:
Source: US6189647B An anti–theft steering wheel has a box–like housing in its central transverse hub portion disposed below the plane of the surrounding annular steering wheel ring portion. The housing is secured to the steering shaft upper end to rotate therewith and has a pair of parallel spaced longitudinal tubular passageways. A pair of metal security rods telescopically mounted in the tubular passageways are movable between a fully retracted position within the tubular passageways and a fully extended position extending radially outward from laterally opposed sides of the steering wheel central transverse hub portion a sufficient distance beyond the annular ring portion to obstruct and prevent effective rotation of the steering wheel. A security rod release button protruding from the rear of the central hub portion simultaneously moves a pair of spring biased detent pins in the housing between a latched position engaged with the security rods to maintain the rods in the fully retracted position and an unlatched position disengaged from the security rods. A pair of latch members connected with a key lock are movable between a latched position engaged with the security rods to maintain the rods in the fully extended position and an unlatched position disengaged therefrom to allow retraction thereof. The key lock has a key receiving portion on the front of the steering wheel for receiving a key that moves the latch members to their unlatched position to allow retraction of the security rods.

0) US4295434A – FEED MECHANISM FOR SEWING MACHINES

152) Family number: 1554691 (US4295434A) © PatBase

Title: Feed mechanism for sewing machines

Priority: CA19800361683 19801007 US19790087906 19791024

Family:

Publication number	Publication date	Application number	Application date
CA1126589 A1	19820629	CA19800361683	19801007
DE3039019 A1	19810507	DE19803039019	19801016
DE3039019 C2	19831215	DE19803039019	19801016
FR2467901 A1	19810430	FR19800021803	19801013
FR2467901 B1	19840831	FR19800021803	19801013
GB2061337 A1	19810513	GB19800034143	19801023
GB2061337 B2	19831102	GB19800034143	19801023
IT1129200 A	19860604	IT19800068626	19801023
IT8068626 A0	19801023	IT19800068626	19801023
JP1624365 C3	19911118	JP19800149243	19801024
JP2040351 B4	19900911	JP19800149243	19801024
JP56072891 A2	19810617	JP19800149243	19801024
US4295434 A	19811020	US19790087906	19791024

Probable Assignee: UNION SPECIAL CORP

Assignee(s):(std): UNION SPECIAL CORP

Assignee(s): UNION SPECIAL CORP 60610 CHICAGO ILL US ; BT COMMERCIAL CORP ; HSIAO JAMES C

Inventor(s):(std): JIEEMUZU CHIN SEIO ; HSIAO JAMES CHING ; HSAIO JAMES CHING ; HSIAO JAMES C

Inventor(s): HSAIO JAMES CHING CHICAGO ILL US ; CHING HSAIO JAMES ; JAMES CHING HSAIO ; HSAIO JAMES CHING CHICAGO ILL ; JAMES CHING HSIAO ; JEEMUZU CHIN SEIO

Agent(s): FETHERSTONHAUGH AND CO

International class (IPC 8–9): D05B27/02 D05B27/24 (Advanced/Invention); D05B27/00 (Core/Invention)

International class (IPC 1–7): D05B27/02 D05B27/08 D05B27/24

CPC: D05B27/02

European class: D05B27/02

US class: 112/314 112/323

Classification Explorer

Cited documents: US558663 A, US3012531 A, US2725023 A, US2713839 A, US2550553 A, US2546939 A, US2303839 A, US2218287 A, US2172559 A, US1864165 A, US1581496 A, US1543945 A, US1054715 A, JP48005489 U1, FR2415683 A1, DE90885 A, DE38730 A, DE170882 A,

Forward Citations: US7981183, US7655074, US5337689, US5103751, US4589364, US4541354, US4469039, US4421047, US4340003, US2007175194,

Abstract:
Source: US4295434A This disclosure relates to a four motion feed mechanism for sewing machines that is adapted to advance a work piece past the stitch forming point of the machine. Orbital movement is imparted to the feed dog by a drive mechanism including first and second linkage assemblies driven off a common eccentric arranged on the sewing machine bed shaft. A feed lift regulatory assembly is operatively connected to one of the linkage assemblies and is provided to selectively modify the amplitude of lift that is imparted to the feed dog of the machine.

0) US1739271A – EXPANSIBLE WHEEL

153) Family number: 19585668 (US1739271A) © PatBase

Title:	EXPANSIBLE WHEEL
Priority:	US19280258164 19280301

Family:

Publication number	Publication date	Application number	Application date
US1739271 A	19291210	US19280258164	19280301

Probable Assignee:	AMERICAN EXPANSION WHEEL CORP
Assignee(s):(std):	AMERICAN EXPANSION WHEEL CORP
Inventor(s):(std):	TOWNSEND FRANK L
International class (IPC 8–9):	B24D9/02 (Advanced/Invention); B24D9/00 (Core/Invention)
CPC:	B24D9/02
European class:	B24D9/02
US class:	451/507 492/4
Classification Explorer	
Forward Citations:	US2499643, US2485786,

Abstract:
Source: US1739271A Against the outer fa–ce of the disl§`B I preterably dispose I1 collar 25 which surrounds the shaft and may abut against an annular flange 10' formed thereon, while adjacent the outer end of the expander I dispose a substantially similar collar 26 which is adapted to bear against thc end ot the sleeve 22 and inner rim of the stay piece Q3 as well as against the outer rim of the latter while for forcing this washer inwardly so as to move the expander in –a corresponding direction, the end oi the shaft 10 is threaded and provided with av nut 27 and, preferably, with gi. lock nut 28 as Well to insure the retention ofthe nut 27 in any desired position of adjustnient The 1'im or periphery of the wheel is formed bye plurality ofindependent radially movable' segments S, ten of these being employed ‘inthe particular embodiment of the invention illustrated although any desired number may be ’utilized, and as all ot these segments are identical a description of one of them will suffice, Each segment is desirably formed of sheet metal and comprises two principal parts 30 and 31 which may be conveniently designated as the head and toe of the segment, each part being separately stamped or out out to the proper shape and then bent up into final form before they are spot Welded or otherwise united together to term the completed segment. Thus the head or main outer portion of each segment comprises a segmental transversely flat rim 33 dcsirably provided at its edges with inwardly annularly directed flanges 34– with consequent formation of an under out channel extcriorly of the riin while, from the extremities ot the latter, the walls of the segment are directed inwardly in opposite directions as at 35 and then turned into parallel relation and continued to form extensions 36 which, viewed troin the side as in Fig. 4, are relatively narrow in comparison with the rest ot the head and have parallel edges for the maj or portion of their length, it being of course understood, as will be apparent from said ligure, that the ends 37 of the outer .portion of the segment beyond the extension 36 are radially directed and that the length of the segment between the said ends is such that when the several segments are assembled they will either be in contact at their ends or separated by a relatively narrow gap when the wheel is contracted. A stay piece 38 of substantially U–shaped cross section is desirably disposed between the side walls of the segment in alignment with the extensions 36. Thotoe3l of the segment is welded or otherwise secured between the lower ends of the extensions 36 and projects beyond the latter. This toe viewed from the side as in Fig. at is substantially wedge shaped and is provided at– its inner extremity with an inclined face or region 4_0 adapted to bear on the correspondingly inclined region 21 of the expander. The toe is also shaped to provide a laterally extending; lug 4:1 adapted to bear against the inner face ot the disk B which is inwardly oftset as shown in Fig. 2 in the region which is engaged by the lug so as to provide a circular depression 43 for its reception. Desirably, also, the inclined end face 40 of the lug is curved transversely so as to seat more perfectly on the expander and thereby attain a maximum bearing thereon. To insure true radial movement of the segments each of the latter is provided with a guide rib 45 struck outwardly on the face ot the segment and adapted to seat in a radiahy extending groove 46 formed in the inner face of the supporting disk A as best shown in Fig. 3. If desired the segments may also be provided with suitably disposed struck–up strengthening ribs –18. To afford a suitable backing 'tor the annular abrasive band X the undercut channel formed between the inclined ilanges 34 of each segment may be filled with any suitable 'TD SO S5 D0 U5 Il() Il5 I3CI composition C such as hard rubber, libre or the like, conveniently by molding the same into the segment and, it desired, a tiller piece 49 may be secured to the outer face of the rim to assist in holding the composition in place as well as to decrease the amount of composition required to till the channel. In accordance with one method of assembling the wheel on the shaft, the collar and disk B may lirst be positioned on the latter. The expander is then inserted in the disk A and these parts, followed in turn by the collar 26, are slipped over the shaft and the nuts 27, Q8 then screwed loosely on the end thereof. The bolts 15 may then be put in place so as to properly align the collars and the nuts 16 threaded

onto the ends of the bolts without, however, tightening the nuts enough to draw the disks so closely together as to prevent. the insertion of the segments between them. The latter are now assembled in position by consecutively sliding them radially inward between the disks, care being taken to align the guide ribs 45 of the segments with and to enter them into the guide grooves 46 in the disk A. Nuts 16 may then be fully tightened so as to draw the disks together against the faces of the segments which are thereafter prevented from sliding radially outward sufficiently to get out of position by the engagcincnt of the lugs 41 on thc toes of the segments with the annular wall of the depression 43 in the disk B in which they are disposed. Or, it desired and in accordance with another method of assembly, the segments may be assembled with the disks and expander apart from the shaft and then, after the eollar 25 is in place, may be slipped endwise over the shaft and the collar 25 and nuts QT and 28 disposed thereon, Frequently this method of assembly will be found more convenient than that hitherto described but whichever method be adopted, it is apparent that once the disks, belts 15, expander and segments arc assembled, they torn; a sel`[~contained, unitary structure which may readily be placed on or removed from the shaft when desired. After the parts have been assembled on the shaft it is further apparent that by setthe collar Q6 and in be forced longitudishaft, thus wedging ting up on the nut 27, turn the expander may nally inward along the the segments simultaneously radially outward through the engagement of their inclined regions 40 with the conical region of the expander, the extent of outward movement of the segments being of course limited by the diameter of the depression 43. Thus, the radially adjusted position ot the seements is determined by the longitudinally adjusted position et the expander on the slmtt which, in turn, is regulated by the position of nut QT so that when the latter is backed of the wheel can be contracted by simply pressing inwardly on the segments to thereby enable the band X to be readily slipped over the periphery of the wheel. The nut 27 may then be tightened so as to move the segments radially outward until the pressure requisite to hold the band firinly in place is exerted. lt will be observed that the engagement ot' the lugs 41 with the inner face of the depressed portion 43 ot the disk B affords effective resistance to the longitudinal thrust of the expander while the wheel is being expanded; in consequence the only inoveinent segments by while, addilongitudinal is neaatived. which can be imparted to the the expander is a radial one tionally, any tendency of the thrust exerted by the expander V it will further be observed that because the extensions or inner ends of the segments are relatively narrow in comparison with the outer portions or heads thereof, gaps or spaces 50 ot considerable width are left between the extensions room for the passage avoiding the necessity ments for the passage be required if the ends which aitord ample of the bolts 15 thus for slotting the SESof the bolts as might ot each segment were disposed in continuous radial planes throughout their length, while, on the other hand, the ends 37 of the outer ends or heads of the segments at all times are either in contact or nearly so, as when the wheel is contracted to its maximum extent, or else separated by relatively narrow gaps 57. Under ordinary conditions the frictional engagement between the shatt, fiangc 10, nut 27, collars Q5 and 26 and parts adjacent thereto is suticient to insure rotation of the wheel with the shaft but under certain conditions it may be desirable to positively secure the collar 25 and disk B to the shaft as by means of a key 52 or otherwise and thus avoid any possibility ot relative rotation or slippage between the wheel and the shalt. In Fig. 5 I have showna modified form of segment suitable for use \vhen it is desired to provide the wheel with a tlat rim or periphery as, for example, when the wheel is to be used as a pulley for the reception of a belt. This form of segment is similar in all respects to that heretofore described except that the inclined flanges 34: as well as the lillcr piece 49 are omitted. If desired, one or inore strengthening rigs 53 may be formed on the inner face bf the rim to enhance its rigidity. It is therefore apparent I have provided an expansible wheel of relatively light weight but which is, nevertheless, of extreme rigidity and strength and in which the diameter of the wheel may be readily varied, between limits, to enable a band to be firmly seated on its pcriphery or for other purposes as may be desired; that the wheel, irrespective of the adT0 of on CU E25 lGa ll() GO E5 justed position of the Segments, at all times presents zz 'truly cylindrical periphery since the segmenis are respectively constrained to move in radial paths during their adjustment and are at all times positively held in syininelricnlly disposed relation about the axis olf the Wheel; that because of the firm and rigid support afforded by the expander to the individual segments, The Wheel is extremely resistant in inward radial pressure and thus capable of sustaining heavy loads without danger nl' collapse, and that because of the construction and arrangement of the several parts; wilh resulting interlitling and interlocking engagement thereof, it is equally resistant to lvnrsting when run at high speeds in bufiing or other operations. \Vhile I have herein illustrated and described one form of my invention with considerable pai'ti_lt;:ulzu'ity, 1 do not thereby desire or intend to limit myself specifically thereto for numerous modiiiczitions and changes may be made in the design and an rangeinent of the various parks and in their details of construction and assexnbly without departing from the spirit and scope of th–2 invention as defined in the appended elaims. Having thus described my invention, I elaiin and desire to protect by Letters Patent of Hin United States: 1. An expansible Wheel C0111])1'1S1Hg_€l pair of opposed spaced disks, means operative to prevent axial separation of the disks, an expander seated ineone of the disks and lon» gitudinally slidable Wiilx respect thereto, and a plurality of radially disposed segments each having a head portion dispuscd outside the periplieries of the disks and an extension disposed between the disks and aclaptefl to bear on the expander. An expansible wheel comprising a pair nf opposed spaced disks, means operative to prevent axial separation of the disks, an expander seated in one ulss the disks and longitudinally slidable with respect thereto, a plurality of radially disposed segments each having a head portion disposed outside the periplieries of the disks and an extension disposed between the disks and adapted to bear on the expander, and means operative to maintain each segment in radially aligned position. 3. An expansible wheel comprising a pair of opposed spaced disks, means opemtive to prevem, axial separation of the–disks, an expander seated in one of the disks and longitudinally slidable with respect thereto, a plurality of syniinetrieally arranged inov» able segments each having a head portion disposed outside the pcriphei–ies of the disks and an extension disposed between the disks and adapted to bear on the expander, means for limiting the out\\'ar'd inovenient of the segments, and means operative to constrain the segments to respectively move in radial paths relatively to the disks. 4. An expansible Wheel comprising a pair of opposed spaced disks, means operative to prevent axial separation of 1/he disks, an expander having a conical surface seated in fme of the' disks and longiiudinally slidable with respect Lhereto, a plurality of symmetrically arranged movable segments each having a head portion disposed outside the periphcries of the disks and an extension disposed between The disks and provided with a. foe having an inclined

region adapted to bear on the expander, means ss?or limiting the out ward movement of the seginents, and means operative to constrain the segments tn 1‘e_lt; spectiv–sly insve in radial paths relatively to the disks. 5, In eoinhination with a supporting shaft, a pair of disks surrounding the shalt and lon» gitudinally spaced apart, an expander surrounding and slidable on the shaft and having a conical surface, means operative to limit niovenient of the expander in one direction, means for limiting inovenient of one of the disks along the shaft, in the other direction, means for preventing axial separation of the disks, a plurality of ssegnients sylninetrieaily ax'ra11§_gt;§er| about the shaft and eaeh having a head portion extending beyond Lhe peripheries of the disks and ai tee portion nisposed between the disks and having an inclined regi on adapted to bear on the exp finder, and means for moving the expander along the shaft in a direction to simultaneously force all of the segments radially outward through eoaetion of their inclined SLU`i`l}(T€S With the conical surface oi’ the expander. 6. In coinbination with a supporting shaft, ll pair of disks surrounding the shaft and longitudinally spaced apart, an expander mounted in one of the disks and having a conical sanrfaee, the expander surrounding and being slidable on the shaft, means opemi ive lo limit movexnent of the expander in one direction with respect to Said disk, means for preventing axial sepaiarion of the disks, means for limiting IIIOVGIIIBHY– of the other disk along the shaft in the other direction, a plurality of segments syinnietrically arranged about the shaft and each having a head por~ tion extending; beyond the peripheries of the disks and a toe portion exlending between the disks and adapted to bear on the conical surface of ihe expander, means for moving the expander along the Sha ft relatively to the disk in which it is mounted and in a di1~ec» tion Lo siiniilnaneously force all of the segments radially O11t\\'2L1'(,l¢ means for constraining the sagnien ts to respectively move in 1`lL(l1ll1 paths, and means for limiting the mitward inoveinent of the segments. In witness whereof, I have hereunto sei; my hand this 29th day of February, 1928

0) IN01812MU2011A – A KEY FOR PIN TUMBLER LOCK

154) Family number: 52608240 (IN01812MU2011A) © PatBase

Title: A KEY FOR PIN TUMBLER LOCK

Family:

Publication number	Publication date	Application number	Application date
IN01812MU2011 A	20121228	IN2011MU01812	20110622

Probable Assignee: GODREJ AND BOYCE MFG CO LTD

Assignee(s): GODREJ AND BOYCE MFG CO LTD

Inventor(s): THOTTUVAI SIVASUBRAMANI MURALI

International class (IPC 8–9): E05B27/02 (Advanced/Invention)

Classification Explorer

Abstract:
Source: IN01812MU2011A The present invention provides a key for pin tumbler lock, the pin tumbler lock having a cylinder shaped pin tumbler and plurality of locking pins for facilitating proper locking when correct key is inserted, the key comprising: an elongated cylindrical shank having two ends named first end and second end; a key crown being provided at the first end of the elongated cylindrical shank, the key crown being adapted to hold the key firmly by a user and apply torque while operating the lock with key; and a key blade being provided at the second end of the elongated cylindrical shank, the key blade having top surface, bottom surface and two side surfaces, the top surface is flat and having plurality of grooves, the side surfaces are flat and one of the side surface having plurality of grooves varying in depth and being arranged in space apart relationship, the bottom surface having curved region at middle being adapted to slide on the pin tumbler to facilitate the engagement of locking pins with the grooves of top and side surfaces.

0) CN203201276U – INSTANT–UNLOCKING ANTI–BURGLARY BLADE LOCK

155) Family number: 54795901 (CN203201276U) © PatBase

Title: INSTANT–UNLOCKING ANTI–BURGLARY BLADE LOCK

Priority: CN201320184044U 20130413

Family:

Publication number	Publication date	Application number	Application date
CN203201276 U	20130918	CN201320184044U	20130413

Probable Assignee: WHENZHOU ANZHONG LOCK TECHNOLOGY CO LTD

Assignee(s):(std)**:** WHENZHOU ANZHONG LOCK TECHNOLOGY CO LTD

Assignee(s): WHENZHOU ANZHONG LOCK TECHNOLOGY CO

Inventor(s):(std)**:** SHAO WENWU ; ZHOU XIANGGUI

International class (IPC 8–9): E05B15/00 E05B19/08 E05B29/06 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN203201276U The utility model discloses an instant–unlocking anti–burglary blade lock. A plurality of blade grooves passing through a lock cylinder along a radial direction are arranged in parallel on the lock cylinder along an axial direction; the blade grooves are communicated with a key hole which is formed axially; an ejecting–pressing surface matched with the head of a key is formed at the tail end of the key hole of the lock cylinder; a pair of blades facing opposite directions are arranged in the blade grooves; each blade is provided with a middle tooth hole and a spring positioning block which is used for connecting a blade spring; the spring positioning block is arranged on the periphery of the blades; hole grooves are formed in a lock shell corresponding to the blade grooves of the lock cylinder; one side ends of the blades extend into the hole grooves in the lock shell; a first step and a second step extending towards a central tooth hole direction are arranged in the tooth holes in a first blade and a second blade corresponding to an outer tooth milling groove of the key respectively; and the first step and the second step are matched with teeth at corresponding positions of the key. According to the instant–unlocking anti–burglary blade lock, a telescopic lock cylinder unlocking way is adopted, and the moving direction of the lock cylinder is changed, so that the key is not required to be twisted during unlocking, and the problems of breakage of the key by twisting is solved.

0) US3258945A – TUMBLER PIN ASSEMBLY JIG AND CODING DEVICE THER...

156) Family number: 21478730 (US3258945A) © PatBase

Title: TUMBLER PIN ASSEMBLY JIG AND CODING DEVICE THEREFOR

Priority: US19640381708 19640710

Family:

Publication number	Publication date	Application number	Application date
CH438076 A	19670615	CH19650003557	19650315
FR1426700 A	19660128	FR19650009335	19650316
GB1106192 A	19680313	GB19650011189	19650316
US3258945 A	19660705	US19640381708	19640710

Probable Assignee: CHICAGO LOCK CO

Assignee(s):(std)**:** CHICAGO LOCK CO

Assignee(s): CHICAGO LOCK COMPANY

Inventor(s):(std)**:** KERR WILLIAM J ; WILLIAM JOHN KERR

Inventor(s): JOHN KERR WILLIAM

International class(IPC 8–9)**:** E05B27/08 (Advanced/Invention); E05B27/00 (Core/Invention)

International class(IPC 1–7)**:** E05B17/00 E05B27/08 E05B9/04

CPC: E05B27/083 Y10T29/49838 Y10T29/49899 Y10T70/7667 Y10T70/7729 Y10T70/7785 Y10T70/7853 Y10T70/80

European class: E05B27/08B

US class: 29/433 29/466 70/372 70/382 70/392 70/404 70/431

Classification Explorer

Cited documents: US3142167 A, US2063085 A, US1984202 A,

Forward Citations: USD533436, US6038898, US5819569, US5609052, US5105637, US3404548, US3330141, US2014331724,

Abstract:
Source: GB1106192A 1,106,192. Tumbler pin coding device. CHICAGO LOCK CO. 16, March, 1965 [10, July, 1964], No. 11189/65. Heading E2A. A tumbler pin coding device comprises a holder 12 for maintaining an annular series of tumbler pins 10 in coded relationship according to length and in parallel and in circumferentially spaced relationship whereby the holder may be brought into juxtaposition with a corresponding series of axially extending tumbler pin receiving bores of an axial pin tumbler lock assembly and tumbler pins ejected endwise from the holder directly into such bores, the holder including an annular end wall 30 having a central opening 31 adapted to receive a pilot post of the lock assembly to align the holder and lock assembly, the wall 30 having a series of axially extending tumbler pin receiving bores 34, a lock–operating key 60 including a cylindrical body 64 having an end socket 66 adapted to receive said pilot post when the key is operatively inserted in the lock assembly, the rim region of the socket 66 being formed with a series of longitudinally extending notches 69, the depths of which vary according to a given code, the number and disposition of the notches corresponding to the number and disposition of the bores 34, and on alignment post 52 adapted to be projected through the opening 31 and into the socket 66 whereby the notches 69 are brought into register with the bores 34 to establish a series of tumbler pin receiving sockets the depths of which are a function of the depths of the associated notches and into which sockets the tumbler pins are adapted to be manually inserted endwise. In the embodiment shown the correct alignment of the key and holder is ensured by lugs thereon engaging in a longitudinal groove 50 in the post 52. The holder 12 is preferably made of transparent "Lucite" (R.T.M.) so that the depths of the notches 69 can be seen when inserting pins of different lengths into the bores 34, the pins being frictionallv retained in the bores by an elastomeric O–ring 36 which intersects the bores.

0) US2008108440A – EXPANDABLE/BATON WITH TWIST RELEASE FOR RETRACT...

157) Family number: 41785774 (US2008108440A) © PatBase

Title: EXPANDABLE/BATON WITH TWIST RELEASE FOR RETRACTION

Priority: US20060593350 20061106

Family:

Publication number	Publication date	Application number	Application date
US2008108440 AA	20080508	US20060593350	20061106
US7416490 BB	20080826	US20060593350	20061106

Probable Assignee: ARMAMENT SYSTEMS AND PROCEDURES INC

Assignee(s):(std): ARMANENT SYSTEMS AND PROCEDURE ; ARMAMENT SYSTEMS AND PROCEDURES

Assignee(s): ARMAMENT SYSTEMS AND PROCEDURES INC ; ARMANENT SYSTEMS AND PROCEDURES INC ; EMISSIVE ENERGY CORP ; IQ HONG KONG LTD ; M AND I MARSHALL AND ILSLEY BANK ; ZEN DESIGN GROUP LTD ; VECTOR PRODUCTS INC ; TARGET CORP

Inventor(s):(std): PARSONS KEVIN L ; STENER LESTER O

Agent(s): WELSH AND KATZ LTD; HUSCH BLACKWELL SANDERS WELSH AND KATZ

International class (IPC 8–9): F41B15/02 (Advanced/Invention); F41B15/00 (Core/Invention)

CPC: Y10T403/7049 F41B15/027

European class: F41B15/02B4

US class: 285/302 403/366 463/47.7

Classification Explorer

Cited documents: USH1947 H1, USH001947 H1, US6623361 BA, US6238292 BA, US5961387 A, US5919093 A, US5868621 A, US5797797 A, US5667441 A, US5657986 A, US5647591 A, US5645276 A, US5595386 A, US5509653 A, US5407197 A, US5386322 A, US5356139 A, US5348297 A, US5161800 A, US5149092 A, US5110375 A, US4037839 A,

Forward Citations: US9480245, US9360035, US9182192, US8568242, US2015198190, US2014357382, US2011016650, TWI502163, CN104457414, CN103148740,

Abstract:
Source: US2008108440A An expandable baton has a twist release for retraction. Each inner section of the baton can lock in its extended position, relative to the preceding section, after axial extension. That section can be released for axial retraction by rotating that section about the longitudinal axis relative to the preceding section.

158) Family number: 7228377 (US3719064A) © PatBase

Title: COMBINATION LOCK WITH LINEALLY MOVABLE CAM FOLLOWERS AND NONSEQUENTIALLY ACTING TUMBLER HOLDERS

Priority: US19710181853 19710920

Family:

Publication number	Publication date	Application number	Application date
US3719064 A	19730306	US19710181853	19710920

Probable Assignee: MOSLER SAFE CO

Assignee(s):(std)**:** MOSLER SAFE CO

Assignee(s): MOSLER SAFE CO US

Inventor(s):(std)**:** POTZICK A

Inventor(s): POTZICK A US

International class (IPC 8–9)**:** E05B37/08 (Advanced/Invention); E05B37/00 (Core/Invention)

International class (IPC 1–7)**:** E05B37/00

CPC: E05B37/08 Y10T70/7226 Y10T70/7322 Y10T70/7367 Y10T70/739 Y10T70/7401

European class: E05B37/08

US class: 70/29.9 70/299 70/315 70/323 70/327 70/329

Classification Explorer

Cited documents: US3518856, US3436941, US2566967, US2155734, US1337242,

Forward Citations: US6904778, US4560164, US4238942, US4123925,

Abstract:
Source: US3719064A A combination lock having lineally movable cam followers that position corresponding tumblers. The tumblers are engageable with corresponding fences when arrested in proper positions. A spring resiliently couples each tumbler to a corresponding cam follower, and tends to cause them to move together lineally. Holders are actuated individually to prevent motion of the corresponding tumblers. The holders make edgewise engagement with the tumblers, and cam them into discrete positions. Randomly oriented holder cams operate in nonsequential order to actuate the holders to arrest the corresponding tumblers. The holder cams are rotated incrementally by a ratchet and pawl.

159) Family number: 18883335 (GB434817A)

© PatBase

Title: Improvements in or relating to machines for operating upon the margins of boot or shoe soles

Priority: GB19340007344 19340308

Family:

Publication number	Publication date	Application number	Application date
GB434817 A	19350909	GB19340007344	19340308

Probable Assignee: UNITED SHOE MACHINERY CORP

Assignee(s):(std)**:** UNITED SHOE MACHINERY CORP

International class(IPC 8–9)**:** A43D43/02 (Advanced/Invention); A43D43/00 (Core/Invention)

International class(IPC 1–7)**:** A43D43/02

CPC: A43D43/02

European class: A43D43/02

Classification Explorer

Abstract:
Source: GB434817A 7344. [Class 31 (i)] A machine for operating upon the margins of boot or shoe soles, for example a channelling machine, is provided with an oscillating knife movable about an axis intersecting the plane of the sole and located at one side of the line of feed of the sole, and an oscillating feed device movable about an axis intersecting the plane at the opposite side of the line of feed. In the machine shown, which somewhat resembles that described in Specification 291,873, [Class 31 (i)], inner and outer channelling knives 42, 44 are provided which are movable about axis perpendicular to the plane of the work and on opposite sides of the line of work feed. The work is fed by vertically–reciprocating feed dogs 50, 52 carried by oscillating knife carriers 62, 64 which move so that while the work is fed by the feed dog on one carrier, it is being cut by the channelling knife on the other carrier moving in the reverse direction. The feed dogs may be provided with slashing or slitting knives on their lower faces to form shallow cuts at right angles to the sole edge and the inner channel; by removing the channelling knives, the machine may thus be adapted for making soles for cement process shoes by slashing only. The outer knife carrier 64 may also carry an adjustable vertical knife 58 in advance of the channelling knife 44 for reducing the width of the marginal lip E of the sole. The under face of the sole may be bevelled by means of a chamfering knife 60 which oscillates with an edge gauge. The machine is driven by an electric motor 80 connected by suitable gearing to drive the vertical driving shaft 70 which actuates all the various parts of the machine. The oscillating knife carriers 62, 64, Figs. 11 and 17, pivoted on shafts 156, 158, are provided with arms 168 connected by a link 166 and are oscillated simultaneously in opposite directions by a two–armed lever 66 pivoted at 172 to the machine head 74 and rocked by a cam 68 on the shaft 70; one arm of the lever 66 is coupled to the carrier 64 by a link 170 pivotally mounted on a rod 180, the link 170 carrying a roller 178 which engages with a groove 176 in the lever 66. The outer part of the groove is curved about the pivotal connection of the link 170 with the carrier 64 and the inner part of the groove may be curved about the same point or it may be eccentric thereto ; in the latter case, movement of the roller 178 into the inner part of the groove, in addition to decreasing the amplitude of the oscillations of the carriers 62, 64, relatively displaces the paths of movement of the channelling knives. This displacement may be used to facilitate swinging of the sole at the toe. The roller 178 is normally held at the outer end of the groove by a spring and a suitable stop, and may be moved inwards by depressing a foot pedal 658 which acts through suitable mechanism to move the rod 180, a screw 650 being adjustable to limit the inward movement. Movement of the carriers 62, 64 may be stopped while the machine is running by moving the roller 178 into line with the pivot 172. The inner channelling knife 42, Fig. 17, is mounted on a slide 186 which is slidable in the carrier 62, is pressed downwards by adjustable spring 224, and has its downward movement limited by stop lugs 232 thereon co–operating with shoulders on the carrier 62. The knife 42 is adjustable horizontally by a screw 204 and slot 206 and vertically in relation to a presser gauge 46, which is fixedly secured to the slide 186 by a clamp screw 214, by a screw 208 and slot 210 and a fine adjustment screw 216. The outer channelling knife 44 is mounted on a similar slide 188 and is adjustable horizontally by screws 254 and vertically by a screw 260 and slot 262 and a fine adjustment screw 264. The edge of the knife 44 may be inclined to the horizontal more than usual without any undue tendency to digging in, because of the shortness of the strokes of the knife. The presser gauge 48, Fig. 18, for the outer channelling knife is fixedly secured to an auxiliary slide 306 which is mounted in a vertical slideway 308 in the slide 188 and is pressed downwards by a spring 310. For operating upon insoles for welt shoes, the auxiliary slide 306 is fixedly secured to the knife slide 188 by a screw 318 so as to maintain a uniform thickness of the outer lip. For operating upon soles for turn shoes, the screw 318 is removed so that the presser gauge can yield independently of the knife so as to maintain a uniform thickness of the feather. The feed dogs 50, 52, Figs. 7 and 17, are adjustably secured by screws 328 and slots to rods 336 which are pressed downwards by springs 340 and have a pin 344 and slot 346 connection with outer sleeves 338. Each sleeve 338 has an upstanding ear 348 connected by a ball and socket joint 349 with the

lower end of a link 350, the upper end of which is connected by a ball and socket joint 352 with a rocker member 354 pivoted at 356 and actuated by an eccentric 72 on the shaft 70 through a rod 364 and actuator member 362. The actuator 362 pivoted at 356 is connected to the rocker member 354 by a finger 370 which is pivoted to the rocker member and carries a stud 374 adapted to enter a notch 376 in the actuator under the action of a spring 377. The above arrangement is such that the feed is intermittent. Means are also provided to automatically stop the vertical reciprocation of the feed dogs when the work is removed from beneath them. A spring−pressed pivoted pawl 378 is adapted to engage with a shoulder 382 on the finger 370 to disengage the stud 374 from the notch 376, the pawl 378 being normally held out of engagement with the shoulder 382 by a rod 386 engaging its tail 390 ; the rod 386 is slidable in the rock shaft 156 and is connected at its lower end with the inner channelling knife slide 186 so as to move therewith. A spring−pressed plunger 392 normally held retracted by a pivoted latch controlled by the rod 386, is released to engage with a flat 394 on the rocker member to bring it to its central position so that the feed dogs are stopped in their mid−vertical positions. The work table 40, Figs. 3 and 7, comprises a disc having a depending central cylindrical stem 412 which turns freely in a supporting block 416. The edge gauge and the chamfering knife 60 are mounted on an auxiliary work support 422 which is oscillated about the axis 412 of the table 40 in unison with the outer channelling knife 44. The support 422 and a flat lever 560 are fixed to a vertical post 554 on which is loosely pivoted a plate 564 which engages between flanges 572 on a rocker member 566 loosely pivoted on the shaft 158 and adapted to be rocked in unison therewith by an offset post 568 on the rocker member extending upwardly between a pair of lugs 570 on the carrier 64. The table 40 and the auxiliary work support 422 are mounted on a carrier 420 and the table 40 has a dovetail connection 426 therewith to allow of its adjustment towards and away from the support 422. The carrier 420 is mounted for horizontal adjustment by a hand lever 508 to adjust the edge gauge 54, and for vertical adjustment by a hand wheel 470 for operation upon soles of different thicknesses, being held against rotation by a rod 448. The carrier is formed with a depending hollow stem 430 bearing in the central portion of a horizontal supporting arm 434 which is secured to a rock shaft 438 ; the arm 434 is swung for adjustment by an eccentric pin 444 on a disc 445 fixed to a shaft 446 which is operated by the hand lever 508. Three adjustable stops are provided so that different distances between the bottoms of the channels and the edge of the sole can be easily obtained at different parts of the sole. The end positions are determined by pins 510, 527 co−operating with shoulders 503, 528 on the machine head 74, and the middle position by a latch 512 on the hand lever 508 co−operating with a recess 514 in the arm 434. The carrier 420 is adjusted vertically by the hand wheel 470 which has a screwed stem to cooperate with a nut 454 bearing underneath the carrier stem 430 ; the hand wheel 470 is provided with a scale and is held in adjusted position by a spring−pressed pivoted latch 476 engaging with notches 478 therein. The carrer 420 is adapted to be lowered for the removal of work from the table 40 by depression of a pedal 490 which is connected by a rod 488 to a bell−crank lever 484, the upper arm 460 of which is connected by a link 458 and a ball and socket joint 482 to the carrier. The first part of the movement of the pedal 490 serves also to lift the channelling knives somewhat so that they emerge from the surface of the sole and allow them subsequently to drop. The channelling knife slides 186, 188, are raised by arms 580, 582, Fig. 9, on a rockshaft 584 engaging under the stop lugs 232, 282; the rock−shaft is operated from the pedal through a rod 602 Fig. 7, a bell−crank lever 598 and a crank arm 595, a clutch being provided so that further depression of the pedal 490 after the arms 580, 582 have reached their end positions causes teeth 606 on clutch sleeves 594, 608 to ride out of engagement with one another. The outer channelling knife can be lifted out of engagement with the sole so as to omit the outer channel over part of the sole by depression of a pedal 640 which acts in a similar way to the pedal 490 to rock an arm 616. To adapt the machine to soles for turn shoes, the outer channelling knife may be replaced by a shoulder knife which makes a shoulder cut instead of an edge slit.

0) GB821571A – RECORD TAPE PERFORATING ARRANGEMENT IN A CASH R...

160) Family number: 20591976 (GB821571A) © PatBase

Title: Record tape perforating arrangement in a cash register, adding machine, or accounting machine

Priority: GB19570002107 19570121

Family:

Publication number	Publication date	Application number	Application date
GB821571 A	19591007	GB19570002107	19570121

Probable Assignee: NCR CO

Assignee(s):(std)**:** NCR CO

Assignee(s): THE NATIONAL CASH REGISTER COMPANY

Inventor(s):(std)**:** HARBOR WILLIAM HENRY

Forward Citations: US3117720,

Abstract:
Source: GB821571A 821,571. Cash registers. NATIONAL CASH REGISTER CO. Nov. 4, 1957 [Jan. 21, 1957], No. 2107/57. Class 106 (1). [Also in Group VIII] A cash register, adding machine or accounting machine is provided with a plurality of punch bearing members adapted to cause a tape to be perforated in a single machine operation with a complete frame of coded data. General arrangement.–As described, a cash register, Fig. 1, comprises amount setting hand levers 14, the set–up amounts being visible through an aperture 17, and ledger number levers 16, the ledger number settings being visible at 18. Transaction details are printed by means not described, a ticket being issued via a shoot 19, and a detail strip being visible at 20. Depression of a motor bar 21 causes an electric motor to operate the printing and punching mechanism, and to open a cash drawer 9. Setting mechanism.–Values set by differential actuation of amount levers 22, 23, Fig. 2, connected to the hand levers 14 and the ledger number levers 16 are transferred to sixtytoothed gear–wheels 37 by intermediary gearing, each gear–wheel 37 being rigidly connected to a corresponding punch bearing disc 41. Punching discs and die.–The pence and farthing punching discs 41 each have twelve faces, only four faces of the farthings disc being used, the remaining discs 41 having ten faces. Each disc, Fig. 6, has on each face six holes 72 in five of which pins 73 are inserted in the required code combination, the remaining hole serving to retain a feed–hole pin 74. An " endof–frame " code symbol is punched by a member attached to the punching assembly framework and always aligned in punching position. The punching die 77, Fig. 10, has secured thereto at such a distance as to permit free passage of the tape 75, a stripper plate (not shown), and is adapted to be rocked at each machine operation by a bell–crank lever 85 which carries a roller (not shown) co–operating with a cam on a camshaft. Additional guiding and supporting means for the more fragile feed–hole pins 74 is provided by an apertured bar (not shown) secured to the die 77. Tape feeding mechanism.–An extension–piece 87 secured to a base–plate 78 carries a shaft 90 driven by a bevel gear. A gear 97, Fig. 13, mounted on the shaft 90 drives a pinion 101 fixedly mounted on a shaft 100 which also carries a roller 103 carrying feeding–pins cooperating with holes 110 in another roller 109 driven by an integral pinion 108 meshing with a pinion 102 carried by the shaft 100, the tape 75 being fed between the rollers 103, 109 and urged towards the roller 103 by a spring–biased guideplate (not shown). Manual rotation of a crank 116 counter–clockwise (Fig. 10) causes a downward extension 115 thereof similarly to rotate, the extension 115 co–operating with a cam slot in a support–plate 106, Fig. 13, which therefore rotates slightly to separate the rollers 103, 109 enabling a new length of tape to be threaded through when required. Tape is fed from a supply roll 122, the tape passing between rubbercovered guide rollers 126, 128, the roller 128 being urged by a spring 131 to press the tape 75 against the roller 126, which is driven by a chain drive 137 from a gear 98 attached to the shaft 90. After punching, the tape is guided to a circular receiving plate (not shown) mounted on a pulley driven by an endless coil–spring 136. Means comprising a slide having an aperture co–operating with studs on the gear–wheel 98 are provided for maintaining the shaft 90 in position during the punching operation (Fig. 9, not shown). A confetti box may be sprung in an aperture 166, Fig. 10, to receive the punchings from the tape 75.

0) US2099194A – TRACTOR

161) Family number: 21269625 (US2099194A) © PatBase

Title:	TRACTOR
Priority:	US19340711377 19340215

Family:

Publication number	Publication date	Application number	Application date
US2099194 A	19371116	US19340711377	19340215

Probable Assignee:	DEERE AND CO
Assignee(s):(std):	DEERE AND CO
Assignee(s):	DEERE AND COMPANY
Inventor(s):(std):	THEOPHILUS BROWN
Inventor(s):	BROWN THEOPHILUS
International class (IPC 8–9):	B60B35/10 F16D1/091 F16D1/094 (Advanced/Invention); B60B35/00 F16D1/06 (Core/Invention)
International class (IPC 1–7):	B60B35/10
CPC:	B60B27/0015 B60B27/065 B60B35/003 B60B35/1027 B60B35/1081 B60B35/109 B60B37/10 B60B2310/305 B60B2310/306 B60B2310/311 B60B2380/12 B60B2380/14 B60Y2200/221 F16D1/094 Y10S180/906
European class:	B60B27/00D B60B27/06B B60B35/00C B60B35/10A4 B60B35/10C2 B60B35/10C4 B60B37/10 F16D1/094 F16D1/09C5 L60B310/305 L60B310/306 L60B310/311 L60B380/12 L60B380/14 L60Y200/221
US class:	180/340 180/906 301/9.2
Classification Explorer	
Forward Citations:	WO9210691, US7735176, US5489114, US2829725, US2655410, US2637598, US2593692, US2458249, US2417139, US2005039278, DE961579, DE1069416, AU650084,

Abstract:
Source: US2099194A What I claim; therefore, and desire to secure by Letters Patent is:– 1. A tractor having an axle member extending outwardly from and rotatable with respect to the body o! the tractor, said axle member having a screw threaded portion, a wheel member mounted on the outer end of said axle inember, releasable means movable laterally with the wheel and including two cooperating parts, one carried by said wheel member and the other carried by said axle member, operative in one position to Hx the wheel member to the axle member and operative ln another position to provide for relative rotation between said members, and means for connecting the tractor motor with one of said members so as to rotate the same when said cooperating parts are in one of their positions and cause said screw threaded portion of. the axle member to react against the tractor body and shift the wheel member laterally relative thereto. 2. A tractor comprising, in combination, a frame member, an axle journaled for rotation therein, a wheel member mounted on said axle, the latter having a threaded section cooperating with one oi' said members to cause the wheel member to shift laterally relative to the frame member upon rotation of the axle, releasahle locking means carried by said wheel member and axle in both its locked and released position for connecting the wheel member and axle to cause them to rotate together, said locking means being shiftable laterally with the wheel` member when the latter ls shifted relative to the frame member, and releasable means operable alternately with remct to said iirst releasable means for locking the axle and frame member together. 3. A tractor having in combination, a frame, supporting wheels therefor, rotatable axles for supportdng said wheels, one of said axles adapted to move longitudinally of itself to thereby vary the tread between said driven wheels, a releasable connection between the longitudinally movable axle and the associated wheel, cooperating means between the longitudinally movable axle and the frame for causing the axle to be shifted upon the occurrence of relative rotation between the axle and the frame, and means separate from said axles for driving said wheels. 4. In a tractor, the combination of a frame, supporting wheels therefor, motive means on said frame for driving certain of said wheels, an axle housing having a. central bore, an axle having threaded connection in said bore and adapted when rotated relative to the housing to be moved longitudinally thereof, one of said wheels being journaled on said axle, and means for locking said axle to said wheel whereby rotation of said wheel will cause said axle to move axially in said bore. – – 5. In a tractor, the combination of a frame, an axle housing carried by the frame and having an axial bore internally threaded near one end, an externally threaded axle associated with said housing, a supporting wheel mounted on the outer end of said axle, means for clamping said housing about said shaft and comprising an axial slit in the end of said housing, lugs projecting from either side thereof, and means for drawing said, lugs together for clamping said axle against V 2,099,194 4 7 relative

movement In said housing, and releasable means for locking the wheel to said axle. , 6. In; a tractor, the combination of a frame, supporting wheels therefor, motive means, certain of said wheels being capable of independent lateral displacement to vary the tread between said wheels, a gear on one of said wheels, a telescopic drive shaft, a pinion on said shaft associated with said gear, said drive shaft being adapted for simultaneous adjustment with the lateral displacement of one of said wheels whereby driving torque is constantly communicated to said wheel from said motive means, an axle housing, a threaded axle screwed in said housing and having said one wheel journaled thereon, means for locking said axle relatively to said housing, and means for locking said axle relative to said wheel, whereby said wheel may optionally rotate with said axle and relative to said axle. 7. A tractor having a pair of drive axles extending outwardly from opposite sides thereof and each having a threaded portion, a drive wheel mounted on the threaded portion of each axle, and clamping means acting directly between each wheel and its axle for releasably looking each wheel to its axle against both axial and rotational movement whereby, upon the release of said clamping means and the occurrence of relative rotation between' the axle and wheel, the latter will be shifted laterally relative to the tractor. '8. A tractor having a pair of drive axles on opposite sides of the tractor body, each axle being threaded on its outer end, a drive wheel for each axle and having a hub threaded on the outer end of the axle, means for delivering power to the inner ends of said axles and arranged to drive either axle independently of the rotation of the other axle, means for holding either axle against rotation while driving the other axle, and means associated with each hub for .locking the wheel thereof against rotation relative to the axle upon which it is threaded, whereby when one axle is locked against rotation and the wheel on the other axle is locked against rotation relative to said other axle, the wheel on said one axle will be shifted laterally of the tractor body on said one axle by its rotation relative thereto as the tractor is advanced through rotation of said other axle and the drive wheel locked to said other axle. 9. A tractor having a. pair of drive axles on opposite sides of the tractor body, each axle being threaded on its outer end, a drive wheel for each axle and having a hub threaded on the outer end of the axle, means including a differential for delivering power to the inner ends of said axles to rotate both axles simultaneously, a, brake for each axle whereby either axle may be held against rotation and all the power diverted to the other axle, and means associated with each hub for locking the wheel thereof against rotation relative to the axle upon which it ls threaded, whereby when one axle is held against rotation and the– wheel on the other axle is locked against rotation relative to said other axle, the wheel– on said one axle will be shifted laterally ofthe tractor body on said one axle as the tractor Is advanced through rotation of said other axle and the drive wheel locked thereto and as said one wheel rotatesrelative to said one axle by the advance of the tractor. 10. A tractor having a pair of drive axles on opposite sides ol the tractor body, each axle being threaded on its outer end and having a keyway formed on the threaded portion, va drive wheel for each axle and having a hub threaded on the outer end of the axle, means for delivering power to the inner ends of said axles, means for holding either axle against rotation, and means associated with each hub for lockingthe wheel thereof against rotation relative to the axle upon which it is threaded, comprising a member havlng a key –engaging in the keyway and held thereby against rotation relative to the axle, and wedge means adapted to be wedged between ‘the member and the hub for locking the wheel against rotation relative to the member. 11. A tractor having an axle extending outwardly from the tractor body, said axle including a portion having screw threads thereon, a supporting wheel for the tractor including a portion threaded onto said screw threaded portion of the axle. a member slidably but non–rotatably mounted on said axle, and means serving to releasably connect said member with said wheel, whereby when said member is connected with said wheel the latter rotates with said axle, and when said member is released from said wheel the latter can rotate relative to said axle and will be shifted bodily along said screw threaded portion thereof. 12. A tractor having an axle extending outwardly from the tractor body, said axle including a portion having screw threads thereon, a. supporting Wheel for the tractor including a portion threaded onto said screw threaded portion of the axle, a member slidably, but non–rotatably mounted on said axle, means serving to releasably connect said member with said wheel, whereby when said member ls connected with said wheel' the latter rotates with said axle, and when said member is released from said wheel the latter can rotate relative to said axle and will be shifted bodily along said screw threaded portion thereof, and means for releasably holding said axle from rotating relative to the tractor whereby when said releasable means is released, the advance of the tractor will cause the wheel to be shifted 'along said threaded portion. 13. A tractor having a pair of axles extending outwardly of the tractor body, each of said axles including a portion provided with screw threads, a supporting wheel mounted on each of said axle portions' and each wheel including a hub having laterally spaced plates mounted on the threaded section of the associated shaft, at least one ol' said plates for each wheel having threads engaging the threads of the associated shaft section, and means disposed between the hub plates ‘of each wheel for optionally tlxlng the wheel to the associated axlef 14. A tractor having a pair of drive axles extending from opposite sides of the tractor body, each of said axles being threaded on its outer end, a drive wheel for each axle and having a hub with a serrated portion and a threaded portion mounted on the threaded portion of the associated axle, means for delivering power ,to the inner ends of both of said axles, means for holding either of said axles against rotation, a member carrled by the threaded portion of each axle in shiftable but non–rotatable relation with respect thereto, and 'optionally controlled clamping means reacting against said member and adapted to secure the same to the serrated portion 'or the associated wheel hub, whereby each wheel may be locked against rotation with respect to the associated axle. » 15. A tractor having a pair ct drive axles ex– tending from opposite sides of the tractor body, each of said axles being threaded on its outer end, a drive wheel for each axle and having a hub with a serrated portion and a threaded portion mounted on the threaded portion of the associated axle, means for delivering power to the inner ends of both of said axles, means for holding either of said axles against rotation, a member arranged in the general plane of each wheel and mounted for bodily shitting but non–rotatable movement on the threaded section of the associated axle, each of said members being provided with a generally conical outer surface, and a. plurality of clamping members carried by and spaced circumferentially about said _generally conical surface and adapted to be shifted relative to the latter into locking engazementvwlth the serrations of the hub of the associated wheel, whereby each wheel may be optionally locked to the associated driving axle and may be released therefrom to provide for relative rotation between each wheel and the associated axle. ss 16. A tractor having a pair of drive axles on opposite sides of the tractor body, each axle being threaded on its\outer end and having a

pair of axially extending oppositely disposed keyways formed on the threaded portion, a drive wheel for each axle and having a hub threaded onto the outer end of the associated axle, means for delivering power to the inner ends of both of said axles, means for holding either of said axles against rotation, a pair of relatively movable members embracing the threaded portion of each of said axles adjacent the wheel mounted thereon, and each of said members having a key engaging one of said keyways, whereby said relatively movable members are held against rotation relative to the axle by said opposltely disposed keyways, and wedge means carried by said members and adapted to be wedged between the latter and the hub for securely clamping said members to the associated axle and locking the wheel associated therewith against rotation relative to said axle. ' 17, A tractor having a pair of drive axles on opposite sides of the tractor body, each axle being threaded on its outer end, a drive wheel for each axle having a hub consisting of a pair of spaced plates, one of which has threaded engagement with the threaded end of said axle and the other of which includes a central cylindrical portion mounted for sliding movement over the threads of said axle, one of said plates having an opening therein, means for delivering power to the inner ends of both of,said axles, and means associated with the hub of each wheel for locking the wheel against rotation relative to the associated axle, said locking means including relatively movable parts disposed between said plates and an operative member for actuating said locking means accessible through the opening in said one plate of each hub. 18. A tractor having a pair of axles extending from opposite sides of the tractor body, each axle being threaded on its outer end and having a pair of oppositely disposed keyways formed ln the threaded section of the axle, a pair of relatively movable members embracing each of said axles and each of said relatively movable members having oppositely disposed generally conical surfaces and a key engaging in one of said keyways of the associated axle, there being undercut slots formed in each of said surfaces, a wheel mounted on each of said axles and including a generally cylindrical hub embracing the pair of relatively movable members mounted on the associated axle, the hub of each wheel having an interior clutching surface, a plurality of clamping blocks carried by each pair ol' said relatively movable members, each of said clamping blocks including a key dis– posed in one of the undercut slots on the associated one of said relatively movable members, said clamping blocks being arranged in opposite pairs and each having an outer clutching surface arranged to cooperate with the interior clutching surface of the hub of the associated wheel, and means for drawing the clamping blocks of each pair together along said opposltely disposed Benerally conical surfaces to force the clutching surfaces on said clamping blocks into engagement lii with the clutching surface on the associated wheel hub. whereby when said clamping blocks are tightened, the wheel is securely locked to the associated axle to rotate therewith. 19. A tractor having a pair of laterally extend– ing drive housings, a pair of drive wheels, means connecting said wheels with the housings including a member for each wheel adjustable laterally relative to the associated housing, and an adjustable part carried by said member and serving in one position to hx the wheel and member for rotation together and in another position to provide for rotation of one with respect to the other, and threaded means acting against said wheel and re– _ acting against said housing whereby rotation of the wheel in one position of said adjustable part causes the wheel to shift laterally relative to the housing. 20. A tractor having a pair of laterally extending drive housings, a pair of drive wheels, means connecting said wheels with the housings including a. member for each wheel adjustable laterally relative to the associated housing, an adjustable clamping part carried by said member and movable relative thereto and to the associated wheel in a direction generally axially of the latter, said clamping part serving in one position to flx the wheel and member for rotation together and in another position to provide for rotation of one with respect to the other, and threaded means acting against each wheel and reacting against its associated housing whereby rotation of the wheel in one position of said adjustable part causes the wheel to shift laterally relative to the housing. 21. A tractor having a pair of`laterally extend– ing drive housings, a pair of drive wheels, means' connecting said wheels with the housings including a member for each Wheel adjustable laterally relative to the associated housing, and a clamping member carried by said llrst member and movable ' into and out of clamping engagement with said wheel, one of said members being threaded and said wheel being shifted laterally by rotation thereof when said clamping member ls in one of its positions. 00 22. A tractor having a pair of laterally extending drlve housings, a pair of drive wheelsimeans supporting said wheels on the housings including a member for each wheel adjustable laterally relative to the associated housing, a clamping part G5 carried by said member and movable with respect to said wheel to fasten the latter and its associated member together, and threaded means for causing said wheel to be moved laterally with – said member when rotated with said clamping T0 part in clamped. position. 23. A tractor having a pair of laterally extendlng drive housings, a pair of drive wheels, means supporting said wheels on the housings including a member for each wheel adjustable laterally rela– _ _ a,oas,1s4. 9 tlveto the associated housing. and a clamping part carried by said member and movable with respect to said Wheel to fasten the latter and its associated member together, sald wheel beinii movable laterallvwlth .said member when said clamping part is loosened, said wheel being flxed in lateral position when said clamping part is tightened. – 24. A tractor havlnga pair of drive axles extending outwardly from opposite sides thereof, a. pair of drive wheels mounted on said axles and capable o! 'rotation with respect thereto, and means connecting each wheel to its axle comprising a. tapered member mounted for axial adjustment on the associated axle, and a clamping block movable relative to the tapered surface of said member and ensa8eable with the hub of the associated wheel for hxlng the latter against both axial and rotational displacement with respect to its axle. , _ , ' 25. A tractor having a pair of drive axles extending outwardly from opposite sides thereof, a pair oi' drive wheels capable ol' rotation with respect to said axles and each having an enlarged hub section, and means connecting each wheel to its axle comprising a. tapered member mounted within the hub of thewheel for axial adjustment on the associated axle, and clamping blocks movable relative to the tapered surface oi said member and engageable with the inner surface of the hub for ilxlng both said wheel and member against both axial dlsplncement and rotation with respect to the associated axle. 26. A tractor having a pair of drive axles extending outwardly from opposite sides thereof, a pair of drive wheels mounted on said axles and capable of rotation with respect thereto, each of said wheels having an enlarged huh section embracing the axle associated therewith, a tapered member mounted within the hub of the wheel on each axle. clamping blocks movable relatlve to the tapered portions of said member, and means engaging said blocks and reacting against said member for forcing the blocks radially outwardly lnto clamping engagement with the inner surface of the wheel hub to lock the wheel against both axial and rotational

displacement relative to the associated drive axle. _ 21. A tractor having a pair of drive axles extending outwardly from opposite sides thereof, a pair of drive wheels mounted on said axle and capable of rotation with respect thereto, each of said drive wheels having an enlarged hub section embracing the associated axle, .and means connecting each wheel to its axle comprising a twopart member carried by the associated axle, one of said parts including a tapered member having a split portion, whereby the parts may be clamped about the axle, the other part consisting of generally wedge–shaped sections movable with respect to said split part and engageable with the hub of the associated wheel for nrrnly engaging the latter and forcing said first part into firm engagement with the axle, whereby the wheel is tlxedly secured against rotation and axial movement with respect to said axle. 28. A tractor having a pair of drive axles extending outwardly from opposite sides thereof, a pair of drive wheels mounted on said axles, a. member mounted for axial adjustment on each of the laterally extended portions of said axles, each of said wheels including a hub embracing and adapted to rotate with respect to the member on the associated axle, and means capable ot moving laterally when the wheel is shifted later, ally for releasably clamping said member and wheel together so as to prevent relative rotation therebetween. 29. An adjustable wheel for tractors and the like having a laterally extended axle for receiving the wheel, said wheel comprising a wheel hub having an uneven interior surface, a tapered member carried on the axle for lateral adlustment with respect thereto. and a complementarlly formed clamping member also having an uneven exterior surface cooperating with the uneven lnterior surface of the wheel hub and movable relative to both said tapered member and the wheel hub and into clamping engagement with the latter, whereby the wheel may be adjustably nxed to the axle in dllierent axial positions. 30. 'An adjustable wheel for tractors and the like having an axle for receiving the whee1,'sald wheel comprlslng a hub section having a diameter appreciably larger than the diameter of the associated axle, a tapered member mounted on the axle within said hub and including interconnected but rela.tlvely'mcvable parts, and wedge blocks movable relative to said tapered member and radially outwardly for engagement with said hub, engagement of said blocks with the latter causlng the blocks to react inwardly against said parts to cause them to be Drmly clamped against the axle. 31. An adlustable wheel for tractors and the like having an axle for receiving the wheel, said wheel comprising a hub section having a diameter appreciably larger than the diameter onthe associated axle, a tapered member mounted on the axle within said hub and including interconnected but relatively movable parts, wedge blocks movable relative to said tapered member and radially outwardly for engagement with said hub, engagement 01' said blocks with the Latter causing the blocks to react inwardly against said parts to cause them to be nrmly clamped against the axle, and means adjustable from the laterally outer side of the wheel for forcing said wedge blocks to move relative to said tapered member. 32. An adjustable wheel for tractors and the like having an axle shaft extending therefrom for receiving said wheel, the wheel comprising a hub section of appreciably greater diameter than the diameter ol the axle. and a two#part member adapted to be carried between the axle and said hub, one part consisting ol a plurality of relatively movable sectlons encircling the axle shaft and plvotally connected to each other for relative movement about a pivot axis extending generally parallel wlth respect to said axle shaft, and the other part consisting of tapered means movable relatively to said plvotally interconnected sections, the movement of the one part with re~ spect to the other ilrmly engaging said hub and clamping said Wheel to the associated axle in axially tlxed relation. 88. A tractor comprising a body, a pair of drive axles disposed on opposite sides of the tractor body and journaled therein for independent rotation, means including a. dllferentlal for transmitting power to said axles, a brake for each axle for locking it against rotation and for causing power delivered through said dlilerentlal to be diverted to the other axle, a wheel on the outer end of each axle, a. connection between each wheel and its axle providing for rotation and axial movement of the wheel relative to its axle, and means for releasably locking each wheel against rotation and axial movement relative to its axle. _ 84. A tractor comprising a laterally extending driving axle member, a. wheel including a. hub member disposed on the outer end of said axle member, and a. clamping member associated with said hub member, one of said members having threaded connection with the hub member whereby said Wheel will be shifted laterally with respect to said axle member upon rotation of said wheel with respect to the axle member, said clamping member having a. non–rotatable connection with said axle member and functioning to releasably lock all three of said members rigidly against any relative movement. – 35. A tractor comprising meansservlng as a. frame, a. driving axle member extending latefally therefrom, a wheel including a hub dispused on the outer end of the axle, a. clamping member associated with said hub, one of said members havlng threaded connection with the hub of the wheel whereby the latter may be shifted laterally on the axle by relative rotation therebetween when the clamping member is released, and means establishing a non–rotatable connection between the clamping member and the axle member for releasably securing the wheel in position on the axle. 36. In a. tractor. the combination of a. frame, a. laterally extending internally threaded sleeve fixed to said frame, an axle threaded into said sleeve, 9. wheel journaled on the outer end of said axle, means for locking said axle to said sleeve to prevent the axle from rotating relative to the sleeve, means for locking said wheel to said axle whereby when said wheel is rotated and said axle is unlocked from said sleeve, said axle will be moved axially with respect to said sleeve, and means for rotating said wheel. ' 37. In a. tractor. the combination of a. frame, a. laterally extending internally threaded sleeve fixed to said frame, an axle threaded into said sleeve, a. wheel journaled on the outer eixd of said axle, means for optionally locking said axle against rotation relative to said wheeluor against rotation relative to said sleeve, and 2. telescppic drive shaft receiving power from the tractor motor and' extending laterally rmmbne frame and having driving conneetionytii said wheel. 38. In a. tractor, the combination of a frame, a. laterally extending internally threaded sleeve Hxed to said frame, an axle threaded into said sleeve, u. Wheel journaled on the outer end of said axle, means for optionally locking said akle against rotation relative to said wheel or against rotation're1a.tlve to said sleeve, a gear faxed to said wheel, a. housing enclosing said Eear, a pinion jnurnaled in said housing and meshing with said gear, a sleeve extending laterally from said frame, a second sleeve Hxed to said housing and having telescoping connection with said Brat sleeve, and a drive shaft receiving power from the tractor motor disposed Within said sleeves and having driving connection with said pinion. 39. A tractor comprising a body. a pair of drive axles disposed on opposite Sides of the tractor body and journaled therein for independent rotation, means for transmitting power to said axles and arranged to drive either axle While the other is locked against rotation, a brake for each axle for locking it against rotation while power is being delivered to the other of said axles, a wheel on the outer end of

each axle, a connection between each wheel and its axle providing for rotation and axial movement of the wheel relative to its axle, and means for releasably locking each wheel against rotation and axial movement relative to its axle.

0) GB1139951A – SHAFT–AND–HUB ASSEMBLIES

162) Family number: 21697691 (GB1139951A) © PatBase

Title: Shaft–and–hub assemblies

Priority: GB19660015553 19660407

Family:

Publication number	Publication date	Application number	Application date
GB1139951 A	19690115	GB19660015553	19660407

Probable Assignee: INT HARVESTER CO

Assignee(s):(std)**:** INT HARVESTER CO

Assignee(s): INTERNATIONAL HARVESTER COMPANY

Inventor(s):(std)**:** MILLA SALVATORE JOSEPH DI

International class (IPC 8–9): F16D1/08 F16D3/19 (Advanced/Invention); F16D1/06 F16D3/16 (Core/Invention)

International class (IPC 1–7): F16D3/72

CPC: F16D1/0864

European class: F16D1/08K3

Classification Explorer

Forward Citations: GB2000258, GB2000258,

Abstract:
Source: GB1139951A 1,139,951. Shaft–to–hub coupling. INTERNATIONAL HARVESTER CO. 7 April, 1966, No. 15553/66. Heading F2U. In a universal joint, Fig. 2 (not shown), for connecting a vehicle engine drive shaft (11) to the input shaft (12) of an air compressor and/or vacuum pump, and comprising two steel coupling hubs (17), (18), each connected to a respective shaft, and a flexible coupling sleeve (19) extending between the hubs and provided with internal rubber ribs (20) which mesh with external grooves (23), (21) of the coupling hubs, the driving hub (17) is rigidly connected to the shaft (11) by means of (a) clamping members 53 received in a recess 32 in the hub end and which extend around the shaft and are urged into frictional engagement with the shaft and with abutments 66, 67, on the hub, by bolts 69; and (b) by a feather key member (65), Fig. 8 (not shown), disposed in keyway slots in the hub and shaft, and gripped in notches 63 between the two clamping members 53. The shaft (11) is provided with a tapered end portion which is received in a correspondingly tapered bore in the hub (17) to prevent "wobbling." The hub (18), Fig. 2, is secured on the tapered end of the shaft (12) by a key and nut. The ribs and grooves on the hub are chamfered to facilitate assembly.

0) GB242808A –

163) Family number: 18156886 (GB242808A) © PatBase

Family:

Publication number	Publication date	Application number	Application date
GB242808 A	00000000		00000000

International class (IPC 1–7): G07B17/04

Abstract:
Source: GB242808A 242,808. Haddan, R., (Postage Meters and Machines Co.). Dec. 19, 1924. Gearing for stopping and starting machinery. – In machines which are adapted to be set to perform a predetermined number of operations, e.g. machines for printing prepaid postage, tickets, and c., a controller is provided which, when inserted in the machine, renders it operative and, when removed, prevents further action thereof. The mechanism in the controller comprises a series of charge discs actuated from the printing mechanism and resettable by an authorized person and devices actuated by the discs for locking the machine at the predetermined limit. The invention is described in connection with the postage meter machine of Specification 170,058, [Class 100 (ii), Printing processes and c.], the removable meter thereof being modified to receive the controller. The meter may, however, be formed as an integral part of the machine, which may be arranged to receive a number of controllers corresponding respectively to stamps of different values. The meter comprises a casing 1, Figs. 2 and 3. on which is mounted a printing– roller 3 and below the bottom plate of which driving and stopping mechanism is arranged which is rendered inaccessible by means of a cover–plate 6 permanently secured in position. Two flanged tubular members 7, 8 secured together and to the casing 1 provide a socket to receive the controller, and above these are arranged two visible ascending counters 34, 35 respectively totalizing and set–back counters, and, in addition, if required a balance counter. A vertical worm shaft 54 driven by gears 50 – – 53 from the shaft 3 of the printer 3 serves to actuate the counters and to rotate a disc 11 adapted to drive the charge discs in the controller. This driving mechanism is covered in by a plate 9 forming the end wall of the controller socket 7, 8. Projecting beyond the plate 9 and into the socket are a key 12 and a pin–tumbler lock 13, the shaft 12 of the key and the plug 13 of the lock being connected by gears 14, 15. The controller is shown in Figs. 8, 18, and 21 and consists of a tubular casing 200 provided, to ensure alignment, with flats on the inner half 8ax engaging flat surfaces 8, 8, Fig. 3, on the inside of the member 8 of the socket. Fixed within the casing are partitions 204, 204, 204 supporting a shaft 205 on which the charge discs are mounted and two parallel shafts 217, 220 geared together and rotatable, by external knobs 219, 219. Fixed on the shafts are the plug 215 of a lock 215 and a key 220 adapted respectively to fit the key 12 and the lock 13 when the controller is in place in the meter. The shaft 205 is then coupled to the driving disc 11 by an end flange 208. A disc 205 keyed on the shaft 205 is adapted to advance a series of loose discs 205, 205 by means of carry–over devices of the kind usual in counting–mechanism. A turn of one division of the last disc actuates the locking–mechanism. This comprises a shutter 209 loosely mounted on the shaft 205 and slotted to receive a slidable bar 214, one end of which engages one of a series of radial slots 205 in the disc 205, whereby, when the disc is advanced one point, a recess 209 in the shutter is moved into line with a hole 7 in the socket 7 and a coincident hole in the casing 200 to allow the entry of a trip finger 23 adapted to actuate locking–devices as hereinafter described. For setting purposes, the other end of the bar 214 is provided with a lip 214 engaging a cam slot 210 in a rotatable member 210 adapted to reciprocate the bar and withdraw it from one slot 205e and engage it with the next, the shutter being meanwhile turned through one division by means of a plate 211 having a lug bearing against the bar 214, the plate being pivoted on the partition 204 and oscillated at each rotation of the cam 210. Reverse rotation of the shutter is prevented by a pawl 213. In resetting, a key is inserted in a lock 212 fixed inside a cap 201 at the outer end of the controller casing, the plug of the lock being coupled to the cam 210 and the keyhole being protected by a sealed cover plate 200. The end of the casing is permanently closed by a disc 202 having an inturned flange engaged by pins mounted in a diametrical groove on the cap 201 and spring–pressed outwardly. To prevent tampering with the shaft 205 from the open end of the controller, a worm 216 mounted on the shaft 217 is arranged to slide a bolt 215 into locking engagement with slots in a disc 208 on the shaft 205. The aperture formed in the end of the controller to receive the meter lock' 13 is closed, to prevent tampering and to exclude dust, by means of a tube 223 sliding in a housing in the controller and spring–pressed outwardly, a revolving dust–cap 223 in the end of the tube being slotted to receive the key 220. The tube is pressed inwardly by the lock when the controller is inserted in the machine. Before the controller can operate when in place in the machine, one or both of the knobs 219, 219 must be turned to release the discs and locking gear, and before it can be removed, the looking gear must be released and the bolt 215 pushed in. Once the controller is removed, the knobs 219, 219 cannot be turned as the coacting lock and key are absent. Stopping the machine when the controller is removed or discharged. The printing–roller 3 is rotated through a clutch controlled from a letteroperated trip as described in Specification 170,058, [Class 100 (ii), Printing processes and c The mechanism includes a reciprocating pin 19, Fig. 15, adapted to enter the casing 1 and, when prevented from doing so, acting to stop the machine. Normally, the pin 19 enters a recess 20b in the curved foot 20 of a bell–crank 20 retained in position against the action of a spring 20 by means of a lever 21 connected by a rod 24 to an arm 22 mounted on a pivot pin 22 which carries a yoke 23. A finger 23 mounted on this yoke is adapted to enter coincident apertures in the tube 7 and casing 200, Fig. 21, and to rest on the shutter 209, Fig. 8, until the controller is discharged when the finger enters the recess 209, the levers 20, 21 are released, the foot 20 swings down and the pin 19 can no longer enter. As a further precaution, an arm 21 on the lever 21 swings against a disc 51, Fig. 2, on the gear 51 and locks the gearing against movement. The printer is locked against rotation when the controller is removed before or after discharge by means of a bar 25 hooked over a

pin 22 on the pivot pin connecting the arms 22, 24 and connected to a second arm 26 on the pivot 21d of the lever 21, this arm 26 being moved against a second locking disc 51b on the gear 51 and the arm 22 being swung round to move the foot 20 over to the opposite side of the aperture 20 and to withdraw the finger 23 from the controller. The bar 25 is connected for operation to the lower end of an arm 27 fixed on one end of a crossshaft 28 carrying at its opposite end an arm 29 received in a slot in the end of a verticallysliding bar 16 raised by a tooth on a disc coupled to the gear 14. The opposite end of the arm 29 actuates by gearing a vertically−sliding rack−bar 31 to release it from a hole in the controller casing.

0) FR1278300A – DISPOSITIF DE REGLAGE POUR SUPPORTS TELESCOPIQU...

164) Family number: 23086576 (FR1278300A) © PatBase

Title:	DISPOSITIF DE REGLAGE POUR SUPPORTS TELESCOPIQUES ADJUSTING DEVICE FOR MEDIA TELESCOPIQUES (Machine translation)
Priority:	FR19600847439 19601220

Family:

Publication number	Publication date	Application number	Application date
FR1278300 A	19611208	FR19600847439	19601220

Probable Assignee:	WIESBADEN MASCHF GMBH
Assignee(s):(std):	WIESBADEN G M B H MASCHF ; WIESBADEN MASCHF GMBH
Assignee(s):	MASCHF WIESBADEN GMBH ; MASCHINENFABRIK WIESBADEN G M B H
International class (IPC 8–9):	A63J5/00 (Advanced/Invention); A63J5/00 (Core/Invention)
International class (IPC 1–7):	A63J5/00 F21P5/02
CPC:	A63J5/00
European class:	A63J5/00

Classification Explorer

Abstract:
Source: FR1278300A (Claim 1) SUMMARY an adjusting device for media telesco pikes, bearing such projectors is characterized par.un winch has two cables parallel one of which bears the load, such as projections tor, while the other carries the support, and in that one of the cables can be shortened relative to each other by means of a device adjustment of fai ing part of the winch.

0) US5540065A – LOCKING DEVICE

165) Family number: 12679451 (US5540065A) © PatBase

Title: LOCKING DEVICE

Priority: US19940322179 19941012

Family:

Publication number	Publication date	Application number	Application date
US5540065 A	19960730	US19940322179	19941012

Probable Assignee: WYERS PHILIP W

Assignee(s):(std)**:** WYERS PHILIP W

Inventor(s):(std)**:** WYERS PHILIP W

International class (IPC 8–9)**:** E05B37/02 (Advanced/Invention); E05C19/18 (Advanced/Non–invention); E05B37/00 (Core/Invention); E05C19/00 (Core/Non–invention)

International class (IPC 1–7)**:** E05B37/02

CPC: E05B37/02 E05C19/18 Y10T70/40 Y10T70/426 Y10T70/443 Y10T70/5009 Y10T70/7305

European class: E05B37/02 P05C19/18

US class: 70/14 70/26 70/260 70/312 70/34 70/58

Classification Explorer

Cited documents: US5007256 A, US4844498 A, US4615191 A, US4576021 A, US4524592 A, US4445348 A,

Forward Citations: WO02064922, USD745364, USD729608, USD724930, USD724929, USD724928, USD703023, USD686953, USD587095, USD575626, USD575625, USD563200, USD546663, USD536236, USD531008, USD525857, USD524144, USD524142, USD511292, USD461392, USD439827, USD428795, US9127481, US8783706, US8783705, US8607600, US8534098, US8376387, US8302435, US7793526, US7165426, US7010944, US6976695, US6862905, US6851285, US6846126, US6688804, US6672115, US6644071, US6622979, US6543260, US6364339, US6186531, US6055832, US5697235, US2010218571, US2010218570, US2010043508, US2010037665, US2009302574, US2009079164, US2007089467, US2005022618, US2004139771, US2004136781,

Abstract:
Source: US5540065A A locking device which may be used in locking one or more objects together, includes a rod having a key–like male portion at its tip and a combination locking means forming an enlarged head which locks over the rod's forward shackle. The locking head also includes a resettable combination inner assembly allowing for the setting of any combination by its user for convenient locking or removal without the need for additional tools or keys. The locking device further has on its exterior a series of outer projections allowing for its locking and unlocking without the benefit of visual confirmation.

0) US5992192A – LOCK–HANDLEBAR COMBINATION

166) Family number: 20637476 (US5992192A) © PatBase

Title: LOCK–HANDLEBAR COMBINATION

Priority: DE19951016243 19950503 DE19965002723 19960502 WO1996DE00750 19960502

Family:

Publication number	Publication date	Application number	Application date
AT183164 E	19990815	AT19960911931T	19960502
AU199654957 A1	19961121	AU19960054957	19960502
AU704352 B2	19990422	AU19960054957	19960502
CA2218080 AA	19971103	CA19962218080	19960502
CN1185134 A	19980617	CN19961094154	19960502
DE19516243 C1	19960725	DE19951016243	19950503
DE59602723 D1	19990916	DE19965002723	19960502
EP0824443 A1	19980225	EP19960911931	19960502
EP0824443 B1	19990811	EP19960911931	19960502
JP11504883 T2	19990511	JP19960532924T	19960502
US5992192 A	19991130	US19970952294	19971222
WO9634790 A1	19961107	WO1996DE00750	19960502

Probable Assignee: TUAL CHRISTINE 80339 MUENCHEN DE

Assignee(s):(std): CHRISTINE TUAL ; TUAL CHISTINE ; TUAL CHRISTINE ; TUAL VERONIQUE ; VUEONIQUE TUAL ; VERONIQUE TUAL

Assignee(s): TUAL CHRISTINE 80339 MUENCHEN DE

Inventor(s):(std): CHISTINE TUAL ; CHRISTINE TUAL ; TUAL CHISTINE ; TUAL CHRISTINE ; TUAL VERONIQUE ; TUAL VUEONIQUE ; VERONIQUE TUAL ; VUEONIQUE TUAL

Inventor(s): TUAL VERONIQUE 80339 MUENCHEN DE

Agent(s): PHILLIPS ORMONDE FITZPATRICK; BORDEN LADNER GERVAIS LLP

Designated states: AT AU BE BR CA CH CN DE DK ES FI FR GB GR IE IT JP KP KR LI LU MC MN NL NO NZ PL PT RU SE SG SK TR US VN

International class (IPC 8–9): B62H5/00 B62H5/04 B62H5/16 B62K21/12 E05B67/00 (Advanced/Invention); E05B67/00 (Advanced/Non–invention); B62H5/00 B62K21/00 (Core/Invention); E05B67/00 (Core/Non–invention)

International class (IPC 1–7): B60R25/00 B62H5/00 B62H5/04 B62H5/16 B62K21/12 E05B71/00

CPC: Y10T70/409 Y10T70/5872 B62H5/00 B62K21/125 E05B67/003

European class: B62H5/00 B62K21/12B P05B67/00B

US class: 224/420 70/18 70/233 702/330

Classification Explorer

Cited documents: US5709113 A, US5701771 A, US5558349 A, US5546776 A, US5488844 A, US5408212 A, US5353663 A, US5226341 A, US5138901 A, US5133568 A, US5127562 A, US5069049 A, US4870843 A, US1629859 A, GB2259325 A1, GB2157756 A1,

Forward Citations: WO0200491, US9534703, US8387839, US7132931, US6467315, US6213910, US6212920, US6206799, US6178788, US6164677, US6152847, US2015197306, US2015184427, US2013061449, US2011139844, US2008022735, US2005178235, GB2471906, GB2471906, EP2982591, CN105059447, CN105059430, CN105000111, CN104973188,

Abstract:
Source: US5992192A PCT No. PCT/DE96/00750 Sec. 371 Date Dec. 22, 1997 Sec. 102(e) Date Dec. 22, 1997 PCT Filed May 2, 1996 PCT Pub. No. WO96/34790 PCT Pub. Date Nov. 7, 1996A lock and handlebar attachment for a cycle comprised of a pair of oppositely curved end sections interconnected by parallel members at least one

of which is selectively separable to enable the introduction of a fixed component to prevent the theft of the associated bicycle.

0) US3857264A – PROTECTIVE SHIELD FOR COIN BOX LOCKS AND KEY TH...

167) Family number: 1115637 (US3857264A) © PatBase

Title: PROTECTIVE SHIELD FOR COIN BOX LOCKS AND KEY THEREFOR

Priority: US19730376729 19730705

Family:

Publication number	Publication date	Application number	Application date
CA1003456 A1	19770111	CA19740202386	19740613
US3857264 A	19741231	US19730376729	19730705

Probable Assignee: FOWLER LAWRENCE S

Assignee(s):(std): FOWLER L ; FOWLER LAWRENCE S

Assignee(s): FOWLER L US

Inventor(s):(std): FOWLER L ; FOWLER LAWRENCE S

Inventor(s): FOWLER L US

International class (IPC 8–9): E05B17/14 G07F9/06 (Advanced/Invention); E05B17/00 G07F9/06 (Core/Invention)

International class (IPC 1–7): E05B17/14

CPC: G07F9/06 E05B17/14 Y10T70/7802 Y10T70/7955

European class: E05B17/14 G07F9/06

US class: 70/395 70/42.3 70/423

Classification Explorer

Cited documents: US3392555 A, DE416273 A,

Forward Citations: WO9618012, WO0118758, WO0031491, US8365560, US6662484, US5916282, US4686840, US4619124, US2012144886, US2011000267, US2010326149, US2008223096, GB2398344, FR2658554, AT514651, AT514651, AT399529,

Abstract:
Source: US3857264A This invention relates to a protective shield for coin box locks comprising a housing mounted in front of the latter that denies all direct axial access to the key slot in favor of a remotely located key–receiving opening at right angles thereto. It also encompasses a remotely–actuated right–angle–driven key operative to open the lock from a position outside the housing and displaced to one side of the axis of lock rotation. The invention further encompasses a push–pin and pivoted lever for actuating same from a remote position that cooperate with one another and with the wall of the housing facing the lock upon actuation to insert the key in the latter.

0) GB307407A – MULTIPLYING–APPARATUS.–IN A MACHINE EMPLOYING R...

168) Family number: 18618844 (GB307407A) © PatBase

Title: Multiplying–apparatus.–In a machine employing representations of the partial products the depression of a motor trip bar...

Family:

Publication number	Publication date	Application number	Application date
GB307407 A	00000000		00000000

International class (IPC 1–7): G06C15/18

Abstract:
Source: GB307407A 307,407. Baumann, A., and Horlacher, C. P. Nov. 7, 1927. Multiplying–apparatus.–In a machine employing representations of the partial products the depression of a motor trip bar controls the setting of the partial product devices in accordance with the depression of the multiplier and multiplicand keys whereupon the partial products are segregated according to their denominational value and transmitted to receivers and accumulated thereon to produce the final product, the excess. accumulation in one order being transferred to the next higher order. The product thus obtained is transmitted to type bars and printed on a record–strip together with the factors. The various parts of the mechanism and the keys are restored upon the return movement of the operating parts to normal position, means, however,. being provided to prevent restoration of the multiplier keys should it be necessary to retain the multiplier setting for the succeeding operation. Keyboards.–As shown in Figs. 7, 8, and 10, two sets of key banks are provided the left hand one for the multiplier and the right hand one for the multiplicand. The keys 10 are normally retained in raised position by springs 12 and are held in depressed position by detent bars 14 cooperating with shoulders on the key stems. Each key bank is associated with a clear key and separate clear keys are provided for the multiplier and multiplicand sets. These keys, Fig. 10, have cam projections 34 co–operating with pins 33 on a corresponding bar 31 having lugs 30 in the path of pins 29 on the detent bars 14. The bars 31 are also arranged to be actuated at the end of an operation to clear the key board by means of a link 36; in the case of the multiplicand key bank the link has a lug engaging one of the lugs of the bar 31, the connection between the link 36 and the multiplier section bar 31 is through a coupling slide 37 passing through a guide on the bar and a slot in the link so as to permit independent movement of the bar 31. Withdrawal of the slide 37 by depression of the repeat key, Fig. 10, prevents the restoring of the multiplier keys. Each key stem has pivoted thereon a spring controlled finger 16 the upper edge of which bears against the latch 14 so that on depression the lower end of the finger is moved within the margin of the key stem. A frame, Fig. 11, comprising parallel bars 18 is guided for vertical movement on shafts 20 and when raised during the operation cycle strikes against the fingers of partially depressed keys to raise then and thereupon lock all undepressed keys. The lower end of the key stems co–operate with lugs 23 on differential stop bars 22 guided on grooved shafts 24. A stop 25 on a bar 26 carried by links 27 is normally in the path of a lug 23 of each stop bar and is removed therefrom to free the stop bar when the end of the key stem strikes the bar 26. Setting up partial products. – These devices comprise a series of groups of elements corresponding to the number of banks or multiplier keys and each group comprises elements arranged in pairs for the units and tens of the partial products of the digits. Each element, Figs. 6, 13, and 14, comprises a bar 45 with an enlarged head 46 provided with steps 47 and a projection 50 in a slot 49 and co–operate with a tappet 48 and stop 480. The bars are guided by rods 51, a comb plate 53 and a bar 54, the latter being pivoted on a shaft 55 and serving as an aligning means for the bars. The tappet and stop extend from shanks 58, 57, Fig. 28, and axe vertically movable in guides 60, 59 on cross heads 61, 62. The shanks are connected by a pin and slot connection 65, 66 and a similar connection is provided between the shank 57 and a bell crank lever 67 associated with the corresponding pair of differential stop bars 22. The tappet 48 is normally in the dotted position shown in Fig. 13, so that when the pair of stop bars is permitted to move in accordance with the key depressed the tappet 48 and stop 480 are raised and presented to the appropriate steps whereupon movement to the left of the tappet by the cross head 62 as hereinafter described causes a movement of the bars 45 until arrested by the stop 480. The selection of the particular pair of bars 45 from each group is effected by connections with the multiplicand differential stop bars 22 comprising a bell crank lever 70, link 71 and slide 72, Figs. 2, 17 and 19. The slides 72 have pairs of slidable couples 74 one pair for each group of bars 45, each coupler having a lug 75 adapted to enter a notch 76 in a bar 45, the notches in the units bars of each group being aligned and those in the tens bars being aligned also. The notches are so spaced that when a lug enters a notch of the units bar the other lug of the pair is in the notch of the tens bar except when the multiplicand setting is " 0 " or " 1 "; in the " 0 " position both lugs are held by fixed lugs 78 on stationary plates 79, while at the " 1 " position only the lugs associated with the tens bars will be so held. Receiving mechanism.–The couplers 74 are guided for movement by pins in slots on the plates 72 and each coupler has a pin 81 enlarged and slotted to engage a head 82 on a slidable member 83. The members 83 are arranged in pairs as shown in Fig. 15 and each has a slot 86 co–operating with a pin 87 projecting through a guide slot 88 in a plate 84, Fig. 19, and connected to an element 89 having a pin 90 projecting through another of the guide slots 88, the elements being arranged as shown in Fig. 16. A series of shafts 91, Fig. 18, beneath the elements 89, are arranged along the lines of movement thereof and each shaft is provided with one or more stepped receivers 93, Figs. 20 and 23, adapted to co–operates with an index or lug 95 on a corresponding collar 97 provided with a rib engaging the forked end of the stirrup 99 forming part of the elements 89, the number of receivers in a line corresponding to the number of elements in that line. By shifting the collars along the lines in accordance with the partial products and allowing the shafts 91 to rotate until arrested by the engagement of the steps thereon with the lugs 95 the

partial products of the same denomination will be accumulated on the shafts. Totalizing mechanism.–Each shaft 91 is hollow to receive a spring 100 fixed thereto at one end the other end being secured to a stem 102 passing through the shaft and integral with an adjustable plug 103 for varying the tension on the spring. The forward receiver in each bank takes into a sleeve 107, Figs. 20 and 23, having a bearing in a head 108 secured to the shaft 91, a spring bearing on lugs on the sleeve and head providing a. limited lost motion connection. Each sleeve 107 is slotted at 96 to receive the first index 95 and the second index 95 coacts with a slot 96 in the first receiver and so on. The sleeve and each receiver is formed with a lug 934 for co–operation with a lug on the adjacent receiver on the resetting operation to bring the receivers to the zero position the lost motion connection permitting the necessary play. The receiver in the first bank and the uppermost receiver in the second bank are held stationary by pins 931 and these receivers serve to arrest the indices. In the other banks the receivers are arrested by their projections 269, Fig. 20, engaging a frame 119. Each shaft 91 has fixed thereto a stepped head 110 which can serve as an indicator of the product. Transfer mechanism.–The second and higher shafts 91 have each a disc 112 fixed thereto with a cam part 113, Figs. 20 and 22, co–operating with a toothed sector 114 connected, through spring means 116 with a sector 115 engaging a rack 117 having a stop 118 arranged beneath the shaft of next higher denomination. The end receiver is formed at its end opposite the stops 94 with stops 940 to co–operate with the stop 118, the rotations of the lower shaft determining the position of the stop 118 with respect to the stops 940 and thus the number of additional step movements of the higher shaft. Printing mechanism.–Each head 110 is felt by a spring controlled slide 120, Figs. 6 and 28, when the latter is freed by the operating mechanism and the movement of the slide is transmitted through a flexible link connection 124 to an. arm 126 having pivoted thereon a type bar 128 normally held away from a platen 131 by a spring 132 with the " 0 " below the printing line. Type bars 133 similarly supported by arms 134 and flexible links 135 are connected to slides 137 having pins 139 bearing on the ends of the differential stop bars 22 to take up the settings of the multiplier and multiplicand key banks. The impression mechanism comprises spring controlled hammers 144 loosely mounted on a shaft 143 and normally latched by a trip bar 145 on arms 147 and by individual hammer latches 154 with overlapping projections 157 for the control of zero printing. The arms 147 are connected by links 149 to arms 150 fixed to a shaft 151 and attached at their lower ends to an aligning bar 152 co–operating with the toothed segments of the arms 126, 134. The hammer latches 154 are provided at their ends with tips 156 which, on movement of the arms 126, 134, are engaged to free the latches, the hammers so released being subsequently freed for impression by a. movement of the shaft 151 to move the aligning bar into operative engagement and to withdraw the trip bar 145. Operating mechanism.–A motor 4, Fig. 2, drives a shaft 174 geared to a shaft 177, Fig. 5, with two helical grooves 178 adapted to be engaged by one or other of a pair of nuts 179 through a sliding clutch member 181 operated by a shifter 182 slidably mounted on a cross head. The shifter is retained in either of its set positions by latches 183, the right hand latch, Figs. 5 and 26, being connected by a spring to an arm 193 engaging, in the normal position, a shoulder on a bar 195 connected by an arm to the shaft 197 of the trip bar 3. The arm 19

169) Family number: 3079376 (WO8904895A1) © PatBase

Title: TELESCOPIC WELL OR COLUMN PIPE

Priority: SE19870004544 19871119 WO1988SE00627 19881118 EP19880910170 19881118 EP19880910170 19881118

Family:

Publication number	Publication date	Application number	Application date
AT66034 E	19910815	AT19880910170T	19881118
AU198827291 A1	19890614	AU19880027291	19881118
DE3864146 D1	19910912	DE19883864146	19881118
DK122790 A	19900517	DK19900001227	19900517
DK122790 A0	19900517	DK19900001227	19900517
DK167542 B1	19931115	DK19900001227	19900517
EP0393094 A1	19901024	EP19880910170	19881118
EP0393094 B1	19910807	EP19880910170	19881118
FI86569 B	19920529	FI19900002460	19900518
FI86569 C	19920910	FI19900002460	19900518
FI902460 A0	19900518	FI19900002460	19900518
NO165884 B	19910114	NO19900002201	19900518
NO165884 C	19910502	NO19900002201	19900518
NO902201 A	19900628	NO19900002201	19900518
NO902201 A0	19900518	NO19900002201	19900518
SE459592 B	19890717	SE19870004544	19871119
SE459592 C	19900802	SE19870004544	19871119
SE8704544 A	19890520	SE19870004544	19871119
SE8704544 A0	19871119	SE19870004544	19871119
SE8704544 L	19890520	SE19870004544	19871119
WO8904895 A1	19890601	WO1988SE00627	19881118

Probable Assignee: SKOENVALL TAGE

Assignee(s):(std)**:** SKOENVALL TAGE ; UPONOR AB

Assignee(s): SKONVALL TAGE ; TAGE SKOENVALL ; TAGE SKONVALL

Inventor(s):(std)**:** SKOENVALL TAGE

Inventor(s): SKONVALL TAGE ; T SKOENVALL ; TAGE SKOENVALL ; TAGE SKONVALL ; UPONOR AB

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

International class (IPC 8–9): E02D29/12 E02D29/14 E03F5/02 (Advanced/Invention); E02D29/12 E02D29/14 E03F5/00 (Core/Invention); E02D E03F (Subclass/Invention)

International class (IPC 1–7): E02D29/12 E03F5/02

CPC: E02D29/12 E02D29/1409 E03F5/02 E03F5/024

European class: E02D29/12 E02D29/14B E03F5/02 E03F5/02D

Classification Explorer

Cited documents: US3606402 A, SE85056851, SE8505685 A, SE398904 B,

Forward Citations: WO0005477, WO0005477, GB2345080, GB2345080, GB2266902, GB2266902, DE102013012576,

Abstract:
Telescopic well or column pipe comprising an outer tube and an insert tube (B) axially displaceable therein, and a covering which receives in a socket (12) thereof the upper end of the insert tube. Between the socket and the insert tube there is provided as an axially locking rotary mounting an extruded rib (18) having round cross section and smooth surface and consisting of a plastic material having good bearing properties, said rib being received in an annular groove (15, 16) which is located partly in the curved surface of the socket and partly in the curved surface of the insert tube, said groove being available for the insertion of the rib through a passage (17) joining the annular groove substantially tangentially and opening at the outside or the inside of the socket of the insert tube. The insert tube engages at the upper end surface (14) thereof an annular shoulder surface (13) on the covering.

170) Family number: 3666282 (US4732562A) © PatBase

Title: DEVICE FOR USE IN THE THAWING OF FROZEN DOOR LOCKS

Priority: CA19860519323 19860929 DK19850004419 19850930 WO1986DK00109 19860929
US19860841762 19860320 EP19860905757 19860929 EP19860905757 19860929

Family:

Publication number	Publication date	Application number	Application date
AT52564 E	19900515	AT19860905757T	19860929
CA1264955 A1	19900130	CA19860519323	19860929
DE3671062 D1	19900613	DE19863671062	19860929
DK152617 B	19880328	DK19850004419	19850930
DK152617 C	19880822	DK19850004419	19850930
DK441985 A	19870331	DK19850004419	19850930
DK441985 A0	19850930	DK19850004419	19850930
EP0239595 A1	19871007	EP19860905757	19860929
EP0239595 B1	19900509	EP19860905757	19860929
FI83903 B	19910531	FI19870002401	19870529
FI83903 C	19910910	FI19870002401	19870529
FI872401 A	19870529	FI19870002401	19870529
FI872401 A0	19870529	FI19870002401	19870529
NO167223 B	19910708	NO19870002274	19870529
NO167223 C	19911016	NO19870002274	19870529
NO872274 A	19870529	NO19870002274	19870529
NO872274 A0	19870529	NO19870002274	19870529
US4732562 A	19880322	US19870031837	19870330
WO8702089 A1	19870409	WO1986DK00109	19860929

Probable Assignee: PALSSON JOHANNES SAEMUNDUR

Assignee(s):(std)**:** PALSSON JOHANNES S MUNDUR ; PALSSON JOHANNES SAEMUNDUR

Assignee(s): PALSSON JOHANNES SAEMUNDUR TAASTRUP DK ; PALSSON JOHANNES S

Inventor(s):(std)**:** PALSSON JOHANNES S ; SAEMUNDUR PALSSON JOHANNES ; PALSSON JOHANNES SAEMUNDUR ; PALSSON JOHANNES S MUNDUR

Inventor(s): PALSSON JOHANNES SAEMUNDUR TAASTRUP DK

Agent(s): G RONALD BELL AND ASSOCIATES

Designated states: AT BE CH DE FI GB LI LU NL NO SE

International class (IPC 8–9)**:** E05B17/00 (Advanced/Invention); E05B17/00 (Core/Invention); E05B (Subclass/Invention)

International class (IPC 1–7)**:** E05B17/00 F24J3/00 F26B21/00

CPC: Y10T70/7955 Y10T70/796 Y10T70/80 E05B17/0016

European class: E05B17/00D

US class: 34/104 432/224 454/185 70/423 70/424 70/431 98/31

Classification Explorer

Cited documents: US460291 A, US4090379 A, US4058995 A, US3805405 A, US3691647 A, US3417482 A, US2614337 A, SE7607670 A, SE405880 B, FR1561301 A, DE2910577 A1,

Forward Citations: USD579317, USD521358, USD520340, USD507171, USD505058, USD494839, US8760116, US8468716, US7490497, US2011199047, US2008078213, US2005120764,

Abstract:
Source: US4732562A A device for use in thawing frozen car locks comprises a tube (10) of a heat insulating material having a plug support at one end; axial holes through the plug support; a flat, axially projecting plug (13) extending from the plug support designed to be inserted into and to essentially fill the keyhole of the lock; and a raised lip on the plug end formed with a plurality of through–going, radial cuts (15). When the projection is inserted into the keyhole in a frozen lock, and expiration air is blown into the other end of the tube, this air gives off its heat to the outer side of the lock before flowing through the openings without itself penetrating into the lock. The heat, on the other hand, is conducted into the lock and melts ice formed therein.

0) US2815833A – DOOR LOCK FOR JALOUSIE DOOR

171) Family number: 22327541 (US2815833A) © PatBase

Title: DOOR LOCK FOR JALOUSIE DOOR

Priority: US19560575528 19560402

Family:

Publication number	Publication date	Application number	Application date
US2815833 A	19571210	US19560575528	19560402

Probable Assignee: ANDERSON MFG CO V E

Assignee(s):(std)**:** ANDERSON MFG CO V E

Assignee(s): V E ANDERSON MANUFACTURING COMPANY ; V E ANDERSON MFG CO

Inventor(s):(std)**:** CLINE ROBERT S

International class (IPC 8–9)**:** E05B55/00 (Advanced/Invention); E05B55/00 (Core/Invention)

International class (IPC 1–7)**:** E05B63/22

CPC: E05B55/00 Y10T70/55 Y10T70/5513 Y10T292/62

European class: E05B55/00

US class: 292/337 49/503 70/150 70/152

Classification Explorer

Cited documents: US2700290 A, US2091248 A,

Forward Citations: USD483430, US8438887, US3044816, US2009165508, DE1185947,

Abstract:
Source: US2815833A (Claim 1) 1. In combination, a door stile of U cross section, a door lock casing within said U and having a boss engaging an opening in the cross wall thereof and constituting a sleeve for a slidable latch bolt, opposite side walls of said U being provided on their inner opposed faces at the open end of the U with longitudinaliy extending bearing strips having longitudinaliy extending grooves therein, and means holding said boss against displacement, iiieluding a slidable plate bridging the open end of the U at a point substantially in horizontal alignment with the opening in said cross wall and having edge portions engagin.said grooves, and an adjustable element carried by said plate and engaging said lock casing.

0) US5295292A – METHOD OF MAKING A SPACER FRAME ASSEMBLY

172) Family number: 11712194 (US5295292A) © PatBase

Title: METHOD OF MAKING A SPACER FRAME ASSEMBLY

Priority: US19920929330 19920813 US19940204775 19940302

Family:

Publication number	Publication date	Application number	Application date
AT160844 E	19971215	AT19930107877T	19930514
DE69315502 D1	19980115	DE19936015502	19930514
DE69315502 T2	19980423	DE19936015502T	19930514
EP0585534 A1	19940309	EP19930107877	19930514
EP0585534 B1	19971203	EP19930107877	19930514
MX9304909 A1	19940331	MX19930004909	19930812
US5295292 A	19940322	US19920929330	19920813
US5361476 A	19941108	US19940204775	19940302

Probable Assignee: GED INTEGRATED SOLUTIONS INC

Assignee(s):(std)**:** GLASS EQUIPMENT DEV INC

Assignee(s): GLASS EQUIPMENT DEVELOPMENT INC ; GLASS EQUIPMENT DEVELOPMENT INC TWINSBURG OHIO US ; ANTARES CAPITAL AGENT AS CORP ; ANTARES CAPITAL CORP ; GED INTEGRATED SOLUTIONS INC

Inventor(s):(std)**:** LEOPOLD EDMUND A

Inventor(s): LEOPOLD EDMUND A HUDSON OHIO 44236 US ; EDMUND A LEOPOLD

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

International class (IPC 8–9)**:** B21D53/74 E06B3/673 (Advanced/Invention); B21D53/00 E06B3/66 (Core/Invention)

International class (IPC 1–7)**:** B21D53/74 B23P17/00 C03B11/00 E06B3/66

CPC: Y10T29/49789 Y10T29/49798 Y10T29/49885 B21D53/74 E06B3/67304 E06B3/67313 E06B3/67317 E06B3/67321 E06B3/67369

European class: B21D53/74 E06B3/673B P06B3/673B2B P06B3/673B4 P06B3/673B6 P06B3/673F2

US class: 156/109 156/244.18 156/244.23 29/412 29/417 29/458 294/170

Classification Explorer

Cited documents: US5255481 A, US5018263 A, US4873803 A, US4831799 A, US4808452 A, US4807419 A, US4780164 A, US4698891 A, US4628582 A, US4622249 A, US4546723 A, US4530195 A, US4520611 A, US4513546 A, US4431691 A, US4222213 A, US4109431 A, US4063002 A, US4057945 A, US4015394 A, US3974823 A, US3919023 A, US3657900 A, US3283890 A, US3280523 A, US3267698 A, US3267569 A, US3212179 A, US3105274 A, US3054153 A, US3045297 A, US3030673 A, US3026582 A, US3021243 A, US2996161 A, US2768475 A, US2750637 A, US2625717 A, US2587063 A, US2348307 A, US2235680 A, US2173664 A, US1877336 A, GB349875 A, GB2104139 A1, GB2072249 A1, GB1509178 A, FR2449222 A1, FR244922 A, FR2428728 A1, FR2417480 A1, EP0475213 A1, EP0305352 A2, EP0132516 A2, EP0003715 A1, DE2923769 A1,

Forward Citations: WO9825001, WO17048948, WO15191205, WO14159055, WO14046768, WO09078906, WO08022877, USRE43533, USD748453, USD736594, US9689196, US9656356, US9617781, US9566771, US9428953, US9359808, US9352512, US9309714, US9279283, US9260907, US9228389, US9212515, US9187949, US9127502, US8967219, US8915032, US8904611, US8795568, US8789343, US8731699, US8720026, US8596024, US8586193, US8512829, US8512501, US8474400, US8151542, US8056234, US7901526, US7866033, US7854097, US7802365, US7801638, US7784320, US7779583, US7743584, US7694470, US7694469, US7685782, US7640073, US7610681, US7588653, US7448246, US7445682, US7429299, US7422650, US7275570, US7100343, US7082727, US7076927, US7048964, US6974518, US6928776, US6926782, US6912767, US6889416, US6883278, US6845593, US6823643, US6740187, US6739101, US6708384,

US6687982, US6679013, US6678938, US6662523, US6651304, US6630028, US6618926, US6606837, US6536182, US6470561, US6439392, US6438819, US6405498, US6397453, US6393955, US6368408, US6360420, US6355328, US6355317, US6354130, US6311455, US6305549, US6286288, US6269954, US6245145, US6173484, US6021701, US5967336, US5851609, US5628114, US5574651, US5408748, US2015176325, US2012174523, US2012017409, US2012011722, US2011238195, US2011104512, US2011079489, US2011005154, US2010319429, US2010155485, US2010154330, US2010065580, US2009299516, US2009294571, US2009120036, US2009120035, US2008315024, US2008295451, US2008286077, US2008236761, US2008226850, US2008172958, US2008060290, US2007261247, US2007193188, US2006233435, US2006218875, US2006162281, US2006150577, US2006093742, US2006075869, US2006075720, US2006075719, US2006065345, US2006037665, US2006029463, US2006026914, US2005188630, US2005178490, US2005132662, US2005086880, US2005055911, US2005028459, US2004255852, US2004226234, US2004187407, US2004159057, US2004139592, US2004083662, US2004037985, US2004000367, US2003226332, US2003205315, US2003084622, US2002189743, EP2407626, EP1892365, EP1643074, EP1643074, EP1643073, EP1643073, EP1642658, EP1642658, EP1201870, EP0902150, EP0752513,

Abstract:
Source: US5295292A A method of making a spacer frame assembly including the steps of providing a supply of thin, flexible relatively narrow sheet metal ribbon stock, feeding the ribbon stock endwise to a first forming station, stamping the ribbon stock to form spacer frame corner structures at the first forming station by defining zones of weakness at frame corner locations spaced along the stock, stopping the movement of stock through the first forming station while stamping, feeding the stock to a second forming station, and roll forming the stock at the second forming station to define a rigid linearly extending frame element having opposite side walls and a base wall, the corner structures disposed at least in part in the opposite channel side walls. The method further includes the steps of severing the frame element to define leading and trailing spacer frame element ends, accumulating stock between the first and second forming stations comprising forming a variable length stock travel path segment, maintaining a substantially continuous movement of the stock through the second forming station, and increasing length of the stock travel path segment when the stock speed through the first forming station is greater than the feeding speed through the second forming station and reducing the length of the stock travel path segment when the feeding speed through the second forming station is greater than the feeding speed through the first station.

0) US4052789A – ROTARY CUTTING ASSEMBLY

173) Family number: 1450201 (US4052789A) © PatBase

Title: Rotary cutting assembly

Priority: CA19770278193 19770511 DE19772759385 19770623 US19730347997 19730405 US19760706623 19760719 US19710207198 19711213 US19760746685 19761202 US19760747318 19761203 US19760747319 19761203 US19760747378 19761203 US19770801536 19770531 US19780881639 19780227

Family:

Publication number	Publication date	Application number	Application date
AU197725936 A1	19781214	AU19770025936	19770608
AU197726274 A1	19790104	AU19770026274	19770601
AU499577 B2	19790426	AU19770026274	19770601
AU502208 B2	19790719	AU19770025936	19770608
CA1079075 A1	19800610	CA19770277742	19770505
CA1093843 A1	19810120	CA19770278193	19770511
DE2728338 A1	19780126	DE19772728338	19770623
DE2728338 C2	19840112	DE19772728338	19770623
DE2730171 A1	19780720	DE19772730171	19770704
DE2730171 C2	19821125	DE19772730171	19770704
DE2759385 C2	19820527	DE19772759385	19770623
ES460025 A1	19781116	ES19770460025	19770622
FR2224069 A2	19741031	FR19740007489	19740305
FR2224069 B2	19791012	FR19740007489	19740305
FR2358816 A2	19780217	FR19770021228	19770708
FR2358816 B2	19811218	FR19770021228	19770708
FR2372585 A2	19780630	FR19770025752	19770823
FR2372585 B2	19850614	FR19770025752	19770823
GB1576171 A	19801001	GB19770022306	19770526
GB1576172 A	19801001	GB19780023801	19770526
GB1576173 A	19801001	GB19780023802	19770526
GB1578906 A	19801112	GB19770022307	19770526
IT1078482 A	19850508	IT19770049776	19770609
IT1112109 A	19860113	IT19770049541	19770524
JP1246010 C3	19841225	JP19770085163	19770718
JP53011725 A2	19780202	JP19770085163	19770718
JP53075019 A2	19780704	JP19770077717	19770629
JP55007100 A2	19800118	JP19790081231	19790627
JP55068414 U1	19800512	JP19790160327U	19791119
JP59022483 B4	19840526	JP19770085163	19770718
MX144586 A	19811028	MX19770169419	19770610
MX145252 A	19820115	MX19770169418	19770610
SE424134 B	19820705	SE19770007967	19770707
SE424134 C	19821014	SE19770007967	19770707
SE435991 B	19841105	SE19770011239	19771006
SE435991 C	19850214	SE19770011239	19771006
SE452090 B	19871116	SE19820003333	19820528
SE452090 C	19880225	SE19820003333	19820528
SE7707967 A	19780120	SE19770007967	19770707
SE7707967 L	19780120	SE19770007967	19770707

SE7711239 A	19780604	SE19770011239D	19771006	
SE7711239 L	19780604	SE19770011239	19771006	
SE8203333 A	19820528	SE19820003333	19820528	
SE8203333 L	19820528	SE19820003333	19820528	
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US4114269 A	19780919	US19760747318	19761203	
US4124938 A	19781114	US19760747378	19761203	
US4156312 A	19790529	US19770814254	19770711	
US4156967 A	19790605	US19760746685	19761202	
US4162575 A	19790731	US19780894931	19780410	
US4172322 A	19791030	US19780881639	19780227	
US4177561 A	19791211	US19770801536	19770531	
YU139277 A	19830228	YU19770001392	19770603	
YU148377 A	19820831	YU19770001483	19770614	
ZA7703152 A	19780426	ZA19770003152	19770525	
ZA7703888 A	19780530	ZA19770003888	19770628	

Probable Assignee: WEED EATER

Assignee(s):(std)**:** WEED EATER ; WEED EATER INC SOC DELLO STATO ; BALLAS GEORGE ; EMERSON ELECTRIC CO

Assignee(s): EMERSON ELECTRIC CO 63136 ST LOUIS MO US ; BALLAS GEORGE C ; BALLAS GEORGE C SR ; BALLAS GEORGE US ; WHITE CONSOLIDATED IND ; WHITE CONDOLIDATED IND ; WEED EATER INC ; WEED EATER INC HOUSTON TEX US ; WHITE CONSOLIDATED IND INC (WCI) 11770 BEREA RD ; WHITE CONDOLIDATED IND INC ; WHITE CONSOLIDATED IND INC WCI 11770 BEREA RD CLEV ; WHITE CONSOLIDATED IND INC (WCI) 11770 BEREA RD CLEVELAND OH A CORP OF DE ; WHITE CONSOLIDATED IND INC WCI 11770 BEREA RD CLEVELAND OH A CORP OF DE ; WHITE CONSOLIDATED IND INC

Inventor(s):(std)**:** BALLAS C G ; BALLAS G C ; BALLAS GEORGE C SR ; BALLAS SR GEORGE C ; BALLAS SR GEORGE CHARLES ; JIYOOJI SHIII BARASU SHINIA ; JIYOOJI CHIYAARUZU BOORASU ; BALLAS GEORGE CHARLES ; BALLAS GEORGE C ; BALLAS G

Inventor(s): BALLAS GC ; CHARLES BALLAS GEORGE ; BALLAS GEORGE CHARLES HOUSTON TEX US ; GC BALLAS ; G C BALLAS ; BALLAS GEORGE CHARLES HOUSTON TEX ; GEORGE CHARLES BALLAS ; JOOJI CHAARUZU BOORASU

Agent(s): SW; MEREDITH AND FINLAYSON

International class (IPC 8–9): A01D34/416 A01D34/73 A01G3/06 (Advanced/Invention); A01D34/73 (Advanced/Non–invention); A01D34/412 A01D34/73 A01G3/00 (Core/Invention)

International class (IPC 1–7): A01B45/00 A01D34/73 A01D35/00 A01D35/12 A01D35/20 A01D35/26 A01D35/262 A01D35/264 A01D35/28 A01D50/00 A01D53/14 A01D55/00 A01D55/18 A01D55/22 A01D55/24 A01G3/00 A01G3/06 B26B27/00 B26D B65H75/14 B65H75/26 B65H75/28

CPC: A01D34/4166 A01D34/4165 Y10S56/18 A01G3/06 A01D34/416

European class: A01D34/416 A01G3/06

US class: 242/118.4 30/276 30/347 310/68D 56/12.7 56/DIG.18

Classification Explorer

Cited documents: US4097991 A, US4047299 A, US4035912 A, US4024635 A, US4020552 A, US3937419 A, US3928911 A, US3859776 A, US3831278 A, US3826068 A, US3774379 A, US3708967 A, US3693255 A, US3664102 A, US3623281 A, US3574978 A, US3527971 A, US3132452 A, US2854798 A, US2601499 A, US2600613 A, US2443413 A, US2058353 A, US2034917 A, US1954051 A, US1589177 A, US1307017 A, JP50132539 B4, JP49131834 A2, FR2224069 A2, FR2167014 A5, FR1281450 A, FR1245177 A, DE2545953 A1, DE1657039 B, DE1502459 A1, CH556632 A, BE852150 A1, BE852150,

Forward Citations: WO9731520, WO9702115, WO9607516, WO8400873, WO16103117, WO04071164, WO04071164, USRE36940, USD769088, USD769087, USD769086, USD465623, USD463081, USD450226, US9699964, US9560799, US9517555, US9472992,

US9445542, US9179597, US9056381, US8910388, US8689451, US8667648, US8573323, US8464431, US8256120, US8136333, US7984555, US7979991, US7966736, US7963041, US7829002, US7762002, US7607232, US7587828, US7581322, US7543387, US7513046, US7484300, US7406771, US7395601, US7350344, US7275324, US7134208, US7100287, US7047592, US6912789, US6892461, US6871484, US6854185, US6665942, US6655034, US6460319, US6439088, US6347455, US6314649, US6301866, US6279235, US6148523, US6023847, US6006434, US5987756, US5933966, US5881465, US5881464, US5867911, US5836227, US5809653, US5806192, US5771582, US5765287, US5749148, US5671536, US5662428, US5657542, US5649413, US5634322, US5617636, US5615970, US5594990, US5544417, US5490641, US5463815, US5454216, US5446964, US5414934, US5404697, US5379846, US5181369, US4882843, US4835867, US4829675, US4819333, US4817289, US4805306, US4794695, US4788771, US4738084, US4724632, US4685279, US4630371, US4625501, US4619105, US4580394, US4561180, US4550499, US4550498, US4512143, US4505040, US4501332, US4490910, US4352243, US4338720, US4338719, US4281505, US4276691, US4238866, US4236309, US4202094, US4148141, US4145809, US2016345493, US2016135367, US2015052869, US2015013172, US2014208598, US2014182143, US2014165521, US2014083067, US2013305675, US2013283752, US2012131804, US2011214301, US2011113746, US2010180451, US2010126023, US2010064530, US2009223065, US2009090094, US2009025351, US2008282552, US2008250653, US2008233398, US2008047148, US2007123092, US2007024048, US2007022614, US2006254061, US2006254060, US2006207235, US2006123635, US2006090350, US2006053635, US2006048397, US2006048396, US2006048395, US2006005347, US2005262705, US2005252009, US2005217120, US2005126149, US2005081389, US2005076515, US2005076514, US2005044725, US2004231166, US2004154127, US2004148785, US2004020060, US2003207713, US2003033960, JP62210911, JP62181122, JP6130153, JP6079219, JP60210910, JP60127711, JP58145508, JP58026819, JP2014147327, ITSA20100017, ITBO20120343, GB2221602, GB2125668, FR2707073, FR2559343, FR2559342, FR2559019, FR2559018, FR2433279, FR2433278, FR2372585, FR2372585, EP3022999, EP3022999, EP3022998, EP2641461, EP2614699, EP2371202, EP1527672, EP1249317, EP1068790, EP0893046, EP0707924, EP0707786, EP0703044, EP0676126, EP0653364, EP0635197, EP0515909, EP0515908, EP0315603, EP0195146, EP0145302, EP0145302, EP0051175, EP0035657, EP0005540, DE2930469, DE2930468, CN103518468, CN103518467, CN103314701, CN102781215, CN102205535, CN102205535, AU614548,

Abstract:
Source: US4052789A Apparatus for cutting, trimming, and edging vegetation, and the like, is provided with a rotatable disc−like head having at least one string−like cutting member removably attached thereto and replaceably extending from its periphery for cutting adjacent vegetation and the like. A pair of knife members for cutting the string are provided, as well as drive means for increasing cutting efficiency.

174) Family number: 20158549 (GB739901A) © PatBase

Title: Means for and methods of producing preassembled nuts and washers

Priority: GB19520003158 19520206

Family:

Publication number	Publication date	Application number	Application date
GB739901 A	19551102	GB19520003158	19520206

Probable Assignee: ILLINOIS TOOL WORKS

Assignee(s):(std)**:** ILLINOIS TOOL WORKS

Inventor(s):(std)**:** NIELSEN MORITZ HERLUF

International class (IPC 8–9)**:** B23P19/08 (Advanced/Invention); B23P19/08 (Core/Invention)

International class (IPC 1–7)**:** B23P19/06 B23P19/08

CPC: B23P19/082

European class: B23P19/08A

Classification Explorer

Abstract:
Source: GB739901A 739,901. Making nut and washer assemblies. ILLINOIS TOOL WORKS. Feb. 6, 1952, No. 3158/52. Classes 83 (2), 83 (3) and 83 (4). Means for manufacturing permanently assembled nuts and washers is formed from a screw machine, of the work–spindleturret type, by replacing one of the sliding tool–holders and the related side–working tools by means for feeding a connected strip of washers and includes means for detaching the leading washer, assembling it on a spigot on the nut, and expanding the spigot to render the washer captive whilst still free to rotate relatively to the nut. Tapping takes place subsequently to the assembly and the assemblies pass over the covered tap shank for discharge to a funnel leading to a receptacle. The invention is described with reference to a five–spindle machine with stockguide–tubes 26, Fig. 1, mounted at the spindle end in a disc 28 and at the outer end in a flanged–disc 32 supported by two rollers 34 carried by a pedestal 36. Both discs are keyed to a shaft 30 that rotates with the turret. A front cam–shaft 526 operates the index bolt for the turret at 44, the turret rotating means at 40, the chuck at 46 and the stock feed at 24. Cam–shaft drives.–All the parts are driven by a single motor 478 driving through a chain and sprocket, and the shaft 526 is driven through a one–revolution clutch from a camshaft 510 provided with a hand–wheel 535 for use in tool–setting; a hand–operated clutch on a third motion shaft permitting of disconnecting all the cam–shafts from the power drive. The third motion shaft drives, through bevel gears, the shaft 510 that, through an intermediate shaft and change gearing, drives a cross shaft 546, Fig. 4, carrying worms driving front and rear cam–shafts 102, 104 that are bevel geared at 560, 562 to opposite ends of a transverse cam–shaft 120. Tool feed–motions.–The sliding tool–holders are fed through adjustable links 140, Fig. 6, and levers 126 from a series of cams 110 on the shaft 120 and the cross slides 66, 68, Fig. 11, and lever rests 70, 72 are similarly linked at 94 to levers 86 operated by cams 78, 80 on the shafts 102, 104. Making nuts.–The stock bar is fed at station A, Fig. 11, and a side tool 58 turns the spigot 568, Fig. 32, that is to receive the lock washer, and the blank is centre–drilled by a tool 152 carried by the sliding tool–holder 48. At station B the sliding tool–holder 50, Fig. 33, drills the blank and a cutter 156 end–faces the spigot whilst a side cutter 60 starts the parting off. At C a single–point boring tool 164, Fig. 34, carried by a block 160 pivoted to the sliding tool–holder 158 and held by a spring 166 so that adjustable strips locate the tool concentric with the axis, is fed into the bore to the depth shown, whereupon a bar 170, carried by the chamfering tool 62, engages an adjustable screw stop 172 and feeds the tool laterally to chamfer the inner end of the bore. At D the washer is supplied and at E the nut is parted–off and tapped. Supplying blanks; tube expanders.–A strip 4, Fig. 1, of internally–toothed lock–washers connected by contacting teeth 7^{11}, Fig. 24, the connection being in part broken when the teeth are twisted, is fed from a reel 3 and passes over a guide 270 and through a feed member 276, reciprocated by an arm 278 on one of the sliding tool–holder feed–levers, to a guide 272 whence it passes over a curved block 260, Fig. 16, to a channel tangential to a feed wheel 206 mounting chamfered pins 204 that enter the holes in the washers and forward the strip through a channel in a fixed block 310, Fig. 26, to a channel in a pinion 304 oscillated through a quarter turn by a rack 338, Fig. 14, carried by a bar 342 adjustably mounted at 346 in a block 364 carried by a sleeve 350 that takes the place of the sliding tool–holder at station D. The sleeve is pinned to a reciprocating bar, cam–operated at 354, and both sleeve and bar have a keyway sliding over a stop key 358 adjustably fixed at 362. The block 364 also supports a bar 262 carrying a slotted head 264, Fig. 19, engaging a pin on a lever, pivoted about the shaft carrying the feed wheel 206 and a ratchet wheel 216, and carrying a pawl 222 kept in engagement with the wheel by a spring 224. A spring detent 228 is also provided. The position of rest of the ratchet wheel is adjusted by a stop pin 238 carried by a rod 234 settable by a spring 242 and nut 246. The pawl may be rendered inoperative by raising the rod 234 by the knob 248 on the sleeve 246 to allow a spring latch 250 to snap beneath the sleeve. The adjustment ensures that the plane of junction of the teeth 7" lies in the contact plane of the block 310 and pinion 306 so that the oscillation of the pinion breaks off a washer

that passes by a channel 320, Fig. 14, to become located in front of a reciprocating sleeve 173 and plunger 188. Pins 324, Fig. 26, sliding in slots as controlled by backing pins 332 and leaf−springs 336 ensure that the washer is correctly fed by the sleeve 173 and plunger 188, Fig. 35, to place it on the nut−spigot, after which further advance of the plunger expands the spigot by its conical surface 190 and renders the washer captive. The plunger is carried by a bar 184 pinned to the sleeve 350, and relative movement of the plunger and sleeve is permitted by a spring 194 on contact of a cap 196 with the stop key 358. This ensures that the end of the sleeve occupies a correct position in relation to the supply channel 320. A stop 374 engages a head on the rack−bar 342 and ensures that the channel in the pinion is in register with the supply channel for the strip. Two modifications, Fig. 42 (not shown), and Fig. 46 (not shown), are described of the means for ensuring correct guiding of the washer on to the spigot of the nut. Tapping; chucks.−At station E a spring collet 390, Fig. 30, is carried by a sleeve 386, splined in an outer sleeve 376 with a countersunk end 393 that effects bevel−closing of the collet. The sleeves are continuously driven at 380 in synchronism with the stock spindles. The inner sleeve 386 carries, beyond the end of the outer sleeve, a block 394; a ball bearing 396 being interposed. An actuating−sleeve 424 for the chuck is cam−operated and acts, through levers 420 engaging the ends of keys 404 sliding in slots in the sleeve 386 and bearing against the end of the outer sleeve, to feed both sleeves towards the spindle−turret until the block 394 contacts a stop 452 and the inner sleeve is arrested with the collet surrounding the nut as in Fig. 36. The bevelled surface 426, Fig. 30, then acts on the levers 420, forcing them inwards and closing the chuck about the nut. In the closed position of the chuck a stop 474 prevents further advance of the sleeve 424 relatively to the block 394. The nut is now held and driven both by the stock−bar and the chuck. A side cutter 64, Fig. 36, now completes the parting−off and the sleeves 376, 386 retire together carrying the nut over the non− rotating tap 462. When the nut has passed to the shank of the tap, the block 394 contacts a stop 454 and the chuck is opened. The finished nuts pass along the tap shank for discharge into a funnel 472, Fig. 1.

0) US2897861A – PINEAPPLE SIZER AND ERADICATOR

175) Family number: 22012856 (US2897861A) © PatBase

Title:	PINEAPPLE SIZER AND ERADICATOR
Priority:	US19560566882 19560221

Family:

Publication number	Publication date	Application number	Application date
US2897861 A	19590804	US19560566882	19560221

Probable Assignee:	FMC CORP
Assignee(s):(std):	FMC CORP
Assignee(s):	FOOD MACHINERY AND CHEMICAL CORP
Inventor(s):(std):	LESLIE VADAS ; LESLIE JR RICHARD B
Inventor(s):	JR RICHARD B LESLIE ; VADAS LESLIE
International class (IPC 8–9):	A23N1/02 A23N4/20 (Advanced/Invention); A23N1/00 A23N4/00 (Core/Invention)
International class (IPC 1–7):	B07B13/04
CPC:	A23N1/02 A23N4/20
European class:	A23N1/02 A23N4/20
US class:	99/589 99/590 99/593

Classification Explorer

Cited documents:	US958743 A, US807571 A, US2784835 A, US2467158 A, US2433730 A, US1941957 A, US1929586 A, US1844810 A, US1369231 A, AU153508,
Forward Citations:	US3191651, US3073366,

Abstract:
Source: US2897861A (Claim 1) Fig. 5 is an enlarged fragmentary perspective of the conveyor belt used to advance the pineapple'in the machine of the invention,. – Fig. 6 is a transverse section taken along lines 6–6 of Fig. 2 and shown at an enlarged scale. Fig. 7 is an enlarged fragmentary detail in section takenalong lines 7–7 of Fig.

0) GB1114909A – NESTED HANDLE TURNBUTTON DOOR LOCK ASSEMBLY

176) Family number: 23061367 (GB1114909A) © PatBase

Title: Nested handle turnbutton door lock assembly

Priority: GB19650037785 19650903

Family:

Publication number	Publication date	Application number	Application date
GB1114909 A	19680522	GB19650037785	19650903

Probable Assignee: CHICAGO LOCK CO

Assignee(s):(std)**:** CHICAGO LOCK CO

Inventor(s):(std)**:** KERR WILLIAM JOHN

International class (IPC 8–9): E05B5/02 E05B5/04 (Advanced/Invention); E05B5/00 (Core/Invention)

International class (IPC 1–7): E05B5/04

CPC: E05B5/003

European class: E05B5/00B

Classification Explorer

Forward Citations: GB2510471, GB2510471, GB2510470, GB2510470, EP0014794,

Abstract:
Source: GB1114909A 1,114,909. Turnbutton fastenings. CHICAGO LOCK CO. 3 Sept., 1965, No. 37785/65. Heading E2A. A lock assembly adapted for use on a cabinet door comprises a lock housing 16 having a tubular open ended cylindrical portion provided at its forward end with an integral, substantially diamond shaped rim flange 26 and at its rear end with an inturned bearing flange 46 presenting a central bearing opening, said rim flange having a shallow recess 34 in the forward end face thereof, a cylindrical sleeve 40 co−axial with and rotatably disposed within said cylindrical portion, a lock shaft 42 on the rear end of said sleeve projecting through said bearing flange, means 58 preventing said sleeve and shaft from shifting axially within the cylindrical portion while allowing free rotation thereof, a barrel and handle unit 20 including a lock barrel 70 and handle 72, said lock barrel being telescopically slidable in said sleeve between a retracted position wherein the operating handle is confined within the recess and a projected position wherein said handle is projected out of the recess, means 76, 78 establishing a driving connection between the barrel and sleeve, means 90, 92, 94 for fastening the barrel in the retracted position, key actuated means 22 for releasing it from the retracted position, means 80 to move it to the projected position and a turnbutton 14 on said lock shaft exteriorly of the lockhousing. In the construction shown the cylindrical portion of the housing is adapted to project through a hole in the door and to be secured to the door by mounting screws 30 which extend through holes in the flange 26. The turnbutton in use engages an inclined shoulder on the door frame so that as it is rotated it pulls the door to the fully closed position. The means 76 are grooves in the sleeve and the means 78 are ribs on the barrel and these enable the barrel to slide relative to the sleeve so that rotation of the handle also rotates the sleeve and the turnbutton 14. The means for fastening the barrel in its retracted position is a latch bolt 90 and an opening 92 in the barrel and another opening 94 in the sleeve which are engaged by the latch bolt which is biassed by means of a spring 104; the other end of the spring engages a plunger 96 which is slidable in an opening 98 in the barrel and an extension 100 of which engages an elongated slot 102 in the sleeve to limit the movement of the barrel relative to the sleeve. The key actuated means 22 for releasing the latch bolt 90 is a lock cylinder which is secured to the barrel by a screw 112 which engages a depression 114 in the lock cylinder 22, a part of the lock cylinder which carries an eccentrically positioned pin 106 being rotatably by means of a key 24, the pin 106 engaging a groove in the latch bolt; once the latch bolt is free of the sleeve the means 80, which is a spring, projects the barrel to its projected position. The handle 70 can then be turned to rotate the barrel, sleeve and turnbutton 14 to release the door. Rotation is imited by means of a stop washer 56 on the shaft 42 which has shoulders engageable with a pin 68 on the housing.

0) US2011097980A – MEAT PROCESSING ASSEMBLY

177) Family number: 48791327 (US2011097980A) © PatBase

Title: MEAT PROCESSING ASSEMBLY

Priority:

EP20100760560	20100923	JP20120535214	20100923	US20120494232	20120612
US20100732391	20100326	US20090254918P	20091026	JP20120535214T	20100923
WO2010US49944	20100923	US20120494274	20120612	US20120494289	20120612
US20120494248	20120612	US20120494264	20120612		

Family:

Publication number	Publication date	Application number	Application date
DK2493322 T3	20170327	DK20100760560T	20100923
EP2493322 A1	20120905	EP20100760560	20100923
EP2493322 B1	20161221	EP20100760560	20100923
ES2618409 T3	20170621	ES20100760560T	20100923
JP2013507961 T2	20130307	JP20120535214T	20100923
JP2014158494 A2	20140904	JP20140092406	20140428
JP5626696 B2	20141119	JP20120535214T	20100923
JP6041246 B2	20161207	JP20140092406	20140428
US2011097980 AA	20110428	US20100732391	20100326
US2012252331 AA	20121004	US20120494274	20120612
US2012252332 AA	20121004	US20120494289	20120612
US2012252333 AA	20121004	US20120494248	20120612
US2012252334 AA	20121004	US20120494232	20120612
US2012252335 AA	20121004	US20120494264	20120612
US8342916 BB	20130101	US20100732391	20100326
US8540554 BB	20130924	US20120494248	20120612
US9084430 BB	20150721	US20120494232	20120612
US9089148 BB	20150728	US20120494264	20120612
WO11056314 A1	20110512	WO2010US49944	20100923

Probable Assignee: STORK TOWNSEND INC

Assignee(s):(std)**:** ARNOTE KENNETH B ; BURGERS EMILE A ; MADDUX ANDREW W ; SIMPSON MICHAEL S ; STORK TOWNSEND INC ; XIE LIANSUO

Inventor(s):(std)**:** ANDREW W MADDUX ; ARNOTE KENNETH ; ARNOTE KENNETH B ; BURGERS EMILE ; BURGERS EMILE A ; EMILE A BURGERS ; KENNETH B ARNOTE ; MADDUX ANDREW ; MADDUX ANDREW W ; MICHAEL S SIMPSON ; SIMPSON MICHAEL ; SIMPSON MICHAEL S ; XIE LIANSUO

Agent(s): VAN DEN HEUVEL HENRICUS THEODORUS; ZEA BERNABE; RYUKA IP LAW FIRM; ZARLEY LAW FIRM PLC; ZARLEY TIMOTHY 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 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): A22B7/00 A22C11/00 A22C11/02 A22C11/06 A22C11/08 A22C11/10 A22C15/00 A22C17/00 F04C13/00 F04C15/00 F04C2/08 F04C2/14 (Advanced/Invention); B65G17/26 F04C13/00 (Advanced/Non–invention)

CPC: A22C11/104 A22C11/105 A22C11/0209 A22C11/0245 A22C11/08 A22C11/107 A22C15/001 F04C2/086 F04C2/14 F04C13/004 F04C15/0076 F04C2230/60 F04C2230/70 F04C2230/80 F04C2240/81 A22C11/10

European class: A22C11/02A A22C11/02C A22C11/08 A22C11/10C A22C15/00A F04C15/00E4 F04C2/08B4 F04C2/14 R04C13/00B2B R04C230/60 R04C230/70 R04C230/80 R04C240/810

US class: 1/1 452/177 452/177S 452/30 452/31 452/35 452/35S 452/40 452/40P 452/46 452/46S 452/47 452/47S 700/230 700/230S 700/244 700/244S

Classification Explorer

Cited documents: US8241096 BA, US7520802 BA, US7455578 BB, US7442117 BB, US7381123 BB, US7306511 BB, US7249997 BB, US7198563 BB, US7160184 BA, US7140958 BB, US7140958, US7033264 BA, US6981912 BB, US6964605 BB, US6855046 BB, US6715913 BB, US6494311 BB, US6482079 BA, US6467668 BA, US6439990 BA, US6325711 BA, US6277018 BA, US6245369 BA, US6234891 BA, US6213368 BA, US6206667 BA, US6125991 A, US6083093 A, US6066035 A, US6056636 A, US6056635 A, US6013295 A, US5971842 A, US5951391 A, US5921857 A, US5890813 A, US5890813, US5842914 A, US5830051 A, US5813907 A, US5730649 A, US5709600 A, US5595534 A, US5372537 A, US5279526 A, US5211599 A, US5199921 A, US5197915 A, US5163864 A, US5131883 A, US5092813 A, US4955109 A, US4884318 A, US4766713 A, US4761854 A, US4730367 A, US4719667 A, US4694536 A, US4675945 A, US4670942 A, US4590830 A, US4584740 A, US4484374 A, US4313240 A, US4284192 A, US4218003 A, US4217678 A, US4129923 A, US4032049 A, US3997941 A, US3964236 A, US3868895 A, US3408687 A, US3159315 A, US3059584 A, US2772638 A, US2011183590 AA, US2008028906 AA, US2006105690 AA, US2002220605 AA, US2002220605, US2002137451 AA, US2002020605 AA, US07140958, JP9322726 A2, JP9322726, JP9207192 A2, JP9028281 A2, JP9028281, JP56057979 U1, JP56057979 U, JP56057979 U, JP2007297687 A2, JP2007297687, JP2007105016 A2, JP2007105016, JP2003335303 A2, JP2003116456 A2, JP2003116456, GB485876 A, EP0507280 A1, EP0451684 A1, EP0399582 A2, EP0395177 A2,

DE102007025583 A1

Forward Citations: US2012231714, JP2009012712,

Abstract:
Source: US2011097980A An improved processing assembly having a meat emulsion pump connected to a stuffing horn. The stuffing horn positioned to fill casings with meat emulsion which form a strand of processed meat that is received by a twister, then a linker, and subsequently deposited on a conveyor.

0) GB2153043A – PUMP DRIVE

178) Family number: 31021688 (GB2153043A) © PatBase

Title: Pump drive

Priority: GB19840001375 19840119

Family:

Publication number	Publication date	Application number	Application date
GB2153043 A1	19850814	GB19840001375	19840119
GB8401375 A0	19840222	GB19840001375	19840119

Probable Assignee: CRANE LTD

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

Assignee(s): CRANE LIMITED

Inventor(s):(std)**:** STATHAM LESLIE FRANK

Inventor(s): LESLIE FRANK STATHAM

International class (IPC 8–9)**:** F04D29/20 F16D1/06 (Advanced/Invention); F04D29/18 F16D1/06 (Core/Invention)

International class (IPC 1–7)**:** F16D1/06

CPC: F04D29/20 F16D1/06

European class: F04D29/20 F16D1/06

Classification Explorer

Cited documents: GB733693, GB611647, GB545383, GB233067, GB1541573, EP0071556,

Forward Citations: US6824471, GB2392970, GB2392970, DE29617396,

Abstract:
Source: GB2153043A The invention relates to a pump drive wherein the pump shaft (14) is provided with a sleeve (18) having one or more screw–threaded through–holes (20;34) in its wall which receive respective socket set screws (26) having leading ends (28) designed to enter a keyway, channel or other recess (24) in a drive shaft (12) over which the sleeve (18) fits in telescopic fashion, the socket set screws (26) thereby preventing relative rotation between the two shafts.

0) GB1454223A – TOOLS FOR GARDENING FARMING ROADWORKING AND THE...

179) Family number: 3990254 (GB1454223A) © PatBase

Title: TOOLS FOR GARDENING FARMING ROADWORKING AND THE LIKE

Priority: GB19740049267 19741114

Family:

Publication number	Publication date	Application number	Application date
GB1454223 A	19761103	GB19740049267	19741114

Probable Assignee: KENDRICK SINONSEN T

Assignee(s):(std)**:** KENDRICK SINONSEN T

International class (IPC 8–9): B25G1/04 B25G3/26 (Advanced/Invention); B25G1/00 B25G3/00 (Core/Invention)

International class (IPC 1–7): B25G1/04

CPC: B25G1/04 B25G3/26

European class: B25G1/04 B25G3/26

Classification Explorer

Forward Citations: WO11096831, US9283668, US9259834, US9050717, US8322764, US6513846, US5171052, US4606089, US4396214, US2014348582, FR3018267, FR2996794, EP2915740, EP1527672, EP1249317, EP0707924, CN104842327, CN102821916, CN102821916, AU2011213367,

Abstract:
Source: GB1454223A 1454223 Hand tools; handles T KENDRICK–SIMONSEN 18 Sept 1975 [14 Nov 1974] 49267/74 Heading B4K A tool suitable for a variety of gardening, farming or roadworking purposes comprises a telescopic shaft 1, 2, a detachable tool head such as a spade, shovel, fork, hoe or rake, secured to one end of the shaft and being one of a set of tool heads any one of which may be interchangeably secured to the said one end of the shaft and a handle 5 detachably secured to the other end. Attachment of the handle and tool head to the shaft may be by a spigot and socket connection with screw locking means or a pin passing through aligned holes in the spigot and socket optionally secured further by means of a rotatable wedge disc (Figs. 5, 6, not shown).

0) DE20311509U1 – COMBINED COMBINATION LOCK AND KEY LOCK WITH A F...

180) Family number: 29501164 (DE20311509U1) © PatBase

Title: COMBINED COMBINATION LOCK AND KEY LOCK WITH A FAILSAFE FACILITY TO READ THE COMBINATION USING THE KEY

Priority: DE20032011509U 20030725

Family:

Publication number	Publication date	Application number	Application date
DE20311509 U1	20031016	DE20032011509U	20030725

Probable Assignee: YANG PING JAN

Assignee(s):(std)**:** YANG PING JAN

International class (IPC 8–9): E05B37/00 (Advanced/Invention); E05B37/02 (Advanced/Non–invention); E05B37/00 (Core/Invention)

International class (IPC 1–7): E05B37/00 E05B37/02

CPC: E05B37/0034 E05B37/02

European class: E05B37/00C2 P05B37/02

Classification Explorer

Forward Citations: FR2885154, EP2171182, CN103711366, CN103711366,

Abstract:
A combined combination and key operated lock has a failsafe facility which enables the user to inert the key and release a cover plate to open viewing apertures next to the combination wheels and thereby check the combination, e.g. if the user has forgotten the code. The lock housing (1) has two side openings, one (121) to hold the key operated lock (31), and one (111) to hold the combination lock. The two lock mechanisms are located close together. The combination lock has a number of code wheels (22) mounted on release ferules (25). The wheels are located in apertures (11) In the lock housing with a sliding cover (21) to block the viewing apertures (112) alongside the main apertures. The cover is released when the key is inserted and turned. This enables the user check the combination code without having to dismantle the lock.

0) GB750483A – IMPROVEMENTS IN AND RELATING TO CENTRIFUGAL PUM...

181) Family number: 20170368 (GB750483A) © PatBase

Title: Improvements in and relating to centrifugal pumps

Priority: 19520922

Family:

Publication number	Publication date	Application number	Application date
GB750483 A	19560613	GB19530019656	19530715

Probable Assignee: GIRTON MFG COMPANY INC

Assignee(s):(std)**:** GIRTON MFG COMPANY INC

Assignee(s): GIRTON MANUFACTURING COMPANY INC ; GIRTON MFG CO INC

International class (IPC 8–9)**:** F04D29/24 F04D29/62 (Advanced/Invention); F04D29/18 F04D29/60 (Core/Invention)

International class (IPC 1–7)**:** F04D13/06

CPC: F04D29/247 F04D29/628

European class: F04D29/24B F04D29/62P

Classification Explorer

Abstract:
Source: GB750483A 750.483. Centrifugal pumps. GIRTON MANUFACTURING CO., Inc. July 15, 1953 [Sept. 22, 1952], No. 19656/53. Class 110(1) [Also in Group XXIV] A centrifugal pump comprises impeller drive means in a housing, and rotatable impeller means pivoted to the drive means eccentrically of the axis of rotation of the latter, the housing having substantially parallel face portions substantially perpendicular to the axis of rotation, and the impeller means having opposed side faces substantially parallel to the respective adjacent face portions of the housing. The casing of a milk pump comprises parts 15, 16, Fig. 1, which are clamped together against an annular groove in a support 5 by means of a clamp comprising a clamping screw 71 and a bracket 66 which is pivoted at 67. An annular gasket 28, preferably of circular cross–section as shown, is interposed between the parts 15, 16. The impeller blades 50, Figs. 1 and 3, are pivoted on pins 48, so that they take up an angular position which depends on the opposing effects of centrifugal force and fluid forces, and are releasably secured on the pins 48 by means of a spring clip 58 which engages grooves 49 in the pins. The hollow impeller shaft 30 is slid over the shaft 3 of the driving motor 1 and is releasably held in place by a spring clip 42 which engages a cam 45. A collar 40 bolted to the shaft 3 carries the spring clip 42 and transmits the drive to the shaft 30 through the engagement of a shoulder 39 with a shoulder 37 on the shaft 30 The force exerted by the spring clip 42 holds a flange 31 on the shaft 30 in sealing engagement with a seal ring 59 which is formed of hard rubber nylon, the material known under the Registered Trade Mark "Bakelite", or other anti–friction material. The seal ring 59 is seated within a conical flange 18 formed in the casing part 16 and is prevented from rotating by a key 65 which engages a slot in the seal ring. The spring clip 42 and cam 45 may be replaced by magnets 83, Fig. 7, carried by the collar 40 directly ooposite flanges 81, 82 on the shaft 30. Specification 750,489 is referred to.

0) CN2696937Y – LOCKING DEVICE FOR GEAR SHAFT ROD LOCK

182) Family number: 32138908 (CN2696937Y) © PatBase

Title: Locking device for gear shaft rod lock

Priority: CN20042043065U 20040226 CN200420043065U 20040226

Family:

Publication number	Publication date	Application number	Application date
CN2696937 Y	20050504	CN200420043065U	20040226

Probable Assignee: RUAN SHUZHEN

Assignee(s):(std)**:** RUAN SHUZHEN

Inventor(s):(std)**:** LI CHUNCHANG

Inventor(s): CHUNCHANG LI

International class (IPC 8–9)**:** B60R25/06 E05B15/00 (Advanced/Invention); B60R25/06 E05B15/00 (Core/Invention)

International class (IPC 1–7)**:** B60R25/06 E05B15/00

Classification Explorer

Forward Citations: CN102330522,

Abstract:
Source: CN2696937Y The utility model discloses a locking device for a gear shaft rod lock, which is composed of a locking key, a key spring, a lock core, a key telescopic seat, a skeleton, a lock stopping block, a lock stopping spring. The lock stopping block can be installed in the transverse through groove of the skeleton and can move backward and forward along the transverse through groove; the lock stopping block and the key telescopic seat can form the sustaining or the separation; a blocking arm extending on the locking key inwards and the lock stopping block can form an abutting state or a separation state. Because the utility model makes use of the convex teeth on the key telescopic seat to be matched with the convex teeth on the lock stopping block, the locking and hollow pressing operation of the lock can be realized; namely the user can use the force to press or attack the locking key, which can not produce the any press or the gear shaft for the gear shaft rod core, so that the latching performance of the utility model is good. In addition, the utility model is composed of the locking key, the key telescopic seat, the skeleton, the lock stopping block, etc.; the part of the whole structure is less; the action of the mechanism is simpler and more reliable, so that the utility model has the advantages of simple structure and reliable lock firmness.

0) GB682295A –

183) Family number: 19899131 (GB682295A) © PatBase

Family:

Publication number	Publication date	Application number	Application date
GB682295 A	00000000		00000000

International class (IPC 1–7): G06C11/04

Abstract:
Source: GB682295A 682,295. Accounting machines. NATIONAL CASH REGISTER CO. Jan. 22, 1951 [Jan. 28, 1950] No. 1600/51. Class 106 (i). A cash register or similar accounting machine comprises a record material printing mechanism, control keys, a primary feeding mechanism for feeding the record material to the printing mechanism, a normally effective disabling mechanism for the primary feeding mechanism, a control mechanism actuated under control of singleitem control keys so as to render the disabling mechanism ineffective, a secondary feeding mechanism differentially controllable by said single–item control keys so as variably to feed the record material, between successive actuations of the printing mechanism, in accordance with which control key is depressed, and a manually operable member operable in conjunction with a multipleitem control key and effective to disable the secondary feeding mechanism and the printing mechanism whilst the individual items of a multiple–item transaction are being entered. The invention is described as applied to the type of machine disclosed in Specifications 285,500, 318,466, [both in Class 106 (i)], and 370,496. The keyboard includes four transaction keys 21, 22, 23, 24, Fig. 6, each having a pin 28 by which it, when depressed, effects downward movement of a control plate 29 against a spring 30. An arm 32 on a shaft 33 is thereby moved away from a bail 34 on a shaft 35 to allow operation of the machine for one cycle. Each transaction key is associated with a corresponding totalizer. The keys 21–24 co–operate with a differential actuator segment 36 free on a shaft 37 and urged clockwise by a spring 38 against a differential operating rod 39 carried by arms secured to the shaft 37. A printer and indicator positioning segment 41 having two sets of teeth is associated with the segment 36 in known way. One set of tooth of the segment 41 meshes with a printer positioning gear 46 which positions a feed control segment 49. The gear 46 is connected to a gear 53, Fig. 1, which through gearing, positions an audit strip printing type wheel 55 and a ticket or slip printing type wheel 60. Ticket and slip feeding mechanisms. A control lever 65, Fig. 7, which may be set to Add, Read (sub–total taking) or Reset (total taking) positions has a segment 68 which sets a ticket feed control cam 69 connected to two type wheels, not shown, for printing symbols on the detail audit strip and on the ticket or slip. Free on a rod 52, Fig. 6, is a sensing arm 72 which is connected to a link 73 pivotally connected to an arm 74 secured to a shaft 75 which carries a lever 76 connected to a spring 77 which urges the arm 72 downwardly. The shaft 75 also carries an arm 78, Fig. 9, connected by a spring 79 to a printer control pawl 80 free on the shaft 75 and normally maintained against a stud 81 on a cam lever 82 which coacts with a cam surface 83 on a knife–operating cam 84 free on a shaft 85. A driving lug 86, Fig. 8, integral with the cam 84 has two shoulders respectively engaged by a driving pawl 87 and a retaining pawl 88 interconnected by a spring 91 and pivotally mounted on a plate 89 secured to a gear 90 which is free on the shaft 85 and which rotates for one counter–clockwise revolution each machine cycle. A stud 175 carried by a lever 174 is normally in the path of the pawl 87 to disengage the pawl 87 from the lug 86 and break the drive from the gear 90 to the shaft 85. Depression of any of the keys 21, 22, 23, however, effects downward movement of a slide 166 which through a linkage moves the lever 174 so that the stud 175 moves away from the pawl 87. The cam 84 has a groove 94 engaged by a roller 95, Fig. 9, carried by a lever 96 secured to a shaft 97. The lever 96 has a stud 98 embraced by a lever 99 integral with an arm 100 having a cam surface 102 which co–operates with a pin 103 on the link 73. The pawl 80 has a lug 104 which co–operates with a lug 105 on the ticket and slip feed segment 106 which through gearing drives two feed rollers 113, Fig. 1, which coact with two pressure rollers 114 carried by a lever 115. The segment 106, Fig. 9, is urged counter–clockwise against a stud 131 by a spring 130 acting through an arm 129, an arm 127 and a pin 126. The ticket strip is fed from a roll 133, Fig. 1, into a guide shoot 135, through a knife guide shoot 120, through a throat 140 of an upper guide shoot 143. A plate 146 normally blocks the throat 140. At the beginning of a ticket–printing cycle a cam 153 on a shaft 156 connected to the shaft 85, Fig. 9, rotates counter–clockwise and allows counter–clockwise movement of a lever 150, Fig. 1, to move the plate 146 inwardly to open the throat 140. A feed roller 154 then in cooperation with a pressure roller 155 feed the ticket strip through the throat opening 140 into the shoot 143. The rollers 154 carry an electro printing plate which prints descriptive data on the ticket. The pressure rollers 114 are then brought into engagement with the upper edge of the tickets strip, the knife blade 132 is moved to sever the ticket and at the same time a hammer 157 makes its first stroke to print the data indicated at 158, Fig. 3, on the ticket 61 and another hammer, not shown, prints the same data on the detail audit strip, Fig. 5, not shown. A cam 124, Fig. 9, then rotates to allow the spring 130 to move the segment 106 counter–clockwise to drive the feed rollers 113, Fig. 1, which feed the severed ticket upwardly. If either the key 21, 23, Fig. 6, is depressed a stud 70 on the segment 49 will be placed opposite a recess in the arm 72 and the arm 78 Fig. 9, will be moved clockwise to prevent movement of the pawl 80 so that the segment 106 will be allowed a complete swing before the second stroke of the hammer 157, Fig. 1, and only one impression is made on the ticket which is held in the shoot 143 by a spring finger 159. If, however, the key 22 is depressed the stud 70, Fig. 6, is positioned opposite a high portion of the surface of the arm 72 so that the arm 78, Fig. 9, will not be moved and when cam 84 rotates the pawl 80 will be allowed to move counter–clockwise and its shoulder 104 comes into the path of the lug 105 on the segment 106. The first stroke of the hammer 157, Fig. 1, again effects printing about the centre of the ticket. The segment 106, Fig. 9, is, however, arrested after a short feeding movement by the lug 104 and upon the second stroke of the hammer the data is printed on the

upper edge of the ticket, Fig. 4, not shown. The cam 84, Fig. 9, then effects clockwise movement of the lever 82 which moves the pawl 80 to release the segment 106 to complete its movement. Slip printing. If it is desired that the second impression of the hammer 157, Fig. 1, be made upon an inserted slip instead of the ticket, the slip, Fig. 2, not shown, is first inserted upside down in the shoot 143 to rest on a bar 163, the position of which is adjustable. After the first impression has been made on the ticket, the ticket and the inserted slip are fed upwardly and upon the second stroke of the hammer 157 the data is printed on the upper edge of the slip. If it is desired that both impressions be made on the inserted slip the key 24, Fig. 6, is depressed, no movement is imparted to the slide 166, Fig. 8, and the stud 175 remains in the path of the pawl 87 which is disengaged from the lug 86 so that the shaft 85 and consequently the ticket feed roller 154, Fig. 1, are not moved. Listing. A lever 178, Fig. 8, movable between two positions, is used in conjunction with the key 24. When this lever is moved counterclockwise a lever 180 is moved so that a cam surface 185 thereon carries into the path of a stud 186 on a link 167 connected to the slide 166. The slide 166 and the keys 21–23 are thereby locked. Prior depression of a key 21, 22, 23, however, would have moved the slide 166 to place the stud 186 over the face 184 of the lever 180 to lock the lever 178. The lever 180 is yieldingly retained in either of its two positions by the engagement of a stud 181 on the lever 180 in either of two notches in a lever 182 urged counter–clockwise by a spring 183. The above counter–clockwise movement of the lever 180 effects through a lever 189 and bellcrank 191 movement of a slide 193, a projection 195 of which moves beneath a stud 196 on a lever 197, Fig. 1, and so retain the pressure rollers 114 in their ineffective positions. The lever 189, Fig. 8, has an extension 198 which latches over a stud 199 on the ticket and slip printing hammer 157 which is thereby prevented from moving. Duplicate slip printing. If it is desired to obtain a duplicate of the slip a lever 201, Fig. 6, is moved counter–clockwise to effect downward movement of the plate 29 which releases the machine as described above. Movement of the lever 201 also effects downward movement of a detent 208, Fig. 7, which prevents depression of any key 21, 22, 23, 24. The lever 201 cannot be moved after depression of any key 21–24. The detent 208 frees a lever 213 and the yoke 34 moves to release the machine for one cycle. The interaction of an extension 210 on the detent 208 and an arm 218 on the shaft 35 prevents movement of the lever 201 during total or sub–total taking, i.e. after movement of the lever 65, and prevents movement of the lever 65 after the lever 201 has been moved. Movement of the lever 201 also causes through a lever 222 and a stud 224 downward movement of the totalizer engaging link 225 which, in known manner, prevents " addition " during this cycle. Movement of the lever 201 prevents movement of the lever 174, Fig. 8, so that the pawl 87 is disengaged from the lug 86 and ticket feeding is thereby prevented. The cam 84, Fig. 9, does not rotate, so the pawl 80 remains stationary and the slip is given a long feeding movement by the segment 106. The consecutive number advancing mechanism is disabled during this operation. Feeding mechanism control during total and sub–total taking. Mo

0) US3049928A – NON–DRIVE TORQUE–TRANSMITTING AXLES FOR TRANSPO...

184) Family number: 22789253 (US3049928A) © PatBase

Title: NON–DRIVE TORQUE–TRANSMITTING AXLES FOR TRANSPORTATION VEHICLES

Priority: US19590836740 19590828

Family:

Publication number	Publication date	Application number	Application date
US3049928 A	19620821	US19590836740	19590828

Probable Assignee: ROCKWELL STANDARD CO

Assignee(s):(std)**:** ROCKWELL STANDARD CO

Assignee(s): ROCKWELL STANDARD CORP

Inventor(s):(std)**:** BOUGHNER LAWRENCE G

International class (IPC 8–9)**:** F16H37/00 (Advanced/Invention); B60K25/08 (Advanced/Non–invention); F16H37/00 (Core/Invention); B60K25/00 (Core/Non–invention)

International class (IPC 1–7)**:** B60K25/06

CPC: B60K25/08 F16H37/00 F16H2700/02

European class: 63C42A F16H37/00 L60K25/08 R16H700/02

US class: 180/53.1 180/53.6 62/242 74/13

Classification Explorer

Cited documents: US2735501 A, US2620636 A, US2570191 A, US2533759 A, US2533022 A, US2262375 A, US2097857 A, US2084259 A, US2036247 A, US2026076 A, US1975351 A, US1827981 A, US1069840 A,

Forward Citations: US8827022, US8347999, US4496016, US4128800, US2013081886, US2010327600,

Abstract:
Source: US3049928A (Claim 1) In a transportation vehicle, driven means mounted ing at least a part of said accessory on said housing, and on said vehicle, and at least one non–driving torque–trans– 25 drive transmitting means between said output shaft and mitting axle assembly supported at opposite ends by road– the accessory part. engaging wheels that rotate due to frictional contact with 7. In the assembly defined in claim 5, said means on the ground for supporting–said vehicle and driving said the output shaft outside the housing comprising a hous–driven means, said axle assembly comprising a tubular mg extension, a coupling shaft rotatably mounted in said axle housing, at least one non–driving wheel hub affixed 30 housing extension, a clutch for operably connecting and to at least one of said wheels and rotatably mounted on disconnecting said output and coupling shafts, and a said axle, housing, said hub having an outwardly extending clutch operator on said housing extension, tubular section surrounding said housing in concentric 8– In a transportation vehicle having an accessory to spaced relation, to said housing and terminating a pre– driven mounted thereon, a non–driving torque–trans–determined axial distance inwardly of the adjacent outer 35 –nutting axle assembly extending transversely beneath the end of said housing, a rotatably mounted shaft extending vehicle and supported at opposite ends by ground engag–through said housing and terminating in a laterally ex– in_ wheels that rotate due to frictional contact with the tending flange member protruding beyond said housing road_gt; said axle assembly comprising a non–rotatable tub–in axially spaced relation to the end of said tubular sec– ular axle housing, wheel hubs for said wheels mounted tion, means for drivingly connecting the inner end of said 40 in surrounding relation over each end of the axle hous–shaft to said driven means, and an adapter assembly for "!§ and joumaled on said housing, ,a differential mecha–drivingly interconnecting said flange member and said hub niS™ W!thm said housing having an output shaft for confer transmitting torque established by rotation of said nection to said accessory and having oppositely extend–wheels to said driven means. ing input shafts projecting through ffie ends of said hous–

0) US5279138A – LOCK HAVING REMOVABLE LOCK–ACTUATOR CARTRIDGE

185) Family number: 11424144 (US5279138A) © PatBase

Title: LOCK HAVING REMOVABLE LOCK–ACTUATOR CARTRIDGE

Priority: US19920878340 19920504

Family:

Publication number	Publication date	Application number	Application date
US5279138 A	19940118	US19920878340	19920504

Probable Assignee: GALLAGHER FRANCIS E

Assignee(s):(std)**:** GALLAGHER FRANCIS E

Assignee(s): GALLAGHER SHERALL A

Inventor(s):(std)**:** GALLAGHER FRANCIS E

International class (IPC 8–9)**:** E05B17/20 E05B21/06 E05B9/08 (Advanced/Invention); E05B29/00 (Advanced/Non–invention); E05B17/00 E05B21/00 E05B9/00 (Core/Invention); E05B29/00 (Core/Non–invention)

International class (IPC 1–7)**:** E05B29/00

CPC: E05B17/2084 E05B9/084 E05B21/066 E05B29/004 Y10T70/7469 Y10T70/7633 Y10T70/765 Y10T70/7695 Y10T70/787

European class: E05B17/20G E05B21/06B E05B9/08C P05B29/00K

US class: 70/341 70/366 70/369 70/371 70/377 70/407 703/660

Classification Explorer

Cited documents: US4838055 A, US4123926 A, US3942346 A, US3821886 A, US3797290 A, US3789638 A, US3600912 A, US2012996 A, US1644365 A, GB2161536 A1, DE2913248 A1, DE2245729 A1,

Forward Citations: WO0031491, USRE45627, USD692744, USD680416, US9273487, US9045916, US9003845, US8881566, US7634930, US7251970, US6725696, US6662484, US5775146, US5609052, US2014041426, US2012248085, US2008276666, US2006162400, US2006150695, CH710833,

Abstract:
Source: US5279138A A key–operated lock has a shell mounted securely in a closure, and a removable lock–actuator cartridge insertable into and withdrawal from the shell to facilitate changing the tumbler disk combination in the lock. The cartridge includes an annular hollow housing seatable in the shell, and a tumbler disk carrier telescopically insertable into the housing. The carrier and associated tumbler disks are rotatable within the housing to operate the lock. An anti–damage feature comprises the cartridge being insertable into the open front end of the shell. A thickened rear wall of the shell reinforces the cartridge against destructive attack by rod and hammer action exerted on the front face of the lock. Principal features are quick changing of the tumbler disk pattern, and a rigid damage–resistant lock structure.

0) US5676415A – LUGGAGE COMPARTMENT COVER FOR A MOTOR VEHICLE

186) Family number: 30543480 (US5676415A) © PatBase

Title: LUGGAGE COMPARTMENT COVER FOR A MOTOR VEHICLE

Priority: DE19944441260 19941119 DE19955000852 19950801 EP19950112047 19950801

Family:

Publication number	Publication date	Application number	Application date
DE4441260 A1	19960530	DE19944441260	19941119
DE4441260 C2	19970522	DE19944441260	19941119
DE59500852 D1	19971127	DE19955000852	19950801
EP0712757 A1	19960522	EP19950112047	19950801
EP0712757 B1	19971022	EP19950112047	19950801
ES2109758 T3	19980116	ES19950112047T	19950801
US5676415 A	19971014	US19950559882	19951120

Probable Assignee: BAUMEISTER AND OSTLER GMBH AND CO KG

Assignee(s):(std): BAUMEISTER AND OSTLER GMBH CO

Assignee(s): BAUMEISTER AND OSTLER GMBH ; BAUMEISTER AND OSTLER GMBH AND CO ; BAUMEISTER AND OSTLER GMBH AND CO KG ; BAUMEISTER AND OSTLER GMBH AND CO KG 73773 AICHW ; BAUMEISTER AND OSTLER GMBH AND CO KG 73773 AICHWALD DE

Inventor(s):(std): SEEL HOLGER ; AMENT EDUARD

Inventor(s): SEEL HOLGER D 71134 AIDLINGEN DE ; AMENT EDUARD D 73773 AICHWALD DE ; SEEL HOLGER 71134 AIDLINGEN DE ; AMENT EDUARD 73773 AICHWALD DE

Designated states: DE ES FR GB IT SE

International class (IPC 8–9): B60R5/04 (Advanced/Invention); B60R5/00 (Core/Invention)

International class (IPC 1–7): B60P7/04 B60R5/04

CPC: B60R5/047 Y10S160/903

European class: B60R5/04B2B

US class: 160/238 160/323.1 160/903 248/268 296/37.16

Classification Explorer

Cited documents: US823452 A, US5584523 A, US5224748 A, US4671557 A, US4668001 A, US4222601 A, US4168094 A, US2307095 A, EP0524397 A1, DE4013157 C1, DE3922450 C2, DE3922450 A1, DE2941711 A1, CA726494 A,

Forward Citations: USD556657, USD554571, USD549626, USD544821, US9573527, US9027271, US9004144, US8702150, US8672016, US8607843, US8596703, US8596594, US8453771, US7779887, US7762363, US7730930, US7621577, US7597132, US7591296, US7562689, US7549615, US7537265, US7331370, US7201417, US7082983, US7014239, US6983970, US6817644, US6709039, US6598651, US6554339, US6488325, US6213186, US6125908, US6039105, US5975186, US5961172, US5934354, US5881793, US2016130871, US2015203044, US2015083351, US2014182178, US2013147225, US2012305204, US2012181813, US2010206492, US2009146448, US2009102226, US2009033114, US2008163990, US2008163987, US2008088145, US2008011922, US2008000596, US2007182190, US2007120391, US2007074829, US2007007783, US2006284436, US2006225843, US2006081746, US2006022076, US2005103450, US2004160075, GB2522417, FR2912097, FR2873970, EP2460688, EP1818217, EP1745982, EP1447275, EP1356991, EP1040964, DE19908609, DE19736170, DE19707674, DE19621009, DE10307228, DE102012002031, DE102007059209, DE102007025259, DE102005042832, DE10063725, CN102582693,

Abstract:
Source: US5676415A A luggage compartment cover for a motor vehicle has a bearing shaft extending between two bucket–shaped side parts, which supports a flat structure that can be rolled and unrolled, such as a

concealing cover. At least one of the side parts is axially movable with respect to a bearing axis of the bearing shaft between a release position, in which the side part is released from a mount which is integral with the vehicle, and a locking position, in which the side part is locked in the mount which is integral with the vehicle. At least one side part has a releasable lock for locking the side part in the release position. In another embodiment, the luggage compartment cover has a locking device which locks a side part axially relative to the bearing shaft and which is unlockable with an actuating button. In another embodiment, the luggage compartment cover has a releasable lock which is constructed in the manner of a ballpoint pen lock.

187) Family number: 65691448 (US2017137177A) © PatBase

Title: STORAGE DEVICE WITH INFINITELY ADJUSTABLE STORAGE DIVIDER SYSTEM

Priority: US20150944889 20151118

Family:

Publication number	Publication date	Application number	Application date
CN106829151 A	20170613	CN201610994066	20161111
DE102016121866 A1	20170518	DE201610121866	20161115
US2017137177 AA	20170518	US20150944889	20151118

Probable Assignee: FORD GLOBAL TECHNOLOGIES LLC

Assignee(s):(std)**:** FORD GLOBAL TECH LLC

Assignee(s): FORD GLOBAL TECHNOLOGIES LLC

Inventor(s):(std)**:** PREZECKI II LEONARD GUS ; PREZECKI LEONARD GUS

International class (IPC 8–9)**:** A47B96/04 B60R7/00 B60R7/04 B65D25/06 (Advanced/Invention)

CPC: B65D25/06

Classification Explorer

Abstract:
Source: US2017137177A A storage device is provided. That storage device includes a sidewall defining a storage compartment and a storage divider system including a hub. That hub is held in the storage compartment and a plurality of telescoping panels extend between the hub and the sidewall to divide the storage compartment into individual chambers.

0) GB832615A – IMPROVEMENTS RELATING TO CONTROL MECHANISMS FOR...

188) Family number: 20633143 (GB832615A) © PatBase

Title: IMPROVEMENTS RELATING TO CONTROL MECHANISMS FOR CHANGE SPEED GEARING

Priority: GB19560008090 19560315

Family:

Publication number	Publication date	Application number	Application date
GB832615 A	19600413	GB19560008090	19560315

Probable Assignee: JOHN WILLIAM GREENWOOD KERSHAW

Assignee(s):(std)**:** HENRY ERNEST GEORGE FLEWELLEN ; JOHN WILLIAM GREENWOOD KERSHAW ; WESTINGHOUSE BRAKE AND SIGNAL ; WILFRED ALWYN KIRK

Assignee(s): WESTINGHOUSE BRAKE AND SIGNAL CO LTD ; WESTINGHOUSE BRAKE AND SIGNAL COMPANY LIMITED

International class (IPC 8–9): F16H63/30 (Advanced/Invention); F16H63/30 (Core/Invention)

International class (IPC 1–7): F16H5/12

CPC: B60W30/18 B60W10/02 B60W10/10 B60W2710/021

European class: B60K41/00 L60K702/10

Classification Explorer

Abstract:
Source: GB832615A 832,615. Change–speed control. WESTING– HOUSE BRAKE and SIGNAL CO. Ltd., KIRK, W. A., KERSHAW, J. W. G., and FLEWELLEN, H. E. G. Aug. 10, 1956 [Aug. 11, 1955; March 15, 1956], Nos. 23142/55 and 8090/56. Class 80 (2). Gear change in a vehicle multi–speed box is effected by a shift finger 14, Fig. 1, in a gearbox 13 which is operated by a gear lever 11 through a longitudinally movable coupling shaft 12, which shaft includes at 15 a lostmotion connection which initiates a timed cycle of disengagement and re–engagement of a fluid–pressure operated clutch during the gearchange operation. The lost–motion connection 15 comprises, Fig. 2, a male part 15b sliding within a female part 15a and centred therein by a spring 27. A cam swell 43 on the part 15b is adapted on relative movement in either direction to part 15a to actuate a lever 41 with one–way catches 44a, 44b to open a pilot valve 36 controlling the escape of pressure fluid from a flexible hose 74 which is connected to a main control valve 46 for the clutch operating mechanism. The valve 46 (see Fig. 3), comprises a main valve member 54 controlling the supply of pressure fluid from an inlet port 48 past a valve seat 56 to an outlet port 58 coupled by a pipe 72 to the clutch operating motor (not shown). The valve member 54 is controlled by a piston 51 with a hollow stem 59 which is acted upon on its lower side by the inlet pressure in a chamber 47 and on its upper side by the inlet pressure through a choke orifice 52. The hollow stem 59 forms an exhaust passage from the outlet 58 to an outlet 63 and has on its lower end a tip 65 engageable with grooves 66, 67, 68 or 69 on the coupling shaft 12 where it passes through the body of the valve 46. In operation, with the gear lever 11 in neutral the pilot valve 36 is closed, the pressure above and below control piston 51 is equalized and a spring 70 holds the tip 65 of stem 59 in locking engagement with the shaft 12. To select and engage a gear the gear lever is moved laterally as may be required to transmit unimpeded rotation through the shaft 12 to the shift finger 14 and then moved forwards or backwards to effect longitudinal movement. The right–hand end of the shaft 12 is prevented from moving immediately because of the locking of the tip 65 in grooves 66–69 to the male part 15b of the connection 15 moves relatively to the female part 15a so that pilot valve 36 is operated. This valve releases the pressure through an outlet 73 and flexible pipe 74 from above the control piston 51 which thereupon rises to release the tip 65 from its groove and to seat the top of the stem 59 against the valve member 54 which simultaneously closes the outlet 58 from exhaust through the stem and opens it to fluid pressure from the inlet 48. The clutch is thereupon released and continued movement of the gear lever and shaft 12 is allowed to move the shift finger 14 to effect the desired movement of the selected gear member. The lost–motion connection 15 is centralized by its spring to close the pilot valve 36 which results in pressure building up above piston 51 through orifice 52 to move the piston and stem 59 downwards to close valve 54, open outlet 58 to exhaust for clutch re–engagement controlled by an orifice 64 and to re–engage tip 65 with another of the grooves 66–69 to lock the engaged gear. The grooves 66–69 may be provided to allow for more than one gear in either the forward or backward movement to the gear lever, by different amounts, one a single wide groove 68 may serve for two gear positions. During a change from one gear to another the cycle of clutch disengagement and re–engagement may occur twice if a pause is made in the neutral position as required by boxes of the sliding mesh type but for boxes of the syncromesh and epicyclic types the gear lever may be moved quickly from one position to another so that time for only one cycle of clutch operation is allowed.

189) Family number: 19701041 (GB721758A) © PatBase

Title: Improvements in or relating to toe lasting machines

Priority: GB19520000110 19520102

Family:

Publication number	Publication date	Application number	Application date
GB721758 A	19550112	GB19520000110	19520102

Probable Assignee: BRITISH UNITED SHOE MACHINERY

Assignee(s):(std): BRITISH UNITED SHOE MACHINERY

Assignee(s): THE BRITISH UNITED SHOE MACHINERY COMPANY LIMITED

International class (IPC 8–9): A43D21/12 (Advanced/Invention); A43D21/00 (Core/Invention)

International class (IPC 1–7): A43D21/12

CPC: A43D21/12

European class: A43D21/12

Classification Explorer

Abstract:
Source: GB721758A 721,758. Lasting machines. BRITISH UNITED SHOE MACHINERY CO., Ltd. (United Shoe Machinery Corporation). Jan. 1, 1953 [Jan. 2, 1952], No. 110/52. Class 17 (1). In a machine for conforming the toe portions of already–pulled–over shoes to the shapes of lasts therein having wipers 2, power means for effecting upwiping and then in–wiping, a clamping arrangement (for positioning the shoe relatively to the path of the wipers) including means to engage the toe portion of the shoe bottom and a device for engaging the top of the forepart of the shoe, means for restraining the upper during wiping, and a heel rest which is movable widthwise, to cater for right and left shoes and different styles, and lengthwise, the rest is guided in a predetermined direction as it is moved lengthwise and the rest guide is adjustable to vary the direction in accordance with the particular last. The wipers are bodily movable together widthwise of the last in response to pressure of the shoe during heightwise movement to adjust themselves to the shoe, but such movement is prevented during inwiping. The power means effecting upwiping comes into effect when the shoe is engaged by the rest, and during the wipers move heightwise to increase the inwiping pressure on the upper margin, then away to reduce the pressure, and finally toward the last again to increase the pressure once more. The shoe is located by engagement with an adjustable plate 4, and a retarder 18 which clamps the margin of the upper on the wipers 2, and at the beginning of a cycle is clamped by means of a toe rest 22, a heel rest 24 then being engaged with the heel. The heel rest includes a padded V–shaped member 26 with a stem which is adjustable angularly about an axis lengthwise of the shoe in a block 32, being clamped by a screw. Segmental members 36, Fig. 3 (not shown), are mounted in curved recesses in the sides of block 32 and in guideways 38 in plates 40 on a holder 42 supported on a slide 44. Screws 46 threaded in the members 36 extend through slots 48 in plates 40 and are turned by hand wheels 50, so that the block 32 and heel rest 24 may be adjusted and clamped about an axis widthwise of the shoe. The parts are adjusted about an axis heightwise of the shoe on a stem 52 and the holder 42 extending into a bore in the slide 44, being clamped by a finger 54. Slide 44 is adjustable laterally on a guide 64 fast on a plate 66, and clamped by a thumb screw 68. A roll 78 on plate 66 lies in a slot 80 in a block 70 so that the plate moves with the block in movement lengthwise of the shoe imparted by rods 82 having telescopically adjustable parts 84, 86. The movement imparted to the heel rest by block 70 is adjusted by means of a guide bar 88 adjustable about a stud 96 and clamped by a handwheel 102 on a bolt 100, extending through a slot 98 in plate 72. The bar 88 is set for a particular style of shoe by means of a mark 104 on the bar and scales for right– and left–hand shoes on plate 72, the operator having a chart indicating the scale numbers for different styles. An additional widthwise adjustment of the heel rest, for the "swing" of the last is made by moving slide 44 along guide 64, right– and left–hand scales being provided. The wipers 2 are detachably mounted in holders 106 guided laterally of the shoe in a curved path on a carrier 108, which is moved lengthwise of the shoe on links 118 by a lever 120 pivoted at 122 and controlled by a cam path 126 on shaft 128. The carrier may be swung upwardly by means of a path cam 138 through roller 136, arms 134 and 130, and links 118. The wipers are closed inwards by forward movement of a slide. 140 through a path cam 143 and parts 142, 144, 146, 148, as in Specification 520,194. The slide 140 is connected to the holders 106 by yieldable link mechanisms similar to those described in Specification 573,358 and having parts 150, 152, 154, 156, 158, 160, 170, 172. A pin 174 on each ring 172 extends into a slot 176 in an adjusting slide 178 guided widthwise of the machine. The slide is adjusted by a rack bar 180 engaging a pinion 184 on a shaft 186, a disc on the shaft having a pin lying in a slot in the slide, and in the correct positions a spring–pressed retaining member enters one of three recesses in the rack bar. The wipers are preliminarily adjusted towards and from each other by turning the rod 148 to move the slide 140 relatively to the rod by.a mechanism similar to that described in Specification 573,358, a,thread on the slide being engaged by a thread 198 on the rod which is turned by means of a pinion 200 thereon, a meshing pinion 202 keyed to a rod 206 which is turned through a

worm gear 216 thereon, a worm 218, shaft 220, and gears 224, 226 by a hand wheel 232. To ensure that the wipers apply substantially equal pressures during upwiping the carrier 180 is swung widthwise in response to pressure on one side. For this purpose the rod connecting the carrier 108 to the lever 120 has a convex portion 238 of larger diameter which engages the bushing 236, and to facilitate this swinging links 118 are pivotally connected by pins 240 to blocks 242 pivotally connected by pins 244 to the carrier and arms 130. To prevent this lateral movement during in−wiping, so that the wipers move equally inwardly, rolls 246 engage cam plates 248 on the carrier. The rolls are urged towards the carrier by a light spring 254, movement being limited by a screw 256, which permit lateral movement during up−wiping. Movement of the carrier for inwiping brings the inclined faces 262 to engage the rolls and force them against springs 254, flanges 264 engaging member 252 to centralize the wipers. To ensure equal inward movement of the wipers the slide 140 is moved to engage nipples 114 with the end of slots 116 in the carrier, and pins 170 with the ends of slots 160. The wipers are moved for a first inwiping as in Fig. 14 to prevent severe action on the upper and then retracted and moved for a second inwiping as in Fig. 15. A movable wiping plate 266 bridges the ends of the wipers. The adjustable fingers 20 of the retarder 18 are supported from a bar 284, prevented from turning about the rod 282, and adjusted lengthwise of the shoe by movement of arms 286 through a screw 292, 294, the arms being clamped by screw 300. The fingers are secured by latch members 304, Fig. 10 (not shown), normally urged by springs 312 but released by movement of arms 314. Bar 284 is pivotally supported on an arm 316 loose on a rock shaft 318 and is adjusted to position the retarder heightwise by means of a hand wheel 336. An arm 322 integral with 316 is connected to one arm 326 of a three−armed lever 328 fast on shaft 318. The retarder is adjustably urged downwardly by a spring 356 through bell−crank 346 link 340 and arm 338 on shaft 318, and by spring 358 connected between the lever 328 and a lever 362 adjustable to vary the tension. The retarder is lifted co−ordinately with upwiping by a cam 354 acting on a roll 352 on the bell crank 346, the timing being adjusted by a screw 364 threaded in an arm 366 integral with 338 which spaces the roll 352 from the cam. During this movement the retarder is moved lengthwise by a roll 372 on bar 284 engaging a slot 370 in an adjustable cam plate 368, an eccentric 382 allowing variation of the initial position of the retarder independently of cam plate 368. The hold−down 390 is pivotally mounted on a pin 402 on a slide 404 urged by spring 410. The initial heightwise position is adjusted by a bell crank 416 having one arm 420 supporting the slide and the other controlled by screw 426, 428. The hold−down is withdrawn by means of cam 354 through a third arm 432 on lever 328, nut 434, rod 436, and an arm projecting from slide 404. Shaft 128 is driven by motor 450 through clutch 448, 452, shaft 446, worm 444, and gear 442. A yoke 456 connected to the hub of member 452 is used to withhold that member from the member 448 against the spring 454 to stop operation. A catch 460 on an arm 458 which swings with the yoke is normally engaged by a shoulder 461 on a block 462 so that the clutch parts are disengaged. An arm 464 carrying block 462 is pivoted to one arm of a bell crank 466, the other arm carrying a roll 470 engaging a path cam 472 on shaft 128. Spring 474 urges arm 464 to hold latch 460. Arm 464 extends through a slot in a bar 476 and has a pin 478 engaging a shoulder 480 on the bar, which is pivoted to an arm 482 on rockshaft 484, a spring 486 urging the arm against a stop 488. The end of bar 476 is held against a screw 490 by a spring 492. Depression of the treadle 494 fast on shaft 484 moves bar 476 forwards, swinging arm 464 to disconnect the latch 460 to permit spring 454 to engage the clutch parts. To stop the machine arm 464 is lowered by cam 472 acting on the bell crank 466, disengaging pin 478 from shoulder 480, so that spring 474 swings the arm to connect the latch, the arm 464 then lifting to swing the yoke 456 so as to disengage the clutch. Cam 472 is formed so as to stop the machine at the end of the cycle, and when the wipers have completed their second inward movement, so as to allow time for the cement to set while the upper is under the pressure of the wipers, the machine being restarted to complete the cycle by depression of the treadle. The machine may be prevented from stopping before the end of the cycle by means of a spring−urged bell crank 496 with one arm 498 carrying a roll 500 engaging a cam 502, and the other arm 506 forked to guide a slide 508 connected by rod 512 and link 514 to a lever 516 pivoted at 518 and engaged in one of two positions 522 by a spring−pressed pin 520. In its lower position, Fig. 16, slide 508 is against a pin 524 on arm 464. Before cam 472 is effective to stop the machine before the end of the cycle cam 502 swings bell crank 496 so that the slide 508 engages pin 524 and swings arm 464 which then does not engage the latch when raised by cam 472. Cam 502 does not interfere at

0) US2599333A – SHAFT CONNECTION

190) Family number: 22878351 (US2599333A) © PatBase

Title: SHAFT CONNECTION

Priority: US19500189190 19501009

Family:

Publication number	Publication date	Application number	Application date
US2599333 A	19520603	US19500189190	19501009

Probable Assignee: BOUR CO INC

Assignee(s):(std)**:** BOUR CO INC ; BOUR COMPANY INC

Assignee(s): LA BOUR CO INC ; THE LA BOUR COMPANY INC

Inventor(s):(std)**:** LA BOUR HARRY E

Inventor(s): BOUR HARRY E LA

International class (IPC 8–9): F04D29/04 F04D29/044 F16D1/04 (Advanced/Invention); F04D29/04 F16D1/02 (Core/Invention)

International class (IPC 1–7): F16D1/00

CPC: F04D29/044 F16D1/04 Y10T29/53835

European class: F04D29/044 F04D29/04B F16D1/04

US class: 29/253 464/177 464/178

Classification Explorer

Cited documents: US670470 A, US2134475 A, US1912201 A, US1661226 A,

Abstract:
Source: US2599333A (Claim 1) 1. Shaft coupling comprising a shaft section having an axial socket, a shaft section having an axial stud telescoped into said socket, there being a radially extending opening through a wall Of the socket remote from the outer end of the socket, and a radially extending shoulder in the wall of the socket diametrically opposite said opening, the stud having a transverse opening therethrough in substantial alig=ent with said opening in the socket, a lock screw threaded in s–aid transverse opening in the stud, said screw having a tapered end adapted to engage said radially extendin.– shoulder on the socket tending to lock the stud with respect to the socket, the center of gravity of said screw lying 6n the same side of the axis of the stud as the tapered end of the screw.

0) EP0089192A1 – COMBINATION LOCK. KOMBINATIONSSCHLOSS. SERRUR...

191) Family number: 5232687 (EP0089192A1) © PatBase

Title: COMBINATION LOCK.

Priority: US19820357604 19820312

Family:

Publication number	Publication date	Application number	Application date
EP0089192 A1	19830921	EP19830301342	19830310
JP58207461 A2	19831202	JP19830040533	19830311
ZA8301462 A	19831130	ZA19830001462	19830303

Probable Assignee: MASTER LOCK CO

Assignee(s):(std)**:** MASTER LOCK CO ; MASUTAA ROTSUKU CO

Assignee(s): MASTER LOCK COMPANY

Inventor(s):(std)**:** GRANDY KENNETH N ; GRANDY KENNETH NEIL ; HANNEMAN ROBERT H ; HANNEMAN ROBERT HAROLD ; HOOSUTO REBUREKUTO ; HORST LEBRECHT ; KENESU ENU GURANDEI ; LEBRECHT HORST ; ROBAATO ETSUCHI HANNEMAN

Designated states: DE GB IT

International class (IPC 8–9)**:** E05B37/02 E05B67/00 (Advanced/Invention); E05B37/00 E05B67/00 (Core/Invention)

International class (IPC 1–7)**:** E05B37/02 E05B67/22

CPC: E05B37/0058 E05B37/025

European class: E05B37/02B

Classification Explorer

Cited documents: US3983724 A, US2853868 A, GB201957 A,

Forward Citations: WO06015552, FR2849088, AU2012216612,

Abstract:
Source: EP0089192A1 The present invention provides a permutation lock 10 comprising a housing 12–16 and a securing element 18 supported by the housing 12–16 for movement into and out of securing engagement for closing and opening the lock 10. A locking structure 50, 52 and structure 118 for controlling its operation whereby the securing element 18 may be opened by an authorised user are supported within the housing 12–16. The control structure generally includes a shaft 88, a plurality of permutation wheels 20 each carrying indicia in a sequence about its outer periphery, and an equal number of cam elements 104. Both the permutation wheels 20 and the cam elements 104 are supported for rotation on the shaft 88 and arranged alternately there–along in associate pairs of permutation wheels 20 and cam elements 104. The cam elements 104 normally are engaged with the associated wheel 20 in a first position, rotationally movable conjointly with the wheel 20 when the wheels 20 are selectively rotated from one angular position to another, and provide control to the locking structure 50, 52 to permit opening of the lock 10 when the permutation wheels 20 and cam elements 104 are angularly located to a preset combination.

0) US2296606A – LATCH OPERATING MECHANISM

192) Family number: 21165608 (US2296606A) © PatBase

Title:	LATCH OPERATING MECHANISM
Priority:	US19410375348 19410121

Family:

Publication number	Publication date	Application number	Application date
US2296606 A	19420922	US19410375348	19410121

Probable Assignee:	GAFFNEY CHARLES E
Assignee(s):(std)**:**	GAFFNEY CHARLES E
Inventor(s):(std)**:**	GAFFNEY CHARLES E
International class (IPC 8–9)**:**	E05B5/02 (Advanced/Invention); E05B5/00 (Core/Invention)
International class (IPC 1–7)**:**	E05B65/22
CPC:	Y10S292/40 E05B5/003 Y10T70/5761
European class:	E05B5/00B
US class:	292/DIG.40 70/208
Classification Explorer	
Forward Citations:	US6099047, US2998992,

Abstract:
Source: US2296606A 1. A latch mechanism for a door having 2, recess comprising a latch operating shaft, a. handle member connected with the shaft for rotating the same, said handle having EL radially extending lug member and being slidable relative to the phaft for movement into and out of the door recess, a. spindle mounted for rotation adjacent the latch operating shaft having an end recess and

0) FR1427450A – APPAREIL D'EXAMEN RADIOLOGIQUE RAY UNIT REVIEW...

193) Family number: 21483104 (FR1427450A) © PatBase

Title: APPAREIL D'EXAMEN RADIOLOGIQUE RAY UNIT REVIEW (Machine translation)

Priority: FR19650009554 19650317

Family:

Publication number	Publication date	Application number	Application date
FR1427450 A	19660204	FR19650009554	19650317

Probable Assignee: SIEMENS REINIGER WERKE AG

Assignee(s):(std)**:** SIEMENS REINIGER WERKE AG

Assignee(s): SIEMENS REINIGER WERKE AKTIENGESELLSCHAFT

International class (IPC 8–9)**:** A61B6/00 G03B42/02 (Advanced/Invention); A61B6/00 G03B42/02 (Core/Invention)

CPC: A61B6/4476 G03B42/025

European class: A61B6/44L G03B42/02P

Classification Explorer

Abstract:
Source: FR1427450A (Claim 1) **ATTENTION** debut du champ CLMS peut contenir fin de DESC **.

Machine translation: (Claim 1) ** WARNING ** start of CLMS field may contain end of DESC **.

0) GB112879A – NEW OR IMPROVED CONSTRUCTION OF TWIST DRILL GRO...

194) Family number: 26365215 (GB112879A) © PatBase

Title: New or Improved Construction of Twist Drill Grooving and Clearance Grinding (or Milling) Machine.

Priority: GB19170006464 19170507

Family:

Publication number	Publication date	Application number	Application date
GB112879 A	19180131	GB19170006464	19170507

Probable Assignee: HUNT HERBERT

Assignee(s):(std)**:** HUNT HERBERT ; HUNT HERBERT WILLIAM ; HUNT PERCY

Assignee(s): PERCY HUNT ; HERBERT HUNT ; HERBERT WILLIAM HUNT

Inventor(s):(std)**:** HUNT HERBERT ; HUNT HERBERT WILLIAM ; HUNT PERCY

Inventor(s): PERCY HUNT ; HERBERT HUNT ; HERBERT WILLIAM HUNT

International class (IPC 8–9): B23C3/32 (Advanced/Invention)

International class (IPC 1–7): B23C3/32

CPC: B23C3/32

European class: B23C3/32

Classification Explorer

Abstract:
Source: GB112879A 112,879. Hunt. H., Hunt. H. W., and Hunt, P., (trading as Hunt and Sons, H.). May 7, 1917. Twist drills, sharpening; cutting–edges, shaping and treating.–A combined twist–drill grooving and clearance–making machine comprises two heads b, c upon one bed a, one h for milling or grinding grooves, and one c for grinding or milling clearances. Means for re–setting the work in transferring it from one head to the other are avoided. The width and depth of the groove are simultaneously and automatically varied as the grooving proceeds. A micrometer gauge nut is provided for regulating the depth of the groove. Means are provided for varying the pitch in both heads, for adjusting the work to do one groove and then another, and for automatically stopping the grooving at the end of the groove. Self–adjusting ball bearings support the clearance–forming tool. The grooving headstock 1. Fig. 3, carries a belt–driven spindle 2 with tool 3 and driving gear–wheels 4 for rotating a shaft 9 actuating parts of the head b, which carries a swinging bracket 11, Fig. 4, journaled about a vertical spindle 12 in bearings 1<a>, 1<b>. The bracket 11 lies normally at 60 degrees to the drill spindle and carries a rectangular guide and rest 13 for a carriage 14 actuated by a nut 15 secured thereto and engaging a traversing–screw 16 The carriage 14 has a loose rotary spindle, which carries the drill–blank chuck and is driven by a key 22 engaging a key–way on a. spindle 21 carrying a loose gear wheel 25 driven through change gear from the traversing–spindle. The wheel 25 has two or more holes, which engage an adjustable spring detent 30 carried by the spindle, one for each drill groove. The shaft 9, Fig. 7, actuates screw 16 through universal joints, a worm 32 and a wheel 31. The worm 32 is carried by a lever bracket 35 pivoted to the frame 11 and carrying a half–pin 39. which normally engages a half–pin 38 in a lever handle 37. The worm 32 may be lowered by hand or a travelling stop 59 engaging the lever 37. The spindle 12 carries a work–holding sleeve 43 and a micrometer–nut 49 and lock–nut 50 for regulating work, and is supported by an eccentric 52 actuated by a lever 53 connected to an adjustable hook 56 on the carriage 14. When the carriage is moving forwards, it exerts a pull on a chain 54 and lowers the spindle 12 to produce a gradual variation in the depth of the groove. At the same time, the bracket 11 is swung by a link 57, Fig. 2, connected to the saddle 14 to widen the groove from the drill point to the shank. The work is lowered on moving the lever 53 to the right, and the worm 32 is also lowered to facilitate the return of the saddle to starting point. The head for grinding the clearances on the drill carries a spindle 60, Fig. 7, a grinding wheel 62 and a pulley 61 driven by belt gearing from a pulley 64. The spindle 62 is supported by ball–bearings 91, 92 93. A spring is arranged between the bearings 91, 92 to take up the wear. A forwardly–extending vertical bracket 69 carries an arm 69<a> supporting a rotary drill–carrying spindle 70 in bearings 69<b>, 69<c>. The bearing 69<b> carries a flanged liner 71 encircled by a retaining–ring 71b, which holds it in one of two positions for grinding the two grooves. An interchangeable and internally screwthreaded sleeve 73 is mounted in and secured to the liner 71 and engages a hollow threaded sleeve surrounding and clamped to the spindle 70 between a shoulder thereon and a hand–wheel 77. The pitch of the thread corresponds to that of the groove in the drill. The nut 77<a> may be released and the spindle 70 adjusted to vary the width of the ground part. The bracket beneath the grinding–wheel carries an adjustable grooved work–support 78. The bracket 69 is raised or lowered by hand–actuated tooth gearing actuating a screw 79. The hand–wheel 84 is provided with a micrometer gauge, and adjustable and fixed stops 85, 86 limit the rise. The twist–drill blank, after being grooved, is transferred in its chuck to the grinding– head, the chuck holders of the two heads being identical. The wheel may have a pivoted guard, and a swivel lever carrying a diamond point may be provided for trueing it up. Telescope covers 89,

89a enclose the spindle 70. The chuck, Figs. 9 and 10, has a rounded stem 20<a> and two segmental flanges 20<b>, 20<c>, which engage recesses on the spindles 17 or 70, Fig. 7, to ensure alinement. The union 19 which clamps the flanges to the spindle has segmental gaps 19<a>, 19<b>, through which the flanges can be withdrawn on rotating it. A pin 20d limits the motion and ensures alinement of the gaps and flanges.

0) SE453685B – AUTOMATIC DRUM BRAKE ADJUSTER FOR VEHICLE AUTO...

195) Family number: 2698972 (SE453685B) © PatBase

Title: AUTOMATIC DRUM BRAKE ADJUSTER FOR VEHICLE

Priority: SE19870001488 19870410

Family:

Publication number	Publication date	Application number	Application date
SE453685 B	19880222	SE19870001488	19870410
SE453685 C	19880602	SE19870001488	19870410
SE8701488 A0	19870410	SE19870001488	19870410

Probable Assignee: CAMPH SVEN ERIK

Assignee(s):(std): CAMPH SVEN ERIK

Assignee(s): SVEN ERIK CAMPH

Inventor(s):(std): CAMPH SVEN ERIK

Inventor(s): SVEN ERIK CAMPH

International class (IPC 8–9): F16D65/56 (Advanced/Invention); F16D65/38 (Core/Invention)

International class (IPC 1–7): F16D65/56

CPC: F16D65/561

European class: F16D65/56B

Classification Explorer

Abstract:
The key shaft is connected to a cylinder–piston activator (1,2) and the key (6) activates a pair of brake shoes (5) by means of power transmission devices, each comprising a pair of telescopically displaceable parts (9–12). One of these parts is an externally threaded rod, whilst the other is an internally threaded socket which receives the rod. One component in each pair has a cylindrical gear crown (18) engaging in radial tracks on an axial stop surface on a wheel located on the key shaft. The track is so shaped that a straight radial movement of the gear crown in relation to the wheel causes a relative torque on the two displaceable parts in a direction producing an increase in their total length. The wheel is axially movable on the key shaft, and is impelled towards the gear crowns by a spring tensioned between it and a fixed part on the key shaft. The other surface area of the wheel is connectable to a snap lock, and runs in the wheel axial direction.

0) GB191113445A – IMPROVEMENTS IN OR RELATING TO COMPUTING MACHIN...

196) Family number: 37000505 (GB191113445A) © PatBase

Title: Improvements in or relating to Computing Machines.

Priority: 19110606

Family:

Publication number	Publication date	Application number	Application date
GB191113445 A	19120606		00000000

Probable Assignee: FAIRWEATHER WALLACE CRANSTON

Assignee(s):(std): FAIRWEATHER WALLACE CRANSTON

Assignee(s): WALLACE CRANSTON FAIRWEATHER

Inventor(s):(std): FAIRWEATHER WALLACE CRANSTON

Inventor(s): WALLACE CRANSTON FAIRWEATHER

Abstract:
Source: GB191113445A 13,445. Fairweather, W. C., [Underwood Computing Machine Co June 6. Adding and subtracting apparatus attachments to typewriters.– Typewriters provided with motor – operated mechanism, controlled by the numeral–keys of the typewriter, are adapted to list amounts in various columns, for example, upon a page of a loose–leaf ledger, and to print one or more copies of the listed amounts. The machine, which is adapted to show, for example, the balances of customers' accounts, and the gross daily deposits and withdrawals, is provided with a series of computing – attachments or counters, which may be actuated simultaneously so as to add or subtract the same item, or one or more of the attachments may remain inactive. Keyboards varying functions of machine transfer mechanism.–The depression of one of the keys 2, Fig. 2, of the numeral–bank, in addition to forcing a type–bar 5, Fig. 30, against the platen by means of a lever 4 rocks a bellcrank 10, and, by means of links 11, levers 12, Fig. 4, and rods 15, thrusts one of the differential stops 17 upon a power – driven primary escapement–wheel 18, into the path of the teeth of a pinion 19. A constant torque is given to the wheel 18 by a continuously rotating motor 34, by means of a friction–clutch 35, 36 and gearing 37... 43, but the projected stop by engaging with the pinion 19 prevents the wheel 18 from turning. A secondary escapementwheel 21, on the same shaft 20 as the pinion 19, is also prevented from moving bv a notched disk 22 at right–angles to the wheel 21. The depression of a key, however, besides projecting a stop, by means of levers 12, universal disk 24, lever 26, and link 30, rocks a shaft 23 and allows a tooth of the wheel 21 to pass through the notch in the disk 22 as soon as the depressed key is released, a second notched disk 32 allows the wheels 21, 18 to turn until the escapement–wheel 18 is again arrested by means of the projected stop 17. The shaft 43 to which the wheel 18 is attached actuates a universal vertical driving–shaft 49 for the four computing– attachments shown in Fig. 1, through gearing 44... 48. Fig. 9 shows the uppermost computing–attachment, which resembles the others, and comprises a driving bevel–wheel 51 fixed to a square shaft 50 and gearing simultaneously with a pair of bevel–wheels which are loose on the universal shaft 49, the lower wheel 56 only being shown. A manually or automatically actuated double–clutch placed between each pair of wheels provides for either or neither to be driven by the shaft 49, and thus allows the numeral–wheels of any of the attachments to add, subtract, or remain inactive. Transfer is performed by means of special teeth 65, Fig. 9, on the wheels 62, which engage with one of five projections 66, Fig. 8, on the carrying– wheels 67, and thereby rotate them so that projections on a recessed disk 71, fixed between the projections 66 and the carrying–wheel, are engaged by a continuously rotating soft–rubber roll 72, which completes, through gearing, the transfer movement to the next higher wheel. A spring–controlled detent–arm 75 carrying a roller 77 determines the position of the carrying–wheel. The hubs of every third transfer, receiving, and numeral wheel are made longer so that the numeral–wheels are divided into sets of three. The continuously rotating transferactuating rollers 72 are driven from the motor 34 by means of gearing 89... 85, Fig. 1, and further gearing comprising pairs of bevel–wheels loosely mounted on a vertical shaft 84 and separated by clutches splined on the shaft, so that either wheel of the pair, or neither, can be engaged with the bevel–wheels actuating the rollers 72. Levers 93... 96, Fig. 1, which may be operated independently by hand, or automatically, control the clutches on the universal driving–shaft 49, and simultaneously actuate those on the shaft 84 of the transfer mechanism. Locking–mechanism for the computing–attachments comprises slidable locking– bars 105, attached to cross–rods 102, which engage in slots in the levers the locking–bars are provided with teeth which are adapted to co–operate respectively with toothed wheels 108 or 109 fixed to the pairs of bevel–wheels on the shaft 49. When a bar 105 is in its middle position the corresponding pair of bevel–wheels, and hence the computing – attachment, is locked. Detents 104 lock the levers in any position. The levers 93... 96, Fig. 1, of a machine provided with four computing – attachments, or 93... 96, Fig. 4, of one with five, are operated automatically, during the normal actuation of the machine, by means of rotating cams 115... 118, driven from the typewriter carriage, and spring–controlled contact levers or ' followers ' 121, pivoted to the controlling– levers 93... 96. These cams can be variously shaped so as to allow one computing–attachment to add, subtract, and c. while another subtracts and c. or is disabled, and so on, and generally comprise three cam–surfaces of different depths, Fig. 24, adapted to throw the followers and hence the levers 93... 96 into their three positions, respectively. In the case of a machine having five computing–attachments A... E, Fig. 4, upon the insertion of the loose leaf 148, Fig. 31, showing the account of a particular customer, the date is written in the first column, the customer's balance is printed in the second column, and, by means of the cams, is antomatically added upon the computing–attachment

D, and subtracted from A, which, at the commencement of the day, shows the bank's total balance at the end of the preceding day's business. The remaining computing–attachments B, C, E remain inactive. The customer's deposits during the day are written in the third column and added to the attachments B, D, while A, C, E are inactive. Cheques passed through the bank are printed in columns 4 to 8 and automatically added to C and E, and subtracted from D, while, in the ninth column, the total of the cheques appearing upon the attachment E is written and subtracted therefrom, thus leaving E at zero. In the tenth column, the amount appearing upon the attachment D is written, and automatically subtracted therefrom (leaving it at zero), and simultaneously added to A. The net balance at the end of the customer's daily transactions is thus added to the attachment A, the total upon which had been previously reduced by the customer's balance at the beginning of the day, and so on for each customer. At the end of the day, therefore, the attachment A exhibits the bank's net balance in hand, while B shows the total deposits during the day, C the total cheques passed through the bank, and D and E stand at zero. The various accounts may be duplicated by using carbon sheets, or a record showing the entire day's transactions may be made upon a record strip in the form of a roll. By means of a handle 150, the shaft 119 carrying the cams may be lowered, thus disengaging the followers 121, and the levers 93... 96 thereupon manually operated as desired. Simultaneously a locking–bar, provided with slots for the engagement of catches upon the levers, is moved laterally so that the levers can engage therewith and be held in position. Selecting denomination.–A master–wheel 59, Fig. 9, is adapted to slide along the square shaft 50 and engage, by means of a pair of pins 60, with the internal teeth 61, Fig. 8, of receiving–wheels 62, in turn, from that of the highest denomination to that of the lowest. The receiving wheels gear with teeth 63 on the numeral–wheels 64. The hub of each masterwheel is grooved to receive a pin 167 projecting internally from a hollow mandrel 168, a series of which, corresponding in number to the computing–attachments, is mounted in a carriage 155, Fig. 2. This carriage is moved from left to right as the typewriter carriage 7 moves from right to left, while printing takes place in each column, but when the printing in any column is completed, the carriage 155 is returned by a constantly – rotating motor – driven screw 192 aided by a coiled spring 202. Thus, while the items are being printed in any column, all the master–wheels engage in turn, and in the same order as that in which the separate numerals are printed, with their corresponding receiving– wheels. The master–wheel carriage 155 is driven from the typewriter carriage 7 by means of adjustable collars 177, which engage in turn with a notch in a spring–controlled pivoted hook 175, lever 171, and a projecting arm 170 of the carriage 155. While printing is taking place in any column the pivoted hook 175 is attached to the typewriter carriage and moves to the left until a stop 187 fixed to the framework depresses the hook, thereby disengaging the carriage 155 from the carriage 7 and engaging a tooth 190, connected to the hook, with the returning–screw 192. The hook is further depressed and locked in its depressed position by a catch 193. The master–wheel carriage is thus returned to the left, the slide 173 moving to the right, until a cam 195 upon the next collar 177 to the right trips the latch and engages with the notch in the hook 175. When printing in the last column has been completed, the hook, as before, is latched in its depressed position until, on the typewriter–carriage being moved to the right to commence a new line, a special cam on the first collar 177 trips the latch 193. The hook 175 is prevented from rising too far by a pin–and–slot connexion, but should it engage during the return movement of the carriage 7 with any of the collars 177, the slide 173 is moved to the right therewith until the hook is again tripped by a pin 204 engaging with a cam 204, whereupon a spring 204, which has been compressed against a projection 204, returns the slide 173 to the left. The carriage 155 may, however, bo operated by a spring.

0) CN201573620U – ANTI–THEFT LOCK FOR VEHICLE DRIVE SYSTEM

197) Family number: 46827489 (CN201573620U) © PatBase

Title: Anti–theft lock for vehicle drive system

Priority: CN200920264952U 20091217

Family:

Publication number	Publication date	Application number	Application date
CN201573620 U	20100908	CN200920264952U	20091217

Probable Assignee: SUMEI LI

Assignee(s):(std): SUMEI LI

Assignee(s): LI SUMEI

Inventor(s):(std): SUMEI LI

Inventor(s): LI SUMEI

International class (IPC 8–9): B60R25/06 E05B47/00 E05B63/08 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN201573620U The utility model relates to the field of automatic lock structures and discloses an anti–theft lock for a vehicle drive system. The anti–theft lock comprises a lock shell, a locking body, a drive mechanism and a limit mechanism, wherein the drive mechanism comprises a motor worm, a worm gear and a telescopic shaft, wherein the worm gear is arranged inside the lock shell, the motor worm is meshed with the outer ring of the worm, and the telescopic shaft is sheathed in the inner ring of the worm gear; and the locking body comprises a movable lock pin and a driving wheel, wherein the movable lock pin is connected with a pressure spring which is placed in a blind hole of the telescopic shaft and fixedly clamped in the telescopic shaft through a fixing seat of the movable lock pin; the driving wheel is provided with a key groove, and when in locking, the movable lock pin is embedded into the key groove. For the anti–theft lock for the vehicle drive system, the reliability is good, and the movable lock pin is adopted and wedged into the lock hole to lock the vehicle drive system and lead a vehicle not to move so as to achieve better anti–theft effect; the structure is simple, the design is reasonable; and when in use, the operations of locking and unlocking are convenient, therefore, the anti–theft lock is applicable to various vehicle drive systems.

198) Family number: 65745884 (CN206175794U) © PatBase

Title: A locking ball valve with the ball valve or valve lock (Machine translation)

Priority: CN201621249803U 20161122

Family:

Publication number	Publication date	Application number	Application date
CN206175794 U	20170517	CN201621249803U	20161122

Probable Assignee: INTEGRATED TREATMENT AND APPLICATION OF SOLID WASTE IN RONGCHENG INDUSTRIAL PARK CO LTD

Assignee(s): INTEGRATED TREATMENT AND APPLICATION OF SOLID WASTE IN RONGCHENG INDUSTRIAL PARK CO LTD

International class (IPC 8–9): F16K35/00 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN206175794U The utility model relates to a ball valve or locking the locking ball valve technology, in particular to a ball valve or a ball valve with a valve locking lock, characterized in that the valve lock by lock, U–shaped shackle, the lock body side provided with the lock inside the lock with a key switch connected to hole, the lower end of the lock body sides were provided with a lock hole, two locking holes are respectively provided on the inner side of the lock cylinder cooperating with the lock gates, two U–shaped shackle inserted into the inner side of the end of the arm is provided with a lock gate mating lock groove, the lock body is provided with a central lower end ball valve or locking ball valve shaft cooperating pits, the pits of the lock body or lock the socket in the ball valve ball valve, ball valve or locking ball locking beams from the lower portion of the valve body on the valve body lower end across into the lock the locking hole by locking groove and the lock gate mating connector is locked in prison, lock cylinder telescopic movement to achieve through the key drive drive lock brake lock beam U–shaped body, and has a simple structure, convenient operation, cost savings and other advantages.

0) GB687309A – IMPROVEMENTS IN SHAFT CONNECTION

199) Family number: 19952372 (GB687309A) © PatBase

Title: Improvements in shaft connection

Family:

Publication number	Publication date	Application number	Application date
GB687309 A	19530211	GB19500029299	19501129

Probable Assignee: BOUR CO INC

Assignee(s):(std)**:** BOUR CO INC ; BOUR COMPANY INC

Assignee(s): LA BOUR CO INC ; THE LA BOUR COMPANY INC

International class (IPC 8–9): F04D29/20 F16D1/06 (Advanced/Invention); F04D29/18 F16D1/06 (Core/Invention)

International class (IPC 1–7): F04D29/04

CPC: F04D29/20 F16D1/06

European class: F04D29/20 F16D1/06

Classification Explorer

Forward Citations: EP0476234,

Abstract:
Source: GB687309A 687,309. Extracting studs from shafts. LA BOUR CO., Inc. Nov. 29, 1950 [Oct. 9, 1950], No. 29299/50. Class 61 (iii). [Also in Group XXIV] The shaft 5 of a rotary impeller 6' is integral with a stud 7 fitting into a co–operating socket in a driving shaft 2, the assembly being mounted in ball–bearings in a housing 35. The two shafts 5, 2 are connected by a Woodruff key 16 engaging a keyway in the wall of the socket and by a screwed pin 23 in a transverse bore in the stud 7 engaging the shoulder of a hole 27. The pin 23 is of such a length that it may be withdrawn completely into the transverse bore. When separating the two shafts, the pin 23 is withdrawn into the transverse bore by means of a wrench inserted through a hole 34 in the housing 35 engaging a hexagonal socket in one of its ends. A drift 32 is then inserted through the hole 34 and through one of two holes 30 in the socket, offset by 90 degrees from the hole 27 and removed axially therefrom, the wedging action of the tool urging the stud 7 axially out of the socket. The drift 32 is' provided with longitudinal bars 33 which engage with the wall of the housing 35 when the limit of travel has been reached, so that unnecessary pounding of the drift may be avoided. Specification 588,939, [Group XXVI], and U.S.A. Specification 2,134,255 are referred to.

0) GB849283A – RELEASABLE SAFETY JOINT FOR WELL STRINGS

200) Family number: 20438452 (GB849283A) © PatBase

Title: Releasable safety joint for well strings

Priority: GB19580003965 19580206

Family:

Publication number	Publication date	Application number	Application date
GB849283 A	19600921	GB19580003965	19580206

Probable Assignee: RAYMOND ELLIS THOMPSON

Assignee(s):(std)**:** KENNETH EDWARD WAGGENER ; RAYMOND ELLIS THOMPSON ; ROSS AUGUSTUS MCCLINTOCK

International class (IPC 8–9)**:** E21B17/06 (Advanced/Invention); E21B17/02 (Core/Invention)

International class (IPC 1–7)**:** F16D43/22

CPC: E21B17/06

European class: E21B17/06

Classification Explorer

Forward Citations: GB2179587,

Abstract:
Source: GB849283A 849,283. Shaft couplings. WAGGENER, K. E., McCLINTOCK, R. A., and THOMPSON, R. E. Feb. 6, 1958, No. 3965/58. Class 80 (2). A releasable coupling between telescoping members 11, 12 at the lower end of an oil well drilling string comprises helical lugs 42 in the outer member 12 which are introduced helically into, and locked at the closed ends of complementary helical grooves 38 in the inner member 11 by axial projections 65 on a spring – loaded locksleeve 50 axially slidable in the outer member 12. During the helical coupling movement the projections 65 ride on a shoulder 80 at the open end of the helical grooves 38 until the helical lugs 42 reach the ends of the grooves 38, whereupon a spring 58 advances the lock–sleeve 50 and its projections 65 enter axial grooves 40 at the mouths of the helical grooves 38, preventing release of the lugs. The next upper section of the well string has a sliding splined joint, and release of the above coupling is effected by introducing through that section a tool comprising a rod 86 having outwardly spring–pressed pivoted arms 88, which spring into a recess 70 in the lock–sleeve 50, permitting the latter to be raised out of locking engagement, whereupon the coupling can be released by helical movement. Sealing rings 52 and 61 are provided. In Fig. 7 (not shown) two sets of helical lugs and grooves are spaced axially and the outer member is provided with an axial slot through which a hooked end of a release tool may pass to engage a recess in the lock–sleeve. The release–tool is pincer–like with one jaw formed as a hook and the other as an arcuate plate adapted to slide on the outer member. In Fig. 10 (not shown), the locksleeve has a rod fixed thereto which rod passes through a hole bored in the outer member and has at its upper end a hook which may be engaged by any suitable tool for raising the lock–sleeve.

0) US3551974A – TOOL CLAMPING DEVICE FOR TOOL STORAGE MAGAZINE ...

201) Family number: 723317 (US3551974A) © PatBase

Title: TOOL CLAMPING DEVICE FOR TOOL STORAGE MAGAZINE OF MACHINE TOOL

Priority: IT19670052600 19670729 IT19670808399 19670729

Family:

Publication number	Publication date	Application number	Application date
AT281543 B	19700525	AT19680007226	19680725
AT286062 B	19701125	AT19680007225	19680725
AT286745 B	19701228	AT19680007227	19680725
AT293141 B	19710927	AT19690011582	19680725
BE718615 A1	19680930	BE19680718615	19680726
BE718616 A	19681231		19680726
BE718617 A	19681231		19680726
CH510489 A	19710731	CH19680011354	19680729
CH521198 A	19720415	CH19680011353	19680729
CH523743 A	19720615	CH19680011355	19680729
DE1752832 A1	19710408	DE19681752832	19680723
DE1752832 B2	19781130	DE19681752832	19680723
DE1752832 C3	19790809	DE19681752832	19680723
DE1752833 A1	19710527	DE19681752833	19680723
DE1752833 B2	19810702	DE19681752833	19680723
DE1752833 C3	19820304	DE19681752833	19680723
DE1752834 A1	19710527	DE19681752834	19680723
DE1752834 B2	19780601	DE19681752834	19680723
DE1752834 C3	19790125	DE19681752834	19680723
FR1575204 A	19690718		19680729
FR1575205 A	19690718		19680729
FR1575206 A	19690718		19680729
GB1220696 A	19710127	GB19680035415	19680724
GB1220697 A	19710127	GB19680035416	19680724
GB1220698 A	19710127	GB19680035417	19680724
JP49033992 B4	19740911	JP19680053074	19680729
JP49037232 B4	19741007	JP19680053306	19680729
NL6810519 A	19690131	NL19680010519	19680725
NL6810520 A	19690131	NL19680010520	19680725
NL6810689 A	19690131	NL19680010689	19680726
SE330474 B	19701116	SE19680010218	19680726
SE337733 B	19710816	SE19680010220	19680726
SE337735 B	19710816	SE19680010219	19680726
US3551974 A	19710105	US19680748535	19680729
US3600777 A	19710824	US19680748402	19680729
US3604083 A	19710914	US19680748534	19680729
US3610097 A	19711005	US19700049769	19700625
US3691899 A	19720919	US19710139793	19710503

Probable Assignee: OLIVETTI AND CO SPA

Assignee(s):(std)**:** C OLIVETTE AND C ING SPA ; C OLIVETTE AND C SPA ING ; ELIO PAGELLA ; GIORGIO OLLEARO ; INC C OLIVETTI AND C SPA ; OLIVETTI AND CO SPA ; OLIVETTI AND C C

Assignee(s):	ING C OLIVETTI AND C S P A IVREA TURIN ITALIEN ; INGCOLIVETTI AND C ; ING C OLIVETTI AND C SPA ; ING C OLIVETTE AND C SPA ; ING C OLIVETTI AND C S P A ; ING C OLIVETTI AND C S P A 10015 IVREA TORINO IT ; C OLIVETTI AND C SPA ; ING C OLIVETTI AND C ; C OLIVETTI AND C ; C OLIVETTI AND C S P A
Inventor(s):(std)	PAGELLA ELIO DR ING ; PAGELLA ELIO DR ; PAGELLA ELIO ; PAGELLA E ; OLLEARO GIORGIO ; OLLEARO G ; IVREA TURIN ITALIEN ; BRUNO ANTONIETTO ; ELIO PAGELLA ; FANTONI G ; GIORGIO OLLEARO ; GIUSEPPE FANTONI ; ANTONIETTO B ; ANTONIETTO BRUNO ; FANTONI GIUSEPPE ; FANTENI GUISEPPE
Inventor(s):	ANTONIETTO BRUNO PAVONE ; PAGELLA ELIO DR ING IVREA TURIN ; GUISEPPE FANTENI ; FANTONI GIUSEPPE IVREA TORINO IT
International class (IPC 8–9):	B23B31/26 B23B47/04 B23Q3/155 B23Q3/157 B23Q5/04 B23Q5/20 D02J13/00 (Advanced/Invention) ; B23B31/02 B23B47/00 B23Q3/155 B23Q3/157 B23Q5/00 D02J13/00 (Core/Invention)
International class (IPC 1–7):	B23B29/32 B23B31/06 B23B39/00 B23B39/20 B23B47/04 B23B7/04 B23C1/02 B23C5/26 B23Q17/04 B23Q3/00 B23Q3/152 B23Q3/155 B23Q3/157 B23Q5/26
CPC:	Y10T29/5105 Y10T29/5107 Y10T29/5155 Y10T29/5157 Y10T408/37 Y10T408/60 Y10T409/30448 Y10T409/306776 Y10T409/309184 Y10T409/309352 Y10T409/309408 Y10T483/179 Y10T483/1795 D02J13/003 B23B31/263 B23B2260/022 B23B2270/20 B23Q3/15526 B23Q3/15706 B23Q5/04 B23Q5/20 B23Q3/15534
European class:	B23B31/26B1 B23Q1/08 B23Q3/155D2 B23Q3/157B B23Q5/04 B23Q5/20 D02J13/00C L23B260/022 L23B270/20
US class:	29/26 29/26.00A 29/26.00R 29/260 29/26A 29/26R 29/40 29/400 29/41 408/117 408/35 409/144 409/185 409/228 409/231 409/232 483/54 483/56 90/11A 90/14
Classification Explorer	
Cited documents:	US3473419 A, US3455207 A, US3422724 A, US3406607 A, US3251249 A, US3074147 A, US2749806 A, FR1491020 A, FR1203135 A, BE686147 A,
Forward Citations:	WO9402283, US8926239, US8769786, US8506215, US7717019, US6467145, US6442815, US6196772, US5752904, US5433562, US5416077, US5326114, US4951578, US4863323, US4827600, US4764064, US4680999, US4566829, US4563800, US4536111, US4532693, US4356609, US4237595, US4196501, US4075927, US4069918, US4053968, US4051583, US4050837, US4022043, US3955471, US3893371, US3834218, US3823466, US3818580, US3803680, US3797956, US3786539, US3760472, US3684303, US2013322978, US2010329801, US2008060492, TWI377111, JP53088935, JP49032293, FR2467053, FR2429644, FR2388639, FR2388639, FR2371999, FR2371999, EP0235511, EP0185842, EP0118587, DE3524739, DE2029469, CN105312947, CN103894847,

Abstract:
Source: US3551974A A machine tool with a device for effecting rapid tool changes comprising a frame carrying a rotatable spindle capable of being coupled to a tool through the intermediary of a tool holder to which the tool is secured. A mechanism for lining up the spindle, from whatever position it is in, to a predetermined angular setting in order to allow engagement of the tool holder with the spindle, and translational locking devices inside the spindle operative to provide a coupling to the tool holder to operate the spindle after the tool has been connected thereto are provided.

0) GB212592A –

202) Family number: 18533106 (GB212592A) © PatBase

Family:

Publication number	Publication date	Application number	Application date
GB212592 A	00000000		00000000

International class (IPC 1–7): B41F17/00

Abstract:
Source: GB212592A 212,592. Julius, G. A. Sept. 20, 1922. Index type–wheel machines with printing–surfaces for tickets. –A machine for use particularly on tramway vehicles but applicable generally for checking admission fees, is adapted at each operation to print and issue a single ticket, Fig. 26, showing the stage of issue, the fare, the direction and length of the journey, and a serial number and date, to display the fare and the stage of issue, and to register the aggregate value and number of tickets issued, as well as the number of each separate value or class. The machine is set manually by the conductor, and may be operated manually or bv motor. The ticket strip 70, Fig. 6, passes between a printing and feeding–roller 84 and a platen roller 85, through a guide shoot 86, between a second printing–roller 87 and its platen roller 88, and past a guillotine 90 to a delivery shoot 91. The machine is fitted at the top with two setting– plungers or keys 51, 52, Fig. 1, one for the outward and the other for the inward journey, each movable over a range of holes 55 for the sections or stages. The plungers are pivoted at 145, Fig. 11, in housings 60 mounted on sleeves 168, 169 rotatable in bearings in the frame, and are pivotally connected to knuckles 144 on vertical plunger rods 142, 143, passing through the sleeves. These plunger rods are pivotally connected to an oscillatory bar 124 suspended by a bail 123 from an arm 125 fast on a shaft 126. At the beginning of a journey, a key lock 116, Fig. 3, is turned by the conductor to move a cam plate 115 and thereby release a lug 112 on a locking–bar 113 from one of three notches 109, 110, 111 in a pivoted anchorshaped member 107. The stock 153 of the anchor member is pivotally connected to collars 150, 151 on the plunger rods, which are fitted with buffer springs 148, 149, so that when the anchor is moved to one side or the other by means of an external knob 262, Fig. 6, the plunger not required on the journey is latched in a depressed position. The plungers are positively prevented from approaching one another beyond the parallel position. Before adjusting the anchor member 107, the conductor sets the plunger not required in the last hole of its range so that after it has been latched the other plunger may be moved over its whole range. The bar 124 is lifted about one of its end pivots 140, 141 by the depression of the plunger that is in use, and this movement serves to release the driving– mechanism of the machine for operation, as described later. When, however, the anchor member 107 is in the middle or " neutral " position shown in Fig. 3, a pin 121 thereon blocks the bail pivot 122 and the machine cannot be operated. A hollow shaft 22, Fig. 3, attached to a crank disc 26, is driven by a hand–crank 21 or by a motor. Where a hand–crank is used, its driving notch 23 and the cross pin of the shaft are eccentric, as shown in Fig. 4, to minimize risk of unauthorized operation by an ordinary notched crank. The crank disc has a bay 27, Fig. 4, for engagement by a locating–roller 29, and drives the main shaft 80 by a pitman 32 pivotally connected at 134, Fig. 5, to cheeks 239 loose on the shaft 80. A driving–pawl 133 is mounted between the cheeks on the same pivot 134, its tail 132 being forced outwards by a spring 136 tending to engage the pawl 133 with teeth on a wheel 137 fast on the shaft 80. When a plunger 51 or 52 is depressed into one of its holes, an arm 125 on a shaft 126 is raised and an adjustable stop 128 is engaged with the tail 129 of a lever 130 loose on the shaft 126, and thereby releases the tail 132 of the pawl 133, whereupon the machine may be operated. Each upward active stroke of the pitman is adapted to turn the shaft 80 and a toothed wheel 104, Fig. 4, through a quarter of a revolution. The wheel 104 gears directly with a pinion 105 on the second–printing roller 87 and with a pinion 106 adapted to drive the first printing–roller 84 through ratchet–mechanism. The arrangement of gearing is such that the second printing–roller 87 makes a complete revolution for each upward stroke of the pitman, while the first printing– roller 84 makes less than a complete revolution. On the downward stroke of the pitman a toggle arm 251, Fig. 5, through a rocker 248 loose on the shaft 243 of the printing–roller 84, turns the roller the remainder of the revolution, during which time an arm 235 is rocked by a cam 237 to actuate the guillotine 90. A locator roller 220, Fig. 4, engages a bay in a disc 221 on the printing–roller 84 to ensure restoration to normal position. A locator cam 214, Fig. 4, on the main shaft 80 engages a counter–actuating arm 211 and holds a lug 217 in the path of a stop 216 to prevent setting of the plungers during operation. The first printing–roller 84 has consecutive–number type wheels 102 advanced by a reciprocating plate 257, Fig. 6, dating–wheels, and a fixed–matter type plate 103 adapted to print all the characters representing the sections of the journey, a portion of the plate being detachable to allow the conductor's number to be changed. The roller may be removed bodily endwise through an opening the frame normally closed by a plate 263, Fig. 2. The second printing– roller 87 is provided with adjustable bars 200, Figs. 2 and 3, for cancelling the printed characters of unwanted sections, a rocking plate 163, Fig. 7, set from the anchor member 107 for printing the word " in " or " out," and type 280, Figs. 23, 25, for printing the fare. The plate 163 is rocked by a slider 167, Fig. 7, carried by a rod 161 movable axially by a lever 157, Fig. 3, actuated by a link 156 from the anchor member. The cancelling–bars 200 are attached to sliding collars 199, Fig. 2, engaged by the ends of arms 195, Fig. 11, on the plunger sleeves 168, 169 and are arranged so that their bases abut when the plungers are parallel, leaving a single section character uncancelled. The fare type are carried on pivoted arms 281, Fig. 25, held in recesses in the roller by springs 282. An axially slidable bar 287, Fig. 23, positioned by a rock shaft 184, Figs. 2 and 11, in accordance with the setting of the plunger 51 or 52, carries a plate 284 adapted to lift the proper type out of the recess in the roller to printing level. The platen rollers 85, 88 are mounted in adjustable eccentric bearings. According to a modification, the fare type may be omitted from the roller 87. The sleeves 168, 169, Fig. 11, of the plungers 51, 52 are connected by links 173, 174

to a rocking member 175 pivotally connected to a rack bar 177. This rack bar engages a pinion 180 attached to a wheel 181, Figs. 1 and 6, bearing fare and stage characters visible to the conductor and passengers through apertures 56, 57 in the top of the casing. The rack bar is connected to a lever 183 which is fast on a shaft 184 and is adapted to move a pinion 188 along a stepped barrel pinion 138 fast on a shaft 191 driven from the wheel 105 on the printing roller 87, whereby the shaft of the pinion 188 conveys a differential movement to a totalizing counter 59, Fig. 4. The shaft 184 is fitted with an arm connected by a link 203, Fig. 4, with a member 204, which is positioned over one of a series of keys 206 for the counters 207 of the several classes of tickets. The depression of the member 204 is effected by the four−bay locatorcam 214 on the main shaft 80 at each operation of the machine. In a modification, a similar member 204 may be actuated from a crank pin or eccentric on the second printing−roller 87, the cam 214 being retained merely as a locator−cam for the main drive. When the plungers are parallel, the rack bar 177 remains stationary, the pinion 188 being set to register a minimum fare, preferably double that between succeeding stages. The counter 58 for the total number of tickets is actuated from an eccentric 225, Fig. 3, on the printing roller 87. The back of the casing is secured to the frame members, while the sides are hinged at 39, 40, Fig. 2, and continued round the front to form doors, which are secured by a lock releasable by the hand−crank. The hinged top door 61 is secured by a catch engaging a hook 47, Fig. 3, and manipulated by a push−rod 64. The base of the machine is provided with dovetailed grooves 67 slidable over brackets 68 provided on the vehicle. Web feeding, guiding, and cutting arrangements.−The ticket strip 70, Fig. 6, is drawn from a spool 71 mounted in a hinged arm 73, which is normally latched by a spring hook 78 at the top but may be drawn forward to replace an empty spool by a full one 266, Fig. 3, carried at the side of it. A roller 77 mounted at the end of a spring arm 76 maintains proper tension on the strip, which passes between a guide roller 82 and a spring brake−shoe 83. A knife−edged plate 228, Fig. 3, is fixed over the intermediate ticket shoot 89. The movable blade 90 has an inclined cutting edge and is pivoted at 253 to a bent spring strip 227 pivoted at 229 and held down by a spring 230. A shank part 254 of the movable knife is guided between collars 255 which may be adjusted to set the blade so as to leave a portion of the strip uncut. The spring strip 227 is raised about its pivot 229, to effect the severing of the ticket, by the engagement of a pin 231 on the arm 232, Fig. 5, with a hole 234 in the free end of the spring. Roller inking−arrangements.−Felt−covered inking−rollers 92, 94, Fig. 6, are employed. The roller 92 is detachably mounted in arms 93 on a rock shaft 267 provided with a spring 268 and a setting arm 267, Fig. 2. The roller 94 is mounted on pin centres in arms 95 on a telescopic shaft 100, 100x, having adjustable stop arms 96, and may be removed through a hinged flap 61 at the top of the casing.

0) US2009318195A – MOBILE TERMINAL DEVICE

203) Family number: 35873277 (US2009318195A) © PatBase

Title: MOBILE TERMINAL DEVICE

Priority: JP20060050287 20060227 WO2007JP53205 20070221

Family:

Publication number	Publication date	Application number	Application date
CN101390142 A	20090318	CN200780006924	20070221
CN101390142 B	20101027	CN200780006924	20070221
JP2007228523 A2	20070906	JP20060050287	20060227
JP4578419 B2	20101110	JP20060050287	20060227
KR101018550 B1	20110303	KR20087021014	20080827
KR20080098389 A	20081107	KR20087021014	20070221
US2009318195 AA	20091224	US20070280937	20070221
US8676278 BB	20140318	US20070280937	20070221
WO07097369 A1	20070830	WO2007JP53205	20070221

Probable Assignee: KYOCERA CORP

Assignee(s):(std)**:** HIRAOKA MICHIAKI ; KYOCERA CORP

Inventor(s):(std)**:** HIRAOKA MICHIAKI ; MICHIAKI HIRAOKA

Agent(s): SUGIMURA KOSAKU; HOGAN AND HARTSON LLP; 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 GT GW HN HR HU ID IE IL IN IS IT 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 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): F16C11/04 G09F9/00 H04B1/38 H04M1/00 H04M1/02 (Advanced/Invention); H04B1/38 H04M1/00 H04M1/02 (Core/Invention)

CPC: H04M1/0216 H04M1/0235 H04M1/04 H04B1/38

European class: H04M1/02A2B4F T04M1/02A2B8 T04M1/04

US class: 455/566 455/566P 455/575.1 455/575.3 455/575.300S 455/575.4

Classification Explorer

Cited documents: US7603143 BB, US7483723 BB, US7000289 BB, US6728557 BA, US6646626 BA, US6529742 BA, US2006264243 AA, US2006034042 AA, US2005192066 AA, US2005102798 AA, US2004203526 AA, US2004097262 AA, JP200619925, JP2006135830 A2, JP2006135830, JP2006019925 A2, JP2003163824 A2, JP2003163824, JP2003008720 A2, JP2002101171 A2, JP2002101171, JP2002009920 A2,

Forward Citations: US9013865, US7877124, US2013335891, US2009176537, JP2010217584, CN104035481,

Abstract:
Source: US2009318195A A mobile terminal device comprise a first housing 11a provided with a displaying unit 13; a second housing 11b on which the first housing 11a is laid; a hinge portion 12 pivotably connecting respective one end portions of the first housing 11a and second housing 11b with each other such that the first housing 11a moves toward/away from the second housing 11b; and a self−stand maintaining unit for maintaining a self−standing state where the displaying unit 13 is inclined by pivoting the first housing 11a relative to the second housing 11b with the hinge portion 12 as a pivoting center, as well as moving the first housing 11a along an axial direction of the hinge 12 to bring a side of the first housing 11a and a contact portion A on a side surface of the second housing 11b into contact with a placement surface.

0) MX9600454A – IMPROVEMENTS IN TELESCOPICALLY RETRACTILE BANDE...

204) Family number: 41464658 (MX9600454A) © PatBase

Title:	IMPROVEMENTS IN TELESCOPICALLY RETRACTILE BANDERILLAS.
Priority:	MX19960000454 19960201

Family:

Publication number	Publication date	Application number	Application date
MX9600454 A1	19970830	MX19960000454	19960201

Probable Assignee:	GOMARIZ LUIS ROJAS
Assignee(s):(std):	GOMARIZ LUIS ROJAS
Assignee(s):	LUIS ROJAS GOMARIZ
Inventor(s):(std):	GOMARIZ LUIS ROJAS
Inventor(s):	LUIS ROJAS GOMARIZ
International class (IPC 1–7):	A63B69/00

Abstract:
The present invention discloses improvements in retractile banderillas. The banderilla shortening is produced due to suction of a pneumatic cylinder disposed on the outer portion thereof, a vacuum being produced when the banderilla is extended to full length, in which it remains nailed by a tiltable ratchet, the bead of which is inserted in two coincident grooves of interior and exterior parts, in the position of which a sphere inserted between the ratchet and wall of the interior part retains the same. When the banderilla is thrust into the bull's body, a rod attached to the handle allows the sphere to jump out of its place, an aperture spring thereby allowing the banderilla to be released due to the ratchet bead being freed when the bull shakes its head. The harpoon is screwed in on the hermetic bottom of the exterior part. The invention is applicable in telescope–type retractile banderillas which are used in bullfighting.

0) US3374786A – FRACTURED BONE SETTING FASTENER ASSEMBLY

205) Family number: 816945 (US3374786A) © PatBase

Title: Fractured bone setting fastener assembly

Priority: US19640418427 19641215

Family:

Publication number	Publication date	Application number	Application date
US3374786 A	19680326	US19640418427	19641215

Probable Assignee: GEORGE R CALLENDER JR

Assignee(s): GEORGE R CALLENDER JR

Inventor(s):(std)**:** CALLENDER GEORGE R JR ; CALLENDER JR GEORGE R

Inventor(s): JR GEORGE R CALLENDER

International class (IPC 8–9): A61B17/74 (Advanced/Invention)

International class (IPC 1–7): A61B17/18

CPC: A61B17/746

European class: A61B17/74D4

US class: 128/92 606/65

Classification Explorer

Cited documents: US662748 A, US3107666 A, US3029811 A, US2702543 A, US1033187 A,

Forward Citations: WO8804161, WO11010974, WO04002343, US9713535, US9675389, US9662156, US9622870, US9561109, US9463091, US9398928, US9333095, US9314283, US9308034, US9254153, US9078765, US9044337, US9039774, US8979932, US8974532, US8939978, US8888779, US8858635, US8834469, US8771284, US8753397, US8734494, US8734448, US8617161, US8465546, US8449544, US8409288, US8398636, US8343219, US8298234, US8267999, US8257439, US8187275, US8177786, US8105326, US8034054, US7972336, US7951176, US7931652, US7918853, US7883509, US7837709, US7799030, US7780667, US7503919, US7229445, US6447546, US5973223, US5849004, US5749872, US5728099, US5674224, US5514138, US5484439, US5362817, US5318567, US5260383, US5041116, US5041114, US4973333, US4760844, US4759352, US4657001, US4641640, US4628923, US4617922, US4616638, US4530355, US4432358, US3996931, US3990438, US3811425, US2014094855, US2013317502, US2011238121, US2011118741, US2011087228, US2009209961, US2009204219, US2009132054, US2009112209, US2008312657, US2008281326, US2008269807, US2008269752, US2008255559, US2008249580, US2008200984, US2008188853, US2008086136, US2008077142, US2008033430, US2008021453, US2007299447, US2007270951, US2007270847, US2007270845, US2007219636, US2007173838, US2007155271, US2007010818, US2006064095, US2006004361, US2005234457, US2005010226, FR2841459, FR2717674, EP1974682, EP0925038, EP0085493, AU567624, AU2012339665,

Abstract:
Source: US3374786A ABSTRACT OF THE DISCLOSURE A nailing apparatus for fractured femoral bones consisting of a sleeve member and a femoral fastening member, the latter having parallel slots joined at their opposite ends by a circumferential slot, the slots cooperating with a keying means on the sleeve and a limit screw attached to one end of the fastening member to alternately permit relative axial displacement of the fastening member or locking it against such movement.

0) US3512381A – LOCK SET

206) Family number: 911016 (US3512381A) © PatBase

Title: LOCK SET

Priority: JP19660000398 19661229 JP19670000398 19661229 JP19670014509U 19670223

Family:

Publication number	Publication date	Application number	Application date
DE1678041 A1	19720420	DE1967M076714	19671223
DE1678041 B2	19770428	DE1967M076714	19671223
DE1678041 C3	19771222	DE1967M076714	19671223
GB1210831 A	19701104	GB19670059207	19671229
JP51046227 Y1	19761109	JP19670014509U	19670223
US3512381 A	19700519	US19670694504	19671229

Probable Assignee: MATSUNAGA KYUICHI

Assignee(s):(std)**:** KYUICHI MATSUNAGA ; MATSUNAGA KYUICHI

Inventor(s):(std)**:** MATSUNAGA KYUICHI

Inventor(s): KYUICHI MATSUNAGA

International class (IPC 8–9)**:** E05B55/00 E05B55/04 E05B59/00 E05B9/06 E05B9/08 (Advanced/Invention); E05B55/00 E05B59/00 E05B9/00 (Core/Invention)

International class (IPC 1–7)**:** E05B55/04 E05B59/00 E05B63/08 E05B63/10 E05B9/06 E05B9/08

CPC: Y10T70/5226 Y10T70/5394 Y10T70/5416 Y10T70/7712 Y10T70/8459 E05B59/00 E05B55/005

European class: E05B55/00C E05B59/00

US class: 70/107 70/380 70/448 70/467 70/472 701/70

Classification Explorer

Cited documents: US3390558 A, US3025694 A, US2638771 A, US2304612 A, US2178132 A, US173853 A, US1714286 A, US1112347 A, FR1359270 A,

Forward Citations: US8006525, US7963134, US7712343, US5791177, US5010752, US4631944, US4236396, US2008121001, US2007266747, US2006042336,

Abstract:
Source: GB1210831A 1,210,831. Locks. K. MATSUNAGA. 29 Dec., 1967 [29 Dec., 1966; 23 Feb., 1967], No. 59207/67. Heading E2A. A door lock and latch assembly comprises a manual knob 7 (or handle) provided with a hollow cylindrical extension 8 adapted to operate, by rotation thereof, a latch bolt 3, a cylinder lock mechanism 36 adapted to receive a key to allow operation of a dead bolt 2 by rotation of the key, said mechanism comprising a hollow cylindrical sheath 37 housing the rotatable elements of the mechanism,and wherein said sheath is disposed coaxially within said cylindrical extension and is secured to a housing 1 of the assembly, whereby rotation of knob or handle and said extension is isolated by said sheath from rotation of said rotatable elements. In the construction shown the hollow cylindrical extension 8 is rotatably supported by a rose 9, the rose having a plurality of angularly spaced hollow cylindrical. projections 10 which extend from its rear surface and which are engaged by set screws 12 which pass through holes in a mounting plate 11 to secure the mounting plate 11 and the rose on opposite sides of the door. The extension 8 is prevented from axial movement relative to the rose 9 by a circlip 19, end portions of which engage in slots in the extension 8. The housing 1 has an end wall and a peripheral wall and in the peripheral wall are a plurality of notches 15 in which lugs 13, extending from the mounting plate 11, fit to connect the housing to the mounting plate 11. A screw bolt 18 extends through the housing and the mounting plate 11 to engage one of the projections 10 and thus prevents release of the housing from the lugs 13. A mounting plate 23 is secured to the base of the housing 1 by set screws 22 which extend into hollow cylndrical projections 21 connected to the base of the housing and the mounting plate 23 has a pair of arcuate slots through which projections 8' of the extension 8 extend to engage a latch bolt driving arm 25 which is pivotally supported by the mounting plate 23. The arm 25 has a slot 26 and a notch 26' to receive the projections 8' of the extension 8 and it also has an ear 26" which engages a lateral projection 3' of the latch bolt 3 thus suitable rotation of the knob 7 used in this embodiment will turn the arm 25 counterclockwise as shown in Fig. 2 to cause the ear 26" to engage the projection 3' to withdraw the latch bolt 3 against the bias of a spring 29. The arm 25 is biassed to the inoperate position by a spring 27. If the knob 7 is turned in the opposite direction a projection 25" of the arm 25 engages a shaft 30 of a latch bolt operating member 28 which has an ear 28' engageable with a second lateral projection 3" of the latch bolt and causes the member 28 to withdraw the latch bolt. Coaxial with the

member 28 and rigidly connected to the shaft of an interior handle 6, which is pivotally mounted by the housing 1, is a second latch bolt operating member 33 which engages in a slot in the latch bolt so that rotation of the lever handle 6 is thus able to retract the latch bolt. The lever handle 6 and the second latch bolt operating member 33 are biassed by a spring 32' to their inoperative positions. The cylinder of the cylinder lock mechanism is connected via a spring biassed dog clutch 43, 46 to a thumb turn 4 pivotally carried by the housing 1, the full insertion of the key 5 engaging the two parts of the dog clutch so that the cylinder is connected to the thumb turn; the shank portion of the thumb turn has a plate 50 rigidly secured to it and the plate has an arm 50' which is received within an elongated groove formed in the upper surface of a thinner rear portion 2' of the dead bolt 2 and thus rotation of the thumb turn 4 moves the dead bolt between locking and unlocking positions. If the rotation of the dead bolt is carried out by hand from the rear of the door the lock mechanism is not rotated because of the dog clutch being disengaged, but if the key is used rotation of the cylinder rotates the thumb turn because the dog clutch is then engaged. In a modification the cylinder lock mechanism instead of being secured to the mounting plate 23 as shown in Fig. 3 is secured to the mounting plate 11. In this construction both mounting plates have an arcuate slot through which the projections 8' of the extension 8 extend. In another modification the housing 1 is wholly contained within a recess in the door and there are two knobs, one on each side of the door and two roses; the mounting plate corresponding to plate 11 has a central circular projection to which the lock mechanism is secured and the other mounting plate is omitted. The housing is bolted to the mounting plate and the two roses have plates which are connected together by bolts extending from the inner rose plate to cylindrical extensions of the outer rose plate the cylindrical extensions passing through the housing; the rose on the inside of the door has a screw threaded bore and another part of the rose has a thread which is engageable with a thread of the bore to secure the knob assembly to the rose.

0) US1915014A – LOCKING DEVICE

207) Family number: 21131089 (US1915014A) © PatBase

Title: LOCKING DEVICE

Priority: US19320637176 19321010

Family:

Publication number	Publication date	Application number	Application date
US1915014 A	19330620	US19320637176	19321010

Probable Assignee: LUCINDA CARTER

Assignee(s):(std)**:** LUCINDA CARTER

Inventor(s):(std)**:** CARTER FRANK H

International class (IPC 8–9)**:** F16B21/02 F16B21/20 (Advanced/Invention); F16B21/00 (Core/Invention)

International class (IPC 1–7)**:** F16B7/00

CPC: Y10S285/912 F16B21/02 F16B21/20 Y10T403/51

European class: F16B21/02 F16B21/20

US class: 285/308 285/328 285/362 285/80 285/912 403/287

Classification Explorer

Forward Citations: WO07051748, WO07051748, US8206055, US3179444, US3168336, US3147992, US3120402, US2967069, US2010240464, EP0038772, DE3320444, DE3015818,

Abstract:
Source: US1915014A 1. In combination. interfitting annular znenibrrs, a locking ring journalcd on one of' Paid members and projecting radially thcrcbcyoml, a cooperating recess in the otlxcr of said members adapted to receive the ring for loclzing the inenxbers against relative axial disnlaceinent by rotation ot the ring relative to said nieinbers, and actuating means for rotating the locking ring, said atcliiating means being mounted in the lin–st mentioned inernbcr in spaced relation from the outer periphery thereof and extending longituclinally, oi' said member and projecting through the outer end surface thereof for access to said actuating nieans for operating the same.

0) GB2400792A – GEAR DRIVEN QUICK ACTING TELESCOPIC STAND AND A...

208) Family number: 31174982 (GB2400792A) © PatBase

Title: GEAR DRIVEN QUICK ACTING TELESCOPIC STAND AND ADJUSTER

Priority: EP20030009384 20030425

Family:

Publication number	Publication date	Application number	Application date
CL2004000874 A1	20050318	CL20040000874	20040423
CL43596 B	20050318	CL20040000874	20040423
CL43596 B	20080807	CL20040000874	20040423
CL43596 B	20050318	CL20040000874	20040423
GB2400792 A1	20041027	GB20030009384	20030425
GB2400792 B2	20050420	GB20030009384	20030425

Probable Assignee: K H S MUSICAL INSTR CO LTD

Assignee(s):(std)**:** BAYER HEALTHCARE AG ; K H S MUSICAL INSTR CO LTD

Assignee(s): K H S MUSICAL INSTRUMENT CO LTD ; KHS MUSICAL INSTRUMENT CO ; KHS MUSICAL INSTRUMENT CO LTD ; ACTIMIS PHARMACEUTICALS INC

Inventor(s):(std)**:** HSIEH WU HONG ; BACON KEVIN ; KORIYAMA YUJI ; LY TAI WEI ; MANABE YOSHIHISA ; SATO HIROKI ; SEKI MASANORI ; SHINTANI TAKUYA ; SUGIMOTO HIROMI ; TANAKA KAZUHO ; URBAHNS KLAUS ; TAI WEI LY YUJI KORIYAMA TAKAS ; YOSHINO TAKASHI

Inventor(s): TAI WEI LY YUJI KORIYAMA TAKASHI YOSHINO HIROKI SATO KAZUHO TANAKA HIROMI SUGIMOTO YOSHIHISA MANABE KEVIN BACON KLAUS U ; TAI WEI LY YUJI KORIYAMA TAKASHI YOSHINO... ; WU HONG HSIEH ; Y KORIYAMA ; Y MANABE ; T LY ; T SHINTANI ; T YOSHINO ; M SEKI ; H SATO ; H SUGIMOTO ; K BACON ; K TANAKA ; K URBAHNS

Agent(s): ALESSANDRI

International class (IPC 8–9)**:** A61K31/506 A61P11/06 A61P27/14 A61P37/08 C07D207/12 C07D239/30 C07D239/34 C07D239/42 C07D239/48 C07D307/78 C07D401/12 C07D401/14 C07D403/04 C07D403/12 C07D405/12 F16M11/18 F16M11/28 (Advanced/Invention); F16B7/14 (Advanced/Non–invention); A61K31/506 A61P11/00 A61P27/00 A61P37/00 C07D207/00 C07D239/00 C07D307/00 C07D401/00 C07D403/00 C07D405/00 F16M11/02 F16M11/20 (Core/Invention); F16B7/00 (Core/Non–invention)

International class (IPC 1–7)**:** A47B19/00 A61K31/506 A61P11/06 A61P27/14 A61P37/08 B66F3/02 B66F3/16 C07D207/12 C07D239/34 C07D239/42 C07D239/48 C07D307/78 C07D401/12 C07D401/14 C07D403/04 C07D403/12 C07D405/12 F16M11/26

CPC: C07D239/30 C07D239/42 C07D401/12 C07D403/04 C07D403/12 C07D405/12

European class: F16M11/18 F16M11/28 R16B7/14P

Classification Explorer

Cited documents: US4978104 A, US3934852 A, US3017968 A, GB2294029 A1, FR2575147 A1, DE20203992 U1,

Forward Citations: CN105065593, CN103486416, CN103486416, CN102705663, CN102705663,

Abstract:
Source: GB2400792A An adjusting device used for a stand with a base and an equipment stand is composed of a three–part telescoping post (30), a primary actuator (10), a secondary actuator (20), a driving device (40) and at least one cable (35). The hand operated driving device (40) is mounted in the primary actuator (10) and drives a worm gear (42) and pinion gear (413) meshing with a rack (322) in one of the telescopic tubes (32) this directly raises or lowers one part of the three–part telescoping post (30). Each cable (35) is securely attached to two parts of the three–part telescoping post (30) and reeves over and around guide rollers (23) mounted in the secondary actuator (20) so the inner post (33) is raised or lowered simultaneously with the middle post (32) to increase the speed and stability of adjusting the stand. A hand operated locking mechanism (12) locks the stand in the desired position. The worm and pinion gears may be supported on bearings (114). There may be an additional pair of guide rollers (24) and the guide rollers may have a groove to support and locate the cable. The outer telescopic shaft (31) may be located on a keyway (133).

0) US4576501A – TELESCOPING ROD CLAMP

209) Family number: 4981092 (US4576501A) © PatBase

Title: TELESCOPING ROD CLAMP

Priority: US19840652667 19840921

Family:

Publication number	Publication date	Application number	Application date
US4576501 A	19860318	US19840652667	19840921

Probable Assignee: MCCONNELL BERNARD E

Assignee(s):(std)**:** MCCONNELL BERNARD E

Assignee(s): MCCONNELL THOMAS E

Inventor(s):(std)**:** MCCONNELL BERNARD E

International class (IPC 8–9): F16B7/14 (Advanced/Invention); F16B7/00 (Core/Invention)

International class (IPC 1–7): F16B7/10

CPC: F16B7/1472 Y10T403/32057 Y10T403/32426 Y10T403/32491 Y10T403/7077

European class: F16B7/14P

US class: 248/413 403/104 403/109 403/109.4 403/377 403/59

Classification Explorer

Cited documents: US4140415 A, US4111575 A, US3955828 A, US3724885 A, US2344309 A, GB2127515 A1,

Forward Citations: WO9423476, USD749344, USD748937, USD697153, USD689502, USD678967, USD675741, USD670776, USD665471, USD659839, US9678300, US8939051, US8511430, US8474796, US8414272, US8246028, US8133039, US8075217, US7980521, US7891619, US7806381, US7731138, US7726681, US7546993, US6698962, US6557643, US6142502, US6010144, US5791805, US5494447, US5154449, US4865484, US2012126468, US2012013162, US2010189578, US2009125055, US2009050771, US2009014983, US2008272254, US2008247810, US2007252457, US2007132203, US2007098487, US2006278785, US2006115319, US2005089366, EP2951481, EP1992827, CN103498844,

Abstract:
Source: US4576501A A clamping or coupling apparatus for clamping an extension rod telescopically extendable from a tubular member includes two separate and independent clamping adjustments. The clamping apparatus is adapted to rotate freely relative to the tubular member, yet is prevented from axial movement relative to the tubular member. The extension rod is adapted to extend linearly relative to the clamping apparatus, but is prevented from rotating relative to the clamping apparatus. In this manner, a first clamping adjustment inhibits the axial movement of the extension rod relative to the clamping apparatus, so that the extension rod is prevented from axial movement and rotational movement relative to the clamping apparatus. A second clamping adjustment prevents the clamping apparatus from rotating relative to the tubular member. By selecting either of these clamping adjustments, the extension rod may (1) freely, linearly extend from the tubular member while being prevented from rotation relative to the tubular member or (2) freely rotate relative to the tubular member while maintaining constant a particular extension relative to the tubular member.

0) ES2134684A – HIGH–SECURITY ANTI–THEFT DEVICE, WITHOUT A KEY,...

210) Family number: 11796301 (ES2134684A) © PatBase

Title: HIGH–SECURITY ANTI–THEFT DEVICE, WITHOUT A KEY, FOR VEHICLES

Priority: ES19950002191 19951108

Family:

Publication number	Publication date	Application number	Application date
ES2134684 AA	19991001	ES19950002191	19951108
ES2134684 BA	20000501	ES19950002191	19951108

Probable Assignee: NAVARRO QUERO VICENTE

Assignee(s):(std)**:** NAVARRO QUERO VICENTE

Inventor(s):(std)**:** NAVARRO QUERO VICENTE

International class (IPC 8–9)**:** B60R25/02 B60R25/022 B60R25/23 E05B37/16 (Advanced/Invention); B60R25/02 E05B37/00 (Core/Invention)

International class (IPC 1–7)**:** B60R25/02 E04H6/02 E05B37/16

Classification Explorer

Cited documents: US4995250 A, US4660394 A, US1395970 A, ES258724 U, ES252464 U, DE2710444 A1,

Forward Citations: ES2138891, EP1535812,

Abstract:
Device which is of the type which mechanically immobilises the steering wheel, connecting it to one of the pedals, or the gear lever to the handbrake, or which prevents turning of the wheel in motorcycles, and it incorporates, as novel, differentiating element, a combination lock especially designed and adapted for this type of anti–theft device, affording great advantages both in terms of security and in terms of convenience and economy.

0) US2013292526A – COLLAPSIBLE HELICAL ANTENNA

211) Family number: 50958763 (US2013292526A) © PatBase

Title: COLLAPSIBLE HELICAL ANTENNA

Priority: US20100405694P 20101022 US20130261619 20130315 WO2011CA01143 20111013

Family:

Publication number	Publication date	Application number	Application date
CA2811453 AA	20130315	CA20112811453	20111013
US2013292526 AA	20131107	US20130261619	20130315
US9406995 BB	20160802	US20130261619	20130315
WO12051701 A1	20120426	WO2011CA01143	20111013

Probable Assignee: MURPHY PATRIC

Assignee(s):(std)**:** MURPHY PATRIC

Assignee(s): MURPHY PATRICK ; WADE ANTENNA INC

Inventor(s):(std)**:** MURPHY PATRIC ; MURPHY PATRICK

Agent(s): KOCH MARK ARTHUR; KOCH MARK

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 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): H01Q1/08 H01Q1/12 H01Q11/08 (Advanced/Invention)

CPC: H01Q1/1235 H01Q1/08 H01Q1/1228 H01Q11/08

European class: H01Q1/08 H01Q1/12B3 H01Q11/08

US class: 1/1 248/157

Classification Explorer

Cited documents: US7574832 BA, US6340956 BA, US5909197 A, US4866892 A, US3707720 A, US2011221646 AA,

Forward Citations: WO17028955, US8840074,

Abstract:
Source: US2013292526A The present concept a helical antenna boom assembly includes a boom assembly, including a boom, and a plurality of rods and stays, each rod operably attached at an upper end of the boom and connected to one end of the stay. The boom assembly includes dish arms operably attached at a lower end of the boom, each dish arm connected to the other end of the stay, wherein the boom assembly moveable between an extended position, and a boom assembly collapsed position, such that in the extended position the stays are held under tension between the dish arms and the rods. The stays are also attached to a helical coil such that the tensioned stays support the helical coil in its correct helical geometry.

0) GB1397272A – TOOL CARRYING UNIT FOR MACHINE TOOLS

212) Family number: 1442001 (GB1397272A) © PatBase

Title: TOOL CARRYING UNIT FOR MACHINE TOOLS

Priority: GB19720033106 19720714

Family:

Publication number	Publication date	Application number	Application date
CH574788 A	19760430	CH19730010201	19730712
DE2334947 A1	19740131	DE19732334947	19730710
FR2192891 A1	19740215	FR19730025603	19730712
FR2192891 B1	19780929	FR19730025603	19730712
GB1397272 A	19750611	GB19720033106	19720714
IT991763 A	19750830	IT19730069113	19730713
SE395120 B	19770801	SE19730009865	19730713
SE395120 C	19771110	SE19730009865	19730713

Probable Assignee: MOLLART ENG CO LTD

Assignee(s):(std)**:** MOLLART ENG CO LTD ; MOLLART ENGENEERING CY LTD

Assignee(s): MOLLART ENGENEERING CY LTD GB ; MOLLART ENGINEERING CO LTD ; THE MOLLART ENGINEERING CO LTD

Inventor(s):(std)**:** NOHEJL A ; NOHEJL ANTONIN

Inventor(s): A NOHEJL

International class(IPC 8–9)**:** B23B47/30 B23Q1/00 B23Q37/00 B23Q5/04 (Advanced/Invention); B23B47/00 B23Q1/00 B23Q37/00 B23Q5/00 (Core/Invention)

International class(IPC 1–7)**:** B23B29/24 B23B43/00 B23G3/00 B23Q3/12 B23Q3/155

CPC: B23B47/30 B23Q1/0063 B23Q5/043 B23Q37/00

European class: B23B47/30 B23Q1/00D B23Q37/00 B23Q5/04D

Classification Explorer

Abstract:
Source: GB1397272A 1397272 Tool carrying unit; grinding MOLLART ENG CO Ltd 29 June 1973 [14 July 1972] 33106/72 Headings B3C B3N and B3D A tool carrying unit for a machine tool consists of two separable parts, a base section 11 and a tool supporting section 12. The base section has apertures 20, 21 into one of which an input shaft 23 is fitted. A bearing unit 22 mounts the shaft therein. The shaft engages one of input shafts 43, 44 and drives tool or tools 42 via gearing and a speed dependent on which input shaft 43, 44 is engaged by shaft 23. A shaft 62 is also driven by the gearing and in turn drives cam 37 via worm shaft 31. Sections 11, 12 are held together by bolts or by pins 71 engaging in bores in section 11 and being locked therein by further pins inserted in apertures that are at right angles to and intersect said bores. Locking pins 82 are adapted to engage apertures in a steel head block forming part of an automatic head lock assembly.

0) GB1050647A – TICKET ISSUING MACHINES.

213) Family number: 23113044 (GB1050647A) © PatBase

Title: Ticket issuing machines.

Family:

Publication number	Publication date	Application number	Application date
GB1050647 A	00000000		00000000

International class (IPC 8–9): G07F11/68 (Advanced/Invention); G07F11/00 (Core/Invention)

International class (IPC 1–7): G07B1/00

CPC: G07F11/68

European class: G07F11/68

Classification Explorer

Abstract:
Source: GB1050647A 1,050,647. Ticket issuing machines. TROLEX CORPORATION. March 21, 1964 [July 31, 1963], No. 12042/64. Heading G4T. In a machine for dispensing selected numbers of stamps, stamps from a roll 40A (Fig. 5, not shown) are guided 83 over a drive roller 76A driven through gears 108, 112 by a main shaft 96, wherein actuation of a selector key energizes a solenoid 134B movement of whose armature permits engagement of a clutch plate mounted on the main shaft 96 with the rotatably mounted gear 112 to drive the latter. Retraction of the armature simultaneously disengages a drive roller holding lever 210 and also, through a clutch slide cam 192 pivots pawls 192 and 196 so that the former 192 may rotate a ratchet wheel 200 and the latter 196 prevent back–slipping of said wheel 200. The pawl 192 is activated by reciprocation of a control plate 226 which is activated by a cam 224 mounted on a shaft with a gear 222 meshing with the gear 112 driven by the main shaft 96. Reciprocation of the control plate 226 also actuates a counter 34 indicating the number of stamps dispensed. Mounted on the ratchet wheel 200 shaft 250 is a switch plate 271 (Fig. 13, not shown) with an arcuate conducting strip 270 co–operating with a plurality of contacts each of which corresponds to a number key. The actuated key energizes that contact which closes the stamp dispensing circuit until an insulated portion 253 is rotated to that contact position, whereupon the circuit is opened, the solenoid 134B is de–energized and the armature returns to its forward position thus locking 211 the drive roller 76A and releasing the ratchet wheel 200 to spring back to its initial position. The drive roller 76A has projections 77 co–operating with perforations between the stamps. A blade 93 assists in peeling the stamps from the roller which are subsequently torn against a firm edge. A cover plate 83 with grooves co–operating with the pins 77 protects the stamps and is held in position by a latch 82 co–operating with a pin 85 on the cover plate. When a stamp roll 40A is finished a spring lever 69 co–operates with the central roller to complete a circuit operating a relay which opens the circuit operating the drive roller mechanism preventing further use of the machine until reloaded. A lamp also lights up. The actuating keys pass through a latch plate which permits only a single key to be actuated and which releases the key when the stamps are dispensed. Several rolls of stamps may be placed in the same housing with a single motor and main shaft to dispense the stamps from each roll. Each strip of stamps may comprise rows of adjoined stamps. The machine may only be operated when a switch is closed by an inserted key.

0) CN102251708A – ANTI–PRYING, ANTI–THEFT AND INSTANT–UNLOCKING L...

214) Family number: 50004665 (CN102251708A) © PatBase

Title: Anti–prying, anti–theft and instant–unlocking lock core

Priority: CN201010179116 20100521

Family:

Publication number	Publication date	Application number	Application date
CN102251708 A	20111123	CN201010179116	20100521

Probable Assignee: JILIANG SU

Assignee(s):(std): JILIANG SU

Assignee(s): SU JILIANG

Inventor(s):(std): JILIANG SU

Inventor(s): SU JILIANG

International class (IPC 8–9): E05B15/00 E05B29/04 E05B35/04 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN102251708A The invention relates to an anti–prying, anti–theft and instant–unlocking lock core, and the lock core comprises a lock shell 1, an inner core 2 and a return spring 8, wherein a seal cover 10 is used for arranging the inner core 2 in the lock shell 1 and realizing limit and telescopic sliding of the inner core 2, and a key hole 7 corresponding to the inner core 2 is formed at one end of the lock shell 1; when the anti–prying, anti–theft and instant–unlocking lock core is unlocked, a legal key is inserted for aligning concave grooves on a blade 3, a sliding block spring 6 is used for pressing the sharp angle part of a sliding block 5 into the grooves of the blade 3, the other part of the sliding block 5 is out of control of the lock shell 1, the key is pushed continuously and then a lockset is unlocked. If an illegal key is inserted into the key hole 7, as long as one groove on the blade 3 is not aligned, the sliding block spring 6 can not press the sharp angle part of the sliding block 5 into the grooves of the blade 3 and the inner core 2, then the sliding block 5 is still controlled by the lock shell 1 and can not move, the inner core 2 is in idle slipping state in the lock shell 1 and the lockset cannot be unlocked.

0) CN205135159U – VEHICULAR ANTITHEFT LOCK

215) Family number: 62041707 (CN205135159U) © PatBase

Title:	VEHICULAR ANTITHEFT LOCK
Priority:	CN201520977722U 20151125

Family:

Publication number	Publication date	Application number	Application date
CN205135159 U	20160406	CN201520977722U	20151125

Probable Assignee:	HEBI AUTOMOTIVE ENG PROFESSIONAL COLLEGE
Assignee(s):(std)**:**	HEBI AUTOMOTIVE ENG PROFESSIONAL COLLEGE
Assignee(s):	HEBI AUTOMOTIVE ENGINEERING PROFESSIONAL COLLEGE ; HEBI VOCATIONAL COLLEGE OF AUTOMOTIVE ENGINEERING
Inventor(s):(std)**:**	GE JUNCHAO ; WANG LIPENG
International class (IPC 8–9):	E05B67/06 E05B67/10 E05B67/22 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN205135159U The utility model relates to a vehicle apparatus field, the more specifically vehicular antitheft lock that says so, the user can adjust the length of lock stalk according to particular case to in being suitable for the different condition, not only made things convenient for user's use, saved the development cost of manufacturer especially, very big practical value has. The retractable lock head sets up the inside in the cooperation shaft hole to be located the left end of U –shaped lock stalk. The one end setting of telescopic connection pole is in the inside in cooperation shaft hole, and the other end of telescopic connection pole is connected with the right –hand member of pickproof lock body is articulated. The stopper has four, sets up the top at retractable lock head and telescopic connection pole respectively to be located the left and right sides of retractable lock head and telescopic connection pole respectively. The fixed bottom that sets up at the retractable lock head in door bolt groove. The fixed top that sets up at the pickproof lock body in lock stalk groove to be located the left end of pickproof lock body. The key slot sets up the left end at the pickproof lock body to be located the right side in lock stalk groove.

0) CN105525780A – COLLISION–RESISTANT PARKING LOCK

216) Family number: 62200694 (CN105525780A) © PatBase

Title:	COLLISION–RESISTANT PARKING LOCK
Priority:	CN201410507265 20140928

Family:

Publication number	Publication date	Application number	Application date
CN105525780 A	20160427	CN201410507265	20140928

Probable Assignee:	SOLID KIN LOCK LOCK IND CO LTD SHANGHAI
Assignee(s):(std)**:**	SOLID KIN LOCK LOCK IND CO LTD SHANGHAI
Assignee(s):	SOLID LOCK CO LTD SHANGHAI JIAN ; SOLID KIN LOCK LOCK IND CO
Inventor(s):(std)**:**	SHEN QIHENG
International class (IPC 8–9):	E04H6/42 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN105525780A The invention relates to an automobile parking lock, in particular to a collision–resistant parking lock. The collision–resistant parking lock mainly consists of a bottom plate, a round pin, a front car stop bar, a back car stop bar, a stepped through hole seat and a lock core, and is characterized in that a plurality of screw holes used for fixing the bottom plate on the ground are formed in the bottom plate; the front car stop bar and the back car stop bar are movably connected with the bottom plate through the round pin; the tail part of the lock core is provided with a lock bolt capable of clamping a lug boss or a special–shaped hole lock bolt shoulder; the top end of a back moving rod is provided with a hole or a groove; the lug boss or the special–shaped hole lock bolt shoulder for clamping the lock bolt is arranged in the hole or the groove; the stepped through hole seat is arranged in the hole or the groove formed in the top end of the front car stop bar; and the telescopic lock core which cannot be pulled out is arranged in the stepped through hole seat, or the lock core capable of being pulled out is arranged in the step through hole seat. In the use process, the two car stop bars are upwards lifted; the front and back holes or grooves are aligned; a lock core shaft is inserted into the stepped through hole seat, and a key rotates; when the car stop bars need to be put down, the key is inserted to rotate; then, the lock core is pulled out; and at the moment, the upper parts of the two car stop bars are mutually clamped and fixed since no lock core shaft exists, so that the car stop bars cannot fall down.

0) US3608939A – CONVERTIBLE LATCH SET

217) Family number: 40968446 (US3608939A) © PatBase

Title: CONVERTIBLE LATCH SET

Priority: US19690858630 19690917

Family:

Publication number	Publication date	Application number	Application date
BE756306 A1	19710301		00000000
CA921512 A1	19730220	CA19700093229	19700916
CH526710 A	19720815	CH19700013754	19700916
DE2045865 A1	19710318	DE19702045865	19700917
DE2045865 B2	19760520	DE19702045865	19700917
ES199646 U	19750801	ES19700199646U	19700915
ES199646 Y	19751216	ES19700199646U	19700915
FR2062258 A5	19710625	FR19700033744	19700917
GB1266668 A	19720315		00000000
JP49019678 B4	19740518	JP19700081632	19700917
NL7013680 A	19710319	NL19700013680	19700916
SE381701 B	19751215	SE19700012603	19700916
SE381701 C	19760401	SE19700012603	19700916
US3608939 A	19710928		00000000
ZA7006151 A	19710428	ZA19700006151	19700909

Probable Assignee: VELTO IND LTD

Assignee(s):(std)**:** VELTO IND LTD ; VELTO INDUSTRIES LTD

Assignee(s): VELTO INDUSTRIES LTD 820 WEST BROADWAY VANCOUVER B ; VELTO INDUSTRIES LTD 820 WEST BROADWAY VANCOUVER BRITISH COLUMBIA CANADA ; WILLIAM G FORTT ; VELTO IND LTD 820 WEST BROADWAY VANCOUVER BRITISH COLUMBIA CANADA ; MICHEL L E ROCHER ; STUART G MCBURNIE

Inventor(s):(std)**:** FORTT W ; FORTT W G ; FORTT WILLIAM G ; MCBURNIE S ; MCBURNIE S G ; MCBURNIE STUART G ; MICHEL L E ROCHER ; ROCHER M ; ROCHER M L E ; ROCHER MICHEL L E ; ROCHNER M L E ; STUART G MCBURNIE ; WILLIAM G FORTT

Inventor(s): W G FORTT ; WG FORTT ; S G MCBURNIE ; SG MCBURNIE ; MICHEL LE ROCHER ; MLE ROCHER ; G FORTT WILLIAM ; G MCBURNIE STUART ; L E ROCHER MICHEL ; LE ROCHER MICHEL ; M L E ROCHER

International class (IPC 8–9): E05B63/04 E05B63/24 E05C1/10 E05C1/16 (Advanced/Invention); E05B63/00 E05C1/00 (Core/Invention)

International class (IPC 1–7): E05B13/00 E05B15/02 E05B61/00 E05B63/00 E05B63/06 E05B63/08 E05C3/00

CPC: Y10T292/18 Y10T292/705 Y10T292/96 E05B63/248 E05C1/163

European class: E05B63/24D E05C1/16C

US class: 292/254 292/341.18 292/359

Classification Explorer

Cited documents: US3508777 A, US3339959 A, US3073640 A, US3022102 A, US2512814 A, US1522628 A, US1236881 A,

Forward Citations: US6131970, US4691952, GB2160251, DE4312032,

Abstract:
Source: US3608939A A latch set having a locking slide which is movable from a disengaged position, in which a latch mechanism can be actuated by rotation of either door handle, to an engaged position, in which the latch set and therefore the door are locked. The locking slide is adjustable relative to associated parts whereby the latch set can selectively be installed as either a privacy set which will lock the door, or as a passage set which will

merely latch but not lock the door, with either one of the alternate installations being adapted for later conversion to the other.

218) Family number: 20358298 (GB601556A) © PatBase

Title: Improvements in or relating to fastener assemblages and means adapted for use in installation thereof in a workpiece

Family:

Publication number	Publication date	Application number	Application date
GB601556 A	19480507	GB19450030141	19451112

Probable Assignee: UNITED SHOE MACHINERY CORP

Assignee(s):(std)**:** UNITED SHOE MACHINERY CORP

International class (IPC 8–9)**:** A43D100/02 (Advanced/Invention); A43D100/00 (Core/Invention)

International class (IPC 1–7)**:** B63B25/22

CPC: A43D100/02

European class: A43D100/02

Classification Explorer

Abstract:
Source: GB601556A 30141/45 and 25016/46. [Class 43] A fastener assembly, providing a throat for a rope or the like, comprises two elements between which an apertured workpiece is clamped, a large tubular barrel extending through the aperture and holding the elements together, and a number of smaller barrels extending through the workpiece and maintaining clamping pressure around the large barrel. A device for installing the assembly comprises an anvil for the support of an eyelet–like barrelled fastener element; a taper–ended workpiercing member telescopically mounted in the anvil and normally held by resilient means so that it extends through the element, and further means for locking it against depression into the anvil. A machine for installing a form of the fastener wherein all the barrels and one clamping element are integral comprises an anvil and a power–driven cam bearing a tool–carrier movable from a position in which a presser tool registers with the anvil to one in which a setting tool registers therewith, the tool–carrier being powerdriven between these positions at half the frequency at which the cam is moved, so that one downward stroke of the cam causes the presser tool to impale the work on a fastener element and the next downward stroke causes the setting tool to clinch the element. A grommet–like element 15, Fig. 2, has a short tubular barrel 14 and an annular flange 36 in which are six equally–spaced holes 16 for receiving small eyelet–like barrelled elements 17, Fig. 4. A rigid washer–like element 18, Fig. 4, has a central hole 19, and six equallyspaced smaller holes 20 in its annulus 37. To instal the assembly use is made of an anvil block 13, Fig. 4, with six anvils 21 each having a taperended pilot 22 with a groove 23 round its base for roll–clinching each element 17. The element 15 is placed flange–down on the block 13, a pilot 22 projecting through each hole 16; a workpiece 10 is,pressed down so that the barrel 14 and pilots 22 go through corresponding holes therein; the element 18 is then positioned with the barrel and pilots going through their corresponding holes 19, 20. An unclenched element 17 is placed on each pilot 22 and is driven through the assembly until its base is seated on the element 18, a hammer and hand tool 25, Fig. 5, being used for this, the hand tool having a setting piece 26 with a central bore 27 for reception of the pilot 22 and a grooved annular seat 28 for the head of the element 17. A second round with the hand tool and hammer is now made to roll–clinch the elements 17 against the anvil 21. Finally the barrel 14 is rollclinched by means of a hammer and another hand tool 30 (Fig. 7) comprising a clenching piece 31 having a pilot 32 with an annular clenching surface 33. In a modification the single element 15 is replaced by two elements, one of which is similar to the washer–like element 18, while the other resembles the element 15 but has a narrower flange. Another device for installing the assembly of Fig. 4 comprises an anvil 40, Fig. 10, fixed in a base 42, a plunger 46 sliding vertically and centrally within the parts 40, 42 and raised by a spring 48, while a key 50 in the part 40 engages a groove 52 in the plunger 46 to prevent its rotation, and six taper–ended spindles 54 sliding in vertical bores 56 in the part 40 and raised by springs 58 while their lower end portions 60 project below bushings 62 which keep the springs 58 under compression. One element 17 is placed head downwards on each spindle 54 and an element 15 is positioned; a perforated workpiece 10 <1> , Fig. 14, is threaded over the plunger 46 and is pushed down by a hammer and a hand tool 68, which has a pressing portion 70 in which are six holes 72 for the elements 17 and an annular cavity 73 for the barrel 14, this cavity lying between the portion 70 and a pilot 74 of the same diameter as the plunger 46, in which there is a groove 78 for receiving a key 76 which is set in the pilot 74 and ensures that the holes 72 register with the spindles 54. As soon as the plunger 46 is depressed the spindles 54 are locked in raised positions so that their ends puncture the workpiece, forming holes for the elements 17. The locking mechanism, Fig. 10, comprises six pins 80 which slide horizontally in radial bores in the bore 42; when operative, a reduced part 90 of each pin lies beneath each spindle 54, notches 88 in the outer ends of the pins 80 being engaged by leaf springs 82, which are anchored to the part 42 and are weaker than the spring 48; normally a conical cam 84, integral with the plunger 46, and raised by the spring 48, engages the inner ends of six pins 86 which slide in bores parallel to the pins 80, thus causing the outer ends of the pins 86 to abut against the leaf–springs 82 forcing the pins 80 outwards. When the tool 68 is removed after this pressing operation the spindles 54 are automatically unlocked, and an element 18 is positioned, the upper ends of the elements 17 being clenched by a hammer and a

hand tool 92, Fig. 15, having an annular clenching surface 94 and a pilot 96 with a pit 98 in its lower end for receiving the end of a spindle 54 to depress it. Finally the barrel 14 is clenched by a hand tool similar to, but larger than, the tool 92. In a second form of fastener, Fig. 17, the elements 15 and 17 are combined into one element 110 having a large barrel 120 and six smaller ones 122, the other part 108 being the same as the element 18. A machine, Figs. 21 and 22, for installing this assembly includes an upstanding column 124 having at its lower end a horizontal bed 126 supporting a stationary anvil 128 and a lower slide 130 which moves in a groove 132 in the bed. A block 144 fixed to a vertically movable ram 146 has a dove–tail connection 142 with an upper horizontal slide 134 which carries a work–presser 136, and a tool head 140 carrying six small setting tools 138 and a large setting tool 172. The two slides 130, 134 are connected by a vertical coupling pin 148 anchored to the slide 130 and having a telescopic engagement with the slide 134. The anvil 128, Fig. 19, has a central pin 156 and six spindles 158, all spring–urged upwards, and has fixed in it a retaining pin (not shown) which engages a slot 164 in the pin 156 to restrict its movement. The lower ends of the spindles 158 abut against the flat upper face 166 of the slide 130 when the latter is in its forward position, but can be depressed when it is in its rear position. The work presser, Fig. 21, has a flat work–engaging face, a socket for the barrel 120 and pin 156, and six small holes 168 for receiving the barrels 122 without fouling the spindles 158. The ram 146 slides in vertical guideways forming part of the column 124 and is reciprocated by a crank pin and connecting rod (not shown), the former being carried by a horizontal power–driven shaft 150, journalled in the column 124 at 152 and provided with a onerevolution clutch (not shown) connected to a treadle–controlled rod 154. The slides 130, 134 are moved to and fro by mechanism including a cam member 176 which has an internal gear 178 and an external cam surface 180, and which is rotatably mounted upon a cylindrical collar 182 keyed to the shaft 150. A pinion 184, formed on the collar 182, engages an intermediate gear 186 which meshes with the gear 178, so that the cam member 176 is driven at half the rate of the shaft 150; the gear 186 turns on a fixed pin 188 mounted in a fixed bracket 190 which has a bore engaging the shaft 150 and another engaging a fixed pin 192. The cam surface 180, which consists essentially of a largeradiused segment 212 and a diametrically opposite small–radiused concentric segment 214, engages a roll 194 carried by an arm 196 which can be swung to and iro about the pin 192, the roll 194 being held against the cam surface 180 by a spring 198, Fig. 21, connected to the arm 196. A link 200 connects the lower end of the arm 196 with one arm 202 of a bell–crank lever, which also has a pair of arms 204 bridged by a pivot pin 206 connected to the pin 148 by a forked link member '208, and which is mounted on a vertical fulcrum stud 210 mounted in the bed 126. The machine has a cycle of four strokes of the ram 146. To instal the second type of fastener the element 110 is placed on the anvil 128 and a workpiece having a hole already punched in it is placed over the spindle 156. With the machine in the initial position, Fig. 21, the slides 130, 134 are forward, the work presser 136 being in register with the anvil 128 and the spindles 158 being locked against depression by the slide 130 so that they can puncture the workpiece. The operator then trips the clutch, bringing about one revolution of the shaft 150, during which the segment 214 engages the roll 194, the ram being depressed so that the work presser 136 impales the work on the barrels 120, 122 of the element 110 and raised so that the slides 130, 134 move to their rear positions, the tool head 140 now being in register with the anvil 128 and the spindles 158 unlocked. The element 108 is now positioned and the clutch is tripped again. During the second revolution of the shaft 150 the segment 212 engages the roll 194; during the down stroke of the ram the tool head 140 clenches all the barrels, the spindles 158 and pin 156 being depressed by the pilots 138, 172; during the final upstroke the slides return forward under the action of the spring 198. Specification 8108/03, [Class 43], is referred to.

0) US3285084A – DRIVE AND STEERING MECHANISM FOR WHEELED VEHICL...

219) Family number: 22883310 (US3285084A) © PatBase

Title: DRIVE AND STEERING MECHANISM FOR WHEELED VEHICLES OR IMPLEMENTS

Priority: US19610102517 19610412 US19640369363 19640522

Family:

Publication number	Publication date	Application number	Application date
GB1010821 A	19651124	GB19620013243	19620406
US3190385 A	19650622	US19610102517	19610412
US3285084 A	19661115	US19640369363	19640522

Probable Assignee: MASSEY FERGUSON LTD

Assignee(s):(std)**:** HUGH IVOR BRUNTON FITZPATRICK ; MASSEY FERGUSON LTD

Assignee(s): MASSEY FERGUSON LIMITED

Inventor(s):(std)**:** JAMES ALLPORT EDWARD

Inventor(s): ALLPORT EDWARD JAMES

International class (IPC 8–9)**:** A01D41/12 A01D69/00 B62D1/16 B62D11/00 B62D49/06 (Advanced/Invention); A01D41/00 A01D69/00 B62D1/16 B62D11/00 B62D49/00 (Core/Invention)

International class (IPC 1–7)**:** A01D41/12 A01D67/00 B62D11/10 F16H9/12

CPC: A01D41/1274 B62D11/00 A01D69/00 B62D1/16 B62D49/0692

European class: 63C19 A01D41/12 A01D69/00 B62D1/16 B62D11/00 B62D49/06K

US class: 180/333 180/6.66 474/25 474/32 474/33 474/35 474/38 474/7

Classification Explorer

Cited documents: US815433 A, US2941609 A, US2930246 A, US2924994 A, US2924993 A, US2924982 A, US2879857 A, US2878690 A, US2869317 A, US2824457 A, US2745506 A, US2729834 A, US2634620 A, US2589032 A, US2329372 A, US2145188 A, US2084808 A, US1567603 A, US1356680 A, US1344366 A, GB580060 A, CA595089 A,

Forward Citations: US5209331, US4572310, US3596732, US3464510, US3384194, US3335808, US3334522, US3299727, EP0117588,

Abstract:
Source: GB1010821A 1,010,821. Motor vehicle driving gear; controlling vehicles. HUGH IVOR BRUNTON FITZPATRICK (Massey–Ferguson Ltd.). April 6, 1962, No. 13243/62. Heading B7H. [Also in Division F2] A self–propelled vehicle has side wheels respectively driven from a single cross–shaft 21 or other single driving means through independent transmission devices each comprising an endless belt 36 oppositely directed reaches of which are trained round forward and reverse drive pulleys 46, 45 rotated in unison by cross–shaft 21, the driving pulleys each having an adjustable flange to grip or release its reach of belt 36. Belt 24 drives cross–shaft 21, preferably through variable ratio expanding pulley drive, to which are pinned (Fig. 7) the outer flanges 49 of the pulleys 45, 46 in each transmission unit 22, 23. The inner flanges 48 on each side are mounted on a sleeve 53 axially movable on cross–shaft 21 through yoke 61 and ring 60 to control the effective diameter and the engagement with belt 36 of the pulleys 45, 46. Pulleys 55 are provided to support the belt reach not engaged by a driving pulley. Each belt 36 also passes round an adjustably spring–loaded tensioner pulley 37 and a pulley 34 which drives a side wheel through bevel gears, shaft 20, on which is mounted a brake drum (see Division F2), and chain 19. Fore and aft movement of control column 75 and block 81 about pins 79 (Fig. 4) operates toggle links 84, 85 together to control the engagement of the forward or reverse drive pulley and the effective pulley diameter through the pivoted yokes 61. Rotation of steering wheel 76 on column 75 provides differential movement of the toggle links successively altering the effective pulley diameters differentially on the two sides of the vehicle, putting one drive into neutral and reversing one drive. The column is biased to the forward drive position by spring 88 and may be held in the neutral or straight ahead drive position by a pin 105 (Fig. 4) engaging a hole in plate 110 on steering control rod 95 in column 75. Accidental release of pin 105 is. avoided by hairpin spring 112 on the column engaging groove 111 on pin 105.

0) EP2105554A1 – HANDLE COMPRISING TWO GRIPPING BARS WITH INCORP...

220) Family number: 42934026 (EP2105554A1) © PatBase

Title: HANDLE COMPRISING TWO GRIPPING BARS WITH INCORPORATED LOCK

Priority: IT2008PD00089 20080319

Family:

Publication number	Publication date	Application number	Application date
EP2105554 A1	20090930	EP20090155413	20090317
ITPD20080089 A1	20090920	IT2008PD00089	20080319

Probable Assignee: COMUNELLO FLII SPA

Assignee(s):(std)**:** COMUNELLO FLII SPA ; FLII COMUNELLO S P A

Assignee(s): FRATELLI COMUNELLO S P A ; COMUNELLO FLLI SPA

Inventor(s):(std)**:** COMUNELLO FRANCO

Agent(s): GALLO LUCA

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): E05B1/00 E05B17/04 E05C9/00 (Advanced/Invention); E05B1/00 E05B17/00 E05C9/00 (Core/Invention)

CPC: E05C9/047 E05B1/0015 E05B17/04 E05B17/042 E05C9/041

European class: E05B1/00B E05B17/04 E05C9/04A P05B17/04C

Classification Explorer

Cited documents: US3670537 A, EP1026346 A1,

DE202005003529 U1

Forward Citations: US9303430, US9003843, US8449003, ITVI20120073,

Abstract:
Handle comprising two gripping bars with incorporated lock, comprising an outer gripping bar and an inner gripping bar fastened to the two sides of the door by fixing and spacing means. The inner gripping bar houses a toothed wheel which engages with a rack portion of at least one locking rod so as to move it vertically between a closed position and an open position. The outer gripping bar has a lock associated with it, while the inner gripping bar has an associated knob. The lock and knob act on the locking rod via transmission means which pass inside the spacers and comprise a transmission shaft which extends continuously through the toothed wheel. The lock has an actuating member rotatably connected to the transmission shaft and able to receive the movement from the lock cylinder via a coupling system so that the cylinder is rotatably connected to the transmission shaft only when the key is inserted.

0) CN202954644U – THREE–POINT ELECTROMAGNETIC DOOR LOCK

221) Family number: 53971748 (CN202954644U) © PatBase

Title: THREE–POINT ELECTROMAGNETIC DOOR LOCK

Priority: CN201220575377U 20121031

Family:

Publication number	Publication date	Application number	Application date
CN202954644 U	20130529	CN201220575377U	20121031

Probable Assignee: ZHENJIANG TAIYUAN ELECTRICAL APPLIANCE TECHNOLOGY CO LTD

Assignee(s):(std)**:** ZHENJIANG TAIYUAN ELECTRICAL APPLIANCE TECHNOLOGY CO LTD

Assignee(s): ZHENJIANG TAIYUAN ELECTRICAL APPLIANCE TECHNOLOGYCO

Inventor(s):(std)**:** NIU LONGHUA

International class (IPC 8–9): E05B17/22 E05B3/00 E05B47/06 E05B63/14 E05B65/52 (Advanced/Invention)

Classification Explorer

Forward Citations: CN105386660, CN104989189, CN104989189, CN102877713, CN102877713,

Abstract:
Source: CN202954644U The utility model relates to a three–point electromagnetic door lock and belongs to electromagnetic locks of equipment case doors and equipment cabinet doors. The three–point electromagnetic door lock is characterized in that an unlocking component comprises a movable handle, a limit groove, a rotary shaft, a reset spring for resetting the movable handle, a transverse spring bolt which is fixed on the rotary shaft and disposed leftwards horizontally or rightwards horizontally, a gear fixed on the rotary shaft, an upper lock rod and a lower lock rod which are vertically disposed on two sides of the gear and matched with the gear, connecting holes arranged on the upper end and the lower end of each of the upper lock rod and the lower lock rod; and a deblocking component comprises a lock cylinder fixed at the end of the movable handle, a deblocking key hole located at the center of the lock cylinder, a deblocking key groove which is matched with a telescopic electromagnetic support column of an electromagnetic component and vertically communicated wit the deblocking key hole, and a deblocking key matched with the deblocking key hole and the deblocking key groove. Compared with the prior art, the three–point electromagnetic door lock achieves three–point locking of two opposite closing cabinet doors, namely upper vertical locking, lower vertical locking, and left transverse locking or right transverse locking, and can be used without distinguishing left and right.

0) US5996728A – MODULAR SPEAKER CABINET INCLUDING AN INTEGRAL R...

222) Family number: 11901692 (US5996728A) © PatBase

Title: Modular speaker cabinet including an integral rigging system

Priority: US19990291165 19990413

Family:

Publication number	Publication date	Application number	Application date
US5996728 A	19991207	US19990291165	19990413

Probable Assignee: CONGRESS FINANCIAL CORP

Assignee(s):(std)**:** EASTERN ACOUSTIC WORKS INC

Assignee(s): LOUD TECHNOLOGIES INC (F K A MACKIE DESIGNS INC) ; LOUD TECHNOLOGIES INC A WASHINGTON (AS ASSIGNEE OF ; LOUD TECHNOLOGIES INC A WASHINGTON CORP ; MERRILL LYNCH CAPITAL ADMINSTRATIVE AGENT AS ; US BANK NATIONAL ASSOCIATION ; MERRILL LYNCH CAPITAL AS ADMINSTRATIVE AGENT ; LOUD TECHNOLOGIES INC ; SUN MACKIE LLC ; ABLECO FINANCE LLC A DELAWARE LIABILITY CO AGENT A ; ABLECO FINANCE LLC A DELAWARE LTD ; CONGRESS FINANCIAL (FL) AGENT AS CORP ; CONGRESS FINANCIAL CORP

Inventor(s):(std)**:** STARK JAMES M

International class (IPC 8–9)**:** H04R1/02 (Advanced/Invention); H04R1/02 (Core/Invention)

International class (IPC 1–7)**:** H05K5/00

CPC: H04R1/028

European class: H04R1/02E

US class: 181/144 181/199 248/282.1 248/323

Classification Explorer

Cited documents: US5758852 A, US5714723 A, US5602366 A, US5584595 A, US5402502 A, US5309518 A, US5266751 A, US5258584 A, US5000286 A, US4884655 A, US4882760 A, US4844565 A, US4805730 A, US4730693 A, US4701951 A, US4660728 A, US4270023 A, US4227047 A, US4179585 A, US4107461 A, US4054750 A, US4042778 A, US4014597 A, US1866831 A,

Forward Citations: WO02067243, WO02067243, USD776638, USD760188, USD594854, USD579007, USD574364, USD560207, USD504418, US9661418, US9432757, US9319763, US9154863, US8646569, US8600097, US8170263, US8130996, US8126184, US7997552, US7967103, US7787649, US7693296, US7634100, US7516932, US7298860, US7201251, US6999597, US6910548, US6748627, US6640924, US6536554, US6354397, US6069787, US2015358734, US2015289050, US2014307907, US2014174847, US2011290977, US2009230273, US2009196450, US2009034771, US2009022354, US2008310661, US2008170735, US2008013759, US2007228241, US2007071270, US2007000719, US2006210095, US2005232455, US2005123165, US2004060153, US2004037636, US2003231782, US2003213642, US2003107326, EP2355540, EP1965602, EP1725068, DE102014227053,

Abstract:
Source: US5996728A A speaker rigging system that features a modular speaker cabinet that incorporates an internal load bearing frame and an internal speaker to speaker coupling mechanism. Speaker to speaker coupling is accomplished by means of a plurality of small, easy to handle coupling pins that allow for the creation of vertical speaker arrays with a minimal gap between speakers in the array.

223) Family number: 206069 (BRPI8802039A) © PatBase

Title:	VEICULO MOTORIZADO MOTORIZED VEHICLE (Machine translation)
Priority:	BR1988PI02039 19880425

Family:

Publication number	Publication date	Application number	Application date
BRPI8802039 A	19891017	BR1988PI02039	19880425

Probable Assignee:	JOSE SOARES JUNIOR
Assignee(s):(std):	JOSE SOARES JUNIOR
Inventor(s):(std):	SOARES JOSE JUNIOR
Inventor(s):	JOSE SOARES JUNIOR
International class (IPC 8–9):	B60R99/00 (Advanced/Invention); B60R99/00 (Core/Invention)
International class (IPC 1–7):	B60R27/00

Classification Explorer

Abstract:
Source: BRPI8802039A [Source: Claim 1] ¦ • • • • < • • • • • ss < • • • • • 1 • • • • • • ••• • ¡ •• ** REIVINDICACOES 1 – "VEICULO MOTORIZADO", caracte rizado por apresentar baixa penetracao aerodinamica a– traves de seu desenho cuneiforme e nao convencional, possuindo chassi composto por duas barras ocas dispos– tas em paralelo ate o final do corpo do veiculo onde se juntam formando uma so barra que se inclina para ci ma, dobrando–se na horizontal e projetando–se para fo– ra do corpo do veiculo, sofrendo dilatacao lateral no seu termino. 2 – "VEICULO MOTORIZADO", de acor do com a reivindicacao um, caracterizado por possuir aerofolio fixado na projecao do chassi sendo composto de duas asas verticais laterais que sustentam duas ho– rizontais sendo que a asa superior possui extremindade frontal abaolada, comportando em seu interior tres me– canismos opcionais para acionamento dos tres lemes con dicionadores verticais, que sao: – mecanismo de acionamento hidraulico que e composto por cilindro com embolos invertidos em cujas extremi dades sao fixados o fio flexivel que faz mover os le mes no sentido contrario ao do volante; – mecanismo de acionamento pneumatico que e semelhante ao mencionado acima, diferindo apenas na fonte de a– limentacao que ao inves de fluidos hidraulicos, uti– liza o ar; – mecanismo de acionamento eletromagnetico composto por dois solenoides que sao ligados as extremidades do fio flexivel fazendo mover os lemes por acionamen to eletrico no sentido contrario ao do volante. < • • • • •» •• •••• •ss 3 – "VEICULO MOTORIZADO", de acor do com a reivindicacao um, caracterizado por possuir chave cremalheira de comando eletrico cujo acionamento se da pela movimentacao do volante e e composta por uma haste horizontal dentada na parte inferior, tendo nas extremidades duas garras que deslizam por quatro trilhos dispostos paralelamente dois a dois, nas extre midades dos trilhos sao colocados fios eletricos ali– mentados pela bateria, sendo que o contato e feito quando a chave desliza e toca as partes que fecham o circuito. 4 – "VEICULO MOTORIZADO", de acor do com a reivindicacao um, caracterizado por possuir me canismo de servo suspensao que atua na suspensao dian– teira e traseira. 5 – "VEICULO MOTORIZADO", de acor do com a reivindicacao quatro, caracterizado por pos– suir servo suspensao dianteira composta por dois cilin dros com embolo centrado por molas fixadas no lado in– terno da carroceria que fazem mover – atraves de ali–. mentacao hidraulica ou pneumatica – os bracos em forma de "V" em cujas extremidades sao fixados os amortecedo res. 6 – "VEICULO MOTORIZADO", de acor do com a reivindicacao quatro, caracterizado por pos– suir servo suspensao traseira composta por dois amorte cedores que em peca unica sao divididos em cilindro com embolo centrado por mola, fixado por braco, a pro– jecao do chassi, e o amortecedor propriamente dito, que e ligado diretamente as rodas; os cilindros sao a– limentados hidraulica ou pneumaticamente, e os amorte– cedores compostos, sao fixados a projecao do chassi por dois bracos que se ajustam ao movimento dos amorte cedores atraves de molas. 7 – "VEICULO MOTORIZADO", de acor do com a reivindicacao um, caracterizado por possuir circuito hidraulico que faz mover o mecanismo de servo >• ss • • • • • • • • • • •• ** • ss • ss ss • • suspensao dianteira e traseira e e composto por: – li– nha de alimentacao ligada a cinco valvulas, do tipo quatro vias tres posicoes (4/3) sendo que quatro valvu las possuem centro com retorno livre ao tanque e uma possui centro bloqueado, sendo que as valvulas de cen– tro aberto sao acionadas quando o volante gira, fazen– do deslizar a chave cremalheira, provocando o fechamen to do circuito eletrico que acionara os solenoides das ditas valvulas alternando o acionamento dos solenoides, fazendo alternar as linhas de alimentacao dos quatro cilindros ligados aos amortecedoresa valvula de cen– tro fechado e acionada manualmente por circuito eletri co independente, depois de desligado o botao contido no painel que permite a atuacao da chave cremalheira? a dita valvula comanda a movimentacao das outras qua– tro por alimentacao hidraulica ou pneumatica, fazendo os. cilindros moverem os embolos alternadamente para dentro ou para fora, conforme a necessidade exigida pe lo tipo de circunstancia em que trafegar o veiculo. 8 – "VEICULO MOTORIZADO", de acor do com a reivindicacao um caracterizado por possuir montagem das rodas traseiras compostas por amortecedor cujo embolo e ligado a um disco e este, – atraves de parafusos – se liga a uma panela que se encaixa ao la– do interno da roda por fixacao de parafusos. 9 – "VEICULO –MOTORIZADO", de acor do com a reivindicacao um, caracterizado por possuir –

montado sobre o aro dos pneus – um recheio de borracha dura em forma de aro, sendo sulcado por razoes de arre fecimento. 10 – "VEICULO MOTORIZADO", de a– cordo com a reivindicacao um, caracterizado por possuir farois de longo alcance dispostos na parte inferior do mesmo e e composto por uma haste ligada a um motor ele trico que faz com que esta haste desloque os farois de seu alojamento de protecao para a posicao em que devam funcionar. ¦ •9ss U ss •• •ss • • ss ss • • • 1 1 9 • • • • • • • ss ¦ • ss • • # e 1 e fit' 'i • • • e • • ••• • # • • • • 11 – "VEICULO.MOTORIZADO", de a– cordo com a reivindicacao um, caracterizado por possuir macaco hidraulico ou pneumatico, composto por um cilin dro cujo embolo e fixado em sua extremidade a um disco que e encaixado de forma a poder se movimentar sobre uma base tambem em forma de disco que e o proprio pi do macaco. 121 – "VEICULO MOTORIZADO", de a– i cordo com a reivindicacao um, caracterizado por pos– suir retrovisor externo ajustavel mecanicamente com– posto por espelho envolvido por capa aerodinamica fixa da por duas hastes paralelas que sao interiorizadas num recipiente cilindrico;, as ditas hastes sao denta– das internamente e se movem por acionamento manual de um botao que possui uma coroa dentada que faz mover al ternadamente as ditas hastes; o recipiente cilindrico que comporta as hastes e interiorizado a um cubo fixo a porta do motorista e possui coroa dentada que se en– caixa aos dentes externos do recipiente cilindrico fa– zendo–o mover–se no momento em que e acionada manual– mente a coroa. 13 – "VEICULO MOTORIZADO", de a– cordo com a reivindicacao um, caracterizado por pos suir retrovisor telescopico composto por espelho com face convexa que e montado dentro de um envolucro que e disposto internamente no paralama dianteiro, possuin do ainda um tubo que sai do paralama e vai ate o inte– rior do console, levando os feixes de imagens ate um segundo espelho tambem convexo que projeta a imagem re cebida ate um terceiro espelho fixado na parte externa do console; o terceiro espelho ja tem a imagem direita que foi captada externanente pelo primeiro espelho, projetando esta imagem direita ate o condutor, sendo a penas ele regulavel. 14 – "VEICULO MOTORIZADO", de a– cordo com a reivindicacao um, caracterizado por pos– suir bancos compostos por base de fixacao montadas so– M > ss ft t t • ss ss)• • • • • f ¦ • ss • • ss • « • • ss >4 •« •ss bre duas barras que possuem em sua extremidade pares de rodas com eixo ligado por molas; os pares de rodas sao encaixados em trilhos fixados no assoalho do vei– culo; sendo que as outras extremidades dos trilhos sao abaoladas e com furos que e por onde os bancos sao fi– xados aos pes traseiros atraves de parafusos; e estes sao fixados no assoalho do veiculo. 15 – "VEICULO MOTORIZADO", de a– cordo com a reivindicacao quatorze, caracterizado por possuir prolongador de assento composto por dois cilin dros paralelos internos ao banco que fazem o prolonga– dor se mover por acionamento manual quando puxado atra ves de puxador. 16 – "VEICULO MOTORIZADO", de a– cordo com a reivindicacao quatorze, caracterizado por possuir encosto ajustavel formado por dois dispositi– vos de ajuste de encosto fixados lateralmente sobre os trilhos do assento do banco e e composto por botao gi– ratorio que faz o dispositivo mover por acao manual se gundo as necessidades do condutor e possui trava para fixar o encosto; sendo que o dispositivo de ajuste do encosto alem de fazer mover o encosto no sentido para tras e para a frente, possibilita o movimento do encos to sobre o proprio dispositivo atraves da acao do cor– po do condutor. 17 – "VEICULO MOTORIZADO", de a– cordo com a reivindicacao quatorze, caracterizado por possuir encosto de cabeca formado por tres hastes pre– sas a um bojo com parafuso de fixacao; ao bojo se fi– xam duas hastes com extremidades terminando em um car– rinho que desliza sobre um trilho fixado na parte de tras do encosto, um parafuso pressiona o carrinho para dar firmeza a ele. 18 – "VEICULO MOTORIZADO", de a– cordo com reivindicacao um, caracterizado por possuir porta–estepe que e um compartimento composto por duas portas fixadas por dobradicas com molas de tensao so– rn ss ss > « f » » ss >• • ss • j • i ass ss • • ss • t • • ss I • 1 < < J « » 1 • ss4 ¦ •t **** ss• • ss ss ss « • ss ss • ss ssM • a t » a# ss ss bre o prolongamento do chassi; sendo a abertura do porta–estepe obtida quando se aciona atraves do painel, o cilindro hidraulico ou pneumatico fazendo com que o embolo se mova liberando dois fios presos a sua extremi dade fazendo com que as duas portas se abram. 19 – "VEICULO MOTORIZADO", de acor do com a reivindicacao um, caracterizado por possuir es tepe de tracao, composto de um estepe traseiro propria– mente dito conectado a um motor eletrico atraves de bra co e correia; ao motor eletrico.e conectado um cilindro hidraulico ou pneumatico que e fixado a projecao do chassi atraves de um bloco com roldana ligada a outro motor eletrico; este do tipo sem escovas com rotacao de ate no maximo 1809 totais; o pneu conectado a este sis– tema pode ser retirado para substituir um dos dois pneus traseiros, desta forma o conjunto portanto serve a tres funcoes: a de macaco elevador do conjunto traseiro; o de porta–estepe; e de tracao para estacio namento e/ou acostamento dispensando as tradicio– nais balizas; o motor eletrico sem escovas mencionado nesta reivindicacao possui chave colocada no painel que serve a inversao da rotacao deste, assim como o ou– tro motor eletrico tambem possui comando no painel. 20 – "VEICULO MOTORIZADO", de a– cordo com a reivindicacao um, caracterizado por possuir conjunto acionador do mecanismo de semiejecao, sendo a cionado pelo processo a seguir: – quando o veiculo se choca frontalmente, o parachoque dianteiro de formato aerodinamico, e empurrado para tras, neste caminho ele aciona dois botoes fechando o circuito eletrico que passando por outro botao do painel estando este fecha– do (acionado) encontrarao dois eletroimas (solenoides) no interior do conjunto do volante, fazendo com que pe– la acao eletromagnetica o volante se solte do seu con– junto no sentido do condutor que o esta segurando; con tinuando seu caminho, o parachoque aciona outro botao, este esta ligado ao circuito eletrico que vai acionar r ft I I ss« »t M • • • t> » (• • » ss • ss ss ft ft ft ft ss ftftftft ss1 ' ss– »• » ss ¦ ft os dois blocos fixados ao chassi assim formados: um ci– lindro sulcado fixo a barra do chassi traseiro e inte– riorizado a um cilindro oco fixo a barra do chassi dian teiro; o primeiro cilindro e mantido em sua posicao a– traves de garras que se encaixam em seus sulcos e estas sao pressionadas por acao de duas molas dispostas para– lelamente em dois trilhos; as garras liberarao o cilin– dro sulcado quando o circuito eletrico atingir os sole– noides fixados na barra do chassi que por acao eletro– magnetica puxarao as garras em sua direcao; quando as garras liberarem o cilindro, este e empurrado pela acao da mola de alta pressao contida no interior do cilindro oco fixado a barra do chassi dianteiro; para o caso do veiculo utilizar fonte pneumatica para alimentar os cir cuitos de comando ja citados, um duto pode ser ligado ao cilindro.oco substituindo ou fazendo conjunto com a mola no interior do cilindro oco sendo entao responsa– vel pela expulsao do cilindro sulcado para fora do ci– lindro oco; desta forma quando o segundo circuito ele– trico e acionado, o bloco do veiculo e espelido para tras num espaco que seja suficiente para proteger o con dutor e passageiro dos perigos da colisao frontal. 21 – "VEICULO MOTORIZADO", de a– cordo com a reivindicacao um, caracterizado por possuir portas de acesso que se abrem em sentido contrario ao convencional e de possuir

trinco de fechamento na parte inferior interna que se encaixa num trilho colocado no assoalho do veiculo que correra sobre o trilho do assoalho sem que as portas se abram, a nao ser por acionamento manual do condutor e/ou passageiro. [Source: Claim 1] ¦ • • • • • • • • • < ss < 1 • • • • • • • • • • • • • • • • • • ** CLAIMS 1–"MOTOR VEHICLE", that due to low product penetration aerodynamics the–traves of cuneiform and not conventional design, with chassis consists of two hollow bars willing–tas in parallel until the end of the body of the vehicle where they join to form a bar that leans toward ci ma, bending horizontally and extending to fo–ra of the body of the vehicle dilatacao, on your side. 2–"MOTOR VEHICLE", in accordance with the claim one, characterized by owning projecao chassis mounted aerofolio being composed of two vertical side wings that hold two ho–rizontais and the top wing has front end abaolada, acting inside three me–optional mechanisms to start of three rudders con vertical dicionadores are:–hydraulic drive mechanism that is composed of a cylinder inverted in whose embolos extremi dades are fixed flexible wire that does moving the mes reverse to le the wheel; –drive mechanism that pneumatico and similar to that mentioned above, differing only in the a–limentacao that instead of fluid auto lift, ICU–liza air; –electromagnetic drive mechanism composed of two solenoids that are connected flexible wire ends doing move the rudders for acionamen to the way to reduce the wheel. < • • • • • ' • • • • • • • ss 3–"MOTOR VEHICLE", in accordance with the claim one, characterized by possessing electric command rack key whose activation if the by handling the wheel and composed of a horizontal Rod bite at the bottom, having the ends two claws that slip by four tracks arranged in parallel two by two, in the vicinity of the Rails ends are placed electrical wires there–various types by battery the contact is made when the key slides and play pieces that close the circuit. 4–"MOTOR VEHICLE", in accordance with the claim one, characterized by having me servo mechanism in dian suspension suspension which and back. 5–"MOTOR VEHICLE", in accordance with the claim four, featured by pos–suir servant front suspension consisting of two dros cilin with bubble centred by springs mounted on side in–body suit that do move through there–. hydraulic or pneumatic mentacao–your arms in shape of "V" in whose ends are fixed to the amortecedo ch. 6–"MOTOR VEHICLE", in accordance with the claim four, featured by pos–suir servant rear suspension consisting of two death were aware that in peca only are divided into cylinder with bubble centered by spring, fixed by arm, the pro–jecao chassis, and the shock itself, that connected directly the wheels; the cylinders are the hydraulic or pneumatic limentados–, and the death–generators, compounds, are attached to the chassis by two projecao arms that adjust to the movement of the death were aware through springs. 7–"MOTOR VEHICLE", in accordance with the claim one, characterized by own hydraulic circuit that drives the servo mechanism> • • • • • • • • • • • • • ss ss • ss • ss ss • • front and rear suspension and composed of:–li–nha supply connected to five valves, four–way type three positions (4/3) with four valvu las have free return to the centre tank and has blocked Center the valves of cen–tro open are triggered when the wheel rotates, making–of slide the key rack, causing the electric circuit that required closing to the control of the acionara valves alternating triggering of solenoids, making switching power lines of the four–cylinder connected to cen valve amortecedoresa–tro closed and triggered manually by co's independent circuit Once the button is contained in the Panel that allows the superior performance of the key rack? the surge runs the handling of other Wed–tro for hydraulic or pneumatic power, making them. move the embolos cylinders alternately in or out as needed required pe it kind of circumstance in which travel the vehicle. 8–"MOTOR VEHICLE", in accordance with the claim a characterized by fitting the rear wheels composed of damper whose bubble connected to a disk and this,–through–bolts binds to a pot that fits to it–the wheel for internal fixation of screws. 9–"–motorized VEHICLE", in accordance with the claim one, characterized by have mounted on the rim of the tyre–filling of hard rubber rim shaped, being grooved for reasons of arre fecimento. 10–"MOTOR VEHICLE", a–gree with the claim one, characterized by possessing long–range beacons are placed in the bottom of the same and consist of a rod connected to an engine he trico that makes this rod slide the headlights of its housing protection for the position to work. ¦ •9ss U ss •• •ss • • ss ss • • • 1 1 9 • • • • • • • ss ¦ • ss • • # e 1 e fit' 'i • • • e • • ••• • # • • • • 11 – "VEICULO. MOTORIZED "by a–gree with the claim one, characterized by own hydraulic or monkey pneumatico, composed of a bubble and fixed cilin dro which at its end to a disc and attached so that you can move around on a disc that also and the own IP of the monkey. 121–"MOTOR VEHICLE", the–i gree with the claim one, characterized by pos–suir mechanically adjustable with external rearview–mirror surrounded by post cover fixed by two aerodinamica parallel rods that are absorbed in a cylindrical container, these rods are denta–internally and move by manual activation of a button that has a bite that inspires al ternadamente said stems; the cylindrical container which holds the rods and internalized to a fixed port hub driver and has toothed Crown that en–box to the external container cylindrical teeth fa–zendo–the move at the time and thrown the manual Crown. 13–"MOTOR VEHICLE", a–gree with the claim one, characterized by pos suir mirror telescopico composed of mirror with convex face and mounted within a housing that and willing internally in the front fenders, the possuin still a tube that exits the mudguard and go to the integrated console back, taking bundles of images until a second mirror convex also projecting the image re through a third mirror fixed on the outside of the console; the third mirror already has the right image that was captured by the externanente first mirror, projecting this image right up to the driver, and the feathers he adjustable. 14–"MOTOR VEHICLE", a–gree with the claim one, characterized by pos–suir banks composed of fixation base mounted so–M> ss ft t t • **) • • • • • • • • ¦ f ss • ' • • ss> 4 • «• ss bre two bars that have on their end pairs of wheels with shaft connected by springs; the pairs of wheels are fitted on Rails laid down on the floor of the vei–culo; the other ends of the rails are abaoladas and with holes and where banks are fi–mounted to rear through screws pes; and these are laid down on the floor of the vehicle. 15–"MOTOR VEHICLE", a–gree with claim 14 characterized by possessing seat Protractor consisting of two parallel qualifications frameworks the Bank internal detaching and making prolonged–pain move by manual override when pulled atra ves of handle. 16–"MOTOR VEHICLE", a–gree with claim 14 characterized by having adjustable backrest formed by two external adjustment of backrest laterally fixed on the rails of the seat cushion and composed of gi–ratorio button that makes the device move by manual action if the driver needs to and has to secure the backrest latch; the backrest adjustment device and make moving the backrest towards back and forward, allows the movement of leaning against to about the own device through the influence of colour–po. 17–"MOTOR VEHICLE", a–gree with claim 14 characterized by possessing seat head formed by three rods pre–sas to a bulge with screw fixation; the bulge if fi–xam two rods with ends ending a car–wine that slides on a rail fixed to the back of the backrest, a screw presses stand to give firmness to it. 18–"MOTOR VEHICLE", a–gree with claim one, characterized by steppe that

holder and a compartment consisting of two doors secured by hinges with tension springs so–rn **> «f»» ss> • • ss • j • i • • ss • t • • I • J < < 1 «1» • ss 4... • t ***** • *** «• ss ss • ** M • t» # ** bre chassis extension; being the opening of the door–steppe obtained when it fires through the Panel, the hydraulic cylinder or pneumatico causing the bubble move by releasing two wires attached to your extremi dade causing the two doors to open.
19–"MOTOR VEHICLE", in accordance with the claim one, characterized by possessing es tepe of draughts, composed of a spare butt own–mind said connected to an electric motor through bra and belt; the electric motor and a hydraulic cylinder attached or fixed to projecao pneumatico and the chassis through a pulley attached to another electric motor; This brushless type with rotation of up to a maximum total 1809; the tire plugged into this sis–theme can be removed to replace one of the two rear tires, this way the set so it serves three functions: the rear lift monkey; the door–steppe; and draughts for estacio and/or storage side dispensing the traditional nais beacons; the electric motor without brushes mentioned in this claim has key placed on the dashboard which serves the reversal of rotation of this, as well as the electric motor or tro also has command in the Panel.
20–"MOTOR VEHICLE", a–gree with the claim one, characterized by having set semiejecao engine starter, being the source for the following process:–when the vehicle crashes head–on, the front bumper aerodinamico format, and pushed back, in this way it triggers two buttons closing the electric circuit that going through another Panel button being this close–(fired) two eletroimas he's too smart (solenoids) inside the wheel assembly, causing pe her action flat lock the wheel let go of your con–together towards the driver that this holding; con tinuando your way, the bumper triggers another button, connected to this electric circuit that will trigger r ft I I ss «» t M • • • t>» (• • • ss ' ss ft ft ft ft ss ftftftft ss ' ss–1» •» ¦ ft two blocks attached to the chassis thus formed: a ci–lindro grooved fixed chassis rear bar and inte–riorizado to a hollow cylinder attached to the chassis as a Carpenter; the first cylinder dian and kept his position a–beams, claws which fit in their grooves and these are pressed for action of two springs arranged for–Assembly in two tracks; liberarao the cilin claws–dro grooved when the electric circuit to achieve the sole–noides set in the chassis by electro–magnetic action puxarao the claws in your direction; When the jaws release the cylinder, this and pushed by the spring action of high pressure contained inside the hollow cylinder attached to the chassis front bar; in case of vehicle use pneumatic source to feed the cir command cuitos ja, a duct can be connected to the cilindro.oco by replacing or making together with the spring inside the hollow cylinder being then responsibility for the expansion of this camp of grooved cylinder level out of the ci–lindro hollow; This way when the second circuit he–trico and fires, vehicle Pack and get back in that space espelido is sufficient to protect the con – and dangers of passenger frontal collision. 21–"MOTOR VEHICLE", a–gree with the claim one, characterized by possessing access doors that open in the conventional way and having lock latch on the bottom that fits in an internal rail placed on the floor of the vehicle to run on the floor rail without the doors to open, except for manual override of the driver and/or passenger.

0) US2482279A – REVERSIBLE CRUSHER WITH PIVOTALLY ADJUSTABLE CH...

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Title:	REVERSIBLE CRUSHER WITH PIVOTALLY ADJUSTABLE CHUTE AND BREAKER PLATES
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Probable Assignee:	JEFFREY MFG CO
Assignee(s):(std):	JEFFREY MFG CO
Assignee(s):	THE JEFFREY MANUFACTURING COMPANY
Inventor(s):(std):	LEMMON ALEXIS W ; STRAWN ORVAL R
International class (IPC 8–9):	B02C13/282 (Advanced/Invention); B02C13/00 (Core/Invention)
International class (IPC 1–7):	B02C13/282
CPC:	B02C13/282
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Abstract:
Source: US2482279A are aligned with the openings in the intermediate plates and through which the pins 40 are inserted and locked In the body. In the embodiment ofthe invention shown, each pln ll pivotslly carries a. pair of material reducing swing hammer elements ll. Thehammersll areeachcomprlsedofapalr of legs I2 connected by a. cross head It that prof¢!'lld$ to one side of one of the legs. The underneath or inside faces of the cross heads are shaped to form abutments ll prwenting relatively large faces or abutting areas that are adapted to engage the bases or sides of the triangular intermedlate plates 3| which form the periphery of the rotor body II. The shape of the plates I3 and the abutments I! of the cross heads ll permitthe hammers ll to swing through an arc of approximately 90 degrees either In a clockwise or a counter–clockwise direction from their normal operating positions seen In Flgs. 3 and 5, this because the rotor may be driven either In a. clockwise or counter–clockwise direction. The large amount of movement of the swing hammers ll ls particularly advantageous in preventing damage to the reducing apparatus In the event that _a large piece of material should enter the reducing apparatus, for example. and not be fracturedby hammer impacts. In such case the hammers 4|' may swing and recede inwardly wlthln pockets I9 provided In the rotor body bythe shape of intermediate plates until their abutments I9 engage the abutments or outer faces 'of the Infermediate plates I8 to limlt their swinging movement and the hammers will pass the piece. The hammers In swinging from their normal radially extended positions into the pockets 39 materially decrease the overall diameter of the rotor 2 I. The cross heads ll of the swing hammers ll extend sidewardly, as seen at H. from above one of the legs 42 and a pair of hammers ll ls secured on each pin 40 with their extended portions ll adjacent one another and overlapping the center intermediate rotor plate ll. Thus In et!ect the cross heads 4! of eacl1.pa.l.r of hammers ll form a continuous breaker bar but either half of sald bar is capable –of absorblng abnormal shocks by yielding from its normal –operating posltlon. While we have described each pin 40 as carrying a pair ol' swing hammer elements ll, it is to 'he understood that any number of such elements as desired, depending upon the width of the rotor. may be used. The end walls ll of themlln frame lll and the closure plates I1 and ll form end walls of a material reducing chamber 41 In the bottom of which the rotor 22 operltes. Preferably the Inner sides of these walls are protected by replaceable wear resistant plates or liners ll that arefastened thereto by a plurality of bolts ll. The liners I5 cooperate to form recesses 4| in which the end discs I2 of the rotor body 12 are receded. Thus due material moving through the apparatus adjacent the liners will not escape from the reducing chamber past the end discs I! but will be directed downwardly through the bottom of the reducing chamber 41. A feed chute ll for properly directing material into the reducing chamber where it will be acted upon by the swing hammers 4| spans the tops of the end walls I3 and its end walls I4 are in vertical

alignment with the lnslde surfaces of the end walls II. ihewallsllareiangedatliandthese flanges are received by the top nanges of the closure plates ll to which they are secured by bolts Bl. The top of the inlet chute ll is also hanged outwardly to receive a. suitable conduit or hopper, not shown, through which material is supplied to the chute. Referring particularly to Fig. 3 of the drawings, the sheet metal walls ll of the feed chute III form in cross section a segment of a cylinder, the top or which ls opened to form a material lnlet or throat ll. Plvoted within the chute and swingable from slde to slde therein is a gate or combination detector Rnd breaker plate member or unlt Sl that ls adapted to direct material entering the reducing apparatus selectively toward either side of the reducing chamber depending on the direction of rotation of the rotor ll and to form a movable wall for the top of the reducing chamber |'| for each position of adjustment thereof. The gate or combination detlector and breaker plate member or \mit 5| ls generally trlsngulsr ln cross~sectlon and is of heavy welded plate construction Including similar heavy side plates ll that are welded to a shaft 6| and extend radially therefrom at an acute angle to each other. The outer ends of the plates I1 are welded to an arcuah base plate il that ls curved to nt closely to the arc of the walls of the inlet chute. ‘The closure plates I8 and end walls ll of the chute cooperate to form aligned bearlngnhrough which the ends of the shaft ll extend and ln which the gate I5 is plvoted. ‘Preferably both ends of the shaft il protrude outwardly beyond the nausea ls of the closure plates I1 and I8 and are provlded with socket type cross head handles 53 into or over which a bar or lever may be inserted for enabling an operator to swing the gate El from Side to side ln the chute. The gate rests upon the top edges ll of the replaceable llner plates 45 that are attached to the inside ofthe closure plates ll. The arcuate side walls 52 of the feed chute are provided at their centers with outstanding ~ _ reinforcing plates E2 that extend between the top flanges of the chute and the flanges BG and are welded along their edges to the flanges and arcuate walls.. In order to lock the gate or deilector member 5| in either of its operating positions a key 6| is provlded that islbolted to either of the outstanding reinforcing plates I2 of the feed chute and projects inwardly through an opening ln the arcuate wall I2 thereof and into an opening formed in the curved wall ll of the gate, z,4ss,avo From the description of the device thus far given it will be seen that the upright end members of the main frame are lined and form the ends of the material reducing. chamber of the apparatus into which material to be reduced is fed through a chute that includes an adjustable deflect/or 55 for deflecting the material toward either side of the reducing chamber and for forming a movable top wall of the chamber which also acts as a breaker plate. The unit 55 will be swung counter–clockwise to a position on the other side of chute Sl! similar to that shown in Fig. 3, upon reversal of the rotor 22. It will also be seen that the reducing rotor of the apparatus is contained below or in the bottom of the reducing chamber and that the sides of thc chamber frame I0 are open above the side frame members |5. The sides of the apparatus are closed by breaker plate assemblies 10 that are pivotally carried adjacent their tops by the end walls I3 of the main frame IU. Each breaker plate assembly 10 :lncludes a cover, rack, or frame 1| the end walls 12 of which are adapted to telescope into the main frame I0 of the reducing apparatus between the end walls I3 thereof. The covers or frames 1| are carried by cross shafts 13 that extend through aligned openings 14 in the ends of the cover 1| and form trunnions that are received by sockets 15 formed by slots or notches in the tops of the end walls I3 of the main frame ID. The ends of the cross shaft are reduced in diameter to provide shoulders 16 (Fig. 2) that abut the inside faces of the walls |3 for preventing endwise movement of the cross shaft 13 relative to the main frame ill and slotted locking members 11 secured to the outside of the main frame cover and slots or notches 15 in the end walls and prevent upward movement of the cross shafts 13 in the frame. Referring to Fig. 4 wherein one of said breaker plate assemblies 10 is seen in section, the cross shaft 13 pivotally carries a primary combination deflector and breaker plate or combination feed chute and breaker plate unit SD. The primary breaker plate B0 may be a casting and it includes a recessed wall 8| which extends radially from the pivotal axis of breaker plate 8 , which is the axis of cross shaft 13. Said breaker plate BU also includes an integral arcuate wall 82 that extends –ill A1 peripherally from the base or outer end of the 53 wall 8| into the cover or frame '85, V/'ails 8| and 82 are connected at their ends by integral walls 83 that include a series of arcuately aligned openings 95 in which a pin 85 is selectively fitted. Pin S4 extends through both of the end walls S3 into "" aligned openings in the end Walls 12 of the frame, rack, or cover 1| and is secured in position by cotter keys 86 that abut the walls 83. Arcuate slots 81 (Fig. 1) are provided in the end walls |15 of the main frame to permit removal of the pins 54 in all positions of adjustment of the covers, frames, or racks 1l_ Preferably the recessed face of the member il! has a renewable wear plate S35 inserted therein. It may be pointed ou here that the primary breaker plates BU are mounted to both the main frame |0 and to the covers or frames 1| of the breaker plate assemblies 19 through the shafts 13 and pins 84 and that the breaker plates BD cooperate to form portions of the side walls of the reducing chamber 131 of the apparatus. It may also be pointed out that the shafts T3 support the primary breaker plates SEI so that they cooperate with the feed chute 50 and depend below and to fi() each side of lt. The functions and advantages of this structxlre will be discussed hereinafter. When rotor 21 travels clockwise, left–hand primary breaker plate Ill will be swung inwardly to form a feed chute, while right–hand breaker plate will be upright, as illustrated in Fig. 3 of the drawings. For reverse rotation of rotor 22, chute will he reversed, left–hand primary breaker plate 80 will be adjusted to vertical position, and right–hand breaker plate 80 will be swung lnwardly. Curved secondary breaker or crusher plates 98 are mounted to the covers or frames 1| of the breaker plate assemblies 1|l. Each of these curved plates 91| is plvotally carried by a shaft 9| fixed at its ends to the end walls 12 of the assembly frames 1| below the primary breaker plates 80. The bottom wall 92 of the assembly frame has an upright bifurcated bracket 93 welded thereto carrying a trunnioned head or cross piece Sl that freely receives a bolt 95. Bolt 95 is formed to include a cross head 96 that is secured in a recess in the back or outside of the secondary breaker plate 90 and is secured therein by straps 91 that are bolted to the breaker plete. Each bolt 95 carries a pair of nuts 98 that adjustably lock it to a head or cross piece 94. Referring to Fig. 4 it will be seen that the positions of the secondary breaker plates 90 can be readily shifted with respect to the assembly frames 1| by adjusting the positions of nuts BB. When the machine is assembled access may be had to the nuts 58 through openings 98 formed in the backs of the frames 1| and access to the cotter keys 86, which must be removed to change the position of the primary breaker plates 80, may be had through openings IDD. Preferably Upenings S9 and |00 are closed by doors |01 that are bolted to the covers. Depending from the bottom wall 92 of each of the assembly frames 1| is a pair of spaced legs |05 that are notched in their lower ends at |08 for receiving cross pieces H36 that are similar to cross pieces 94. The tines |01 of the yokes or notches |08 are pierced at |08 (Fig. 4) for receiving removable pins ||ll that

secure the cross pieces |06 in the legs ||I5. Referring HOW |50 Fig. 3 it will be seen that each of the cross picces IDS carries a bolt ||| that is similar to bolts 95 through which the positions of secondary breaker plates SIU are adjusted by setting nuts ||5. The head ||2 of each bolt III is received in an opening H3 in the low frame wall I5 and is secured therein by lugs H4 that are bolted to the member |5. Extending across and rigidly connected to the tops of the cross frame members I5 are outwardly, upwardly sloping material directlng cross shelf members IIE that form the tops of the openings H3. In operation a small amount of reduced material may find its way between the primary and secondary breaker plates and between the side walls of the assembly frames and the breaker plates. For this reason the telescoping Walls 92 and the side shelves H6 are sloped outwardly and upwardly for directing said material through the outlet openingg I2 in the main frame. Resilient sealing strips |23 are provided for sealing the top walls of the covers 1| to the feed chute 50. In summary it may be pointed out that the frames 1| of the breaker plate assemblies 10 are pivoted to the main frame I0 and their positions are adjustable through the bolts ||| and nuts H5 with respect to the main frame HJ and the rotor 2| of the reducing apparatus, the primary and secondary breaker plates, of course, moving n a,4ss,a':a v 7 ' with the frames 'II as they are adjusted. The posltlons of both the primary and secondary plates ID and 9II, respectively, are adjustable Independently of each other relative to the frames 'H. Each breaker plate assembly 1II may be removed bodily from the main frame I0 by removing its associated locklngmembers 11 and lifting the assembly upwardly and outwardly. since most or the top or breaking edges' II`I of the secondary breaker plates _SU are exposed no a great amount of abuse by the impact of material heing reduced we have found it desirable to form the secondary breakers to include renewable sections I I8 that are bolted thereto. The secondary breaker or grlnder plates QII cooperate with the swing hammers 4| of the rotor to crush and grind material and to enhance their operation we have provided in their faces a series of horizontal serrations or grooves II9 which provide the plates with additional crushing surfaces. Because the pins III cannot be withdrawn from the rotor 2| to permit removal of the swing hammers II without interfering with the rotor shaft bearing blocks 25 we have provlded open upstanding reinforcing lugs IIII on the caps I2I of the bearing blocks 25. Viflth such caps a repairman may remove the swing hammers by removing plates |22 that cover the openings 24 in the sides of the reducing chamber and after releasing the pins III from the rotor end discs I2 withdraw them sidewardly through the openings III in lugs III of the bearing block cal–IS. the lugs IIII providing necessary strength in the bearing block caps III. In Fig. 5 we have shown a modilled form of our invention. In this embodiment the secondary breaker or crusher plates ISU terminate above rigid breaker bars IIII that extend across and are secured in the main frame III by mounting mechanisms I3I (Figs. 1 and 2) that are formed as a part of the end walls I3. Below the breaker bars I 38) is positioned an arcuate screen II! that encloses the bottom of the rotor and is carried in channels I33 formed by the bottom edges |25 of the lowermost liner plates I5 and arcuate liner plates |21 that are welded to the end walls I3 of the main frame III_ The embodiment of the invention shown and described in Figs. 1 through 4 may be readily converted to the embodiment shown in Fig. 5 by substituting the secondary breaker plates ISI for the secondary breaker Plates 90 and by inserting the breaker bars |30 and the arcuate screen II! in the mounts ISI and channels III, respectively. It wlll be seen that the positions of the secondary breaker plates |50 may be adjusted as desired to expose more or less of the breaker bars III whlch, of C0l1‘S€, will change the reducing characteristics oi the apparatus. In operation with the parts of the machine positioned as seen in Flg. 3 and with the rotor turning in a clockwise direction, material flowing in the feed chute 5|I is guided by the gate or detlector and is dellected toward the left side of the reducing chamber 4'| and against the left primary breaker or dellector feed plate B0 which Is positioned to dellect or guide the material toward the center of the reducins chamber. The material slides or falls sldewardly from the primary breaker plate IU, which now is cooperating with the chute 50 to form a part thereof, into the path of the whirling rotor whereupon it is struck by the swing hammers II _ The material may be sufficiently or partly reduced hy impact of the rotor and it will In any event be knocked. lmpelled or thrown to the right in the reducing chamber. The material thus thrown sidewardly In the reducing chamber 41 by the rotor: will strike the right hand primary breaker I0 by which it wlll be further reduced by impact therewith. Some of the material will be dellected from right hand breaker plate II upwardly to strike the horizontal plate 5`I of dedector 5| and be further reduced thereby. The materlal that has been sumciently reduced, for the most part, will fall or pass downwardly and be dlscharsed from the apparatus through the outlet opening I2 in the bottom of the main frame. That material which was not sullclently reduced by the impacts of the hammers 4| or by collision with the walls of the reducing chamber will upon striking the walls glance therefrom and be thrown back into the path of the swing hammers. Less frlable plecm of material wlll even.. tually and their way to positions between the rotor 2| and the secondary breaker or grinder plates 9| wherein the blows of the swing hammers become more eifectlve for reducing or grinding the material. Should a piece of material that greatly resists reduction find its way between the secondary breaker plate and the rotor the swing hammers will shift from their normal operating positions to reduce or decrease temporarily the radius of the rotor where the sw–Ing hammers engage the resisting piece of material. Thus the material may pass through the reducing apparatus wlthout damaging lt. For reverse rotation of rotor II, gate EI will be swung to the opposite side of chute 50, left–hand primary breaker Il will be adjusted to vertical position, and righthand breaker 80 will swing inwardly. Their operation will be evident from the above description. In the embodiment shown In Fig. 5 wherein the screen I!! is provided. a Piece of material that reslsts reduction as above described will be carried by the rotor. breaker plates, breaker bars and the screen back to the reducing chamber to be further acted upon above the rotor. ' ' In our improved material reducing apparatus the breaker plate assemblies may be adjusted to any of many and various angular positions which, of course, cause material being reduced to glance and bounce in substantially predetermined directions in the reducing chamber according to the setting of the breaker plates. For example, by adjusting the position of the assembly frames 1| outwardly with the primary breaker plate 8| in the position shown in Fig. 4 and then adjusting the heel or bottom portion ol’ the secondary breaker or crusher plate to a position wherein It is closely adjacent the rotor, the side wall so adjusted bulges outwardly at its horizontal center. Such adjustment of the parts tends to throw more material between the secondary breaker or grinder plate and the swing hammers. It will be seen that since the positions of the primary and secondary breaker plates are independently adJustable, the wall above described may assume many various shape characteristics to affect the reducIng functions of the apparatus. Another advantage of our material reducing apparatus resides in the adjustability of the grinder–plates BI] and |90 to compensate for the gradual reduction in length of the swing

hammers |I caused by wear. ` The curved wall 82 of. the primary breaker plate may function as a deflector for material that is carried over the screen Ill by the hammers ll. In such case the deilector wall 82 directs the material toward the opposite walls of the reducing chamber or directly into the path ol' the reducing hammers | I. ` The direction of rotation of the rotor 2| may be reversed in which event it is generally, but not necessarily, desirable to reverse the positions of the right and left hand combination chute and breaker plates 89 and to shift the position of the combination defiecbor and breaker plate unit in the feed chute by swinging it counter–c1ockwise to 2. reverse similar position. Should the direction of the rotor be reversed when the parts of the apparatus are adjusted as seen in Fig. 3, as it is under certain conditions, then material sliding or falling from the primary breaker or combination deiiector and breaker plate BD is knocked by the swing hammers 4| directly against. the left hand secondary breaker or grinder plate SU and crushed, One wall of the combination deflector and breaker unit 55 in the feed chute EE! forms the top reducing or breaker plate of the reducing chamber 41 when the unit is positioned in either the right or left hand side of the chute. Another important feature of our invention is that for either position of adjustment of the chute means 55 and 80 the material being reduced is so delivered to be struck and impelled by the swing hammers 4| that substantially all of said impelled material will travel in a direction away from the eiective feed opening to the reducing chamber. This is particularly important when damp or sticky material is being treated because it has been found that there is a great tendency for such material to choke up the feed opening, if any substantial part of it is impelled toward such feed opening or inlet to the feed chamber. This problem has been particularly dimcult in connection With iron ore_ This characteristic will be evident from a consideration of Fig. 3 because of the detiecting action afforded particularly by the combination breaker and deiector plate which in part extends over the rotor 2| and guides material as it reaches the position where it is struck by a hammer 4| so as to impel it against the working top breaker plate 51 or the breaker plate 88 of the right–hand unit 80. A similar situation prevails for reverse rotation of rotor 2| with the chute means reversely adjusted as above described. From the foregoing description of our improved material reducing apparatus and its functions it will be readily seen that we have provided a reducing apparatus that is reversible and highly versatile in reducing materials of various characteristics. Obviously those skilled in the art may make various changes in the details and arrangement ef parts without departing from the spirit and scope of the invention as defined by the claims hereto appended and we wish therefore not to be restricted to the precise construction herein disclosed. Having thus described and shown an embodiment of our invention, what we desire to secure by Letters Patent of the United States is: 1. A reversible reducing apparatus having a reducing chamber, a feed chute including a. combination defiector and breaker plate plvotally mounted therein having similar walls extending radially from a plvoted axis at an angle to each other, said combination deilector and breaker plate being adjustable tn bring the angular walls IBIECUIVSIY into deflecting and breaker plate operating positions, similar combination detector and breaker plate means forming opposite wall portions of said reducing chamber, and means for swinging either of said second named combination breaker plate means to a position to di– rect material deiiected by said Hrst named combination deiecbor and breaker plate toward the center of the reducing chamber while the other acts as a breaker plate and vice versa depending upon the direction of operation of the reversible reducing apparatus. 2, A combination breaker and deflector unit for use with material reducing apparatus, said combination breaker and defiector unit including a. pair of heavy plates extending radially from an axis at an acute angle to each other, a wall plate integral with and extending peripherally from the outer edges of said first named plates, and wall means for mounting the unit to swing about said axis, the outer surfaces of both said heavy plates acting selectively as guiding dedectors or breaker plate surfaces. 3. A reversible crusher having a main frame and including a. material reducing chamber, a reversible reducing rotor in said chamber, 5. feed chute above said chamber, a combination deiiector and breaker plate pivotally mounted in said feed chute having similar walls extending radially from a. pivoted axis at. an acute angle to each other, said combination defiector and breaker plate being adjustable to bring the angular walls selectively into material guiding, deiiecting and breaker plate operating positions, breaker plate assemblies forming the sides of said reducing chamber, each breaker plate assembly including 2. frame 1TlOVab]y mounted on said main frame and each carrying similar combination breaker plate and chute means and similar erusher plates, means for adjusting the positions of said assembly frames, means for independently adjusting the positions of said crusher plates, and means for individually swinging either of said combination breaker and chute means to a position to direct material toward the rotor While the other is in an upright position and acts as a breaker plate and vice versa, the positions of said combination deiicctor and breaker plates in the chute and the combination breaker plate and chute means in the reducing chamber depending upon the direction said rotor is to be driven.

0) US2910887A – COLLAPSIBLE AND ADJUSTABLE STEERING COLUMN

225) Family number: 22382328 (US2910887A) © PatBase

Title: COLLAPSIBLE AND ADJUSTABLE STEERING COLUMN

Priority: US19560602794 19560808

Family:

Publication number	Publication date	Application number	Application date
US2910887 A	19591103	US19560602794	19560808

Probable Assignee: HELMS JAMES D H

Assignee(s):(std)**:** HELMS JAMES D H

Inventor(s):(std)**:** HELMS JAMES D H

International class (IPC 8–9)**:** B62D1/18 B62D1/184 B62D1/189 B62D1/19 (Advanced/Invention); B62D1/18 B62D1/19 (Core/Invention)

International class (IPC 1–7)**:** B62D1/18

CPC: B62D1/184 B62D1/189 B62D1/192

European class: B62D1/184 B62D1/189 B62D1/18D1 B62D1/19B

US class: 74/493

Classification Explorer

Cited documents: US2836079 A, US2828646 A, US2770981 A, US2716355 A, US2639626 A, US2511165 A, US2140319 A, US2079536 A, FR711605 A,

Forward Citations: US8240424, US6279414, US5820163, US4890505, US4811921, US4495834, US4424721, US4317387, US4033158, US3799569, US3776062, US3459063, US3307420, US3283604, US3258988, US3245282, US3216521, US3176537, US3170711, US3167971, US3144785, US2009139597, JP50128896, JP2013193508, EP1070651, EP0448246, DE2101018, DE1530759,

Abstract:
Source: US2910887A (Claim 1) 1. The combination with a steering mechanism for wheeled vehicles with a steering column having Hrst and second telescopically interconnected tubular shafts, a telescopic steering rod extending longitudinally of and within the first and second shafts and being journalcd in the distal ends of the first and second shafts, a steering wheel fixed to one end of said steering rod, means to connect the other end of the steering rod to a steering linkage, first and second means cooperatively urging said first and second tubular shafts to relatively extended positions, means tixedly supporting one of said tubular shafts in iixed relation to said vehicle, the other tubular shaft being adjacent to the steering wheel and being axially movable relative to said iixed one of the tubular shafts, means limiting the extent to which the first and second tubular shafts may be extended and also yicldably restraining said hrst and second tubular shafts from rel~ ative axial movement and said lirst urging means having lesser inherent force than said second urging means whereby, sudden impact of the vehicle will cause the operator thereof to apply sufficient pressure to the steering wheel to overcome said first urging means and cushion the initial movement of the steering wheel and whereby the second urging means will further absorb the shock of movement of the steering wheel under a greater pressure when said steering wheel has moved a predetermined distance relative to the fixed tubular shaft.

0) US3720085A – PICK PROOF LOCK

226) Family number: 7237505 (US3720085A) © PatBase

Title:	PICK PROOF LOCK
Priority:	US19710179674 19710913

Family:

Publication number	Publication date	Application number	Application date
US3720085 A	19730313	US19710179674	19710913

Probable Assignee:	ZUCCA M
Assignee(s):(std):	ZUCCA M
Assignee(s):	ZUCCA M US
Inventor(s):(std):	ZUCCA M
Inventor(s):	ZUCCA M US
International class (IPC 8–9):	E05B35/00 (Advanced/Invention); E05B35/00 (Core/Invention)
International class (IPC 1–7):	E05B19/08 E05B35/00
CPC:	E05B35/00 Y10T70/7565 Y10T70/7593 Y10T70/7847 Y10T70/7932
European class:	E05B35/00
US class:	70/35.8 70/358 70/403 70/419 70/491
Classification Explorer	
Cited documents:	US504262, US2142610, US2044534, US1385889, US1262809, US1064313,
Forward Citations:	US4981027,

Abstract:
Source: US3720085A A pick proof lock assembly in which an annular housing or body member having a plurality of axial grooves telescopically receives a cylinder having rows of radially extending lug projections receivable in the body grooves. The cylinder is connected to a bolt actuating mechanism in any conventional manner with rotation of the cylinder in the body effecting bolt movement for locking and unlocking a door. The cylinder is normally prevented from rotation in the body by engagement of one or more of the lug projections with the side walls of the grooves. A key is used to axially move selected ones of the key projections into alignment with transaxial peripheral notches communicating with an associated groove, and when so aligned, further key rotation will permit rotation of the cylinder for unlocking operation. The non–selected projections will already be normally aligned with such peripheral notches. As a further feature, a plurality of short dummy peripheral notches may be provided which are normally aligned with the selected operative lug projections, such notches not being sufficiently long to permit operative cylinder rotation, but their presence is intended to thwart any person attempting to pick the lock, since such person could not ascertain whether a lug projection was aligned with an operative or a dummy notch.

0) US5493880A – STRUCTURE OF LOCK MOUNTING RACK FOR THE SHIFT L...

227) Family number: 12402390 (US5493880A) © PatBase

Title: STRUCTURE OF LOCK MOUNTING RACK FOR THE SHIFT LEVER OF A CAR

Priority: US19940257131 19940609

Family:

Publication number	Publication date	Application number	Application date
US5493880 A	19960227	US19940257131	19940609

Probable Assignee: JANG JAW JIA

Assignee(s): JANG JAW JIA

Inventor(s):(std)**:** JANG JAW JIA

International class (IPC 8–9)**:** B60R25/00 (Advanced/Invention); B60R25/00 (Core/Invention)

International class (IPC 1–7)**:** B60R25/06

CPC: B60R25/066 Y10T16/5323 Y10T16/54095 Y10T16/5535 Y10T16/557 Y10T403/32262 Y10T403/553 Y10T70/454 Y10T70/5735 Y10T70/5934 Y10T70/7757 Y10T70/8838

European class: B60R25/06D

US class: 16/239 16/353 16/381 16/386 248/558 403/294 403/84 70/202 70/247 70/387 70/39 70/461

Classification Explorer

Cited documents: US957033 A, US5372019 A, US5295375 A, US5230231 A, US5228320 A, US4895333 A, US4693099 A, US4630333 A, US2820669 A, US1743331 A, US1039576 A,

Forward Citations: WO09037686, US9551499, US9323237, US9199318, US9133651, US9079545, US8979446, US8713759, US8634951, US8532809, US8287215, US7823425, US6447043, US2016002956, US2015301559, US2014091694, US2012168482, US2009249845, US2008256993, US2008145163, US2008078732, US2003086756,

Abstract:
Source: US5493880A The improved structure of a lock mounting rack includes a receiving seat for receiving a lock, a plurality of connecting rods and position limiting rods; and further includes a card insertion type lock for an automatic or a manual shift lever, the lock further has a housing, a lock seat, a locking mechanism, a latching mechanism and an insertion type locking card; insert the locking card into the housing, the lock can be unlocked thereby, such locking card can increase the safety in duplicating–proofing and is easier for carrying in a pocket than a conventional key; the rack can suit various types of the seats for the shift levers in various types of cars, the cost of moulding thus is largely reduced.

0) ES2040175A – DEVICE FOR BONE ELONGATION. APARATO PARA ALARG...

228) Family number: 18790777 (ES2040175A) © PatBase

Title: Device for bone elongation.

Priority: ES19920000461 19920302

Family:

Publication number	Publication date	Application number	Application date
ES2040175 AA	19931001	ES19920000461	19920302
ES2040175 BA	19940516	ES19920000461	19920302

Probable Assignee: GOMEZ CAMBRONERO VICTOR JOSE

Assignee(s):(std)**:** GOMEZ CAMBRONERO VICTOR JOSE ; MALLACH FORNER JOSE MANUEL ; MAYA SEGRELLES CARLOS

Inventor(s):(std)**:** GOMEZ CAMBRONERO VICTOR JOSE ; MALLACH FORNER JOSE MANUEL ; MAYA SEGRELLES CARLOS

International class (IPC 8–9)**:** A61B17/58 (Advanced/Invention); A61B17/58 (Core/Invention)

International class (IPC 1–7)**:** A61B17/58

Classification Explorer

Cited documents: FR2606269, ES1017719 U, EP0346247,

Abstract:
Bone lengthener consisting of a double, telescopic action, endo–bone marrow nail, made of a distal (1) and a proximal (2) nail, equipped with transverse, assistant holes used to respectively insert fixing screws (14) and (15), whilst using an insertion mechanism (11) to reach the correct position. The proximal screw (2) has grooves (7) at the end to stop or release the distal nail (1), consisting of a proximal screw itself (2), a transverse, prismatic axis (16), set inside the unit (17), fastened to the muscle (20) by means of supports (21) to produce a diversion either by mechanics or an electric motor. The axis (16) is connected to the tooth edged crown (24) inside the proximal nail that stays linked to the tooth edged crown (25), perpendicular and linked to the threaded shaft (26) that interlinks with the internal blockade (27) linked to the distal nail (1) to be used before the bone is lengthened (4). The distal nail (1) is finished off with a sharp, three–point shape (3) to help it to be introduced into the bone's marrow cavity.

229) Family number: 22795715 (US3204330A) © PatBase

Title: NONLINEAR GEARING AND APPARATUS UTILIZING NONLINEAR GEARING FOR INDEXING

Priority: US19620199363 19620601 US19620199372 19620601 FR19620907538 19620822

Family:

Publication number	Publication date	Application number	Application date
BE638006 A	00000000		00000000
FR1336928 A	19630906	FR19620907538	19620822
GB976016 A	19641125	GB19630002006	19630116
US3187420 A	19650608	US19620199363	19620601
US3204330 A	19650907	US19620199372	19620601

Probable Assignee: ILLINOIS TOOL WORKS

Assignee(s):(std)**:** ILLINOIS TOOL WORKS

Assignee(s): ILLINOIS TOOL WORKS INC ; ILLINOIS TOOLS WORKS INC

Inventor(s):(std)**:** HENRY POMERNACKI ; JULES POUPITCH OUGLJESA

Inventor(s): POMERNACKI HENRY ; POUPITCH OUGLJESA JULES

International class (IPC 8–9): B23P19/08 F16H1/34 F16H27/04 F16H35/02 F16H55/08 F16H55/17 (Advanced/Invention); B23P19/08 F16H1/28 F16H27/00 F16H35/00 F16H55/02 F16H55/17 (Core/Invention)

International class (IPC 1–7): F16H1/28 F16H27/04

CPC: Y10T29/53313 Y10T29/53978 Y10T74/1447 Y10T74/18528 F16H55/084 B23P19/08 F16H1/34 F16H27/04 F16H35/02 F16H55/17 Y10T74/19972

European class: B23P19/08 F16H1/34 F16H27/04 F16H35/02 F16H55/08G F16H55/17

US class: 29/281.5 29/771 475/16 475/17 74/462 74/821 74/84R

Classification Explorer

Cited documents: US3133462 A, US3131455 A, US3116651 A, US3081648 A, US3010336 A, US2979971 A, US2903914 A, US2874584 A, US2870659 A, US2816459 A, US2791135 A, US2679357 A, US2656587 A, US2635326 A, US2585971 A, US2066758 A, US1278734 A, SE158816 C1, GB237411 A, GB189315426 A, DE335076 A,

Forward Citations: US4802376, US4572017, US4059197, US4055091, US3919895, US3750206, US3495316, US3483772, US2014000397, CN103335081, CN103335081, CN102878264, CN102878264,

Abstract:
Source: GB976016A 976,016. Toothed gearing; slip couplings. ILLINOIS TOOL WORKS Inc. Jan. 16, 1963 [June 1, 1962 (2)], No. 2006/63. Headings F2C and F2Q. Uniform rotation of a shaft 60, Fig. 3, driven from a motor 54 preferably through a variablespeed belt drive (not shown) and worm gearing 56, is converted into cylindrically varying or intermittent rotation of a gear 22 by a planetary pinion 24 carried in a yoke 66 on a plate 64 fixed to the shaft 60 and rolling on a stationary gear 20, at least one of the gears 20, 24, 22 having its teeth at non–uniform circumferential intervals–i.e. although the gears themselves are circular the base curves and rolling pitch curves are non–circular. It is stated that non– imiformly toothed gears may also be used in any gearing having parallel, skew or perpendicular axes (e.g. spiral bevel gearing). As shown, the gear 22 and pinion 24 have uniform involute teeth, there being 72 teeth on the gear 22, but the gear 20 has 74 involute teeth which vary in shape around the gear from teeth corresponding to a 71–tooth wheel to teeth corresponding to a 76–tooth wheel. The teeth in the sector corresponding to a 72–tooth wheel are identical with the teeth on gear 22, and so produce a dwell period in the drive. The slight backward rotation which should result from the teeth corresponding to a 71–tooth wheel may be avoided by allowing backlash between the gears 22, 24. Alternatively the " 71–tooth " teeth may be replaced by " 72–tooth " teeth. In either construction there is a substantial dwell period with a smooth acceleration and deceleration and the gear 22 is thus intermittently rotated at a reduced speed dependent on the difference between the numbers of teeth on gears 20, 22. In a modification the gear 20 has 38 teeth on half its periphery and 36 teeth on the other half, thus providing a drive having abrupt acceleration and deceleration at the end and beginning of a long dwell. Such a gear may be formed in two halves. Fig. 4 shows in its upper and lower parts the teeth 26a, 26b on gear 20 corresponding respectively to a 72–tooth and 76–tooth wheel. The two sets of teeth have the same outer diameter 30 and the same root diameter 32 (although this may be varied). Two base circles 34a, 34b are different–i.e. the base curve around the gear is not a circle and the pitch circles 46a, 46b are

likewise different to give a variation in velocity ratio–i.e. the rolling pitch curve is also not a circle. It is stated that since the normal distances BCP are the same for all teeth, a smooth rolling action is obtained in any phase of mesh. Means 78, Fig. 3, are provided for adjusting the angular position of the stationary gear 20 and so adjusting the phase between fingers 77 of a mechanism 76 reciprocated by a face cam 74 on the shaft 60, and a plate 72 coupled to the gear 22 through an overload–released coupling 70. The intermittent drive is applied to a machine assembling washers or lock washers on to fastening screws. The plate 72, Fig. 6, rotates intermittently in a hopper 104 full of washers causing them to fall into peripheral recesses 73 on the plate and so allowing reciprocating fingers 77 to insert a screw blank through each washer. Each screw blank is fed to the fingers from a hopper (not shown) and after insertion through a washer is fed to mechanism which rolls a screw thread on the blank, the thread serving to retain the washer loosely on the screw. The complete machine is illustrated in Fig. 5 (not shown) but is not described in detail. The intermittent drive of Fig. 3 is shown in detail in Figs. 7 and 8. The worm wheel 58 rotates on a fixed shaft 98 secured to a casting 100, and is keyed to a sleeve 92 corresponding to shaft 60 of Fig. 3. The sleeve 92 drives the cam 74 through a key 96 and drives the planet carrier 64 through a bolt 62. The planetary pinion 24 rolls on a stationary gear 20 angularly positioned by an arm 106 bolted thereto, the arm 106 forming the phase–adjusting device 78 of Fig. 3 and being adjustable against the action of a spring 114 by screw 126 engaging a boss 110 on the arm. Resilient material 130 may be inserted between the screw and boss to damp out vibrations due to gear errors. The driven gear 22 has a hub 134 coupled to a surrounding plate 140 by an overload released coupling comprising four radial projections 136, Fig. 10, on the hub 134 engaging the ends of square pins 154 held by springs 156 in grooves 148 in the plate 140. A lug on each pin 154 engages a bore in the plate 140 to retain the pin against radial movement. On overload the pins 154 rock within the grooves 148 to allow projections 136 to pass. The plate 140, Fig. 8, seats on the plate 72 and is coupled to it by a single pin 146. The parts are pressed together by springs 164 reacting against a plate 160 loosely retained on the plate 140 by bolts 162, the plate 160 being engaged by the underside of the rotating cam 74 which is axially retained on the fixed shaft 98 by a screw 168. When it is required to change the plate 72 to suit different washers the screw 168 is removed, allowing the entire assembly 74, 160, 140, 72 to be lifted off. A new plate 72 is then engaged with the pin 146. In a modification, Fig. 9 (not shown), in which several screws must be undone to change a plate 72, the overload–released coupling comprises two facially–toothed rings spring–pressed together. Specifications 533,358 and 654,659 are referred to.

0) US4846805A – CATHETER INSERT DEVICE

230) Family number: 3073446 (US4846805A) © PatBase

Title: Catheter insert device

Priority: CA19880584910 19881202 US19870128740 19871204

Family:

Publication number	Publication date	Application number	Application date
CA1305903 A1	19920804	CA19880584910	19881202
EP0322129 A2	19890628	EP19880311434	19881202
EP0322129 A3	19910515	EP19880311434	19881202
JP2004391 A2	19900109	JP19880306767	19881203
US4846805 A	19890711	US19870128740	19871204

Probable Assignee: ICU MEDICAL INC A CA CORP

Assignee(s):(std)**:** ICU MEDICAL INC ; ICU MEDICAL INC A CALIFORNIA C

Assignee(s): ICU MEDICAL INC A CALIFORNIA CORP ; SITAR DENNIS L ; ICU MEDICAL INC A CA CORP

Inventor(s):(std)**:** DENISU ERU SHITAA ; SITAR DENNIS L

Agent(s): GOWLING LAFLEUR HENDERSON LLP

Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

International class (IPC 8–9)**:** A61M25/00 A61M25/06 A61M25/08 (Advanced/Invention); A61M25/06 A61M25/08 (Core/Invention)

International class (IPC 1–7)**:** A61M25/00 A61M25/08 A61M5/00

CPC: A61M25/0631

European class: A61M25/06D2

US class: 604/110 604/165 604/165.04 604/198

Classification Explorer

Cited documents: US4737144 A, US4631057 A, US4553962 A, US4507117 A, US4425120 A, US4373526 A, US4329989 A, US4170993 A, US4026287 A, US3943927 A, US3890971 A, US3658061 A, US3572334 A, US3536073 A, US3438373 A, US3406687 A, US3380448 A, US3356089 A, US3134380 A, US2925083 A, US27797 A, US2571653 A, FR689751 A, DE1566588 B1, CA1541417,

Forward Citations: WO9101151, WO15067106, USRE38996, US9707378, US9555221, US9375552, US8939938, US8926563, US8834422, US8715250, US8647301, US8628497, US8486024, US8403886, US8162881, US8038123, US8029472, US8002765, US7959648, US7736342, US7722576, US7722575, US7717887, US7717886, US7717885, US7717884, US7717883, US7713249, US7713248, US7713247, US7682339, US7658725, US7632243, US7520489, US7500964, US7314462, US7306576, US7125396, US7118552, US6254574, US6156015, US6117110, US6080137, US6010487, US5957893, US5954698, US5951520, US5916208, US5913848, US5851196, US5817069, US5792122, US5772636, US5769827, US5746215, US5725503, US5695474, US5683370, US5651772, US5601536, US5562631, US5558651, US5462533, US5419766, US5409461, US5379755, US5368577, US5356390, US5356389, US5295974, US5248301, US5242427, US5201713, US5192275, US5135505, US5135504, US5135502, US5013304, US5007901, US4964854, US4944728, US4944725, US2009264922, US2009082733, US2008300543, US2007191776, US2007100284, US2007073222, US2007073221, US2007038188, US2007038187, US2007038184, US2007038183, US2007038182, US2006229563, US2004249351, US2004127854, US2004073174, GB2448885, EP0843568, EP0578367, EP0564797, EP0494932, EP0448395, EP0446479, CN104623760, AU649279,

Abstract:
Source: US4846805A Disclosed is a catheter insert device 10 employing a collection tube 12 having a conical end 18 with a needle 16 extending therefrom. A catheter 20 is removably mounted on the conical end 18 and is pushed off this end by a guard member 14 mounted to move along the longitudinal axis of the collection tube 12.

Locking means 60 and 48 between the guard member and the collection tube permanently lock the guard member 14 in an extended position covering the tip 16a of the needle 16 after the catheter 20 has been inserted into the body 21 of a patient.

0) CN201145088Y – SPECIAL PIPE VALVE LOCK

231) Family number: 42666364 (CN201145088Y) © PatBase

Title: Special pipe valve lock

Priority: CN200720082339U 20071209

Family:

Publication number	Publication date	Application number	Application date
CN201145088 Y	20081105	CN200720082339U	20071209

Probable Assignee: CHENGDU YUZHONGMEI SCIENCE

Assignee(s):(std)**:** CHENGDU YUZHONGMEI SCIENCE ; CHENGDU YUZHONGMEI SCIENCE AND TECHNOLOGY CO LTD

Assignee(s): CHENGDU YUZHONGMEI SCIENCE AND TECHNOLOGY CO

Inventor(s):(std)**:** YU CAO

Inventor(s): CAO YU

International class (IPC 8–9): F16K35/00 (Advanced/Invention); F16K35/00 (Core/Invention)

Classification Explorer

Forward Citations: CN104075020, CN103874873, CN103874873,

Abstract:
Source: CN201145088Y The utility model discloses a special pipeline valve lock, which comprises a shell, a rotating shaft, a wrench, a shaft housing and a special structure, wherein, the shaft housing is fixed in the shell, the rotating shaft is inserted into the shaft housing and is in running fit with the shaft housing, the wrench is fixed at the upper end of the rotating shaft; the special structure consists of a triangular rotary column, a hinge and telescopic round sticks; the rotating shaft is provided with a circular groove, and the wall of the rotating shaft is provided with two through holes which are axially symmetrical; the inner wall of the shaft housing is provided with a plurality of small holes corresponding to the through holes; the triangular rotary column is arranged in the circular groove of the rotating shaft and can rotate relative to the rotating shaft under the action of a key provided with a corresponding triangular groove; one end of each of the two telescopic round sticks is connected to the lower part of the triangular rotary column through the hinge, while the other end passes through the through hole and then is inserted into the small hole on the inner wall of the shaft housing. The special pipeline valve lock has simple structure, convenient use, low production cost in mechanical structure, and strong rainproof ability, is not easy to damage, and is suitable for all pipeline valves.

0) GB820564A – IMPROVEMENTS IN AND RELATING TO METAL–WORKING M...

232) Family number: 20574426 (GB820564A) © PatBase

Title: Improvements in and relating to metal–working machines

Priority: 19540909

Family:

Publication number	Publication date	Application number	Application date
GB820564 A	19590923	GB19550025069	19550831

Probable Assignee: LODGE AND SHIPLEY COMPANY

Assignee(s):(std): LODGE AND SHIPLEY COMPANY

Assignee(s): THE LODGE AND SHIPLEY COMPANY ; LODGE AND SHIPLEY CO

International class (IPC 8–9): B21D22/16 (Advanced/Invention); B21D22/00 (Core/Invention)

International class (IPC 1–7): B21D22/14

CPC: B21D22/16

European class: B21D22/16

Classification Explorer

Forward Citations: US3127861,

Abstract:
Source: GB820564A 820,564. Spinning. LODGE and SHIPLEY CO. Aug. 31, 1955 [Sept. 9, 1954], No. 25069/55. Class 83 (4). [Also in Group XXXIV] A machine tool comprises a rotatable spindle adapted to carry a blank, a tool mounted for movement both along and transverse to the spindle axis and mechanism to control the relative movement between the tool and the spindle including means for automatically determining the deviation in thickness of the blank to be worked from a known thickness and automatically adjusting said mechanism in accordance with said deviation. The invention is described as applied to a spinning machine comprising a bed 1, a headstock 2 with a spindle 3 and a carriage 4 with a tailstock 5 yieldably supported therein. The carriage has a support 12 for the black B and two supports 6 and 7 for the rolls 8 and 9 which may be moved inwardly and outwardly with respect to the axis of the spindle by tracer control mechanism. Bed and carriage.–The bed is generally H– shaped in cross–section and is made by welding relatively heavy rolled–steel plate and provides a channel 26 to receive the lower U–shaped portion 28 of the carriage 4 which has sets of rollers such as 44, 46; 50, 52 and 53, 55 engaging runners 33, 32 and 34 secured to the bed. These rollers may be preloaded. The upper body portion 36 of the carriage is also constructed of welded steel plates and has two upwardly extending sections 56, 57 which form a central channel in which is mounted the tail stock 5. The part 56 carries electric motors 58, 59 and 60 connected to pumps 58a, 59a and 60a which drive hydraulic motors for operating parts of the machine, current being supplied to the motors through brushes engaging bus–bars along the bed. Mounted on the lower portion of the carriage is a cross–guide 35 on which is a channel 68 to receive the base portions of the supports 6 and 7 for the blank–working rolls 8 and 9. These supports have rollers engaging runners on the carriage and carry nuts 102, 105 on a lead screw 100 mounted in the carriage, the nut 105 being secured to a worm 109 which may be rotated through a knob 125 for the fine manual adjustment of the support 7 relatively to the support 6. End plates 65 and 67 of the cross–guide carry hydraulic motors 131, 132 connected to the lead screw through couplings which permit a slight axial floating of the screw. The motors, of known type, lock the screw against rotation when not operative. Beneath the screw 100 is an hydraulic cylinder with opposed piston secured to the cross–members 78 and 107 of the roll supports and urged outwardly in order to eliminate backlash. Roll mountings.–The roll 9 is mounted on a segmental block 160 which is mounted on a segmental table 161 which is in turn mounted on the top plate 114 of the support 7. Roll 8 is similarly mounted on the support 6. Table 161 is adjustable on the plate 114 by a knob 178 on an eccentric spindle, the adjustment being in a direction parallel to the rotational axis of the spindle. The block 160 is acurately adjustable on the table 161 by a pinion 213 meshing with a segmental rack 210 in the table and rotatable by a hand wheel 230. After adjustment it may be clamped by bolts 204. Tailstock.–The tailstock 5 comprises a generally rectangular frame 231 positioned between the body portions 56, 57 of the carriage. Slidable within frame 231 is an inner frame 242 carrying the rotatable head 270 of the tailstock which is adjustable by means of a knob 271 and housing four piston and cylinder assemblies, pistons P1 and P2 being secured to a forward head 243 and pistons P3 and P4 to a rear head 244. When fluid is admitted to cylinders C1, C2 pistons P1, P2 move forward until an abutment 250 on the head 244 engages an adjustable stop screw 251. When the carriage moves forward the tailstock moves with it until the head 270 engages the blank B at the spindle, cylinders C1 and C2 thereafter sliding over pistons P1, P2 which displace the fluid therein into cylinders C3, C4. The shaft 293 of the head 270 is supported by roller bearings 296 and a roller thrust bearing 302 which allows slight axial play but limits movement to the left, as seen in Fig. 18. Movement to the right is limited by an hydraulic thrust bearing 301 (see Group XXXIV). Work support.–This is of V–shape and comprises plates 362 and 370 spaced apart by a V– block 369. Plate 362 has a vertical key running

in a keyway in a frame 352 slidable on a guide 343 bolted to a vertical plate 341 bolted to the carriage. A screw 373 permits vertical manual adjustment of the blank support on the frame 352 which is itself movable vertically by hydraulic cylinders 345, 346 formed in the block 352. Templet support.–The side 20 of the bed has two longitudinally extending guides 376, 377 between which is a slide 380 carrying two uprights 381 and 382. Templet 16 is carried by an arm 395 secured by a pivot 396 on another arm 395^1 pivotally mounted on the upright 381. A coarse adjustment of the templet is made by movement of the arm 395^1 about pivot 396 by a knob 433, Fig. 21, and a fine adjustment by the movement of arm 395^1 about pivot 396^1 by means of a cylindrical extension 406 within a sleeve 410 rotatable on a pin 411 on a slide 414 movable along the upright 382. The templet support is yieldably held with respect to the carriage by means of a cylinder 442 secured to the upright 381 and a piston 449 secured to a bracket 448 on the main body of the carriage. When fluid is supplied to the cylinder, the templet support moves to the left as seen in Figs. 1 and 5 until an adjustable stop screw 461 engages the bracket, Thereafter the support normally moves with the carriage but may be locked to the bed by means of pistons 464 pressed by fluid pressure against the slide 380. Usually the templet will be locked to the bed just after the head of the tailstock or the rolls 8 and 9 have engaged a blank on the spindle. Tracer valve.–This comprises a main body portion 473, Fig. 20, mounted on the top plate 114 of the roller support 7 and having two fluid lines 474 and 475 connected with the body portion 36 of the carriage and with the drive motors 132 and 131 for the roll supports. To the body 473 is bolted an upper disc 485 to which a spacer 490 and a lower disc 491 are secured by bolts 492 to form a cylindrical chamber 493 in which a slide 495 is supported by a spring 514. A reduced lower portion 523 of a central bore of the slide supports a ball 524 on which rests the lower end of a shaft 526 which, above the slide, carries a ball 532 bearing against a cap 533 at the upper end of the body 473 and prevented from rotating by an inwardly projecting pin 528 entering a vertical slot in the ball. The cap 533 has a conical aperture in which is disposed a conical member 535 integral with the ball. Above the conical member the shaft 526 is threaded and receives a cylindrical member 541 to which is also screwed a disc 543 with a conical finger 10 bearing against the templet 16. The height of the finger is adjustable by turning a ring 536, a spring 546 taking up backlash and a friction disc 538 holding it in adjusted position. When the roll support is moved forward by the carriage, the finger 10 and shaft 526 are tilted causing the ball 524 to move to alter valve openings G1 and G2 thus controlling further movement of the rolls. The roll supports can also be moved by deflecting the finger 10 through a manually operated cam moved through hand wheels 571 and 572. Carriage feed.–The carriage carries a nut on a lead screw 585 extending along the bed of the machine. For power operation of the carriage, a motor 620 rotates the nut through gearing while the screw 585 is held against rotation by a brake in the headstock. For manual operation, the gearing between the motor 620 and nut 606 is locked and the screw 585 is rotated by a hand wheel 632 at the headstock. Headstock.–The upper part of the headstock carries bearings 640 and 657 for the shaft 641 of the spindle 3, the shaft having secured thereto drive gears 661 and 670 adapted to be alternately engaged by gears 671 and 672 on a shaft 673 movable axially by known fluid–operated gear–shifting mechanism and geared to a driving motor 694 through a clutch 704. The motor is coupled by a belt drive to a shaft 703 slidable along which is a sleeve 713, Fig. 26, having at one end a plate 714 of the friction disc clutch 704 and at the other end the plate 715 of a friction disc brake 704^1. The sleeve is movable by a piston 732 in one direction and by a spring 730 in the other direction so that the clutch is engaged and the brake released or vice versa. The thrust on the shaft 641 is taken by an hydraulic thrust bearing (see Group XXXIV). Operation.–The ports of the machine are actuated by electric motors or hydraulically by fluid supplied by electrically driven pumps. The headstock includes a pump which supplies fluid under pressure from a reservoir to the headstock hydraulic bearing, to the headstock gear–shifting mechanism and to the control mechanism for the headstock clutch and brake. The carriage includes a closed hydraulic system supplied by the pump 58a for driving the rolls inwardly and outwardly, another system supplied by the pump 59a for moving the carriage along the bed and a third independent system supplied by the pump 60a. This last system contains a restriction to give a pressure drop providing fluid at both operating and suboperating pressures. In addition to priming the other two systems it energizes the hydraulic means for holding the carriage and templet in yielding engagement and for taking up the backlash in the roller supports driving mechanism and also supplies fluid to a rotary valve mounted on the carriage. This valve controls the supply of pressure fluid to various valves which in turn operate or condition for operation certain components of the machine. In the stand–by position, the carriage is at the rear of th

0) GB128277A – IMPROVEMENTS IN OR RELATING TO AIRCRAFT.

233) Family number: 25729126 (GB128277A) © PatBase

Title: Improvements in or relating to Aircraft.

Priority: GB19170010039 19170711

Family:

Publication number	Publication date	Application number	Application date
GB128277 A	19190626	GB19170010039	19170711

Probable Assignee: GEORGE HENRY CHALLENGER

Assignee(s):(std): GEORGE HENRY CHALLENGER ; THOMAS SMITH DUNCAN ; VICKERS LTD

Assignee(s): VICKERS LIMITED

International class (IPC 8–9): F41A19/05 (Advanced/Invention); F41A19/00 (Core/Invention)

International class (IPC 1–7): F41D11/22

CPC: F41A19/05

European class: F41A19/05

Classification Explorer

Abstract:
Source: GB128277A 128,277. Vickers, Ltd., Challenger, G. H., and Duncan, T. S. July 11, 1917. Machine guns fire between aircraft propeller blades, controlling and synchronizing.–Relates to guns mounted on aircraft and controlled by the propelling motor so as to fire between the propeller blades, for example as described in Specification 124,486. According to the invention, (1) the hand sear of the gun is actuated by a rotary device driven from the motor, (2) the shafting or gearing is so arranged that the gun can be elevated and the mechanism casing be opened and closed without affecting the timing and setting of the device, and (3) two or more guns are interconnected and can be elevated and timed separately. In the form shown in side view in Fig. 3 and in cross–section in Fig. 4, a rotary cam disk B for actuating the hand sear is mounted on a transverse shaft b on the hinged cover A<3> of the mechanism casing A<2> and the shaft b is connected to the motor through adjustable timing disks D<1>, D<2>, bevel gear d, d<1>, and flexible shaft D, which is connected to the motor by a dog clutch, and is disposed in a vertical plane parallel to the axis of the gun, so as not to be twisted when the gun is elevated such twisting would alter the timing of the cam. The cam disk is thrown in and out of action with the hand sear by means of a spring b<1> and a Bowden wire B<2>. In modifications, Oldham's couplings, epicyclic gears, and telescopic shafts with universal joints are used for the transmission mechanism between the motor and the cam shaft b, and between the cam shafts of interconnected guns. In the modification, shown in Figs. 10 and 11, the gun, mounted on brackets A, is elevated about an axis a, and the cam shaft b is driven from a shaft E through bevel gearing F<2>, F<3>, telescopic shaft F, and bevel gearing F<1> enclosed in a casing g. When the gun is elevated, the shaft F is drawn through the gear wheel F<2> at the same time as it is twisted by the elevating of the gun to prevent the timing being affected by this, the shaft and the bevel wheel are keyed together by an inclined key way f.

0) GB1202238A – IMPROVEMENTS IN OR RELATING TO TYRE BUILDING MA...

234) Family number: 23887548 (GB1202238A) © PatBase

Title: IMPROVEMENTS IN OR RELATING TO TYRE BUILDING MACHINES

Priority: DE1966C040893 19661206 FR19670125330 19671020

Family:

Publication number	Publication date	Application number	Application date
DE1579209 A1	19700730	DE19661579209	19661206
FR1542985 A	19681018	FR19670125330	19671020
GB1202238 A	19700812	GB19670042664	19670919

Probable Assignee: CONTINENTAL GUMMI WERKE AG

Assignee(s):(std)**:** CONTINENTAL GUMMI WERKE AG

Assignee(s): CONTINENTAL GUMMI WERKE AKTIENGESELLSCHAFT ; CONTINENTAL GUMMI WERKE A G

Inventor(s):(std)**:** SCHWEIDLER UWE

International class (IPC 8–9)**:** B29D30/26 (Advanced/Invention); B29D30/20 (Core/Invention)

International class (IPC 1–7)**:** B29H17/16

CPC: B29D30/26

European class: B29D30/26

Classification Explorer

Forward Citations: US7753614, EP1640143, EP0709180, EP0000423,

Abstract:
Source: GB1202238A 1,202,238. Tyre building machines. CONTINENTAL GUMMI – WERKE A.G. 19 Sept., 1967 [6 Dec., 1966], No. 42664/67. Heading B7C. A tyre building machine comprises a drum having a hub 5, end walls 6, 7 and an inflatable diaphragm 8 fixed to walls 6 and 7, the walls being mutually axially adjustable symmetrically to remain evenly spaced from the drum midcircumferential plane, wall 6 by axial movement of support shaft 1 and wall 7 by sliding on hub 5. Shaft 11 with oppositely threaded parts 13, 14 engaging a disc 15 rotatable on shaft 1 and a sleeve 17 fixed to wall 7 is rotated by shaft 12 to move the walls. Member 22 carried by hub 5 is turned to engage wall 7 with bayonet connection by sleeve 23, whereafter sleeve 20 may be moved to the right freeing hooked ends 18 of sleeve 17 to spring out of groove 19 in wall 7. Thus the drum may be removed entire from the shaft 1 after removal of a lock ring 10.

0) US4907716A – LOCK MECHANISM

235) Family number: 3367276 (US4907716A) © PatBase

Title: LOCK MECHANISM

Priority: US19890379101 19890713

Family:

Publication number	Publication date	Application number	Application date
US4907716 A	19900313	US19890379101	19890713

Probable Assignee: WANKEL DEAN R

Assignee(s):(std)**:** WANKEL DEAN R ; WANKEL PATRICIA S

Inventor(s):(std)**:** WANKEL DEAN R ; WANKEL PATRICIA S

International class (IPC 8–9): E05B35/00 E05B63/12 (Advanced/Invention); E05B35/00 E05B63/00 (Core/Invention)

International class (IPC 1–7): B65D55/14

CPC: E05B63/125 E05B35/008 Y10T70/5589 Y10T70/7497 Y10T70/7576

European class: E05B35/00J E05B63/12E

US class: 220/326 70/169 70/346 70/360

Classification Explorer

Cited documents: US47537 A, US4551999 A, US4442571 A, US3930388 A, US3578156 A, US3102411 A, US1956029 A, IT341849 A, GB173639 A, DE612846 A,

Forward Citations: WO9315295, USD670553, USD661975, USD660682, USD651889, US8230707, US8042366, US8001812, US7997106, US7963132, US7730751, US7647796, US7614266, US7500371, US7464836, US7415852, US7409842, US7320236, US7204106, US7201029, US7191623, US7143614, US7111479, US7100404, US7100403, US6735990, US6662602, US6588241, US6553794, US6321579, US6155088, US6112561, US6062785, US6006557, US6000252, US6000251, US5983679, US5502989, US5493878, US5450737, US5381685, US5275029, US5140833, US2015345658, US2011089794, US2011080707, US2011072863, US2010139337, US2007220931, US2007113608, US2007056337, US2006123242, US2006117814, US2006112740, US2005241349, US2005178173, US2005150263, US2005150262, US2005028571, US2004206138, FR2666137,

Abstract:
Source: US4907716A A key–operated lock installable on a portable cooler cabinet and associated lid, with the lock surfaces substantially flush with the cabinet–lid surfaces. The lock includes a lock bolt housing formed by two telescopically connected tubes extendable through aligned openings in two spaced walls of the cabinet lid. The key–operated bolt is movable axially and rotationally to effect a lock action.

0) CN105421849A – ANTI–COLLISION PARKING SPACE LOCK

236) Family number: 61915141 (CN105421849A) © PatBase

Title:	ANTI–COLLISION PARKING SPACE LOCK
Priority:	CN201410457335 20140910

Family:

Publication number	Publication date	Application number	Application date
CN105421849 A	20160323	CN201410457335	20140910

Probable Assignee:	SOLID KIN LOCK LOCK IND CO LTD SHANGHAI
Assignee(s):(std):	SOLID KIN LOCK LOCK IND CO LTD SHANGHAI
Assignee(s):	SOLID LOCK CO LTD SHANGHAI JIAN ; SOLID KIN LOCK LOCK IND CO
Inventor(s):(std):	SHEN QIHENG
International class (IPC 8–9):	E04H6/42 E05B15/00 E05B65/00 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN105421849A The invention relates to an automobile parking space lock, in particular to an anti–collision parking space lock. The anti–collision parking space lock is mainly composed of a bottom plate, round pins, a front automobile blocking rod, a rear automobile blocking rod, a stepped through hole base and a lock cylinder and is characterized in that a plurality of screw holes fixed to the ground are formed in the bottom plate, the front automobile blocking rod and the rear automobile blocking rod are movably connected with the bottom plate through the round pins, the tail of the lock cylinder is provided with a spring bolt capable of clamping a boss or special–shaped spring bolt shoulder, the top end of a rear movable rod is provided with a hole or groove, and the boss or special–shaped spring bolt shoulder clamping the spring bolt is arranged in the hole or groove. The through hole base with steps is arranged in a hole or groove in the top end of the front automobile blocking rod, the lock cylinder which cannot be pulled out and is telescopic is arranged in the through hole base with steps, or the lock cylinder which can be pulled out is arranged in the through hole base with steps. In use, the front automobile blocking rod and the rear automobile blocking rod are lifted up, the front hole or groove is aligned with the rear hole or groove, and it is only needed that a lock cylinder shaft sleeve is inserted into the stepped through hole base, and a key is rotated; when the automobile blocking rods need to be put down, the key is inserted and rotated, then the lock cylinder is pulled out, and the upper portions of the two automobile blocking rods are not clamped or fixed through the lock cylinder shaft sleeve so that the automobile blocking rods can fall down.

0) US3832910A – TELESCOPIC BELT TIGHTENER

237) Family number: 1091832 (US3832910A) © PatBase

Title: TELESCOPIC BELT TIGHTENER

Priority: US19720263337 19720615

Family:

Publication number	Publication date	Application number	Application date
BR7304369 A0	19740815	BR19730004369	19730612
CA977585 A1	19751111	CA19730171954	19730522
DE2328901 A1	19731220	DE19732328901	19730606
DE2328901 B2	19750703	DE19732328901	19730606
DE2328901 C3	19770728	DE19732328901	19730606
GB1427535 A	19760310	GB19730026705	19730605
JP49049380 A2	19740513	JP19730065976	19730613
JP57049783 B4	19821023	JP19730065976	19730613
US3832910 A	19740903	US19720263337	19720615

Probable Assignee: BRYANT C B

Assignee(s):(std)**:** BRYANT C ; BRYANT C B ; BRYANT CHARLES B ; BRYANTE C

Assignee(s): BRYANT CHARLES BRATE HARTLAND WIS V ST A ; BRYANT C US

Inventor(s):(std)**:** BRYANT C ; BRYANT CHARLES B ; BRYANT CHARLES BRATE ; BRYANTE C

Inventor(s): BRYANT CHARLES BRATE HARTLAND WIS V ST A ; BRYANT C US

International class (IPC 8–9)**:** B65G23/44 F16H7/10 F16H7/14 (Advanced/Invention); F16H7/08 (Advanced/Non–invention); B65G23/00 F16H7/10 (Core/Invention)

International class (IPC 1–7)**:** B65G23/44 B65H23/26 F16H7/10 F16H7/12 F16H7/14

CPC: B65G23/44 F16H2007/0891

European class: B65G23/44 R16H7/08Z1

US class: 474/136 74/242.14R

Classification Explorer

Cited documents: JP47023580 U1, JP31016909 Y1,

Forward Citations: WO9948785, USD750864, US9643786, US9371189, US7338400, US7243782, US7181845, US6409619, US5302162, US5259821, US5054608, US5030173, US4803804, US4573368, US4561538, US4509934, US3949805, US2005189201, US2005037878, JP60025275, JP54035134, JP2132387, EP1975462, EP1073604, EP0918174, EP0321935, DE3938704, DE3318818, DE3313108, DE3135988, DE19808097, DE19712690, CN104444125, CN104210882, CN103508163,

Abstract:
Source: GB1427535A 1427535 Belt tensioning device C B BRYANT 5 June 1973 [15 June 1972] 26705/73 Heading B8A [Also in Division F2] A belt tensioning device comprises a first tube 20 to which is fixed a mounting bracket 26, a second tube 24 telescopioally received within the first tube and connected at one end to shaft supporting means 18 and at the other end to a member 54 having a threaded aperture, a longitudinally extending key and keyway between the first and second tubes and a bolt 60 which is received in the aperture and movement of which adjusts the axial position of the second tube with respect to the first tube. In the Figure, bolt 60 is locked against a plate 72 attached to first tube 20 by a locknut 76, and engages nut 54 fixed to the free end of second tube 24. Nut 64 is rotatable with the bolt 60 and thus moves longitudinally inside tube 20. When head 62 is turned to move bolt 60 to the right in the Figure, nut 64 engages against plate 72 to move the tube 24 and attached shaft 16 of belt 12 away from tube 20 to increase the tension on the belt.

0) US4842292A – FOLDABLE MULTIPURPOSE BICYCLE

238) Family number: 29297267 (US4842292A) © PatBase

Title: FOLDABLE MULTIPURPOSE BICYCLE

Priority: US19870134510 19871216

Family:

Publication number	Publication date	Application number	Application date
US4842292 A	19890627	US19870134510	19871216

Probable Assignee: WANG FU CHAO

Assignee(s):(std)**:** WANG FU CHAO

Inventor(s):(std)**:** WANG FU CHAO

International class (IPC 8–9)**:** B62K15/00 B62K17/00 (Advanced/Invention); B62K15/00 B62K17/00 (Core/Invention)

International class (IPC 1–7)**:** B62K15/00

CPC: B62K15/008 B62K17/00 B62K2015/003 Y10T74/2172

European class: B62K15/00F2 B62K17/00 L62K15/00C

US class: 280/278 280/287 280/288.4 280/30 440/27 74/594.7

Classification Explorer

Cited documents: US4440414 A, US4170188 A, US3979113 A, US3640239 A,

Forward Citations: WO9943537, WO9942356, WO08145767, WO06111590, WO04087492, US9598133, US9415823, US9321500, US9248882, US9108695, US9061726, US8991848, US8894082, US8707825, US8689663, US8464609, US8388005, US8308178, US8181978, US7445224, US7232144, US7198281, US7156409, US6968754, US6695335, US6659487, US6637292, US6536079, US6474667, US6435523, US6394479, US6116629, US5193834, US2015042065, US2013249185, US2012098233, US2012073891, US2011283828, US2011266769, US2010192722, US2010148467, US2007013162, US2007007744, US2006244237, US2006087095, US2006055131, US2005029031, US2003041689, US2003033902, US2002148324, GB2400086, ES2264884, EP2639148, EP0718183,

Abstract:
Source: US4842292A A foldable multipurpose bicycle includes a foldable main frame, a foldable handlebar assembly, a removable seat assembly, a pair of foldable pedal assemblies, a front brake assembly, and a foldable rear brake assembly. By using a pair of quick–release lock mechanisms, a pair of wheels can be connected quickly to the main frame to form a bicycle for riding on land. Alternatively, a front wheel and a tripod can be connected to the main frame to form an exercise bicycle. Or, a float assembly and a propeller assembly can be connected to the main frame to form an hydro–bicycle for riding on smooth surfaced water. The float assembly and the propeller assembly can be mounted removably on the rear portion of the main frame. The bicycle can be folded into a relatively small wheel–like unit which is capable of being conveniently pushed on the ground.

0) US4493454A – CASH COLLECTION RECEPTACLE

239) Family number: 4630010 (US4493454A) © PatBase

Title: Cash collection receptacle

Priority: US19820424398 19820927

Family:

Publication number	Publication date	Application number	Application date
US4493454 A	19850115	US19820424398	19820927

Probable Assignee: SAC CORP

Assignee(s):(std)**:** GEN SIGNAL CORP

Assignee(s): GENEAL SIGNAL TECHNOLOGY CORP ; GENERAL SIGNAL CORP ; SAC CORP ; GSTC DEVELOPMENT CORP ; GSLE SUBCO LLC WAS KNOWN GSTC DEVELOPMENT CORPO AS ; CHASE MANHATTAN BANK COLLATERAL AGENT AS

Inventor(s):(std)**:** DAVILA JOSE E ; GIEBELHAUSEN CHARLES W

International class (IPC 8–9)**:** G07F9/06 (Advanced/Invention); G07F9/06 (Core/Invention)

International class (IPC 1–7)**:** G07B15/00

CPC: G07F9/06

European class: G07F9/06

US class: 109/52 109/70 232/15

Classification Explorer

Cited documents: US4210801 A, US4201333 A, US3966116 A, US3938733 A, US3843203 A, US3807628 A, US3773252 A, US3733863 A, US3693870 A, US3670955 A, US28308 A, US28307 A, US1173258 A, US1076584 A, SE57930,

Forward Citations: US9047725, US9047724, US8668134, US7694872, US7140608, US7140608, US6663675, US2004007615,

Abstract:
Source: US4493454A A cash collection receptacle for receiving coins and paper currency from a farebox is disclosed. The receptacle is comprised of a five–sided steel cashbox with two inner chambers which receive coins and currency separately from the farebox. The cashbox has disposed therein a lock assembly into which a slidable steel cover is engaged by means of a rotatable control handle to lock the cashbox.

0) US3848522A – ROTISSERIE SPIT MOUNTING MEANS

240) Family number: 1108451 (US3848522A) © PatBase

Title: ROTISSERIE SPIT MOUNTING MEANS

Priority: US19720270445 19720710

Family:

Publication number	Publication date	Application number	Application date
DE2334748 A1	19740131	DE19732334748	19730709
FR2191863 A1	19740208	FR19730025240	19730710
FR2191863 B1	19760618	FR19730025240	19730710
GB1376709 A	19741211	GB19730028624	19730615
IT989808 A	19750610	IT19730051346	19730709
JP49042863 A2	19740422	JP19730077376	19730709
NL7308597 A	19740114	NL19730008597	19730620
US3848522 A	19741119	US19720270445	19720710

Probable Assignee: MC GRAW EDISON CO

Assignee(s):(std)**:** MC GRAW EDISON CO

Assignee(s): MCGRAW EDISON CO ; TOASTMASTER HOLDING CO ; TOASTMASTER INC ; WALTER E HELLER AND CO ; SHAWMUT CAPITAL CORP ; WELLS FARGO FOOTHILL INC ; MCGRAW EDISON CO US ; BARCLAYS BUSINESS CREDIT INC ; BARCLAYS BUSINESS CREDIT INC A CORP OF CT ; CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST CO ; CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST CO OF ; MAGRAW EDISON CY ; MAGRAW EDISON CY US

Inventor(s):(std)**:** TRELC W ; TRELC WILLIAM F

Inventor(s): F TRELC WILLIAM ; TRELC W US

International class (IPC 8–9)**:** A47J37/04 F24C15/16 (Advanced/Invention); A47J37/04 F24C15/16 (Core/Invention)

International class (IPC 1–7)**:** A47J37/04 F24C15/18

CPC: A47J37/041

European class: A47J37/04A

US class: 99/340 99/421H 99/450

Classification Explorer

Cited documents: US3704141 A, US2821905 A, US2729160 A, US2702098 A, US2555593 A, FR1502522 A,

Forward Citations: US8017167, US7934494, US7921768, US7878111, US7739948, US7626142, US7514651, US7424849, US7225730, US7225729, US7021203, US6874408, US6837150, US6782805, US6742445, US6658991, US6568316, US6568315, US6536334, US6509549, US6450087, US6408742, US6382085, US6138553, US6076453, US5801362, US5536518, US4985607, US4476848, US2009191322, US2007006869, US2006225580, JP54114666, JP52054050, JP52054049, JP52054048, GB2204481, FR2706755, FR2325345, EP0631753,

Abstract:
Source: US3848522A A mounting means for a rotisserie spit, including spaced bearing supports adjacent the ends of the spit upon which the spit can be lowered to and supported on, a spit drive adjacent one end of the spit axially movable for engagement with and disengagement from the spit after the spit is on and independently of positioning the spit on the bearing supports, and a separate tool to carry the spit and locate the same relative to the bearing supports.

0) US3937032A – TRAY ICE MAKER TEMPERATURE CONTROL ICE CLUTCH

241) Family number: 1233775 (US3937032A) © PatBase

Title: Tray ice maker temperature control ice clutch

Priority: US19740527957 19741129

Family:

Publication number	Publication date	Application number	Application date
US3937032 A	19760210	US19740527957	19741129

Probable Assignee: GEN MOTORS CORP

Assignee(s):(std)**:** GEN MOTORS CORP

Assignee(s): GENERAL MOTORS CORP

Inventor(s):(std)**:** BRIGHT JAMES A

International class (IPC 8–9): F16D43/25 F25C1/04 (Advanced/Invention); F16D43/00 F25C1/04 (Core/Invention)

International class (IPC 1–7): F16D11/00 F25C1/10

CPC: F16D43/25 F25C1/04 F25C2305/022

European class: F16D43/25 F25C1/04 R25C305/022

US class: 62/135 62/353

Classification Explorer

Cited documents: US3745779, US3727427, US3712076, US3702543, US3306072, US2907179,

Forward Citations: US9080799, US6915644, US6810680, US2013167575, US2004148957, DE19651335, DE19651335, DE19648416, DE19648416, CN102252476,

Abstract:
Source: US3937032A An ice clutch control for an automatic ice maker wherein a drive motor continually turns a threaded drive rod extending within a liquid filled temperature sensing tube which in turn is positioned within a pocket of an ice cube mold. Upon the freezing of the water in the mold the temperature of the sensing tube and the liquid charge contained therein is frozen solid causing the rod to thread in the solid liquid resulting in axial travel of the rod so as to exert a thrust on coupling means thereby initiating the ice harvesting sequence of the ice maker. Upon completion of the harvesting operation the temperature of the sensing tube is raised by the fill water in the mold which melts the frozen liquid therein freeing the threaded rod from the coupling means for resumption of its independent rotation by the drive motor until the liquid charge is refrozen during the next ice making cycle of the ice maker.

0) GB670484A – IMPROVEMENTS IN OR RELATING TO PROPELLER SYSTEM...

242) Family number: 20089090 (GB670484A) © PatBase

Title: Improvements in or relating to propeller systems particularly for aircraft comprising two coaxially mounted adjustable pitch propellers

Family:

Publication number	Publication date	Application number	Application date
GB670484 A	19520416	GB19500020119	19460801

Probable Assignee: UNITED AIRCRAFT CORP

Assignee(s):(std)**:** UNITED AIRCRAFT CORP

International class (IPC 8–9)**:** B64C11/30 (Advanced/Invention); B64C11/00 (Core/Invention)

International class (IPC 1–7)**:** B64C11/48

CPC: B64C11/306

European class: B64C11/30F

Classification Explorer

Abstract:
Source: GB670484A 670,484. Variable–pitch propellers. UNITED AIRCRAFT CORPORATION. Aug. 1, 1946 [Aug. 9, 1945], No. 20119/50. Divided out of 670,412. Drawings to Specification. Class 114. [Also in Group XXIX] The subject–matter of this Specification is identical with that described in Specification 670,412 but the claims are directed to the mechanism whereby, when both propellers are stationary, one propeller is unfeathered as a result of the unfeathering of the other propeller by auxiliary power means. Specifications 560,522 and 752/44 (as open to inspection under Sect. 91) also are referred to.

0) GB742701A – IMPROVEMENTS IN OR RELATING TO TELESCOPIC PITPR...

243) Family number: 20174348 (GB742701A) © PatBase

Title: Improvements in or relating to telescopic pitprops

Priority: 19500510 19530911

Family:

Publication number	Publication date	Application number	Application date
GB742701 A	19560104	GB19510005723	19510309
GB776555 A	19570612	GB19540026482	19540913

Probable Assignee: SCHMIDT ALEXANDER

Assignee(s):(std)**:** SCHMIDT ALEXANDER

Assignee(s): ALEXANDER SCHMIDT

International class (IPC 8–9)**:** E21D15/28 E21D15/38 E21D15/502 (Advanced/Invention); E21D15/00 (Core/Invention)

International class (IPC 1–7)**:** E21D15/28 E21D15/42

CPC: E21D15/285 E21D15/38 E21D15/502

European class: E21D15/28W E21D15/38 E21D15/502

Classification Explorer

Forward Citations: WO11101716, CN102996146, CN102996146,

Abstract:
Source: GB742701A 742,701. Pit props. SCHMIDT, A. March 9, 1951 [May 10, 1950], No. 5723/51. Class 20(2). The telescoping parts 1, 3 of a pit–prop are locked by independent wedges 8, 9 in slots in a prop lock 2 with or without the interposition of a locking element 6 or 7. The keys 6, 7 are of light alloy and are engaged by a galvanised surface on the wedges 8, 9. The inner prop member 1 may be of double H section, Fig. 4, having brake shoes 15, 16 adapted to be gripped between the flanges of the inner member by operation of wedges 8 acting on both sets of flanges by means of keys 6A. In a modification, Fig. 5, (not shown) each wedge 8 and one key operates on one set of flanges only. For in. stantaneous withdrawal of the prop an eccentric may be provided or two wedges connected by a sleeve passing over the tapered ends.

244) Family number: 20628209 (GB835030A) © PatBase

Title: Improvements in or relating to welding apparatus

Priority: GB19560029198 19560924

Family:

Publication number	Publication date	Application number	Application date
GB835030 A	19600518	GB19560029198	19560924

Probable Assignee: ROLLS ROYCE

Assignee(s):(std)**:** ROLLS ROYCE

Assignee(s): ROLLS ROYCE LIMITED

Inventor(s):(std)**:** COOKE FRANK ARTHUR

International class (IPC 8–9)**:** B23K37/053 B23K9/028 (Advanced/Invention); B23K37/053 B23K9/028 (Core/Invention)

International class (IPC 1–7)**:** B23K9/12

CPC: B23K9/0282 B23K37/0531

European class: B23K37/053B B23K9/028B

Classification Explorer

Forward Citations: WO14090739, WO14090737, FR2474915, FR2442101, CN102913288,

Abstract:
Source: GB835030A 835,030. Welding by fusion tube expanders. ROLLS–ROYCE Ltd. Sept. 23, 1957 [Sept. 24, 1956], No. 29198/56. Class 83 (4). In a support for the ends of tubular parts, e.g. parts of a jet pipe for a gas–turbine engine, to be butt–welded, in which shoes are carried on arms extending radially from a hub, the shoes have alternately diverging and converging end surfaces and when the rams are fully extended provide a continuous annular support for the butting ends on each side of the joint. The rams when fully extended expand the ends of the tubular parts. The hub 29 is mounted on a shaft 15 rotatable within an arm 14 on a pedestal 12 and compressed–air pipes 62, 63 are connected through bores in the shaft 15 to the rams 30, 31. The structure of the rams and the connecting pipes ensures that the rams 31 carrying the outwardly diverging shoes 44 are expanded before and contracted after the rams 30 carrying the outwardly converging shoes 37. The shoes 37, 44 have copperfacings with a peripheral groove 78 which backs the joint and to which argon may be fed through a bore in the shaft 15. The tubes are supported at one end on a tail–stock (not shown) and at the other end on a mounting 25 rotatable about and adjustable along the arm 14. The shoes are moved first by low pressure air into engagement with the tubes 10, 11 and when the pressure in the supply line builds up to its maximum a switch is operated so that highpressure air can be supplied to the rams to expand the ends of the tubes 10, 11. Copper clamps 80 are secured on both sides of the joint and the tubes are welded using an argon shielded arc–welding head 24 carried by the pedestal. The shoes are retracted, after welding, by high–pressure air. Welding wire is fed to the weld by an arrangement, Fig. 6, consisting of a reel 82, feed rollers 84 and guide 86 mounted on a compound slide 100, 101 on an adjustably pivoted platform 98. The platform is mounted on a telescopic stand 88 the height of which is determined by adjustment of bolts 87. When welding is completed a ram 94 lifts and rotates the platform 98 to move the guide 86 clear of the weld.

0) CN2549104Y – DOOR–LOCK WITH TELESCOPIC BOLT

245) Family number: 28544980 (CN2549104Y) © PatBase

Title: Door–lock with telescopic bolt

Priority: CN20022064834U 20020616

Family:

Publication number	Publication date	Application number	Application date
CN2549104 Y	20030507	CN20022064834U	20020616

Probable Assignee: YAO CHUNLIANG

Assignee(s):(std)**:** YAO CHUNLIANG

Inventor(s):(std)**:** YAO CHUNLIANG

Inventor(s): CHUNLIANG YAO

International class (IPC 8–9)**:** E05B15/10 (Advanced/Invention); E05B15/00 (Core/Invention)

International class (IPC 1–7)**:** E05B15/10

Classification Explorer

Forward Citations: CN102155117,

Abstract:
Source: CN2549104Y The utility model relates to a door lock the lock–tongue of which is retractable in the hardware product field. The utility model is composed of a lock shell, an outer guide sleeve, an inner guide sleeve, a lock core, a rotary shaft, a pin, a lock–tongue etc. The utility model aims at tightly locking the door or the cabinet. The key point lies in that a set of spiral guiding mechanism which is connected into being by the outer guide sleeve, the inner guide sleeve and the pin is arranged in the lock shell. The outer guide sleeve is fixed on the lock shell and the opening or closing is determined by two different rotation directions. In opening, the lock core rotates in anticlockwise direction. Under the pressure of the spring, the pin is forced to move straightly backwards along the spiral groove and the rotary shaft and the lock–tongue move simultaneously to be separated from the pressed cabinet frame. Then if users continue to rotate the lock core, the pin drives the rotary shaft to make 90 DEG circumference rotation along the outer guide sleeve. The lock–tongue rotates 90 DEG simultaneously. Finally, the cabinet door is opened. Rotating in the contrary direction can lock the cabinet door. The utility model with a compact structure can be used on the electric cabinet door which has a strict requirement of the sealing performance. Therefore, the utility model is a relatively ideal lock at present.

0) BRMU7502446U – TRAVA HIDRAULICA E ELETRICA PARA VEICULOS HYDR...

246) Family number: 31648507 (BRMU7502446U) © PatBase

Title: Trava hidraulica e eletrica para veiculos Hydraulic and electric lock for vehicles (Machine translation)

Priority: BR1995MU02446U 19951110

Family:

Publication number	Publication date	Application number	Application date
BRMU7502446 U	19980428	BR1995MU02446U	19951110

Probable Assignee: DIAS DE CESARO ANTONIO AUGUSTO

Assignee(s):(std)**:** DIAS DE CESARO ANTONIO AUGUSTO

Inventor(s):(std)**:** DIAS DE CESARO ANTONIO AUGUSTO

Inventor(s): DE CESARO ANTONIO AUGUSTO DIAS

International class (IPC 8–9): B60R25/08 (Advanced/Invention); B60R25/08 (Core/Invention)

International class (IPC 1–7): B60R25/08

Classification Explorer

Abstract:
Source: BRMU7502446U [Source: Claim 1] 1 – "TRAVA HIDRAULICA E ELETRICA PARA VEICU– LOS" caracterizada a partir de um corpo (1) cujo interior longitu– dinal projeta na seccao superior uma cavidade principal (70) enquanto na seccao inferior incorpora uma cavidade secundaria (80) esta dotada de um eixo de acionamento (2) que detem dois sulcos definidos de avanco (3) e recuo (4) e cujo extremo traseiro e define um embolo (5) provido de dois aneis de vedacao (6) e segue atraves de um pino acionador (7) que estabelece contato com uma esfera de fechamento (8) comprimida por uma mola espiral (9) na camara de saida de oleo, esta comunicante com uma camara de entrada e ambas sao fechada por um niples (11) de engate de tubulacao, sendo que o extremo frontal do dito eixo de acionamento (2) inferiormente recebe uma manipulo acionador (13) que esten– de–se para fora do corpo (1) e e deslizante sobre um rasgo (15) na face inferior do dito corpo (1), cuja cavidade secundaria (80) e comunicante com a cavidade principal (70) por meio de uma canal que ora e alinhado com o sulco de avanco (3) ora com o sulco de recuo (4) sendo que em tal canal, encontra–se inserido um pino de trava (17) com mola espiral (18) deixando o dito pino trava (17) comprimido sobre pressao por um disco excentrico (19) disposto no centro longitudinal da cavidade principal (70), disco este (19) solidario ao miolo de uma fechadura tetra (21) cujo orificio de entrada da chave, posiciona–se na face frontal (30) do corpo (1). Ainda na entre a cavidade principal (70) e secundaria (80) verifica–se um rasgo oblongo (35) por onde estende–se um pino de 05 acionamento eletrico (36) vindo do eixo de acionamento (2) e extremado por uma tirante (37) disposto longitudinalmente na cavidade principal (70) e na seccao traseira desta, onde verifica– se dois terminais de contato (38) que de uni lado saia para fora do corpo (1), onde definem um terminal (40) para ligacao de fios 10 eletricos da ignicao (65), enquanto do outro lado, oportunamente estabelecem contato com um disco de contato (41) inserido no tirante (37) cujo extremo traseiro e passante com fundo (44) do corpo (1), onde e inserido uma rosca (45) para sediar unia porta (46) que atraves de um terminal de contato aterrado (91) estabelece 15 contato oportuno com um terminal auxiliar (48) que segue para um alarme, ficando o extremo frontal do corpo (1) dotado de uma tampa (49) com furo (50) concentrico com o miolo da fechadura tetra (21) e projeta tambem um led (51) sinalizador luminoso, enquanto o extremo superior do corpo (1) e revestido por uma capa 20 (52) que fixa um suporte de fixacao (53). [Source: Claim 1] 1–"HYDRAULIC and ELECTRIC LOCK for VEICU them" characterized from a body (1) whose interior designs in section longitu dinal–higher than a main cavity (70) while in the lower section incorporates a secondary cavity (80) this has a drive shaft (2) that holds two grooves set of advance (3) and (4) and whose rear end and sets a bubble (5) with two seal rings (6) and follows through a starter pin (7) that establishes contact with a lock ball (8) compressed by a spiral spring (9) in the outlet Chamber oil, communicating with a camera of this entry and both are closed by a nipples (11) tubulacao coupling, and the front end of the drive shaft (2) inferiorly receives a starter lever (13) that esten–out of the body (1) and sliding on a tear and (15) on the underside of the body (1), whose secondary cavity (80) and communicating with the main cavity (70) through a channel that well and in line with the advance Groove (3) now with recoil Groove (4) and in such channel, is inserted a locking pin (17) with spiral spring (18) leaving the lock pin (17) Tablet about pressure by an eccentric disc (19) provisions of the longitudinal Center of the main cavity (70) This disk (19) sympathetic to the meat of a lock tetra (21) whose key input hole, positioned on the front face (30) of the body (1). Still in between the main cavity (70) and secondary (80) it is a RIP oblong (35) where it extends a 05 electric drive pin (36) coming from the drive shaft (2) and extreme by a tether (37) provisions along the main cavity (70) and at the rear of this section, where there is two contact terminals (38) that of uni side skirt out of the body (1) where define a terminal (40) to 10 wires electrical linkage of the ignition coil (65), while on the other side, in due course establish contact with a contact plate (41) inserted into the beam (37) whose rear end and passes with background (44) of the body (1), where and inserted a screw (45) to host United door (46) that through a contact terminal grounded (91) provides timely contact with 15 an auxiliary terminal (48) tracking for an alarm the front

end of the body (1) with a lid (49) with hole (50) concentrico with the kernel lock to tetra (21) and designs also a led (51) warning light, while the extreme upper body (1) and covered with a cover 20 (52) laying down a fixation support (53).

247) Family number: 57566604 (TWM487806Y) © PatBase

Title: TOOL–DRAWING OIL PRESSURE CYLINDER BODY RETRACTABLE STRUCTURE

Priority: TW20140210638U 20140617

Family:

Publication number	Publication date	Application number	Application date
TWM487806 Y	20141011	TW20140210638U	20140617

Probable Assignee: KUGI TECH CORP

Assignee(s):(std)**:** KUGI TECH CORP

Assignee(s): LIBRARY MACHINE TECHNOLOGY CO LTD

Inventor(s):(std)**:** LIU ZHE SEN

International class (IPC 8–9): B23B29/20 B23Q3/12 (Advanced/Invention)

Classification Explorer

Abstract:
Source: TWM487806Y The novel's main purpose is to provide a scalable his sword cylinder body structure; structure can be locked by its retractable design tool changer arm, the hydraulic cylinder drive back and forth to complete the tool change retractable telescopic structure, the structure of the Department includes: a his sword cylinder body and a telescopic structure, which his sword before the cylinder body side has a main spindle, spindle sleeve features a telescopic body structure, diameter at the top and bottom ends of the mandrel body has a guide groove, body spindle center is provided at the receiving slot, is provided with a groove accommodating the hydraulic cylinder, the cylinder holder and the front end of the flange sleeve has a locking nut using a hydraulic cylinder of the spindle lock cylinder located in the telescopic construction the center of the front end of the telescopic structure comprising: a shaft sleeve, a front cover, a plurality of guide blocks and a plurality of guide key, the shaft sleeve has a sleeve hole at the center, the front end of the rotating shaft sleeve has a locking front cover, the rear end of the rotary shaft sleeve is provided There ATC arm fixing ring, can lock located on the ATC arm tool changer arm retaining ring, the outer diameter of the shaft sleeve and mandrel body top and bottom ends of the guide groove has a guide hole at the corresponding guide hole can be accommodated guide block and After guiding the key cylinder sleeve holes set into the body end his sword, the guide block after the plural and plural guide key lock, guide key can be accommodated in the body just the top and bottom ends of the spindle guide slot.

0) US5987945A – SECURITY CLOSURE FOR CONTROL OF ACCESS

248) Family number: 11864927 (US5987945A) © PatBase

Title: SECURITY CLOSURE FOR CONTROL OF ACCESS

Priority: ES19970000430 19970227

Family:

Publication number	Publication date	Application number	Application date
AT222636 E	20020915	AT19980103524T	19980227
DE59805220 D1	20020926	DE19985005220	19980227
EP0861959 A2	19980902	EP19980103524	19980227
EP0861959 A3	20000531	EP19980103524	19980227
EP0861959 B1	20020821	EP19980103524	19980227
ES2138523 AA	20000101	ES19970000430	19970227
ES2138523 BA	20000516	ES19970000430	19970227
US5987945 A	19991123	US19980009171	19980120

Probable Assignee: TALLERES DE ESCORIAZA SA

Assignee(s):(std)**:** TALLERES ESCORIAZA SA

Assignee(s): TALLERES DE ESCORIAZA TESA SA ; TALLERES DE ESCORIAZA BARRIO VENTASS N SA ; TALLERES DE ESCORIAZA S A ; TALLERES DE ESCORIAZA S A TESA ; TALLERES DE ESCORIAZA SA

Inventor(s):(std)**:** ARAMBURU LUIS ANGEL RUANO ; RUANO ARAMBURU LUIS ANGEL

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)**:** E05B47/06 G07C9/00 (Advanced/Invention); E05B47/00 E05B65/10 (Advanced/Non–invention); E05B47/06 G07C9/00 (Core/Invention); E05B47/00 E05B65/10 (Core/Non–invention)

International class (IPC 1–7)**:** B60S5/02 B67D5/06 E05B13/00 E05B47/00 E05B47/06 E05B49/00

CPC: Y10T70/5226 Y10T70/5805 Y10T70/7062 Y10T70/7068 Y10T70/7107 G07C9/00722 E05B47/0692 E05B65/1086 E05B2047/0031 E05B2047/0086

European class: E05B47/06E E05B47/06E4R G07C9/00E12G P05B47/00A5D7D P05B47/00K3 P05B65/10P

US class: 70/107 70/218 70/277 70/278.1 70/279.1

Classification Explorer

Cited documents: WO9309319 A1, US5809812 A, US5640863 A, US5475996 A, US5457975 A, US5083448 A, US4820330 A, US4429556 A, US4276760 A, US3881331 A, US3455129 A, US3390558 A, US1684230 A, GB2262770 A1, EP0451712 A1, EP0425431 A1, EP0378124 A1, EP0268335 A1, DE3631118 A1,

Forward Citations: WO11119097, WO09078800, WO06110958, WO04067882, WO04067882, WO0118331, USD769102, USD766067, USD756196, USD752946, USD743773, USD738700, USD729610, USD701743, USD698222, USD684842, USD683205, USD682659, USD682658, USD682657, USD682656, USD673025, USD666074, USD630929, USD609994, USD602762, USD601003, USD601002, USD601001, USD599189, USD597821, USD595109, USD592486, USD584594, USD569221, USD568717, USD558026, USD554196, USD553949, USD533763, USD533762, USD533047, USD515401, USD512899, USD501131, US9262875, US9187929, US8590948, US8539801, US8522582, US8490444, US8353189, US8215685, US8001818, US7818984, US7373795, US7308810, US7168276, US7096698, US7096697, US7007985, US6895791, US6837081, US6651468, US6615629, US6418765, US2015159402, US2015114055, US2013067969, US2012175892, US2011265527, US2010264672, US2009038353, US2008127686, US2008011030, US2007157684, US2007137267, US2007032826, US2007017265, US2006196238, US2006144102, US2006117819, US2006112747, US2006021404, US2005172685, US2005167995, US2004177663, US2004003633, US2003084690, FR2884272, EP1645702, EP1565633, EP1522659,

Abstract:
Source: US5987945A A safety closure for controlled access, that includes an inner and outer unit mounted on a door to drive a main bolt and a privacy bolt. The outer unit has an armored chassis with a primary tube of the actuating handle and carrying a secondary tube having a square axis that drives the main latch. A retractable tenon provides the connection between the primary and secondary tubes and a retractor treadle is in permanent contact with the retractable tenon and a rocker having elastic arms that drives the retractor treadle. A motorize actuator is activated by an electronic card reader. The motorized actuator or an emergency handle may actuate the rocker in opposite directions. The inner tube has first and second pushing tabs symmetrically arranged in mutual opposition whereby the pushing tabs act independently of each other in response to the direct or opposite turning of the inner actuating handle to actuate the privacy bolt. An emergency lock cylinder drives the emergency handle.

249) Family number: 19498070 (GB788507A) © PatBase

Title: Apparatus for mixing two liquids together in predetermined quantities

Priority: GB19530021719 19530806

Family:

Publication number	Publication date	Application number	Application date
GB788507 A	19580102	GB19530021719	19530806

Probable Assignee: IRENE JOYCE MOUNTFORD

Assignee(s):(std)**:** IRENE JOYCE MOUNTFORD ; LAWRENCE ALMERIC MOUNTFORD

International class (IPC 8–9): B67D7/74 G01F11/02 (Advanced/Invention); B67D7/74 G01F11/02 (Core/Invention)

CPC: B67D7/742 G01F11/021

European class: B67D7/74B2 G01F11/02B

Classification Explorer

Abstract:
Source: GB788507A 788,507. Mixing liquids. MOUNTFORD, L. A., and MOUNTFORD, I. J. Aug. 6, 1954 [Aug. 6, 1953], No. 21719/53. Class 86 [Also in Group XXVIII] In apparatus for distributing a mixture of two liquids, for example petrol and oil, in which the movements of a first piston in a first cylinder receiving for example petrol, cause the movement of a second piston in a second cylinder for receiving, for example, oil, the movement of the first piston is caused either by the thrust of the petrol admitted under pressure or is effected manually and the oil delivered by the second piston is fed into a duct admitting the oil into the first cylinder adjacent to where the petrol enters the latter cylinder so that the oil is mixed intimately with the petrol. The apparatus shown in Figs. 2, 3 and 4 comprises a metering chamber 3 having a valve–controlled inlet 2 for connection to a supply of petrol under pressure and being provided with a piston 4 and hollow piston rod 6. The rod 6 has a rack 21 co–operating with a gear wheel 38 which is connected to a shaft 37 through pawl and ratchet mechanisms whereby shaft 37 completes a full revolution during the outward or "charging" stroke of the piston. The shaft 37 carries a wheel 40 which is connected to a piston 45 in a cylinder 32 functioning as an oil pump. The oil is supplied through a passage 84 from a bottle 94 detachably connected to the cylinder wall. Valves 89, 79 are provided at the mouth of the bottle to prevent oil flow through passage 84 unless when suction is applied by the oil pump. The cylinder 32 is provided with a second piston 49 formed with three longitudinal grooves 51 52, 53, the groove 51 communicating with the passage 84, the groove 52 co–operating with a set screw 54 to prevent rotation of the piston 49 and the groove 53 being adapted to communicate by way of valve 56 with the cylinder 3. The piston rod 58 has a screwthreaded portion 59 formed with a flat 60 on which are fitted stop washers 61 each provided with a lug 62, the lugs being differently disposed angularly. A rotary cap 66 provided with a lug 71 is mounted on the end of the cylinder 32 and the position of the cap determines which of the lugs 62 will engage the lug 71 during the stroke of the piston 49. The cap has markings indicating the measure of oil to be supplied. As the piston 45 is drawn rearwardly by rotation of the wheel 40, the piston 49 closely follows the piston 45 until stopped by a lug 62 engaging the lug 71, whereupon continued movement of piston 45 sucks in oil from the bottle 94. On return of piston 45 this oil is forced past valve 56 into cylinder 3 to mix with the petrol therein. The apparatus is set into operation by the pulling of a trigger 30 to actuate a pivoted plate 101 whereby petrol inlet valve 8 is opened and outlet valve 12 is closed. Petrol forces the piston 4 along the cylinder until it reaches an end plate 20 whereupon a lug 104 connected to the plate 101 is freed from engagement with a key 22 on the piston rod 6, allowing the pivoted plate 101 to swing to its initial, position so that valve 8 is closed and valve 12 is opened. The piston 4 is returned by pressure of spring 23 and discharges the mixture of oil and petrol through pipe 19. The inlet 2 may be attached by a flexible conduit to a point between the air separator and the meter of a conventional electrically–driven kerbside pump. The apparatus shown in Fig. 7 is manually operated to turn through ratchet and pawl mechanism a cam assembly 158 formed on its interior with a cam track 159 arranged to co–operate with a cam follower 160 rotatably secured to a bearing pin on a collar. 161 attached to the piston rod 6. As the handle 169 is turned the piston 4 is drawn away from cylinder head 110, whereby petrol is drawn into the cylinder 3 together with oil supplied by the oil pump. When the cam assembly has completed a revolution a spring actuated locking rod 171 enters a hole 174 in plate 162 preventing further rotation of the cam assembly until the piston 4 has returned to its initial position under spring influence, to effect the discharge stroke

0) US4419034A – TELESCOPABLE RETRACTABLE STACKER KEY LOCKING DE...

250) Family number: 3879861 (US4419034A) © PatBase

Title: TELESCOPABLE RETRACTABLE STACKER KEY LOCKING DEVICE

Priority: US19810224320 19810112

Family:

Publication number	Publication date	Application number	Application date
US4419034 A	19831206	US19810224320	19810112

Probable Assignee: BENEFICIAL COMMERCIAL CORP

Assignee(s):(std)**:** LINE FAST CORP

Assignee(s): BENEFICIAL COMMERCIAL CORP ; BENEFICIAL COMMERCIAL CORP A CORP OF DE ; BENEFICIAL COMMERICIAL CORP ; BENEFICIAL COMMERICIAL CORP 200 BENEFICIAL CENTER ; BENEFICIAL COMMERICIAL CORP 200 BENEFICIAL CENTER PEAPACK NJ A CORP OF DE

Inventor(s):(std)**:** DIMARTINO JOHN M

International class (IPC 8–9)**:** B60P7/13 (Advanced/Invention); B60P7/06 (Core/Invention)

International class (IPC 1–7)**:** B60P7/08 B60P7/13

CPC: B60P7/132 Y10T24/42

European class: B60P7/13B

US class: 24/453 410/77 410/83

Classification Explorer

Cited documents: US4212251 A, US4023504 A, US3975804 A, US3612466 A, GB1283795 A, GB1189426 A, DE2305001 A1,

Forward Citations: WO9728020, WO10084368, USD670553, USD661975, USD660682, USD651889, US8230707, US8042366, US8001812, US7997106, US7963132, US7730751, US7651305, US7647796, US7614266, US7500371, US7415852, US7409842, US7204106, US7201029, US7191623, US7143614, US7111479, US7100404, US7100403, US6735990, US6679660, US6662602, US6588241, US6553794, US6155088, US6112561, US6074142, US6006557, US6000252, US6000251, US5893692, US5356257, US5257440, US4957399, US4950114, US4732505, US4507032, US2011080707, EP0877677, EP0585498, CN103707895, CN103707895, AU732694,

Abstract:
Source: US4419034A A locking device for a vehicle platform adapted for securing a corner fitting of a shipping container wherein the device has a housing fixidly mounted on and beneath the upper surface of the platform, having a neck member and a horizontal latching member mounted within the housing when the device is in a first position adapted to being elevated to enter a slot in a corner fitting when a container is placed on the platform with the latching member being capable of being rotated to a second position for elevation and rotation to engage an inner surface of the corner fitting to lock the container fitting to the upper surface of the platform and capable of being returned to a first position whereby it is beneath the upper surface of the platform.

0) SE453684B – AUTOMATIC VEHICLE BRAKE ADJUSTER AUTOMATISK BR...

251) Family number: 2640435 (SE453684B) © PatBase

Title: AUTOMATIC VEHICLE BRAKE ADJUSTER

Priority: SE19860000825 19860224

Family:

Publication number	Publication date	Application number	Application date
SE453684 B	19880222	SE19860000825	19860224
SE453684 C	19880602	SE19860000825	19860224
SE8600825 A	19870825	SE19860000825	19860224
SE8600825 A0	19860224	SE19860000825	19860224
SE8600825 L	19870825	SE19860000825	19860224

Probable Assignee: CAMPH SVEN ERIK

Assignee(s):(std)**:** CAMPH SVEN ERIK

Assignee(s): SVEN ERIK CAMPH

Inventor(s):(std)**:** CAMPH SVEN ERIK

Inventor(s): SVEN ERIK CAMPH

International class (IPC 8–9)**:** F16D65/52 F16D65/56 (Advanced/Invention); F16D65/38 (Core/Invention)

International class (IPC 1–7)**:** F16D65/52 F16D65/56

CPC: F16D65/561

European class: F16D65/56B

Classification Explorer

Abstract:
A radially extending surface on the wheel has inclined tracks which are suited to receive cogs on telescopically displaceable power transmission components. An axially extending toothed surface works in conjunction with a snap lock coupled to the key shaft (104) via a rigid attachment. A compression spring (131) is fitted between this attachment and the wheel, impelling the latter against the cogs on the power transmission components.

0) IN00704MU2000A – AN IMPROVED LOCKING DEVICE

252) Family number: 48169084 (IN00704MU2000A) © PatBase

Title: AN IMPROVED LOCKING DEVICE

Family:

Publication number	Publication date	Application number	Application date
IN00704MU2000 A	20050506	IN2000MU00704	20000727
IN196477 B	20070318	IN2000MU00704	20000727

Probable Assignee: GODREJ AND BOYCE MFG CO LTD

Assignee(s): GODREJ AND BOYCE MFG CO LTD

Inventor(s): THOTTUVAI SIVASUBRAMANI MURALI

International class (IPC 1–7): E05B37/00

Abstract:
Source: IN00704MU2000A An improved locking device with an Ultra high security reversible key pin tumbler locking cylinder system comprising cylindrical hollow stator (1); to accommodate a rotor (2) rotably placed; having keyway slot (3); the said stator and rotor have plurality of radial matching slots (4) and (5); to accommodate bottom pin–tumbler (6); top pin–tumbler (7) connected through individual operating and biasing means (8); a tail piece (9) with retainers (10); is held in the opposing end through a spacer (11); a reversible key blade (12); having circular/ oval indentation on either sides/ edges to operate the lock through the key–way, in the close position the mushroom pin–tumblers will bridge the radial holes of stator and rotor; in open position the bottom pin–tumblers will be away from the bridging line thus allowing the rotor to turn by means of reversible key thereby opening the lock.

0) GB1513823A – SAFETY DEVICE FOR GUARDED MACHINERY

253) Family number: 1515634 (GB1513823A) © PatBase

Title: SAFETY DEVICE FOR GUARDED MACHINERY

Priority: GB19750010219 19750312

Family:

Publication number	Publication date	Application number	Application date
CA1045182 A1	19781226	CA19760247708	19760311
CH625027 A	19810831	CH19760003057	19760311
DE2609537 A1	19760930	DE19762609537	19760308
FR2303928 A1	19761008	FR19760006910	19760311
FR2303928 B1	19821119	FR19760006910	19760311
GB1513823 A	19780614	GB19750010219	19750312
IT1056953 A	19820220	IT19760020978	19760309
JP1268524 C3	19850610	JP19760027008	19760312
JP51145979 A2	19761215	JP19760027008	19760312
JP59043680 B4	19841023	JP19760027008	19760312
NL7602509 A	19760914	NL19760002509	19760310

Probable Assignee: UNIMAX SWITCH LTD

Assignee(s):(std)**:** UNIMAX SWITCH LTD

Assignee(s): YUNIMATSUKUSU SUUITSUCHI LTD ; FRIENDSHIP ADRIAN FM ; RUSTON KENNETH ; UNIMAX SWITCH LIMITED ; UNIMAX SWITCH LIMITED TE MAIDENHEAD GROOT BRITTANNIE

Inventor(s):(std)**:** ADORIAN FURANSHISU MAABIN FURE ; FRIEDSHIP ADRIAN FRANCIS MERVY ; FRIENDSHIP ADRIAN F M ; FRIENDSHIP ADRIAN FRANCIS MERV ; MARLOW BUCKINGHAMSHIRE GROSSBR ; RUSTON KENNETH ; KENESU RASUTON

Inventor(s): ADORIAN FURANSHISU MAABIN FURENDOSHITSUPU ; MERVYN FRIENDSHIP ADRIAN FRANCIS ; KENNETH RUSTON ; FRIENDSHIP ADRIAN FM ; ADRIAN FRANCIS MERVYN FRIEDSHIP

International class (IPC 8–9): D03D51/06 D04B35/10 E05B27/08 E05B47/00 E05C21/00 F16P3/00 F16P3/02 F16P3/08 F16P3/10 (Advanced/Invention); D03D51/00 D04B35/00 E05B27/00 E05B47/00 F16P3/00 (Core/Invention)

International class (IPC 1–7): D03D51/06 D04B35/10 D06F37/18 D06F37/42 E05B27/08 E05B43/00 E05B47/00 E05C21/00 F16P3/00 F16P3/08 F16P3/10 F26B11/04 H01H27/08

CPC: F16P3/00 F16P3/08

European class: F16P3/00 F16P3/08

Classification Explorer

Cited documents: US2325406 A, GB1350911 A, GB1260322 A, FR2233558 A1, DE2257587 A1,

Forward Citations: GB2239895, GB2239895, EP0100316,

Abstract:
Source: GB1513823A The safety device contains a first unit (1) with a closure body which can be fitted to the machine frame, and a second unit (5) which can be fitted to a protection device (7), for example a door, and has a closing part (9). The closing part can be moved from an open position into an off position and into an on position and, in the open position, can be engaged with the first unit and disengaged from it. The closing part operates a switching device (29) when both units are engaged with one another, in such a manner that the voltage is applied to the machine only when the closing part (9) is in the on position. A delay device (30, 31, 32, 34), which can be actuated from the on position into the off position by rotating the closing part (9), prevents displacement of the closing part from the off position into the open position during a time interval in order, for example, to block access to the machine before it stops. The device can be used, for example, on a domestic spin drier.

254) Family number: 17109692 (US4762490A) © PatBase

Title: TOOTH SETTING AID ARRANGEMENT FOR POSITIONALLY CORRECTLY SETTING ARTIFICIAL TEETH IN A COMPLETE LOWER DENTURE

Priority: DE19860005333U 19860227 DE19860017182U 19860627 DE19860025405U 19860923 EP19870901469 19870227 WO1987EP00119 19870227 DE19873773807 19870227

Family:

Publication number	Publication date	Application number	Application date
AT68329 E	19911115	AT19870901469T	19870227
DE3773807 D1	19911121	DE19873773807	19870227
DE8605333 U1	19860507	DE19860005333U	19860227
DE8617182 U1	19870115	DE19860017182U	19860627
DE8625405 U1	19870122	DE19860025405U	19860923
EP0250637 A1	19880107	EP19860109546	19860711
EP0258357 A1	19880309	EP19870901469	19870227
EP0258357 B1	19911016	EP19870901469	19870227
JP63031656 A2	19880210	JP19860174008	19860725
US4762490 A	19880809	US19860944670	19861219
US4886453 A	19891212	US19870130385	19871026
WO8705202 A1	19870911	WO1987EP00119	19870227

Probable Assignee: BISICO LUDWIGS AND MARTEN INHABER HORST LUDWIGS 4800 BIELEFELD DE

Assignee(s):(std)**:** BISICO LUDWIGS AND MARTEN INHABE ; LUDWIGS HORST

Assignee(s): LUDWIGS HORST 4800 BIELEFELD DE ; HORUSUTO RUUTOBUIHISU ; BISICO LUDWIGS AND MARTEN INHABER HORST LUDWIGS 48 ; BISICO LUDWIGS AND MARTEN INHABER HORST LUDWIGS 4800 BIELEFELD DE

Inventor(s):(std)**:** LUDWIGS HORST

Inventor(s): HORUSUTO RUUTOBUIHISU

Designated states: AT BE CH DE FR GB IT JP LI LU NL SE US

International class (IPC 8–9)**:** A61C11/00 A61C11/08 A61C13/10 A61C13/12 (Advanced/Invention); A61C11/00 A61C11/02 A61C11/06 A61C11/08 (Advanced/Non–invention); A61C11/00 A61C13/00 (Core/Invention); A61C11/00 (Core/Non–invention)

International class (IPC 1–7)**:** A61C11/00 A61C13/10 A61C13/12

CPC: A61C11/082 A61C11/006 A61C11/005 A61C11/02 A61C11/087 A61C11/08 A61C11/022 A61C11/06 A61C11/084 A61C11/088 A61C13/1016

European class: A61C11/08 A61C13/10B3A K61C11/00M K61C11/00S K61C11/02 K61C11/02A K61C11/06 K61C11/08A1 K61C11/08A3 K61C11/08M K61C11/08S

US class: 433/54 433/55 433/56 433/59

Classification Explorer

Cited documents: US3913230 A, US3693257 A, US3414977 A, US3277576 A, US2772477 A, US2748481 A, US2618068 A, US2571280 A, US2270561 A, US2234411 A, NL8501029 A, GB206667 A, FR2548532 A1, DE2909719 A1,

Forward Citations: WO0042941, USD599023, USD596297, USD596296, USD594988, USD594987, USD576734, USD576733, USD576732, USD575873, USD575404, USD573712, USD567380, USD566281, USD565186, USD559986, US7690919, US7347689, US7341451, US7156660, US7108507, US7108507, US6102698, US6033221, US6015291, US6004132, US5993208, US5984676, US5876200, US5795152, US5707233, US5320527, US5163841, US2015111168, US2006199143, US2005106530, US2004214133, US2004146829, US2004029071, US2004029070, KR101100929, KR100976043, JP5875916, JP2013198632, EP1704831, DE19621800, DE102008006644, DE102008006644, DE102005013459,

Abstract:
Source: US4762490A A tooth setting aid arrangement for use for positionally correctly setting artificial teeth in a complete lower denture on a lower jaw model in accordance with a Pound's line includes a holder which is positionally fixable with respect to the lower jaw model and is arched along an imaginary skullcap−shaped surface with a sagittal and transversal compensation curve, and two insert members which are pivotable and shiftable on the holder within the imaginary skullcap surface as well as arrestable in selected positions thereof relative to the holder for adjustment to the Pound's line. The holder is constituted by a bridge member which includes two plate−shaped bridge elements which are juxtaposed with one another and spaced from each other by a distancing element so as to bound an insertion space. Each of the insert members includes a straight portion and two arm portions which extend at an angle from one side of the straight portion. The insertion slot is dimensioned to receive the arm portions of either one of the insert members at a time, or of both of the insert members at the same time. Recessed head screws passing through the end portions of the bridge elements cooperate with knurled nuts for clamping the insert arms between the bridge portions upon tightening. The straight portions of the insert members have at least regions made of transparent material and provided with marking lines which are to be superimposed with the Pound's line.

0) GB444588A – IMPROVEMENTS IN OR RELATING TO SETTING CONTROL ...

255) Family number: 18936456 (GB444588A) © PatBase

Title: Improvements in or relating to setting control mechanism for calculating machines and cash registers

Family:

Publication number	Publication date	Application number	Application date
GB444588 A	19360323	GB19340027271	19340922

Probable Assignee: KRUPP AG

Assignee(s):(std)**:** KRUPP AG

Assignee(s): FRIED KRUPP AKTIENGESELLSCHAFT

International class (IPC 8–9): C08B3/00 G06C27/00 (Advanced/Invention)

CPC: C08B3/00 G06C27/00

European class: C08B3/00 G06C27/00

Classification Explorer

Abstract:
Source: GB444588A 444,588. Calculating–apparatus; accounting–machines. KRUPP AKT.–GES., F., Essen, Germany. Sept. 22, 1934, No. 27271. Convention date, Sept. 23, 1933. [Class 106 (i)] In order to check the accuracy of the initial setting of a calculating machine or cash register, a checking symbol is introduced into the machine by keys at the beginning of a calculation. If this symbol is not in agreement with a symbol formed automatically by the machine to correspond with the data set up, the operation of the machine is interrupted. Means are provided to print a checking symbol corresponding to the result of the operation or series of operations. The invention is described as applied to an accounting machine for dealing with series of transactions, each series comprising the entry of an old balance and one or more items, followed by the calculation of a new balance. The setting field, Fig. 3, comprises amount keys 10, account number keys 11, transaction banks 13, 14, debit and credit item keys 15, old balance keys 15<1>, a balance totalizer control lever 17, a total–taking lever 18 and motor bar 19. In addition three banks of keys 12 are provided for setting up a checking symbol or cipher number. The old balance, account number, and cipher number or symbol are taken from an account card, Fig. 16, and set up by depression of keys 10, 11, 12, Fig. 3, the appropriate old balance key 151 depressed and the machine released by the motor bar 19. If the data is correctly set up, the cipher number calculated by the machine from the old balance and account number will agree with that set up on the keys 12, the old balance will be printed on the record strip, Fig. 17, and the machine conditioned to receive an item by the locking of the old balance keys 15<1> and release of the deposit and withdrawal keys 15. On the other hand, if the data has been incorrectly set up, the cipher numbers will not agree, the data will be printed on the record strip with a sign to indicate its inaccuracy, and the machine be so conditioned that the next succeeding operation must be the taking of a new balance. This new balance is also printed on the record strip with a distinguishing sign, and at the end of the day the amount of the inaccurate entry must be deducted from the amounts in the old balance and new balance totalizers. A new cipher number is calculated by the machine and printed on the account card and record strip upon the taking of a new balance. The cipher'number may be related to or calculated from the data in any manner. In the machine described, the digits of each denomination of the amount and account numbers are each assigned a code number in accordance with the schedule shown in Fig. 1 and these code numbers are summed to form the cipher number. Thus, the cipher number corresponding to an amount of 005,000.00 and an account number of 1234 would be 0+1+22+0+12+ 10+2+21+2+10+12+0=92. Automatic calculation of cipher number. The racks 24, Fig. 10, that communicate the amount and account number settings from the differentials to the type pinions 25 are each provided with cam slots 30, 31 for the units and tens of the corresponding code numbers. Each units slot serves vertically to position an arm 33 carrying a pinion 38 meshing with two wheels 36, 37 on parallel shafts 43, 44, Fig. 11, the wheels of succeeding denominations being so connected that the arrangement serves to accumulate the increments received from the cam–slots and rotate the shaft 44 through an angle proportional thereto. This units setting serves to position a star–wheel 48 keyed to shaft 44 and adapted to co–operate with a projection 87 on a wheel 86 free on the shaft and set by the units bank of cipher number keys. The tens of the code numbers are similarly accumulated by pinions 59 vertically positioned by the cam–slots 31, and meshing with wheels 58, 60 on parallel shafts 51, 52, the total of the tens setting being communicated through the shaft 52 to a star wheel 70 co–operating with a projection 89 on a wheel 88 set by the tens bank of cipher number keys. Transfer mechanism is arranged between the shafts 44, 51 and between shafts 52 and a shaft 69 on which is keyed a star wheel 85 co–operating with a projection 91 on a wheel 90 set by the hundreds bank of cipher number keys. Pinions 68, 72, 84 on the shaft 69 transmit the settings of shafts 44, 52, 69, respectively, to type wheels to print the calculated cipher number. Sequence arrangements. Normal operation. At the beginning of a series of operations, the old balance keys OC, OD, Fig. 18, are free and the item entering keys 15 are locked by a slide 202. Depression of the appropriate old balance key and the motor bar frees the machine to enter the data taken from the account card; the cipher numbers are compared and if they agree, the slide 202 is lowered to lock the old balance keys and free the item keys. For this purpose the slide 202 is connected through a telescopic link 214, linkage 213, 213b, 213, shaft 131, and arm 132 to a bar 103 that is urged toward the left by a spring 104, but restrained in the position

shown by a bell crank 124 while a stud 125 projecting therefrom is supported by an arm 126 flexibly mounted on a bar 101. This bar 101 is controlled by a cam 97 and is released thereby for movement to the left during each operation. However, in all operations other than old balance operations, the bar will be restrained in normal position by a plunger 111 connected to the bar and bearing against the underside of a rack 113 set longitudinally by the' differential of the operation key bank 15, 151. Movement of the bar 101 to the left during an old balance operation serves through bell crank 109, shaft 148 and forked arms 149 to shift the star wheels 48, 70, 85, Fig. 11, towards the projections 87, 89, 91 to compare the cipher numbers. If these agree, the extent of movement of the bar 101 is sufficient to remove the arm 126 from under the stud 125, and the bar 103, thus released, moves to the left to lower the slide 202 and adjust a special type−wheel to non−printing position. The bar 103 remains in its left hand position until a new balance is taken, when it is returned by a rocker 118. This rocker is actuated at each machine operation by a bar 102 rocked by a cam 98, but is held in ineffective position during all operations other than a new balance operation by a lever 114 linked to the rocker and bearing against the underside of the rack 113. However, in a new balance operation, a recess in the rack lowers the rocker and permits it to strike an arm 120 and restore the bar 103. Sequence arrangements. Inaccurate setting. In the event of the old balance data being inaccurately set on the keyboard, the cipher numbers will not agree and the bars 101, 103 will be held in their right hand positions. In this position of the bar 103, the slide 202 will be maintained in its upper position to lock the item keys 15 and the special type−wheel will print an asterisk indicating a faulty booking. Such an entry must be followed by a new balance operation. To prevent the release of the machine for a second old balance operation immediately following a faulty booking, the old balance keys co−operate with a cam plate 201, Fig. 15, to raise the upper part 205 of a telescopic link 205, 206. At the beginning of the faulty booking operation, a stud 208 on the lower part 206 of the link co−operates with a cam 210 on a shaft 209 rotated counterclockwise at each machine operation. At the beginning of the subsequent operation the stud assumes the intermediate position shown in dotted lines. Now if an old balance key is depressed the stud moves to its highest position and blocks a segment 211 connected to the motor bar, thus preventing the release of the machine. During a new balance operation, the stud 208 remains in its intermediate position until it is returned to its lowest position by the cam 210. Hammer impression arrangements. Upper and lower sets of printing hammers 184, 167, Figs. 4 and 4a, are provided to print from typewheels 20 on a record strip 185, Fig. 17, and an account card, Fig. 16, respectively. The hammers are selected for operation by a notched slide 139, Figs. 4 and 14, the upper surface of which co−operates directly with the tails of the lower set of hammers and the lower surface with levers 168 linked to the upper hammers. This hammer−control slide 139 is urged to the right by a spring 141, Fig. 14, and bears by a roller 142 on a stepped transverse slide 143 positioned by the rack 113 that is set by the differential of the operation bank of keys 15, 15'. To prevent the entry of an erroneous new balance on the account card, a slide 136, Fig. 18, on the bar 103, co−operates with a slot 140 in the hammer slide 139 to restrain the latter in a new balance operation following the entry of an inaccurate old balance. Specification 407,927 is referred to.

0) GB719376A – IMPROVEMENTS IN OR RELATING TO COMPOSING APPARA...

256) Family number: 19539483 (GB719376A) © PatBase

Title: Improvements in or relating to composing apparatus for reproducing typographical andlike matter by photographic means

Priority: GB19500018120 19500720

Family:

Publication number	Publication date	Application number	Application date
GB719376 A	19541201	GB19500018120	19500720

Probable Assignee: HENRY GEORGE CROUCHER

Assignee(s):(std): HENRY GEORGE CROUCHER ; WILLIAM CLOWES AND SONS LTD

Assignee(s): WILLIAM CLOWES AND SONS LIMITED

International class (IPC 8–9): B41B17/04 (Advanced/Invention); B41B17/00 (Core/Invention)

International class (IPC 1–7): B41B17/20

CPC: B41B17/04

European class: B41B17/04

Classification Explorer

Abstract:
Source: GB719376A 719,376. Photographic type–composing. CLOWES and SONS, Ltd., W., and CROUCHER, H. G. July 13, 1951 [July 20, 1950], No. 18120/50. Class 98(1) The machine comprises a support for an element or elements bearing characters to be photographically reproduced, means for supporting a lightsensitive receiving surface, an optical system for projecting images of the characters on the surface, the support, receiving surface supporting means and optical system being capable of relative movement perpendicular to the projection axis so that images of selected individual characters can be projected on the surface for reproduction, mechanism controlled by previously prepared record–bearing means for effecting such relative movements in succession to reproduce the characters in spaced and justified lines, the relative distances in a direction parallel to the projection axis between the optical system, the plane of the character to be reproduced and the receiving surface plane being adjustable, means for maintaining during such adjustment the required varying proportions between the adjusted distances so as to vary the size of a reproduced character and to focus the image thereof correctly upon the receiving surface, and means controlled by record–bearing means either comprised in or driven in synchronism with the aforesaid mechanism for adjusting the distances to enable the size of each reproduced character to be varied. Character–projection system. As shown in Fig. 3, the machine has a lighttight cover 9. A mounting tube 33 carrying a lamp 32 and a condenser 36 is slidable in the cover by means of a pair of supporting levers 38 pivoted 43 to a bracket 2b on the frame of the machine. A pair of levers 39, pivoted to bracket 26 at 42 and connected to levers 38 by a link 37, are connected to a lens mounting 77 slidable in a guide 79. A member–75 pivoted to a lever 39, engages a wedge 74, which is moved by a rod 73 connected to control mechanism when the size of image is to be changed to move the light source and the lens 77a together. A shutter 80 is mounted in front of lens 77a to make exposures. To prevent overheating, a shutter 52 may be mounted in front of condenser 36 and opened just before, and closed just after, the shutter 80. An iris diaphragm 54 is mounted below shutter 52, and is actuated by a stud 55 engaging a cam slot 56 in a fixed tube so that as the degree of enlargement is varied, the intensity of the light is also varied to keep the required exposure time constant. A plate carrying the characters for projection is mounted in a case 62 in a frame 61, which is grooved to move along a frame 60 in one direction, the frame 60 being movable in the perpendicular direction. Case 62 can thus be positioned, by mechanisms not shown but similar to those used in machines of the kind known under the Registered Trade Mark " Monotype" in two directions at right angles, to bring a selected character into position for projection. Case 62 has pairs of depending lugs 66 sliding on rods 67, connected by cross rods 68 to pairs of elements 69 which rest on pairs of wedges 70. These wedges, or, according to the Provisional Specification, rotatable cams, are movable by means of the control mechanism to move the case 62 vertically. Thus the lens 77a and the case 62 are movable to focus images of different sizes on the photographic film, supported on a plate 83 of a movable table 82 of the kind described in Specification 706,312 [Group XVI], the movements of the table being such that successive projected characters form lines of type. The line–shift mechanism is modified slightly to provide different inter–line spacings. This is in addition to the variation of spacing according to character size, described below. In an alternative form, the lamphouse and lens are threaded, and are movable by means of surrounding nuts which are prevented from moving axially, but which are rotated by racks movable by the control mechanism. The same objects may be achieved by moving the sensitized surface while the character–bearing plate remains in the same plane; two further modifications for carrying out these movements are described. Character carrier Positive or negative normal or reversed characters may be carried by a transparent sheet, but preferably the characters are provided on separate blocks, e.g. of glass, bearing the character and set in a stainless steel frame. The blocks are assembled in a frame and held between transparent or perforated metal

plates. When the apparatus is used in conjunction with photogravure and like processes, line screens may be used together with the character transparencies. Film perforating and winding mechanism The sensitized surface may be e.g. a photographic plate or cut film, but is preferably film wound on rollers 89, 89a. In some circumstances such film has to be perforated, and this is done by punches 115, Fig. 9, sliding through the casing of a film container 4 which rests on plate 83. The winding spool 89 engages a pin 133a on a driving disc 132a journaled in a wall 85a of the casing 4, which wall may, if desired, be adjustably positioned in the casing in accordance with the width of film. Disc 132a is splined on a shaft 130a journaled in brackets 856, 85c, and connected by a one−way drive to a pinion 136a meshing with a fixed rack 137. The film is not wound during the line−by−line movement in reproduction, but when a page is completed, the return movement causes the film to be wound to provide a fresh surface for the next page. The film may also be wound manually, by means of a tool or by means of a differential gear, if the length of film to be wound is greater than a page. Line−by−line movements are effected by mechanism described in Specification 706,312, [Group XVI]. The stroke of a part actuated by this mechanism is limited by a block placed between this part and a fixed part of the machine. By using a number of blocks of different sizes brought selectively into position, the distance between lines of text can be varied. Means are described for stopping the machine when the film is exhausted by means of a lever system, or, according to the Provisional Specification, by means of a steel tape or counting mechanism as described in Specification 719,372, [Group XVI], Removal and replacement of film container. The film container 4 is removed from or replaced on the plate 83 through a door 103, Fig. 14. On insertion of the container 4 into guides 84, a flange 170 on the sliding lid 88 of the container engages a groove in a bracket 172 mounted on a slide 160 mounted in the 'frame of the machine. This slide is normally urged to the right by a spring, but when the door is closed, it is moved to the left by a handle 160a which is then held by a catch. Lugs 174, 174a, 174b on the slide engage lugs 175, 175a, 175b on the door to keep it closed, and by means of bracket 172 lid 88 is slid to uncover enough film for the printing of the first line. As composition of lines proceeds the container 4 moves to the right, exposing more film as required. When the container is first inserted, a cam surface 178 thereon engages a pin 179, which is linked to a lever 182, which is thereby held up so that when door 103 is closed, a lug 184 on slide 160 passes thereunder. When container 4 starts to move when composition begins, surface 178 moves away from pin 179 and lever 182 drops so that a recess 183 therein engages lug 184. The door cannot then be opened until the container 4 is brought back to its initial position. A rack 102 on slide 160 engages a pinion 98. When the door is opened, the movement of the slide rotates the pinion, which actuates mechanism which raises the objective lens to prevent damage when the container is removed or replaced. Control mechanism. This mechanism, shown in Fig. 17, is similar to that described in Specification 719,371, and is controlled by a record strip prepared by keyboard means as described in Specification 719,372, [Group XVI]. A cylinder block 1090 has four pistons (of which only three are shown) actuated by different compressed air supplies. Each piston has a stop in a different place, so that a base plate 1091 on a rack 156x is moved through a different distance according to which air supply is used. A pawl 158x engages ratchet teeth on the back of rack 156x to prevent its return movement; this pawl can be released by actuating either a compressed air piston M5x or a rod 508c. The rack engages a gear wheel 1061 splined to a shaft 1060 carrying a disc 1050 on which four gauge rods are mounted. These rods control the setting of the optical system for different sizes of projected characters. A lever 1000 is rocked continuously by a cam on the main shaft of the apparatus, and is connected to mechanism which, when actuated, connects it to a slidable rod 1002 for two strokes. Rod 1002 is connected to a cross−head 1004, slidable on the shaft 1060 and on a shaft 1052 splined to a pinion 1053 engaging rack 156x, and urged to the right by a spring 1002a. Shaft 1052 and pinion 1053 are connected to mechanism (not shown) of the kind described in Specification 779,374, [Group XVI], for justification of the characters. Shafts 1052, 1060 are connected respectively to longitudinally slidable bars 1014, 1013, so as to move longitudinally with the bars but to rotate freely with respect to them. When cross−head 1004 is moved to the left, a buffer 1007 thereon engages one of the gauge rods on disc 1050, thereby moving shaft 1060 through a distance depending on which rod is brought into position by movement of rack 156x. This causes movement of bar 1013, which is connected to the rod 73 controlling the setting of the projection lens. Bar 1013 is held in place by a spring−urged wedge 1200. When character size is to be changed, lever 1000 is engaged to move the cross−head 1004, and a rod 1127 is raised by a compressed air piston, thus bri

0) US2101009A – RADIO TUNING APPARATUS

257) Family number: 21319652 (US2101009A) © PatBase

Title: RADIO TUNING APPARATUS

Priority: US19350028037 19350624

Family:

Publication number	Publication date	Application number	Application date
US2101009 A	19371130	US19350028037	19350624

Probable Assignee: GALVIN MFG CORP

Assignee(s):(std)**:** GALVIN MFG CORP

Inventor(s):(std)**:** MITCHELL DONALD H

CPC: Y10S70/30 H03J1/063 Y10T74/1957 Y10T70/5819

European class: 95I8A H03J1/06A

US class: 116/257 285/192 334/8 334/83 338/179 455/170.1 455/348 464/179 464/52 70/221 70/DIG.30 74/10.8 74/397

Classification Explorer

Forward Citations: US4565539, US2433295,

Abstract:
Source: US2101009A 1. In a radio– receiving set, a housing, a chassis removably located in said housing and including spaced brackets, a frame pivoted to said brackets, at least one tuning condenser carried by said frame and including a rotatably mounted shaft, a gear carried by said shaft and fixed thereon, a pinion rotatably mounted on said housing for driving said gear, a, spring urging said frame and gear toward said pinion, and means adjustable after said chassis is in said housing for limiting said movement, whereby free all w Mil l35 driving action of said gear by said pinion without play may be obtained.

0) US5799521A – SECURITY BAR WITH INDICATOR

258) Family number: 11111073 (US5799521A) © PatBase

Title: SECURITY BAR WITH INDICATOR

Priority: CA19982229963 19980218 US19970802024 19970218

Family:

Publication number	Publication date	Application number	Application date
CA2229963 AA	19980818	CA19982229963	19980218
US5799521 A	19980901	US19970802024	19970218

Probable Assignee: BROUWER GERARDUS J

Assignee(s):(std)**:** BROUWER GERARDUS J ; KENNEDY SAMUEL

Assignee(s): BROUWER GERARDUS J RR

Inventor(s):(std)**:** KENNEDY SAMUEL

Agent(s): BERESKIN AND PARR

International class (IPC 8–9)**:** E05B13/00 E05B17/20 E05C19/00 (Advanced/Invention); E05B67/38 (Advanced/Non–invention); E05B13/00 E05C19/00 (Core/Invention); E05B67/00 (Core/Non–invention)

International class (IPC 1–7)**:** E05B13/00 E05B17/20

CPC: Y10S292/65 Y10T70/5168 Y10T70/7915 Y10T70/7949 Y10T70/8027 Y10T292/23 Y10T292/67 E05C19/003 E05B13/001 E05B67/383

European class: E05B13/00B E05C19/00C P05B67/38B

US class: 292/259R 292/339 292/DIG.65 70/416 70/422 70/432 70/94

Classification Explorer

Cited documents: US779032 A, US5474343 A, US5466023 A, US5340172 A, US4971374 A, US4852921 A, US4792168 A, US4593946 A, US4491354 A, US4300796 A, US415437 A, US3895507 A, US3797005 A, US3729963 A, US3280606 A, US2812095 A, US197187 A, US1176407 A, US1076851 A, GB25550, GB190225550 A,

Forward Citations: WO11131971, WO0112934, WO0028180, US9534703, US9341002, US9255424, US8756965, US8746757, US7681421, US6370751, US6058563, US2015308168, US2015292243, US2015233099, US2012139270, US2011304164, US2011203335, US2011198865, US2009188214, US2008302146, US2008110215, US2003067176, GB2502124, GB2394929, GB2394929, GB2390113, GB2390113,

Abstract:
Source: US5799521A A security indicator has a two part telescopic locking bar attached to the handle of a door at one end and to the door or door jamb at the other end through an end piece. The device includes a cup or tube which encases the door handle, preventing use of the handle. The length of the bar is fixed by aligning apertures in each part of the telescopic locking bar to form a continuous aperture, inserting a frangible pin through the continuous aperture and locking the frangible pin in place with a padlock received by a hole in the frangible pin. The pin has a narrow portion which can be broken by relatively little human force. The device requires someone who does not have the key to the padlock on the frangible pin to break the frangible pin to enter a door fixed with the device. A broken pin alerts the occupant that an entry has occurred during his/her absence. A sleeve normally protects the narrow portion but slides easily away to expose the narrow portion when entry is desired.

0) GB617330A – FLUID PRESSURE CONTROL MECHANISM

259) Family number: 29694700 (GB617330A) © PatBase

Title: Fluid pressure control mechanism

Family:

Publication number	Publication date	Application number	Application date
GB617330 A	19490204	GB19450016412	19450627

Probable Assignee: BENDIX WESTINGHOUSE AUTOMOTIVE

Assignee(s):(std)**:** BENDIX WESTINGHOUSE AUTOMOTIVE

Assignee(s): BENDIX WESTINGHOUSE AUTOMOTIVE AIR BRAKE COMPANY

International class (IPC 8–9): F15B11/20 F16H3/00 (Advanced/Invention)

CPC: F15B11/20 F16H3/00 F16H2712/04

European class: F15B11/20 F16H3/00 R16H712/04

Classification Explorer

Abstract:
Source: GB617330A 617,330. Controlling reverse–gearing; locking levers. BENDIX–WESTINGHOUSE AUTOMOTIVE AIR BRAKE CO. June 27, 1945, No. 16412. Convention date, March 22, 1944. [Classes 80 (ii) and 80 (iii)] Relates to a selector–valve control–mechanism more particularly for use in a marine reversegear for supplying compressed air to inflate distensible annular members 8, 13, one, 8, of which, contracts friction clutch–segments to grip a driven member 10 and provide a direct forward drive between driving and driven shafts 5, 6; whilst the other, 13, contracts friction brake–shoes to station a carrier 15 of planets 17, arranged between a driving ring– gear 19 and a driven sun 18, thus providing reverse drive. The forward – neutral – reverse selector–valves 57, 58, 56, Fig. 1, and the engine–throttle are operated by a single controllever 98, Figs. 5 and 9, which is movable between positions 1 and 9, Fig. 2, and is moved from an engine–idling neutral position 1, Fig. 2, into a forward–gear position 2 and thence. laterally into a throttle–opening range 3–4, in a guided path 1, 2, 3, which, once started, cannot be retraced reversely, the return to neutral being only possible by first moving from position 3 to a further position 6 and thence laterally back to position 1, no step between positions 1, 2, 3, 6 and 1 being reversible. This, together with timed pressure–released locking– plungers 125, 126, 127, ensure that it is not possible to move the lever into the throttle–opening range 3, 4 (or 7, 8) or return to neutral, until after the forward–clutch (or reverse brake) has been fully engaged or to engage the reverse–brake until the pressure in the forward–clutch is below the minimum for complete disengagement. Partial engagement and thus slip and wear on the friction surfaces are thereby avoided. The invention is concerned with the provision of resiliently–biassed locking–rings 175, 176 (see below) which assist in enforcing the sequential operation of the lever in its closed path. Means is also provided for relieving the stationary pressure – seals 24, bearing on the driving–shaft 5, of all pressure during normal operation, to prevent wear on the seal. The selector – valve group comprises three dumb – belt – valves 56, 57, 58, Fig. 1, communicating with a common pressure–chest 43, supplied from a reservoir 44, and with a common open exhaust–duct 74. The outlet–chamber 50 of the valve 56 communicates through a conduit 78 directly with the reverse brake–annulus 13; that 51 of the valve 57, leads, through a conduit 79, to a non–rotating chamber 26, which supplies the forward clutch–annulus 8 through a spring– seated non–return valve 29; whilst the outlet of the third valve 58 leads, through a conduit 36 to a chamber containing an annular piston 35, which, through pins 36a and a sliding collar 32, opens the non–return valve 29 to vent the clutch–annulus 8 when forward drive is to be disengaged. The valves 56, 57 are fed through restrictor–orifices 48, 49 to ensure gradual engagement of the clutch and brake. The non–rotating chamber 26 has at each end pressure–seals 24, bearing on the driving shaft 5, and to prevent wear on the seals they are relieved of pressure when the forward–drive clutch 8 is engaged, by venting the chamber 26, working pressure being retained in the clutchannulus 8 by the non–return valve 29 and being made up manually as required, as described below. No seal is required for the reverse brake–annulus 13 which is kept under direct supply–pressure for all reverse operation. The selector–valves 56, 57, 58 are controlled by sliding and turning a cam–shaft 80, shown developed in Fig. 11, and having cam–slots 86, 85, 84, acting through balls 81, 82, 83 on hollow ported plungers 71, 72, 73, which operate the valves and also form exhaust–valve seats for their lower ends, the valve–axes lying on centrelines 90, 89, 88. The opposite side of the camshaft 80 has shaped apertures 128, 129, 130 for engagement with locking–plungers 125, 126, 127, which are actuated by air–pressure in the selector–valve outlet–conduits 78, 79, 36 to lock the cam–shaft positively for a predetermined time–interval to ensure the required sequential inflation and deflation of the clutch and brake annuli 8, 13, as described below. An allmechanical lock 41 also assists in this function and in controlling the sequence of the movements of the shift–lever 98. The selector–cam–shaft 80 is operated through a yoke 99, Fig. 9, pivoted to it at 102 and carried by the actuating–lever 98, fulcrumed at 106 on an extension–bracket of a collar 108, secured to an inner shaft 104, Fig. 1, which can rotate but not slide axially, whereby turning movement of the lever about the axis of the inner shaft 104 always turns that shaft, whilst lateral movement of the lever always moves the camshaft 80 axially and in the opposite direction to the lever. The shaft 104 is connected to the engine–throttle through a lost–motion connection (not shown), which permits sufficient idling travel for fully operating the selector–valves before the throttle–opening range is reached. The lever 98 is locked in a central neutral position by a pivoted latch 112, Fig. 5, engaging a notch 114 in a fixed endplate 115,.

and released by fully'depressing a spring−loaded button 121 in the end of the lever. The latch 112 also carries a worm 117, which, by freely tracking a gap between two segments of wheel−teeth 118 on the fixed endplate 115, determines the limits of the idling arc, beyond which the worm must be lifted clear of the teeth by partly depressing the button 121 to pass to the throttle−opening range. Release of the button in this range engages the worm 117 with the fixed teeth 118, thereby locking the lever 98 in any set throttleopen position, which may be finely adjusted by turning the worm 117 by a hand−knob 124. The sides of the abutments forming the notch 114 also serve as an inner limit for the throttleoperating range of the lever, which can only be returned to neutral by fully depressing the button 121 to raise the latch 112 over the abutments. The sequence for selecting forward speed from neutral is as follows: Initially, the axial centre−line 87 of the selector−valves 56 and c. is disposed as shown in Fig. 11 in relation to the cam−slots 86 and c., all valves being down in the cam−slots and open to exhaust. The centreline 131 of the locking−plungers 125, 127 is also disposed as shown, the centre plunger 126 being up and in engagement with its aperture 129, but not obstructing a limited clockwise movement of the cam 80. Movement of the control−lever 98 from this position, shown as 1 in Fig. 2, to position 2, turns the selector−cam 80 clockwise, from the right−hand side, causing a shoulder 91 of the cam−slot 85 to raise the central valve 57 and supply air−pressure to the forward clutch−annulus 8 through the conduit 79, chamber 26 and non−return valve 29. At the same time pressure in the conduit 79 acts directly on the underside of a differential piston 150 on the locking plunger 127, to move the latter upwardly into engagement with its aperture 130, which it is able to occupy after a slight initial clockwise movement of the cam 80, thus preventing the operator from moving the cam 80 back again to neutral when the annulus 8 has been only partly inflated, which might result in excessive slip. Further clockwise movement of the lever 98 beyond position 2 to open the throttle is positively prevented by the locking plunger 126, now occupying a part 159 of its aperture 129, and also acting in combination with the mechanical lock 41, described below, to prevent axial movement of the cam as the operator loads the lever for movement to position 3 in order to reach the throttle−opening circumferential range 3 to 4. The locking−plunger 126 is retracted by airpressure acting on the upper face of its differential piston 138 through a conduit 157 fed from the clutch−inflating conduit 79 through a restrictor−orifice 160, acting, with a capacitychamber 161 to delay the retraction of the plunger until the clutch−annulus 8 is fully inflated, whereafter the lever is free to be moved to position 3 and thence in the throttleoperating range 3 to 4. In the leftward movement of the lever 98 from position 2 to 3, causing rightward axial movement of the cam 80, the plunger of the centre−valve 57 falls into the part 97 of its cam−slot, thereby venting the chamber 26 and relieving the seals 24 of pressure. Over the normal forward−drive range 3 to 4, make−up pressure can be applied to the clutch−annulus 8 at any time to compensate for leakage, by momentarily moving the lever to the right (cam 80 to the left), position−range 5, in opposition to a return−spring described below, so that the centre−valve 57 is raised by the edge 97 of its cam slot 85. To disengage the forward clutch−annulus 8 and return to neutral or engage reverse, the lever 98 is moved anticlockwise through position 3, idling the engine, to position 6, further movement being positively prevented by the locking−plunger 127, which is still operative, and also prevents rightward axial movement of the lever 98 towards the neutral position 1 (leftward axial movement of the cam 80) by engaging the curved end 164 of its aperture 130. In the movement to position 6, a shoulder 95 of the cam−slot 84 raises the valve 58 to supply pressure to depress the annular piston 35 which opens the non−return valve 29 and permits the clutch−annulus 8 to deflate through the exhaust of its valve 57. At the same time pressure in the piston−supply conduit 36 reaches the upper face of the differential piston 150 of the locking−plunger 127 through a restrictor−orifice 165, which, in conjunction with a capacity−chamber 167, delays the buildup of pressure so that the plunger 127 is retracted only after the clutch−annulus is deflated, whereupon the lever 98 is free to be moved to the neutral position 1. Pressure in the piston−supply c

0) CN201321757Y – TWO–WAY SAFE LOCK

260) Family number: 43849317 (CN201321757Y) © PatBase

Title: Two–way safe lock

Priority: CN200820206825U 20081231

Family:

Publication number	Publication date	Application number	Application date
CN201321757 Y	20091007	CN200820206825U	20081231

Probable Assignee: WEIXI CHEN

Assignee(s):(std)**:** WEIXI CHEN

Assignee(s): CHEN WEIXI

Inventor(s):(std)**:** WEIXI CHEN

Inventor(s): CHEN WEIXI

International class (IPC 8–9): E05B47/06 E05B63/14 (Advanced/Invention)

Classification Explorer

Forward Citations: CN102392560,

Abstract:
Source: CN201321757Y The utility model discloses a two–way safe lock, which comprises a lock core arranged in a lock box, a shifting fork, a driving motor, a square locking dog and an inclined locking dog. The square locking dog and the inclined locking dog are respectively connected with a telescoping mechanism; the shifting fork comprises an inner shifting fork and an outer shifting fork which are sleeved up and down; the middle part of a linkage plate is inserted between the inner shifting fork and the outer shifting fork and separates the inner shifting fork from the outer shifting fork; the downward end of the linkage plate leans against one end of a mechanical key pulling plate, the other end of the linkage plate is connected with one end of an inclined lock dog pulling plate, the other end of the inclined lock dog pulling plate is connected with the telescoping mechanism, and the inner shifting fork is connected with one of the a counter lock pulling plate through a shifting block arranged on the inner shifting fork. The output shaft of the driving motor is connected with one end of an inserting plate capable of moving up and down through a drive gear, and the other end of the inserting plate is inserted into a brake groove arranged on the outer shifting fork. The mechanical key pulling plate is transversely arranged, the transverse counter lock pulling plate is arranged on the inner wall of the mechanical key pulling plate, and mechanical key pulling plate and the counter lock pulling plate are sleeved together through a stop dowel. The two–way safe lock has the advantages of low cost, convenient installation, and flexible open and close.

0) SU944859T – APPARATUS FOR ASSEMBLING THREADED CONNECTIONS

261) Family number: 6549661 (SU944859T) © PatBase

Title: APPARATUS FOR ASSEMBLING THREADED CONNECTIONS

Priority: SU19803009734 19801202

Family:

Publication number	Publication date	Application number	Application date
SU944859 A1	19820723	SU19803009734	19801202
SU944859 T	19820723	SU19803009734	19801202

Probable Assignee: MO AVTOMOBILNYJ Z IM I A LIKHA

Assignee(s):(std)**:** MO AVTOMOBILNYJ Z IM I A LIKHA ; MO AVTOMOBILNYJ ZAVOD IM I A L

Assignee(s): MO AVTOMOBILNYJ ZAVOD IM I A LIKHACHEVA (PROIZVODSTVENNOE OB ZIL) ; MO AVTOMOBILNYJ ZAVOD IM I A LIKHACHEVA PROIZVODS

Inventor(s):(std)**:** BEDRIN VLADIMIR M ; BORISENKO VLADIMIR I ; KLENOV PAVEL S ; LEVCHUK DMITRIJ M ; UMNYAGIN VYACHESLAV V

Inventor(s): UMNYAGIN VYACHESLAV V SU ; LEVCHUK DMITRIJ M SU ; KLENOV PAVEL S SU ; BORISENKO VLADIMIR I SU ; BEDRIN VLADIMIR M SU

International class (IPC 8–9): B23P19/06 (Advanced/Invention) ; B23P19/06 (Core/Invention)

International class (IPC 1–7): B23P19/06

Classification Explorer

Abstract:
Source: SU944859T Invention relates to automated assembly work in engineering and other branches of farming equipment, particularly automated assembly of threaded joints. A device for assembling threaded connections comprising selector turntable with nests under the base parts assembled kit, wrenches ammunition under the head of the threaded parts and generators pnevmovihrevyh oscillations I. disadvantage of the known device is the complexity of the design due to the presence of individual drives for moving and wrenches for fixing the orienting device. Having separate drives and their kinematic communication design makes the device less reliable. object of the invention – to simplify the design and reliability povyschenie: aim is achieved in that the device for assembling the threaded connection is provided with latches in the form of telescopic rods, and pnevmovihrevyh oscillation generators are arranged in slots of the turntable and provided with orienting device in the form of a disk with a shank, wherein the shank end face orienting fixture associated with the inner end face of the rod locking groove by connecting – the protrusion and the latch telescopic rods coupled to each other and the outer of them – from the table by schlitsevogo compound. Fig. 1 shows an apparatus for assembling the threaded connections, a general view, longitudinal section; Fig. 2 is a section A–A in Fig. 1. apparatus assembly of threaded joints contains selector turntable 1 with work stations (jacks) on the faceplate 2, each of which is mounted generator pnevmovihrevyh oscillations of the sleeve 3 with through tangential nozzles 4, which is located orien20 tiruyuschee device 5, having a slot 6 to form oriented and assembled parts. Tool 5 is made in the sleeve 3. At the bottom of the sleeve 3 is made seat 8 for cooperating with a clamp mounted in the housing of the turntable 1 is axially movable and formed in the form of two telescopic rods 9 and 10 are to eliminate relative rotation of each section, and elements relative to each other are splined connection. Rods 9 and 10 retainer axially are present under the influence of the spring 11. Coaxially with a lock on the orienting device 5 is rigidly mounted wrench 12 having a spring–loaded chuck key 13. Rod 10 and the shank 7 bonded compound groove–ledge. The device operates as follows.. When planschayby fixing section 2 in the operating position the lock consisting of telescopic rods 9 and 10 are moved upwardly. When interacting with the surface of the rod 9 8 socket sleeve 3 generator pnevmovihrevyh hesitation he set, while under the influence of the spring 11. Rod 10, continued axial movement meets the end of the shank 7 orienting fixture 5, picks it up and moves to Gajkovert 12. This occurs simultaneously 7 shank socket orientation relative to the rod 10. At end of turn lock fastener (eg, bolt) suitable for key wrench 12 and screwing parts occurs. At this time, the orienting device 5 and the rods 9 and 10 are fixed in an angular position relative to each other and the housing section, which prevents rotation of the second items collected (e.g., screws), comprised within the slot section 6. Use of the device due to the fixation and prevent rotation planschayby collected items allows to simplify the design of assembly machines and their control systems, improve their performance and reliability. CLAIMS 1. Apparatus assembly of threaded connections, comprising a rotary table selector jacks beneath the base parts assembled kit with fastening patrona.mi threaded part under the head and pnevmovihrevyh vibration generators, characterized in that in order to simplify construction and enhance the reliability of the assembly, it is provided by the number of slots in the clamps as telescopic rods, and pnevmovihrevyh oscillation generators are arranged in slots of the turntable and provided with orienting device in the form of a disk with a shank, wherein the shank of the orienting fixture is coupled to the inner shaft retainer. 2. Apparatus according to claim 1, characterized in that the telescopic rods are coupled between the latch and an outer one – with a table is splined, and a shank end face of the orienting fixture is

associated with the butt end of the inner shaft retainer pOsredstvo.m compounds groove–protrusion. Sources of information received into account in the examination 1. USSR Author's Certificate number 601113, cl. P 19 V 23/06, 1976.

262) Family number: 24675228 (US6484450B) © PatBase

Title: Demountable indoor/outdoor seating system components

Priority: US20000710470 20001109

Family:

Publication number	Publication date	Application number	Application date
US6484450 BA	20021126	US20000710470	20001109

Probable Assignee: RI INC

Assignee(s):(std)**:** ENGLISH TONY ; MOREBY JOHN ; SUPRINA SCOTT

Assignee(s): RI INC

Inventor(s):(std)**:** ENGLISH TONY ; MOREBY JOHN ; SUPRINA SCOTT

International class (IPC 8–9): A47C1/12 E04H3/12 (Advanced/Invention); A47C1/00 E04H3/10 (Core/Invention)

International class (IPC 1–7): E04H3/12

CPC: A47C1/12 E04H3/126

European class: A47C1/12 E04H3/12C

US class: 248/161 297/217.7 297/35 52/126.6 52/184 52/8 52/9

Classification Explorer

Cited documents: US6244657 BA, US5960589 A, US5385323 A, US4831797 A, US4412403 A, US3808757 A, US3443835 A, GB2229217 A1, GB2229205 A1, GB2229089 A1,

Forward Citations: US9499083, US8978310, US8733838, US8627608, US8490335, US8312819, US6941708, US6925760, US2015033661, US2011215621, US2009174234, US2009031648, US2005000171, US2003200703, GB2456684,

Abstract:
Source: US6484450B A demountable indoor/outdoor arena seating system includes a plurality of seat groups in seating modules. The seat group modules are supported by a plurality of floor board deck members of joined planks, wherein the deck members have attachment extensions attachable to the seat group modules. The deck members are supported by inner struts insertable in outer hollow struts. The inner struts are grooved to accommodate the heads of shortened locking bolts having spring loaded cam rings to lock the bolts in place.

0) US6766995B – ADJUSTING DEVICE FOR A STAND

263) Family number: 30739145 (US6766995B) © PatBase

Title:	ADJUSTING DEVICE FOR A STAND
Priority:	US20030419891 20030422

Family:

Publication number	Publication date	Application number	Application date
US6766995 BA	20040727	US20030419891	20030422

Probable Assignee:	HSIEH WU HONG
Assignee(s):(std)**:**	HSIEH WU HONG
Inventor(s):(std)**:**	HSIEH WU HONG
International class (IPC 8–9)**:**	F16M11/18 F16M11/24 (Advanced/Invention); F16M11/02 F16M11/20 (Core/Invention)
International class (IPC 1–7)**:**	F16M11/00
CPC:	F16M11/046 F16M11/245 F16M11/28 F16M2200/028 F16M11/18
European class:	F16M11/18 F16M11/24
US class:	248/404 248/422
Classification Explorer	
Cited documents:	US6659417 BB, US6450462 BA, US6311705 BA, US6279860 BA, US6119605 A, US5385323 A, US4635565 A,
Forward Citations:	US9616312, US9476543, US8602377, US8276869, US8272617, US7410143, US7368647, US2017065869, US2013161472, US2012025055, US2008251672, US2007205345, US2007205342, US2007131091, US2006207063, US2005224770,

Abstract:
Source: US6766995B An adjusting device used for a stand with a base and an equipment stand is composed of a three–part telescoping post, a primary actuator, a secondary actuator, a driving device and at least one cable. The driving device is mounted in the primary actuator and directly raises or lowers one part of the three–part telescoping post. Each cable is securely attached to two parts of the three–part telescoping post and reeves over and around guide rollers mounted in the secondary actuator so the inner post is raised or lowered simultaneously with the middle post to increase the speed and stability of adjusting the stand.

0) AU2008200543A – LIGHT–WEIGHT, MASS–PRODUCIBLE, COMBINED CHASSIS...

264) Family number: 43705157 (AU2008200543A) © PatBase

Title: Light–weight, Mass–producible, Combined Chassis, Battery Housing, Cooling System Structure for Solar Electric Vehicle

Priority: AU20080200543 20080201

Family:

Publication number	Publication date	Application number	Application date
AU2008200543 AA	20090827	AU20080200543	20080201
AU2008200543 BB	20101125	AU20080200543	20080201
AU2008200543 BH	20110120	AU20080200543	20080201

Probable Assignee: ERROL SMITH

Assignee(s):(std)**:** ERROL SMITH

Assignee(s): SMITH ERROL JOHN DR

Inventor(s):(std)**:** SMITH ERROL JOHN

Inventor(s): ERROL JOHN SMITH

Agent(s): SMITH ERROL JOHN DR

International class(IPC 8–9)**:** B60H1/26 B60K1/04 B60K11/06 B60R16/04 B60S5/06 B60W10/24 B62D21/00 H01M6/50 (Advanced/Invention); B60S5/00 B60W10/24 (Core/Invention)

CPC: B60L2200/26 B60S5/06 B60K16/00 B60K2001/0455 B60K2001/0461 B60K2001/0494 B60K2016/003 B60L8/003 B60L11/1822 B60L11/1877 B60W10/08 Y02T10/7005 Y02T10/705 Y02T10/7072 Y02T10/7083 Y02T10/90 Y02T90/124 Y02T90/14

European class: B60K16/00 B60L11/18L6 B60L11/18M36 B60L8/00B B60S5/06 B60W10/08 L60K1/04C L60K1/04C1 L60K1/04C13 L60K16/00A Y02T10/70B Y02T10/70H4 Y02T10/70J Y02T10/70J2B Y02T10/90 Y02T90/12F Y02T90/14

Classification Explorer

Cited documents: US7201384 BB, US5833023 A, US5542488 A, US5501289 A, US3989118 A, US1566089 A, US1335243 A, JP11178115 A2,

Forward Citations: WO16135691, US9601733, US8356852, US8256807, ITMI20121368, EP3070763, EP2749442, EP2463162, DE202011004219, DE102013225137, DE102012012739, CN105383277, CN104340020, CN103241220,

Abstract:
Source: AU2008200543A Solar Electric Vehicle System Not Requiring Major Energy Distribution Infrastructure Change Abstract Present "plug–in" electric motor vehicles recharge their batteries from the main electric power grid. Unfortunately for some years to come this grid will often still bum coal to generate electricity and thus contribute significant amounts of greenhouse gases. How can one rapidly introduce fully solar powered electric vehicles without the delay of building major new environmentally responsible energy generation and distribution infrastructure? The best solution to this problem is using small–scale domestically located solar (or wind) generated power to recharge an extra set of batteries for all–electric vehicles. After initial outlay costs the average commuter would have almost zero fuel costs, and with very little labour involved. The present patent claims are for a system or plant with a variety of rapid battery charging, and or, rapid battery exchange modes. The rapid exchange system is not overly automated and is suitable even for the motorist with less than average physical strength – for the person who cannot or does not want to manoeuvre heavy batteries. The system also uses the whole underfloor space of the vehicle for batteries enabling a much greater payload of batteries and extending the usual range of travel in all electric mode. As well as environmental and economic advantages there are numerous engineering, efficiency and safety advantages in the system proposed. Machines for the manufacture of key components are also described....

265) Family number: 15170114 (US4915563A) © PatBase

Title: AUTOMATIC LOCK FOR MECHANISMS CONTROLLING VARIOUS MOVEMENTS OF THE GRIPPING PLIERS OF A REMOTE HANDLING DEVICE WHEN DISMOUNTING THE BALL AND SOCKET JOINT BEARING THESE PLIERS

Priority: FR19870007067 19870520 WO1988FR00253 19880519

Family:

Publication number	Publication date	Application number	Application date
DE3862638 D1	19910606	DE19883862638	19880519
EP0317596 A1	19890531	EP19880904563	19880519
EP0317596 B1	19910502	EP19880904563	19880519
FR2615431 A1	19881125	FR19870007067	19870520
FR2615431 B1	19890818	FR19870007067	19870520
JP1503770 T2	19891221	JP19880504481T	19880519
JP2733848 B2	19980330	JP19880504481T	19880519
US4915563 A	19900410	US19890310722	19890109
WO8809247 A1	19881201	WO1988FR00253	19880519

Probable Assignee: CALHENE STE NLE EXPL

Assignee(s):(std)**:** CALHENE ; CALHENE STE NLE EXPL ; EXPLOTATION DE LA CALHENE SOC

Assignee(s): NOUVELLE D EXPLOITATION DE LA CALHENE SOC ; NOUVELLE D EXPLOITATION LA CALHENE SOC ; NOUVELLE D EXPLOTATION DE LA CALHENE VELIZ SOC ; NOUVELLE D'EXPLOITATION LA CALHENE SOC ; NUUBERU DEKUSUPUROATASHION RA KAREENU SOC ; SOCIETE NOUVELLE D EXPLOITATION LA CALHENE ; SOCIETE NOUVELLE D EXPLOITATION DE LA CALHENE

Inventor(s):(std)**:** ANGELO BANDIERA ; ERIC TEILLAUCHET ; TEILLAUCHET ERIC RUE DE LA VAL ; TEILLAUCHET RUE DE LA VALLEE D ; LAURENT GIRAULT ; TEILLAUCHET ERIC ; GIRAULT LAURENT ; BANDIERA ANGELO

Inventor(s): TEILLAUCHET ERIC 36 RUE DE LA VALLEE DU LOIR ; TEILLAUCHET RUE DE LA VALLEE DU LOIR ERIC 36 ; TEIROOSHE ERITSUKU ; GIRAULT LAURENT F 41000 BLOIS FR ; JIROO ROORAN ; BANDEIERA ANJERO ; BANDIERA ANGELO F 41100 VENDOME FR

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

International class (IPC 8–9)**:** B25J15/04 B25J3/00 (Advanced/Invention); B25J15/04 B25J3/00 (Core/Invention)

International class (IPC 1–7)**:** B25J15/04 B25J18/02 B25J3/00 G21F7/06

CPC: Y10T74/19637 B25J15/04 B25J3/00

European class: B25J15/04 B25J3/00

US class: 414/1 414/7 74/411.5 901/21 901/29 901/41 901/49

Classification Explorer

Cited documents: US4650388 A, US3572807 A, US3543593 A, US3543592 A, US3297172 A, GB1341489 A, EP0292384 A1, EP0104118 A1,

Forward Citations: US9532849, US9439732, US9320568, US8998930, US8998799, US8529582, US7963913, US2011218551, US2011028990, US2007119274, US2005149003, FR2828126, FR2688436,

Abstract:
Source: US4915563A PCT No. PCT/FR88/00253 Sec. 371 Date Jan. 9, 1989 Sec. 102(e) Date Jan. 9, 1989 PCT Filed May 19, 1988 PCT Pub. No. WO88/09247 PCT Pub. Date Dec. 1, 1988.Strips (20), housed in the slave arms (10) of a remote handling device and used for transmitting to the pair of gripping pliers borne by this arm orientation and tightening movements remote controlled by an operator, rotate pinions (26a) mounted at the extremity of the slave arm (10). These pinions (26a) are normally geared onto pinions (30a) mounted in a ball and

socket joint (16) inserted between the pliers and the slave arm. When the ball and socket joint is dismounted, any attempt to remove the strips (20) is made impossible by the locking devices (60a) which come to rest onto the flanks of the pinions (26a) under the action of the spring (72). Any breakage of the strips due to their being pulled during dismantling of the ball and socket joint is thus avoided.

0) US4223940A – GLOVE COMPARTMENT LID FOR VEHICLES, OR THE LIKE...

266) Family number: 1654890 (US4223940A) © PatBase

Title: GLOVE COMPARTMENT LID FOR VEHICLES, OR THE LIKE

Priority: DE19772727394 19770618

Family:

Publication number	Publication date	Application number	Application date
DE2727394 A1	19781221	DE19772727394	19770618
FR2393702 A1	19790105	FR19780017467	19780612
GB1570665 A	19800702	GB19780016927	19780428
IT1102925 A	19851014	IT19780004839	19780613
IT7804839 A0	19780613	IT19780004839	19780613
JP54008333 A2	19790122	JP19780043379	19780414
SE7804060 A	19781219	SE19780004060D	19780411
US4223940 A	19800923	US19780909451	19780525

Probable Assignee: HAPPICH GMBH GEB

Assignee(s):(std)**:** HAPPICH GMBH GEB ; HAPPICH GMBH GEBR

Assignee(s): GEBR HAPPICH G M B H ; GEBR HAPPICH GMBH ; GEBRHAPPICH GMBH ; HAPPICH GEB GMBH ; HAPPICH GEBR GMBH

Inventor(s):(std)**:** MAANFUREITO SHIYUNAIDAA ; SCHNEIDER M ; SCHNEIDER MANFRED ; YOAHIMU YANTSU ; JANZ J ; JANZ JOACHIM

Inventor(s): M SCHNEIDER ; J JANZ

International class(IPC 8–9)**:** B60R7/06 E05B65/12 E05B83/30 (Advanced/Invention); B60R7/06 E05B65/12 (Core/Invention)

International class(IPC 1–7)**:** B60R7/04 B60R7/06 E05B65/02

CPC: Y10S292/37 Y10T292/0859 Y10T292/0933 E05B83/30 B60R7/06

European class: B60R7/06 E05B83/30

US class: 292/127 292/53 292/DIG.37 296/37.12 49/394

Classification Explorer

Cited documents: US3909092 A, US3691799 A, US3503648 A, US3040832 A, US2789861 A, US2313711 A, FR1360807 A,

Forward Citations: WO9815706, US7341300, US6976722, US6761052, US6220065, US6152512, US5904389, US5890755, US5823583, US4940275, US4886311, US2009224558, US2007278812, US2005104400, FR2623453, DE4400628, DE4400628, DE4224683, DE3739921, DE19612066,

Abstract:
Source: US4223940A A lid for a glove compartment of a vehicle, or the like, comprised of an upper and a lower injection molded lid half, which halves are secured together, a lock for the glove compartment lid, including a swiveling lock bar, which is held to the lid, and a cam carrying tumbler which is moved to position cams for swivel opening the lock bar when the tumbler is pushed in, the lid halves are shaped with various recesses, holes and shapings for being supported in relative positions and for receiving and holding the lock.

267) Family number: 20178528 (GB754439A) © PatBase

Title: Improvements in or relating to extensible couplings

Priority: 19530119

Family:

Publication number	Publication date	Application number	Application date
GB754439 A	19560808	GB19540001440	19540118

Probable Assignee: KURT SCHROETER

Assignee(s):(std)**:** KURT SCHROETER

International class (IPC 8–9): F16D3/06 (Advanced/Invention); F16D3/02 (Core/Invention)

International class (IPC 1–7): F16D7/06

CPC: F16D3/06

European class: 63C30A F16D3/06

Classification Explorer

Forward Citations: DE1091816,

Abstract:
Source: GB754439A 754,439. Telescopic shafts. SCHROTER, K. Jan. 18, 1954 [Jan. 19, 1953; April 23, 1953; July 20, 1953], No. 1440/54. Class 80(2) A telescopic shaft comprises at least two shaft sections one of which is a sliding fit in the other, the outer section having formed in its inner surfaces, by forging, rolling or drawing, a pair of longitudinal recesses in which engage lugs projecting from the inner section. Each section may have a pair of beadings 27, 27[1], Fig. 8, extending the whole length of the 'section and forming both recesses and lugs, and each end section may be secured in a split universal–joint part 30 by a tightening bolt 32 extending through one of the beadings, or in an unsplit part by a hollow transverse pin. In the form shown in Fig. 9, transverse bores in the inner section 35 house pairs of dogs 38 urged outwards into the recesses 39 in the outer section 36 by wedge–shaped projections on a central member 41 located axially by a spring 42 which is adjujstable by means of a screw 44, thus forming an overload–release coupling. In a modification of this form, the dogs of each pair are urged apart by a separate spring.

0) AU632452B – MULTI–FUNCTION AUTOMOBILE STEERING LOCK

268) Family number: 8333757 (AU632452B) © PatBase

Title: Multi–function automobile steering lock

Priority: AU19920011277 19920212

Family:

Publication number	Publication date	Application number	Application date
AU199211277 A1	19921224	AU19920011277	19920212
AU632452 B1	19921224	AU19920011277	19920212
AU632452 B2	19921224	AU19920011277	19920212
AU632452 B3	19921224	AU19920011277	19920212

Probable Assignee: CHEN TIAN YUAN

Assignee(s): CHEN TIAN YUAN

Inventor(s): JAN SHWU MEEI

Agent(s): WRAYS

International class (IPC 8–9): B25B15/02 B60R25/02 B60R25/022 (Advanced/Invention); B25B15/00 B60R25/02 (Core/Invention)

International class (IPC 1–7): B25B23/16 B25G1/08 B60R25/02

CPC: B25B15/02 B60R25/0225

European class: B25B15/02 B60R25/022H

Classification Explorer

Cited documents: AU609372 B2, AU599863 B2, AU586805 B2,

Abstract:
Source: AU632452B i. An automobile steering lock comprising an elongate tubular body having one end and another end, and having a passageway which extends through the tubular body along its axis and opening into said other end, a first U–shaped hook mounted at one end of the tubular body being adapted to engage a steering wheel from the inside thereof, the other end of the body member supporting a housing; an elongate rod member adapted to be received at its one end in telescopic relationship within said passageway having a U–shaped second hook secured to the side of the rod member intermediate of its length and directed towards its other end and being adapted to engage said steering wheel from the inside thereof in substantially opposed relation to the first hook, a grip fixed around the rod member between the second hook and the other end; a plurality of spaced annular grooves provided on the rod member between its one end and the second hook, each groove comprising a first side wall proximate the second hook which is substantially perpendicular to the central axis of the rod member and a second side wall remote to the second hook which is inclined to the central axis of the rod member, said grooves extending to circumferentially around the rod member; /2 Y–l l l L r r –Y 0 l l l

0) US3484055A – INFORMATION RETRIEVAL SYSTEM

269) Family number: 16148570 (US3484055A) © PatBase

Title: INFORMATION RETRIEVAL SYSTEM

Priority:

CA19670989955 19670508
FR19670105710 19670509
GB19660122319 19660512
GB19670012196 19670315
GB19660021223 19670512
US19660578318 19660909
GB19670110919 19670505
CA19710120294 19710811
CA19710120298 19710811
GB19670021110 19670505
GB19670021109 19670505
GB19670012196 19670313
US19700085289 19701029
FR19660076153 19660913
GB19650038937 19650913
GB19670012196 19670315
GB19660021223 19660512
US19670695817 19671204
GB19670219619 19670315

Family:

Publication number	Publication date	Application number	Application date
AT288112 B	19710225	AT19670004353	19670509
AT289504 B	19710426	AT19690006643	19670509
AT289508 B	19710426	AT19690006642	19670509
AT289509 B	19710426	AT19690006644	19670509
AT304359 B	19730110	AT19690006641	19670509
AT304360 B	19730110	AT19690006645	19670509
AU1090866 A1	19680314	AU19660010908	19660912
AU2138267 A1	19681114	AU19670021382	19670508
BE686754 A	19670215		19660912
BE698226 A	19671109		19670509
BR6789250 A0	19730102	BR19670189250	19670508
CA918397 A1	19730109	CA19710120296	19710811
CA931099 A1	19730731		00000000
CA931099 A2	19730731	CA19710120294	19710811
CA931520 A1	19730807		00000000
CA931520 A2	19730807	CA19710120298	19710811
CH470934 A	19690415	CH19660013211	19660913
CH508962 A	19710615	CH19680006794	19680506
CH527027 A	19720831	CH19670006551	19670509
DE1602895 A1	19710609	DE19671602895	19670503
DE1602895 B2	19750109	DE19671602895	19670503
DE1774216 A1	19710826	DE19681774216	19680504
DE6610091 U	19730322	DE19660010091U	19680504
ES340249 A1	19680601	ES19670340249	19670508
FR1492556 A	19670818	FR19660076153	19660913
FR1522117 A	19680419	FR19670105710	19670509
FR1583218 A	19691024		00000000
GB1202361 A	19700819	GB19670021109	19660512
GB1222363 A	19710210	GB19670021110	19670505
NL6612906 A	19670314	NL19660012906	19660913
NL6706484 A	19671113	NL19670006484	19670509
NL6806322 A	19681106	NL19680006322	19680503
SE329739 B	19701019	SE19680006086	19680506
SE339656 B	19711011	SE19670006415	19670508
US3484055 A	19691216		00000000
US4237598 A	19801209	US19720248198	19720427
US4369563 A	19830125	US19700085289	19701029
US4369563 B1	19860513	US19700085289	19701029

US4621410 A	19861111	US19820429918	19820930	

Probable Assignee: MOLINS MACHINE CO LTD

Assignee(s):(std)**:** MOLINS LTD ; JOHN CONVENTRY SMITH JR ; MOLINS MACHINE CO LTD ; MOLINS PLC ; MOLINS MACHINES COMPANY LIMITE ; MOLINS MASCHINE CO LTD ; SMITH JR JOHN CONVENTRY ; SMITH JR JOHN C ; SMITH JOHN COVENTRY JR ; SMITH JOHN C JR ; MOLINS MACHINES CO LIMITE ; DAVID THEODORE NELSON WILLIAMS ; ROYDON HENRY GURNEY RAINE

Assignee(s): DAVID T N WILLIAMSON ; DAVID THEODORE NELSON WILLIAMSON ; FIRST NATIONAL BANK OF CHICAGO ; MOLINS PLC GRAFTON COURT WINTERHILL CHILDS WAY MIL ; PATENT DEFENSE GROUP LLC AMERICAN ROADDEARBORN MIC ; SECURITY PACIFIC BUSINESS CREDIT INC ; RAYOVAC CORP ; PATENT DEFENSE GROUP LLC ; MOLINS MACHINE COMPANY LIMITED ; MOLINS MACHINES COMPANY LIMITED ; MOLINS PLC (MOLINS) GRAFTON COURT WINTERHILL CHILD ; MOLINS PUBLIC CO LTD ; MOLINS PLC (MOLINS) GRAFTON COURT WINTERHILL CHILDS WAY MILTON KEYNES MK6 1AF ENGLAND A CORP OF GREAT BRITAIN ; MOLINS PLC MOLINS GRAFTON COURT WINTERHILL CHILDS WAY MILTON KEYNES MK6 1AF ENGLAND A CORP OF GREAT BRITAIN ; MOLINS MACHINES CO LTD ; MOLINS MACHINE COLTD ; INTERTEC LE QUINTIN A CORP OF FRANCE SOC ; INTERTEC LE QUINTIN A CORP SOC ; INTERTEC LE QUINTIN ZONE IND SOC ; MOLINS MACHINE CO LTD LONDON ; MOLINS LIMITED

Inventor(s):(std)**:** GURNEY RAINE ROYDON HENRY ; HENRY GURNEY RAINE ROYDON ; RAINE G ; RAINE ROYDON HENRY GURNEY ; DAVID T N WILLIAMSON ; WILLIAMSON DAVID T N ; WILLIAMSON DAVID THEODORE NELS ; WILLIAMSON DAVID T ; WILLIAMSON D T N ; WILLIAMSON D ; THEODORE NELSON WILLIAMSON DAV ; NELSON WILLIAMSON DAVID THEODO

Inventor(s): NELSON WILLIAMSON DAVID THEODORE ; WILLIAMSON DAVID THEODORE NELSON LONDON ; DAVID THEODORE NELSON WILLIAMSON ; ROYDON HENRY GURNEY RAINE

International class (IPC 8–9): B23Q3/155 B23Q37/00 B23Q41/00 B23Q41/02 B23Q7/14 B65G1/04 B65G47/50 B66F9/06 G05B15/02 G05B19/417 G05B19/418 G06K17/00 G11B15/68 (Advanced/Invention); B23Q3/155 B23Q41/00 B23Q7/14 B65G1/04 B65G47/50 G05B19/418 G06K17/00 G11B15/68 (Core/Invention)

International class (IPC 1–7): B23B39/08 B23B41/02 B23B47/00 B23P13/00 B23P17/02 B23Q3/157 B23Q39/04 B23Q41/00 B23Q41/02 B23Q41/06 B23Q7/00 B23Q7/14 B65G1/04 B65G47/50 G03B1/04 G05B15/00 G06K G11B15/32 G11B15/68 G11B23/02 G11B23/04 G11B25/06

CPC: B23Q7/1442 B23Q3/15526 B23Q3/15786 B23Q41/02 G05B15/00 Y10T29/5107 Y10T29/5124 Y10T29/5136 Y10T29/53013 Y10T29/53039 Y10T29/53048 Y10T29/53052 Y10T29/534 Y10T483/10 Y10T483/12 Y10T483/123 Y10T483/13 Y10T483/165 Y10T483/175 Y10T483/179 B23Q7/1426 Y02P90/28 B23Q41/00 G05B19/4189 G06K17/0009 G11B15/686

European class: B23Q3/155D2 B23Q3/157M B23Q41/00 B23Q41/02 B23Q7/14K B23Q7/14K4 G05B15/00 G05B19/418T G06K17/00B2 G11B15/68D1C

US class: 198/346.1 242/181 242/337.1 29/26A 29/563 29/564 29/568 29/703 29/709 29/711 29/712 29/791 360/92 360/92.1 369/37.01 414/279 483/1 483/15 483/37 483/4 483/5 483/54 483/7 700/112 700/113 700/114 700/115 700/169 700/179 700/182 G9B/15.147 G9B/23.049

Classification Explorer

Cited documents: US4309600 A, US3854889 A, US3709623 A, US3576540 A, US3543392 A, US3519151 A, US3355797 A, US3339273 A, US3313014 A, US3286595 A, US3271840 A, US3256600 A, US3245144 A, US3242568 A, US3225439 A, US3211060 A, US3204492 A, US3188736 A, US3171327 A, US3168993 A, US3155217 A, US3119501 A, US3113404 A, US3099873 A, US3071262 A, US3054333 A, US3052999 A, US3049247 A, US3027022 A, US3010371 A, US2997154 A, US2988237 A, US2986261 A, US2941738 A, US2903120 A, US2803333 A, US26770 A, US25886 A, GB996862 A, GB981571 A, GB955715 A, GB948181 A, GB923369 A, GB846388 A, GB841400 A, GB729687 A, GB404617 A, GB1039819 A, GB1035197 A, FR1447806 A, FR1401446 A, FR1387173 A, FR1362309 A, FR1098924 A, DE839476 A, DE566008 A, DE1141231 B, DE1099306 B, DE1076558 B, DE1062177 B, CH399130 A, CH399130, CH365602 A, CH365602, CA732925 A, CA700318 A, CA620478 A, AT236739 B, AT236739,

Forward Citations: WO9216942, WO8900146, WO8808194, WO8703979, WO17015686, WO15058302, USRE32837, US9539685, US9324129, US8733617, US8713780, US8620467, US8561279, US8516676, US8474683, US8474117, US8428768, US8376117, US8308048, US8306647, US8231324, US8220617, US8201723, US8175742,

US8145348, US7894930, US7877159, US7654379, US7650982, US7640071, US7496423, US7487004, US7347765, US7343660, US7337520, US7334673, US7262685, US7150213, US7150213, US7149884, US7149884, US7139635, US7139635, US7084738, US7080434, US7065856, US7040001, US7035710, US6990721, US6847982, US6826821, US6708385, US6650225, US6633787, US6629355, US6578671, US6507767, US6496789, US6493607, US6476999, US6467605, US6449529, US6366930, US6360417, US6350222, US6349237, US6341243, US6325199, US6292716, US6236901, US6216948, US6160678, US6105239, US6076652, US6067862, US6039168, US5987958, US5969973, US5889926, US5887325, US5880965, US5844146, US5764518, US5761940, US5682276, US5672044, US5621648, US5570992, US5555143, US5478300, US5475797, US5389769, US5374231, US5371940, US5371679, US5310396, US5283934, US5281079, US5254068, US5216613, US5214588, US5202832, US5193314, US5189624, US5166884, US5132949, US5128912, US5125783, US5119732, US5107581, US5097421, US5068958, US5056437, US5031441, US5031106, US5029095, US5018617, US5017084, US4998206, US4984353, US4984228, US4962583, US4947335, US4928383, US4918613, US4871290, US4870592, US4870591, US4841431, US4827423, US4821198, US4821197, US4807108, US4807066, US4805738, US4803772, US4796194, US4780952, US4777715, US4773815, US4722653, US4719694, US4711016, US4709605, US4709337, US4700308, US4698766, US4697239, US4679286, US4674181, US4669047, US4667294, US4661912, US4659892, US4626645, US4612697, US4611377, US4607338, US4599786, US4591991, US4590662, US4589174, US4580207, US4577284, US4564913, US4561060, US4547854, US4546533, US4543636, US4519055, US4510668, US4510539, US4484289, US4473883, US4472783, US4468741, US4430717, US4373185, US4271440, US3898692, US3872506, US3814343, US3811625, US3774916, US3752483, US3749410, US3690587, US3677555, US3667624, US3652096, US3617066, US3603597, US2015225180, US2011192007, US2011118866, US2010307300, US2010212134, US2010126017, US2010106281, US2009324370, US2009285666, US2009234488, US2009216361, US2009204253, US2009048703, US2009012643, US2008281457, US2008279658, US2008035448, US2008021589, US2007215435, US2006095155, US2006089087, US2005279612, US2005141973, US2005140498, US2005061195, US2004250394, US2004244180, US2004207512, US2004186613, US2004181929, US2004071518, US2004039476, US2003059283, US2002172580, TWI415699, TWI410764, TWI308096, JP63502093, JP61184652, JP61019534, JP60217015, JP60067328, JP60056859, JP59019650, JP59014582, JP58109256, JP58040238, JP58015651, JP57201156, JP57189759, JP55123576, JP55096256, JP54139381, JP53012714, JP52156513, JP52038592, JP51140280, JP51121875, JP51070580, JP51070579, JP51044385, JP51044384, JP51011345, JP50118382, JP49133975, JP49127275, JP49089274, JP49076175, JP49067276, JP49034475, JP48087777, JP48083566, JP48073960, JP2008023704, GB2233790, GB2233790, GB2145046, GB2130186, FR2584964, FR2532577, EP2181801, EP1394642, EP1394642, EP0992319, EP0992319, EP0759854, EP0569636, EP0554769, EP0400284, EP0377474, EP0302542, EP0261410, EP0236812, EP0236812, EP0201262, EP0174799, EP0162670, EP0110815, EP0110815, EP0058183, DE9205554, DE4290927, DE4290927, DE3925248, DE3807490, DE3742096, DE3720157, DE3706122, DE3703725, DE3629069, DE3624415, DE3614165, DE3607391, DE3543209, DE3533063, DE3522488, DE3519545, DE3500666, DE3417876, DE3412526, DE3348414, DE3301036, DE3301036, DE3243335, DE3241363, DE3240974, DE3235319, DE3221165, DE3115481, DE3022717, DE2847418, DE2741647, DE2435622, DE2408992, DE2364790, DE2340764, DE2262210, DE2036562, DE2021611, DE202007002351, DE1817914, DE1817913, CN103056667, CN103056667, BE1004199, AU591442, AT392946,

Abstract:
Source: US3484055A ABSTRACT OF THE DISCLOSURE Information retrieval system having a random access tape cassette storage dmm from and into which selected cassettes may be ejected and replaced after identification by means on each cassette identified by selection means. After ejection into a rotatable transfer means, the tape in a cassette is sequentially tensioned, or rewound to the , start position and then tensioned, played, rewound and finally returned to the random storage drum by rotational positioning adjacent a tensioning/rewind device and a tape playing deck. Random ejection and return means are associated with the identifying means and positioned ad– 9– jacent the ejection position.

0) US1861714A – COINCIDENTAL LOCK

270) Family number: 20729910 (US1861714A) © PatBase

Title: COINCIDENTAL LOCK

Priority: US19290330668 19290105

Family:

Publication number	Publication date	Application number	Application date
US1861714 A	19320607	US19290330668	19290105

Probable Assignee: DELCO REMY CORP

Assignee(s):(std)**:** DELCO REMY CORP

Inventor(s):(std)**:** NORVIEL HARRY E

International class (IPC 8–9)**:** B60R25/04 (Advanced/Invention)

International class (IPC 1–7)**:** B60R25/04 B65D25/14

CPC: B60R25/04 Y10T74/2042 Y10T70/5938 Y10T70/5978

European class: B60R25/04

US class: 188/2.00D 188/2D 200/43.08 70/248 70/257 74/501.6

Classification Explorer

Forward Citations: US4927391, US2712862, DE1814007, DE1814007,

Abstract:
Source: US1861714A 1. In a coincidental lock for automotive vehicles, the combination of a tubular case, a key controlled device movable endwise Within the case, stationary switch contacts insulatingly supported within the case, a bridging contact moved into and out of engagement with_ the stationary contacts by the key controlled device, and a spring transmitting pressure from the device for yieldingly maintainin the bridging contact, in engagement with tie other contacts, and for moving the bridgin contact relative to the other contacts, while in en agement therewith.

0) GB883334A – IMPROVEMENTS IN OR RELATING TO PHOTOGRAPHIC CAM...

271) Family number: 29794404 (GB883334A) © PatBase

Title: Improvements in or relating to photographic cameras equipped for adjustment by exposure values

Priority: DE1957D013592U 19570129

Family:

Publication number	Publication date	Application number	Application date
GB883334 A	19611129	GB19580002802	19580128

Probable Assignee: DECKEL FRIEDRICH W

Assignee(s):(std): DECKEL FRIEDRICH W ; HANS DECKEL

Assignee(s): FRIEDRICH WILHELM DECKEL

International class (IPC 8–9): G03B7/00 (Advanced/Invention); G03B7/00 (Core/Invention)

CPC: G03B7/003

European class: G03B7/00B

Classification Explorer

Abstract:
Source: GB883334A 883,334. Photographic cameras. DECKEL, H., and DECKEL, F. W. Jan. 28, 1958 [Jan. 29, 1957; Dec. 9, 1957], No. 2802/58. Class 98(1). In a camera having an interchangeable lens and an exposure meter in the camera body, coupling elements of a drive between an exposure meter follower and the shutter and diaphragm are disconnected and are locked in the position in which they are disconnected by detachment of the lens mount. As shown, pinion 52 drives the cage 40 of a differential as in Specification 878,153. Shaft 54 is driven by shaft 218 and telescopes therein to permit focusing the lens. On rotating the lens mount to free the arm 234 and disconnect the bayonet joint attaching the mount to the camera, arms 240 and 236 enter previously positioned notches 244 and 238 in shafts 242 and 218 and, as in Specification 770,821, the coupling slots in shutter setting shaft 242 and shaft 218 are normal to their respective axial planes to permit disengagement of the coupling. Shaft 242 on the camera body may either be locked by a pawl member engaging a notch therein or, alternatively, by a friction brake. In another form, Figs. 5, 6 and 7, bayonet lugs 308/312 are carried on ring 306 in screwthreaded connection with member 304. Plunger 390, 396 extends into notch 310 of ring 306 to prevent it from being rotated when the mount is removed from the camera. On replacing the mount, the return of the plunger simultaneously unlocks coupling element 360 and frees knob 338 by disengagement of tooth 386 from notch 348 in disc 346. Thereafter rotation of knob 338 turns cam 330 to adjust follower 326 into coincidence with pointer 324 of exposure meter 322. When knob 338 is turned into the position in which it is locked, cam groove 342 frees ring 306 from latch 376 to permit removal of the mount. Coupling element 362 (Fig. 7) is locked on withdrawal of the mount by plunger 402 engaging notch 400 in disc 398. Figs. 13, 14 (not shown) illustrate a double bayonet joint and a modified locking arrangement using only a single member for both ring 306 and shaft 358. In Fig. 15 removal of the lens mount locks only the coupling element 360^1 and leaves the knob 338^1 free to turn. Ring 306^1 drives shaft 358^1 through internally toothed gear segment 432 and gear 434 having pin 436 coacting with arm 438. The locking of ring 306^1 in the lens free position holds shaft 358^1 at the end of its travel and torsion spring 442_1 tensioned. Arm 440 is held clear of pin 448 on bevel gear 446 which thus rotates freely on shaft 358^1 as knob 338^1 is turned. When, on reconnecting the bayonet joint, pin 436 is rotated away from arm 438, spring 442 drives arm 440 until it abuts pin 448 whatever the position of the latter may be. It is further suggested, additionally or alternatively, that a resilient lost–motion connection acting in the same way as 436, 438, 442, 440 and 448 may be provided in shaft 364^1 so that the diaphragm aperture and shutter speed may be freely adjusted while the coupling element 362^1 is locked. A fixed lens camera having a detachable diaphragm is referred to. If the exposure meter has more than one range of measurement, a follower may be provided for each range.

0) US4909537A – UNIVERSAL VEHICLE FOR PEDALING OR THE LIKE

272) Family number: 3374908 (US4909537A) © PatBase

Title: UNIVERSAL VEHICLE FOR PEDALING OR THE LIKE

Priority: US19890319531 19890306

Family:

Publication number	Publication date	Application number	Application date
US4909537 A	19900320	US19890319531	19890306

Probable Assignee: TRATNER ALAN A

Assignee(s):(std)**:** TRATNER ALAN A

Inventor(s):(std)**:** TRATNER ALAN A

International class (IPC 8–9)**:** B62K13/00 B62K15/00 (Advanced/Invention); B62K13/00 B62K15/00 (Core/Invention)

International class (IPC 1–7)**:** B62K15/00

CPC: B62K13/00 B62K15/00 Y10T74/2078 Y10T74/20792 Y10T74/20798 Y10T74/2164 Y10T74/2165 Y10T403/32393 B62K25/005

European class: B62K13/00 B62K15/00

US class: 280/278 280/287 403/100 74/551.1 74/551.3 74/551.4 74/594.1 74/594.2

Classification Explorer

Cited documents: US4460192 A, US4447068 A,

Forward Citations: WO17006090, WO10048779, WO04048185, WO03004341, WO0224517, USD572321, USD510965, US9694869, US9598133, US9487262, US9428237, US9284009, US9248882, US9227683, US9061726, US8876128, US8864159, US8746722, US8714576, US8672339, US8480113, US8459678, US8414007, US8382135, US8348294, US8181981, US8157282, US7845666, US7533895, US6783158, US6655707, US6354618, US6220614, US6209899, US6017051, US5863051, US5765871, US5611560, US5588338, US5458213, US5398955, US5301570, US2017144721, US2015307151, US2015035248, US2013180792, US2013119631, US2013075995, US2012304810, US2009212529, US2008303243, US2008061528, US2007205576, US2006138743, US2005082786, US2004031349, GB2539967, GB2539967, GB2457020, GB2457020, FR2946612, FR2664228, EP2891595, EP1410984, EP1232088, EP1086888, EP1086888, EP0501385, DE4335460, DE4232592, CN105314024, CN103910010, CN103910010,

Abstract:
Source: US4909537A The vehicle has a chassis formed of a front strut and a seat strut which are attached together so as to be angularly adjustable about a horizontal axis. The seat strut telescopically carries a seat post with a seat thereon. The front strut telescopically carries a front post. Angularly adjustably mounted on the top of the front post is the steering head which rotatably carries the front fork. A wheel is mounted on the lower end of the front fork. A power strut is also mounted on the chassis axis. A telescopically mounted post extends from the power strut and rotatably carries a rear wheel thereon. In this way, complete adjustability is achieved. Pedals are mounted on the chassis axis and are connected to drive the rear wheel. A motor may be additionally or alternatively installed. In addition, different kinds of wheels and different numbers of wheels as well as skis and the like can alternatively be installed.

0) CN2371296Y – LOCKING DEVICE FOR GLASS DOOR

273) Family number: 16827379 (CN2371296Y) © PatBase

Title: Locking device for glass door

Priority: CN19982049850U 19981207

Family:

Publication number	Publication date	Application number	Application date
CN2371296 Y	20000329	CN19982049850U	19981207

Probable Assignee: FENG SHIPU

Assignee(s):(std)**:** FENG SHIPU

Inventor(s):(std)**:** FENG SHIPU ; SHIPU FENG

International class (IPC 8–9)**:** E05B65/00 (Advanced/Invention); E05B65/00 (Core/Invention)

International class (IPC 1–7)**:** E05B65/00

Classification Explorer

Forward Citations: WO10121564,

Abstract:
Source: CN2371296Y The utility model relates to a locking device for glass doors, wherein, a lock and two lock shells are arranged at the outer side face of two glass doors, the lock is provided with a telescopic lock tongue, and the two lock shells are provided with lock tongue grooves. The two lock shells are fixed on clamping plates, a skidproof rubber plate is padded between the clamping plates, and the clamping plates are tightly fixed on the glass doors by screws or cone–shaped pins. The utility model is suitable for locking a single rotating shaft glass door with a glass doorframe. When the utility model is used in non–glass doorframes, the lock tongue grooves can be arranged on the doorframes; when the utility model is used in double opening glass doors, a bolt can be added at the lower part of one door. An arched groove is arranged on a lock head and can also be used as a handle, so the handle is not easy to slide, and the hardness of the lock tongue is high; a key is made into double face tooth form and can be tightly adjusted by screws according to the thickness of glass. Accordingly, the locking device for glass doors has the advantages of simplicity, fastness, reliability and convenient installation and adjustment.

0) GB169437A – IMPROVEMENTS IN DENTAL ENGINE HAND–PIECES

274) Family number: 18156723 (GB169437A) © PatBase

Title: Improvements in dental engine hand–pieces

Family:

Publication number	Publication date	Application number	Application date
GB169437 A	19220803	GB19210023621	19210905

Probable Assignee: WHITE S DENTAL MFG CO

Assignee(s):(std)**:** WHITE S DENTAL MFG CO

Assignee(s): S S WHITE DENTAL MFG CO ; THE S S WHITE DENTAL MANUFACTURING COMPANY

International class (IPC 8–9): A61C1/14 (Advanced/Invention); A61C1/08 (Core/Invention)

International class (IPC 1–7): A61C1/10

CPC: A61C1/14

European class: A61C1/14

Classification Explorer

Abstract:
Source: GB169437A Dental engines.–Relates to dental hand–pieces of the type in which the tool–engaging chuck is actuated by relative axial movement of parts of the hand–piece, and consists in a construction in which the wedge slide of the front spindle is connected to the rear driving–shaft by a T–head and undercut socket joint, in which a slide or bearing for the shaft is embraced by a sleeve or bushing to which the sheath of the hand–piece is connected by a screw–thread so that it may be adjusted axially and secured by a split nut, and in which said slide or bearing is formed with an enlarged head carrying a tubular shield which covers that part of the slide which would otherwise be exposed on actuation of the hand–piece to engage a tool. The hand–piece comprises a front spindle 1, Fig. 2, connected through a wedge slide 2 to the driving shaft 3 by a T–head and socket joint 27, 26, shown separately in Fig. 3. The wedge slide 2 is formed with a key 30 extending into a keyway 31 in the spindle 1 which is fitted with the usual pivoted lever 40, plunger 49, and double split chuck 46. A thrust bearing washer 36 for the rear of the spindle 1 is adjustable by means of a collet 6 which surrounds the driving shaft slide or bearing 5, is adjustably connected to the outer casing 4 by a screw–thread, and is secured by a split lock–nut 7. The slide or bearing 5, which moves longitudinally with the shaft 3 relatively to the front spindle and outer casing for operating the chuck, is formed with an enlarged head 12 carrying a sleeve 15 which covers that part of the slide 5 which otherwise would be exposed when the parts of the hand–piece are in the position shown in Fig. 2. The collet 6 and slide 5 are connected by a key 10 working in a keyway 9. An oil hole 52 and aperture 53 for the injection of oil into an annular chamber 55 are normally closed by the outer casing 4, but are accessible on its removal. The shaft 3 may be withdrawn from its bearing 5 on removal of the outer casing 4 and set–screw 22, and may then be separated from the wedge slide 2 by lateral movement of the joint members 26, 27.

0) US1809404A – CONNECTION FOR UNIVERSAL JOINTS OR COUPLINGS

275) Family number: 20151249 (US1809404A) © PatBase

Title:	CONNECTION FOR UNIVERSAL JOINTS OR COUPLINGS
Priority:	US19260101147 19260410

Family:

Publication number	Publication date	Application number	Application date
US1809404 A	19310609	US19260101147	19260410

Probable Assignee:	SPICER MFG CORP
Assignee(s):(std):	SPICER MFG CORP
Inventor(s):(std):	ESTAY CULBERTSON E
Inventor(s):	CULBERTSON E ESTAY
International class (IPC 8–9):	F16D1/076 (Advanced/Invention); F16D1/06 (Core/Invention)
International class (IPC 1–7):	B60K17/22
CPC:	Y10S411/946 F16D1/076 Y10T403/57
European class:	F16D1/076
US class:	403/300 411/316 411/946

Classification Explorer

Forward Citations: US3326580, US2869910, US2694586, US2447299, US2426219, DE19635161,

Abstract:
Source: US1809404A 1. In e device –of the character –described, the CO1i’1l)l11il,hlO11 with e shaft]1aving=a.’seet, of a ring–threaded on said sliaftndjzice–nt said sent, and being externally threaded, niefms for looking said ring to –said sliaft, n hub mounted on said shelf _mid–lizwiiig –threads, olfopposite direetion of–lend to those on said ring, on,_its –periphery, a gconpling ineniber member 21 is also provided with a 'groove 24 ilmving right unddeft hand inierna;l‘thre=1ds in its outer ‘periphery for receiving au. flock wire=25 for‘locking it to the l1nb»3»by means of–9. hooked –end»2G. This loek‘wire Lis –then held in –place through its initial 'diameter being smaller than thatuof the groove and, being ma–de also of fi resilient nietel, –holds itselftightly in the –groove. This loek »oper~ ates oppositely from the lock 16, "being –of the contractinf tv JL vhile the loclc 16 is of » V §=_U.ll\'V i» . the expanding type, A –means is provided foryacfustrneiit in locking by fx series of–holes 27 drilled through the Wall Q8 'of the menr ber 21, the spacing of `Lhese holes making it necessary to turn the –member 21'orily n. few degrees before the hook 26 of the look wire is–able to enter one of the slots 29 inthe end of the hub 3,‘thereby rotatably locking the members 3 and Qltogetlier, In Fig. 4 a_p01'ti0n of a housing is –also shown with kl slight\difl’erenee in–thedesign of'its~detuils. Thisulso shovvsfthe method employed ,When a ;propeller shaft braille 'is used and differs –from Fig. 1, –excepting 'in foreign deieils, in the–shape of the connecting member 21“ and the–design of the‘hub 3 degrees which lprovides –e flange ‘for qnounting –the brake drum. –In–tliisease the–member 21” is made from round stock =to facilil wie –the adjacent its ends for –engeigeineiit with the threads on said ring and hub, and mea–ns –for –loclgmg said –coupling Lneniber inoperative iposi L1 on. _ –

0) US4168764A – LEVEL STEP STAIR WALKWAY

276) Family number: 7527118 (US4168764A) © PatBase

Title: LEVEL STEP STAIR WALKWAY

Priority: US19780899528 19780424

Family:

Publication number	Publication date	Application number	Application date
US4168764 A	19790925	US19780899528	19780424

Probable Assignee: WALTERS TOM

Assignee(s):(std)**:** WALTERS TOM

Inventor(s):(std)**:** WALTERS TOM

International class (IPC 8–9)**:** B63B27/14 E04F11/025 E04F11/06 (Advanced/Invention); B63B27/00 E04F11/02 (Core/Invention)

International class (IPC 1–7)**:** E04F11/04 E06C9/06

CPC: B63B27/14

European class: B63B27/14 E04F11/025B E04F11/02B2B E04F11/06

US class: 182/1 182/96

Classification Explorer

Cited documents: US4013140 A, US298212 A, US1944159 A, US1419834 A,

Forward Citations: WO17013277, WO15018979, WO11100855, WO10019513, WO09062331, WO09062331, US9562358, US9314106, US9055824, US8950353, US8869335, US8782838, US8769752, US8671869, US8413591, US8341821, US8261393, US8028629, US7976746, US7950095, US7617635, US7383600, US7159261, US7025004, US6863000, US5950267, US5657832, US4583466, US4572328, US4403362, US4280243, US4249634, US2013228110, US2013092474, US2013084133, US2011225794, US2011017122, US2010032633, US2010031456, US2010031455, US2009144916, US2009100614, US2009020360, US2008236065, US2008190038, US2008163571, US2007101516, US2005235437, US2005081743, US2004159492, KR101099298, GB2427643, FR2652332, FR2559539, DE102012104720, DE102012104720, DE102012025630, CN105705701,

Abstract:
Source: US4168764A Self adjusting stair walkway with double side handrailing keyed and hinged to opposed side bar hinge linkage configurations that have steps hinge supported in a manner that upon the main side bars being swung in an arc about its support hinge the steps remain level for practical use as a safe self supporting stairway suitable for pedestrian traffic from seventy–five degrees below the horizontal to sixty degrees above the horizontal then folds to an essentially vertical compactness upon reaching ninety degrees above the horizontal to a standby position. Opposed side gears hydraulically driven are provided for safely swinging the level step stairs that will hydraulically lock the stairs in a desired inclination whereupon controllable opposed ratchet and pawl configurations can safely and additionally lock the stairs in the position.

0) AT214487B – FAHRZEUG–ANTENNE MIT TELESKOPARTIG AUSZIEHBAREN...

277) Family number: 26337753 (AT214487B) © PatBase

Title: FAHRZEUG–ANTENNE MIT TELESKOPARTIG AUSZIEHBAREN TEILROHREN SOWIE SCHLUESSEL HIEZU ANTENNA TELESKOPARTIG PULL–OUT PIPES OF PART OF AS WELL AS KEY DEPOSITED (Machine translation)

Priority: 19581118

Family:

Publication number	Publication date	Application number	Application date
AT214487 B	19610410	AT19590008294	19591116

Probable Assignee: PODDIG HUGO

Assignee(s):(std)**:** PODDIG HUGO

Assignee(s): HUGO PODDIG

Inventor(s):(std)**:** PODDIG HUGO

Inventor(s): HUGO PODDIG

International class(IPC 1–7)**:** H01Q1/32

Forward Citations: DE1288657, DE1236033,

Abstract:
Source: AT214487B [Source: Claim 1] 1.. Fahrzeug–Antenne–insbesondere fuer Kraftfahrzeuge–nach Patent Nr. 209386 mit teleskopartig ausziehbaren Teilrohren, dadurch gekennzeichnet, dass der Antennenkopf (1) ein in einer Laengsbohrung (4) bewegliches, durch Einfuehren des Schluessels (17) von der Stirnseite her federnd verschiebbares Sperrstueck {10) enthaelt, das die Lage eines in einer Querbohrung (12) bewegbaren und in Sperrstellung ueber die Aussenflaeche des Antennenkopfes hinausragenden, bei eingefahrener Antenne in eine Querrille (14) des aeusseren, ortsfesten Antennenrohres (9) hineinragenden zweiten Sperrstueckes (13) bestimmt. [Source: claim 1] 1. vehicle antenna in particular for motor vehicles to patent no. 209386 with telescopic pull–out part of pipes, characterised by the fact that the antenna head (1) one in a longitudinal hole (4) mobile, made springy sliding by inserting the key (17) of the front locking piece {10) contains the location one in a cross–hole (12) movable and in the locked position on the outer surface of the antenna head great addition, retracted antenna into a transverse Groove (14) of the outer}, fixed antenna tube (9) great into second locking piece (13) determines.

278) Family number: 16598479 (CN2321900Y) © PatBase

Title: Lock and key telescopic positioning structure for remote controller

Priority: CN19982009115U 19980122

Family:

Publication number	Publication date	Application number	Application date
CN2321900 Y	19990602	CN19982009115U	19980122

Probable Assignee: ZHENG JINMING

Assignee(s):(std)**:** ZHENG JINMING

Inventor(s):(std)**:** JINMING ZHENG ; ZHENG JINMING

International class (IPC 8–9)**:** E05B65/00 (Advanced/Invention); E05B65/00 (Core/Invention)

International class (IPC 1–7)**:** E05B65/00

Classification Explorer

Forward Citations: CN103432748, CN103432748,

Abstract:
Source: CN2321900Y The utility model relates to a lock key telescopic positioning structure for a remote controller. The utility model is mainly formed by that slide seat and an actuating spring are contained by a chamber of a containing groove of a shell body of the remote controller, and the slide seat is fixedly assembled with a lock key in a convexly extending way; a sliding shaft level integrally penetrates through penetrating and sliding holes of the actuating spring and the slide seat, and is assembled in the chamber of the containing groove in a sliding mode. A restoring spring and a controlling piece which is provided with a jointing rod orderly penetrate in a jointing hole on the slide seat. Pressing parts at the top end of the controlling piece are inlaying blocks which outward and convexly extends from a penetrating and sliding groove which is pre–arranged at the top part of the shell body so that the front end section and the back end section of the penetrating and sliding groove are matched with the top surface of the jointing rod. The utility model is characterized in that the front end section and the back end section of the penetrating and sliding groove are correspondingly provided with positioning wedge blocks.

0) US3025864A – DISHWASHER

279) Family number: 22334125 (US3025864A) © PatBase

Title: DISHWASHER

Priority: US19570678639 19570816

Family:

Publication number	Publication date	Application number	Application date
US3025864 A	19620320	US19570678639	19570816

Probable Assignee: ENSIGN GERTRUDE W

Assignee(s):(std)**:** ENSIGN GERTRUDE W

Inventor(s):(std)**:** ENSIGN GERTRUDE W

International class (IPC 8–9)**:** A47L15/33 A47L15/50 E03C1/184 (Advanced/Invention); A47L15/00 A47L15/50 E03C1/18 (Core/Invention)

International class (IPC 1–7)**:** A47L17/02 E03C1/184

CPC: A47L15/0086 A47L15/33 A47L15/50 E03C1/184

European class: A47L15/00G A47L15/33 A47L15/50 E03C1/184

US class: 134/115G 134/188 220/488

Classification Explorer

Cited documents: US817802 A, US424603 A, US2726004 A, US2707379 A, US2669240 A, US2501887 A, US2418366 A, US2403526 A, US1968658 A, US1905523 A, US1804715 A, US1606068 A, US1398664 A, US1187875 A, CA474149 A, AU145876,

Forward Citations: WO07057135, WO06045853, US8381919, US8252121, US8192558, US7621287, US7267131, US6915808, US6454872, US5209784, US3935958, US3909291, US3665943, US3356097, US2010059086, US2009301977, US2009241993, US2009001006, US2005241686, US2004089030, US2004031508, US2003205259, EP1787569,

Abstract:
Source: US3025864A (Claim 1) 1. In a kitchen article washing apparatus, a stationary unit including a sink adapted to hold liquid discharged by a faucet associated therewith and having a drain for discharging said liquid, a motor located below said sink, an agitator unit removably attached in said sink in a working position in driving relationship to said motor to be driven thereby, said stationary unit including a basket removably, located in a working position in said sink fordeta_–hably holding kitchen articles to be washed there–in, said units and motor drive being constructed so t_iat when said agitator unit and the basket are d–tached from saict workin– position and removed from said sink no projections therefor remain above the bottom of said sink, saidstat;onary Linit incl,,iding a removable cover for said sink, said basket of said stationary unit surroundin.– said agitator in clearance spaced relationship, and locating means on said cover coacting with rigidly interco–.inected portions_ on said stationary basket and rigidly intercon–_lected portions on said sink for maintai–.iin.– said clearance relation–. ship.

0) US3358880A – THREE DENOMINATIONAL STAMP DISPENSING MACHINE

280) Family number: 23023997 (US3358880A) © PatBase

Title: THREE DENOMINATIONAL STAMP DISPENSING MACHINE

Priority: US19660575002 19660825

Family:

Publication number	Publication date	Application number	Application date
US3358880 A	19671219	US19660575002	19660825

Probable Assignee: RICHARD W CALLAWAY

Assignee(s):(std)**:** LELAND F DILLS ; RICHARD W CALLAWAY

Inventor(s):(std)**:** WALKER JAMES H

International class (IPC 8–9)**:** B65C11/00 (Advanced/Invention); B65C11/00 (Core/Invention)

International class (IPC 1–7)**:** G07F11/68

CPC: B65C11/00

European class: B65C11/00

US class: 221/124 221/26 221/7

Classification Explorer

Cited documents: US2974772 A, US2878014 A, US2740581 A, US2581323 A,

Forward Citations: EP0301155,

Abstract:
Source: US3358880A (Claim 1) 1. A stamp dispensing device for dispensing a predetermined number of stamps selectively from a plurality of stamp supply strips, said dispensing device having means rotatably supportin.– first and second dials; first, second and third stamp dispensing mechanisms; drive connection means between said first dial and said first stamp dispensin.– mechanism operable to dispense a predetermined number of stamps as said first dial is rotated through a corresponding number ofincrements; and drive connection means between said second dial and said second and third stamp dispensing mechanisms selectively operable in response to the direction of rotation thereof to drive a particular one only of said second and third stamp dispensing mechanisms.

0) US2010024191A – PORTABLE ELECTRICAL EQUIPMENT RACKING TOOL

281) Family number: 44322534 (US2010024191A) © PatBase

Title: PORTABLE ELECTRICAL EQUIPMENT RACKING TOOL

Priority: US20080084897P 20080730 US20080250254 20081013 US20090500523 20090709 US20100698828 20100202 US20110253925 20111005 US20140215813 20140317 WO2009US52152 20090729 US20160056322 20160229

Family:

Publication number	Publication date	Application number	Application date
CA2732405 AA	20100204	CA20092732405	20090729
CA2732405 C	20131022	CA20092732405	20090729
US2010024191 AA	20100204	US20090500523	20090709
US2016181770 AA	20160623	US20160056322	20160229
US8063323 BA	20111122	US20080250254	20081013
US8151452 BB	20120410	US20090500523	20090709
US8307545 BA	20121113	US20100698828	20100202
US8671556 BA	20140318	US20110253925	20111005
US9275813 BA	20160301	US20140215813	20140317
WO10014748 A1	20100204	WO2009US52152	20090729

Probable Assignee: SPECTRUM PHARMACEUTICALS INC

Assignee(s):(std)**:** LEDBETTER ASHLEY ; LEDBETTER FINLEY L ; LEDBETTER FINLEY LEE

Assignee(s): SPECTRUM PHARMACEUTICALS INC

Inventor(s):(std)**:** LEDBETTER FINLEY L ; LEDBETTER FINLEY LEE ; LEDBETTER ASHLEY

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; BUSKOP LAW GROUP PC; WENDY; GARDERE WYNNE SEWELL LLP; BUSKOP LAW GROUP PC 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 TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B23P11/00 B23P19/00 H01H11/00 H01H49/00 H01H65/00 H01H9/00 H02B11/00 H02B3/00 (Advanced/Invention); H02H7/08 H02J7/00 (Advanced/Non–invention); B23P11/00 B23P19/00 H01H9/00 (Core/Invention)

CPC: H02B11/127 Y10T29/49826 Y10T29/53248 Y10T29/53274 Y10T29/53283 Y10T29/53909 Y10T29/49105 Y10T29/49799 H02B3/00 H01H49/00

European class: H02B3/00

US class: 1/1 200/50.21 200/50.24 200/50.26 29/270 29/418 29/428 29/428P 29/622 29/756 29/756S 29/762 29/764 361/605 361/606 361/607

Classification Explorer

Cited documents: US8410389 BB, US8395065 BB, US7825344 BB, US7804201 BA, US7019230 BA, US6951990 BA, US6897388 BB, US6777627 BA, US6404620 BA, US5477017 A, US5465031 A, US5453587 A, US5397869 A, US5330213 A, US4713501 A, US4668035 A, US2010024191 AA, US2005194243 AA, US2003200648 AA,

Forward Citations: WO16144472, WO15152864, US9565740, US9530576, US9520248, US9463574, US9362723, US9357617, US9350144, US9275813, US8896162, US8671556, US8654513, US8553394, US8466584, US8325078, US8228225, US8161631, US8156639, US8063323, US2015311683, US2015008833, US2013258104, US2013231779, US2013142602, US2012199450, US2011062002, CN106532351, CN105261858, CN104051971, CN103846661, CN103594932, CN103594932,

Abstract:
Source: US2010024191A A portable electrical equipment racking tool with an onboard power supply, controllers

and drive assembly that can raise or lower the drive assembly while operating the drive assembly from a safe distance form the electrical equipment needing replacement.

0) TWM470794Y – VEHICLE LOCKING SET

282) Family number: 55634432 (TWM470794Y) © PatBase

Title:	VEHICLE LOCKING SET
Priority:	TW20130212430U 20130702

Family:

Publication number	Publication date	Application number	Application date
TWM470794 Y	20140121	TW20130212430U	20130702

Probable Assignee:	WANG YU HAN
Assignee(s):(std)**:**	WANG YU HAN
Inventor(s):(std)**:**	WANG YU HAN
International class (IPC 8–9)**:**	B62H5/16 (Advanced/Invention)

Classification Explorer

Abstract:
Source: TWM470794Y A vehicle with a lock, the lock bolt of the lever system can be pivoted to reduce the level of the auxiliary lock to the length of the system comprising: a main body by a lock core is rotated a key, the lock core can be driven by a control bolt telescoping action; one lock seat, coupled to the body, the lock holder located a hole and bolt holes, the bolt hole and rod hole is connected and can be controlled bolt stretching or control bolt stagger; a locking lever, drilled in the rod hole and can be used for the longitudinal movement of the latch bolt rod having an end disposed in the groove and a pivot portion, the plug can be inserted into the control or leave the locking grooves; and an extension rod, one end pivotally connected to the shaft hole activity pivoting portion of the lock lever, the shaft holes in the rod can enter or leave the rod bore holes.

0) US5253497A – MULTI–FUNCTION AUTOMOBILE STEERING LOCK

283) Family number: 11319878 (US5253497A) © PatBase

Title: MULTI–FUNCTION AUTOMOBILE STEERING LOCK

Priority: US19920837633 19920213

Family:

Publication number	Publication date	Application number	Application date
US5253497 A	19931019	US19920837633	19920213

Probable Assignee: CHEN TIAN YUAN

Assignee(s):(std)**:** HSIEH TA YOUNG

Assignee(s): TA YOUNG HSIEH ; TA YOUNG HSIEH NO ; CHEN TIAN YUAN

Inventor(s):(std)**:** HSIEH TA YOUNG

International class (IPC 8–9): B60R25/02 (Advanced/Invention); B60R25/02 (Core/Invention)

International class (IPC 1–7): B60R25/02

CPC: B60R25/0225 Y10T70/5765 Y10T70/5841 Y10T70/5894

European class: B60R25/022H

US class: 70/209 70/226 70/238

Classification Explorer

Cited documents: US5069048 A, US5062282 A, US5042278 A, US5040388 A, US5031428 A, US5022246 A, US4959981 A, US4935047 A, US4887443 A, US4848110 A, US4674306 A,

Forward Citations: US8671722, US6539758, US5924315, US5921115, US5799513, US5673576, US5488844, US5440907, US5426960,

Abstract:
Source: US5253497A A multi–function automobile steering lock having a similar structure as a conventional steering lock comprising a rod member to extend in a telescopic manner in a body tubular member to adjust its length to engage two opposite hooks with two opposite portions of a steering wheel of an automobile and to lock the rod member immovable, the rod member provided with a hollow lengthwise cavity for storing a driver half–hidden in the cavity and half–hidden in the body tubular member, the rod member also provided with a square projection extending from its outer end to fit with an impact socket having a deep square hole and two different sized 6 point holes at both ends to be used as a socket wrench.

284) Family number: 13351690 (WO9808422A1) © PatBase

Title: VERTICAL SUPPORTING POST

Priority: CH19960002144 19960830

Family:

Publication number	Publication date	Application number	Application date
WO9808422 A1	19980305	WO1997CH00320	19970901

Probable Assignee: FEHLBAUM AND CO

Assignee(s):(std)**:** FEHLBAUM AND CO ; JERABEK HARALD ; UECKER MANFRED

Inventor(s):(std)**:** JERABEK HARALD ; UECKER MANFRED

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

International class (IPC 8–9)**:** A47B96/14 A47F5/10 A47G25/06 F16B7/14 (Advanced/Invention); A47B96/00 A47F5/10 A47G25/00 F16B7/00 (Core/Invention)

International class (IPC 1–7)**:** A47B96/14 A47F5/10 A47G25/06 F16B7/14

CPC: A47B96/1425 A47F5/10 A47G25/0664 F16B7/1454 F16B7/1463

European class: A47B96/14D A47F5/10 A47G25/06E F16B7/14H F16B7/14K

Classification Explorer

Cited documents: US3145669, GB2200402, FR2329232, FR1101248, DE9305495 U,

Forward Citations: WO9840632, WO06002697, WO02076264, GB2467778, EP1195331,

Abstract:
Disclosed is a vertical supporting post for displaying goods, erecting information bearers or installing decorative elements, which includes an inner tube (2) and an outer tube (3) telescopically displaceable on the inner tube. Once the bearing point is determined, a linking device is provided for locking both the inner an the outer tubes (2, 3) one against the other. The mechanical linkage is achieved by constricting or extending both tubes (2, 3) and may be actuated by means of a rod axially coming out of the tubes. The inventive device is provided with a clamping bracket (100) which may be readily opened. The box key for actuating the clamping screw can be maintained inside the clamping bracket (100).

0) FR2102611A – DISPOSITIVO ANTIRROBO.

285) Family number: 16675709 (FR2102611A) © PatBase

Title: DISPOSITIVO ANTIRROBO.

Priority: FR19700029607 19700804

Family:

Publication number	Publication date	Application number	Application date
DE2117035 A1	19720210	DE19712117035	19710407
DE2117035 C2	19830922	DE19712117035	19710407
ES190510 Y	19751016	ES19700190510U	19701005
FR2102611 A5	19720407	FR19700029607	19700804

Probable Assignee: JUY LUCIEN

Assignee(s):(std)**:** ANTIVOLS SIMPLEX SA ; JUY LUCIEN

Assignee(s): CHARLES HIPPOLYTE JUY ; ANTIVOLS SIMPLEX S A ; ANTIVOLS SIMPLEX S A 21003 DIJON ST APOLLINAIRE FR

Inventor(s):(std)**:** JUY LUCIEN CHARLES HIPPOLYTE

Inventor(s): JUY LUCIEN CHARLES HIPPOLYTE DIJON COTE D OR FR

International class (IPC 8–9): B60R25/02 B60R25/021 (Advanced/Invention); B60R25/02 (Core/Invention)

International class (IPC 1–7): B60R25/00 B60R25/02 E05B47/00 G08B

CPC: B60R25/02121

European class: B60R25/021C2A1

Classification Explorer

Cited documents: FR2003310, DE6605579 U, DE1555257,

Forward Citations: WO14020165, FR2817816, FR2816267, FR2448019, FR2429692, FR2398644, FR2330569, FR2330569, EP2692592, EP0003994, DE2916559, DE2365923,

Abstract:
Source: FR2102611A (Claim 1) – REVENDICATIONS – 1 – Dispositif antivol, notamment pour vehicules automobiles, qui est du type dont ltensemble constitue un bloc compact et autonome, et dont le pene de verrouillage est monte et deplace generalement parallelement ou diune maniere sensiblement parallele a l'axe du dispositif qui comprend notamment un bottier portant l'ensemble, une serrure avec un stator et un rotor entraine au moyen d'une cle, un organe entraineur solidaire du deplacement du rotor et cooperant avec un pene et un porte–oene intermediaire de preference, et aussi generalement quoique non exclusivement, un systeme de contacteur rotatif actionne angulairement avec le rotor afin d'ouvrir ou de fermer un ou des circuits electriques, ce dispositif etant caracterise en ce qu'il comprend des moyens de blocage du pene d'une maniere sure dans la position de deverrouillage, le porte–pene en forme de secteur etant deplace sur un degagement correspondant du stator par les effets conjugues dlun ou plusieurs ressorts dans un sens, et d'une ouverture a profil avec rampe cooperant avec un ergot peripherique de organe entrarneur d'autre part, un levier etant monte flottant et basculant dans une fente du stator, ce levier recevant, en direction de lXaxe du dispositif, la poussee elastique d'un ressort de positionnement, le dit levier presentant un bec de verrouillage destine a cooperer avec une ouverture formee dans le porte–pene, ou directement dans le pene, la partie inferieure du levier presentant un cran de positionnement et une forme inclinee destines a cooperer avec une bille intermediaire logee dans une fente formee entre la fente de montage du levier et ltalesage du stator, le diametre de la bille etant un peu superieur a la largeur de la tenie ouverte du rotor dans laquelle est engagee la tige de cle, le dos de la cle presentant une encoche pour entrainer la bille et faire basculer le levier afin de bloquer ou de debloquer le porte–pene et le pene.

Machine translation: (Claim 1) – CLAIMS – 1 – Anti–theft device, particularly for motor vehicles, which is of the type ltensemble is a compact, autonomous, and whose pene lock is mounted and moves generally parallel or substantially parallel to diune the axis of the device which includes a housing carrying the set, a lock with a stator and a rotor driven by means of a key, a drive member secured to the displacement of the rotor and cooperating with a bolt and a carrier of intermediate Oene preference, and also generally though not exclusively, a system of rotary switch operates with the rotor angle to open or close an electrical circuit or circuits, this device being characterized in that it comprises means for blocking the pene of a safe manner in the unlocking position, the door pene–shaped area being moved to a corresponding recess of the stator by the combined effects dlun or more springs in one direction, and has an opening ramp profile with cooperating with a pin peripheral organ of entrarneur other hand, a lever being mounted floating and rocking in a slot of the stator, this lever receiving, lXaxe

towards the device, the thrust of an elastic positioning spring, said lever presenting a spout intended to cooperate with locking an opening formed in the bolt−carrier, or directly in the bolt, the lower part of the lever having a notch and positioning an inclined shape intended to cooperate with a ball housed in a slot intermediate formed between the slot lever mounting ltalesage and the stator, the diameter of the ball being slightly greater than the width of the open tenie rotor which is engaged in the key shaft, the back of the key having a slot to cause the ball and tilt the lever to lock or unlock the bolt−carrier and the bolt.

0) GB171406A – IMPROVEMENTS IN DENTAL ENGINE HANDPIECES

286) Family number: 18179944 (GB171406A) © PatBase

Title: Improvements in dental engine handpieces

Family:

Publication number	Publication date	Application number	Application date
GB171406 A	19230212	GB19210030254	19211112

Probable Assignee: WHITE S DENTAL MFG CO

Assignee(s):(std)**:** WHITE S DENTAL MFG CO

Assignee(s): S S WHITE DENTAL MFG CO ; THE S S WHITE DENTAL MANUFACTURING COMPANY

International class (IPC 8–9)**:** A61C1/14 (Advanced/Invention); A61C1/08 (Core/Invention)

International class (IPC 1–7)**:** A61C1/10

CPC: A61C1/14

European class: A61C1/14

Classification Explorer

Abstract:
Source: GB171406A Dental engines.–In an " all–cord " or beltdriven dental handpiece, which does not include a slip–joint as part of its construction, the chuckoperating mechanism is actuated by relative axial sliding movement of parts of the handpiece. The handpiece comprises a front spindle 1, Fig. 2, connected through a wedge slide 2 to the driving shaft 3 by a T–head and socket joint 37, 36, shown separately in Fig. 3. The wedge slide 2 is formed with a key 40 extending into a keyway 41 in the spindle 1 which is fitted with a pivoted lever 50, plunger 59 and double split chuck 56. A thrust–bearing washer 46 for the rear of the spindle is adjustable by means of a collet 6 which surrounds the driving shaft slide or bearing 5 and is adjustably connected to the outer casing 4 by a screw thread and is secured by a split lock nut 7. The collet 6 and slide 5 are connected by a key 10 working in a keyway 9. The slide or bearing 5, which moves longitudinally with the shaft 3 relatively to the front spindle and outer casing, for operating the chuck, is formed with an enlarged head 12 against which the driving pulley 13 rotates and which is flanged to provide an oil retaining annular space 14. The head 12 is rotatably supported in an extension 15 of the wrist joint frame 16 of well known construction. The forward end of the extension 15 carries a shield 19 which covers that part of the slide 5 which otherwise would be exposed when the parts of the handpiece are in the position shown in Fig. 2. A spring 20 confined between the extension 15 and a nut 22 on the slide 5 provides sufficient friction normally to prevent the slide 5 and outer casing 4 from rotating with the shaft 3, but permitting them to turn with the natural movements of the hand of the operator. The extension 15 is formed with an annular oil chamber 25 housing a spring 27 which normally closes the oil inlet aperture 26, and the slide 5 is formed with an aperture 32 opening into the chamber 25. The collet 6 is provided with an oil hole 62 which registers, in one position of the parts, with an opening 63 in the slide 5 and is accessible on removal of the outer casing 4. The shaft 3 may be withdrawn from its bearing slide 5 on removal of the outer casing 4 and of the pulley 13 and may then be separated from the wedge slide 2 by lateral movement of the joint members 36, 37.

0) CN201976621U – CUP OF SPINNING REEL

287) Family number: 49637337 (CN201976621U) © PatBase

Title:	Cup of spinning reel
Priority:	CN201120032128U 20110125

Family:

Publication number	Publication date	Application number	Application date
CN201976621 U	20110921	CN201120032128U	20110125

Probable Assignee:	TONG CHEN
Assignee(s):(std)**:**	TONG CHEN
Assignee(s):	CHEN TONG
Inventor(s):(std)**:**	CHEN CHEN ; TONG CHEN
Inventor(s):	CHEN TONG
International class (IPC 8–9):	A01K89/00 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN201976621U The utility model discloses a cup of a spinning reel. A main body of the cup is a shell, the middle of the shell is concave and the two ends are raised, the concave part is a winding part, the shell is hollow, the left side of the shell is connected with a cap, a telescopic clip is connected to the cap, the telescopic clip is matched with a groove at the left end of a spool to fix the cup on the spool, the inner side wall of the winding part of the shell is provided with a plurality of strip fixed keys parallel to the central axis of the shell, the left end of the shell is threadedly connected with a lock nut which is threadedly connected with a shaft sleeve, an inner clutch disk and an outer clutch disk are clipped between the lock nut and the shaft sleeve, the inner clutch disk is connected with a shaft sleeve key, and the outer clutch disk is connected with the shell through the fixed key. In the scheme, the telescopic clip is expanded and separated from the groove by only pressing the cap, and the cup and a force relief device are drawn out together; meanwhile, the speed of force relief can be controlled by rotating the lock nut due to the function of the front force relief device.

0) CN106151664A – A VALVE LOCKS (MACHINE TRANSLATION)

288) Family number: 64084503 (CN106151664A) © PatBase

Title: A valve locks (Machine translation)

Priority: CN201510146336 20150331

Family:

Publication number	Publication date	Application number	Application date
CN106151664 A	20161123	CN201510146336	20150331

Probable Assignee: SOLID LOCK CO LTD SHANGHAI JIAN

Assignee(s): SOLID LOCK CO LTD SHANGHAI JIAN

International class (IPC 8–9): F16K35/02 (Advanced/Invention)

Classification Explorer

Abstract:
Source: CN106151664A The present invention relates to a hardware lock, especially a valve lock. This invention by the valve seat, valve, valve handles, locks, and its characteristics are: roots of the valve handle close to the valve shaft is equipped with flexible tabs on the lock snaps into the Groove, lock setting on the valve seat lock tab on the scale corresponds to the root location of lap Groove on the valve handle. Switch valve Shi, with key will lock with open, telescopic card tongue exit valve handle Shang of hole slot, valve handle will can turned switch valve; Dang need will valve open or close or will valve open must of angle not moving, just with key reverse makes telescopic card tongue back bit card into valve handle Shang of hole slot, valve handle will cannot continues to turned has, valve will was open or close or positioning has.

0) US3977692A – EXTENSIBLE SUPPORT STRUCTURE

289) Family number: 1317111 (US3977692A) © PatBase

Title: EXTENSIBLE SUPPORT STRUCTURE

Priority: US19750560395 19750320

Family:

Publication number	Publication date	Application number	Application date
US3977692 A	19760831	US19750560395	19750320

Probable Assignee: SCOTT AND FETZER CO

Assignee(s):(std)**:** SCOTT AND FETZER CO

Assignee(s): THE SCOTT AND FETZER COMPANY ; DOUGLAS AUTOTECH CORP ; DOUGLAS COMPONENTS A CORP OF DELAWARE CORP ; DOUGLAS COMPONENTS CORP

Inventor(s):(std)**:** FINDLEY SAMUEL A ; RIEGER FRANCIS C

International class (IPC 8–9): B62D1/18 B62D1/184 (Advanced/Invention); B62D1/18 (Core/Invention)

International class (IPC 1–7): A45C13/02 B62D1/18

CPC: B62D1/184 Y10T74/2066 Y10T74/2101

European class: B62D1/184 B62D1/18D2

US class: 248/298.1 248/354.1 280/775 280/87HA 74/493 74/531 74/567

Classification Explorer

Cited documents: US3877670 A, US3803939 A, US3724290 A, US3678778 A, US3533302 A, US3491614 A, US3170711 A, IT614355 A,

Forward Citations: US8960050, US8677851, US7338079, US7322608, US5265492, US5088767, US5078022, US4195535, US4179137, US4046024, US2009205460, US2009107278, US2004113408, US2004090058, GB2326928, GB2326928, EP0440403,

Abstract:
Source: US3977692A An extensible support structure comprising a housing formed of a pair of U–shaped members arranged to form an elongated passageway which telescopically receives a third member characterized by a cam member extending through aligned apertures in the first and second member and slots in the third member, overcenter means received in the housing and coacting with the cam member to urge it into a first position clamping the first and second members onto the third member to frictionally lock the third member in a selected axial position within the housing and a second position releasing the clamping engagement and the frictional lock of the third member.

0) WO17023711A1 – COMPLIANT MODULE CONNECTIONS CONNEXIONS DE MOD...

290) Family number: 64890499 (WO17023711A1) © PatBase

Title: COMPLIANT MODULE CONNECTIONS

Priority: US20150199601P 20150731

Family:

Publication number	Publication date	Application number	Application date
WO17023711 A1	20170209	WO2016US44602	20160729

Probable Assignee: SERVICES PETROLIERS SCHLUMBERGER

Assignee(s):(std)**:** SCHLUMBERGER TECHNOLOGY BV ; SCHLUMBERGER TECHNOLOGY CORP ; SERVICES PETROLIERS SCHLUMBERGER ; SCHLUMBERGER TECH BV ; SCHLUMBERGER CA LTD

Assignee(s): SCHLUMBERGER CANADA LTD

Inventor(s):(std)**:** HALANI PRATIK ; MORIARTY KEITH

Agent(s): VEREB JOHN

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): E21B17/02 E21B41/00 (Advanced/Invention)

CPC: E21B17/028

Classification Explorer

Cited documents: US2014284103 AA, US2013133882 AA, US2011127085 AA, US2005016769 AA, US2004112603 AA,

Abstract:
Systems capable of compliantly coupling electrical assemblies located within drill string modules or drill collars to one another can include male and female mating portions, wire–carrying hollow tubes including helical portions thereof, a plurality of wires, and interconnection systems for interconnecting the plurality of wires. Related methods can include manufacturing the drill string modules and various components thereof, coupling the drill string modules to one another, and tripping the drill string modules into a wellbore.

291) 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) GB1467816A – ANTI–THEFT DEVICE FOR ROAD VEHICLES

292) Family number: 3992898 (GB1467816A) © PatBase

Title: ANTI–THEFT DEVICE FOR ROAD VEHICLES

Priority: GB19730028914 19740618

Family:

Publication number	Publication date	Application number	Application date
GB1467816 A	19770323	GB19730028914	19740618

Probable Assignee: ZAIDENER K

Assignee(s):(std)**:** ZAIDENER K

International class (IPC 8–9)**:** B60R25/02 B60R25/022 (Advanced/Invention); B60R25/02 (Core/Invention)

International class (IPC 1–7)**:** B60R25/00

CPC: B60R25/0221

European class: B60R25/022B

Classification Explorer

Forward Citations: WO9617755, WO8605150, US5878609, US5862688, US5199283, GB2230500, GB2134463, FR2861355, EP0374453,

Abstract:
Source: GB1467816A 1467816 Anti–theft devices K ZAIDENER 18 June 1974 [18 June 1973] 28914/73 Heading B7J [Also in Division E2] A vehicle anti–theft device comprises an elongated rod 12 formed with an axially extending series of recesses 14 and telescopically received in an elongated socket member 11, the free ends of rod 12 and member 11 respectively being hook shaped (13), Fig. 1 (not shown), for engagement with a control pedal and steering wheel of a vehicle respectively, with a locking mechanism 10 secured to member 11 and including a detent 18 biased by spring 20 into looking engagement with a selected recess 14 to prevent relative movement of rod 12 and member 11, a groove 30 extending longitudinally of rod 12 along the series of recesses 14 and a finger 31 entering the groove 30 to obstruct access to the detent 18 by extraneous means such as a steel strip for lock–picking purposes. Instead of forming part of casing 17 of the mechanism 10, as shown, the finger 31 may be formed on the inner face of the member 11. Specifications 1,039,980, 1,107,012, 1,186,853 and 1,354,883 are referred to.

0) US2010367A – BALL AND SOCKET JOINT

293) Family number: 21863335 (US2010367A) © PatBase

Title: BALL AND SOCKET JOINT

Priority: US19310547577 19310629 US19320629917 19320822

Family:

Publication number	Publication date	Application number	Application date
US2010367 A	19350806	US19320629917	19320822
US2012669 A	19350827	US19310547577	19310629

Probable Assignee: CLARK EQUIPMENT CO

Assignee(s):(std)**:** CLARK EQUIPMENT CO

Assignee(s): CLARK EQUIPMENT COMPANY

Inventor(s):(std)**:** ROBERT LAPSLEY

Inventor(s): LAPSLEY ROBERT

International class (IPC 8–9)**:** F16C11/06 F16H59/04 F16H63/20 (Advanced/Invention); F16C11/06 F16H59/04 F16H63/08 (Core/Invention)

International class (IPC 1–7)**:** B60K20/12 B60K23/00 F04B1/20

CPC: F16C11/069 Y10T74/20165 Y10T403/1674 Y10T403/32762 Y10T403/32811 F16H59/042 F16H63/20 Y10T403/5746 Y10T403/589 Y10T403/645

European class: F16C11/06M2 F16H59/04C F16H63/20

US class: 384/264 403/138 403/144 403/20 403/307 403/320 403/337 74/473.34

Classification Explorer

Forward Citations: WO9512763, US8375821, US6398446, US5417512, US5372446, US4764048, US4653342, US4471602, US3787128, US3269525, US3087341, US3016758, US2916933, US2662766, US2010031766, JP53149177, EP0918168, EP0394545, EP0239757, EP0051686,

Abstract:
Source: US2010367A 1. A socket mounting for a lever for shifting gears, comprising a spherical head on said lever, a stationary support having a socket one portion of which is formed to receive the spherical head, the other portion being generally cylindrical, there being an annular undercut groove having a tapered upwardly converging wall formed ln said cylindrical portion, and an inwardly extending ledge, s. retaining ring contacting with said head opposite its seat in said socket and mounted in said cylindrical portion, and a split spring ring seated against said retaining ring and pressed outwardly against said tapered wall to urge the retaining ring downwardly against the spherical head of the gear shift lever, said cylindrical portion being provided with a slot to permit the insertion of a tool to remove the spring ring from said portion, and said ledge acting to prevent the inadvertent displacement of said spring ring.

0) US6273115B – WIND AND WEATHER PROTECTIVE DEVICE IN THE FORM ...

294) Family number: 29582462 (US6273115B) © PatBase

Title: Wind and weather protective device in the form of a folding roof and/or partition

Priority: CH19970000459 19970227 CH19970000883 19970416 WO1998CH00079 19980226 CH19980000131 19980121

Family:

Publication number	Publication date	Application number	Application date
AT241741 E	20030615	AT19980902930T	19980226
AU199859800 A1	19980918	AU19980059800	19980226
CH693535 A	20030930	CH19980000131	19980121
DE59808538 D1	20030703	DE19985008538	19980226
EP0963495 A2	19991215	EP19980902930	19980226
EP0963495 B1	20030528	EP19980902930	19980226
HU0000633 AB	20000828	HU20000000633	19980226
HU0000633 AC	20000928	HU20000000633	19980226
US6273115 BA	20010814	US19990380257	19990826
WO9838400 A2	19980903	WO1998CH00079	19980226
WO9838400 A3	19981217	WO1998CH00079	19980226

Probable Assignee: GUGGISBERG URS

Assignee(s):(std)**:** GUGGISBERG URS ; URS GUGGISBERG ; URS GUGGISBERG C O GUGGISBERG ; URS GUGGISBERG C O GUGGISBERG SOLARBAU AG

Assignee(s): URS GUGGISBERG C O GUGGISBERG AG SOLARBAU ; GUGGISBERG URS LUETERSWIL

Inventor(s):(std)**:** GUGGISBERG URS ; URS GUGGISBERG

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): A45B23/00 D06F57/08 D06F57/12 E04F10/04 E04H15/38 E04H15/58 (Advanced/Invention); A45B23/00 D06F57/00 E04F10/00 E04H15/32 E04H15/34 (Core/Invention)

International class (IPC 1–7): A45B23/00 D06F57/08 D06F57/12 E04F10/04 E04H15/18 E04H15/48

CPC: A45B23/00 A45B2023/0025 A45B2023/0093 E04F10/04 E04H15/38 E04H15/58

European class: A45B23/00 E04F10/04 E04H15/38 E04H15/58 K45B23/00D K45B23/00Z

US class: 135/135 135/90 135/98 160/134 160/81 52/63 52/74 52/82

Classification Explorer

Cited documents: US779446 A, US706605 A, US5918615 A, US5490533 A, US4981152 A, US4836232 A, US4630627 A, US3333373 A, US3156497 A, US3134426 A, US3118186 A, US2465140 A, NL79156 C, NL79156 C, NL79156 A, GB1488351 A, FR802857 A, EP0587529 A2, EP0567922 A1, EP0011041 A1, DE8533632 U, DE8533632 U, DE4322417 A1, DE3730696 A1, DE3721738 A1, DE3418994 A1, DE29616314 U1, DE29616314 U, DE2961631, DE2150198 B, DE1207560 B, DE1184930 B, CH678875, BE879924 A2,

Forward Citations: WO16139575, WO03035995, WO0123692, WO0036246, US8056573, US8051866, US7559174, US7464900, US7264012, US6776178, US6729076, US6640868, US2014360437, US2011167737, US2010229907, US2007266648, US2006267326, US2006185706, US2006169309, US2006102796, US2006081343, KR101156606, EP1151172, DE102016204211, CN103821404, CN103821404, CN102330320, CH693536, AU738481,

Abstract:
Source: US6273115B A proposed wind and weather protection device is designed in the form of a collapsible pavilion. The collapsible pavilion is provided with a collapsible roof (1) formed from circular segments. In two preferential design variants, the maximum opening angle of the pavilion is 180 degrees, 90 degrees or 270

degrees. The roof (1) consists of a central nodal element (2) on which several roof spars (11) are fixed. The roof spars (11) support a covering element (21) in the form of a circular segment. To extend the roof (1), at least one tensioning device is provided. The pavilion can have vertical side supports. Each side support is positioned at the outer end of each roof spar. Furthermore, the pavilion can be equipped with a side wall. A gathering device can be used to ensure that the covering element (21) does not hang too far down when folded.

0) BRPI0403987A – DISPOSITIVO PARA MEDICAO DO NIVEL DE UM FLUIDO ...

295) Family number: 31729691 (BRPI0403987A) © PatBase

Title: DISPOSITIVO PARA MEDICAO DO NIVEL DE UM FLUIDO NO INTERIOR DE UM TANQUE DEVICE FOR MEASURING THE LEVEL OF A FLUID WITHIN A TANK (Machine translation)

Priority: BR2004PI03987 20040916

Family:

Publication number	Publication date	Application number	Application date
BRPI0403987 A	20050222	BR2004PI03987	20040916

Probable Assignee: DOVER DO BRASIL LTDA

Assignee(s):(std)**:** DOVER DO BRASIL LTDA

Inventor(s):(std)**:** RIBEIRO JOAO LUIZ

Inventor(s): JOAO LUIZ RIBEIRO

International class (IPC 8–9): G01F23/36 (Advanced/Invention); G01F23/30 (Core/Invention)

International class (IPC 1–7): G01F23/36

Classification Explorer

Abstract:
Source: BRPI0403987A 1 •• •••? • « # # # • • E # # •••• •• • ••#• • « ss•••• « •ss e # •••••• • • •••• # ## • • • • • # ss • # # ss # • •• # ss # •• »• •• •• • RESUMO DISPOSITIVO PARA MEDICAO DO NIVEL DE UM FLUIDO NO INTERIOR DE UM TANQUE desenvolvido para medicao de um nivel de fluido, e e particularmente vantajoso para uso com tanques e assemelhados ou 5 pode ser usado sem limitacoes numa gama de meios diversos alem de tanques e compreende: um abrigo (102) dotado de um indicador de nivel (184) ai alojado para mostrar um nivel medido de fluido; uma haste (108) que se estende do abrigo (102) e define um caminho de percurso para uma boia (112); um elemento flexivel alongado (114) esta ligado a boia (112) para io localizar a posicao da boia (112) ao longo da haste (108); o dispositivo (100) montado num tanque (200) para medir o nivel de fluido (204) de um fluido (206) num tanque aereo (202); dita haste (108) e a dita boia (112), sao introduzidas atraves de uma abertura superior convencional (208) do tanque, da qual a tampa rosqueada ou algo que o valha tenha sido removida, no 15 interior (210) do tanque (202); e o o dispositivo (100) mede o nivel do fluido (204) no tanque (202), mostrando a informacao do nivel medido na direcao de um observador em pe adjacente ao tanque (202) 1 •• •••? • " # # # • • And is # •••••• • • •••• # ## • • • • • • # ss # # ss # # ss # • •• •• »•• •• • SUMMARY • DEVICE level measuring A FLUID WITHIN A TANK medication developed to a level of fluid, and is particularly advantageous for use with 5 or tanks and the like can be used without limitations in the range of several means in addition tank and comprising: a housing (102) provided with a level indicator (184) housed al to display a measured fluid level; a rod (108) extending from the shelter (102) and sets a route path for a float (112); an elongate flexible member (114) is connected to the displacer (112) for io locate the position of the displacer (112) along the rod (108); the device (100) mounted in a tank (200) for measuring fluid level (204) of a fluid (206) in an air tank (202); said rod (108) and said float (112) are introduced through a conventional upper opening (208) of the tank, from which the screw cap or something of that sort is removed at 15 inside (210) of the tank (202); and the the device (100) measures the level of the fluid (204) in the tank (202), showing the information of the level measured in the direction of an observer Standing adjacent to the tank (202)

0) US3023012A – SUBMARINE DRILLING HEAD AND BLOWOUT PREVENTER

296) Family number: 22772050 (US3023012A) © PatBase

Title: SUBMARINE DRILLING HEAD AND BLOWOUT PREVENTER

Priority: US19590819083 19590609

Family:

Publication number	Publication date	Application number	Application date
US3023012 A	19620227	US19590819083	19590609

Probable Assignee: SHAFFER TOOL WORKS

Assignee(s):(std)**:** SHAFFER TOOL WORKS

Inventor(s):(std)**:** WILDE ARTHUR E

International class (IPC 8–9)**:** E21B3/04 E21B33/064 E21B33/076 E21B33/08 (Advanced/Invention); E21B3/00 E21B33/02 E21B33/03 (Core/Invention)

International class (IPC 1–7)**:** E21B33/04

CPC: E21B3/045 E21B33/064 E21B33/076 E21B33/085

European class: E21B3/04A E21B33/064 E21B33/076 E21B33/08B

US class: 166/368 277/324 277/549 285/18

Classification Explorer

Cited documents: US661664 A, US369869 A, US2886350 A, US2628852 A, US2506538 A, US2333847 A, US1560763 A,

Forward Citations: WO05083230, US9404346, US9359853, US9334711, US9260927, US9175542, US9004181, US8939235, US8863858, US8844652, US8826988, US8770297, US8714240, US8701796, US8636087, US8408297, US8353337, US8347983, US8347982, US8322432, US8286734, US8113291, US7997345, US7934545, US7926593, US7836946, US7798250, US7789172, US7766100, US7762320, US7726416, US7717170, US7717169, US7708089, US7635034, US7559359, US7487837, US7448454, US7258171, US7237623, US7159669, US7007913, US7004444, US6913092, US6749172, US6708780, US6470975, US6263982, US6138774, US5662181, US5647444, US4754820, US4448255, US4438900, US4293047, US4285406, US4196924, US3965987, US3868832, US3724862, US3662823, US3628604, US3621912, US3561723, US3491842, US3485051, US3472518, US3400938, US3347567, US3285352, US3209829, US3199595, US3099316, US3083973, US2014027129, US2011168392, US2011168382, US2011024195, US2010175882, US2009200747, US2009139724, US2009101411, US2009101351, US2009057026, US2009057023, US2009057022, US2009057021, US2008169617, US2006144622, US2006108119, US2005061546, US2004222393, US2004222020, US2004178001, US2003193035, DE2845183,

Abstract:
Source: US3023012A (Claim 1) 1. A submarine drilling head and blowout preventer, comprising a housing adapted to be fixedly mounted at iq the floor of an océan or other body of water, a turbine rotor disposed in said housing, bearing means to mount said turbine rotor in said housing for rotation about a generally vertical axis, a rotating assembly disposed co−axially in said rotor and including a packer member ig adapted to be sealingly mounted around a drill string and to permit longitudinal shifting of said drill string therethrough, means to prevent relative rotation between said turbine rotor and rotating assembly while permitting longitudinal shifting therebetween whereby said rotating 20 assembly may be lifted out of said turbine rotor and said housing, means to lock said rotating assembly against excessive axial shifting in said turbine rotor while permitting rotation of said rotating assembly, rotary seal means to effect a rotary seal between said rotating as− 25 sembly and said housing, and passage means to introduce fluid into said housing and to said turbine rotor to effect rotation of said turbine rotor and thus of said rotating assembly.

0) GB191326053A – STEERING MECHANISM FOR VEHICLES, MOTOR BOATS AN...

297) Family number: 37038314 (GB191326053A) © PatBase

Title: Steering Mechanism for Vehicles, Motor Boats and the like.

Priority: 19131113

Family:

Publication number	Publication date	Application number	Application date
GB191326053 A	19140618		00000000

Probable Assignee: TWOMBLY WILLARD IRVING

Assignee(s):(std)**:** TWOMBLY WILLARD IRVING

Assignee(s): WILLARD IRVING TWOMBLY

Inventor(s):(std)**:** TWOMBLY WILLARD IRVING

Inventor(s): WILLARD IRVING TWOMBLY

International class (IPC 8–9)**:** B63H25/10 (Advanced/Invention); B63H25/06 (Core/Invention)

CPC: B63H25/10

European class: B63H25/10

Classification Explorer

Abstract:
Source: GB191326053A 26,053. Twombly, W. I. Nov. 13. Adjusting steering hand–wheels. – The steering–column is telescopic and is provided with a spring catch to hold the steering–wheel at any desired height. The steering–wheel is fixed on a shaft 7 slidably keyed in the steering–column 6, the upper end of which is slit to form spring fingers 14 which engage with grooves 16 made in the shaft 7. Thus, as the steering–wheel is pulled or pushed, the fingers move out of the grooves and allow the wheel to be placed at any desired height.

0) DE2062746B2 – STEERING COLUMN LOCK FOR MOTOR VEHICLES – HAS A...

298) Family number: 543081 (DE2062746B2) © PatBase

Title: STEERING COLUMN LOCK FOR MOTOR VEHICLES – HAS ADDITIONAL SAFETY LINK WITH DOUBLE BALL COUPLING TO PREVENT INADVERTENT LOCKING

Priority: DE19702062746 19701219 DE19702062746 19701219

Family:

Publication number	Publication date	Application number	Application date
DE2062746 A1	19720720	DE19702062746	19701219
DE2062746 B2	19770707	DE19702062746	19701219

Probable Assignee: SUZUKI NAGATOSHI

Assignee(s):(std)**:** SUZUKI NAGATOSHI

Inventor(s):(std)**:** YAMAGUCHI KENICHI

International class (IPC 8–9)**:** B60R25/02 B60R25/021 (Advanced/Invention); B60R25/02 (Core/Invention)

International class (IPC 1–7)**:** B60R25/02

CPC: B60R25/02128

European class: B60R25/021C2B1

Classification Explorer

Forward Citations: WO16050880, FR2817816, FR2816267, EP3002161,

Abstract:
Source: DE2062746B2 The steering column lock has an extra safeguard in that the lock is not actuated until the key is fully withdrawn from the cylinder. The actual locking element (4) is connected to a safety link consisting of two parts (6,8). They are telescopic and spring (9) operated and there is a further spring (10) fitted between them. The free end of the safety link (8) fits in a groove (5) in the locking element (4). The other end (6) has an inclined surface that supports a ball (15). This in turn supports a second ball (14) that projects into the keyway and contacts the key (13) as it is inserted.

0) US4063520A – NIGHT DEPOSITORY CLOSURE

299) Family number: 6659218 (US4063520A) © PatBase

Title: Night depository closure

Priority: US19760682127 19760430

Family:

Publication number	Publication date	Application number	Application date
US4063520 A	19771220	US19760682127	19760430

Probable Assignee: MEILINK STEEL SAFE COMPANY

Assignee(s):(std)**:** MEILINK STEEL SAFE CO ; MEILINK STEEL SAFE COMPANY

Assignee(s): THE MEILINK STEEL SAFE COMPANY

Inventor(s):(std)**:** PARSONS KENNETH A

International class (IPC 8–9): E05G7/00 (Advanced/Invention); E05G7/00 (Core/Invention)

International class (IPC 1–7): E05G1/026

CPC: E05G7/001

European class: E05G7/00B

US class: 109/66 232/44

Classification Explorer

Cited documents: US3784090 A, US3465955 A, US2617584 A,

Forward Citations: US8935884, US8578885, US8136718, US7832625, US7431200, US7021691, US6871601, US5454332, US5284101, US5172643, US5052730, US4949651, US4753387, US4665839, US4573416, US4489662, US4483255, US4466357, US4176610, US2013152475, US2011315083, US2009030855, US2008073421, US2006066124, NL1007618, EP1424660, EP0919167,

Abstract:
Source: US4063520A A rockable customer operated door for a chute to a safe type receptacle as in a bank for receiving parcels and/or envelopes, which door may be unlocked by a key, and when opened exposes a pocket into which a parcel or letter may be dropped, and which during the manual closing of the door, a pivoted wall of the pocket ejects the contents thereof into the chute. Spring urged lever and ratchet means control the movement of the pocket wall to not only eject its contents but to scrape the walls thereof as well as to prevent reversing movement of the door intermediate the ends of its travel. Movable trunnion pivots for the door are provided for removing the door for repairs to its mechanism. The lever means pivoted to the door is provided with pins that cooperate with the ratchet means which is pivoted to the frame for the door that is rigidly mounted in the opening of the chute. Stops and toggle means are provided for controlling and limiting the movement of the door, the movable pocket wall, and the lever means. The key lock for the door comprises a pinion for a rack type bolt.

0) GB732709A – IMPROVEMENTS IN COLLAPSIBLE PORTABLE STRUCTURES...

300) Family number: 19801098 (GB732709A) © PatBase

Title: Improvements in collapsible portable structures

Priority: GB19530007876 19530323

Family:

Publication number	Publication date	Application number	Application date
GB732709 A	19550629	GB19530007876	19530323

Probable Assignee: JOHN WALTER BRAMALL

Assignee(s):(std)**:** JOHN WALTER BRAMALL

International class (IPC 8–9)**:** E04H15/28 (Advanced/Invention); E04H15/00 (Core/Invention)

CPC: E04H15/28

European class: E04H15/28

Classification Explorer

Forward Citations: US5439016, US4744381, US3331376, US3054413, US2953145, GB2297099, GB2297099, GB2136845, EP0567664,

Abstract:
Source: GB732709A 732,709. Tents. BRAMALL, J. W. March 22, 1954 [March 23, 1953], No. 7876/53. Class 20 (1). A collapsible tent or like framework comprises a central hub 3, adapted to be the apex of the structure, a plurality of flexible stays 1 pivotally attached to the hub 3 at spaced, radial positions to be movable outwardly from a closed position parallel.to the hub axis to an open position where they form the general shape of the structure, and.a member, e.g. a disc 8, coaxial with the hub and adapted to engage the stays 1 and urge them outwardly. A wire 6 located in a peripheral groove 4 in the hub 3 and passing through eyes in the ends of the stays 1 attaches them to the hub 3. The disc 8 is pivotally attached to the bottom of a screw 7 having a nut 13 with a handle 14, a sleeve 15 locking in the disc in its operative position as shown. The stays 1 may be steel rod, metal tube, or cane and may be straight or hinged intermediate their length, or may be in two telescopic sections, locking sleeves 18 being provided in the last two cases. When the cover 11 is clipped or stitched to the stays 1 and attached at the top to a member 10, the tent is erected in the following manner. The stays 1 are unfolded, locked, moved outwardly, their lower ends pushed into the ground, and a rod 34 inserted, Fig. 2. The disc 8 is raised until notches 9 therein engage the stays 1, the sleeve 15 moved to lock the disc 8, and the handle 14 operated to pull up the disc 8 and tension the cover 11. Several modifications are described. The disc 8 may be carried on the bottom of a shaft having at its top a handle with a cam surface adapted to bear on a collar which is on the shaft and rests on the hub 3, movement of the handle raising the disc. Again, the disc may be loosely carried on a screw which threads in the hub, or the screw may pass freely through the hub and thread on to the disc.

0) US2447930A – HIGH–SPEED OIL SEAL

301) Family number: 21737015 (US2447930A) © PatBase

Title:	HIGH–SPEED OIL SEAL
Priority:	US19470728915 19470215

Family:

Publication number	Publication date	Application number	Application date
US2447930 A	19480824	US19470728915	19470215

Probable Assignee:	GITS BROS MFG CO
Assignee(s):(std):	GITS BROS MFG CO
Inventor(s):(std):	LEO BIGGS JOHN
Inventor(s):	BIGGS JOHN LEO
International class (IPC 8–9):	F16J15/36 (Advanced/Invention); F16J15/36 (Core/Invention)
International class (IPC 1–7):	F16J15/36
CPC:	F16J15/36
European class:	F16J15/36
US class:	277/384 277/391
Classification Explorer	
Cited documents:	US2377452 A, US2347118 A, US2233709 A, US2122378 A, US1972077 A,
Forward Citations:	US5984312, US5897118, US3770181, US2888280, US2743121, US2722439, EP0265264,

Abstract:
Source: US2447930A 1. . Flnally the retainer ring ll ls locked in Plane wlthln the shell or body I by means of a snap ring ll which engages in a suitable groove formed on the inner surface of the shell. The leader or torque plns I1 serve to key the ilange II and the retainer ll and prevent rotation of the parts within the seal body thus eliminating torsional strain on the dlapln–asm I. When the seal ls thus assembled, the carrier member I is supported within the body or shell I so as to have 9, limited floating movement ln the axlal direction, the diaphragm E flexlng and the leader pins |'| sliding axially ln the apertures ll formed in the retainer ring IS. and in order to provide pressure or tension forwardly ln the axial direction for sealing purposes _an annular wobble spring 2| is disposed ln the space between the flange I0 of the spacer rlng and the forward ilange I5 of the hanger ring. This wobble spring ll is nested within the spacer ring li before the hanger ring II is installed and ls normally compressed between the two flanges I0 and 15, when the retainer ring I9 ls secured in the shell, so as to exert a forwardly directed axial pressure on the ilange li. In the form shown, the wobble spring 2| is an annular member of wavy contour as indicated in Figures 2 and 3, made of spring metal and so formed that edgewise it has a slnuous appearance, provldlng resiliency against flattening in the axial direction. Thus, when compressed between the flanges li and I0 the wobble spring 1| will exert a substantially uniform pressure against the ilange I5 of the hanger II and urge the carrier I forwardly in an axial direction and in a. plane that ls always perpendicular to the qxls of the shaft or rotating member being sealed. The sealing cartridge structure, which has been thus far described, is normally held stationary in the housing and the sealing action of the seal member I takes place ln a plane normal to the axis of the rotating member and against a collar or shoulder which rotates with the member. In order to overcome the dimculty of providing a perfectly lapped axially facing surface on a collar that is integral with the shaft, the present invention contemplates the use of a separate sealing collar which is atllxed to the rotating member at the time the sealing cartridge is installed and which may be renewed when necessary. As shown the collar comprises a ring 22 which is aiilxed to the rotating member by being wedged over an annular washer or band 13, made of synthetic rubber or any other suitable yleldable or compresslble material, which engages the surface of the rotating member. As shown, the washer or band 13 is tapered rearwardly and the inner perlphery of the collar 12 is likewise tapered or converged rearwardly, so that when the collar I2 ls driven over the washer or band 2| the parts become securely wedged to the rotating member II. The collar 22 is thus secured to the rotating member against both axial and relative rotational movement so that the collar will tum with the rotating member without slipping. As shown, the collar 22 ls arranged to carry a sealing member 25 which ls nested and secured within an axially extending peripheral tlange 1| on the cartridge facing side of the collar 21. Thus the collar 22 may be of any suitable material or metal that can be easily formed and the sealing member 25 may be of any desired frlctionless material or a material providing desired wearing qualities different from that of the collar material. The sealing ring 25 ls held in the collar by spinning or otherwise forming the margin of the flange 2| inwardly so as to lock the sealing member in place. It will be understood that the sealing members I and 25 may be any suitable combination of materials. For example, the stationary seallng member 4 may be a composition material or a

carbon ring and the rotating sealing member 25 may be of hard polished material' such as glass. In the assembly of the improved cartridge seal, the carrier 3 together with the stationary sealing ring I and the diaphragm 5 are pre−assembled and handled as a unit and the carrier assembly ls inserted within the body I so that the bead B at the periphery of the diaphragm 5 engages in the groove 5 formed on the inner surface of theflange

0) US2906146A – FLOATING REAMER

302) Family number: 22131489 (US2906146A) © PatBase

Title:	FLOATING REAMER
Priority:	US19560629641 19561220

Family:

Publication number	Publication date	Application number	Application date
US2906146 A	19590929	US19560629641	19561220

Probable Assignee:	LEONARD W KUTTLER JR
Assignee(s):(std):	LEONARD W KUTTLER JR
Inventor(s):(std):	FLANNERY FRANK A ; NOVKOV RAYMOND E
International class (IPC 8–9):	B23B29/034 (Advanced/Invention); B23B29/00 (Core/Invention)
International class (IPC 1–7):	B23D75/00
CPC:	B23B29/0341 Y10T407/193 Y10T407/1934 Y10T408/86 Y10T408/9098
European class:	B23B29/034B1C
US class:	407/45 407/47 408/186 408/231
Classification Explorer	
Cited documents:	US2652634 A, US2629270 A, US2623420 A, US2125005 A,
Forward Citations:	WO9906192, WO9906192, US5975811, US4050842,

Abstract:
Source: US2906146A (Claim 1) 1. A machine tool of the character described, cornprising; a hollow tubular member having opposed axial ends; an elongated cutting bit having a cutting end; means for telescopically positioning said bit concentrically of said tubular member in non–rotatable axially shiftable relationship therewith whereby said cutting end thereof projects from one axial end of said tubular member; said means including a. cylindrical adaptor ring unit concentrically positioned between said bit and said member in relatively rotatable axially shiftable relationship therewith; said ring having an axial end thereof projecting beyond said member in encircling relationship to said bit whereby the projecting end of said ring is accessible exteriorally of said member; and a lock ring encircling said bit at an axial location between the projecting ends of said bit and said adapting ring; said locking ring engaging said adaptor ring upon axial movement thereof relatively thereof of said bit exteriorally of said member adjacent one axial end thereof.

0) EP0681069A1 – ACCESSIBLE SUSPENDED FALSE CEILING. BEGEHBARE,...

303) Family number: 10629308 (EP0681069A1) © PatBase

Title: Accessible suspended false ceiling.

Priority: EP19940440020 19940329

Family:

Publication number	Publication date	Application number	Application date
AT131238 E	19951215	AT19940440020T	19940329
DE69400039 D1	19960125	DE19946000039	19940329
DE69400039 T2	19960829	DE19946000039T	19940329
EP0681069 A1	19951108	EP19940440020	19940329
EP0681069 B1	19951206	EP19940440020	19940329
ES2082667 T3	19960316	ES19940440020T	19940329
JP2852722 B2	19990203	JP19940232452	19940902
JP7269011 A2	19951017	JP19940232452	19940902

Probable Assignee: CLESTRA CLEANROOM SA

Assignee(s):(std)**:** CLESTRA CLEANROOM S A ; CLESTRA CLEANROOM SA

Assignee(s): CLESTRA CLEANROOM SOCIETE ANONYME ; KURUSUTORA KURIINRUUMU ; CLESTRA CLEANROOM S A STRASBOURG FR ; CLESTRA CLEANROOM

Inventor(s):(std)**:** JIYOTSUPU ANDORE ; GOEPP ANDRE

Inventor(s): JOTSUPU ANDORE ; GOEPP ANDRE F 67230 HUTTENHEIM FR

Designated states: AT BE CH DE ES FR GB IE IT LI LU NL PT

International class (IPC 8–9)**:** E04B9/00 E04B9/02 E04B9/04 E04B9/26 E04B9/28 F16B5/00 (Advanced/Invention); E04B9/00 E04B9/02 E04B9/04 E04B9/22 F16B5/00 (Core/Invention)

International class (IPC 1–7)**:** E04B9/00 E04B9/02 E04B9/04 E04B9/26 E04B9/28 F16B5/00 F16B5/00

CPC: E04B9/003 E04B9/02 E04B9/225 E04B9/26 E04B9/28 F16B5/0064

European class: E04B9/00B E04B9/02 E04B9/22A E04B9/26 E04B9/28 F16B5/00A3C

Classification Explorer

Cited documents: US5207035 A, US2969667 A, US2143980 A, JP6358104 U, JP63058104 U, JP63058104 U, JP61155511 U1, JP61155511 U, JP50153714 U1, JP50153714 U, JP4819448 Y1, JP48019448 Y1, JP48019448 U1, JP381277 Y1, JP38001277 Y1, JP38001277 Y1, GB1335122 A, FR2627206 A1, FR2339718 A1, FR2245832 A1, FR1238720 A, FR1064940 A, DE481182 A, DE3844548 A1, DE2553109 A1,

Forward Citations: WO10102388, US9091053, JP5336934, JP2010281703, FR2927637, EP2090708, CN102661018,

Abstract:
The ceiling consists of panels (A) which are set side by side and suspended from straight parallel rails (B) to form a seal between a room and the main supporting ceiling. The panels are connected to the rails by suspension elements (4) attached to the panel edges and able to clip inside the rails and slide along them. Adjacent panels are joined together in the direction perpendicular to the rails by locking couplings accessible only from the upper surface of the panels. The suspension elements are fixed to adjacent panels in the same positions, symmetrically in relation to the line of the rails, so that the suspension element on one panel can make contact with those on an adjacent one and are capable of being locked to the rails. Any remaining gaps between the panels after they have been fitted are filled by seals (E).

0) US4030323A – ANTI–THEFT TRANSMISSION LEVER LOCK PLATE

304) Family number: 1407001 (US4030323A) © PatBase

Title: ANTI–THEFT TRANSMISSION LEVER LOCK PLATE

Priority: US19750639053 19751209

Family:

Publication number	Publication date	Application number	Application date
US4030323 A	19770621	US19750639053	19751209

Probable Assignee: RAYMOND LEE ORGANIZATION INC

Assignee(s):(std)**:** RAYMOND LEE ORGANIZATION INC

Assignee(s): THE RAYMOND LEE ORGANIZATION INC

Inventor(s):(std)**:** STANISLAWCZYK JOHN P

International class (IPC 8–9)**:** B60R25/00 (Advanced/Invention); B60R25/00 (Core/Invention)

International class (IPC 1–7)**:** F16H57/00

CPC: B60R25/066 Y10T70/5721 Y10T70/5735

European class: B60R25/06D

US class: 70/199 70/202

Classification Explorer

Cited documents: US1475863, US1402955, US1386543, US1372597, US1364539, US1329644, US1291617, US1222456, GB275903,

Forward Citations: US6705135, US6003350, US5613382, US5560233, US5361613, US4693099, AU726985,

Abstract:
Source: US4030323A A lock plate assembly that mounts about a pair of transmission gear shift levers of a vehicle to prevent unauthorized use of the vehicle. The lock plate assembly consists of a pair of shaped plates which are shaped to matingly engage with each other, with each plate shaped to fit halfway about two parallel cylindrical rods. An accessory assembly may be mounted to the vehicle floor to permit mounting the lock plate assembly about a shaft on the accessory plate and about one transmission gear shift lever of a vehicle, when so desired.

0) GB438284A – IMPROVEMENTS IN OR RELATING TO SUCTION CLEANERS...

305) Family number: 18866314 (GB438284A) © PatBase

Title: Improvements in or relating to suction cleaners

Priority: GB19340023624 19340816

Family:

Publication number	Publication date	Application number	Application date
FR790281 A	19351116		19350520
GB438284 A	19351114	GB19340023624	19340816

Probable Assignee: HOOVER CO

Assignee(s):(std)**:** HOOVER CO ; HOOVER LTD

Assignee(s): THE HOOVER COMPANY ; HOOVER LIMITED

International class (IPC 8–9)**:** A47L9/24 (Advanced/Invention); A47L9/24 (Core/Invention)

International class (IPC 1–7)**:** A47L9/24 E21B17/02 F16L37/12

CPC: A47L9/242

European class: A47L9/24B

Classification Explorer

Forward Citations: EP1585419, DE4201855, DE4201855, DE1290501,

Abstract:
Source: GB438284A 23624. [Class 99 (i)] A suction cleaner is connected to a dusting tool by a hose A which is provided with rigid tubes B, C at its ends, the tube C being secured to the hose in a swivelling manner by a ring E, Figs. 2 and 3, constituted by a flat strip of spring steel. As shown the ring E is located in a groove C <1> formed in the tube C and is provided with re–entrant arcs E <1> to engage a groove D <1> in an inner tube D which is cemented within the hose end and is further secured to the hose by a rubber ring G cemented to both parts, air tightness between the tubes C, D being effected by a packing ring F, Each of the tubes B, C may be provided with a lock, Fig. 4, comprising a spring blade J for securing it to the cleaner or dusting tool, the blade J being located in a housing H within the tube and being provided with an operating knob K <2> at its free end and also a securing hook K <1> .

0) WO04062453A1 – TOILET SEAT–LIFTING AND –LOWERING DEVICE DISPOS...

306) Family number: 30740294 (WO04062453A1) © PatBase

Title: TOILET SEAT–LIFTING AND –LOWERING DEVICE

Priority: WO2002FR04238 20021210

Family:

Publication number	Publication date	Application number	Application date
AU2002364438 AA	20040810	AU20020364438	20021210
WO04062453 A1	20040729	WO2002FR04238	20021210

Probable Assignee: BENYAHIA LAHCENE

Assignee(s):(std)**:** BENYAHIA LAHCENE

Inventor(s):(std)**:** BENYAHIA LAHCENE

Inventor(s): LAHCENE BENYAHIA

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 US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A47K13/10 (Advanced/Invention); A47K13/10 (Core/Invention)

International class (IPC 1–7): A47K13/10

CPC: A47K13/10

European class: A47K13/10

Classification Explorer

Cited documents: US4975988 A, GB2146674 A1,

Forward Citations: WO06076846, US7987528, US7644451, DE102012016821,

Abstract:
The invention relates to a device which is used to lift and lower a toilet seat without the use of the hand. According to the invention, the lower face of the toilet seat comprises a hook (3b) which, when the seat is lowered, fits into an opening (14a) in a case B4 which is fixed to the front face of the toilet bowl (48). Another case, B1, is fixed to a recessed surface. An upper pedal (6a) is used to lift the toilet seat (4a) while a second pedal (6b) is used to lower same. The aforementioned two pedals actuate a cable (34) which is disposed inside the toilet bowl (48), from which it emerges through an eyelet (15) and passes through a hole (12) where it is blocked by a screw (18a). A base (8a), which is screwed to the ceramic of the bowl (48), receives a spring (9a), a toilet seat (4a) and a cover (23), said assembly pivoting on a shaft (42e).

0) US4708510A – BALL JOINT COUPLING

307) Family number: 5442115 (US4708510A) © PatBase

Title: BALL JOINT COUPLING

Priority: AU19870075720 19870716 DE19873724816 19870727 US19860853209 19860417

Family:

Publication number	Publication date	Application number	Application date
AU579284 B1	19881117	AU19870075720	19870716
DE3724816 A1	19890209	DE19873724816	19870727
US4708510 A	19871124	US19860853209	19860417

Probable Assignee: MCCONNELL THOMAS E ROUTE

Assignee(s):(std): BERNARD E MCCONNELL ; MACCONNELL BERNARD E ; MACCONNELL THOMAS E ; MCCONNELL BERNARD E ; MCCONNELL THOMAS E

Assignee(s): MCCONNELL THOMAS E ROUTE

Inventor(s):(std): MACCONNELL BERNARD E ; MACCONNELL THOMAS E ; MCCONNELL BERNARD E ; MCCONNELL THOMAS E

Inventor(s): THOMAS E MCCONNELL ; BERNARD E MCCONNELL ; E MACCONNELL BERNARD ; E MACCONNELL THOMAS

Agent(s): PHILLIPS ORMONDE FITZPATRICK

International class (IPC 8–9): A61G13/12 F16C11/10 F16M11/14 (Advanced/Invention); A61G13/00 F16C11/04 F16M11/02 (Core/Invention)

International class (IPC 1–7): A61G13/00 F16C11/06 F16C11/10 F16C3/00

CPC: A61G13/12 A61G13/101 A61G13/1245 A61G13/125 F16C11/106 F16M11/14 F16M2200/022 Y10T403/32311 Y10T403/32754

European class: A61G13/12 F16C11/10B2 F16M11/14 K61G13/10A K61G13/12A7 K61G13/12A8 R16M200/02A1

US class: 403/137 403/90

Classification Explorer

Cited documents: US807857 A, US654051 A, US4491435 A, US4412635 A, US4402481 A, US3675953 A, US3632073 A, US3240516 A, US3198408 A, US2752116 A, US2736580 A, US2673054 A, US2670228 A, GB943191 A, GB602683 A, FR783530 A, FR359008 A, DE8307887 U, DE6905511 U, DE2213684 B2, DE1950381 A1, DE1827568 U, AU517401 B2, AU408614 B2, AU3834885 A1,

Forward Citations: WO9810705, WO9218082, WO9015258, WO13063477, WO13063469, WO12006554, WO11097431, US9655605, US9636148, US9615858, US9572741, US9545828, US9453526, US9297409, US9198695, US9060814, US9003562, US8894316, US8663291, US8663290, US8621692, US8561234, US8465530, US8382654, US8235622, US8197518, US8083664, US8075603, US8051515, US7951173, US7947065, US7942911, US7942910, US7942909, US7748669, US7485090, US7335158, US7281693, US7219671, US7055910, US6849044, US6708935, US6565567, US6264396, US5899627, US5790910, US5419756, US5385536, US5284313, US5177847, US4974325, US4865484, US2015167731, US2015098749, US2015059097, US2011208251, US2011020055, US2011009911, US2010312288, US2010242176, US2009308681, US2009306720, US2009254187, US2008142649, US2007152115, US2005072414, US2005052066, US2005029413, US2003036677, JP2010285073, GB2336314, FR2657780, CN103750935, CN103750935, CN102506272,

Abstract:
Source: US4708510A A ball joint coupling assembly permits universal movement and positioning of an object with respect to a vertical support shaft. Quick release/lock action is provided by a ball joint assembly having a housing in which a ball and piston are movably coupled. The ball is captured between annular jaw portions of the housing and piston, with locking action being provided by gripping engagement of the piston jaw portion and the housing jaw portion. The ball member is gripped in line−contact, compressive engagement by the annular edges of the piston jaw and housing jaw on opposite sides of the ball. The piston is constrained for axial movement within the housing with locking engagement and release being effected by rotation of a threaded actuator shaft.

0) US5505415A – TRIPOD

308) Family number: 8353122 (US5505415A) © PatBase

Title: Tripod

Priority: AU19910084096 19910819 EP19910915154 19910819 WO1991GB01404 19910819

Family:

Publication number	Publication date	Application number	Application date
AU199184096 A1	19930316	AU19910084096	19910819
DE69123157 D1	19961219	DE19916023157	19910819
DE69123157 T2	19970313	DE19916023157T	19910819
EP0598718 A1	19940601	EP19910915154	19910819
EP0598718 B1	19961113	EP19910915154	19910819
ES2095950 T3	19970301	ES19910915154T	19910819
US5505415 A	19960409	US19940196133	19940623
WO9304314 A1	19930304	WO1991GB01404	19910819

Probable Assignee: BRETT KENNETH STANLEY

Assignee(s):(std)**:** BRETT KENNETH STANLEY

Assignee(s): BRETT KENNETH STANLEY NORTHCHURCH HERFORDSHIRE GB ; KENNETH STANLEY BRETT ; BRETT KENNETH S

Inventor(s):(std)**:** BRETT KENNETH S ; BRETT KENNETH STANLEY

Inventor(s): BRETT KENNETH STANLEY NORTHCHURCH HERFORDSHIRE GB ; KENNETH STANLEY BRETT

Designated states: AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL SE US

International class (IPC 8–9)**:** F16M11/14 F16M11/16 F16M11/32 F16M11/42 (Advanced/Invention); F16M11/00 F16M11/02 F16M11/20 (Core/Invention)

International class (IPC 1–7)**:** F16M11/32 F16M11/38

CPC: F16M11/14 F16M11/16 F16M11/32 F16M11/42 F16M11/28 F16M2200/022 F16M2200/027

European class: F16M11/14 F16M11/16 F16M11/28 F16M11/32 F16M11/42 R16M200/02A1 R16M200/02B1

US class: 248/168 248/181.1 248/288.51

Classification Explorer

Cited documents: US911544 A, US5249766 A, US4974802 A, US3908945 A, US3114529 A, US2282285 A, US2195391 A, US1715668 A, GB916607 A, FR2560965 A1, EP0198106 A1, DE3733956 A1, DE1623489 A1,

Forward Citations: WO9747915, WO9402774, US9297409, US8894316, US7631455, US7551225, US7021592, US7011280, US6843015, US6824319, US6513774, US6450464, US6352228, US5790910, US5772164, US5660366, US2011020055, US2005242250, US2005213337, US2005178935, US2005161560, US2005122424, US2005092878, GB2329120, GB2329120,

Abstract:
Source: US5505415A PCT No. PCT/GB91/01404 Sec. 371 Date Jun. 23, 1994 Sec. 102(e) Date Jun. 23, 1994 PCT Filed Aug. 19, 1991 PCT Pub. No. WO93/04314 PCT Pub. Date Mar. 4, 1994.A tripod of the kind in which the head comprises an arcuate bolt on which the legs are pivoted, the pivots being spaced apart by wedges carried on the bolt. A pillar guide for an article supporting sliding pillar (14), and constructed from symmetrical half−shells, is also pivoted on the head and the pillar has rings for carrying straps (114) at each end. The leg pivots are offset from the axes of the three respective legs so as to facilitate folding the tripod into as compact an assembly as possible which is easy to carry as the center of gravity of the folded assembly can be adjusted by moving the pillar (14) in the pillar guide (18).

0) US3361020A – CABLE–CUTTING APPARATUS

309) Family number: 905597 (US3361020A) © PatBase

Title: CABLE–CUTTING APPARATUS

Priority: FR19620898156 19620521 US19590844441 19591005 US19640344095 19640211 US19670618742 19670227 US19670618743 19670227 US19640359053 19640413 US19680708135 19680226 US19670618745 19670227

Family:

Publication number	Publication date	Application number	Application date
FR1325971 A	19630503	FR19620898156	19620521
GB977175 A	19641202	GB19620007357	19620226
US3128521 A	19640414	US19590844441	19591005
US3281911 A	19661101	US19640359053	19640413
US3305907 A	19670228	US19640344095	19640211
US3361020 A	19680102	US19670618742	19670227
US3384939 A	19680528	US19670618743	19670227
US3412439 A	19681126	US19670618745	19670227
US3504066 A	19700331	US19680708135	19680226

Probable Assignee: AMERICAN CONCRETE CROSSTIE CO

Assignee(s):(std)**:** CHARLES WILLIAM CONE ; DOUGLAS P CONE ; DOUGLAS POE CONE ; JULIAN LEE CONE JUNIOR ; J L CONE JR C W CONE ; AMERICAN CONCRETE CROSSTIE CO

Assignee(s): AMERICAN CONCRETE CROSSTIE CORP

Inventor(s):(std)**:** BAKER ROBERT S ; BAKER ROBERT SHANNON ; CONE CHARLES WILLIAM ; CONE DOUGLAS POE ; JR JULIAN LEE CONE

Inventor(s): ROBERT S BAKER

International class (IPC 8–9)**:** B28B13/06 B28B15/00 B28B23/04 B28B23/06 (Advanced/Invention); B28B13/00 B28B15/00 B28B23/02 (Core/Invention)

International class (IPC 1–7)**:** B28B15/00 B28B23/04 B28B5/04 B28D1/08 B65G37/02 B65G49/00 E04G21/12

CPC: B28B15/00 Y10S425/116 Y10S425/117 Y10S425/118 B28B13/06 B28B23/06 B28B23/04 Y10T24/3909 Y10T83/4473 Y10T83/541 Y10T83/778 Y10T83/8735

European class: B28B13/06 B28B15/00 B28B23/04 B28B23/06

US class: 24/122.6 242/420.6 249/97 25/1 264/228 264/39 264/71 414/421 414/564 425/111 425/123 425/125 425/126.1 425/128 425/135 425/229 425/253 425/289 425/404 425/421 425/452 425/99 425/DIG.116 425/DIG.117 425/DIG.118 83/214 83/370 83/488 83/554

Classification Explorer

Cited documents: US974372 A, US644520 A, US611180 A, US3305907 A, US3223379 A, US3217375 A, US3189971 A, US3181213 A, US3142106 A, US3132403 A, US3128521 A, US3070867 A, US3061904 A, US3055073 A, US3013372 A, US3006053 A, US2996782 A, US2966717 A, US2959267 A, US2935172 A, US2901808 A, US2835016 A, US2821005 A, US2787042 A, US2787041 A, US2778088 A, US2745164 A, US2695754 A, US2689999 A, US2686963 A, US2653371 A, US2590478 A, US2578620 A, US2569231 A, US2566848 A, US2556928 A, US2554118 A, US2496016 A, US2437003 A, US2431618 A, US2423557 A, US2394228 A, US2266357 A, US2237618 A, US2147776 A, US2131474 A, US1796636 A, US1793208 A, US1632286 A, US1560618 A, US1486056 A, US1440716 A, US1429459 A, US1425015 A, RU147494, NL13274 C, NL13274, GB784184 A, GB769720 A, GB647780 A, GB306762 A, GB144193 A, FR1062188 A, DE1047098 B,

Forward Citations: US8701569, US8522694, US8438981, US8420179, US8167605, US8015727, US7748972, US6814906, US6425751, US5439629, US5000655, US4952129, US4661054, US4493177, US4381852, US4214655, US4128384, US3994657, US3966375, US3946631, US3898027, US3859021, US3827132, US3810726, US3732053, US3732044, US3720493, US3695129, US3685782, US3656634, US3620285, US3578187, US3577613, US3577610, US3571866, US3525131, US3523343, US3504066, US3448496, US3384939, US3305907, US3223379,

US2015151932, US2009315210, US2008035901, US2005102854, US2002125593, FR2657382, FR2643848, FR2404821,

Abstract:
Source: US3361020A ABSTRACT OF THE DISCLOSURE Cable−cutting apparatus which utilizes spaced power saws, each vertically slidable, with a control system including a counter, the counter being operable in response to saw motor load to cause sequential movement of the saws into cutting position. cutting apparatus wherein motor load is used as a control for the cutting operation. Other objects of the invention will become apparent from the following description of one practical embodi− ment thereof, when taken in conjunction with the drawings which accompany, and form part of, this specification. Brief description of the drawings Figure 1 is a schematic plan view illustrating the 1 degrees lay−out of the entire prestressed concrete forming machine, and showing the position of the cable−cutting apparatus with respect to the other parts of the machine; Figure 2 shows in side elevation that portion of the machine which includes the cable−cutting apparatus; Figure 3 is a vertical transverse section through the machine at the cable−cutting station and is taken on the line 3—3 of Figure 2; and Figure 4 is a diagrammatic view of the electrical circuit controlling operation of the cable−cutting saws. Cross−reference to related application This application is a division of co−pending application of Robert S. Baker, Serial No. 344,095, filed Feb. 11, 1964, now Patent No. 3,305,907, for Machine for Making Prestressed Concrete Members. B

310) Family number: 3346608 (FR2271102A) © PatBase

Title:	PERAMBULATOR FOLDING INTO FORM OF SUITCASE – HAS INTERNAL STIFFENERS AND FOLDING WHEEL CARRIERS AND SLIDING HANDLES
Priority:	FR19740016978 19740516

Family:

Publication number	Publication date	Application number	Application date
FR2271102 A1	19751212	FR19740016978	19740516

Probable Assignee:	UNILANDO
Assignee(s):(std):	UNILANDO
Assignee(s):	UNILANDO FR
International class (IPC 8–9):	B62B7/10 (Advanced/Invention); B62B7/00 (Core/Invention)
International class (IPC 1–7):	B62B7/12
CPC:	B62B7/10 B62B2205/06
European class:	B62B7/10 L62B205/06

Classification Explorer

Abstract:
Source: FR2271102A (Claim 1) REVENDICATIONS 1 – Voiture pour le transport de bebe, jeune enfant ou poupee, du type landau et constituee d'une nacelle apte a recevoir le corps du bebe ou de l'enfant ladite nacelle reposant sur des supports intermediaires associes a des moyens de roulement, ladite voiture etant demontable et repliable pour occuper en position compactee un volume restreint, les roues etant a cet effet demontables et amovibles, caracterisee en ce que les dits supports intermediaires supportant la nacelle d'une part et reposant d'autre part sur les moyens de roulement sont constitues par des elements d'armature rigide articules a une extremite sous la nacelle et susceptibles d'etre ramenes en position de repli apres enlevement des roues demontables et amovibles, sous le fond de la nacelle, les dits elements d'armature constitues de tiges rigides etant amenes en position repliee sous le fond de la nacelle, cote a cote et selon un plan sensiblement commun, sans superposition des elements, les dites tiges rigides etant prevues a cet effet avec des dimensions et des points d'articulation permettant leur repli cote a cote sans superposition. A perambulator has a body made of an upper part and a lower part made e.g. as plastic mouldings each with a key hole slot around its upper and lower edges into which fit the sides, the top cover and the bottom, the upper and lower parts being held apart by flexible rods which also hold the sides in tension. By removing and stowing these rods, the upper and lower parts can be collapsed towards one another, to form a shell shaped liked a suitcase, the following hood being extending flat across the top forming a lid. The tubular handle slides into the sides and the rod framework between the wheels and the underside fold up, after the wheels have been removed, into recesses around the underside. A seat may be erected inside the body.

0) GB164346A – IMPROVEMENTS IN DRESSMAKERS' MODELS

311) Family number: 18100270 (GB164346A) © PatBase

Title: Improvements in dressmakers' models

Family:

Publication number	Publication date	Application number	Application date
GB164346 A	19220831	GB19210015705	19210607

Probable Assignee: ANTONIN VOPATA

Assignee(s):(std)**:** ANTONIN VOPATA

International class (IPC 8–9)**:** A41H5/01 (Advanced/Invention); A41H5/00 (Core/Invention)

International class (IPC 1–7)**:** A41H5/01

CPC: A41H5/01

European class: A41H5/01

Classification Explorer

Forward Citations: EP0143284, CN103976495, CN103976494, CN103976493,

Abstract:
Source: GB164346A Void [Published under Sect. 91 of the Act]. Lay–figure and like stands.–A dressmaker's model comprises a number of parts, shaped to the Figure, said parts being divided into groups capable of horizontal adjustment by the rotation of a single operating–spindle 14 mounted in the casing 1 below the figure, said casing being provided at its lower end with a rod 3 vertically adjustable in a base portion. Locsely mounted in the spindle 14 are five toothed wheels each provided with a clutch by which the wheel may be coupled, so as to rotate with the spindle. These toothed wheels engage similar wheels 13 , 13, 13 , 13 , 13 fixed to the lower ends of tubes 29, 30, 32, 36, 37 respectively, said tubes being arranged for rotation one within the other and carrying the shaped body parts and the mechanism for operating same. The three corner wheels 13 , 13, 13 are each vertically adjustable in the casing 1. The parts of group A are operated simultaneously by the rotation of tube 37, this being effected by rotating the spindle 14 when the toothed wheel, engaging the wheel 13 on the tube 37, is coupled thereto by its clutch 35. The group A can be swung out as a whole forwards or backwards, and the two portions d, d constituting the hips are capable of independent adjustment. The waist group 13 is operated by a toothed wheel fixed to the 'upper end of tube 36, said wheel meshing with teeth formed in recesses in the arms carrying the waist portions. The tube 32, actuating the group e, has at its upper end three toothed wheels, one wheel being faced thereon and actuating the bust portions a, which are carried by arms having toothed recesses engaging said wheel, when the tube 32 is rotated. The other two wheels, which actuate in a similar manner the portions b, c' are loose on the tube 32 and can be coupled thereto by means of clutches so that the fans a, b, c <1> forming the group c may' be adjusted horizontally together or singly and are adjusted vertically by shifting the wheel 13 , attached to lower end of tube 32, in the casing 1. The shoulder portions e of the group D are attached to arms operated by a toothed wheel fixed to the upper end of tube 30, which has a second wheel loosely mounted thereon, which operates arms carrying the shoulder blade portions f when the wheel is secured to the tube 30 by a clutch. The width across the shoulders is adjustable separately and the whole group D may be vertically adjusted by shifting the toothed wheel 13d in the casing 1. The parts of the neck group are attached to arms having toothed recesses engaging a toothed wheel rotated bv means of a toothed wheel fixed to the upper end of tube 29. This group is vertically adjustable by shifting the wheel 13a in the casing 1. Each wheel on the spindle 14 when rotated, rotates a tooth wheel upon the axle of which a tape measure is wound off a spring drum. Vertical movements of the lower three wheels 13 , 13, 13 may be read from spring bands wound on a roller 27 and attached at their other ends to arms projecting from the said wheels.

0) US2429806A – FUEL INJECTION PUMP

312) Family number: 21792722 (US2429806A) © PatBase

Title: FUEL INJECTION PUMP

Priority: US19450616532 19450915

Family:

Publication number	Publication date	Application number	Application date
US2429806 A	19471028	US19450616532	19450915

Probable Assignee: DESCHAMPS FUEL INJECTION CORP

Assignee(s):(std)**:** DESCHAMPS FUEL INJECTION CORP

Inventor(s):(std)**:** DESCHAMPS DESIRE J

International class (IPC 8–9): F02M59/04 F02M59/26 F02M59/48 (Advanced/Invention); F02M59/00 F02M59/20 (Core/Invention)

International class (IPC 1–7): F02M59/04

CPC: F02M59/04 F02M59/265 F02M59/48

European class: F02M59/04 F02M59/26B F02M59/48

US class: 417/269 417/494 417/499

Classification Explorer

Cited documents: US2388462 A, US2376856 A, US2215827 A, US2206914 A, US2160735 A, US1933081 A, US1697853 A, GB146963 A,

Forward Citations: US4531494, US3746476, US3011452, US2982218, US2567367, EP0209938, EP0209938, DE918129,

Abstract:
Source: US2429806A 1. In a.

0) CN2610067Y – TOOL JOINT

313) Family number: 30895530 (CN2610067Y) © PatBase

Title: Tool joint

Priority: CN20032040702U 20030314

Family:

Publication number	Publication date	Application number	Application date
CN2610067 Y	20040407	CN20032040702U	20030314

Probable Assignee: XIAORUI DU

Assignee(s):(std)**:** XIAORUI DU

Assignee(s): DU XIAORUI

Inventor(s):(std)**:** DU XIAORUI

Inventor(s): XIAORUI DU

International class (IPC 8–9)**:** E21B17/02 (Advanced/Invention); E21B17/02 (Core/Invention)

International class (IPC 1–7)**:** E21B17/02

Classification Explorer

Forward Citations: WO14194621,

Abstract:
Source: CN2610067Y The utility model relates to a drilling tool joint, which comprises an upper joint and a lower joint, wherein the upper and lower joints are provided on the end with coordinating half screw jaws, the utility model also comprises a transmission key socket sleeved on the outer side of the upper and lower joints, the transmission key socket is provided between the inner side and outer side of the upper and lower joints with slide coordinating shaft key and groove, the upper joint is provided with a radial flexible telescopic locating pin which outer end extends out of the joint surface, the transmission key socket is provided with a locating hole corresponding to the locating pin. The utility model has the advantage that when connecting, the upper joint is plugged dead against the lower joint and rotates with 90 degree, then enters the transmission key socket, and the lock pin automatically locates so that all the work is done. Therefore unloading is in no need of large torque, which saves time, protects screw thread and lengthens drilling tool screw thread service life. The bearing torque and sealing is reliable no matter coronation or reversion. Since the upper and lower joints are of adjusting effect and break proof effect, which is relatively capable of easing damage effect of bit jumping so that when bit freezing happens, the utility model has the function of explosion free.

0) CN201446935U – DOUBLE ANTI–THEFT FAST SPARE WHEEL UP–DOWN REGU...

314) Family number: 45019330 (CN201446935U) © PatBase

Title: DOUBLE ANTI–THEFT FAST SPARE WHEEL UP–DOWN REGULATOR

Priority: CN200920034444U 20090904

Family:

Publication number	Publication date	Application number	Application date
CN201446935 U	20100505	CN200920034444U	20090904

Probable Assignee: XIAOFENG NING

Assignee(s):(std)**:** XIAOFENG NING

Assignee(s): NING XIAOFENG

Inventor(s):(std)**:** XIAOFENG NING

Inventor(s): NING XIAOFENG

International class (IPC 8–9): B60R25/00 B66D1/06 F16B41/00 (Advanced/Invention)

Classification Explorer

Forward Citations: CN104176003, CN104176003,

Abstract:
Source: CN201446935U The utility model provides a double anti–theft fast spare wheel up–down regulator, which comprises a chain wheel, a ratchet wheel, a safe nut and a mechanical key, and is characterized in that the chain wheel, the ratchet wheel and the safe nut are fixed on the same shaft to coaxially rotate, the chain wheel has an outer brake conical surface, the ratchet wheel has an inner brake conical surface, and in addition, the outer brake conical surface and the inner brake conical surface are matched with each other; the safe nut is additionally provided with a sleeve, the inner wall of the sleeve is provided with two raised bonds, the sleeve is provided with a telescopic lock core, and the safe nut is provided with three grooves; the outer wall of the mechanical key is provided with two grooves matched with the two raised bonds on the inner wall of the sleeve, and the inner wall of the mechanical key is provided with three raised bonds matched with the three grooves of the safe nut. The utility model has compact structure, can fast lift the spare wheel, and has double anti–theft function and long service life.

0) GB786078A – IMPROVEMENTS IN PERSONAL SERVICE CONNECTORS FOR...

315) Family number: 19430699 (GB786078A) © PatBase

Title: Improvements in personal service connectors for the crews of aircraft

Priority: GB19550003054 19550202

Family:

Publication number	Publication date	Application number	Application date
GB786078 A	19571113	GB19550003054	19550202

Probable Assignee: HYMATIC ENG CO LTD

Assignee(s):(std)**:** HYMATIC ENG CO LTD

Assignee(s): THE HYMATIC ENGINEERING COMPANY LIMITED

Inventor(s):(std)**:** PETTINGER DONALD STANLEY

International class (IPC 8–9)**:** B64D25/00 (Advanced/Invention)

International class (IPC 1–7)**:** B64D25/00

CPC: B64D25/00

European class: 62D9F3 B64D25/00

Classification Explorer

Abstract:
Source: GB786078A 786,078. Personal service connectors for use by airmen. HYMATIC ENGINEERING CO., Ltd. Feb. 2, 1956 [Feb. 2, 1955], No. 3054/55. Class 4. A connecting device for the personal service supplies such as microphone, oxygen and pressure connections for an airman occupying an ejector seat in aircraft comprises a seat plate d attached to the airman's ejector seat (not shown) and comprising a fixed plate i spaced from plate d to sandwich a sliding plate e which is moved lengthwise against the action of springs by a projection k or Bowden control m operated by the airman (see Fig. 1). The plate e is formed with keyhole apertures f which in the position shown lock, and with plate e moved by the control, release, two pairs of cones b, each having an annular recess c, formed on a seat bracket a. Fig. 10. The bracket a is apertured for the passage of the various services and it carries a plate n having connections o for the supplies, the plate n being releasably secured to bracket a by a catch plate t, Fig. 8, said catch plate having two lugs t^1 with holes therein to be engaged by catches s operated by a pair of levers u pivoted about fixed fulcrum points in a fitting v secured to plate n. A spring–loaded plunger r, formed with a collar r^1 to engage levers u, is connected to the aircraft structure by a lanyard so that plate n is automatically released when the seat is ejected from the aircraft. A conical end on plunger r holds catches s apart to lock plate n to bracket a and a visible plunger is provided to indicate that the catches are not in locking position. An airman's coupling unit comprising halves p connected by catches y, figures 6 and 8, and inter–locking handle elements x, Fig. 6, is releasably secured to seat bracket a by two pairs of spring–loaded catches 10, 11, one catch of each pair being bevelled so that it can be freed by a pull by the airman on the coupling unit handle x, the other catch of each pair providing a positive means of locking which can be released only by operation of a lever 12 which is automatically actuated by the airman when he releases his seat harness buckle. The coupling halves p carry service connections q complementary to the connections o on platen. In use, the airman on entering the aircraft, connects the halves p of his unit and presses it downwards on to the seat bracket a (to which the supply plate n is already attached) where it will be retained by one each of the catches 10 and 11, the other catch of each pair springing into their locking positions when all services are established and valves opened. During a normal exit from the aircraft the airman will release his harness buckle, thus freeing some catches 10, 11 and then pull out his unit against the restraint of the remaining catches. During an ejection exit plunger r will be operated to release automatically supply plate n from the remainder of the assembly. At the same time an emergency oxygen and pressure supply for the airman during descent will be opened and the normal gas services automatically sealed. Once out of the aircraft the operation of a combined parachute and seat harness release mechanism causes a pull on cable m to move sliding plate e so that the remainder of the assembly becomes separated from seat plate d. On landing, the airman will release his harness buckle, thereby freeing catches 10, 11 and by exerting a pull on handle x he will separate the half–coupling unit p from seat bracket a and sever his emergency supplies.

0) US2007081857A – FOUR PARTS MANHOLE ENABLING AN EASY INSTALL AND...

316) Family number: 34382283 (US2007081857A) © PatBase

Title: FOUR PARTS MANHOLE ENABLING AN EASY INSTALL AND HEIGHT ADJUSTMENT

Priority: US20050245810 20051007

Family:

Publication number	Publication date	Application number	Application date
US2007081857 AA	20070412	US20050245810	20051007

Probable Assignee: YOON JUNG H

Assignee(s):(std)**:** YOON JUNG H

Inventor(s):(std)**:** YOON JUNG H

Inventor(s): YOON JUNG HO

Agent(s): EUGENE OAK PHD JD MDIV PATENE ATTORNEY LAW OFFICE OF JANE OAK AND ASSOCIATES PC

International class (IPC 8–9): E02D29/14 (Advanced/Invention); E02D29/14 (Core/Invention)

CPC: E02D29/124 E02D29/14

European class: E02D29/12E E02D29/14

US class: 404/26 404/26P

Classification Explorer

Cited documents: US6527476 BA, US6036401 A, US5785409 A, US5655564 A, US5555998 A, US4666333 A, US4536103 A, US4505814 A, US4325405 A, US4174183 A, US2490075 A, US2003235467 AA,

Forward Citations: WO09092835, USD612348, US9711949, US9711941, US9666677, US9653642, US9646827, US9595813, US9590392, US9570888, US9564736, US9553426, US9543738, US9531164, US9520697, US9520695, US9466949, US9401584, US9379525, US9379522, US9371970, US9368939, US9362720, US9362715, US9356430, US9343871, US9318875, US9287684, US9250044, US9246311, US9239427, US9236530, US9209596, US9166374, US9166372, US9142935, US9106049, US9100590, US9099844, US9099843, US9093820, US9071772, US9071039, US9048170, US9025635, US9020003, US9019437, US9014229, US9013638, US8971370, US8971368, US8969113, US8956894, US8908731, US8905588, US8848755, US8847249, US8837546, US8837545, US8816319, US8805134, US8773598, US8767787, US8750342, US8728842, US8575728, US8558265, US8524578, US8509275, US8494017, US8451876, US8427590, US8422525, US8382392, US8355418, US8351478, US8177086, US2016177535, US2011182056, US2011180781, US2011064101, US2011064100, US2011036019, US2011017730, US2010302464, US2009309127, US2009309110, US2007286676,

Abstract:
Source: US2007081857A A manhole comprised of four parts is provided. The manhole is comprised of an outer–manhole pipe, an inner–manhole pipe, a manhole cover, and a support pipe. Pluralities of concave arc band shape blades are horizontally developed along the inner surface of the outer manhole pipe. Same number of convex arc band shape blades is horizontally developed along the outer surface of the inner manhole pipe. The inner–manhole pipe is inserted into the outer–manhole pipe vertically when the two kinds of arc shape blades aligned to make pass way for each other. When a desired height is reached, workers rotate the inner–manhole pipe 60 degrees horizontally and put down the inner–manhole pipe. Then the two kinds of blades are overlapped and fix the height of the manhole cover. A support pipe, comprised of two pieces of equal hemi–pipe connected one end, is engaged between the top flange of the inner–manhole pipe and top end of the outer manhole pipe to hold and support the distance between them.

0) US3176718A – LIQUID SUPPLY SYSTEM FOR MIXING MACHINE

317) Family number: 22861061 (US3176718A) © PatBase

Title: LIQUID SUPPLY SYSTEM FOR MIXING MACHINE

Priority: CH19610010790 19610918

Family:

Publication number	Publication date	Application number	Application date
CH387599 A	19650215	CH19610010790	19610918
GB1008827 A	19651103	GB19620035486	19620918
US3176718 A	19650406	US19620224343	19620918

Probable Assignee: BUEHLER GEB AG

Assignee(s):(std)**:** BUEHLER GEB AG ; BUEHLER AG GEB

Assignee(s): BUEHLER GEB ; GEBRUEDER BUEHLER ; GEBRUDER BUHLER ; BUHLER GEB

Inventor(s):(std)**:** EDGAR RUEGGER

Inventor(s): RUEGGER EDGAR

International class (IPC 8–9): B01F15/02 B01F15/04 (Advanced/Invention); B01F15/02 B01F15/04 (Core/Invention)

International class (IPC 1–7): B01F15/04 B01F7/10 B01J19/20 B67D5/56

CPC: Y10T137/86549 Y10T137/86823 Y10T137/87692 B01F15/0203 B01F15/0429

European class: B01F15/02B4 B01F15/04G4

US class: 137/607 137/625.17 137/625.41

Classification Explorer

Cited documents: US748744, US2412037, US1572509, US1169090, GB674094,

Forward Citations: CN102614792,

Abstract:
Source: GB1008827A 1,008,827. Mixing apparatus; feeding liquids. GEBRUDER BUHLER. Sept. 18, 1962 [Sept. 18, 1961], No. 35486/62. Heading B1C. A mixing apparatus for animal feeding stuffs has a liquid supply with a shut–off device at the extreme end and located within the mixing chamber or the feed duct for solid materials. As shown, the mixing chamber 1 has a rotary shaft 3 with paddles 2, a feed duct 6 and a discharge duct 5. Within the feed duct 6 is a transverse pipe 7 having a coaxial pipe 9 divided by a partition 15 and connected to liquid supply lines 16, 17. The pipes 7, 9 have corresponding holes 8, 10 which may be placed out of register by rotating the pipe 9 by means of a piston 22 and rod 21 interconnected with the solid material supply means. The pipe 9 is also axially movable in relation to the pipe 7 to vary the proportions of the two liquids supplied, being located by engagement of the pin 27 in one of the grooves 26.

0) GB191317325A – IMPROVEMENTS IN AND RELATING TO AUTOMATIC RAILW...

318) Family number: 37034386 (GB191317325A) © PatBase

Title: Improvements in and relating to Automatic Railway Switch Mechanism.

Priority: 19130728

Family:

Publication number	Publication date	Application number	Application date
GB191317325 A	19140728		00000000

Probable Assignee: MARSHALL LAFAYETTE SHEPHERD

Assignee(s):(std): MARSHALL LAFAYETTE SHEPHERD ; SHEPHERD AUTOMATIC SWITCH COMP

Assignee(s): SHEPHERD AUTOMATIC SWITCH COMPANY

International class (IPC 8–9): B61L11/02 (Advanced/Invention); B61L11/00 (Core/Invention)

CPC: B61L11/02

European class: B61L11/02

Classification Explorer

Abstract:
Source: GB191317325A 17,325. Shepherd, M. L., and Shepherd Automatic Switch Co. July 28. Mechanically operated from or by vehicle locking–bolts and like devices ground levers operated in conjunction with point–indicating signals stretcher bars.–Relates to point operating and locking devices of the type described in Specification 17,324/13, and consists in providing a single pivoted arm 21, Fig. 2, for tripping the spring–held lock–bar 25, the arm 21 and the spring–held switch being actuated by either (a) mechanism operated from the vehicle, (b) wheel–operated guard rails, or (c) a ground lever 54, each acting independently of the others. (a) The mechanism comprises a grooved cylinder which rotates a shaft 13 having arms 14, 15, the arm 14 being connected by a pin and a slotted link 17 to a bar 18 attached to one tongue, and the arm 15 being connected by a chain 19 and rod 20 to the arm 21 loosely mounted on a shaft 31. This arm 21 engages a V–shaped projection 28, Fig. 9, on the bar 25 which has a lug engaging notches 23, 24 in a bar 22 attached to 'the points or to the stretcher–bar 7, Fig. 2, which is in two parts 8, 9 pressed apart by a spring 10. (b) The train wheels engage a spring–held guard rail which rotates the shaft 31 carrying a plate 37 and an arm 38. The plate 37 has a pin which engages the arm 21, and the arm 38 then engages a roller depending from the bar 22. To retract the arm 21, the plate 37 carries a pawl 43, Fig. 7, having a shoulder 46 engaging a pin 47 on the arm 21. The pawl is lowered against a stop 44 and is raised by an abutment 49 engaging the heel 48 of the pawl. In a modification, the guard rail actuates a sliding rod and a bell–crank lever which carries the pawl and successively engages the arm 21 and a pin on the bar 22. (c) The lever 54, Fig. 11, actuates the arm 21 by a pin 56 and then engages a pin 57 on the bar 22. The lever is locked by a lug 58 engaging a keeper 59 and is released by a key. The bar 22 is connected to a signal 30. When the train does not pass fully through the switch, the arm 21 is retracted by a handle 53 and chain 50.

0) ES2353480A – SOMBRILLA DE ADAPTACION MODULAR PARA LA CREACIO...

319) Family number: 48382650 (ES2353480A) © PatBase

Title: SOMBRILLA DE ADAPTACION MODULAR PARA LA CREACION DE ESPACIOS DE PROTECCION SOLAR. MODULAR ADAPTATION UMBRELLA FOR CREATING SPACES sunscreen. (Machine translation)

Priority: ES20080000279 20080201

Family:

Publication number	Publication date	Application number	Application date
ES2353480 AA	20110302	ES20080000279	20080201
ES2353480 BA	20120125	ES20080000279	20080201

Probable Assignee: ALONBSO HERNANDEZ AND ASOC ARQUITECTOS S L

Assignee(s):(std)**:** ALONBSO HERNANDEZ AND ASOC ARQUITECTOS S L

Assignee(s): ALONBSO HERNANDEZ AND ASOCIADOS ARQUITECTOS S L ; ALONSO HERNANDEZ AND ASOCIADOS ARQUITECTOS SL

Inventor(s):(std)**:** BRANCHI BORRELL PABLO EMILIO ; GARRAZA ALVAREZ JOSE ; PERETZ ANA JULIETA ; VARGAS SILVA GUSTAVO ADOLFO

Inventor(s): ANA JULIETA PERETZ ; GUSTAVO ADOLFO VARGAS SILVA ; JOSE GARRAZA ALVAREZ ; PABLO EMILIO BRANCHI BORRELL

International class (IPC 8–9): A45B23/00 (Advanced/Invention)

CPC: A45B23/00

Classification Explorer

Cited documents: WO07062653, JP2006043430, GB167754, EP0587529,

Abstract:
Source: ES2353480A Sombrilla de adaptacion modular para la creacion de espacios de proteccion solar, comprendiendo piezas cilindricas (2), formantes del fuste. La superior (2a) incorpora una tapa (3) y tres piezas moviles (4), con ranuras (5) acopladas a varillas (6), para la elevacion independiente de sectores de 120 degrees en que este dividida la cubierta (7). La pieza inferior (2b) se ancla a un contenedor cilindrico (8), conformante de la base de la sombrilla (1), funcionando como contenedor cerrado cuando esta este plegada. Al contenedor se puede adaptar un tablero (9) como mesa o descender mediante un sistema hidraulico para quedar insertado bajo el suelo. El contenedor (8) cuenta con una cerradura de seguridad.

Machine translation: Umbrella modular adaptation for creating spaces sunscreen comprising cylindrical pieces (2), stem formants. The upper (2a) incorporates a cover (3) and three movable parts (4), with grooves (5) attached to rods (6), for lifting of sectors independent of 120 degrees in this divided cover (7). The lower part (2b) is anchored to a cylindrical container (8), conformant to the base of the sunshade (1), functioning as a closed container when it is folded. When container can adapt a board (9) as table or lowered by a hydraulic system to be inserted in the ground. The container (8) has a security lock.

0) EP0345194A2 – QUICK POINT REVERSIBLE SLING SWIVEL ASSEMBLY FO...

320) Family number: 7244144 (EP0345194A2) © PatBase

Title: QUICK POINT REVERSIBLE SLING SWIVEL ASSEMBLY FOR RIFLE, SHOTGUN OR THE LIKE.

Priority: PH19880036991 19880530

Family:

Publication number	Publication date	Application number	Application date
EP0345194 A2	19891206	EP19890500043	19890406
EP0345194 A3	19900321	EP19890500043	19890406
IL89873 A0	19891215	IL19890089873	19890406
PH24560 A	19900803	PH19880036991	19880530
ZA8902590 A	19891129	ZA19890002590	19890410

Probable Assignee: EMIL C LLAMES

Assignee(s):(std)**:** EMIL C LLAMES ; LLAMES EMIL C

Inventor(s):(std)**:** EMIL C LLAMES ; LLAMES EMIL C

Designated states: BE DE ES FR GB IT

International class (IPC 8–9)**:** F41C23/02 (Advanced/Invention); F41C23/00 (Core/Invention)

International class (IPC 1–7)**:** F41C23/02 F41C33/00

CPC: F41C23/02

European class: F41C23/02

Classification Explorer

Cited documents: WO8500423 A1, US4665641 A, GB573964 A, GB571538 A, EP0063100 A2, DE1903000 A1,

Forward Citations: USD634390, US8596504, AT517901,

Abstract:
Source: EP0345194A2 This sling assembly (1) for a long firearm is formed by a butt portion (2) of the firearm which is provided with a hold located between its toe and heel, a rear swivel (6) with a tubular receptacle (13) and this rear swivel (6) which has a shaft portion (6a) is rotatably secured to the hole of the butt portion (2) through this tubular receptacle (13) allowing the rear(4) swivel to be disposed at either side of the butt portion (2). Forming parts also of the sling assembly (1) are the fore–end portion (5) of the firearm, a front swivel structure which consists of a front swivel (7) and fittings through which this front swivel (7) is rotatably attached to the either side of the fore–end portion (5), and connected to the rear swivel (6) and to the front swivel (7) are the two ends of a sling (8) which could be positioned either above or below the firearm when the same is in horizontal position, thus allowing the person holding the firearm to carry the same in ready–to–fire positions and in other manners convenient to him.

0) EP0534928A1 – ARRANGEMENT FOR LOCKING BICYCLES. VORRICHTUNG Z...

321) 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.

0) US2221371A – SHAFT COUPLING

322) Family number: 21355179 (US2221371A) © PatBase

Title: SHAFT COUPLING

Priority: US19380190015 19380211

Family:

Publication number	Publication date	Application number	Application date
US2221371 A	19401112	US19380190015	19380211

Probable Assignee: DE BETHUNE GASTON S P

Assignee(s):(std)**:** DE BETHUNE GASTON S P

Inventor(s):(std)**:** DE BETHUNE GASTON S P

Inventor(s): BETHUNE GASTON S P DE

International class (IPC 8–9)**:** F16D1/04 (Advanced/Invention); F16D1/02 (Core/Invention)

International class (IPC 1–7)**:** F16D1/10

CPC: F16D1/04 Y10T279/17761 Y10T403/604 Y10T403/7039

European class: F16D1/04

US class: 279/76 403/328 403/361

Classification Explorer

Forward Citations: US9255591, US8944390, US7618211, US6585444, US5613693, US5123664, US4370773, US2464543, US2015110545, US2011255931, US2011192947, US2011009906, US2009060646, US2008196573,

Abstract:
Source: US2221371A 1. What I claim is: l. A coupling of the class described, for assembly of a driving member and a driven member, one of said members having a cavity into which the other member fits telescopically, comprising a movable locking ring mounted in said cavity, means for moving said ring into position for interlocking and unlocking said members, said locking ring having a peripheral recess delined by a pair of spaced shoulders, and the inner wall of said cavity being provided with means to enter said recess and prevent relative rotation as between said locking ring and the surrounding wall.

0) FR1422525A – MACHINE ET PROCEDE DE TAILLE DES ROUES D'ENGREN...

323) Family number: 21415446 (FR1422525A) © PatBase

Title: MACHINE ET PROCEDE DE TAILLE DES ROUES D'ENGRENAGE MACHINE AND METHOD FOR GEAR WHEEL SIZE (Machine translation)

Priority: FR19650002378 19650118

Family:

Publication number	Publication date	Application number	Application date
FR1422525 A	19651224	FR19650002378	19650118

Probable Assignee: GLEASON WORKS

Assignee(s):(std)**:** GLEASON WORKS

Assignee(s): THE GLEASON WORKS

International class (IPC 8–9)**:** B23F9/10 (Advanced/Invention); B23F9/00 (Core/Invention)

International class (IPC 1–7)**:** B23F9/10

CPC: B23F9/10

European class: B23F9/10

Classification Explorer

Abstract:
Source: FR1422525A (Claim 1) 1. Le dispositif de support comporte encore un coulisseau qui peut etre regle dans une direction a angle droit par rapport a l'axe perpendiculaire ainsi que dans une direction a angle droit par rapport aux autres axes precites, qui peuvent ainsi etre regles dans des positions d'intersection ou de decalage par rapport a l'axe perpendiculaire;

Machine translation: (Claim 1) 1. The support device also comprises a slide which can be adjusted in a direction at right angles with respect to the perpendicular axis and in a direction at right angles relative to other axes referred to above, which can thus be set in positions of intersection or offset from the axis perpendicular to

0) US3708882A – DENTAL ARTICULATOR ACCESSORY

324) Family number: 7157854 (US3708882A) © PatBase

Title: DENTAL ARTICULATOR ACCESSORY

Priority: US19700096906 19701210

Family:

Publication number	Publication date	Application number	Application date
US3708882 A	19730109	US19700096906	19701210

Probable Assignee: TELEDYNE IND

Assignee(s):(std): GUICHET N

Assignee(s): GUICHET N US ; TELEDYNE IND

Inventor(s):(std): GUICHET N

Inventor(s): GUICHET N US

International class (IPC 8–9): A61C11/02 A61C19/045 (Advanced/Invention); A61C11/00 A61C11/06 A61C11/08 (Advanced/Non–invention); A61C11/00 A61C19/04 (Core/Invention)

International class (IPC 1–7): A61C11/00

CPC: A61C11/005 A61C11/022 A61C11/06 A61C11/088 A61C19/045

European class: A61C11/02A A61C19/045 K61C11/00M K61C11/06 K61C11/08S

US class: 433/56 433/59

Classification Explorer

Cited documents: US3482312, US3206852, US2097701,

Forward Citations: US5431564, US4155163, US2004259050, JP53092594, EP2371320,

Abstract:
Source: US3708882A Dental supports for clutches in an articulator are described which are used to facilitate the mounting of the clutches and their dependent dental instruments in an articulator. The supports comprise a base member which is removably attached to the dental cast support screw of each articulator frame member with a telescoping member that bears a clutch support plate and that can be locked to the base member at any desired extension therein. The supports are used when the adjustable fossa and incisal guides of the articulator are to be set to duplicate a paitent's border mandibular movements. In this method, a pantograph with attached clutches is positioned in the articulator in the proper anatomical relationship to the articulator control surfaces. The clutch support plates of the accessory of this invention are then extended from their base members into proximate positions to their respective clutches, a curable plastic is placed between the clutches and the support plates, and the articulator is maintained in its centric position until the plastic cements the clutches to their support plates.

0) US3785288A – INK ROLL CARTRIDGE

325) Family number: 1037707 (US3785288A) © PatBase

Title: INK ROLL CARTRIDGE

Priority: CH19710007911 19710601 US19710159811 19710706 US19730368995 19730611

Family:

Publication number	Publication date	Application number	Application date
AT313167 B	19740211	AT19720003593	19720424
BR7203497 A0	19730927	BR19720003497	19720705
BR7204397 A0	19730927	BR19720004397	19720705
CA935036 A1	19731009	CA19720145317	19720621
CA961426 A1	19750121	CA19720141104	19720502
CH538968 A	19730715	CH19710007911	19710601
DE2133296 A1	19730118	DE19712133296	19710705
DE2133296 B2	19730510	DE19712133296	19710705
DE2133296 C3	19731122	DE19712133296	19710705
DE2232862 A1	19730118	DE19722232862	19720705
DE7125676 U	19740228	DE19710225676U	19710705
DK130509 B	19750303	DK19720002709	19720531
DK130509 C	19750804	DK19720002709	19720531
FR2139810 A1	19730112	FR19720007145	19720302
FR2139810 B1	19770715	FR19720007145	19720302
FR2145250 A5	19730216	FR19720024261	19720705
GB1350324 A	19740418	GB19720015857	19720406
GB1376967 A	19741211	GB19720031804	19720706
IT958946 A	19731030	IT19720068626	19720523
IT962439 A	19731220	IT19720026625	19720705
JP55040432 B4	19801017	JP19720063317	19720626
SE389655 B	19761115	SE19720006668	19720523
SE389655 C	19770224	SE19720006668	19720523
US3785288 A	19740115	US19710159811	19710706
US3833143 A	19740903	US19720248215	19720427
US3859915 A	19750114	US19730368995	19730611

Probable Assignee: IIS INC

Assignee(s):(std): STARKERMANN AND CO P ; STARKERMANN AND CO ; DECISION DATA COMPUTER CORP ; STARKERMANN P ; DECISION DATA CORP ; STARKERMANN P U CO ; STARKERMANN PAUL AND CO ; STARKERMANN PAUL ET CO

Assignee(s): DECISION DATA INC A PA CORP ; STARKERMANN PAUL ; DECISION DATA CORP US ; DECISION DATA HOLDINGS LTD ; PAUL STARKERMANN AND CO ; PAUL STARKERMANN AND CO MELIDE SCHWEIZ ; STARKERMANN AND CO PAUL ; DECISION DATA COMPUTER CORP HORSHAM PA V ST A ; ALEXANDER HUNTER ; BIRNATH REINHOLD ; DECISION DATA COMPUTER ; FIRST NATIONAL BANK ; FIRST NATIONAL BANK OF BOSTON ; DECISION DATA INC ; IIS INC ; PROPERTIES HOLDING CORP ; STARKERMANN P AND CO ; STARKERMANN P AND CO CH

Inventor(s):(std): BIRNATH R ; BIRNATH REINHOLD ; HUNTER A ; HUNTER ALEXANDER ; PAUL STARKERMANN ; REINHOLD BIRNATH ; STARKERMANN P ; STARKERMANN PAUL

Inventor(s): STARKERMANN PAUL ZUERICH ; ALEXANDER HUNTER ; STARKERMANN P AND CO ; STARKERMANN P CH ; HUNTER ALEXANDER CHALFONT PA V ST A ; HUNTER A US ; BIRNATH REINHOLD MELIDE ; BIRNATH R CH

International class (IPC 8–9): B41F31/22 B41F31/30 B41J27/10 B41J27/12 B65D6/06 B65D83/04 (Advanced/Invention); B41F31/00 B41J27/00 B65D6/00 B65D83/04 (Core/Invention)

International class (IPC 1–7):	A61J1/00 B41F1/46 B41F31/24 B41F31/30 B41F31/32 B41J27/00 B41J27/10 B65D11/00 B65D11/12 B65D25/00 B65D43/12 B65D43/20 B65D5/22 B65D6/06 B65D83/04 B65D85/56
CPC:	B65D11/12 B41F31/30 B41J27/12 B41F31/22
European class:	B41F31/22 B41F31/30 B41J27/12 B65D11/12
US class:	101/103 101/348 101/352.01 206/538 220/345 220/345.4 220/351
Classification Explorer	
Cited documents:	US828151 A, US448219 A, US3433155 A, US3347159 A, US3286622 A, US2986299 A, US2868122 A, US2691936 A, US2539383 A, US2312053 A, US2166271 A, US2162222 A, US1958101 A, US1922533 A, US1901284 A, US1805347 A, US1689177 A, US1215900 A, US1139710 A, US1063630 A,
Forward Citations:	WO9408872, WO10066035, WO03106283, USD645244, USD592949, USD592528, USD590707, USD552983, USD545187, USD534069, USD525748, USD510859, USD507968, USD491805, USD479462, USD446718, US8936158, US8333281, US8240249, US7963221, US7536952, US7194954, US7178674, US7140511, US7140511, US6971522, US6672471, US6035782, US5870953, US5636569, US5505130, US5267650, US5242076, US5240113, US5154602, US5109769, US5080222, US5025727, US4932547, US4833819, US4817819, US4817526, US4785735, US4697517, US4444108, US4440083, US4433624, US4418823, US4393774, US4359940, US4342403, US4333567, US4227457, US4119033, US4104967, US4092918, US4062286, US4051781, US4044677, US2012318704, US2011231006, US2010326298, US2010032100, US2009235834, US2007039851, US2006151502, US2006037503, US2005284319, US2005279754, US2005173290, US2005172842, US2004188317, US2004056035, US2003230514, FR2573049, EP2370047, EP2370047, EP0508971, EP0334788, EP0334788, EP0184474, DE3816548, DE10143120, AU570400,

Abstract:
Source: US3785288A A cartridge for an ink roll is disclosed comprising a pair of cylindrical casing or shell elements each of which has a cylindrical side wall and end walls. The ink roll is encased within the two cylindrical elements which are nested together and mounted for limited relative rotation with respect to one another. Each cylindrical element has an opening in the side wall. The openings are out of registry with one another thereby sealing the cartridge and preventing contact with the ink roll when the cylindrical elements are in a first position. Upon relative rotation of the elements to a second position the openings are in registry so that a portion of the ink roll is exposed for contact by a printing member. A releasable fitting, for example of the bayonet type is provided on the end wall of one of the casing elements. Upon rotation of the other casing element to lock the bayonet fitting the two casing elements are caused to rotate relative to one another to expose the ink roll. Relative rotation of the casing elements in the opposite direction effects release of the bayonet fitting and movement of the casing elements to close the cartridge. Also disclosed are mounting means for moving the cartridge toward and away from the printing members.

0) DK9600083U – LASESYSTEM TIL CYKLER OG LIGNENDE KOERETOEJER ...

326) Family number: 17870254 (DK9600083U) © PatBase

Title: Lasesystem til cykler og lignende koeretoejer Lasesystem for bicycles and similar vehicles (Machine translation)

Priority: DK19960000083U 19960307

Family:

Publication number	Publication date	Application number	Application date
DK9600083 U3	19960426	DK19960000083U	19960307

Probable Assignee: MORTENSEN ELO AKSEL

Assignee(s):(std)**:** ELO AKSEL MORTENSEN ; MORTENSEN ELO AKSEL

Inventor(s):(std)**:** ELO AKSEL MORTENSEN ; MORTENSEN ELO AKSEL

International class (IPC 8–9): B62H5/02 (Advanced/Invention); B62H5/00 (Core/Invention)

International class (IPC 1–7): B62H5/02

Classification Explorer

Abstract:
Source: DK9600083U 1. Låsesystem til cykler og lignende køretøjer med en forgaffel og med et styr, som er fæstnet i en styrholder 5 på en lodret styrstamme (styrpind) fastgjort til et kron– rør på forgaflen, og af den art hvor styret, mens det fastholdes i lodret retning, kan frigøres fra forgaflen og dreje frit i forhold til denne, så køretøjet ikke kan styres, kendetegnet ved, at styrholderen (3) er adskilt 10 fra styrstammen (2), som er fastgjort til kronrøret på kendt måde ved hjælp af en styrbolt (1) eller lignende anbragt nede i styrstammen (2); og at der på styrholderen (3) er fastgjort et cylindrisk aggregat (4) omfattende et cylinderlegeme (5), som rager ned i styrstammen (2) og 15 ligger an mod dennes inderside samt er forsynet med en rundgående rille (6), hvori mindst én stift (7) fæstnet på styrstammen (2) rager vandret ind og fastholder styret i lodret retning, mens det kan dreje frit i forhold til styrstammen; og endvidere at der i forbindelse med styr– 20 stammen (2) er anbragt en forskydelig koblingspart (11, 19), som i dens ene yderstilling danner kobling med det cylindriske aggregat (4) eller styrholderen (3) og såle– des fastholder styrholderen (3) og styrstammen (2) i for– hold til hinanden, men i dens anden yderstilling holdes 25 fri af det cylindriske aggregat (4) og styrholderen (3), så styrholderen (3) og styrstaminen (2) kan dreje frit i forhold til hinanden. 1 Locking system for bicycles and similar vehicles having a handlebar and with a guide which is fitted in a guide holder 5 on a vertical steering column (steering column) secured to a crown tube of the front fork, and of the type where the structure while it is maintained in vertical direction, can be released from the fork and rotate freely in relation to this, so that the vehicle can not be controlled, characterized in that the steering bracket (3) is separated 10 from the steering column (2), which is attached to the head tube in a known manner by means of a guide pin (1) or the like placed below the steering column (2); and that on the arm holder (3) is fixed a cylindrical aggregate (4) comprising a cylinder body (5) projecting into the steering column (2) and 15 abuts against its inner surface and is provided with a circumferential groove (6) in which at least one pin (7) mounted on the steering column (2) protrudes horizontally and maintains controlled in the vertical direction, while it can rotate freely relative to the steering column; and also that, in connection with the control–20 strain (2) is arranged a displaceable coupling part (11, 19) which in its one extreme position, form coupling with the cylindrical aggregate (4) or arm holder (3) and thus maintain the handlebar base (3) and the steering column (2) in relation to each other, but in its second extreme position held 25 clear of the cylindrical unit (4) and bike mount (3), so the bike mount (3) and styrstaminen (2) can rotate freely in relative to each other.

0) GB729688A – DUPLEX STRAINER

327) Family number: 19720666 (GB729688A) © PatBase

Title: Duplex strainer

Priority: GB19530009888 19530410

Family:

Publication number	Publication date	Application number	Application date
GB729688 A	19550511	GB19530009888	19530410

Probable Assignee: J A ZURN MFG CO

Assignee(s):(std)**:** J A ZURN MFG CO

Inventor(s):(std)**:** SCHMID JOHN HENRY

International class (IPC 8–9)**:** B01D35/12 (Advanced/Invention); B01D35/00 (Core/Invention)

CPC: B01D35/12

European class: B01D35/12

Classification Explorer

Abstract:
Source: GB729688A 729,688. Filters. ZURN MANUFACTURING CO., J. A. April 10, 1953, No. 9888/53. Class 46. A multiple strainer comprises a casing having a plurality of compartments each having an inlet and an outlet on opposite sides, an apertured baffle in each compartment inclined upwardly from the bottom of the inlet, strainer baskets disposed in the apertures in the baffles and having their tops inclined correspondingly, removable covers for the casing, valves for selectively closing inlets and outlets, and means for operating the valves. Liquid entering one of two chambers 2, 3, Fig. 1, by an inlet 17, Fig. 3, (shown closed by a valve 46 in Fig. 3), passes through a number (four, as shown) of strainer baskets 24 having flanges 23 inclined so as to lie in grooves 22a surrounding apertures 22 in a baffle 21 extending from a point below the inlet to a point above the outlet 18 of the chamber. Either of the outlets 18 may be closed by a valve 46a, Fig. 1, having a grooved member 43 into which is pressed a member 40 by a spring 40a. The member 40 is held on a sleeve 42 which has sliding engagement with cylindrical members 36, 37 and which may be moved from the position shown in Fig. 1, where the left half is wholly within the member 36, to the position where the right half is wholly within the member 37, by rotation of an axially fixed hand wheel 51, the screwed shaft 45 of which engages in a threaded portion 44 of the sleeve 42. In the latter position of the sleeve the valve 46a would cover the outlet 18 of the chamber 3. A guide bar 98 inside the sleeve 42 is secured at 99 to the member 36. The valve 46, Fig. 3, is moved over the inlets 17 by a similar mechanism 25, Fig. 1, operated in unison with the mechanism 25a by sprocket wheels 56 and a chain 57. Access to the chambers 2, 3 is gained by raising.covers 6, 6a, normally secured by bolts and C–washers, about a common hinge 62. Eye–bolts 12b, rest members 13 and air relief valves 14 are provided on the covers. In Fig. 4 the valve 92 has a projection 93 loosely secured between spring clips 96 on a rod 77 which may be rotated by a key 82 operated by an axially–fixed handwheel 84 and engaging a groove 81 in the rod, the rod on such rotation being constrained to move axially (and thus move the valve 92) by movement of a threaded head 80 in a threaded portion 79 of a member 70. Sight holes 53, 54, Fig. 1, indicate the position of the sleeve.

0) GB236732A – IMPROVEMENTS IN AND RELATING TO FOLDING DOORS A...

328) Family number: 18076490 (GB236732A) © PatBase

Title: Improvements in and relating to folding doors and shutters

Priority: GB19240016977 19240715

Family:

Publication number	Publication date	Application number	Application date
GB236732 A	19250716	GB19240016977	19240715

Probable Assignee: MANUEL BRETOS Y CLAVERIA

Assignee(s):(std)**:** MANUEL BRETOS Y CLAVERIA

International class (IPC 8–9)**:** E06B9/17 (Advanced/Invention); E06B9/17 (Core/Invention)

International class (IPC 1–7)**:** E06B9/04

CPC: E06B9/17

European class: E06B9/17

Classification Explorer

Abstract:
Source: GB236732A Folding doors; shutters.–The invention relates to a combined folding door and folding shutter. The door consists of corrugated slats movable in guides 2 and balanced by spring drums 27, 28 on a spindle 26 carried by a pair of brackets 4 which are adjustably bolted to the frame 3 <1> , 6 and to the guides 2. The spindle–supporting arms 25 are non–rotatably but adjustably secured by squared bolts to the brackets 4. The spring drums are mounted on the reduced parts 31''' of hubs 31, Fig. 14, non–rotatably held on the spindle 26 by collars 34 bolted on the spindle and provided with projections engaging the slots 33 in the hubs. The springs are secured between slots 31 <1> on the hubs and pins 38 joining the two halves of the drums. Fibrous bearing washers 35 enclosed by spring expanding washers, Fig. 7, are provided in the drums. The door is engaged with the drums 27, 28, by a U–shaped clip engaging two pins 41 and the upper edge of the door, and the shutter is connected to the two drums 29, 30, by steel tapes 54 engaged in openings 54' in flanges on the drums, which are adjustably spaced apart by an intermediate flanged and slotted sleeve 52. Two hoops 53 <1> adjustably connected to the door bear on the tapes 54 and act as brakes. The drums may be locked to the spindle for repairs and c. by' means of a plug or key having projections to enter respectively recesses in the drum and the slot'33 in the hub 31. The guides 55 for the shutter, Fig. 2, are connected to rods 56 by pivots 58 and hooks 57 and adjustably secured to rods 60 oil the lower part of the door by a universal joint, outwardly turned channels of the guides engaging the edges of the shutter opening. The upper ends of the rods 56 are housed in a channel on the door. The hinges of the shutter are reinforced by curved fibrous links having projections 65" placed at the ends of the slats and joined by staples 66 engaging the surface of alternate slats, Fig. 24. The lowest slat of the shutter has a roller 69 carried in a bracket riveted thereto, a pin 70 on an extension of the bracket engaging the curled edge of the slat, Fig. 49 . Other bearmg rollers in planes at right–angles to each other, alternately, are mounted on the door and shutter by means of riveted arms 77, 80. A plate 75 hinged to the door at the bottom of the shutter opening may be rotated into the position shown in Fig. 36 to form a sill for the shutter. The lateral guides of the door are held by means of adjustable slotted braces shown in Figs. 42, 44, and 45, according as the door is on the inside of the wall, or on the outside, or in the same plane. A bolt for the door is shown in Fig. 29 and consists of a stem and curved operating end apertured to engage a keeper 89 in which may be secured a padloch 91. A suitable lock having a plate curved to conform to the shutter is riveted thereto and operates bolts slidably mounted on the shutter and adapted to engage housings in the guides 55; a bolt is also provided adapted to engage an adjustable opening in the frame and provided with a trunnion projecting through its housing which may be secured in the open or closed positions by a pivoted catch. The stop and eye–bolt are secured to the bottom of the door bv threaded stems and flanged nuts. The operating hook consists of threaded sections, the end section being provided with two hooks in planes at right–angles to each other. An operating member 72 <1> is pivoted in the bottom of the shutter and adapted to be turned outwardly for foot operation when closing the shutter. A spring bears frictionally on the member 72 <1> to retain it in position. Before folding the door, the shutter is folded and the guides 55 and the rods 56 are disconnected. In a modification, Fig. 70, the shutter and door may be provided with guides 136 and 137 to extend over a show case and c., or to form an awning. The awning guides 137 are pivoted at 139 and connected to cords 156 passing over guide pulleys 169, 167, 160, to a spring drum in the casing 146. Pivoted plates 143 and 144 form side and front curtains. The drums for the door and c. are carried on the spindle 26 housed in bearings in side plates 118 provided with polygonal plates 118" adjustably connected to shock–absorbing blade springs 122. A pivoted corrugated shutter 125 closes the top of the door opening. The cord passes between rollers 147 to the spirally–grooved reel 155 which is adjustably anchored to the spring drum by a ratchet 158 engaging registering notches in the reel and drum. A pivoted stop 159 is adapted to engage pins 154 in the drum. To adjust the spring tension, the drum holder is partially withdrawm from its case 146 and held bv notches 150 engaging pins 146 <111> and.by an arm 153 <1> engaging a pin 146 <1111> .

329) Family number: 18692077 (GB316911A) © PatBase

Title: Improvements in and relating to life–saving devices for submersible vessels

Priority: GB19280013003 19280503

Family:

Publication number	Publication date	Application number	Application date
GB316911 A	19290806	GB19280013003	19280503

Probable Assignee: GEORGE SMITHSTONE

Assignee(s):(std)**:** GEORGE SMITHSTONE ; JOHN THOMAS SMITH

International class (IPC 8–9)**:** B63G8/40 (Advanced/Invention); B63G8/00 (Core/Invention)

International class (IPC 1–7)**:** B63G8/40

CPC: B63G8/40

European class: B63G8/40

Classification Explorer

Abstract:
Source: GB316911A Buoyant life–saving chambers. An escape apparatus for sunken vessels comprises a sealed container, capable of containing one or more persons, and of being passed out of the hull of the vessel by means of a sliding casing, whereafter it rises to the surface. A casing E is built inside the hull of a submarine. In it is a sliding casing C, with a flange c which seats on the flange e and closes the outer end of the casing E. One or more of the crew enter the buoy–like container B by means of an opening closed by the hatch e <2> and manhole cover e <3> , and the container is closed by a lid b. The hatch e <2> and cover e <3> are. them replaced, and the parts B, C with the piston D, are pushed outwards by the screws c <1> , d <1> . The part B then rises to the surface. The part C is then drawn in, the approach to the piston D expelling the water between them; the part D is then drawn in, and another container B is put into position. The last man to escape operates the apparatus by means of a key b'. the shaft F, and the gearing f <2> , c <7> and c.

0) US3390369A – ELECTRIC PLUG OR RECEPTACLE ASSEMBLY WITH INTER...

330) Family number: 828482 (US3390369A) © PatBase

Title: ELECTRIC PLUG OR RECEPTACLE ASSEMBLY WITH INTERCHANGEABLE PARTS

Priority: US19660540423 19660105

Family:

Publication number	Publication date	Application number	Application date
US3390369 A	19680625	US19660540423	19660105

Probable Assignee: KILLARK ELECTRIC MFG CO

Assignee(s):(std)**:** KILLARK ELECTRIC MFG CO ; KILLARK ELECTRIC MFG COMPANY

Assignee(s): KILLARK ELECTRIC MANUFACTURING COMPANY

Inventor(s):(std)**:** KELLY JAMES A ; RONGEY CLARENCE A ; WILLIAMS CHESTER E ; ZAVERTNIK MARSHALL G

International class (IPC 8–9)**:** H01R13/502 (Advanced/Invention); H01R13/595 H01R13/64 (Advanced/Non–invention); H01R13/502 (Core/Invention); H01R13/58 H01R13/64 (Core/Non–invention)

International class (IPC 1–7)**:** H01R13/502

CPC: Y10S439/901 H01R13/502 H01R13/595 H01R13/64

European class: H01R13/502 T01R13/595 T01R13/64

US class: 339/14 439/469 439/491 439/598 439/607.08 439/608 439/680 439/690 439/733.1 439/813 439/901 439/97

Classification Explorer

Cited documents: US3271726 A, US3177462 A, US3146054 A, US3065439 A, US2750571 A, US2563713 A, US2521056 A, US2091054 A, US2032501 A, GB950088 A, GB941593 A, GB831884 A, DE1024602 B,

Forward Citations: US9136634, US8715003, US7837505, US7837504, US7713088, US7708569, US7429176, US7264510, US7258566, US7198502, US7179113, US7144268, US7144268, US7117590, US6875052, US6755670, US5021006, US4775847, US2007290155, US2006252307, US2006040542, US2006035506, US2006035505, US2006035504, US2005071700, US2005042911, US2004161954, FR2332627, EP1443602,

Abstract:
Source: US3390369A (Claim 1) 1. An electrical contact assembly for a plug or receptacle comprising a housing shell having an open end, a base insulator supported opposite the said open end, a plurality of contact elements projecting from the base insulator toward the said open end, a grounding ring supported by the base insulator, and means to selectively orient the base insulator upon rotation within the housing shell depending upon the electrical characteristics of the assembly, with electrical contact means for locking the grounding ring to the housing shell in a selected position and thereby lock the base insulator in a selected position.

0) US3043624A – SEAT FOR PUBLIC USE

331) Family number: 20831064 (US3043624A) © PatBase

Title: SEAT FOR PUBLIC USE

Priority: FR19620898281 19620522 GB19620015508 19620424 US19610141561 19610920 US19580772456 19581107

Family:

Publication number	Publication date	Application number	Application date
FR1322683 A	19630329	FR19620898281	19620522
GB936567 A	19630911	GB19620015508	19620424
US3043624 A	19620710	US19580772456	19581107
US3147997 A	19640908	US19610141561	19610920

Probable Assignee: ERNEST GILBERT MASON

Assignee(s):(std)**:** ERNEST GILBERT MASON ; GILBERT MASON ERNEST

Inventor(s):(std)**:** GILBERT MASON ERNEST ; MASON ERNEST GILBERT

International class(IPC 8–9)**:** A47C1/026 A47C1/12 A47C3/025 A47C3/03 B60N2/24 (Advanced/Invention)

International class(IPC 1–7)**:** A47C1/02 A47C1/023 B60N1/00

CPC: A47C1/0265 Y10S297/01 A47C1/12 A47C3/025 A47C3/03 B60N2/242

European class: A47C1/026 A47C1/12 A47C3/025 A47C3/03 B60N2/24B

US class: 297/302.4 297/302.6 297/326 297/396 297/452.14 297/452.65 297/DIG.1

Classification Explorer

Cited documents: US941919 A, US332564 A, US2847061 A, US2824602 A, US2808875 A, US2802515 A, US2711786 A, US2638968 A, US2563347 A, US2402974 A, US2351698 A, US2296212 A, US20863 A, US1793606 A, US138073 A, US1362042 A, US135465 A, US133721 A, US1219834 A, US1078828 A, US1033981 A, FR1223600 A, CA623848 A,

Forward Citations: WO9215229, WO8703816, US7600820, US5630648, US5417474, US5071191, US4946224, US4805962, US4784435, US4752065, US4595235, US4555139, US4530541, US4529246, US4422691, US4277103, US4231612, US3778104, US3471197, US3468582, US3318635, US3252736, US3134627, US2009273126, US2009195047, US2008136240, GB2001241, GB2001241, FR2600608, FR2527528, EP0251201, EP0096859, EP0096858, DE3219710, DE2341981,

Abstract:
Source: US3043624A (Claim 1) 1. In combination, a trunnion, a trunnion supporting means, a bracket rotatably mounted on the trunnion, a chair having a seat and a back mounted on the bracket and having its back vertical with respect to the trunnion and its seat surface above the trunnion, spr_in.– means be– tween the bracket and the trunnion supportin_– nleans, 133 721 Rapp – – Dec. 10, 1872 and a member fixed with respect to the cha and co– 135:465 Chichester – Feb. 4, 1873 operating Y)ith a second niember fixed with respect to 138,073 Chichester – Apr. 22, 1873 the trunnion so that the two nienibers interlock in a piurality' of positions with respect to each otherlwhereby 5 332,564 Sfreit – – Dec. 15, 1885 the chair rocks backward and forward and can rocis to 941,919 Greilick – Nov. 30, 1909 a selected position and be locked in that position. 1,033,981 Berman – July 30, 1912

0) DE2260815A1 – FOLGESTEUERUNG FUER KRANAUSLEGER UND AEHNLICHE ...

332) Family number: 18204046 (DE2260815A1) © PatBase

Title: FOLGESTEUERUNG FUER KRANAUSLEGER UND AEHNLICHE GERAETE FOLLOW FOR CONTROLLING CRANE BOOM and similar devices (Machine translation)

Priority: DE19722260815 19721213

Family:

Publication number	Publication date	Application number	Application date
DE2260815 A1	19740620	DE19722260815	19721213

Probable Assignee: KRONE BERNHARD GMBH MASCHF

Assignee(s):(std)**:** KRONE BERNHARD GMBH MASCHF

Assignee(s): MASCHINENFABRIKEN BERNARD KRONE GMBH 4441 SPELLE

Inventor(s):(std)**:** TIMMERS JOSEF DR ING

Inventor(s): TIMMERS JOSEF DR ING 4436 EPE

International class (IPC 8–9): B66C23/70 F15B11/20 (Advanced/Invention); B66C23/00 F15B11/00 (Core/Invention)

International class (IPC 1–7): B66C23/68 B66F11/04

CPC: B66C23/705 F15B11/20

European class: B66C23/70B4 F15B11/20

Classification Explorer

Forward Citations: US7703616, EP1749789, EP0188112, DE202005012049,

Abstract:
Source: DE2260815A1 (Claim1) Patentanspruech e1 Folgesteuerung fuer hydraulisch oder pneumatisch gesteuerte zwei– oder mehrstufige Teleskopausleger fuer Krane oder aehnliche Geraete, dadurch gekennzeichnet, dass beim Ausfbkren der Kolbenstangen die Zulaufleitungen und bei ihrem Einfahren die Ruecklaufleitungen so gesteuert werden, dass die folgene Kolbenstange erst dann ausfahren kann, wenn die vorgeschaltete bereits ausgefahren ist, bzw.

Machine translation: (Claim1) claims e1 sequence control for hydraulically or pneumatically controlled two–or multi–stage telescopic boom for cranes or similar devices, characterized in that controlled the Ausfbkren the piston rods of the inlet pipes and their run–in Ruecklaufleitungen so that the consequences of piston rod only exit may, if the upstream is already extended, or

0) US1674036A – LAUNDRY MACHINERY

333) Family number: 19365353 (US1674036A) © PatBase

Title: LAUNDRY MACHINERY

Priority: US19210492029 19210813

Family:

Publication number	Publication date	Application number	Application date
US1674036 A	19280619	US19210492029	19210813

Probable Assignee: BUTTERWORTH H W AND SONS CO

Assignee(s):(std)**:** BUTTERWORTH H W AND SONS CO ; H W BUTTERWORTH AND SONS COMPANY

Assignee(s): H W BUTTERWORTH AND SONS CO

Inventor(s):(std)**:** EHNTS FREDERIC H

International class (IPC 8–9): D06F29/00 (Advanced/Invention); D06F29/00 (Core/Invention)

International class (IPC 1–7): D06F21/04

CPC: D06F29/00

European class: D06F29/00

US class: 192/148 68/22A

Classification Explorer

Abstract:
Source: US1674036A 1 lo the tnhs A and iS Fll0\\'ll :is nn 1–xioneion of ihr– l\(`|llFlll§l \\'l\im–h enrlosvs the gearing at 30. l)|`f)\'lf_lt;l_lt;!ll. liowever. is inode to hold housing G in iixed position, the Qnljuétineni' with resiien–1 lo The de\':n~l\– nhlv nun–hinc having once been made.

0) DE202014101904U1 – STATIVKOPF TRIPOD HEAD (MACHINE TRANSLATION)

334) Family number: 60171233 (DE202014101904U1) © PatBase

Title: STATIVKOPF TRIPOD HEAD (Machine translation)

Priority: DE201420101904U 20140423

Family:

Publication number	Publication date	Application number	Application date
DE202014101904 U1	20150903	DE201420101904U	20140423

Probable Assignee: CULLMANN GERMANY GMBH

Assignee(s):(std)**:** CULLMANN GERMANY GMBH

International class (IPC 8–9): F16M11/14 (Advanced/Invention)

CPC: F16M11/14 F16M11/10 F16M11/16 F16M11/2014 F16M2200/022 F16M2200/024

Classification Explorer

Cited documents: DE19839461 C1,

DE102013004952 A1

Abstract:
Source: DE202014101904U1 Stativkopf (1) mit einem in einem Stativkopfgehaeuse (12) angeordneten Kugelgelenk, das eine Gelenkpfanne (13) und eine in der Gelenkpfanne (13) um drei Schwenkachsen schwenkbar gelagerte Gelenkkugel (11) umfasst, wobei an einem Pol der Gelenkkugel (11) ein Anschlussstueck (14) mit einem Befestigungsgewinde zum Anschluss eines optischen Geraetes angeordnet ist und an dem der Gelenkkugel (11) abgewandten Bodenabschnitt des Stativkopfgehaeuses (12) ein Stativgewinde (17s) oder eine Stativschraube vorgesehen ist, wobei die drei Schwenkachsen ein x–y–z–Koordinatensystem bilden, dessen Mittelpunkt mit dem Mittelpunkt der Gelenkkugel (11) zusammenfaellt und dessen y–Achse mit der Laengsachse des Stativgewindes (17s) fluchtet, dadurch gekennzeichnet, dass in der Gelenkkugel (11) eine schaltbare Sperreinrichtung (19) mit einem Sperrelement angeordnet ist und das Sperrelement aus einer Freigabestellung in eine Sperrstellung schaltbar ist, wobei das Sperrelement in der Sperrstellung, zum Fixieren einer Schwenkbewegung der Gelenkkugel (11) um mindestens eine Schwenkachse, in eine im Stativkopfgehaeuse (12) angeordnete Sperrausnehmung (12n) eingreift, und in der Freigabestellung vollstaendig innerhalb der Gelenkkugel (11) angeordnet ist. Tripod head (1) with one in a Stativkopfgehaeuse (12) arranged in the ball joint comprising a joint socket (13) and in the joint socket (13) to pivot about three pivot axes mounted ball (11), wherein one pole of the joint ball (11) a Anschlussstueck (14) is arranged with a fastening thread for the connection of an optical device and facing away from the joint ball (11) bottom portion of the Stativkopfgehaeuses (12) is a tripod thread (17s) or a tripod screw is provided, wherein the three pivot axes a xyz form coordinate system, zusammenfaellt its center with the center of the joint ball (11) and whose y–axis is aligned with the longitudinal axis of the tripod thread (17s), characterized in that arranged in the joint ball (11) a switchable blocking device (19) with a locking element and said locking element from a release position can be switched into a blocking position, wherein the blocking element in the blocking position, for fixing a pivoting movement of the joint ball (11) engages around at least one pivot axis arranged in an in Stativkopfgehaeuse (12) locking recess (12n), and in the release position is arranged completely inside the joint ball (11).

0) GB706756A – NEW OR IMPROVED APPARATUS FOR REMOVING TYRES FR...

335) Family number: 19346271 (GB706756A) © PatBase

Title: New or improved apparatus for removing tyres from wheels

Priority: GB19520017872 19520715

Family:

Publication number	Publication date	Application number	Application date
GB706756 A	19540407	GB19520017872	19520715

Probable Assignee: BROCKHOUSE J AND CO LTD

Assignee(s):(std)**:** BROCKHOUSE J AND CO LTD

Assignee(s): J BROCKHOUSE AND CO LTD ; J BROCKHOUSE AND COMPANY LIMITED

Inventor(s):(std)**:** NEWMAN LESLIE CYRIL

International class(IPC 8–9)**:** B60C25/132 (Advanced/Invention); B60C25/00 (Core/Invention)

International class(IPC 1–7)**:** B60C25/06

CPC: B60C25/132

European class: B60C25/132

Classification Explorer

Forward Citations: US3158190,

Abstract:
Source: GB706756A 706,756. Tyre removing apparatus. BROCKHOUSE and CO., Ltd., J. Jan. 12, 1953 [July 15, 1952], No. 17872/52. Class 144(1) In a tyre removing machine having a plurality of angularly spaced tyre–engaging pushers 24 arranged for relative movement with respect to a wheel support 12, each pusher 24 has a guide finger 39 to engage the peripheral edge of the wheel rim flange 35 before the pusher to locate and guide the latter into its correct working position relative to the tyre and wheel rim as the pushers and wheel support are moved towards each other. As shown the wheel support 12 is guided in a stand 2 for axial movement, by a hydraulic jack or ram 15, relative to a coaxial post 8 removably secured to a top plate 4 of the stand 2. The post 8 is screw–threaded to provide for axial adjustment of a spider 18 mounted thereon, the arms 20 of the spider being of inverted T–section and each supporting a carriage 23 slidable radially therealong. Each carriage 23 pivotally supports a depending channel–section pusher 24 having a slightly upturned toe 30 and a rounded tyreengaging heel portion. Simultaneous radial adjustment of the pushers 24 for wheels of different diameters, is provided by the tie rods 47 pivotally linking the carriages 23 with a hand–operated nut 49 engaging the screw–threaded post 8 above the spider hub nut 21. A swinging jib crane 53 is mounted on the machine base 1 for removal of the post 8 and its spider assembly front the stand 2. Each pusher 24, Fig. 2, has vertical slots 42 in.its side faces slidably receiving the ends of a pivot 41 at one end of a strip–like guide finger 39, the free end of which normally hangs below the pusher toe 30. In operation, with a tyred wheel on the support 12 the spider assembly is adjusted axially and radially until the guide fingers rest on the tyre and abut the peripheral edge of the wheel flange 35. A stop projection 45 on each finger 39 limits the downward movement of the finger relative to the wheel rim. The jack or ram 15 is then operated to raise the wheel support 12 to bring the wheel tyre into engagement with the pusher heel, the guiding finger riding upwardly in the slots 42 and guiding the pusher toe to a position where subsequent movement of the support 12, due to the pusher heel engaging the tyre at a point radially inwardly of the carriage pusher pivot 25, forces the pusher toe 30 between the tyre bead and the rim flange. During this inward movement of the pusher toe the adjacent face of the finger 39, which is rounded, is engaged by the pusher toe to produce an upward thrust on the finger 39 causing it to snap to an out–of–the–way position. The finger can then be housed within the pusher by engaging its free end behind a projection 43 above the pusher toe. Specification 703,086 is referred to.

- **search:** SS3 FT=telescop* and MACS and key (Results 2)
- List: SS3 1–50 (FT=telescop* and MACS and key) (Results 2)

0) US2015345177A – ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION ...

1) Family number: 56882671 (US2015345177A) © PatBase

Title: ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION RESTRICTIONS FOR TELESCOPING PINS

Priority: EP20130829087 20131204 IL20130224111 20130102 IL20130224111 20130103 WO2013US72945 20131204

Family:

Publication number	Publication date	Application number	Application date
AP201508559 A0	20150630	AP20150008559	20131204
AR094302 AA	20150722	AR2013P105057	20131227
AU2013371518 AA	20140710	AU20130371518	20131204
AU2013371518 BB	20170202	AU20130371518	20131204
CA2894857 AA	20150611	CA20132894857	20131204
CL2015001816 A1	20151016	CL20150001816	20150623
CN104968874 A	20151007	CN201380069151	20131204
CO15306611 A2	20160630	CO20150306611	20151224
CR20150348 A	20151117	CR20150000348	20150702
DE602013013349 D1	20161208	DE201360013349T	20131204
DK2882912 T3	20170123	DK20130829087T	20131204
EA201500709 A1	20160129	EA20150000709	20131204
EP2882912 A2	20150617	EP20130829087	20131204
EP2882912 B1	20161026	EP20130829087	20131204
HK1210511 A1	20160422	HK20150111167	20151112
HR20170018 T1	20170224	HR20170000018	20170109
IL224111 A0	20130324	IL20130224111	20130103
IN06012DN2015 A	20160408	IN2015DN06012	20150709
JP2016502010 T2	20160121	JP20150551682T	20131204
KR20150102028 A	20150904	KR20157017086	20131204
LT2882912 T	20170125	LT20130829087T	20131204
MX2015008216 A1	20150929	MX20150008216	20131204
NZ709026 A	20161125	NZ20130709026	20131204
PH2015501510 A	20150928	PH20150501510	20150702
PL2882912 T3	20170428	PL20130829087T	20131204
PT2882912 T	20170123	PT20130829087T	20131204
SG11201504751P A1	20150730	SG20151104751	20131204
TR201700824 T4	20170221	TR20170000824T	20131204
TW201432128 A	20140816	TW20130146442	20131216
US2015345177 AA	20151203	US20130758832	20131204
WO14107254 A2	20140710	WO2013US72945	20131204
WO14107254 A3	20141016	WO2013US72945	20131204

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** KLEIN DAVID ; MUL T LOCK TECHNOLOGIES LTD ; MUL T LOCK TECH LTD

Assignee(s): TAYLOR S CO ; YITZHAK KAISER ; ZVI FRENKEL ; BEN AHARON EFFI ; EFFI BEN AHARON ; FRENKEL ZVI ; KAISER IZHAK

Inventor(s):(std)**:** BEN AHARON EFFI ; FRENKEL ZVI ; IZHAK KAISER ; KAISER IZHAK ; ZVI FRENKEL ; KAISER YITZHAK ; EFFI BEN AHARON ; BENAHARON EFFI

Inventor(s): YITZHAK KAISER

Agent(s):

SPRUSON AND FERGUSON; REGEHR HERBERT B; BULL HOUSSER AND TUPPER LLP; CLARO SWINBURN LUIS FELIPE; JORGE CHAVARRO ARISTIZABAL; WHITE DUNCAN ROHAN; TANI AND ABE PC; FULYA SUEMERALP; KLEIN DAVID

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): B24B27/02 B24B27/04 B62D E05B19/00 E05B19/08 E05B27/00 E05B27/10 (Advanced/Invention); E05B19/00 E05B27/00 (Core/Invention); E05B (Subclass/Invention)

CPC: E05B19/0017 E05B27/0003 Y10T70/7531 Y10T70/7842 E05B19/0023 E05B19/0035 E05B19/0058 E05B27/0017 E05B27/0021

US class: 70/352 70/402

Classification Explorer

Cited documents: WO10026381 A1, WO09019726 A1, WO04048724 A1, WO04001165 A1, US6516644 BA, US5819566 A, US2013327102 AA, US2013091910 AA, US2011146360 AA, US2009301144 AA, US2006207303 AA, JP2006507435 T2, JP2005530072 T2, GB2412689 A1, CN1714214 A, CN1662720 A, CN101743367 A,

Abstract:
Source: US2015345177A A key device (10) includes a generally elongate shaft portion (12) including a key combination surface (16) that has a plurality of key cut stations (18) for forming telescoping key cuts at each key cut station (18). Each key cut station (18) has a telescoping maximum adjacent cut specification (MACS) that defines a maximum depth of adjacent. The key device (10) also has a non−MACS key cut (20), formed at one or more of the key cut stations (18), for interfacing with a first pin (24) of a given telescoping plug pin. The non−MACS key cut (20) is dimensioned to leave material in the elongate shaft portion (12) for forming another key cut (20A) for interfacing with a second pin (26) of the given telescoping plug pin.

0) US2005135838A – REMOVABLE TONER CARTRIDGE UNIVERSAL ADAPTER

2) Family number: 32021031 (US2005135838A) © PatBase

Title: REMOVABLE TONER CARTRIDGE UNIVERSAL ADAPTER

Priority:

CA20042548821	20040826	CA20042649082	20040826	CA20042686399	20040826
CA20042687354	20040826	CA20042706915	20040826	CA20042706645	20040826
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US20050160894	20050714	EP20040782220	20040826	CA20052561070	20050401
EP20050735117	20050401	US20050120685	20050503	US20050120684	20050503
US20050120493	20050503	US20040521326P	20040401	US20030742323	20031219
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Family:

Publication number	Publication date	Application number	Application date
BRPI0417289 A	20070724	BR2004PI17289	20040826
BRPI0508061 A	20070717	BR2005PI08061	20050401
CA2548821 AA	20060607	CA20042548821	20040826
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CA2561070 C	20100316	CA20052561070	20050401
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CA2686405 AA	20050728	CA20042686405	20040826
CA2686405 C	20111101	CA20042686405	20040826
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CA2687354 AA	20050728	CA20042687354	20040826
CA2687354 C	20120424	CA20042687354	20040826
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CA2706645 C	20111101	CA20042706645	20040826
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EP1695153 A4	20080924	EP20040782220	20040826

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EP1730601 A4	20100217	EP20050735117	20050401	
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WO05098549 A3	20081113	WO2005US11160	20050401	
WO05098550 A1	20051020	WO2005US11177	20050401	

Probable Assignee: ADVANCED CARTRIDGE TECHNOLOGIES LLC

Assignee(s):(std)**:** CARTRIDGE CORP OF AMERICA IN ; CARTRIDGE CORP OF AMERICA INC ; CARTRIDGE OF AMERI CORP ; MILLER STEVEN ; SCHNELL HERMAN ; SOFTWARE CORP OF AMERICA INC

Assignee(s): CARTRIDGE OF AMERICA IN CORP ; INNOVATIVE CARTRIDGE TECHNOLOGIES ; INNOVATIVE CARTRIDGE TECHNOLOGIES INC ; STATIC CONTROL COMPONENTS INC ; IMAGING TECHNOLOGIES HOLDING LLC ; GLOBAL INNOVATIONS LLC ; WHITNEY NATIONAL BANK ; UNIVERSAL IMAGING HOLDINGS LLC ; UNIVERSAL IMAGING PROPERTIES LLC ; CARTRIDGE OF AMERICA INC CORP ; STEVEN MILLER ; SOFTWARE OF AMERICA INC CORP ; CARTRIDGE CORPORATIONS OF AMERICA INC ; ADVANCED CARTRIDGE TECHNOLOGIES LLC ; AMERICAN IMAGING CARTRIDGE LLC

Inventor(s):(std)**:** CARTRIDGE CORPORATION OF AMERI ; MILLER STEVEN ; SCHNELL HERMAN ; CARTRIDGE OF AMERI CORP

Inventor(s): CARTRIDGE OF AMERICA INC CORP ; STEVEN MILLER ; CARTRIDGE CORPORATION OF AMERICA INC

Agent(s): FINLAYSON AND SINGLEHURST; MEISSNER BOLTE AND PARTNER; MEISSNER BOLTE AND PARTNER GBR; SMITH AND HOPEN PA; SMITH HOPEN PA; STEVEN MILLER; JESSE DELCAMP; THOMAS E; TONER THOMAS E; DELCAMP JESSE; JESSE; JESSE E

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 B41J2/41 B41J29/393 F16H1/20 F16H55/02 F16H57/00 G01D15/28 G03G15/00 G03G15/04 G03G15/06 G03G15/08 G03G15/10 G03G21/00 G03G21/12 G03G21/16 G03G21/18 G03G9/00 G03G9/08 G06F3/12 (Advanced/Invention); B41J2/41 B41J29/393 G01D15/00 G03G15/00 G03G15/04 G03G15/08 G03G15/10 G03G21/00 G03G21/18 G03G9/08 (Core/Invention)

International class (IPC 1–7): G03G15/00 G03G15/08 G03G21/18

CPC: G03G15/0863 G03G21/1892 G03G15/0855 G03G15/0865 G03G15/0868 G03G15/0877 G03G15/0856 G03G15/0862 G03G15/0889 G03G15/0875 G03G2215/0695 G03G2215/0634 G03G2215/0802 G03G21/1857 G03G2221/1624 G03G15/0898 G03G15/0817 G03G2221/166 G03G15/0896 G03G21/1867 G03G21/181 G03G21/1821 G03G2215/085 G03G2215/0888 G03G21/12 G03G15/0894 G03G21/1652 G03G21/1878 G03G21/1896 G03G2215/0697 G03G2215/0852 G03G2221/1815 G03G2221/1823 Y10T29/49826 Y10T74/19642

European class: G03G15/08F6 G03G15/08H2 G03G15/08H3 G03G15/08H3B G03G15/08H3D G03G15/08R G03G15/08S G03G15/08S1 G03G15/50F G03G21/12 G03G21/16C2 G03G21/18C2 G03G21/18C4C G03G21/18H2 G03G21/18H3 G03G21/18L1 G03G21/18L2 S03G215/06B S03G215/06C8 S03G215/06C8E S03G215/08A S03G215/08A5 S03G215/08A5A S03G215/08D S03G221/16C2 S03G221/16K3 S03G221/18C S03G221/18E

US class: 29/428 29/428S 347/152 347/19 358/1.15 358/1.150P 399/103 399/105 399/107 399/107P 399/109 399/109P 399/110 399/110P 399/111 399/111P 399/113 399/113P 399/114 399/117 399/117P 399/119 399/12 399/120 399/120P 399/12P 399/13 399/167 399/222 399/24 399/25 399/254 399/254P 399/258 399/258P 399/260 399/262 399/262P 399/262S 399/263 399/27 399/360 399/360P 399/61 399/90 399/90P 74/412.00RP 74/412R

Classification Explorer

Cited documents: WO0002096 A1, US7643773 BB, US7565097 BB, US7526234 BB, US7356279 BB, US7286774 BA, US7257356 BB, US7254346 BB, US7232209 BB, US7221878 BB, US7187874 BA, US7136608 BB, US7113710 BB, US7106993 BA, US7099606 BB, US7088928 BB, US7068963 BB, US7054577 BB, US7047635 BB, US6980753 BB, US6947685 BB, US6941082 BB, US6940613 BA, US6934489 BB, US6931216 BB, US6912365 BB, US6912365 BA, US6904400 BA, US6904248 BB, US6904248 BA, US6904248 B1, US6882810 BB, US6882810 BA, US6876826 BB, US6876826 BA, US6856775 BB, US6832056 BB, US6826380 BB, US6826380 BA, US6801733 BB, US6782222 BB, US6782222 BA, US6771922 BB, US6771922 BA, US6771922 B1, US6751428 BB, US6735405 BB, US6721520 BB, US6714749 BB, US6701107 BB, US6701107 BA, US6701096 BB, US6684039 BA, US6678481 BB, US6678481 BA, US6678481 B1, US6671476 BA, US6654569 BB, US6654569 BA, US6654569 B1, US6654567 BB, US6654567 BA, US6646571 BA, US6643482 BB, US6641134 BA, US6636702 BB, US6603933 BA, US6556792 BB, US6556792 BA, US6556792 B1, US6546213 BB, US6546213 BA, US6546213 B1, US6539867 BB, US6529691 BB, US6519430 BB, US6459876 BA, US6406128 BB, US6397015 BB, US6389243 BB, US6385407 BA, US6343192 BA, US6330410 BA, US6321048 BA, US6289189 BA, US6263170 BA, US6246841 BA, US6226476 BA, US6181885 BA, US6181885 B1, US6175706 BA, US6175706 B1, US6173140 BA, US6173140 B1, US6137966 A, US6104888 A, US6070029 A, US6064846 A, US6064842 A, US6029019 A, US6018637 A, US6016409 A, US6009289 A, US5995774 A, US5966566 A, US5937239 A, US5909603 A, US5907753 A, US5907752 A, US5907748 A, US5899602 A, US5878317 A, US5878309 A, US5875378 A, US5870654 A, US5867751 A, US5845176 A, US5815644 A, US5807005 A, US5787323 A, US5784671 A, US5768661 A, US5754923 A, US5745824 A, US5652647 A, US5634169 A, US5614996 A, US5579088 A, US5485249 A, US5479467 A, US5446525 A, US5365315 A, US5331378 A, US5331377 A, US5298952 A, US5294960 A, US5268720 A, US5119137 A, US5089853 A, US4961088 A, US4949983 A, US4771313 A, US4739367 A, US2010061761 AA, US2008120216 AA, US2007106523 AA, US2005036800 AA, US2005025522 AA, US2004114959 AA, US2003215261 AA, US2003212565 AA, US2003185587 AA, US2003170045 AA, US2003161658 AA, US2003161654 AA, US2003123896 AA, US2003091361 AA, US2003063311 AA, US2003049046 AA, US2003035017 AA, US2002110379 AA, US2002064395 AA, US2002031359 AA, US2001041079 AA, US10742323, JP7098538 A2, JP2003084631 A2, JP2003057888 A2, JP2002108086 A2, JP2001305935 A2, JP2001175080 A2, JP11237821 A2, JP11084850 A2, GB2389196 A1, GB2354735 A1, EP1363168 A2, EP1146609 A2,

Forward Citations: WO17083223, WO17002355, WO15039432, WO15030812, WO15016875, WO14110384, WO14107369, WO14004189, WO14003828, WO13184102, WO13120441, WO12024355, WO12024355, WO11127820, WO11110044, WO11091025, WO11053426, WO11016895, WO10068612, WO09110693, WO09097258, WO06020217, USD627389, USD597129, USD590012, USD590011, USD580968, USD578155, USD560713, US9703258, US9690230, US9658590, US9645546, US9619663, US9599945, US9581938, US9575460, US9563169, US9557684, US9551974, US9542222, US9535373, US9529319, US9519243, US9494914, US9494913, US9465351, US9429899, US9417603, US9395684, US9389582, US9360835, US9360834, US9357091, US9342047, US9335656, US9329525, US9298130, US9291989, US9280124, US9280084, US9250590, US9207632, US9203980, US9195207, US9170559, US9152080, US9141816, US9128444, US9128443, US9128414, US9104134, US9098216, US9098015, US9079410, US9069327, US9069286, US9063506,

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Abstract:
Source: US2005135838A A universal adapter for a toner cartridge enables a single toner cartridge to be used with printers made by different manufacturers and differing printer models made by a common manufacturer. The toner cartridge includes a waste bin having a leading end that is sculpted to mate with the cartridge−receiving cavities of a large number of printers. Additional improvements include an improved planar having a common thickness along its extent, the elimination of a pivotal motion between the waste bin and the hopper, an enhanced interconnection between the waste bin and the hopper, improved ergonomics along a trailing edge of the waste bin to facilitate its handling, a structure that prevents mounting of a circuit board over a host circuit board, reduced friction media guide ribs, an improved circuit board mounting pad, and a microswitch actuating tab that functions even in a printer with worn hinges and latches.

- **search:** SS4 FT= telescop* and MAXIMUM ADJACENT CUT SPECIFICATION and key (Results 1)
- List: SS4 1−50 (FT= telescop* and MAXIMUM ADJACENT CUT SPECIFICATION and key) (Results 1)

0) US2015345177A – ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION ...

1) Family number: 56882671 (US2015345177A) © PatBase

Title: ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION RESTRICTIONS FOR TELESCOPING PINS

Priority: EP20130829087 20131204 IL20130224111 20130102 IL20130224111 20130103 WO2013US72945 20131204

Family:

Publication number	Publication date	Application number	Application date
AP201508559 A0	20150630	AP20150008559	20131204
AR094302 AA	20150722	AR2013P105057	20131227
AU2013371518 AA	20140710	AU20130371518	20131204
AU2013371518 BB	20170202	AU20130371518	20131204
CA2894857 AA	20150611	CA20132894857	20131204
CL2015001816 A1	20151016	CL20150001816	20150623
CN104968874 A	20151007	CN201380069151	20131204
CO15306611 A2	20160630	CO20150306611	20151224
CR20150348 A	20151117	CR20150000348	20150702
DE602013013349 D1	20161208	DE201360013349T	20131204
DK2882912 T3	20170123	DK20130829087T	20131204
EA201500709 A1	20160129	EA20150000709	20131204
EP2882912 A2	20150617	EP20130829087	20131204
EP2882912 B1	20161026	EP20130829087	20131204
HK1210511 A1	20160422	HK20150111167	20151112
HR20170018 T1	20170224	HR20170000018	20170109
IL224111 A0	20130324	IL20130224111	20130103
IN06012DN2015 A	20160408	IN2015DN06012	20150709
JP2016502010 T2	20160121	JP20150551682T	20131204
KR20150102028 A	20150904	KR20157017086	20131204
LT2882912 T	20170125	LT20130829087T	20131204
MX2015008216 A1	20150929	MX20150008216	20131204
NZ709026 A	20161125	NZ20130709026	20131204
PH2015501510 A	20150928	PH20150501510	20150702
PL2882912 T3	20170428	PL20130829087T	20131204
PT2882912 T	20170123	PT20130829087T	20131204
SG11201504751P A1	20150730	SG20151104751	20131204
TR201700824 T4	20170221	TR20170000824T	20131204
TW201432128 A	20140816	TW20130146442	20131216
US2015345177 AA	20151203	US20130758832	20131204
WO14107254 A2	20140710	WO2013US72945	20131204
WO14107254 A3	20141016	WO2013US72945	20131204

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** KLEIN DAVID ; MUL T LOCK TECHNOLOGIES LTD ; MUL T LOCK TECH LTD

Assignee(s): TAYLOR S CO ; YITZHAK KAISER ; ZVI FRENKEL ; BEN AHARON EFFI ; EFFI BEN AHARON ; FRENKEL ZVI ; KAISER IZHAK

Inventor(s):(std)**:** BEN AHARON EFFI ; FRENKEL ZVI ; IZHAK KAISER ; KAISER IZHAK ; ZVI FRENKEL ; KAISER YITZHAK ; EFFI BEN AHARON ; BENAHARON EFFI

Inventor(s): YITZHAK KAISER

Agent(s):

SPRUSON AND FERGUSON; REGEHR HERBERT B; BULL HOUSSER AND TUPPER LLP; CLARO SWINBURN LUIS FELIPE; JORGE CHAVARRO ARISTIZABAL; WHITE DUNCAN ROHAN; TANI AND ABE PC; FULYA SUEMERALP; KLEIN DAVID

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): B24B27/02 B24B27/04 B62D E05B19/00 E05B19/08 E05B27/00 E05B27/10 (Advanced/Invention); E05B19/00 E05B27/00 (Core/Invention); E05B (Subclass/Invention)

CPC: E05B19/0017 E05B27/0003 Y10T70/7531 Y10T70/7842 E05B19/0023 E05B19/0035 E05B19/0058 E05B27/0017 E05B27/0021

US class: 70/352 70/402

Classification Explorer

Cited documents: WO10026381 A1, WO09019726 A1, WO04048724 A1, WO04001165 A1, US6516644 BA, US5819566 A, US2013327102 AA, US2013091910 AA, US2011146360 AA, US2009301144 AA, US2006207303 AA, JP2006507435 T2, JP2005530072 T2, GB2412689 A1, CN1714214 A, CN1662720 A, CN101743367 A,

Abstract:
Source: US2015345177A A key device (10) includes a generally elongate shaft portion (12) including a key combination surface (16) that has a plurality of key cut stations (18) for forming telescoping key cuts at each key cut station (18). Each key cut station (18) has a telescoping maximum adjacent cut specification (MACS) that defines a maximum depth of adjacent. The key device (10) also has a non−MACS key cut (20), formed at one or more of the key cut stations (18), for interfacing with a first pin (24) of a given telescoping plug pin. The non−MACS key cut (20) is dimensioned to leave material in the elongate shaft portion (12) for forming another key cut (20A) for interfacing with a second pin (26) of the given telescoping plug pin.

- **search:** SS5 FT= MAXIMUM ADJACENT CUT SPECIFICATION and key (Results 5)
- List: SS5 1−50 (FT= MAXIMUM ADJACENT CUT SPECIFICATION and key) (Results 5)

0) US2015345177A – ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION ...

1) Family number: 56882671 (US2015345177A) © PatBase

Title: ELIMINATING MAXIMUM ADJACENT CUT SPECIFICATION RESTRICTIONS FOR TELESCOPING PINS

Priority: EP20130829087 20131204 IL20130224111 20130102 IL20130224111 20130103 WO2013US72945 20131204

Family:

Publication number	Publication date	Application number	Application date
AP201508559 A0	20150630	AP20150008559	20131204
AR094302 AA	20150722	AR2013P105057	20131227
AU2013371518 AA	20140710	AU20130371518	20131204
AU2013371518 BB	20170202	AU20130371518	20131204
CA2894857 AA	20150611	CA20132894857	20131204
CL2015001816 A1	20151016	CL20150001816	20150623
CN104968874 A	20151007	CN201380069151	20131204
CO15306611 A2	20160630	CO20150306611	20151224
CR20150348 A	20151117	CR20150000348	20150702
DE602013013349 D1	20161208	DE201360013349T	20131204
DK2882912 T3	20170123	DK20130829087T	20131204
EA201500709 A1	20160129	EA20150000709	20131204
EP2882912 A2	20150617	EP20130829087	20131204
EP2882912 B1	20161026	EP20130829087	20131204
HK1210511 A1	20160422	HK20150111167	20151112
HR20170018 T1	20170224	HR20170000018	20170109
IL224111 A0	20130324	IL20130224111	20130103
IN06012DN2015 A	20160408	IN2015DN06012	20150709
JP2016502010 T2	20160121	JP20150551682T	20131204
KR20150102028 A	20150904	KR20157017086	20131204
LT2882912 T	20170125	LT20130829087T	20131204
MX2015008216 A1	20150929	MX20150008216	20131204
NZ709026 A	20161125	NZ20130709026	20131204
PH2015501510 A	20150928	PH20150501510	20150702
PL2882912 T3	20170428	PL20130829087T	20131204
PT2882912 T	20170123	PT20130829087T	20131204
SG11201504751P A1	20150730	SG20151104751	20131204
TR201700824 T4	20170221	TR20170000824T	20131204
TW201432128 A	20140816	TW20130146442	20131216
US2015345177 AA	20151203	US20130758832	20131204
WO14107254 A2	20140710	WO2013US72945	20131204
WO14107254 A3	20141016	WO2013US72945	20131204

Probable Assignee: MUL T LOCK TECHNOLOGIES LTD

Assignee(s):(std)**:** KLEIN DAVID ; MUL T LOCK TECHNOLOGIES LTD ; MUL T LOCK TECH LTD

Assignee(s): TAYLOR S CO ; YITZHAK KAISER ; ZVI FRENKEL ; BEN AHARON EFFI ; EFFI BEN AHARON ; FRENKEL ZVI ; KAISER IZHAK

Inventor(s):(std)**:** BEN AHARON EFFI ; FRENKEL ZVI ; IZHAK KAISER ; KAISER IZHAK ; ZVI FRENKEL ; KAISER YITZHAK ; EFFI BEN AHARON ; BENAHARON EFFI

Inventor(s): YITZHAK KAISER

Agent(s):

SPRUSON AND FERGUSON; REGEHR HERBERT B; BULL HOUSSER AND TUPPER LLP; CLARO SWINBURN LUIS FELIPE; JORGE CHAVARRO ARISTIZABAL; WHITE DUNCAN ROHAN; TANI AND ABE PC; FULYA SUEMERALP; KLEIN DAVID

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): B24B27/02 B24B27/04 B62D E05B19/00 E05B19/08 E05B27/00 E05B27/10 (Advanced/Invention); E05B19/00 E05B27/00 (Core/Invention); E05B (Subclass/Invention)

CPC: E05B19/0017 E05B27/0003 Y10T70/7531 Y10T70/7842 E05B19/0023 E05B19/0035 E05B19/0058 E05B27/0017 E05B27/0021

US class: 70/352 70/402

Classification Explorer

Cited documents: WO10026381 A1, WO09019726 A1, WO04048724 A1, WO04001165 A1, US6516644 BA, US5819566 A, US2013327102 AA, US2013091910 AA, US2011146360 AA, US2009301144 AA, US2006207303 AA, JP2006507435 T2, JP2005530072 T2, GB2412689 A1, CN1714214 A, CN1662720 A, CN101743367 A,

Abstract:
Source: US2015345177A A key device (10) includes a generally elongate shaft portion (12) including a key combination surface (16) that has a plurality of key cut stations (18) for forming telescoping key cuts at each key cut station (18). Each key cut station (18) has a telescoping maximum adjacent cut specification (MACS) that defines a maximum depth of adjacent. The key device (10) also has a non−MACS key cut (20), formed at one or more of the key cut stations (18), for interfacing with a first pin (24) of a given telescoping plug pin. The non−MACS key cut (20) is dimensioned to leave material in the elongate shaft portion (12) for forming another key cut (20A) for interfacing with a second pin (26) of the given telescoping plug pin.

0) US2008314106A – PROGRAMMABLE LOCK CYLINDER ASSEMBLY

2) Family number: 42724796 (US2008314106A) © PatBase

Title: PROGRAMMABLE LOCK CYLINDER ASSEMBLY

Priority: EP20080768432 20080613 US20070934353P 20070613 US20080138950 20080613 US20090474804 20090529 WO2008US07392 20080613

Family:

Publication number	Publication date	Application number	Application date
AT528463 E	20111015	AT20080768432T	20080613
AU2008266989 AA	20081224	AU20080266989	20080613
AU2008266989 BB	20140327	AU20080266989	20080613
CA2691311 AA	20081224	CA20082691311	20080613
CA2691311 C	20151117	CA20082691311	20080613
CN101743367 A	20100616	CN200880019617	20080613
CN101743367 B	20130626	CN200880019617	20080613
DE602008010435 D1	20111208	DE200860010435T	20080613
EP2152986 A2	20100217	EP20080768432	20080613
EP2152986 B1	20111012	EP20080768432	20080613
MX2009013492 A1	20100118	MX20090013492	20080613
NZ581399 A	20121026	NZ20080581399	20080613
US2008314106 AA	20081225	US20080138950	20080613
US2009277239 AA	20091112	US20090474804	20090529
US8117876 BB	20120221	US20080138950	20080613
US8621902 BB	20140107	US20090474804	20090529
WO08156664 A2	20081224	WO2008US07392	20080613
WO08156664 A3	20090430	WO2008US07392	20080613

Probable Assignee: SCHLAGE LOCK CO LLC

Assignee(s):(std)**:** INGERSOLL RAND CO ; MATHACHAN SAJIL JOHN ; SCHLAGE LOCK CO ; SCHLAGE LOCK CO LLC ; SCHLAGE LOCK COMPANY LLC

Assignee(s): SCHLAGE LOCK CO CARMEL ; SCHLAGE LOCK COMPANY ; INGERSOLL RAND COMPANY ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** JOHN MATHACHAN SAJIL ; MATHACHAN SAJIL ; MATHACHAN SAJIL JOHN

Inventor(s): MATHACHAN SAJIL JOHN DHARWAD ; SAJIL JOHN MATHACHAN

Agent(s): A J PARK; AJ PARK; BLAKE CASSELS AND GRAYDON LLP; SCHWABE SANDMAIR MARX; EVERY DAVID AIDAN; RATNERPRESTIA; MASSINA GLENN M

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): E05B19/02 E05B25/00 E05B27/00 E05B27/04 E05B29/04 (Advanced/Invention); E05B19/00 E05B25/00 E05B27/00 (Core/Invention)

CPC: Y10T70/7599 Y10T70/7605 Y10T70/7616 Y10T70/7734 Y10T70/774 Y10T29/442 Y10T70/7463 Y10T70/7729 E05B27/005 E05B27/0017 E05B27/0053 E05B27/0082

European class: E05B27/00K E05B27/00M E05B27/00S P05B27/00A3

US class: 29/76.2 29/76.200S 70/340 70/382 70/382S 70/383 70/383P 70/384 70/492 70/493 70/493P 70/495

Classification Explorer

Cited documents: WO9840589 A1, WO06033864 A1, WO06010080 A2, US8056378 BB, US7980106 BB, US7975518 BB, US7836739 BB, US7634930 BB, US7628048 BB, US7624606 BA,

US7584635 BB, US7526935 BB, US7448240 BA, US7448239 BA, US7340929 BA, US7322219 BB, US7308811 BB, US7290418 BB, US7240525 BB, US7240523 BB, US7234331 BB, US7225651 BB, US7213429 BB, US7207200 BB, US7181938 BB, US7181937 BB, US7162901 BB, US7162900 BA, US7117701 BB, US7114357 BB, US7047778 BB, US7028517 BB, US7007528 BB, US6983630 BB, US6973813 BB, US6959569 BB, US693813 A, US6935146 BA, US6871520 BB, US6862909 BB, US6860131 BB, US6681609 BA, US6578396 BB, US6477876 BA, US6119495 A, US6076386 A, US5718136 A, US5502990 A, US5495733 A, US5325690 A, US4966021 A, US4836002 A, US4741188 A, US4712399 A, US4453432 A, US4377082 A, US4376382 A, US4290287 A, US4231242 A, US4142389 A, US4122694 A, US3999413 A, US3991596 A, US3983728 A, US3589153 A, US3499302 A, US3320781 A, US2009217720 AA, US2008163657 AA, US2008092611 AA, US2008078224 AA, US2008011033 AA, US2007289346 AA, US2007271976 AA, US2007193317 AA, US2007186601 AA, US2007101782 AA, US2007089468 AA, US2007062230 AA, US2007051147 AA, US2007028658 AA, US2007017264 AA, US2006112748 AA, US2006101880 AA, US2006059965 AA, US1965336 A, US1564556 A, US1514318 A, US1494765 A, EP1752601 A2, EP0226252 A2,

Forward Citations: WO16141496, WO15063358, WO11134610, US9598880, US9587415, US9353548, US9127479, US9045916, US9027373, US9021843, US8881566, US8850859, US8770000, US8661865, US8661863, US8561444, US8490446, US8424349, US8347678, US8291735, US8099988, US8091393, US8074480, US8033150, US7975518, US7895866, US7878036, US2016090752, US2014157843, US2014090429, US2014069156, US2013319057, US2013047688, US2012304716, US2012291505, US2011259065, US2011011139, US2010101288, US2010018266, US2009301144, US2009031774, US2009007615, US2008236224, JP5726291, JP2013525650, ITTO20100350, EP2792822, EP2381054, CN104968874, CN102859100, CN102304987, CN102304987, CH710832, AU2015200556, AU2011201837,

Abstract:
Source: US2008314106A A programmable lock cylinder assembly comprising a lock housing and a cylinder plug mounted for rotation within the housing. A set of rack pins are positioned in the cylinder plug and moveable between a locked position and an unlocked position. A set of tongue pins are positioned in the cylinder plug and extend across the keyway. Each tongue pin is selectively engagable with a respective rack pin. A re−combinating member is engaged with the tongue pins and moveable between a first position wherein the tongue pins are engaged with the rack pins and a second position wherein the tongue pins are disengaged from the rack pins. A reset actuator is positioned within the cylinder plug and moveable between an engaged position wherein the re−combinating member position is locked relative to the cylinder plug and a non−engaged position wherein the re−combinating member position is moveable relative to the cylinder plug.

0) US2012240646A – CYLINDER LOCK WITH SIDE BAR AND SIDE PINS, KEY ...

3) Family number: 49119908 (US2012240646A) © PatBase

Title: CYLINDER LOCK WITH SIDE BAR AND SIDE PINS, KEY AND LOCK ASSEMBLY

Priority: EP20100837996 20101216 SE20090050985 20091218 WO2010SE51405 20101216

Family:

Publication number	Publication date	Application number	Application date
CA2784878 AA	20110623	CA20102784878	20101216
EP2513396 A1	20121024	EP20100837996	20101216
EP2947238 A1	20151125	EP20150171507	20101216
HK1211330 A1	20160520	HK20150112005	20151204
NO20120831 A	20120717	NO20120000831	20120717
SE200950985 A1	20110619	SE20090050985	20091218
SE534415 C2	20110816	SE20090050985	20091218
US2012240646 AA	20120927	US20100512655	20101216
US9051760 BB	20150609	US20100512655	20101216
WO11075069 A1	20110623	WO2010SE51405	20101216

Probable Assignee: ASSA OEM AB

Assignee(s):(std)**:** ASSA AB ; ASSA OEM AB ; HERRMANN JONAS

Inventor(s):(std)**:** HERRMANN JOHAN ; HERRMANN JONAS

Inventor(s): JOHAN HERRMANN ; JONAS HERRMANN

Agent(s): BRION RAFFOUL; PETERSSON HANS GOERAN; KRANSELL AND WENNBORG KB; PERKINS COIE 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 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): E05B19/04 E05B19/06 E05B27/00 E05B27/06 E05B27/08 E05B27/10 (Advanced/Invention); E05B19/00 (Advanced/Non–invention); E05B (Subclass/Invention)

CPC: E05B27/0082 E05B19/0035 E05B27/0017 Y10T70/7621 Y10T70/7864

European class: E05B27/00A3 E05B27/00S P05B19/00K3

US class: 1/1 70/406 70/496

Classification Explorer

Cited documents: WO0014367 A1, US8281628 BB, US8230708 BB, US8210009 BB, US5964112 A, US5823029 A, US5819566 A, US5517840 A, US5502991 A, US4756177 A, US4393673 A, US2123940 A, US2111515 A, US1244450 A, SE469565 B, JP62180158 U1, JP62180158 U, FR2127047 A1,

Forward Citations: US9598880, US9435138, CN103046802,

Abstract:
Source: US2012240646A A cylinder lock comprising a cylinder housing (2), a cylinder core (4) having a key channel (5) arranged in the cylinder housing (2), at least one side bar (6, 7) arranged between the cylinder housing (2) and the cylinder core (4) and a plurality of side pins (20) arranged on at least one side of the key channel (5) and arranged to be lifted by insertion of a key (8) and in cooperation with the side bar (6, 7) allow or prevent relative rotation of the cylinder housing (2) and the cylinder core (4), wherein each side pin (20) comprises a foot (26, 29) adapted to be lifted by means of a code groove (10) in the side surface (12) of the key. The cylinder lock is characterized in that the foot (26) of at least one of the side pins (20) is tapered. A key (8) for the cylinder lock having a groove for side pins having tapered foot is also described.

0) US6516644B – METHOD OF MASTER KEYING A SYSTEM OF LOCKS

4) Family number: 28046263 (US6516644B) © PatBase

Title: METHOD OF MASTER KEYING A SYSTEM OF LOCKS

Priority: US19990361071 19990726

Family:

Publication number	Publication date	Application number	Application date
US6516644 BA	20030211	US19990361071	19990726

Probable Assignee: SCHLAGE LOCK CO

Assignee(s):(std)**:** SCHLAGE LOCK CO

Assignee(s): SCHLAGE LOCK COMPANY ; SCHLAGE LOCK CO LLC ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** SELIBER LLOYD

International class (IPC 8–9): E05B27/00 (Advanced/Invention); E05B27/00 (Core/Invention)

International class (IPC 1–7): E05B35/10

CPC: E05B27/0053 Y10T70/7463 Y10T70/7475

European class: E05B27/00M

US class: 70/340 70/342 703/400

Classification Explorer

Cited documents: US5000019 A, US1590232 A, US1440459 A, US1135027 A, US1122816 A, US1100266 A,

Forward Citations: US9587415, US9359791, US9003845, US8739587, US7634930, US2015345177, US2014216114, US2013227995, US2012173462, US2011041577, US2009301144, US2005194658,

Abstract:
Source: US6516644B A method of assigning change keys and master keys in a master key system using a 6 pin cylinder with 5 bittings based on an 8x8 checkerboard and pieces ¼, 1, 4, 16 squares in size representing 16, 64, 256 and 1024 change keys with a master key bitting combination available for each piece which would operate all the change keys assigned to that piece. A first alternate embodiment uses an array of (b−1)(p−3) elements (b being the number of bittings and p being the number pins used for master keying), each array element representing (b−1)3 change keys. The array being repeatedly divided into subarrays of (b−1)(p−x) elements, where x=4, 5, 6,..., p−1. Instead of assigning the change keys to a checkerboard piece, the change keys are assigned to a subarray representing at least the number of change keys.

0) US2009301144A – LOCK MASTER KEYING EVALUATION SYSTEM AND METHOD...

5) Family number: 44112947 (US2009301144A) © PatBase

Title:	LOCK MASTER KEYING EVALUATION SYSTEM AND METHOD
Priority:	US20080134549 20080606

Family:

Publication number	Publication date	Application number	Application date
US2009301144 AA	20091210	US20080134549	20080606

Probable Assignee:	INGERSOLL RAND CO
Assignee(s):(std):	INGERSOLL RAND CO
Assignee(s):	INGERSOLL RAND COMPANY ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; SCHLAGE LOCK CO LLC
Inventor(s):(std):	HERMAN MARK ALAN
Agent(s):	RATNERPRESTIA
International class (IPC 8–9):	E05B15/00 (Advanced/Invention); E05B15/00 (Core/Invention)
CPC:	E05B27/0053 Y10T70/10
European class:	E05B27/00M
US class:	70/1 70/1P
Classification Explorer	
Cited documents:	US6516644 BA, US6415523 BA, US5999182 A, US5351409 A, US3348392 A, US2010288002 AA, US2009277239 AA, US2007119065 AA, US1440459 A,
Forward Citations:	US2015345177,

Abstract:
Source: US2009301144A A method of evaluating a master key system. The method comprises entering criteria for the master key system and determining the available master key cuts and change key cuts based on the criteria. The determined available master key cuts and change key cuts are arranged under a standard progression format including at least two page masters. Each page master is displayed as a graphical page master arranged graphically relative to the other graphical page masters based on the master key hierarchy. The information is displayed as a master key illustrator.