

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO	
RAD: 14-173060- -5	FECHA: 2015-03-30 11:17:12
DEP: 2020 DIRECCION DE NUEVAS CREACIONES	EVE: 1 REGISTRO/DEPOSITO/CONCESION/DEPOSITO
TRA: 3 PATENTES DE MODELO DE UTILIDAD	FOLIOS: 5
ACT: 430 REQUERSOLICITA	

DIRECCIÓN DE NUEVAS CREACIONES

2020
Bogotá, D.C.,

Abogado(a)/Señor(a)
LUIS FELIPE SALDARRIAGA SAVEDRA

Asunto: Radicación: 14-173060- -5
 Trámite: 3
 Evento: 1
 Actuación: 430
 Oficio: 3399
 Folios: 5

Patente de Invención				Patente de Modelo de Utilidad	X
Vía Nacional	X				
Vía PCT (Fase Nacional)		Capítulo I		Capítulo II	
No. Solicitud Internacional					
Fecha de Presentación Internacional					

Como resultado del Examen de Fondo realizado, con fundamento en el artículo 85 y en concordancia con el artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le comunica:

1. Documentos estudiados

Descripción:	Rad. N° 14-173060-00000-0000	08/agosto/2014
Reivindicaciones:	Rad. N° 14-173060-00000-0000	08/agosto/2014
Dibujos:	Rad. N° 14-173060-00000-0000	08/agosto/2014

2. Objeto de la invención

De acuerdo con lo establecido en el numeral 1.2.2.2 del Capítulo Primero del Título X de la Circular Única para efectos del examen de patentabilidad, se tendrá en cuenta la tasa pagada por el solicitante al momento de comenzar el examen para las reivindicaciones adicionales; esto es que cuando la solicitud contenga más de diez (10) reivindicaciones y no se haya pagado la tasa complementaria, sólo se estudiarán las cubiertas por la tasa pagada. Por lo tanto, se estudiarán las reivindicaciones 1 a 11

Título de la solicitud: “Sistema electrónico para la interpretación de la Lengua de Señas Colombiana” (Radicado No. 14-173060-00000-0000).

El problema planteado en esta solicitud consiste en la necesidad de diseñar una nueva

configuración de un dispositivo portable para traducir el lenguaje de señas colombiano a una señal audible o un texto.

Para resolver este problema técnico, la solicitud en estudio proporciona un dispositivo caracterizado por comprender un guante con sensores resistivos y acelerómetros que capturan los movimientos del hombro, codo, muñeca y dedos, que son procesados por un sistema micro controlado que traduce a voz o texto las señas realizadas por el usuario.

El objeto de la presente solicitud se relaciona con la Clasificación Internacional de Patentes (CIP): A61D19/00; G06F 17/28; G09B 21/04; G10L 13/00.

3. De la solicitud de patente

Reivindicaciones (Art 30 D 486, Art 22 PCT)

Se sugiere al solicitante que incluya en las reivindicaciones independientes un preámbulo en donde se indican aquellas características técnicas conocidas en el estado de la técnica y una parte caracterizadora en donde se indican las características esenciales de la invención.

Se le sugiere al solicitante que indique al frente de la característica o del elemento, el número de referencia guardando correspondencia con el capítulo descriptivo, las gráficas o dibujos y dicho capítulo reivindicatorio, con el objetivo de comprender mejor la invención al momento de hacer el análisis y distinguir los elementos de dicha invención.

Las reivindicaciones 1 a 13 no está/n caracterizada/s por sus características esenciales sino por resultados a alcanzar y/o funcionalidades definidos por los términos: “...que captura el movimiento realizado en la ejecución de una palabra en lengua de señas colombiana, realiza su traducción al castellano y la convierte en una palabra para ser reproducida...”, “...que convierten en señales eléctricas...”, “...para ser procesadas, interpretadas y convertidas a una nueva señal que es amplificada y reproducida” (Reiv. 1), “...que mide la abducción y aducción del hombro y la convierte en una señal eléctrica...” (Reiv. 2), “...que mide la extensión y flexión del codo y la convierte en una señal eléctrica...” (Reiv. 3), “...que miden la flexión, extensión, abducción y aducción de la muñeca y los convierte en dos señales eléctricas...” (Reiv. 4), “...que miden la flexión y extensión de los dedos pulgar, índice, medio, anular y meñique y las convierte en cinco señales...” (Reiv. 5), “...que mide la fuerza de choque sobre el palmar de la mano y la convierte en una señal...” (Reiv. 6), “...las convierte en señales eléctricas que son transmitidas por un bus de comunicaciones.” (Reiv. 7), “...estabilizan el voltaje de las señales eléctricas...” (Reiv. 8), “...que envía un código binario de 4 bits a un circuito integrado multiplexor con el que se relacionan una a una las señales eléctricas provenientes de los 10 sensores resistivos, y que retornan de nuevo al microcontrolador. Estas señales eléctricas son evaluadas y asociadas a un único valor binario de 10 bits; luego se compara con un conjunto de valores almacenados (asociados a palabras en lengua de señas colombiana) en la memoria del microcontrolador; el resultado es un conjunto segmentado de posibles señas similares a la que fue gesticulada.” (Reiv. 9), “...que compara las señales eléctricas de aceleración y velocidad angular, con el conjunto segmentado de posibles señas similares a la gesticulada, arrojando una única palabra correspondiente a la seña.” (Reiv. 10), “...que busca la palabra respectiva en un conjunto de archivos de audio almacenados en una memoria flash y lo envía como una señal eléctrica.” (Reiv.

11), “...que amplifica a señal eléctrica para ser reproducida por un altavoz.”(Reiv. 12) y “...que transmite la palabra en forma de texto a cualquier dispositivo móvil asociado al guante.”(Reiv. 13). Es así que estos términos no definen características estructurales esenciales, puesto que la reivindicación incluiría no sólo la solución propuesta por el solicitante, sino todas las alternativas presentes o futuras que lleguen a esos resultados. Se sugiere reemplazarlos por las características esenciales estructurales que contribuyen a la obtención de esos efectos. Es oportuno aclarar que, las funcionalidades pueden estar presente en la reivindicación pero no le pueden dar novedad a un producto, dado que, que cuando se reivindica un producto, las funcionalidades sirven para entender la relación que hay entre los diferentes elementos estructurales de un producto, pero son solo los elementos estructurales los que definen a dicho producto haciendo a las funcionalidades opcionales.

La reivindicación 1 no es clara porque presenta el término “...una palabra...” mal digitado o redactados.

Descripción (Art 28 D 486)

Hay inconsistencia entre La referencia de las figuras 4 y 5 y la descripción, en el capítulo “Descripción de Dibujos”.

Error en la digitación, redacción y/o traducción de la descripción, según el siguiente fragmento: “...se ubican además oros dos sensores...”. Se sugiere al solicitante hacer las aclaraciones necesarias.

4. Determinación del Estado de la Técnica

El estado de la técnica se determinó con base en la fecha de presentación: agosto 8 de 2014 y se encontraron los siguientes documentos que anticipan el objeto de esta solicitud:

Ítem	Documento	Título	Fecha de Publicación
D1	US2010063794	“Method and apparatus for translating hand gestures”	11/Marzo/2010

El documento D1¹ divulga un “aparato para el reconocimiento del lenguaje de señas y método para la traducción de gestos a voz o texto escrito...”. (Abstract)

5. Examen de Patentabilidad (Art 14 D486)

Es importante mencionar que el siguiente análisis de patentabilidad se realizó teniendo en cuenta las objeciones del numeral 3 de la presente comunicación.

Novedad (Art 16 D486)

La reivindicación 1 consiste en “...Dispositivo electrónico conformado por un reproductor de audio y un guante que captura el movimiento realizado en la ejecución

¹[http://worldwide.espacenet.com/publicationDetails/biblio?](http://worldwide.espacenet.com/publicationDetails/biblio?FT=D&date=20100311&DB=EPODOC&locale=en_EP&CC=US&NR=2010063794A1&KC=A1&ND=4)

[FT=D&date=20100311&DB=EPODOC&locale=en_EP&CC=US&NR=2010063794A1&KC=A1&ND=4](http://worldwide.espacenet.com/publicationDetails/biblio?FT=D&date=20100311&DB=EPODOC&locale=en_EP&CC=US&NR=2010063794A1&KC=A1&ND=4)

de una palabra en lengua de señas colombiana, realiza su traducción al castellano y la convierte en una palabra para ser reproducida por medio de altavoces o enviada en forma de texto a cualquier dispositivo móvil; caracterizado por...” (Ver radicado N° 14-173060-00000-0000).

Comparación de las características técnicas esenciales, con las del estado de la técnica:

Características esenciales	D1
Dispositivo electrónico con reproductor de audio y guante	Aparato con Guante (11), Reproductor (52) (Fig. 1 y 2)
Un conjunto de 12 sensores	Sensores cada dedo y el pulgar y dos acelerómetros en la parte posterior de la mano para detectar el movimiento y orientación de la mano. Los sensores también se proporcionan en la parte posterior de la mano o la muñeca para detectar la rotación del antebrazo, un sensor de ángulo para detectar la flexión del codo, dos sensores en la parte superior del brazo para detectar la elevación y rotación del brazo, y un sensor en la parte superior del brazo para detectar la torsión del brazo. (Abstract)
microcontrolador	Microprocesador (Abstract)
Altavoz o mensaje de texto	Convertir gestos a texto y/o a un sintetizador de voz para ser reproducidos (Reiv. 17)

De acuerdo con la tabla anterior, las características esenciales del dispositivo de la reivindicación 1 habían sido divulgadas previamente en el documento D1, por lo tanto, la materia reivindicada no es nueva.

Asimismo, el documento D1 divulga las características de las reivindicaciones dependientes así:

- Reivindicación 7: dos acelerómetros en la parte posterior de la mano para detectar el movimiento y orientación de la mano (Abstract).
- Reivindicación 9: El método se lleva a cabo en el micro-controlador utilizando el código de software en forma de algoritmos (Párr. 85).

De acuerdo con el análisis anterior, las reivindicaciones dependientes 7 y 9 no mencionan alguna característica que haga nuevo al objeto de la reivindicación 1, por lo cual, se considera que no son nuevas.

De igual manera, las reivindicaciones dependientes 10 y 11 no mencionan características técnicas tangibles adicionales que puedan brindarle novedad al objeto de la reivindicación 1, puesto que se encuentran redactadas en términos de usos, resultados y/o funcionalidades.

6. Conclusión

Los requisitos de Patentabilidad de la presente Solicitud están afectados así:

Item	Documento	Reivindicaciones afectadas	Requisito que afecta
D1	US2010063794	1, 7, 9 - 11	Novedad

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de treinta (30) días contados a partir del día siguiente de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Se invita al solicitante se sirva indicar, si así lo considera, su renuncia al término faltante de treinta (30) días para dar respuesta a este requerimiento y presentarla por escrito.

Finalmente, se le recuerda al solicitante que si como respuesta a este requerimiento llegara a modificar el capítulo reivindicatorio y éste contenga más de diez (10) reivindicaciones, no pagará la tasa de modificación voluntaria pero sí la correspondiente al pago por reivindicación adicional.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única No. 10 de 2001.



JOSÉ LUIS SALAZAR LÓPEZ
Director de Nuevas Creaciones (c)

El anterior requerimiento fue notificado por fijación en lista, de fecha 2015-04-07

Elaboró: Diana Melisa Avila

Revisó: Sonia Andrea Diaz Pirazan

Search history

Search 1: TAC=(glove and (capture or sense or sensor or detect)) (Results 2152)
Search 2: tac=(glove and (capture or sense or sensor or detect) and (flexion or flection)) (Results 53)
Search 3: TAC=(glove and interpreting and sign and language) (Results 6)
Search 4: TAC=((system or device or appara*) interpreting and sign and language) (Results 1724)
Search 5: TAC=((system or device or appara*) glove and sign and language) (Results 1724)
Search 6: TAC=((sensor or sense or detect) and sign and language) (Results 470)

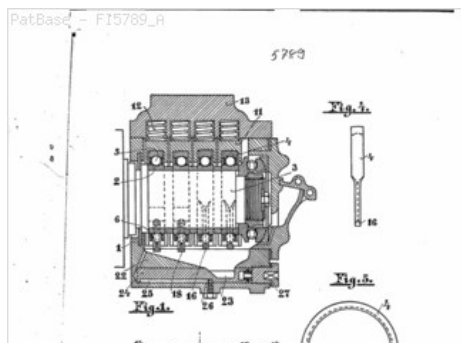
Title: Kullager foer vagnsaxlar

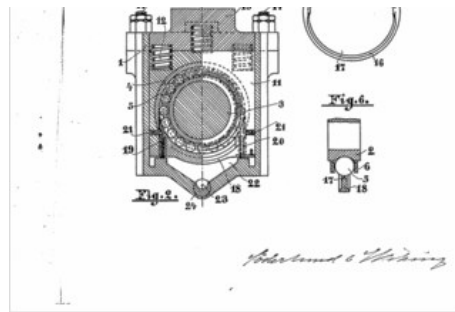
Abstract: Source: F15789A -5. £6 sorn löper i ett i båda ändar slutet spar 25 i BlideE 24, Fullständigt inskjuten kan sliden försäkras mot obehörigt eller oafsigtligt utdragande genom en i 'boxväggen in- skrufbar förskrufning 27. Ora en kula 5 skulle splittras eller krossas, falla bitarna ur kulkammaren i den cylindriska kulhållaren resp. ned. utefter de starkt sluttande sidorna 17 till ryggen å ringdelen 16,resp. ringen 18 och glida utför den lutande botten 22 ned i ladan 33, där de genom att blott draga ut sliden 24 varseblif- vas, och blir det således iröjljigt att konstatera skadan, innan denna hinner antaga farliga proportioner. öfverstycket 13 bör,vid lagrets monterande icke spän- nas tätt till lagerbalkarna 11 utan «ndast åå mycket, att ett» j helt litet spelrum uppstår mellan öfverstycket och balkarna 11 s;1 länge lagret Ur obelastadt. Sa snart lagret belastas med vagnens vigt, skola emir,ellertid ifrågavarande delar koi/jna i be. röring med hvarandra, på grund hvaraf belastningen genom öfver stycket 13 alltid kommer att öfverföras direkt på balkarna 11. fjädrarna 12 lia således endast till rindarnål att åstadkomma den ofvan, narnda,avgva sajnmanböjn ingen af lagerbalkarna. Till följd af att ringdelens 16 resp. ringen 18 håll- les tryckt upp mot Kuloma, kaaria densa att fifven på lagrets obelastade undre del rulla emot inre löpringen, hvarigenom en jair.n nötning af, såvrrl innerring som kulor uppkommer, och und- vikas de senares benägenhet at;t slitats platta, om de, sk.som vid hittlis kinda lagerkonstruktioner för ensidig belastning, förbli stillastående vid passerandet af den obelaatade lager» halfvän pu grund uf bristande friktionsryck. För att undvika att nedfallna kulbitar. skola kl and n:- may fast mellan kant;in af botten 22 och sliden 24 vid dennas utdragande, är det fördelaktigt att låta bakväggen af lådan 23 stiga upp sned t bakat, hvarigenom därstädes möjligen liggande kulbitar vid lådans utdragande «EoroiEa att;lida upp på botten 22 framkant. i P A T ¦ W T A IT 3 P H ¦ K: o För ensidigt ia and ertryck, utsatta axlar, isynnerhet -6* vagnaxlar afsedt kullager raed yttre lopringen omslutande en- dast axeln» belabta and e halffa känns t ekndt af,kombinationen mellan dels anöfcdningar för den yttre löpringans- «amaanböj- anda, så att den ensidigt utträdande belastning n upptagas af ett flertal kulor eeh ej blott af de» å lagrats tcpp, dels anordningar för att skadade kulcr af sig åajlfva akola aflägs- n and s ur kulbnan Tid pnaaerandat af axeltappens obelastade undr del men förhindras att falla ut åå lange da åro hela. Utforingsfonn af dsn i anspråk l:o angifna anordning- en for den yttrd löprlnjrsn» sammanbojande kännetecknad af att lagerboxen är fårenad 5*3 <* de delar (13), på hvilka yagnala and ten hvilar, ondst på tv -nns italien,hvilka åro belågna ett på hvardera sidan om 1.strsslultantens riktningslinia. Utforingsfera af den i anBpråk 3:o angifna anordning- en kännetecknad af att ds två ställen af lagerkrppen,, som åro förenade mad de vagnslasten upptagande delarna (13), åro belåg- o na hva,rt och ett ned ungefår 60 vinkelforsksjutning från belast- ningsresultantenB riktningsalanie räknadt. Utföring-ifora af den i an and pråk lio angifna anord- ningen för,ytterrigena Bårananböjande kännetecknad af att yt- e ' tårningen H) genom utefter desa omkrets fördelad fjådrar (13) hålles pressad med likförmigt tryck omkring ctavarande parti and f axeltappen. Vid dan i anspråk 4: o ang if na anordningen en anord- ning kannetecknad af att den yttre lopringens (4) öfverdel omslutee af en hästskoformig balk (11), på hvilken de i an- språk 4;o angifna fjådrarna verka istället för omedelbart på läpringen 14). Utföringsfora af den i anspråk l:o ngifna anord- niij? en for att aedpifva sondrig and kulors aflåg and nande ur kulbai- Noah naa på kändt åått bestående af en kulma saarmnhållåide,cy- linderformig kulhållare (6), med stt flertal kulbanor och som är omsluten af en cylindrisk mantel (15) med att flertal på sanna sätt so.it kulkamrarfaa i kulhållaren, kanne- tecknad af att manteln (15) är vridbar eller forskjutbr i förhållande till hålcylindern, och att hålen i mantaln ha an diameter, hb *Er lika »tor »om, »11 er obetydligt större an kulornas, så att kulorna kunna inforas 1 resp. kulkamrar ge- nom hålen i mntaln (15) och därefter ganem dan senares vrid- ning eller forskjutning förhindras att f vll ut, sa långa de årc hela. 7;o Utföringsfora af den i anspråk l:o angifna anordning- en for för att medgifva BÖndriga kulors utfallande ur kulbanan kännetecknad af att den yttre Jöpringen (4) påt den iieke te- lastade, undre delen af axeltappen är formad som on rygg aedj Btarkt sluttande sidor (17). 8:o Utföringsform af den i anspråk T:o angifna anord- ningen kännetecknad ->.t att ryggen med sidorna (17) utgöree af ett förtunnadt parti (16) af ytterringsen (4). 9:o Utförinifnsform af den i anspråk 7: o angifna anord- ningen kännetecknad af att den belastade ytterrigen (4) är ivtterlingena undrehalfva mot»varande hästakoformig ringdel (18), hästskoformad cch ryggen med sidorna (1") utbildad å erJNMfe- son genom en i s c / hvardera skankåln påverkande fjåder hallaa pressad mot de å åxel- tappens icke belastade sida varande kulorna. 10:o Anordning vid kullager enl. anepränk l:o kännetecknad af sn under axeltappen befintlig, för uppsamlandet af från löpbanan utfallna skadade kulor afsedt utdragbar låda (23),soa är utbildad i en, en öppning i lagerboxen Qljettått tillslutana de slid (24), i andmål att möjliggöra en snabb undersökning af lagret. 11 jo Anordning enl. anspråk lOjo kännetecknad af att sli- den (24) Er försedd med en i boxväfen inskrufb and r förskrufning (27), i ändamål ått kiaina skyddas mot obehörigt utdr~,gande. 12; o Vid dsn i anspråk 10: o angifna anordning-en en an- ordning kännetecknad af att lådana (23) botten höjer sig nå- got bakåt, i åndaål att vid lådans utdragande förhånda, i den- samma liggande kulbitar att fastkållmas mellan lådans kant och kanten af öppningen i lagerboxen. Carl Gustaf Söndrclund ja Henri* Wiking. Kuualaakeri vaununakseleita varten.. Kuten tunnettu ei vielä ole onnistuttu käyttää hyväksi kuulalaacerin hyviä ominaisuuksia vaununakseleissa, ennenkaikkea rautatie- tai raitio- tefcélaakereiflsa» ja tämä on ollut aisanlaita pääasiallisesti sentakia, että osaksi ainoastaan kaksi tai kolme huipussa löytyvistä kuulista saa- vat ksståå, k'ko kuormituksen, minkä kautta ne joutuvat sen vaaraa alai- siksi että ne saattavat mennä pirstaleiksi tai musertua rikki, ja osak3i senttiä, että liikkeen aikana satunnaisesti rikkiämusertuneet tai muulla tavalla vahingoittuneet kuulat saattavat aikaansaada niin tuntuvia vau- rioita kulkursnkaisiin, SX.ZS.1. että saattaa syntyä akselinkatkeamia siitä johtuvine onnettomuuksiaan. Semmoiset vahingot aikaansaavat tosin aina haittoja myöskin tavallisissa aksellaakereissa, mutta siitä säännölli- sissä oloissa ei johdu niin vaikeita seurauksia kuin mitä rautatie- tai raitiovaunuuihin tulee, joissa osaksi ajonopeus tavallisesti on sangen suu- ri, ja osaksi onnettomuuden sattuessa monet ihmishenget ovat vaarassa, ja joissa niinmuodoin mahdollisimman parimmat varjunnustoimenpiteet ovat. välttämättömät. Esilläolevan keksinnön tarkoituksena on poistaa yllämainittu epäkoh- dat ja tunnetaan siitä, että osaksi ulkoisen kulkurenkaan ylempi osa on jonkun verran joustava ja pidetään alespuristettuna suuremmalta osalta laakerin kehästä, ja osaksi että saman kulkurenkaan alempi osa on s;n- latuinen, että se päästää rikkinäiset kuulat esteettömästi putoamaan u- los laakerista kuulien tarvitsematta olla tältä laakerista osalta ilman tarvittavaa painetta sisärengasta vastaan, niinkauvan kuin ne vielä ovat kokonaisina. Senohessa on laakeri varustettu laitteilla, joita tekee mah- dolliseksi nopean tarkistuksen josko joku kuula on musertunut rikki, ja josko laakeri sentakia olisi perusteellisemman tarkistuksen ja korjail- lun tarpeessa. Tämä viimeksimainittu laite on luonnollisesti suurasta merkityksestä, koskapa se teke- mahdolliseksi tarkastaa kokonaisen Junan laakeripannut ja poistaa rikkinäiset kuulat junan vakinaisen olon aikana and 50j11*iv1j1å * - Oheeniitetyssä piirustuksessa osoitetaan laadintamuoto tässä tar- koitetusta laakerista, jossa kuv. 1 osoittaa pituusleikkauksen laakerin jläpi, kuv. 2 poikkileikkauksen vasen ja oikeapuolinen puolisko kahdessa eri tasossa, kuAr. 3 poikkileikkauksen erään toisen laadintamuodon mu kai- sesta laakerista, kuv. k la,ad int amu odon ulkorenkaa3ta, nähtynä ulkopuo- leita, kuv. 5 saman osan nähtynä sivultapäin, kuv. 6 suuremmassa. mitta- kaavassa, läpileikkauksen akselin suunnassa kulkurengastan aiemman osan kautta, kuv. 7 poikkileikkauksen ensimmäisen laadintamuodon mukaisesta laakerista siseimat osat poistettuina, kuv. 8 osan eräästä erikoisosasta suuremmassa mittakaavassa j * kuv. 5 sattui erikoisosan eräissä toisessa asennossa samalla kun kuv. lo lopuksi on pituusleikkauks tarkistuslait- tfeista tarkistusaanno33a. Laakeri on vaunuakselillaakereihiin näaen tunnettuun tapaan suljettu laakerituppeen 1 ja siihen kuuluu aiseipitapiin 3 kiinnitetty sisäran- gas 2 ja uikorengas V varustettuna yhdellä tai useammalla niiden väliin sovitettulla kuulasarjalla 5, mitkä pysytetään yhdessä kuulapitäjää 6 avulla, varustettuna useammalla silinterinmuotoiselia kammiolla, jois- ta kukin sisältää yhden kuulan. Erään laadint and muodon raukaan muodosta sisemmän kuluradan akseli- tappiin sovitettu tuklnta 2 tehty teräksestä tai sentapaisesta, Jota ympäröi reikasilinterinmuotoinen kuulanpitäjä 6. Laakeritupen yläosaan kuuluu kaksi siihen yhdistettyä huulsnmuotoista osaa 7, jotka laakerin keskuskoiden yläpuolelta ovat toistensa yhteydessä tuen 5 kohdalla, jo- ka tunnettuun tapaan kannattaa vaununjouset ja niihin kohdistuvan kuor- mituksen* Huulet 7 ovat yhdistetty laakerituppeen 1 kumpikin omaan puo- leensa kuormitukssnresultantin suuntaviivaa, jolloin yhäistyskohdat edulla ovat niin öökulmasiirrossa sanottuun viivaan nähden korkeimmas- ta kohdasta lukien. Huulet 7 saattavat olla laaditut muullakin tavoin kuin mitä piirustuksessa on osoitettu, esimerkiksi saattaa huulina käyt- tää irtonaisia jalkoja, jotka ruuvataan kiinni laakerirunkoon, sekä saattavat olla suunnatut suoraan ylöspäin tai jonpaankumpaan puoleen. Niinikään ei kulmasi irroksen tarvitse välttämättömästi olla 60°. Ulkopuolinen kulkursngas h- kuulia varten muodostaa puoisiilinterin, joka on sovitettu vastaavaan tupeasa olevaan onteloon, ja joka jättää kuulanpitäjän ai siman puolison vapaaksi. Osat 7 aikaansaavat laakeria kuoritettaessa ulkoisen kulkurinkaan V heikosti taipuisaan yhteen icularadan ympäri ja purist.*** s senkautta kuormituksen alaisena olevassa laakeripuoliskossa löytyvät kuulat si- SMEpia kulku rengas ta vastaan niin että kuormitus tulee jaotetuksi rrel- len kaikkiin siinä oleviin kuuliin. • Jälkimmäisen la-äaintarruodon mukaan yrpäroi ulkoista kulkurengasta 4 ä'fBf hevosenkengän tai ss.tula.nrrnuotoinen la.akerlpa.lkki 11, joka on sovitettu laakeritupen ylempään osaan. Edulla. laaditaan sekä uikorengas las.keri- palkkineen että sisärengas useammasta toistensa vieren akselitappia pitkin,, sovitetusta osasta, jotka kukin ovat varustetut ainoastaan yhdel- lä kuulas arj alla. Sekä ulkorsnkaassa että akselit «.pissa olevassa si- aemässä kulkursnkaassa 2 löytyy tunnettuun tapaan koro kuulia 5 varten. jotta, voitaisiin kyseessäöolsvassa l and adintamuodossa yhdenmukaisesti jaottaa kuormitus kaikkiin ylemmässä laakeripuoliskossa oleviin kuuliin pidetään laakeripalkit useampien kierrejouisien 12 avulla painettuina kuularacian kehän ylempää puoliskoa vasten. Jouset ovat jännitetyt yksi- tyisten laakeripalkkien 11" ja laakerituppeen ruuvipulttien 14 avulla kiinnitetyn yläkappaleen 13 (vaununjoustituen) väliin ja ovat jaotetut siten laakerin keskitasoon nähden, että osaksi keskitasossa ja osaksi tämän kummallakin puolella löytyy yksi tai useampia jousia. Jousien 12 jännityksen tulee olla niin lujan, että se saattaa aikaansaada palkkien 11 ja senkautta myöskin ulkoisen kulkurenkaan yhteantalvutuksen. Sanotta alaspäin tapahtuva taiputus on luonnollisesti ainoastaan hy- vin pieni eikä synnytä niinmuodoin niittäkään rasitusta joka vähentäisi aineen lujuutta. Jotta kuulat estettäisiin putoamasta ulos iruularaflasta niiden kulki- essa tämän alemman vapaan osan kautta käytetään jonpaakumpaa alempana selitytystä laitteista. Laakerin ensiksimmäinittu laadintamuodon mukaan ympäröi kuulanpitäjäå irtonainen ulkovaippa 15 varustettuna reijillä, jaotettuna täsmälleen samalla tavalla kuin kammiot kuulanpitäjässä, ja mitkä reijit ovat yhtä suuret tai jonkun verran suuremman kulu kuulat, niin että kuntoonpanossa nämät Jälkimmäiset voidaan viedä vaipassa 15 olevien reikien kautta asianomaisiin kammioihinsa (Kuv. 9). Kiertämällä sitten tai akselinsuuntaisesti siirtämällä vaippa 15 jonkun verran kuulanpitäjä ån nähden tulevat edelliset reijit oletnaan epäkeskoissa asen- nossa kuuliin nähden ja sulkevat ne kammiiohinsa, niin että saattavat Hiissä tosin pyöriå vapaasti, vaan ei pudota ulos (kuv. 8) niin kauvan kun ne ovat kokonaisina. Toisen laadintainuodon mukaan tukee kuulia niiden kulluissa iasiMfri* laakerin vapaan alaosan kautta sikamå varustettuna jyrkästi kaltevilla Ifffijjii sivupinnolla 17. Tämä selkämä voidaan aikaansaada vahvasti ohen- tamalla ulkoisen kulkurenkaan alempaa puoliskoa 16. Seikkulan saattaa myöskin muodosta*, erityinen hevosenkengänmuotoinen rengasosa 18, jota asianomaisen laakeripipkin 11 kummaltakin puolelta kannattaa kierrejoussi 19 ja 2o, joka puristaa sen määrättyä paineella akselit, *pln alemmassa puoliskossa olevia kuulla vastaan. Keskenänsä pysytetään kuulat 7 yhdessä kuulanpitäjän 6 avulla, jonka percent kuulakaltani oina käytetään laakerissa säateusuuntaisesti suunnattuja si- lintereitä. Laakeripalkit li ovat varustetut salparuuvella 21, jotka kukin ulettuvat molemmista päistä suljettuun rengasosaan IS laaditun ko- ronsa sisään, jotta voitaisiin estää sekä tätä jälkimmäistä laakeria kun- toonp and naessa putoamasta ales että ulkorenkaan 4 kiertymistä pois tar- koitetusta asennostaan laakeritupessa. Ulin kauvan kun kuulat ovat eheät estää niiden ulosputoumista laakerista ulkoisen kulkurenkaan 4 alempi osa tai rengas 18, kun ne kulkevat tapin alemman puolison kautta. Jos selcämänä käytetään renkaan H- ohennettua osaa 16 (kuten oikeal- la puolella olevat renkaat kuvassa, i), niin on edullista tehdä tämä osa jonkun verran epäkeskoiseksi saman kulkurenkaan ylempään osaan verraten, siten, että senkautta aikaansaadaan määrätty nojapaine myöskin muuten kuormittamattomia kuulia vastaan laakerin alemmassa, puoliskossa. Yllämainittu laakerin satunnainen tarkistus käy ehdolliseksi ales- pln kaltevasa pohjassa 22 laakeritupessa akselitapln alla löytyvän ulosvedettävän laatikon 23 avulla, mikä on muodostettu laakeritupen poh- jaan öljynpitävästi sovitettuun luistiin 24, mikä voidaan vetää ulos niin pitkälle että laatikko 23 tulee tupen*

ulkopuoleen. Pohjasyvennyks 22 on siinä yhä edelleen pidettävä luistin 3ulke«mana, jotta laakeritupeessa oleva volteluöljy ei pääsisi juoksemaan pois. Täydesti ulosvedettyssä asennossa rajoittaa luistin liikettä pidätyslaitte, jona voidaan käyttää tuppeen kiinnitettyä nastaa 26, joka kulkee luistissa 24 olevassa molem- mista. päistä suljetussa korossa. Täydellisesti siasäntöyörinettynä voidaan luisti estää tulemasta a s i aankuu luir a 11 oma s t i tai tarkoituksettomasti ulosvedettyksi tupen seinä- mään ruuvattavan ruuvin 27 avulla. Jos jokin kuula 5 särkyisi tai murtuisi putoavat kappaleet ulos si- linlinterinmuotoisessa kuulanpitäjässä olevasta kuulakammioista tai ales rengasosassa 16 tai renkaassa 13 löytyvässä selkämässä olevia jyrkästi kaltevia sivuja 17 pitkin ja luisuvat, pitkin kaltevaa pohjaa 22 ales laatikkoon 23, jossa ns havaitaan vetämällä ainoastaan luisti 24 ulos, ja käy niinuuodoin mahdolliseksi todentaa vahinko, ennenkuin se ennättää käydä vaarallisemmaksi. C57 (S-? Yläkappaleella 13 el saa laakeria kuntoonpantaessa kirstää, vallan, kiinni laakeripalkkeifcln 11 vaan ainoastaan sen verran, että xysi muodostuu hyvin pieni liikkumatila yläkappaleen ja palkkien 11 väliin niinkauvan kun laakeri on ilman kuormitusta. Niinpian kun laakeri kuor- mitetaan vaunun painolla, täytyy kuitenkin kyseessäolevien osien tulla toistensa yhteyteen, minkä kautta kuormitus yläkappaleen 13 avulla aina tulee siirtymään välittömästi palkkeihin 11. Jousien 12 tarkoituksena on siten ainoastaan saada laakeripalkkien yllämainitun heikon yhtteentai- pumisen aikaan. Sen johdosta että rangasosa 16 tai rengas 13 pidetään painettuna ylös kuulia vastaan, tulevat nämät myöskin laakerin kuormittamattomassa alem- massa, osassa pyörimään sisempää kulkurengasta vastaan, minkä kautta ai- kaansaadaan sekä sisärenkaan että kuulien tasainen kulutus, eivätkä Viimeksimainitut saata kuluu litteiksi, jos ne, kuten tähän saakka tun- netuissa laakerirakenteissa EXXXYEXXXSEXXX yksipuolista kuormitusta var- ten jäävät seisomaan paikoilleen kuljettaessa kuormittamatonta laakeri- puoliskoa puuttuvan kitkapaaineen takia. Jotta alespuodnooneet kuulakappaleet voitaisiin estää puristumasta kiin- ni pohjan 22 reunan ja luistin 24- väliin tätä ulosvedettaessa, on edul- lista antaa laatikon 23 takaseinähan jatkua ylöspäin vinosti taaksepäin, minkä kautta siinä mahdollisesti olevat kuulakappaleet laatikkaa ulos- vedettäessä tulevat luisumaan pohjan 22 etureunaan. Patenttivaatimus. 1. yksipuolisen laakeripairineen alaisena toimiva akselista, erittäin- kin vaunuakselista varten ajottu kuulalaakeri,jossa ulkopuolinen kulku- rengas ympäröi ainoastaan akselin kuormitettua puoliskoa, minkä tunnus- merkinä on yhdistelmä johon kuuluu osaksi laitteita ulkoisen kulkuren- kaan yhteentaivutusta varten, niin että yksipuolisesti esiintyvä kuor- mitus Jakaantuun useampiin kuuliin eik ei ainoastaan laakerin huipussa ole- viin, osaksi laitteita käytettäviksi siinä tarkoituksessa että vahin- goittuneet, kuulat itsestään saattaisivat poistua kuularadalta kulkies- saan aksellitapin kuormittamattoman alemman osan kautta, mutta tulisivat estetyiksi putoamasta ulos niin kauvan kun ne ovat eheät. 2. La and dintamuoto patenttivaatimuksessa 1 mainitusta laitteesta ul- koisen kulkurenkaan yhteentaivutusta varten, tunnettu siitä että laake- ri tuppi on yhdistetty niihin osiin (13), joilla vaununkuorma lepää, ai- noastaan i.aMesta kohdasta, mitkä sijaitsevat yksi molemmin puolin kuormaresultantin suuntaviivaa. 3. Laadintamuoto patenttivaatimuksessa E mainitusta laitteesta, tun- nettu siitä, että afääkerirungon molemmat kohdat, jotka ovat yhdistetyt vaununkuormituksen alaisina oleviin osiin (13), sijaitsevat kumpikin noin*6o* kulmasiirrossa kuormituksenresultantin suuntaviivasta lukien. 4» LaadIntamuoto patenttivaatimuksessa 1 mainitusta laitteesta ulko- renkaan yhteentaivutusta varten, tunnettu silta että ulkorengas (4) pitkin sen kehää jaotettujen jousien (12) avulla pidetään puristettuna yhdenmukaisesti paineella akselitapin vastaavan osaston ympäri. 5. Patenttivaatimuk**ssa 4- mainittuun laitt.eeseen laitelaita, tunnettu siitä että ulkoisen kulkurinkaan (4) yläosaa ympäröi hevosenkengänmuo- toir.en palkki (11), johon patenttivaatimuksessa 4 mainitut Jouseit vai- kuttavat välittömästi kulkurenkaseen (4) aiheuttamansa vaikutuksen ase- mesta.. 6. LaadIntamuoto patenttivaatimuksessa 1 mainitusta laitteesta Jotta rikkinäisten kuulien poistaminen kuularadasta kävisi mahdolliseksi ja Johon tunnettuun tapaan kuuluu kuulia yhdssäpitävä, silinterinmuotoi- nen kuulanpitäjä a (6), jossa on useampia kuuiaratoja ja jota ympäröi si- llinterinmuotoinen vaippa (15) varustettuna useammalla reijillä, jaote- tut samalla tavalla kun kuulakammiot kuulanpitäjässä, tunnettu siitä että vaippa (15) on kiertyvä tai siirtyvä r e ikäsi lirit er iin nähden, Ja että vaipassa olevien reikien halkaisija on yhtä suuri kuin tai vähän suurempi kuin kuulien, niin että kuulat voidaan panna asianomaisiin kuu- lakanimioihin vaipassa (15) olevien reikien kautta ja senjälkeen tämän jälkimmäisen kiertämisen tai siirtämisen avulla estää putoamasta ulos niinkauvan kuin ne ovat eheät. 7. LaadIntamuoto patenttivaatimuksessa 1 mainitusta laitteesta, jotta rikkinäiset kuulat saattaisivat pudota ulos kuularadasta, tunnettu sii- tä että ulkoisen kulkurengas (4) akselitapin kuormittamattomalta, alem- malta osalta on muodostettu selk-jriin muotoon, varustettuna jyrkästi kaltevilla sivuilla (17). 3. Laadintar/iUoto patenttivaatimuksessa 7 mainitusta laitteesta, tun- nettu siitä että sivuilla (17) varustetun selkämän muodostaa uikorenkaan (4) ohennettu osasto (16). 9» Laadintamuoto patenttivaatimuksessa 7 mainitusta laitteesta, tun- nettu siitä että kuormitettu ulkorengas (4) on ilievosenkengänmuotoinsn ja sfilkämä sivuineen (17) muodostettu ulkorenkiaan alemmaa puoliskoa vas- taavaan hevosenkengänmuotoiseen rengasos*Hi (13), mikä kumpankin saa- reen vaikuttavan jousen avulla pidetään puristettuna akselitapin kuor- mittamattomassa sivustassa olevia kuulia vastaan. lo.»Laitte patenttivaatimuksen 1 mukaiseen kuulalaakeriin, minkä tun- nusmerkinä on akselitapin alla oleva, kulkuradasta ulospudonneiden vahingoittuneiden kuulien keräämistä varten ajottu ulosvedettävä laa- tikko (23), mikä on muodostettu laakeritupeessa olevaa aukkoa öljynpi- tävästi sulkevaan luisti iin (24), siinä tarkoituksessa, että laakerin nopea tarkistus kävisi mahdolliseksi. 11. Patenttivaatimuksen lo mukainen laite, tunnettu siitä että luisti (24) on varustettu tupenseinämään ruuvittavalla ruuviliitoksella (27) siinä tarkoituksessa että luisti voitaisiin suojata asiaankuuluma- tonta ulosvetoa vastaan. 12. Patenttivaatimuksessa lo mainittuun laitteeseen laiteima tunnettu siitä että laatikon (23) pohja kohoaa, jonkun verran taaksepäin siinä tarkoituksessa että laatikkaa uiosveastettaessä voitaisiin estää siinä olevat kuuiakappalliet puristumasta kiinni laatikon reunan ja laakeritu- pessa olevan aukon reunan väliin. -5. £ 6 sorn runs in that i | bada ends to slutet spar 25 in BlideE 24, Fullstaendigt inskjuten national sliden foersaekras against obo-herogirt eller oöfsigtligt utdragande Genome I i 'boxvaeggen in-skrufbar foerskrufning 27 Ora A ball 5 skulle splittras eller krossas, Falla bitarna ur kulkammaren in the cylindrical kulhallaren resp. ned. utedter de starkt sluttande the sides till 17 Ryggen a ringdelen 16, resp. eringen 18 and glida utfoer of leaning the bottom 22 ned i downloaded 33 daer de thereby that Blott Draga ut sliden 24 varseblif-left, och det blir saledes ir.oeljigt att konstatera skadan, Inna Denna hinner antaga Hazards proportioner. oefverstycket 13 boer.vid lagrets monterande Icke Span-nas tatt till 11 lagerbalkama utan «ndast mjm mycket, in that a> j helt litet spelrum uppstar oefverstycket och between the beams 11 s, 1 Laenge lagret Ur obelastadt. Sa snart lagret belastas med yagnens vigt, skola emir, ellertit ifragavarande ett par koi / JNA i be. Roering med hvarandra, pa grund hvaraf By means of the load is oefver stycket 13 alltid kommer att oefverfoeras direkt pa beams 11 by the springs 12 lia saledes endast till att rndarnal astadkomma the ofvan, narncnda.avnga sajnmanboeojn ingen af lagerbalkama. Till foeljd f in that the ringdelen 16, respectively. eringen ISS hole-les Tryckt upp mot Kuloma, arcs Densa fiven pa att lagrets obelastade lower part to the inner roller dams loepringen, hvarigenom I jair.n noetning af, savrll innerring som Bullets uppkommer, Science und-Vikes de senares bnaegenhet at, t slitas platta om de, sk.som at the hittlis kinda lagerkonstruktioner for loading of ensidigt, foerbli stillastaende at the passerandet af the obelataede lager »halvan pu grund uf bristande friktionsryck. In order to provide Undvik att nedfallna kulbitar. skola kl and n - mav fast between the edge, in the bottom af 22 and 24 at the sliden dennas utdragande, AR det advantageous to dowload bakvaeggen af of the box 23 stiga upp sned t Baka, hvarigenom daerstaedes moejligen radial projection kulbitar at the ladans utdragande aeoroiEa att; lida upp pa of the bottom 22 framkant. i PAT | WTA it I K 3 PH: o For ensidigt ia and ertryck, utsatta shafts, isynnerhet -6 * vagnaxlar afsedt Kullager raed outer lopringen omslutande en-dast the shaft »belaBta and e halva kanns t ekndt af, kombinationen between dels anofcdningar for the outer-lOpringans »amaanboj-anda, such that it ensidigt uttraedande loading of the upptagas af a plurality Bullets eeh ef af de Blott» a lagrats TCCP, anordningar dels fur att skadat kulcr af signal ajalfva Akola aflaegs-n and s ur kulbanan Time pnaeraandt af axeltappens obelastada undr del men is prevented att falla ut mjm lange da Aaro tip. Utforingsfonn dsn in ansprak f i o-I angifna an apparatus for the yttrd loeprlnjrns »f sammanbojande characterized in that the lagerboxen AER farenad 5 * 3 <* the portions (13), a head hvilka yagnala and ten hvilar, ondst cards tv -. nns italien, hvilka aro superimposed pa ett hvardera om the side 1.strsrultantens riktninglinia. f Utforingsfera in the anBprak 3: No, I do not angifna an apparatus characterized in that f d f tva Stallen lagerkrccppen,, som Aaro Foerenade mad de vagnslasten upptagande delarna (13), Aaro Belag during HVA-o rt och ett ned ungefär 60 The load on vinkelforskjutning from the ningsresultantenB riktningalinie raeknad. Utfoering-ifora af den i an and prak Lions angifna kept in constant contact Groningen fur, ytterringene Baerananboejande af characterized in that the co-e 'tarringen H) through the utedter desa periphery of foerdelad Fjaedrar (13) halles pressad med likformigt printing omkring ctavarande parti and f the axle journal. At thereof in ansprak 4 No na ang if the apparatus kept in constant contact kanneteeknad f-ning in that the outer lopringens (4) oefverdel omslutee f I haestskoformig beam (11), a head in an hvilken de- language 4 o angifna the springs broadcloth istaellet For omedelbart pa laepringen I4). the Utfoeringsfora f i l ansprak No ngifna kept in constant contact niij? I do not for att aedpifva sondrlg and kulors aflaeg and Nande ur kulbai-Noeh lion pa kandt AATT circuit consisting af en kulcma saarmnhalalide, cy-linderformig kulhallare (16), med stt plurality of kulbanor och som AER omsluten af a cylindrical fireplace (15) having a plurality of att holes, foerdelade pa sanna manner so.it kulkamrarfaa i kulhallaren, the action-teknad af att almonds (15) is pivotable eller forskjutbr in relation to the halcyylinder, and in that the holes in an Mantalena ha diameter, hb £ r dirty »tor» om » 11 er Insignificant greater than kulornas, so that the kulorna kunna be inserted into one resp. kulkamar ge-nom i mntaln the holes (15) and thereafter Ganem dan senares vrid-ning is prevented displacement of the eller att f vl ut, in the Arc de Langa tip. 7; Utfoerlngsforo o f the l i ansprak No, I do not angifna an apparatus for att for medgifva Boendriga kulors utfallande ur af kulbanan characterized in that the outer Joepringen (4) the ends of the Ieke you- Lastadia, lower part af the axle journal AER formad som rygg is aedj Btarkt sluttande sides (17). 8 degrees in the embodiment of ansprak f T o angifna kept in constant contact, characterized in Groningen ->. Ryggen T med in that the sides (17) utgoeree f ett parti foertunnadt (16) ytterringns f (4). 9 No Utfoerlnfisform in the ansprak f 7 No angifna kept in constant contact Groningen characterized in that the belastade f ytterringen (4) is itterfingena against undrehalfva »varandet haestakoformig ringdel (18), hastskoformad cch med Ryggen the sides (1") a utbildad er/JNMFe- son Genome I isc / hvardera skankaeln paverkande a spring frost pressad mot de a Axel-tappens Icke belastade sida Varanda kulorna. 10 No arrangement in Kullager enl. aneprak I o f sn characterized under the axle journal to compression. For uppsamlandet af from the loepbanan utfallna skadat Bullets afsedd utdragbar lada (23), soa AER utbildad i do, i lagerboxen an opening Qljetaett tillslutan-de slid (24), i andmal in that I do not moejliggoera snabb Undersoekning af lagret. 11 Apparatus for enl. f ansprak LOJO characterized in that the sli means (24),? r i provided with a boxvafen inskrufb foerskrufning and R (27), in aett aim of the present kiaina skyddas against oboehoerigt uidr ~. Gande. 12; No Vid dsn i ansprak 10 No angifna an arrangement, I did not do an ordning characterized in that the af ladana (23), a bottom sign Hoejer neighbors got backwards, i aendaal in that vid ladans utdragande foerhindar, i-Shammah, the radial projection kulbitar att fastklaemmas between the edge of ladans cch the opening edge together af i lagerboxen. Carl Gustaf Sued «rlund and Henri * Wiking. Kuulalaakeri vaunuakseliteita for.. As well-known, have failed to take advantage of kuulalaacerin vaunuakselieissa good qualities, above all, by rail or tram tefcelaaakereifisa, "and this has been mainly asianlaita remarkable, allowing that part of the only two or three at the top you will find in the beads are given the ksstaee, k'ko load through which they are exposed to the risk of subordinate, therefore, that they might go to pieces or crush broken, and osak3i cents, the movement of the random rikkimuseruonet or otherwise vahingoittuneat balls may be time to get as significant lesions kulkursnkaisiin, SX.ZS.I. that may arise akselinkatkeamia of the latter onnettomuksiaan. For such damage at the time are of course always disadvantages also normal aksalilaakeereissa, but it regularly priate circumstances is not so severe consequences than rail or trams will be where part of the driving speed is usually very foot-ri, and into the event of an accident, many lives are at risk, and where the then as parammat varjuuustoimenpiteet are. necessary. of the present invention is to eliminate the above drawbacks and is characterized in that part of the outward travel of the tire upper part is somewhat flexible and is considered to be alespuristettuna larger in respect of the bearing circumference, and into the same KULKURI lower part of the s, s-track of it to let the broken balls Accessibility fall on the u-los bearing balls without the need to have a bearing in this regard without the necessary pressure against the inner ring, as long as they are still whole. Senohessa the bearing is equipped with a system that makes it possible to quick check to see if anyone has crushed the ball out, and see if the bearing would be remarkable, allowing a more thorough check and fiddled-lun in need. This latter device is, of course, in Sura **sense**, given that it-make it possible to check an entire train bearing pans and remove the broken balls during the course of normal train and 50J11 * iv1JLAE * - in the accompanying drawings shown in this drawing shape on the intended from the bearing of Fig. 1 shows the longitudinal section of the bearing |

through the embodiment of FIG. 2 is a cross-section of the left half and oikeapuolinen two different levels, kUAR. 3 is a cross-section of another form of accounting in accordance with all of the bearing, the embodiment of FIG. k sat, int d amu odon ulkorenkaa3ta, seen from the outside, Fig. 5 the same section as seen from the side, Fig. 6 enlarged. scale, a cross section in the axial direction kulkurengastan through the earlier part of the embodiment of FIG. 7 ensimäi3en cross-sectional shape of a bearing according to drawing siseimat parts removed, Fig. Part D from a special part of a larger scale j * in FIG. 5 occurred in some special part in the second position, while FIG. Finally, lo is the length of the cutting device tfiesta check tarkistusaanno33a. vaunuakselilaakereihiin naenaen bearing is folded in a known manner laakerituppeen 1 and 3 is attached to the aiseiitappiin sisaeran ring 2 and the V uikorengas with one or more of the series arranged between the ball 5, which is maintained by means of a single kuulapitaejaa 6, with more silinterinmuotoisella chamber, the North- each containing one of the ball. According to one embodiment rukaan the preparation and forms an inner path of the axle pin arranged in two tuklnta made of steel or the like, surrounded by reikasilinterinruotoinen kuuanpitaejaa 6 Laakeritupen upper portion comprises two parts connected to it huulsnmuotoista 7 which are above the bearing keskuskoidian conjunction with each other on the S into the already - ka known manner, you should wagon springs and against them the load of * Lips 7 are connected to each one laakerituppeen own half leensa kuormituksnresultantin guidelines when yhaistyskohdat interest are about ookulmasiirroissa called the Supreme line of the section including. 7 The lips may be prepared in a way different from what is shown in the drawing, for example, can be used to huulina loose legs that are screwed into the bearing frame, and may be directed straight up or jonpaankumpaan half. Likewise, no kulmasi irroksen vaelttaemattoemaesti need to be 60 degrees. External kulkursngas h puolisilinterin form of balls, which is arranged tupeasa corresponding to the cavity, and leaves a ball half of the controller al mead free. Parts 7 cause the bearing kuoritetaessa external tramp all V weakly to a flexible one icularadan around and purist. * • • • s senkautta under load in the laakeripuolisokossa can be found on the balls si-SMEpia running the ring against so that the load will be spread to target rrel-keln all of it in the balls. • In the latter la-aeaintarruodon yrpaeroei of the external ring 4 a'fbf passage horseshoe or ss.tula.nruotoainen la.akeripa.lkki 11, which is arranged in the upper part of the laakeritupen. Interest. uikorengas prepared and las.keri-palkkineen that the inner ring of several adjacent to each other along the axle pin,, made up in part of each of which are provided only by one through the clear ARJ. Ulkorsnkaassa, as well as the shafts'. Pee in the si-aemmaessa kulkursnkaassa 2 can be found in a known manner increases the balls for 5. so that could be kyseessaolevassa l adintamuodossa and uniformly distributes the load on the upper laakeripuoiisokossa all of the balls in the bearing bars is considered more spiral springs 12 by means of kuularacian pressed against the periphery of the upper half. The springs are strained by private bearing beams 11 "and laakerituppeen the bolt 14 by means attached to the upper member 13 (vehicle of the spring support) between and are graduated to the bearing plane, in that the part of the center plane and into the both sides of the presence of one or more springs. Of the springs 12 tension will not be so strong it may provide a beam 11 and an external senkautta also play a ring yhteentalvutuksen. Said downward bending is, of course, only very small and does not cause then they are no burden which would reduce the strength of the material. In order to prevent the balls from falling out of the iuularaflasta they went, ESSA this lower part of the free period is used for either of the below-discussed devices. Bearing ensiksimainitun drawing the shape of the surrounding kuulapitaejaa loose outer sheath 15 with HOLES, graduated in exactly the same way as the chambers of the ball Parish, and which holes are equal to or somewhat greater expense balls, so that PREPARATIONS these latter instruments can be introduced into the casing 15 through holes in the respective chambers (fig. 9). And then turning axially moving the sheath 15 months Moderate lanpitaaj possible compared with the previous holes will oletnaa position eccentrically in relation to the beads and they close the chambers, so that Hiissa however, may rotate freely but will not drop out (Fig. 8) so long as they the whole. According to the second laadintainuodon supports the balls as they pass through the bearing-free iasiMfri * sikamae through the lower part with a sharp sloping side surfaces 17 Ififfijjii The butts can be obtained by reacting a strong thinner passage of the external lower half of the tire 16 Seikkula may also form «, a special hevosenkengaanmuotoainen ring 18 which is concerned on either side of the bearing 11 supports the coil spring 19 and k2, which presses the predetermined pressure shafts, * pln the lower half of the hear. retention of the balls themselves, kuulapitaejan 6 7 together by means of a transparent percent extrusions used in a radially directed bearing si cylinder. The bearing bars are provided with additional salparuuvella 21, each of which ulettuvat closed at both ends of the ring portion to the IS co-ronsa in order to prevent this latter bearing, as well as the toonp-ntaessa falling out of ales and the rotation of the outer ring 4 from the position, on the intended laakeritupeassa. Uli many days when the balls are intact to prevent their falling out of the bearing play of the external ring 4 and the lower part of the ring 18 as they pass through the lower half of the pin. selJaemaenaen used in the tire H thinned part 16 (such as the right-hand side tires of the picture, i), it is preferable to make this part of the same somewhat eccentrically running ring relatively to the upper part, so that there is a certain senkautta also nojapaine otherwise uncompressed, balls against the lower bearing, half. The above-mentioned bearing a random check is conditional ales, the sloping bottom of the 22 laakeritupessa akselitapln below found out drawer means 23, which is formed laakeritupen the bottom of the oeljynpitaeavstl coordinated slide 24, which can be pulled out so far that the box 23 will sheath the outside. Base recess 22 is still kept in the ice 3ulke «, mana, so laakeritupessa the volteluoljy ei would run away. Taeydesti extended position to limit the movement of the slide retaining device on which the Socket can be used as a fixed pin 26 which passes through the slide 24 in both. the ends of a closed heel. With sisaentyoerinettnyae slide can be prevented from becoming cus aankuu lui own a 11 sti or unintentionally pulled out of the sheath wall of the screw-screw 27. If any of the 5 ball breakage or falling objects would break out of the si-linlinterinmuotoisessa the ball in the parish of the kuulakammioista ales, or the ring of the ring of 16 or 13 can be found on the butts of the steeply inclined sides 17 and along the slip along the sloped bottom 22 of the box 23 ales, which are detected by pulling only the so-called 24 out of the gate, and go niinnuodoin possible to verify the claims before it manages to go more dangerous. C57 (S? Bonnet of 13 el kuntoonpantaessa not tighten the bearing, power, stick laakeripalkkeifcln 11, but only to the extent that xysi consists of a very small room for maneuver ylakappaleen and beams 11 between the days when the bearing is no load. Soon So when the bearing is loaded with the weight of the vehicle, however, need to be kyseessaolevlen parts, each other, and through the load of the top piece 13 by means of always going to move immediately to the beams 11 of springs 12 is thus intended only to get laakeripalkkien above yftteental low-val and time. As a result, the rangasosa 16 or ring 13 is held pressed up balls against, will these also bearing condition with a lower mass of the rotating inner running ring against, through which, there are provided both inside the ring and the balls flat consumption, and the latter were available to take a flat, if they are, so far as in known structures bearing Xxyy E E E KXXS XXX-sided load var-ten remain standing in place is carrying a load on the bearing halves lack of pressure due to friction. In order alespudonneet ball tracks could be prevented from squeezing hoard bottom 22 and the edge of the slide 24 - between this is being pulled out, it is preferable to administer the box 23 takaseinaehaen continue upwards obliquely backwards, through which the possible presence of ball tracks drawers pulling out will slide base 22, the front edge. Claim. 1 one-sided bearing pressure acting shafts, very least vaunuakselileita for aljottu kuualaaakeri in which an external straying surrounded only by the shaft and loaded halves, the sign-sign is a combination comprising a part of the equipment of the external path-not yhteentaivutusta for, so that one-sided occurring the load is divided into several of the balls and not only the bearing at the top of available-for-, part of the equipment used for the purpose that damaged in, the balls themselves could leave the ball of the race passing through in its aksellitapin-load of the lower part of the season, but would prevented from falling out so long as they are undamaged. and La 2 dintamuoto in claim 1 said device with an external ring yhteentaivutusta passage, characterized in that the bearing ester sheath is connected to the sections (13) which rests on the vehicle load, only i.aMesta al section, which are located one on each kuormaresultantin sides of the guidelines. in claim 3 E LaadIntamuoto said device, characterized by stating that no afiaaakerirungon both, which are combined under the load of the vehicle parts (13) are located on each of * some * 60 angle transmission line including kuormituksenresultantin direction. 4 »LaadIntamuoto claim 1, said device outside of the tire yhteentaivutusta, characterized in that the outer ring bridge (4) along its circumference of divided spring (12) is held compressed at the pressure of one compartment to the corresponding axle journal. 5 in claim 4 * - said device to laitt.eesen, characterized in that the tramp external ring (4) surrounding the upper part of hevosenkengaanmuo-toir.en beam (11) with claim 4, said springs directly affect transport ring (4) caused the effect instead of... 6 LaadIntamuoto claim 1, said device broken beads order to removal of the ball and track Where it might be possible to include a known manner yhdsssaepitaevae balls, silinterinmuotoi a kuulapitaej-tion (6), which is more kuuiaratoja and which surrounds an inner casing linterinmuotoinen (15) with a more reijaeliae, jaote-research in the same manner as kuulakammiot ball Parish, characterized in that the casing (15) is rotatable or movable re age lirit er cent, and in that the jacket of the holes having a diameter equal to or slightly greater than the balls so that the balls can be the relevant month lakanimioihin sheath (15) through the holes in the yoke between it and the latter a circumvention or Transfer to prevent from falling out of all the days that they are undamaged. 7 LaadIntamuoto claim 1, said device so that broken beads could fall out of the ball track, characterized in that the external transport ring (4) stub axle unladen, lower malt, it is formed on your back-jriin shape, with steep sloping sides (17). 3 Laadintar / iUoto claim 7, said device, characterized in that the sides (17) with the butts formed uikorenkiaan (4) The thinned section (16). 9 * Laadintaniuto claim 7, said device, characterized in that the loaded outer ring (4) is iievosenkenganmotoinsn and sfilkaemae sivuineen (17) formed in the outer ring lower half of the corresponding hevosenkengaanmuotoiseen ring portion; * Hi (13), which in each to the island active spring is held compressed stub axle unloaded in my hear against the side of your points. lo '. device according to claim 1 kuulalaakeriin, the characterizing features is the journal below, the path of the ulospudonneiden damaged beads of ceramics for the designed pull-out of a box (23), which is formed laakeritupessa an opening in oil pressure-cantly closing luist cent (24), it purpose of the bearing it might be possible for a quick check. as claimed in claim 11 wherein the lo, characterized in that the slide (24) is provided with a screw connection with screw tupenseinaamaean (27) for the purpose of the slide to protect the asiaankuuluma-free out of the draft. as claimed in claim 12 to said device via a lo laiteima characterized in that the box (23) on the ground increases, to some extent with the intention that the back box to prevent the uiosvasttaeessa kuuiakappaliel squeezing the folded edge of the box in nitrogen and laakeritu the edge of the opening in the barrier.

Classifications:
International (IPC 8-9): B61F15/12 (Advanced/Invention);
B61F15/00 (Core/Invention)
International (IPC 1-7): B61F15/12





Family:

Publication number	Publication date	Application number	Application date
FI5789 A	19140609		00000000

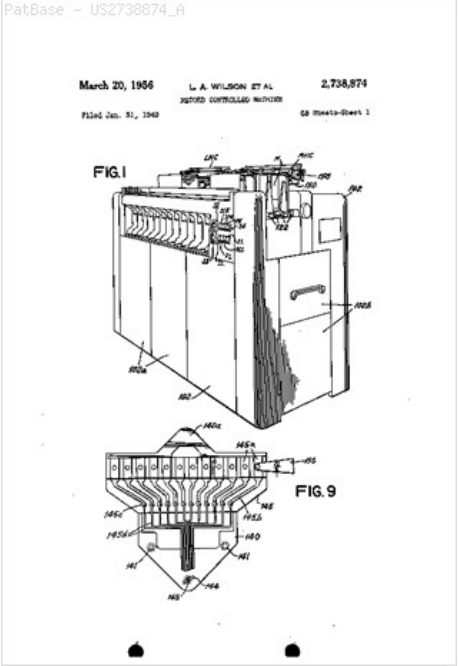
Inventor(s): (std): GUSTAF SOEDERLUND CARL ; HENRIK WIKING

Inventor(s): SOEDERLUND CARL GUSTAF ; WIKING HENRIK

Title: Record controlled machine

Abstract: Source: GB688383A 688,383. Typewriters and c. BRITISH TABULATING MACHINE CO., Ltd. Jan. 30, 1950 [Jan. 31, 1949; Jan. 31, 1949; Jan. 31, 1949; Jan. 31, 1949], No. 2371/50. Class 100(iv) [Also in Group XIX] A record-card-controlled machine for census and like statistical purposes (see Group XIX) includes mechanism for printing on a record sheet, Fig. 42, amounts read out from unit counters and a foursection accumulator and a " group number " held in an electronic storage unit. The functions of the machine are controlled by a plugboard, Figs. 49A -R (not shown). Type-bar machines; hammer impression arrangements.-A record sheet is divided into half-sheets Fig. 42, which are printed simultaneously, two columns at a time by four printing banks each comprising four type bars 161, Figs. 13 and 20, carried by a fixed plate 160. The half-sheets are carried on typewriter-like carriages comprising platens 155 and the banks are so spaced that, e.g. columns 1, 16, Fig. 42, and like columns 31 and 46, are printed together. Each set of bars 161 is slidably mounted in a vertically slidable frame 169 and supported by spring-urged arms 172. The frames 169 are raised during each printing cycle by cams 182 on shafts 183, Figs. 3 and 20, and carry the bars 161 with them until the latter are stopped by spring-urged pawls 175 released from the armature of magnets PM, Fig. 13, energized at times depending on the digits to be printed. The subsequent relative movement of a bar 161 and frame rocks an interposer 300 which closes checking contacts CKC through a T-member 301 for entry of the value printed into the accumulator. The bars 161 have-pawls 167 which cause automatic printing of zeros to the right of a significant figure. Printing hammers 189 are guided in comb slots in an operating frame 192 secured to a shaft 190, Figs. 3 and 13, which is rocked under control of a cam (not shown) fixed to a gear 196a. An inking ribbon 197 is provided for each carriage and feeding and reversing mechanism therefor.including spools 198. After printing, the pawls 175 are returned to latching position by a bail 178 secured to a shaft 179 which is rocked by a pin on a gear 186, Fig. 3. The gears 196a, 186 are driven by gears 188 on shafts 183 which are driven from a main print shaft 220, Fig. 20, when clutched to a co-axial shaft 216 connected to the motor shaft 120 and rotating at a slower speed than the card feed shaft 117. The shaft 216 carries a notched collar 222, Fig. 23, which co-acts with a dog 223 pivoted on an arm 219 fixed to the shaft 220. When the clutch magnet PCM is energized its armature releases the dog and the clutch is engaged for one or more revolutions. Letter-spacing, carriage-return, and line-spacing mechanism.-Each carriage is fed step by step by spring motor 350 and tape 351, Fig. 20, under control of spring-urged escapement pawls 353, Fig. 17, and a rack 352. The pawls have slots engaging a pivot 354, and the one engaging the rack is pulled leftward, Fig. 17, by the motor 350 so that its tail is in the path of an operating member 356. When the escapement solenoid (not shown) is energized it pulls down this member through linkwork 361, 358 and the rack is stepped one half tooth space into engagement with the other pawl, the functions of the pawls then being reversed. The carriages are coupled by a tie rod 362, Fig. 20, to ensure movement in unison. Each carriage is returned by a tape 409 wound on a pulley 408 normally loosely mounted on a shaft 406, Fig. 18, driven by worm gearing from the high speed shaft 117, Fig. 3. When the solenoid CRS, Fig. 13, is energized a lever 424 is rocked and a cam 422 is rotated by a spring-operated arm. 423 so that its serrated tread engages the resilient surface of a roller 407 on the shaft 406. The cam is then rocked with its supporting lever 420, thus pulling down a lever 416, Fig. 18, connected by a toggle link 415 to a twopart lever 412. The lever 412 actuates a disc friction clutch 411 to couple the pulley 408 to shaft 406, and the clutch engagement is maintained by the toggle action. The clutch is released when the carriage has been returned by a lug on the appropriate marginal stop (not shown) which rocks a trip lever 454, Fig. 20, connected by a link 455, lever 456 and link 458, Fig. 13, to a toggle-restoring lever 459. The marginal stops are adjustably mounted on a rack 450 and those for the carriage shown in Fig. 20 carry cam plates 461 which operate switches MS1, MS2 having roller-carrying operating levers 462. The switch MS1 is used for indicating that the carriage is in the returned position. The operation of switch MS2 initiates carriage return and other operations (see Group XIX). A third switch MS3 is operated when the carriage is in the first three positions for printing the amounts on the accumulator and the group number in the " Amount " and " Sort " columns respectively of the record sheet, Fig. 42. When a carriage is returned, the tape 409 operates the line-spacing. mechanism, Fig. 19, by rocking a bell-crank 479 which pulls down a spring-returned slide 477 so that a pawl 476 steps on the line-spacing ratchet 475. The pawl is normally held away from the ratchet by an arm 481 which can be set in three different positions for different line-spacing movements by a control lever 484 engaging one of three notches therein. The carriage shown in Fig. 20 carries contact brushes 506- which pass over contact strips to control the sequence of printing operations.

Classifications:
International (IPC 8-9): C04B35/38 H01F1/34 (Advanced/Invention);
C04B35/26 H01F1/12 (Core/Invention)
International (IPC 1-7): C04B35/38 G03C1/10 G06C11/04 G06F15/10 G06F7/00
G06F7/06 H01F1/34
US: 101/19 101/2 101/494 209/554 234/30 234/56 235/424 235/425 235/427 235/429
235/432 235/434 235/442



Family:

Publication number	Publication date	Application number	Application date
DE1040836 A	00000000		00000000
DE1040836 B	00000000		00000000
FR1054749 A	19540212		19500127
GB688383 A	19530304	GB19500002371	19500130
NL151330 B	00000000		00000000
US2558941 A	19510703	US19490073843	19490131
US2615569 A	19521028	US19490073844	19490131
US2651460 A	19530908	US19500204661	19501229
US2658682 A	19531110	US19490073842	19490131
US2738874 A	19560320	US19490073845	19490131

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Inventor(s): (std): WILSON LAWRENCE A ; PIATT DONALD R ; LAKE CLAIR D ; DURFEE BENJAMIN M

Title: Electrical data processing apparatus

Abstract: Source: GB886421A 886,421. Digital electric calculating and sorting apparatus. MINNEAPOLIS-HONEYWELL REGULATOR CO. Jan. 24, 1958 [Jan. 25, 1957], No. 2437/58. Class 106 (1). General.-A data processing machine has an internal store to or from which data may be transferred under the control of a single programme control order, and a portion of the data may be uniquely selected from the data being transferred for combination with the programme control order to direct a further operation of the machine in accordance with the modified control order. This feature of the machine has particular application to sorting- operations. A further feature of the machine is that a single control order may direct the transfer of data from an external source, e.g. a magnetic tape store, to a number of separately accessible storage locations in the internal store through an input buffer store, and simultaneously direct the transfer of data from these storage locations to an external destination through an output buffer store. In the embodiment described, data derived from punched cards and recorded on magnetic tape in one of files 13-19A, Fig. 1, is read at a relatively slow speed on 31 channels into the input buffer store 21 which discharges its contents into the internal store over a single channel at a relatively high speed, and the output buffer 23 simultaneously receives high-speed data from the internal store over a single channel and delivers it on 31 low-speed channels into one of the tape files 13-19A. Input buffer, Fig. 7 comprises an argument section and a data section which may be selectively connected to one of the magnetic tape files, each section being divided into an upper and a lower portion which are each capable of storing 31 complete words, corresponding to one block of 62 words recorded on 31 channels of a tape. A block of data is read serially into the 31 shift register circuits of the buffer section selected, and is later read out in parallel, words being read out alternately from the upper and lower portions into a high-speed register AOWL or DOWL, from which the data is again converted to serial form, provision being made for reversing the bit order if a reverse tape-read was used. The tape " argument " channel carries key information which identifies other information recorded in that particular block, and the argument section of the input buffer may receive data from a plurality of magnetic tapes, one channel at a time, or a complete block from a single tape. The buffer argument section also includes circuitry in the first ten register circuits to enable a selective read-out of any of the first twenty words stored in that section to be made. The number of words read out from the buffer store may be controlled by the programmer. Internal store. Fig. 9.-The serial input derived from high-speed register AOWL or DOWL is converted to parallel form at 156 and stored in local register 157 from which it may be transferred through Z driver 158 to an address in high-speed magnetic core memory 155 selected by X, Y drivers 161, 162. The X driver has four " tens " and ten " units " input lines, and the Y driver has five " tens " and ten " units " input lines from the memory control circuits 159, giving a total of 2,000 addresses in store 155. Word structure and operation checking, Fig. 2. Each word has 52 bit positions of which positions 5-52 are considered to be in groups of four which are assigned transfer weights 1, 2, 4, 8. Bits 1-4 comprise a weight count section which carries a number indicative of the number of " ones " in positions 5-52 in accordance with the transfer weights of those positions. The weight count provides a check to ensure that no errors are made in transferring a word between two locations or performing an operation on the word. The weight count is removed from the word which then undergoes the desired process and is then supplied to a transfer weight adder which generates a new weight count for the processed word, this weight count being compared with the original weight count, modified as necessary according to the type of process involved, and if the two weight counts are identical a check pulse is produced to allow the machine to proceed. Fig. 2 illustrates numeric and alphabetic data words and also order or instruction words used in the machine. The order words each have an operation code section in which the actual order is represented. Thus order word 1 may mean " take the word stored at address A and the word stored at address B, perform a specified arithmetic operation on them and store the result at address C." Order word 1 may also be used to perform various transfer and extracting functions. Order word 2 is used to transfer B2 words from the input or output buffer, as determined by bits Ba, Bd and the existing machine connections, and store them in B2 sequential locations starting with address A, the next order being obtained by a subsequence call to address C. Order word 3 means " transfer C2 consecutive words starting at address A and store them at consecutive locations starting at address B." Order word 4 is used for shifting a word left or right including or excluding the **sign** bit by four bits Bh times and also performing or not performing an additional two-bit shift as determined by Bt, the word being selected from address A and the modified word stored at address C. In addition to these words, sentinel words whose bit positions 51, 52 are zeros are employed, for performing special functions in the machine, such as denoting the end of a certain type of data or acting as filler words for the output buffer when a tape write signal is given before the buffer is full. A sentinel word when **sensed** is stored in a special register to which a sub-sequence call is made at the end of a machine major cycle, the sentinel word then directing a subsequence operation before the next major cycle commences. If no sentinel word is **sensed**, a " pass " order is stored in the special register. Control console and programming.-Initial programming is accomplished by way of a keyboard and an address selection keyboard, the programme being stored in sequential addresses in the internal store. The console also includes a typewriter from which a printout of data may be obtained at a specified time in the machine operation. The address of the first order to be used is inserted in a sequence register SR, Fig. 18, and this sequence number is changed at the end of each major machine cycle which includes a first minor cycle so that the machine orders are selected in succession. A sub-sequence may be initiated by the setting of certain special functional units, e.g. by the sensing of a sentinel word, while an order is being processed, in which case the contents of SR remain unchanged until the end of the major cycle proper. Minor cycle 1 is the same for all types of order words: sequence register SR sets an address selection circuit which then transfers the order word from the high-speed memory or a special address into control register CR. Special addresses denote circulating registers CR. AR2, AR4, LOP, AR7, the output buffer (one word) and a label register LR (not shown) which stores the source of a word currently being processed. The contents of SR are also supplied to an accumulator ACC in which a one is added to the address of the order word and to the transfer weight. The contents of SR are also supplied to LR. Weight count checks are made throughout minor cycle 1 (and all succeeding cycles) for each data transfer, and if no error is indicated the machine proceeds to cycle 2 (or next cycle). Arithmetic operations: Addition.-Fig. 18 shows the arithmetic unit. In cycle 2 CR supplies the addition order to an operation code register, and sets the address selector to transfer the numerical word at address A to AR1 in cycle 3, and the next order address in ACC is transferred to SR. In cycle 3 the **sign** of the number transferred from A to AR1 is noted and stored. In cycle 4 CR sets the address selector to address B whereupon the number stored there is transferred to AR2 and its **sign** is also noted and stored. The two numbers are inserted into ACC, Fig. 26, in cycle 5, the number from address B being complemented before insertion if the **signs** of the number were found to be different. CR also sets the address selector to address C. In ACC a 6 is added to each decimal digit of the augend, no carry between digits occurring, and the modified augend is added serially to the addend in the main adder, carry digits being supplied as necessary from the main adder carry circuit. When there is no carry between a pair of decimal digits, the negation output of the main adder carry circuit causes a binary coded ten to be added without carry to the appropriate output digit of the main adder. The result of the addition is recirculated. In cycle 6 various control and checking functions are performed, and in cycle 7 the result is moved out of ACC and is checked before being supplied to address C in cycle 8. The machine will then step to cycle 1 or cycle 2 of the next order. Subtraction.-This operation is the same as addition except that in minor cycle 5, either A or B is complemented on being fed into ACC according to their **signs**. Multiplication.-In this operation the number at A is multiplied by the number at B and the high order product is transferred to C whilst the low order product is stored in LOP. Cycle 2 is similar to the addition process. The multiplicand is transferred from address A into ACC in cycle 3 and in cycle 4 the multiplier is transferred from B into LOP. In cycle 5, one, two, four and seven times the multiplicand are generated as follows. The multiplicand is applied to AR1 and added to itself in ACC; twice the multiplicand thus generated is applied to AR4, and twice the multiplicand an

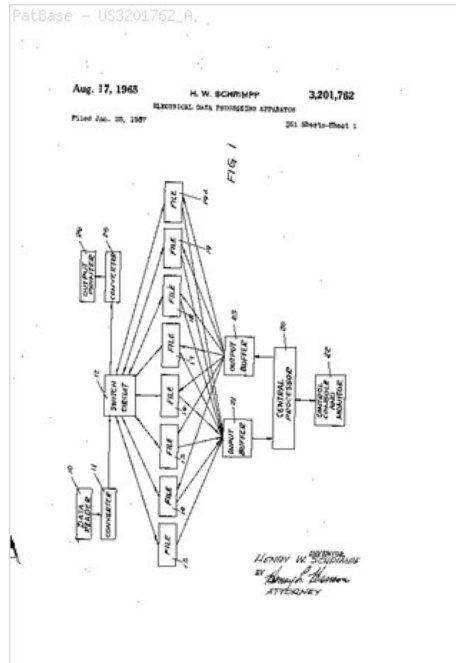
Classifications:

International (IPC 8-9): G06F15/00 G06F15/78 (Advanced/Invention)

CPC: G06F15/00 G06F15/78

European: 42M37G2D3 G06F15/00 G06F15/78

US: 708/670 708/673 710/21



Family:

Publication number	Publication date	Application number	Application date
GB886421 A	19620103	GB19580002437	19580124
US3201762 A	19650817	US19570636256	19570125

Priority:

US19570636256 19570125

Assignee(s): (std): HONEYWELL INC ; HONEYWELL REGULATOR CO

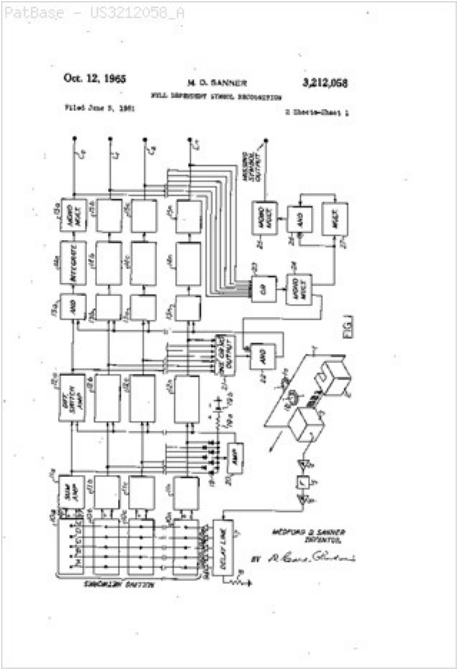
Assignee(s): MINNEAPOLIS HONEYWELL REGULATOR COMPANY

Inventor(s): (std): SCHRIMPF HENRY W

Title: Null dependent symbol recognition

Abstract: Source: GB973429A 973,429. Automatic character reading. SPERRY RAND CORPORATION. May 28, 1962 [June 5,1961 No. 20421/62. Heading G4R. In an automatic character reader characters are sensed to produce a characteristic waveform which is sampled e.g. in a tapped delay line 7, Fig. 1, and the samples applied in parallel to correlation circuits 10a-10n designed so that positive and negative peaks of the waveform are interconnected through resistors so as to produce a balance or null condition when the corresponding character waveform is applied. The interconnections are made twice as shown in Fig. 3 for the "0" wave, Fig. 2C, one set being connected through diodes 50-61 to a positive lead 46 and the other through diodes 64-75 to a negative lead 47. Any out-of-balance will produce a non-recognition signal. In addition the tapping C, which at the instant the character is properly registered, should be at zero potential is connected through resistors 51, 65 and diodes 52 and 66 to the two output leads. An appropriate characteristic waveform produces a null output on both leads, or at least a minimum signal. The signals on each pair of leads are combined in an amplifier 11a-11n and applied as a positive signal to a comparator. The other input comes from a variable gain amplifier 20 connected via diodes 19 to each output, the diodes being biased by a battery so that the signal nearest to zero passes to the amplifier 20. One of the comparators 12a-12n produces an output which identifies the character. If more than one output is produced a circuit 21 responds to pass a signal to gate 22 which normally applies an enabling signal to gates 13a-13n. The signal from unit 21 closes these gates and blocks the output. If the gates are open the signal identifying the character is applied to a delay 14a-14n device comprising an integrator. these cause short spurious pulses to be ignored. When the output of one of the units 14a-14n reaches a certain level a mono-stable unit 15a-15n is set to give an output on one of the final output leads Lo-Ln. If there is already an output on one of these leads circuit 23 causes the gating signal from gate 22 to be blocked. Another circuit responds if a character identifying signal does not appear at the correct time in a succession of signals to indicate that a character has passed unrecognised.

Classifications:
International (IPC 8-9): G06K9/00 (Advanced/Invention)
International (IPC 1-7): G06K9/12 G06K9/13
CPC: G06K9/186
European: G06K9/18M
US: 382/139 382/182 382/207 382/320



Family:

Publication number	Publication date	Application number	Application date
BE618477 A1	19621214	BE19620618477	19620604
CH414220 A	19660531	CH19620006743	19620602
DE1235047 B	19670223	DE1962S079634	19620526
FR1333123 A	19630726	FR19620899633	19620604
GB973429 A	19641028	GB19620020421	19620528
NL279259 A	00000000		00000000
US3212058 A	19651012	US19610114784	19610605

Priority:
US19610114784 19610605 FR19620899633 19620604
Assignee(s): (std): SPERRY RAND CORP
Inventor(s): (std): MEDFORD DUANE SANNER ; SANNER MEDFORD D ; SANNER MEDFORD DUANE
Inventor(s): DUANE SANNER MEDFORD

Title: Method and apparatus for controlling a line casting machine

Abstract: Source: GB1127183A 1,127,183. Type - bar - making machines. LINOTYPE G.m.b.H. 28 Sept., 1965 [29 Sept., 1964], No. 41147/65. Heading B6W. Controlling by record-strip; assembling matrices. -For controlling a machine from a tape, the end-of-line signals in which are not suitable for the particular composing operation in progress, means is provided for stopping the sensing of the tape a preselected distance from the end of the line, means to actuate the sensing of the rest of the line by hand, or manually to initiate a stepwise scanning thereof, and means to indicate when the line is justifiable. Electric circuitry is provided whereby a space signal or a hyphen signal is transformed into an end-ofline signal when the line is justifiable, and whereby an end-of-line signal is transformed into a space signal when the line is not justifiable. Means is also provided to present a visual representation of a predetermined number of code signals after a particular sensed signal, or such a representation of said signals in plain language.

Classifications:

International (IPC 8-9): B41B27/00 (Advanced/Invention);

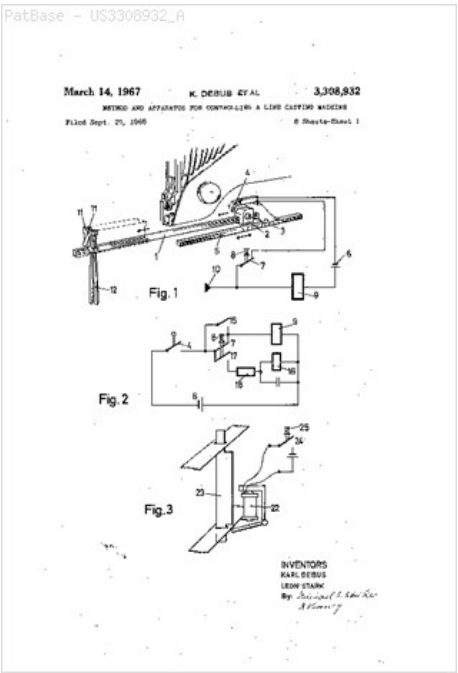
B41B27/00 (Core/Invention)

International (IPC 1-7): B41B27/32 B41B7/16

CPC: B41B27/00

European: B41B27/00

US: 199/18 199/25 400/15 400/2 400/7 400/80



Family:

Publication number	Publication date	Application number	Application date
CH458399 A	19680630	CH19650013361	19650928
DE1436431 A1	19690508	DE19641436431	19640929
DE1436431 B2	19710318	DE19641436431	19640929
GB1127183 A	19680911	GB19650041147	19650928
NL6512641 A	19660330	NL19650012641	19650929
SE322240 B	19700406	SE19650012417	19650924
US3308932 A	19670314	US19650490492	19650927

Priority:

DE1964L048888 19640929

Assignee(s): (std): LINOTYPE G M B H ; LINOTYPE GES MIT BESCHRAENKTER ; LINOTYPE GMBH

Assignee(s): LINOTYPE GES MIT BESCHRAENKTER HAFTUNG ; LINOTYPE GESELLSCHAFT MIT BESCHRAENKTER HAFTUNG

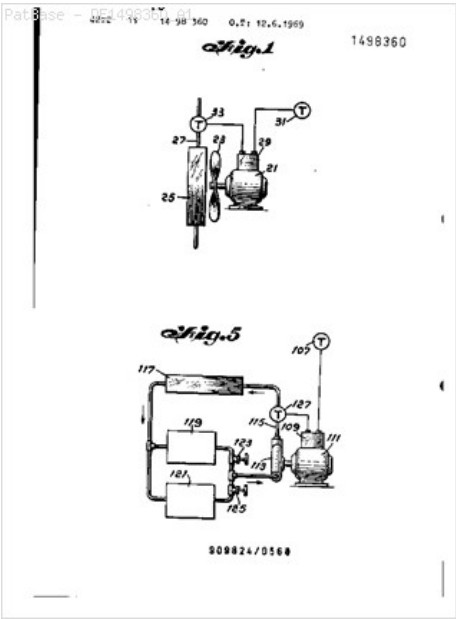
Inventor(s): (std): DEBUS K ; DEBUS KARL ; KARL DEBUS ; LEON STARCK ; STARCK L ; STARCK LEON

Title: REGELUNGSEINRICHTUNG ZUR ERZIELUNG EINES BESTIMMTEN MISCHUNGSVERHAELTNISSES VON FESTEN,FLUESSIGEN UND/ODER GASFOERMIGEN STOFFEN IN EINEM MIT ELEKTROMOTORISCHEN FOERDEREINRICHTUNGEN VERSEHENEN SYSTEM CONTROL DEVICE FOR ACHIEVING A SPECIFIC MISCHUNGSVERHAELTNISSES of solid, liquid AND / OR houses on gaseous SUBSTANCES IN AN ELECTRIC MOTOR BEARING SYSTEM FOERDEREINRICHTUNGEN (Machine translation)

Abstract: Source: DE1498360A1 (Claim 1) Patentansprueche Regelungseinrichtung zur Erzielung eines bestimmten Mischungsverhaeltnisses von festen, fluessigen und/oder gasfoermigen Stossen in einem mit elektromotorischen Foerdereinrichtungen versehenen Sy stem, dadurch gekennzeichnet, dass die Geschwindigkeiten bzw, die Drehzahlen der elektromotorischen Foerdereinrichtungen (z.B.

Machine translation: (claim 1) claims control device to achieve a certain mixing ratios haeltnisses in solid, liquid and / or gaseous poking one with electromotive Foerdereinrichtungen bearing Sy stem, characterized in that the speeds or the speed of the electric motor Foerdereinrichtungen (eg

Classifications:
International (IPC 8-9): F24D19/10 G05D16/20 G05D23/24 H02P25/10 (Advanced/Invention); F24D19/00 G05D16/20 G05D23/20 H02P25/02 (Core/Invention)
International (IPC 1-7): B01J4/00 G05B11/14
CPC: F24D19/1012 G05D23/241 F24D19/1084 G05D16/2073 H02P25/10 Y02B30/745 F24F13/04
European: F24D19/10 F24D19/10D G05D16/20D4B G05D23/24C1 H02P25/10



Family:

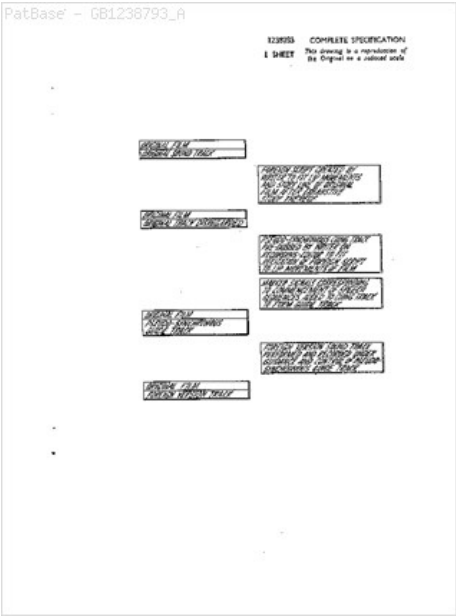
Publication number	Publication date	Application number	Application date
BE672062 A	19660509		19651109
DE1498360 A1	19690612	DE19651498360	19651108
NL6514501 A	19660510	NL19650014501	19651109

Priority:
US19640409869 19641109
Assignee(s): (std): INT STANDARD ELECTRIC CORP
Assignee(s): INTERNATIONAL STANDARD ELECTRIC CORP
Inventor(s): (std): JOSEPH PARRO JAMES ; MILES HASSENPLUG WALTER ; WISMER MILLER JUN SAMUEL
Inventor(s): WISMER MILLER JUN

Title: Dubbing sound-tracks.

Abstract: Source: GB1238793A 1,238,793. Dubbing sound-tracks. **SIGN** POST PRODUCTIONS Ltd. 24 Jan., 1969 [24 Jan., 1968], No. 4293/69. Heading G5R. A first sound-track is replaced by a second track having a new text synchronous with the first, e.g. in dubbing a foreign-**language** track on to a cinematograph film, by a process similar to that described in Specification 931,830 but extended in that the record which guides the artist recording the second track carries, instead of the first sound-track, a recording of the new text made, e.g. by its author, in synchronism with the first track. The synchronous advance of the guide record and the second track during the recording of the second track is initiated by a voice-operated relay, or other means under the control of the artist.

Classifications:
International (IPC 8-9): G03B15/08 (Advanced/Invention)
International (IPC 1-7): G03B15/08 G03B31/00
CPC: G03B15/08
European: 42G19 G03B15/08



Family:

Publication number	Publication date	Application number	Application date
FR2000690 A1	19690912	FR19690001478	19690124
GB1238793 A	19710707		19690124

Priority:

US19680700019 19680124

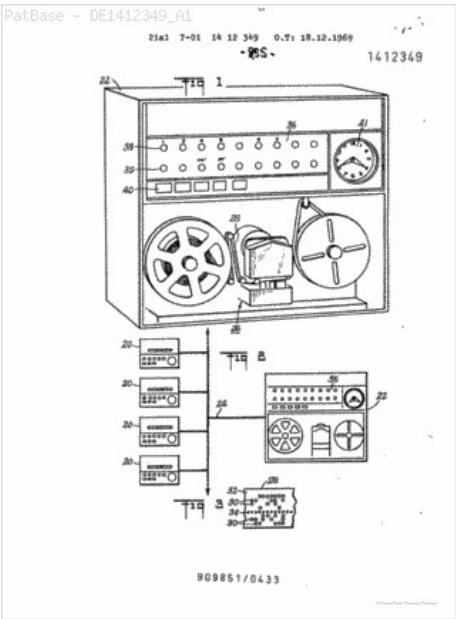
Assignee(s): (std): SIGN POST PRODUCTIONS

Title: System und Einrichtung zum automatischen Sammeln von Informationen System and device for automatically collecting information (Machine translation)

Abstract: Source: DE1412349A1 (Claim 1) 2 A T L N T A N 8 P R Ue C H E 1.

Machine translation: (Claim 1) 2 AT LN TA N 8 PR Ue first CHE

Classifications:
International (IPC 8-9): G06K17/00 G06Q10/00 (Advanced/Invention)
CPC: G06K17/00 G06Q10/087
European: G06F17/60C4 G06K17/00 G06Q10/087 G06Q10/08E



Family:

Publication number	Publication date	Application number	Application date
DE1412349 A1	19691218	DE19601412349	19601222

Priority:

DE1960G031399 19601222

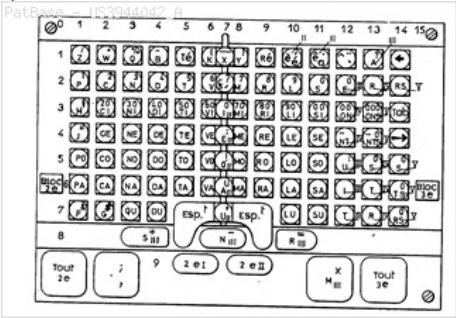
Assignee(s): (std): CONTROL DATA CORP
Inventor(s): (std): CRAIG REYNOLDS JUN ANDREW ; FRANCIS CARRAGAN JOHN ; JOSEPH YAGUSIC GEORGE
Inventor(s): CRAIG REYNOLDS JUN

Title: Syllabic typewriters and similar machines

Abstract: Source: US3944042A A syllabic keyboard and the devices through which its keys control different mechanisms and/or apparatus, for example: printers and/or other recording systems. The material structure of the keyboard, these devices and their arrangements have made possible different layouts of syllabic keyboards for different **languages** in which certain keys each control simultaneously up to five characters plus a spacing. Several character keys and spacing keys may be depressed simultaneously.

Classifications:

International (IPC 8-9): B41J19/58 B41J25/24 B41J3/51
B41J7/90 (Advanced/Invention);
B41J19/34 B41J25/00 B41J3/44 B41J7/00 (Core/Invention)
International (IPC 1-7): B41J1/00 B41J11/14 B41J19/00 B41J19/58 B41J25/24
B41J3/00 B41J3/02 B41J3/26 B41J3/51 B41J5/00 B41J5/10 B41J7/22 B41J7/90
CPC: B41J7/90 B41J19/58 B41J25/24 B41J3/51
European: B41J19/58 B41J25/24 B41J3/51 B41J7/90
US: 197/7 197/72 400/101 400/109 400/215.4 400/255 400/258 400/261 400/303
400/322 400/324 400/330 400/373 400/445 400/478 400/479 400/484 400/486 400/488
400/99



Family:

Publication number	Publication date	Application number	Application date
DE2229492 A1	19721228	DE19722229492	19720616
DE2265423 C2	19840517	DE19722265423	19720616
FR2142601 A1	19730202	FR19710022540	19710621
FR2142601 B1	19730525	FR19710022540	19710621
GB1393548 A	19750507	GB19720028546	19720619
GB1393549 A	19750507	GB19740048845	19720619
GB1393550 A	19750507	GB19740048846	19720619
IT958447 A	19731020	IT19720051002	19720619
US3944042 A	19760316	US19740502188	19740830
US3944043 A	19760316	US19740502190	19740830
US3990561 A	19761109	US19740502192	19740830
US4010837 A	19770308	US19740502184	19740830

Priority:
FR19710022540 19710621 FR19710022450 19710621 DE19722229492 19720616
US19740502188 19740830 US19740502190 19740830 US19720259051 19720602
US19740502192 19740830 US19740502184 19740830

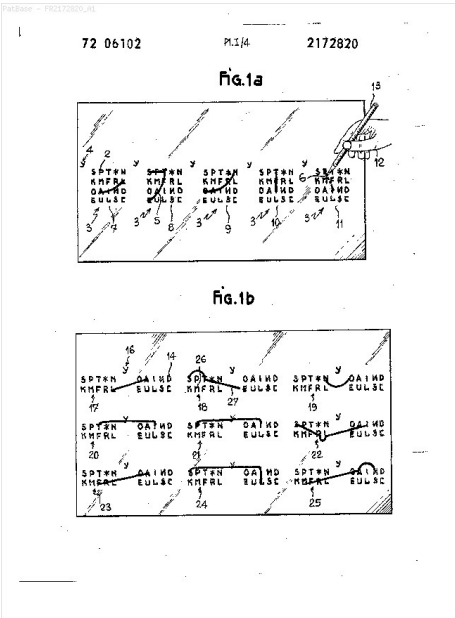
Assignee(s): (std): GREMILLET J ; GREMILLET JEAN
Assignee(s): GREMILLET JEAN PARIS FR
Inventor(s): (std): GREMILLET JEAN
Inventor(s): GREMILLET JEAN PARIS FR

Title: VERFAHREN UND VORRICHTUNG ZUR STENOGRAPHISCHEN AUFZEICHNUNG

Abstract: Source: FR2172820A (Claim 1) 1.- Materiel pour 11 enregistrement en clair de la parole sur un support, par exemple une feuille de papier, - chaque syllabe etant conventionnellement representee par un groupe de **signes**, tous prelevés dans un meme ensemble de re reference, par exemple des caracteres alphabetiques prelevés dans un alphabet, - ledit ensemble de reference etant materialise par un diagram me compose de symboles, notamment un alphabet dont les carac teres alphabetiques sont disposes en lignes et en colonnes, - ledit materiel etant caracterise en ce que ledit diagramme est repete en paves adjacents au sein d'un systeme suscepti ble d'etre materiellement associe au support.

Machine translation: (Claim 1) 1 11.- Equipment for recording clear speech on a support, such as a sheet of paper - each syllable being conventionally represented by a group of **signs**, all taken in the same set of reference re, example of alphabetic characters in an alphabet TAKEN - said set of reference being materialized by a diagram I made of symbols, including an alphabet whose character alphabetic teres are arranged in rows and columns - the equipment being characterized in that said pattern is repeated in adjacent blocks in a system suspection ble of being at tangibly associated support.

Classifications:
International (IPC 8-9): B43L13/00 G09B11/08 G09B21/00 (Advanced/Invention); B43L13/00 G09B11/00 G09B21/00 (Core/Invention)
International (IPC 1-7): B42D B43L13/00 G09B11/00 G09B21/00
CPC: G09B11/08
European: G09B11/08



Family:

Publication number	Publication date	Application number	Application date
BE795420 A1	19730529	BE19730795420	19730214
CA997138 A1	19760921	CA19730164315	19730221
DE2308396 A1	19730913	DE19732308396	19730221
FR2172820 A1	19731005	FR19720006102	19720223
FR2172820 B1	19760116	FR19720006102	19720223

Priority:

FR19720006102 19720223

Assignee(s): (std): GRANDJEAN STENOTYPE ; GRANDJEAN STENOTYPE FR ; STENOTYPE ; STENOTYPE GRANDJEAN ; STENOTYPE GRANDJEAN S A ; STENOTYPE GRANDJEAN SA ; GRANDJEAN

Assignee(s): GRANDJEAN FRANCOISE ; BUCHACA JOSEPH

Inventor(s): (std): BUCHACA J ; BUCHACA JOSEPH ; GRANDJEAN F M C ; GRANDJEAN FRANCOISE ; GRANDJEAN FRANCOISE MARGUERITE

Inventor(s): J BUCHACA ; CECILE GRANDJEAN FRANCOISE MARGUERITE ; F M C GRANDJEAN

Title: Larry algorithmic tongue (Machine translation)

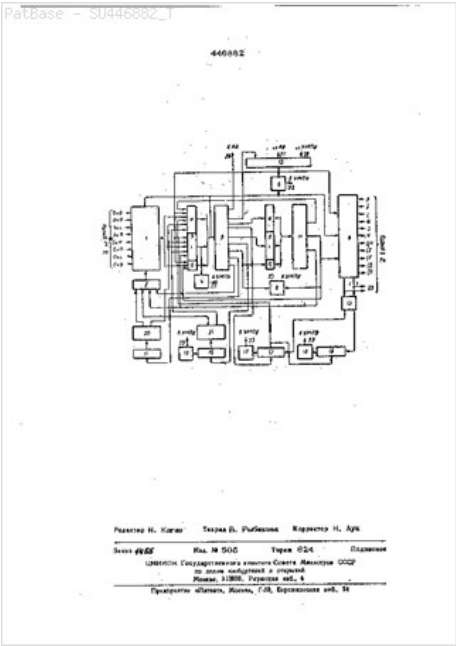
Abstract: Source: SU446882T I Invention relates to the field of archives Avktury digital computers pretssnaachennyyh al zatsach decision with incomplete information. known interpreters algorithmic SOON tongue containing random access memory (RUPD), address register, the output of which is connected to the address input of the RAM: 1 Register the number of RAM, separate inputs and outputs which, with response tyvuyushie first address portion of the prianachnoy and a second address parts are connected to the respective outputs and inputs of RAM; zero indicator connected to the output of the first address register number of the RAM; decoder, and comparison circuitry main switch polnorazr projectile loader whose output is connected to the data output of the interpreter and address output connected to the input of the address register, inputs connected to separate corresponding first address portion and a second portion priznachnoy adrenoy portion corresponding to the number of RAM output rgistra. disadvantage of the known device is low speed in solving problems with incomplete information. proposed apparatus differs from the prior art in that it comprises: an intermediate register whose inputs are isolated, corresponding to the first address portion and a second portion priznachnoy address portion, connected to respective outputs of the main switch, moreover, the address input of the second intermediate portion connected to the output register the first address of the main switch; Separate auxiliary switch inputs and the outputs of which corresponding to the first address portion and a second portion priznachnoy address portion are respectively connected to separate outputs of the intermediate register and the register number of separate input OSsy, moreover, the auxiliary switch outputs corresponding prianachnoy chasvi, coupled to the input decoder outputs corresponding to the second address part, connected to the input of the first address register and the input of the number of RAM address register, whose input is also connected to the output of the first address part of the auxiliary switch; comparing circuit characteristics, which are connected to vhotsy prienachnym portions osnovnbg6 and auxiliary com commutators, and the output is connected to the control output of the interpreter; Register number polnorazr projectile loader output is connected to the inputs of decoder circuit and comparing the number of register RAM; and the output of the register number is connected to the input of the main switch and the data input of the interpreter; circuit depth brand whose inputs are connected to the outputs of the decoder; mark counter the relative depth an input coupled to the first output circuit of depth marks, and an output connected to a zero indicator; absolute depth mark counter having an input connected to the output of the second address of the main switch and the second output of the circuit of depth marks, and the first counter output is connected to the input of the torus Indrasena zero counter output and a second input coupled to the counter and the relative depth of the mark with the input part to the second address register the number of RAM; viewing register having an input coupled to the outputs of the primary address commutator pieces, and the first output register is connected to a zero indicator and a second output register through the circuit connected to the input view of the address register with the address and the register number of E input of RAM; collectively address register having an input connected to the output nen first address of the main switch, and exit through the circuit connected to the input address register address and address inputs of register RAM number. This allows to increase the speed in solving problems with incomplete information. For a description of the interpreter, consider the alphabet and syntactic description DekAS tongue. Alphabet consists of **signs, sign::** bukvaU | digit (**sign** punktuatsiIch. Letters are uppercase letters and Russian, as well as space. Punctuation:: <l UolciD | Cilil - l dictionary tongue DekAS consists of brands. Stamp); i constant | March ka punctuation) constant; I BCC by constant truth I bshs):: 1 letter j letter I by BCC BCC) I / BCC by Jtsh, constant truth:: N / Y punctuation mark) -. 1C | E | C1; | For multiplicity metalinguistic determining the number will not be provided. Alphanumeric constants (BCC) Z P F) R x in the recording on the tongue, the structures of which are described below, may be of particular importance, therefore, in a semantic **sense**, they are isolated and referred to the operation names. Brand Z is an operation indication, and a variable used to denote the unknown. Brand D is primitive, ie, the function, the calculation of which is provided in a computer built on the basis of the proposed interpreter. Marc J designated functional dependence, the program computing which was a programmer rfa zke DekAS and be introduced to the library machine. Mark R is used when writing functional, channels. Constitute the basis of grammar together. Is a finite set of nonempty sestvo consistently recorded marks, including constants can not be encountered sequentially. Collectively referred to as forms; meytosoboe value as soon as they are permitted by the **language** of the note E. At the same time, the aggregate is not propelling shapes may be formed at intermediate stages of the interpretation. Forms are formed in accordance with the following determinations of. form constant:: | form), the form of the normal form j j conditional form / conditional form:: (forma.forma form)} | f form):: abnormally form (form) If a and b - together, the set of a, b naz1vaets combination of a and b in the conditional form Vidago. (A {s} p) (1) and is referred to as an alternative to the truth. J, alternativnoy pozhnoeti, ---, I-UJ-Ir l. - P - predicate conditions. For important. interpretation of the term is the depth of the brand together. Rights depths different from the round brackets is the number of interchain aznosti indoor and outdoor round Stapling right of it. Rights depth mark for the case is open or closed parenthesis equal to the depth imaginary complementarity constants introduced directly tively right or left of this bracket, respectively. Form E is called decomposable if it can be written as e, is) - a form of non-western Here comprising ex-called i-depth about tyh ABOUT used canonical component, and M (Q., C fishing positive number called pure scrap canonical component. If n zap tyh depth, M (t-) and 1. vaets on nedokompoziruemoy form. define the operation of productions is yuschuyus base when performing transformations on the tongue DekAS. Suppose we have a set of e and b, and J - in | Ev j ti ie the set Q consists of a sequence of 6 sets, j3, while in-and (or) BP may be empty. on s and e Then replace operation is called substitution place three centuries. example, if e:: A, B, C, K and B::; B) b (D). poslepodstanoaki then j (j, instead of 31 in the collection A, BH), K. Forms as defined above you-h, are permitted by the constructs of the tongue DekAS, Semantic structures through which the program is recorded on this zylke following (3. indene unknown: tifikator Y) functional expression Y (f, identifier) I generalized functional yrazhenif (R nedekompoziruema form) functional address expression;; (F, identifier, address word) functional formulation;; functional expression argumentalna sequence) Xfunktionalna the addressing the phrase "functional address expression) of the argument sequence Y). rbobschenna funktsionapna formulation; (generalized functional expression of the argument sequence) sequence of argument):: j the argument empty sequence, the argument, the argument from the primitive expression:: (/ identifier Y) primitive program, (ti, SUB) W device name, / name of the array primitive first order: (a primitive expression / value argument) primitive second-order (/ primitive expression argument value / value of the argument N) identifier):: nedokompoziruema Pharma argument:: nedokompoziruma form the argument:: nedokompoziruie 1a forma5 library element):: identifier reference / threshold condition W Address word used to define the start address and the reference threshold conditions when the library element is placed in the main memory in the process of interpretation. Note that idenEifikator argument, the argument value syntaks Nedokompoziruema cally identical form of the same species may be a one or the other, or a third, depending on the place where it is located on the tongue DekAS record. For example, in the functional formulation ((F, name1), (Z, A), 37) unknown (2 A) is the argument that there are 37, and in the formulation of funktsionapnoy , ((F, name2, p, (Z, A)) is an unknown as is anacheniam argument. Brand p is in one case with a mark operation, and in the other jaiarymentom. With pomsshshy stand operation is performed synthesis, is to guide the foundation in December realizadii tongue speakers. Let e be a sequence of argument, and at the appropriate functional link wording. Then we can construct a form 9/1 consisting of shape about where in the process, viewing it from right to left each unknown than iden-| Cator coincides at least one argument and is replaced with the value of the first argument. Build operation forms 9/6 is called synthetic manner. For example, if 6. Have A, 37 B, ((R K M 5), B {2., AK), 24 A and J is equal to (CZ, A) {cz, B} 3 (Z, n)}, then j / e is equal to (37 {af, K); M, 5} (z, ri interpreter random access memory organized by the associative principle;;, this principle means that the word in memory contains dopolnitelnuyu.adresnyuyu infoomatsiyu constructed in accordance with the stored in it smyulovoy information. Specifying an address word, the meaning of which is associated the word is called associative bond (AU).7 Structure g associative memory (AP provides for the division of each word into four parts: the left, priznachnyuy, center and right. central portion word used for storing semantic-hand information, ie, the code representing the corresponding mark. Priznachna part is used to indicate some of the distinguishing features of marks stored in the central part of the word. These features of M relates type brands: number BCC punctuation. Left portion of the word has dimension address contains an address word, the central portion of which holds the mark, disposed in a form not directly to the left of this. This communication method of one word to another is called an associative bond 1st order iACL). Following AC1 is performed view I form right to left. associative memory is divided into lists. The list is a sequence of 8 I without a finite number of repetitions of the word. Every word, except the last, the left side contains the address of the next word. On the last word contains the left side... In interpreter are used two types of lists: lists and logical list of free storage. In logical list, e (in those cases. when there is no ambiguity, and we; for multiplicity will omit the word logical) but words containing semantic information, there are two other words - a pointer to the beginning and end of the indicated exponent. Lists are denoted by capital letters, and the pointer and a pointer to the beginning of the end - a capital letter corresponding with index or 00. the left side of the start pointer record-vaets address of the first word list, and the left end of the pointer - the address of the last word list. list is read empty if, central and right-hand sides of his words contain no information. Empty list following distinguished from O - list, which is not a-, keeps words. At any given time in the system there is a list of free storage t. List p combines all free associative memory. This list is empty. Before the operation all the words are in the AP down list p. To construct logical lists the required capacity is taken from the AP list p releasably in the process container is returned back to the list. In the list of F there is only a pointer to the start-f. first part then there is the word, when its central portion stores punctuation mark. It has a dimension address. This communication method is called an associative bond 2nd-order (AC2). AC2 communication allow viewing form in the sequence taking into account the structure of the mold. For a description of the algorithm, we introduce the term AC2 pair punctuation mark depth d in the form of e, If 3: is open. curly bracket pair has its own right (ie, used to lykaysha s) placed on the left In from open parenthesis depth d. If 5t has closed brace, it has a pair of brand, located neposretstvvenno left of the rightmost left open brace depth cd. If g is a spare one or open parenthesis, its vapor is itself left zap one closed parenthesis, open or closed braces braces at depth d to the right of D. If there are 3 closed parenthesis, its vapor es1 itself the right to open a circular tie bracket on the left and a depth d. If I e contains spare tye About ie depth is tsekompoziruemoy, then she left them referred NIH initial point instruction centuries.. Let the form available in the list of e S ie S set AC1. Then writing, ie, the right way to fill the parts of words that carry the brand punctuation is as follows. All slbva S, bearing marks paragraph ations have on the right side corresponding atsrjs japi. In addition, the right part of the start pointer J contains the address of the starting point instruction, provided that she walks, otherwise the right side is zero. If there are spare tye e depth, then the right side of eating wa carrying the right-most of them contained e S e ". Application AC2 allows easy handling to the desired component of the canonical form, as well as to any component of the canonical form of pattern being its subforms. Here is an example of the formula indicating AC2, s. (A / (38-3, (the first) 73 / (second) if) VB) f / t-UL II to designate parts of a word is used operator notation. Let SB have the address of the word. Then his left part designated by L j central - Cn, right - Rt, j These designations are operator. Perhaps the use of composite operators and their powers. For example, an entry with L Cjj means the contents of the central part of the word whose address is contained in the left part of the word thereof present at, to. If M is O - list, n. Priznachna, left and right part of the word occupy one memory cell, and the central portion is stored in the next address cell. We now consider the interpretation algorithm au, which is a basis to estimate shapes using synthesis. Its shape estimation is referred to as conversion in accordance with the available context information, consisting of a plurality of programs and initial data reschenii employed for this task. Evaluation is performed by scanning in the forms e spiske.L. from right to left and the gradual formation of its value in the list L.L. The value is obtained by shape, replace it in the incoming functional formulas) fovok generalized functional primitives iand **language** and values. Functional value formulS. is the result of synthesis bibliorovki technoy form identifier that matches the identifier of the functional

expression of the form C and its arguments acid sequence (if the argument sequence C is absent, as the / library received form). If the library does not contain the required library element, the value of C is a form of C. The generalized functional formulation is the result of synthesis netsokompoziruemy forms, extending into its generalization functional expression, and sequence of argument. From a functional formulation may be associated a rule, called the threshold condition. It is recorded in the form of conditional form, which always takes the value V or N. The threshold condition is evaluated based on the values of the arguments in SRI functional formulation. If the value of the threshold conditions have, the assessment of functional formulation is performed, otherwise it remains unchanged. The threshold condition and link functional formulation stored in the library For umenscheni number of calls to external content memory is used special logic list R. Initially P is O-list. When in the process of evaluation forms e is encountered first functional expression, such as V, then the treatment is performed to the library and look for the feature, which coincides with itsifikator | identifier; V th Nsl naruzhivaets an element b, it is attached to the list P vice JY F P gtse Jy - itsifikator functional expression V, D, link, - the threshold condition. If no library ke threshold condition, then (3) instead of the recorded Y R Also, functional expression V is converted to the targeted expression of a functional, in which the address word E consists of two parts: a resom is a word, storing the most present right brand in Yar same, but P, in the absence of the element in the library with its constituents down list to P element is attached, t and address terms in the evaluation process when the form e chayuts subsequent functional expression, a list P is viewed sequentially, in order to find out whether the identifier V coincides with the ideal tifikatorom one of the elements to perk direct P If this match happened, then V is converted into a functional address expression, which address-word indicates the shape and Pp. If found item list has the form F (4), the set I Oh, If the search identifier in the list P okazals unsuccessful, the proi vodits appeal to the library. Thus, the machine accesses the library only once for each name in the functional expression Consider the algorithm determining the value of the primitive. Prednaz nacheniy primitives for performing elementary operator radios in the car. In this **sense**, we can draw an analogy between primitives and commands in mainframe list of primitives specific machine, built on the basis proposed by the interpreter, it is determined by the device firmware control, as well. as the teams mainframe determined its PIPE device. Can be called a master list of primitives executed ing arithmetic, ratios (greater than, equal to), logical operations (disjunction k6t yunktsia1; negative flickering), etc., as well as to doiolnitelnye primitives spreading programming capabilities in a **language** DekAS. With Single: hdyim primitive in the car is associated a rule, called the threshold condition. Once a primitive is placed last in the list of M, manufactured analysis values of its arguments in accordance with the threshold condition is satisfied if the threshold condition, then the primitive value is determined, which is attached to the end of the list M and the primitive is removed from the list. If the threshold condition is not satisfied, then the list of primitive M remains unchanged. For example, the threshold condition ADDITION primitive is that both his argument number A, and the value is the sum of the values primitiva his arguments. Here is another example. Entity which performs the konyunktatsiyu two variables has the form (c, d), a, a), and the method of its evaluation is as follows. The threshold condition is primitive, that value - or 9 and I are constants of the truth. IF Etruscan condition is satisfied, the value depends on the primitive and d as follows. IF 31 E and J, have a constant truth, the value of the primitive power --- J-.A Eslp4. or. estM, the value priitiiva power A / If "-1 h 2 is 2 The value of the primitive ootvetstvenno. Algorithm for determining the value of primiiva podprogra; algoritma we different from other primiiiov determine the values that use information for its execution, stored in the list M nedotatochno. The list M this primitive adaats external ustroyva name, from which must be entered podprm amma, and the name of the array, Appropriation Goes this routine. Once primitive podprogramy placed at the end of the list M, as described Subprogramme external disorders and naimeyoyaniyu array vvoits in the car and placed in the list of I. Then view transmitted from the write off L to list Q. During promotra list Q are performed the same as Procedure, that when viewing the list L, This is performed assessment of functional formulations primitives, etc. Thus, at the end of a list of O at the end of the list M value of a subroutine is placed. Conditional form of type (1) as follows atsenivaets If the value P is H, then (1) is equivalent to the value aentno b; if jfc --. P value is V, then (1) the meaning and priimaesh, if the value of P is not a constant truth, the form (1) remains unchanged. Consider the sequence of action in assessing tions (1). If you are viewing the list L, P, or C | - met closed braces and if the list A1 corresponding value P N, then closed braces is not added to the end. View and continues with the form b. If P is closed YI braces just is not added to the end of M, and proceeds to show the form. In both cases, the aggregate of N) or Y) is removed from the list of M. When the open curly brace is encountered corresponding closed brace for which P jvi, then open curly brace is attached not to the end of the list M, and proceeds to show mark on the left of the open parenthesis (1), ie, an alternative truth is ignored. If the P value is not a constant truth, both forms of alternative conditions are attached to the list of M, but it is necessary to limit the evaluation forms 3N b as both score. alternatives; can cause an infinite loop. Poe-in forms to 3 and b are evaluated only primitives and functional forms of wording remain unchanged. In evaluating nested conditionals. Sun forms whenever lye are encountered circle-open brackets or braces, the interpreter must remember what the alternative in the short conditional form belongs to this brand and whether it is not included in any form like 5, for which the value of B | j is not constant truth. If in the process of interpretation is not enough storage capacity of free storage, ie the list of free storage becomes SI O-list, the address words of their functional expressions in address lists t,, M, P and GI are removed and executed by a special operations scavenger. For the algorithm described in etojro additional square Deats tagging operation point instruction list P separating the identifier and the link. This is the spare is marked each time when selecting a list element R. After completion of a list of P label is quenched. Operations in garbage tick list items P prosmatrivayuts right to left. When an element is encountered with nopomochennoy point instruction, it is removed from P whereby is replenished cnHcoic F.; This algorithm is constructed based on the interpretation of the operations, a sequence which is given by the device firmware and control depends on the interpreted text in a **language** speakers in December. List the basic operations of the algorithm. Determining the value of the f word in this list at another word fo operator formulas F, ie, f. For example, f; 2 oz1 assigned beginning that magnitude **sign** of the word whose address is in the left part of the word, whose address is in the right part of the word whose address f ". With this operation, in particular, is performed viewing form available in the list, ie, 2 Assigning a predetermined value, the words defined by the address of another word and operational formula. For example, means that the central part of the word, whose address is in the left part of the word, is a pointer to the end of the list yuschegos YIDD assigned a central part of the word, whose address is on the equality comparison cheniyu given knowledge of the word, defined with apdecy Apyioio words and operational for /-.ule. For example, ((means comparing the central part again, ainpec nakoditc which the left side of the word, is a pointer yuschegos tn-in, with constant truth N. Calculating the right depth marks in aggregate. Depth can be absolute, relative calculus emoy rightmost mark forms stored in the list, and a relative, relative to a given calculus emoy brand frmry. Deschifratsl punctuation marks, truth constants, such as the number (integer, float), brands and collections operations (2; (P; (D; (R. Identification of the vanishing absolute depth marks the completion of this prosmotpa kononicheskoy components Tse. kompoziruemy form available in the list. appl is, for example, the CPU opretseleni completion view links placed in the list of R.. Identification of vanishing with respect to the depth of the brand you have finished viewing this netsokompoziruemy shaped pattern being subshape tsrugoy form. appl e with, for example, to determine when viewing argument author of argument sequence. nedokompoziruemyh Comparison of two forms. Is applied, for example, when searching for the sequence of argument in the argument, the identifier part coincides with the unknown. Establishing AC2 punctuation mark after its placement at the end of a logical list. The following transactions relate directly to the operation m above lists. Pressure lyrics to this list box ka. Is used when writing the word list in the store. Delete word ds beginning of this spin ska. Is used when removing words from the list store. Add a word to the end of this spin ska. Is used, for example, when entering och Rednevs brand in the list together with M. Removal end of the list starting with a given brand. Is used, e.g., the late list udadent aggregate M M) formed in the evaluation of conditional forms for cat swarm truth value was constant. To perform this operation, the address is given mark placed immediately to the right of this. In this example, is given the address of the brand, located directly to the right of the closed parenthesis. This operation is discussed in connection with the interpreter. Removal from the list together, which is set for itself left stamp and address stamps, located directly to the right of the rightmost mark. Is used, e.g., to remove from the list of M functional formulation, which is attributed to the left of its value. Scheme interpreter is shown in the drawing, where you received are following designations; 1 - random access memory device No. (RAM), 2 - the address register, the register number 16 RAM, s - zero indicator, main switch, circuit comparison, decoder, comparing circuit features an intermediate register, register of (1rtra, collectively address register, the counter the absolute depth of the brand, the register number, the auxiliary switch circuit of depth brand counter the relative depth of the brand, 17-19 - zero indicators, 20 - scheme addresses 21 - circuit viewing 22 - inputs of the device firmware control (UMPU), 24. 25 - outputs UMPU 27 - Entrance to vyhots in arithmetic unit 28 - the entrance of the device firmware control. Random Access Memory (RAM) 1 is intended for storing programs and Tekkite original data and results zye DekAS rescheni, poluchaeogo in the process of interpretation. RAM upavl a commands from the control of the device firmware (UMPU) without entering the proposed interpreter and team ZPO, 3 {zn, SfBL, LNA is controlled by writing to RAM respectively of the total number (total record), it priznachnoy left or right part, and the team with th -, SRS, - reading from RAM, respectively of the total number, it priznachnoy, left or right side. All blocks interpreter running teams UMPU. Interpreter working with AU which acts as if it is necessary, when calculating the values of primitive and satisfies his letvoreiii rorogovogo conditions, and UMPU under management are performed by all the elementary actions of the interpreter. The toplevel consider the example of the removal operations, combined with the end of the list M, starting with a given brand. This operation is in operational form is recorded in the following way;; - Lfo (1) L... (2) Lmc-. - 2 (3) Lf irLf-(4), br2. (5) - pointer to the end of the list M here: / TP - pointer of the list of free storage, T - intermediate value, which is used for storing the left part of the re giste 9; - The address of the brand, located directly to the right of the rightmost mark removed my e aggregate estab vaets before Opis Vai operation in register 11; - The operator referring to the left of the word. Operation described with expressions of (1) - (5), the following is performed by a sequence of elementary actions of the interpreter. Installation on the address register 2 f-, This email address is stored in UMPU. Reading from RAM 1 signal SI (definition). Transfer the contents of the left side of re giste 3 through 5 switch on the left side of register f 9 Compliance (1) Set the register address 2 W Read from RAM 1 signal (defined delenie.U tu) Transfer the contents of the left side of re giste 3 through 5 to switch Register 2. Transfer content left side re giste 9 through the switch 14 to the left of the register 3. Recording RAM 1 signal zli (you overcrowding -2) Installation on re giste 2 addresses / tli about Transfer the contents of register 11 through a gate circuit in 20 left f 2 E Rvchast register 3 (transfer register is 3). Writing in RAM 1 signal 3 f n b perform (3). Tvypoln Transfer the contents of register 11 through a gate circuit 20 to register 2. Reading WS RAM 1 signal Cnt (definition Gy L Installation on register 2 address in the RAM Recording f 1 signal 3fL (execution / 4 /) Transfer the contents of register 11 through the gate circuit 20 in the register 2. blanking left side of the register 3. Writing to RAM 1 by the signal Zp (performance / 5 /). claims interpreter algorithmic tongue comprising a random access memory (RAM), the address register, whose output is connected to the address input of the RAM, case number RAM, separate entrances and vIhody which corresponding to the first address part, recognized iyuy parts BT6-2 | swarm address part, connected to the respective outputs and inputs O35f;, intsGpsator zero connected to the output of the first part of the address register number RAM deschifrator, comparing circuit and the main switch polnorazr projectile loader whose output is connected to the data output of the interpreter and address output connected to the input of the address register, inputs connected to separate corresponding first address portion and a second portion priznachnoy address portion corresponding to the number of RAM output registers, for t-lichayuschis that in order to improve performance, it comprises an intermediate register which separate inputs corresponding to the first address portion and a second portion priznachnoy address portion, connected to respective outputs of the main switch, moreover, the input of the second address register coupled to the intermediate a first address output of the main switch, an auxiliary switch, the separate inputs and outputs of which are corresponding to the first address, priznachnoy portion and the second portion of the address are respectively connected to separate outputs promezhutochnooo separate input register and the number of RAM registers ra, moreover, auxiliary outputs 19 gatelnih switch corresponding prianachnoy part soetsineny with, WMO Tzom decoder outputs rootvetsvuyuschie second address part, connected to the input of the first part of the address register and the entry number RAM address register having an input connected to the output as the first address of the auxiliary switch comparing circuit characteristics, the inputs of which

are connected to prizmachnym portions kommutatorop basic and auxiliary, and the output coupled to the control output of the interpreter register Numbers projectile loader polnoraar whose output is connected to inputs of decoder circuits and comparing the number of RAM registers and the output connected to the register number main switch and input data input interpreter scheme depth brand whose inputs are connected to the output of the decoder, the relative depth of the brand counter having an input coupled to the first output 20 circuit depth mark, and the output is connected to the indicator zero, counter absolute depth; Bina brand; input connected to the output of the address portion of the main switch and the second output of the circuit of depth marks, and the first counter output is connected to the input of the indicator and the second zero counter output coupled to the input of the counter. relative depth mark and the terminal (second address of the register numbers RAM register viewer input coupled to the output of address parts of the main switch and the first output register is connected to a zero indicator and a second output register through the circuit connected to the input viewing address register and address inputs register number RAM address register sovkupnos-ty, whose input is connected to the output of the first address of the main switch, and the output is connected through the circuit address s.vhodom address register and address inputs of register RAM number. ijaMW IIL

Classifications:

International (IPC 8-9): G06F17/27 (Advanced/Invention);
G06F17/27 (Core/Invention)
International (IPC 1-7): G06F15/20 G06F17/27



Family:

Publication number	Publication date	Application number	Application date
SU446882 T	19741015	SU19721789286	19720525

Priority:

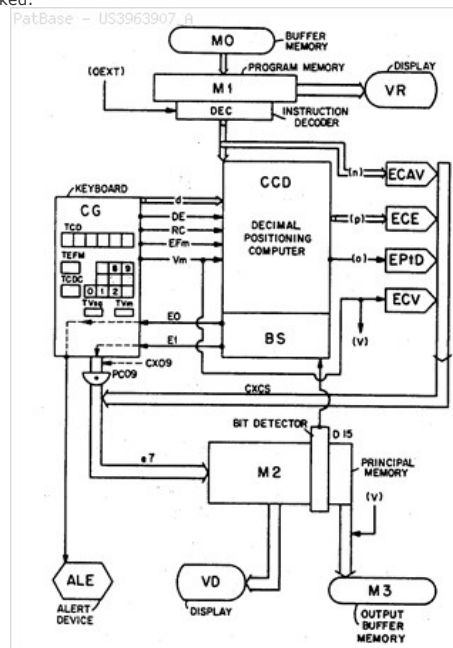
SU19721789286 19720525

Abstract: Source: US3963907A This instantaneous decimal credibility check device enables the operator of a terminal to send out, by means of this terminal, numerical data, the decimal value of which will have been previously checked.

International (IPC 8-9): G06F3/02 G06F3/023 G06F3/048
G06F3/0489 (Advanced/Invention);
G06F3/023 G06F3/048 (Core/Invention)

International (IPC 1-7): G06F11/00 G06F11/04 G06F3/02
CPC: G06F3/0489 G06F3/021

European: G06F3/023A G06F3/02A3 G06F3/0489
US: 235/153B 364/737 708/530



Publication number	Publication date	Application number	Application date
DE2431602 A1	19750130	DE19742431602	19740702
DE2431602 C2	19860918	DE19742431602	19740702
DE2628027 A1	19770127	DE19762628027	19760623
FR2245257 A5	19750418	FR19730024393	19730703
FR2315723 A2	19770121	FR19750019778	19750624
FR2315723 B2	19771202	FR19750019778	19750624
GB1470460 A	19770414	GB19740029474	19740703
GB1550133 A	19790808	GB19760024332	19760611
US3963907 A	19760615	US19740485146	19740702
US4080662 A	19780321	US19760695535	19760614

FR19730024393 19730703 US19740485146 19740702 GB19740029474 19740703
FR19750019778 19750624

Assignee(s): ANVAR FR ; AGENCE NAT VALORISATION RECH ; AGENCE NATIONALE DE VALORISATION DE LA RECHERCHE ; AGENCE NATIONALE DE VALORISATION DE LA RECHERCHE ANVAR ; AGENCE NATIONALE DE VALORISATION DE LA RECHERCHE ANVAR NEUILLY SUR SEINE FRANKREICH ; AGENCE NATIONALE DE VALORISATION DE LA RECHERCHE ANVAR NEUILLY SUR SEINE HAUTS DE SEINE FR

Inventor(s): DURAND VIENNE ROBERT RENE NOIXY LE ROI FR ; DURAND VIENNE ROBERT RENE NOIXY LEROI FRANKREICH ; RENE DURAND VIENNE ROBERT

Title: LABEL READER WITH ROTATABLE TELEVISION SCAN

Abstract: Source: US3902047A A surface containing encoded information bordered by bars where both the bars and the information contrast with a background is **detected** as to orientation and location and the information read by sampling the video scan output of a television camera which is designed to raster scan the image formed therein. The camera may be caused to scan with alternating rasters at an angle, preferably 900, to one another while the orientation of the raster relative thereto is determined. The orientation of the raster scan may be rotated by electronic means, to provide the desired orientation of the raster relative to the information. 14 Claims, 16 Drawing Figures

Classifications:

International (IPC 8-9): G06F3/06 G06K7/015 G06K7/10

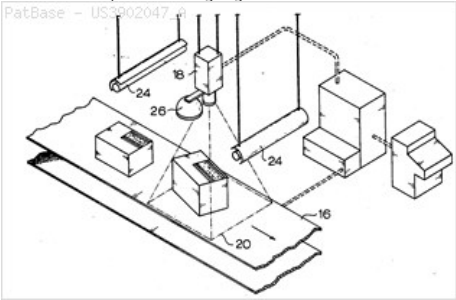
G06K9/32 (Advanced/Invention);
G06K7/01 G06K7/10 (Core/Invention)

International (IPC 1-7): G06F15/24 G06F15/36 G06F15/46 G06F3/06 G06K7/00
G06K7/015 G06K7/10 G06K9/04

CPC: G06K7/10871

European: G06K7/10S9E1

US: 235/471 235/61.11E



Family:

Publication number	Publication date	Application number	Application date
CA1041666 A1	19781031	CA19740206177	19740802
CA1044807 A2	19781219	CA19780302160	19780427
DE2439913 A1	19750313	DE19742439913	19740820
GB1441469 A	19760630	GB19740037523	19740828
JP50082956 A2	19750704	JP19740099041	19740830
US3902047 A	19750826	US19730393552	19730831

Priority:

US19730393552 19730831 CA19740206177 19740802

Assignee(s): (std): FERRANTI PACKARD LTD

Assignee(s): FERRANTI PACKARD LTD TORONTO ONTARIO KANADA ; SONDHI VICKRAM ; TYLER ANTON R ; CASS RALPH S ; DAYCO PRODUCTS CANADA INC ; FERRANTI PACKARD LIMITED

Inventor(s): (std): CASS RALPH S ; SONDHI VICKRAM ; TYLER ANTON R ; TYLER ANTON ROY ; CASS RALPH SHERWILL

Inventor(s): CASS RALPH SHERWILL WESTON

Title: Parametric interpolation of three-dimensional surfaces

Abstract: Source: US3882304A A method is described for defining complex two- and three-dimensional objects with a minimal amount of data. The method employs a "preprocessor" which receives the coordinate values of an ordered set of points on the object and calculates one or more state vectors which concisely define the object. Two numerical control systems are described in which these state vectors are applied to a "mapping" interpolator that controls the servomechanisms of a machine tool. The mapping interpolator controls machine tool motion to generate a three-dimensional surface which not only passes through each of the data points used to describe the object, but which also assumes a smooth shape of minimum strain energy.

Classifications:

International (IPC 8-9): G05B19/4103 G06F17/17 G06F7/38

G06G7/30 (Advanced/Invention);

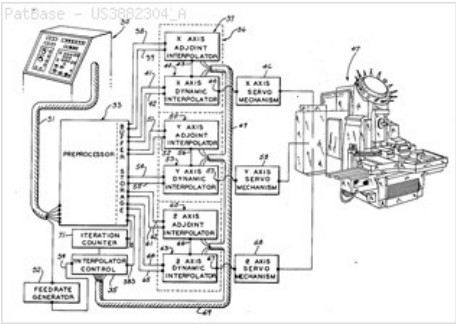
G05B19/41 G06F17/17 G06F7/38 G06G7/00 (Core/Invention)

International (IPC 1-7): G05B19/18 G06F15/20 G06F7/38 G06G7/30

CPC: G05B19/4103 G05B2219/34034 G05B2219/34145 G05B2219/34167 G06F17/17

European: G05B19/4103 G06F17/17 S05B219/34034 S05B219/34145 S05B219/34167

US: 235/151.11 318/569 318/600 700/163 700/189 708/290



Family:

Publication number	Publication date	Application number	Application date
CA1011460 A1	19770531	CA19740191548	19740201
GB1471541 A	19770427	GB19740019101	19740501
GB1471542 A	19770427	GB19750020814	19740501
US3882304 A	19750506	US19730357321	19730504

Priority:

US19730357321 19730504

Assignee(s): (std): ALLEN BRADLEY CO

Assignee(s): ALLEN BRADLEY CO INC ; ALLEN BRADLEY COMPANY ; WALTERS RONNIE G

Inventor(s): (std): WALTERS RONNIE G

Title: Alphabetic character word upper/lower case print convention apparatus and method

Abstract: Source: US4003025A The print convention apparatus and method disclosed herein effects a decision making process with respect to a determination as to whether an alphabetic character field output from an optical character reader (OCR) is related to the OCR scan of an upper case or a lower case inscription on the document scanned. The alphabetic character field (e.g., a word) is comprised of one or a series of alphabetic characters which represent the OCR's interpretation of characters printed on the scanned document. Each word output by the OCR corresponds to a field (i.e., word) of characters imprinted on the scanned document. The electrical signals representative of the upper and lower case alphabetic characters and rejects including conflicts outputted from the OCR are applied to a character occurrence probability storage apparatus which contains precomputed empirical probabilities therein that: (1) a given character recognition is the result of the scan of an upper case character; and (2) a given character recognition is the result of the scan of a lower case character. In addition, the storage apparatus includes probability values for character conflicts and rejects. As the series of alphabetic character signals from the OCR output are applied character-by-character to the character occurrence probability storage apparatus (e.g., a read-only store), a running sum of the respective probabilities for the upper case and lower case print conventions is developed so that, following the input of the final character, reject or conflict within a word to the aforesaid apparatus, an appropriate upper or lower case determination can be made for all of the characters within the word. This determination corresponds with the print convention of the word inscribed on the scanned document. A corresponding upper or lower case flag is correspondingly generated with the print convention determination, and associated with the alphabetic character word output from the print convention apparatus for further text processing. In one embodiment of the invention the probability for each OCR output alphabetic character being an upper or lower case character is stored in respective upper and lower case character occurrence probability storage devices after having been precomputed as the product of two probability factors; i.e., (1) a first probability factor with respect to the likelihood that the OCR recognition resulted from the scan of an upper or lower case character, and (2) a second probability factor with respect to the likelihood of a given character occurring in a specified language (e.g., English) document. In another embodiment of the invention, the character occurrence probability storage devices are functionally replaced by a read-only store having an address position for each upper and lower case alphabetic character outputted by the OCR including conflicts and rejects, and a precomputed numerical probability value associated with each address position to represent the quotient of: (1) the probability that a given character is related to an upper case print convention; and (2) the probability that the same character is related to a lower case print convention.

Classifications:

International (IPC 8-9): G06F17/21 G06K9/00 G06K9/62

G06K9/72 (Advanced/Invention);

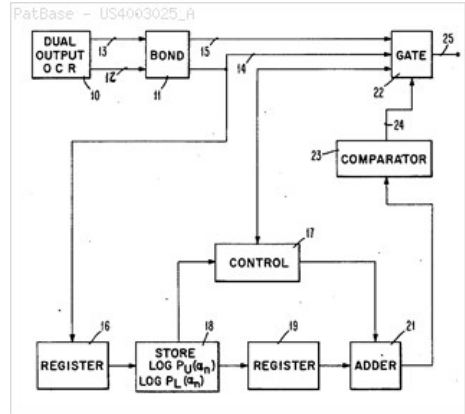
G06F17/21 G06K9/62 G06K9/72 (Core/Invention)

International (IPC 1-7): G06K7/10 G06K9/00 G06K9/03 G11B

CPC: G06K9/72

European: G06K9/72

US: 340/146.3S 382/228 382/229 382/325



Family:

Publication number	Publication date	Application number	Application date
CA1066418 A1	19791113	CA19760268693	19761223
DE2654815 A1	19780126	DE19762654815	19761203
FR2336743 A1	19770722	FR19760036143	19761124
FR2336743 B1	19801024	FR19760036143	19761124
GB1559884 A	19800130	GB19760051622	19761210
IT1072633 A	19850410	IT19760030071	19761203
JP1121992 C3	19821112	JP19760144075	19761202
JP52080743 A2	19770706	JP19760144075	19761202
JP57013029 B4	19820315	JP19760144075	19761202
US4003025 A	19770111	US19750643976	19751224

Priority:

US19750643976 19751224

Assignee(s): (std): IBM

Assignee(s): IBM CORP ; INT BUSINESS MACHINES CORP ; MULLAN PHILIP J ; ROSENBAUM WALTER S ; HILLIARD JOHN J

Inventor(s): (std): HILLIARD JOHN J ; MULLAN PHILIP J ; ROSENBAUM WALTER S ; UORUTAA SUTEIIBUN ROOZENBAUMU ; JIYON JIYOSEFU HIRAADO ; FUIRITSUPU JIYOSEFU MIYUURAN ; ROSENBAUM WALTER STEVEN ; MULLAN PHILIP JOSEPH ; HILLIARD JOHN JOSEPH

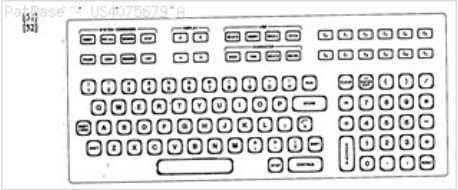
Inventor(s): JOHN J HILLIARD PHILIP J MULLAN ET WALTER S... ; JOSEPH MULLAN PHILIP ; JOSEPH HILLIARD JOHN ; JOHN J HILLIARD PHILIP J MULLAN ET WALTER S ROSENBAUM ; STEVEN ROSENBAUM WALTER

Title: PROGRAMMABLE CALCULATOR

Abstract: Source: US4075679A An adaptable programmable calculator employs modular read-write and read-only memories separately expandable to provide additional program and data storage functions within the calculator oriented toward the environment of the user, and an LSI NMOS central processing unit, capable of handling sixteen-bit parallel binary operations, binary-coded-decimal arithmetic, sixteen-bit parallel input/output operations, two-level interrupt from up to sixteen input/output devices, and a direct memory access channel. The input/output units include a keyboard input unit having a full complement of alphanumeric keys, a magnetic tape cassette reading and recording unit capable of bidirectionally transferring programs and data between the calculator and a magnetic tape, a 32-character solid state output display unit capable of displaying every alphabetic and numeric character and many other symbols individually or in combination, and a sixteen-column alphanumeric thermal printer for printing results of computations, program listings, messages generated by the user and the calculator itself, and error conditions encountered during use of the calculator. All of these input/output units are included within the calculator itself. Many other external input/output units may be employed with the calculator. The calculator may be operated manually by the user from the keyboard input unit or automatically through a program stored within the read-write memory to perform calculations and to provide an output indication of the results thereof. While a program stored within the read-write memory is being executed, the user can perform calculations manually from the keyboard. Execution of the program is temporarily suspended at convenient points within the program to allow execution of the calculations manually selected by the user. If desired, the user may be prevented from manually selecting calculations from the keyboard input unit by disabling the keyboard input unit during program execution. The calculator employs a natural algebraic program language that allows the user to enter lines of one or more alphanumeric algebraic statements into the calculator from the keyboard input unit while visually observing each line as it is entered to check for errors therein. The user may immediately execute each entered line or store that line as part of a program in the read-write memory, may subsequently recall the executed or stored line so that it may be reinspected, and, if necessary, edited and re-executed or re-stored, thereby automatically replacing the previously stored line. The program language of the calculator is contained within a plug-in language read-only memory and may be changed by inserting a different language read-only memory.

Classifications:

International (IPC 8-9): G06F15/02 G06F3/02 (Advanced/Invention);
G06F15/02 (Core/Invention)
International (IPC 1-7): G06F15/02 G06F15/06 G06F3/02 G06F3/023 G06F9/06
G06F9/18 G06F9/40 G06F9/46
CPC: G06F15/02
European: G06F15/02
US: 341/22 364/200 708/130 708/139



Family:

Publication number	Publication date	Application number	Application date
CA1080851 A1	19800701	CA19760264637	19761029
DE2655241 A1	19770630	DE19762655241	19761207
GB1568094 A	19800521	GB19760042869	19761015
HK34383 A	19830916	HK19830000343	19830908
JP1292406 C3	19851216	JP19760146639	19761208
JP52069539 A2	19770609	JP19760146639	19761208
JP60007309 B4	19850223	JP19760146639	19761208
US4075679 A	19780221	US19750638381	19751208
US4437156 A	19840313	US19810227019	19810121

Priority:

US19750638381 19751208 US19770835371 19770921 US19790031341 19790419
US19810227019 19810121

Assignee(s): (std): HEWLETT PACKARD CO ; HEWLETT PACKARD YOKOGAWA

Assignee(s): HEWLETT PACKARD COMPANY ; YOKOGAWA HIYUURETSUTO PATSUKAADO KK ; HIYUURETSUTO PATSUKAADO CO ; WENNINGER FRED W ; MORRIS DONALD E ; NAIRN JOHN H ; OSBORNE JEFFREY C ; BEYERS JOSEPH W ; CHRISTOPHER CHRIS J ; COVINGTON WAYNE F ; FOLSOM JERRY B

Inventor(s): (std): BEYERS JOSEPH W ; CHRISTOPHER CHRIS J ; COVINGTON WAYNE F ; DONARUDO II MORISU ; FOLSOM JERRY B ; FURETSUDO DABURIYU UENIGUNA ; MORRIS DONALD E ; NAIRN JOHN H ; OSBORNE JEFFREY C ; UEIN EFU KOBINGUTON ; WENNINGER FRED W ; JIEFUREI SHII OZUBOON ; JIERII BII FUORUSOMU ; JIYON ETSUCHI NAIRUN ; JIYOSSEFU DABURIYU BEIYAA ; KURISU JIEI KURISUTOFUA

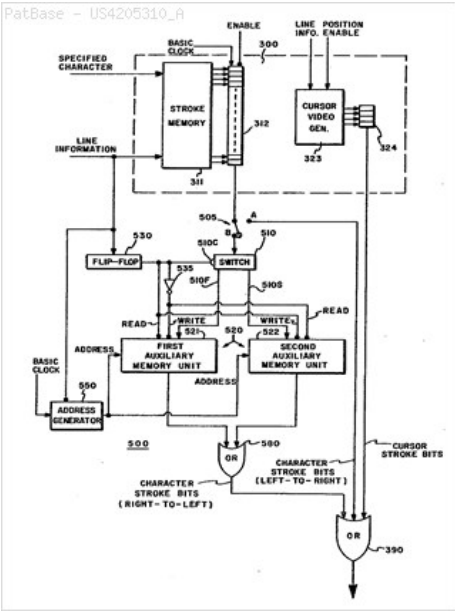
Inventor(s): KURISU JOI KURISUTOFUA ; JON ETSUCHI NAIRUN ; JOSEFU DABURYU BEIYAA ; W WENNINGER FRED ; W BEYERS JOSEPH ; J CHRISTOPHER CHRIS ; H NAIRN JOHN ; F COVINGTON WAYNE ; E MORRIS DONALD ; C OSBORNE JEFFREY ; B FOLSOM JERRY ; FURETSUDO DABURYU UENIGUNA ; JEFUREI SHII OZUBOON ; JERII BII FUORUSOMU

Title: Television titling apparatus and method

Abstract: Source: US4205310A The disclosure relates to a television titling apparatus which is substantially the same as a conventional television titling apparatus designed for left-to-right character presentation, but includes a novel subsystem and method which can be utilized to effect display of characters from right-to-left for **languages** which so require. Reverse image stroke representations are stored in a stroke generator. An auxiliary storage is provided for storing a scanline of stroke bits from the stroke generator. Scanlines of stroke bits are read out of the auxiliary storage in reverse order from the order in which they were read in; i.e., on a last-in-first-out basis. Preferably, the auxiliary storage includes first and second stores which are alternately operable to read in and read out successive scanlines of stroke bits so that one scanline of stroke bits is being read out while the next scanline of stroke bits is being read in.

Classifications:

International (IPC 8-9): G09G3/00 G09G5/16 G09G5/24 G09G5/32 H04N5/278 (Advanced/Invention);
G09G5/16 G09G5/24 G09G5/32 H04N5/278 (Core/Invention)
International (IPC 1-7): G06F3/14 G06F3/153 G06K15/20 G09G1/00 G09G3/00 H04N5/00 H04N5/22
CPC: G09G5/16 G09G5/24 G09G5/243 H04N5/278
European: G09G5/16 G09G5/24 G09G5/24A H04N5/278
US: 340/750 345/471 345/472.3 348/E05.06 348/E5.06



Family:

Publication number	Publication date	Application number	Application date
CA1139028 A1	19830104	CA19790327863	19790518
DE2962875 D1	19820708	DE19792962875	19790516
EP0005672 A1	19791128	EP19790400309	19790516
EP0005672 B1	19820519	EP19790400309	19790516
JP5030293 A2	19800304	JP19790063151	19790522
US4205310 A	19800527	US19780908084	19780522

Priority:

US19780908084 19780522 CA19790327863 19790518

Assignee(s): (std): THOMSON CSF ; THOMSON CSF LABS INC

Assignee(s): THOMSON CSF SCPI ; THOMSON CSF BROADCAST INC ; BAKACH JOSEPH ; MCMANN RENVILLE H JR

Inventor(s): (std): BAKACH JOSEPH ; MCMANN JR RENVILLE H ; MCMANN RENVILLE H JR ; RENBIRU ETSUCHI MAKUMAN JIYUNI ; JIYOZEFU BAKATSUCHI

Inventor(s): MCMANN RENVILLE H

Designated states: DE FR GB NL

Title: Memory apparatus for digital computer system

Abstract: Source: US4316244A Therein is disclosed high speed digital computer system architecture. System architecture includes a processor for processing machine **language** digital data and a memory for storing at least machine **language** instructions for use by the processor. Instructions or data are transmitted between memory and processor by memory input and output busses. Signals are transmitted between computer system and external devices by I/O apparatus. Instruction pre-fetch circuitry is disclosed for fetching from memory, and storing, instructions in advance of instructions being executed by the processor. Also disclosed are a high speed memory and memory input and output busses providing high memory bus bandwidth and simple memory bus interface circuitry. Processor circuitry is disclosed for allowing high speed initiation and execution of instruction sequences. I/O circuitry is disclosed which allows I/O apparatus to easily adapt to a variety of external devices or to changes in computer machine **language** or instructions.

Classifications:

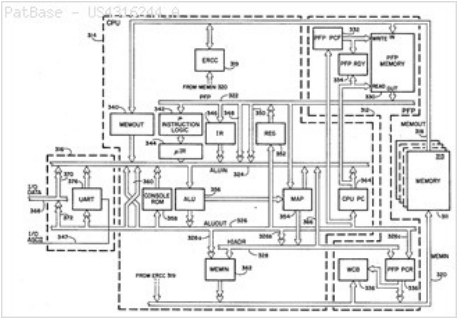
International (IPC 8-9): G06F13/16 G06F13/38 G06F13/42 G06F9/06 G06F9/22 G06F9/26 G06F9/28 G06F9/30 G06F9/312 G06F9/38 G11C11/30 (Advanced/Invention); G06F9/22 G06F9/28 (Advanced/Non-invention)

International (IPC 1-7): B01D13/02 G06F13/00 G06F13/06 G06F13/16 G06F3/00 G06F3/04 G06F3/06 G06F9/00 G06F9/06 G06F9/22 G06F9/26 G06F9/28 G06F9/30 G06F9/32 G06F9/38 G11C7/00

CPC: G06F9/30043 G06F9/30145 G06F9/3822 G06F13/161 G06F13/1689 G06F13/385 G06F13/42 G06F9/223 G06F9/226 G06F9/261 G06F9/30167

European: G06F13/16A2 G06F13/16D8 G06F13/38A2 G06F13/42 G06F9/22D G06F9/22F G06F9/26F G06F9/30A2L G06F9/30T G06F9/30T4T G06F9/38C4

US: 364/200 711/168 712/207 712/208 712/225 712/248 712/E09.005 712/E09.006 712/E09.01 712/E09.028 712/E09.033 712/E09.072 712/E09.005 712/E09.006 712/E09.01 712/E09.028 712/E09.033 712/E09.072 713/502



Family:

Publication number	Publication date	Application number	Application date
AU197952228 A1	19800515	AU19790052228	19791026
AU532100 B2	19830915	AU19790052228	19791026
CA1129557 A2	19820810	CA19810391041	19811126
CA1129559 A2	19820810	CA19810391042	19811126
CA1130009 A1	19820817	CA19810391044	19811126
CA1130009 A2	19820817	CA19810391044	19811126
CA1130010 A1	19820817	CA19810391043	19811126
CA1130010 A2	19820817	CA19810391043	19811126
CA1134051 A1	19821019	CA19790339190	19791105
DE2944419 A1	19800514	DE19792944419	19791103
DE2944419 C2	19880818	DE19792944419	19791103
DE2953861 A1	19820916	DE19792953861	19791103
DE2953861 C2	19890126	DE19792953861	19791103
FR2443099 A1	19800627	FR19790028008	19791106
FR2443099 B1	19880325	FR19790028008	19791106
GB2034944 A1	19800611	GB19790035593	19791012
GB2034944 B2	19821222	GB19790035593	19791012
GB2106285 A1	19830407	GB19820013053	19820506
GB2106285 B2	19830817	GB19820013053	19820506
GB2106286 A1	19830407	GB19820013054	19820506
GB2106286 B2	19830817	GB19820013054	19820506
GB2112551 A1	19830720	GB19820013052	19820506
GB2112551 B2	19831221	GB19820013052	19820506
GB2112973 A1	19830727	GB19820013051	19820506
GB2112973 B2	19831221	GB19820013051	19820506
JP55102050 A2	19800804	JP19790143422	19791107
NL7907768 A	19800512	NL19790007768	19791022
US4316244 A	19820216	US19780959038	19781108
US4342080 A	19820727	US19790091347	19791105
US4447877 A	19840508	US19810290285	19810806
US4462073 A	19840724	US19810290454	19810806

Priority:

US19780959038 19781108	GB19790035593 19791012	CA19790339190 19791105
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GB19820013053 19820506	US19810290285 19810806	GB19820013054 19820506

Assignee(s): (std): DATA GENERAL CORP

Assignee(s): DATA GENERAL CORP WESTBORO MASS US ; DATA GENERAL TE WESTBORO MASSACHUSETTS VER ST V AM CORP ; GRONDALSKI DAVID S

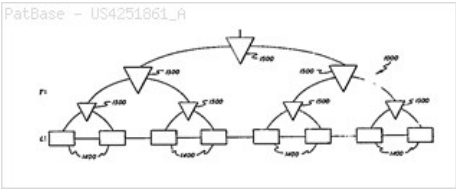
Inventor(s): (std): DEEBITSUDO ESU GURONDARUSUKII ; GRONDALSKI DAVID ; GRONDOLSKI DAVID ; GRONDOLSKI DAVE ; GRONDALSKI DAVID S

Inventor(s): DAVID GRONDALSKI ; DAVE GRONDOLSKI ; GRONDOLSKI DAVID 01748 HOPKINTON MASS ; GRONDOLSKI DAVID HOPKINTON MASS

Title: Cellular network of processors

Abstract: Source: US4251861A A network of processors having a cellular structure is capable of directly and efficiently executing a predetermined class of proگرامing **languages** such as applicative **languages**. The network includes two interconnected networks of processors, one of which is a linear array of cells of a first kind and the other a tree network of cells of a second kind. The network directly interprets a high level **language** and is capable of operating on a wide range of classes of programs. Within practical limits, the network accommodates the unbounded parallelism permitted by applicative **languages** in a single user program. The network also has the capability of executing many user programs simultaneously.

Classifications:
International (IPC 8-9): G06F15/16 G06F15/173 G06F9/28 G06F9/40 G06F9/44 G06F9/46 (Advanced/Invention); G06F15/16 G06F9/44 (Core/Invention)
International (IPC 1-7): G06F13/00 G06F15/00 G06F15/16 G06F9/28 G06F9/40 G06F9/44 G06F9/46
CPC: G06F9/4436
European: G06F9/44F3
US: 712/11 712/13 712/15 712/18



Family:

Publication number	Publication date	Application number	Application date
CA1159151 A1	19831220	CA19790338066	19791019
DE2967022 D1	19840705	DE19792967022	19791026
EP0010934 A1	19800514	EP19790302345	19791026
EP0010934 B1	19840530	EP19790302345	19791026
JP55092964 A2	19800714	JP19790137077	19791025
US4251861 A	19810217	US19780955414	19781027

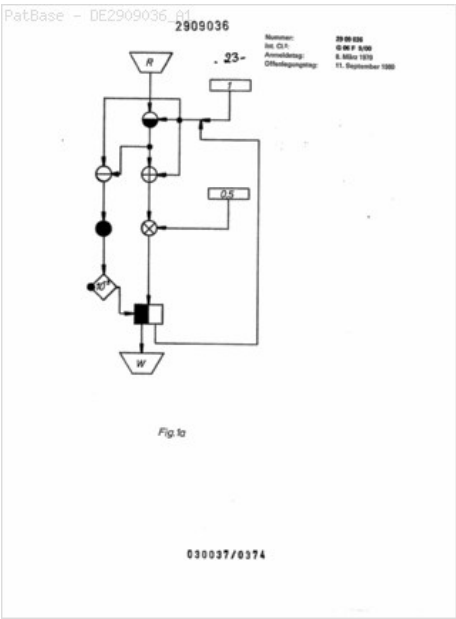
Priority:
US19780955414 19781027 CA19790338066 19791019
Assignee(s): (std): MAGO GYULA A ; MAGO GYULA ANTAL
Assignee(s): GYULA ANTAL MAGO
Inventor(s): (std): GIYUURA ANTOORU MAAGO ; MAGO GYULA A ; GYULA ANTAL MAGO
Designated states: DE FR GB

Title: ANORDNUNG ZUM GRAPHISCHEN VERARBEITEN VON MATHEMATISCHEN UND LOGISCHEN PROGRAMMEN UND GRAPHISCHE PROGRAMME
ARRANGEMENT FOR GRAPHIC PROCESSING AND MATHEMATICAL LOGIC PROGRAMS AND GRAPHICS PROGRAMS (Machine translation)

Abstract: Source: DE2909036A1 Anordnung zum graphischen Verarbeiten von mathematischen und logischen Programmen und graphischen Programme Patentansprüche: 1 Anordnung zum Verarbeiten von mathematischen und/oder logischen Programmen, durch gekennzeichnet, dass ein graphisch dargestelltes Programm in den Rechner oder Automaten oder die Programmierereinrichtung eingegeben wird ararbeiten von mathematischen und/oder logischen Programmen, dadurch gekennzeichnet, dass das im Rechner oder Automaten oder in der Programmierereinrichtung gespeicherte Programm mit einem Sichtgeraet oder Zeichen eraet graphisch dargestellt wird 3.

Machine translation: Arrangement for graphic processing math and logic programs and graphics programs claim: 1 arrangement for processing mathematical and / or logic programs, characterized in that a graphically illustrated program is entered into the computer or machine or the programming device ararbeiten of mathematical and / is logical or programs, characterized in that the evic in the computer or machine or in the programming device with a stored program or characters depicted graphically Sichtgeraet third

Classifications:
International (IPC 8-9): G06F9/44 (Advanced/Invention)
International (IPC 1-7): G06F3/00 G06F9/00
CPC: G06F8/34
European: G06F8/34



Family:

Publication number	Publication date	Application number	Application date
DE2909036 A1	19800911	DE19792909036	19790308

Priority:

DE19792909036 19790308

Assignee(s): (std): KRAUSE GERHARD

Inventor(s): (std): KRAUSE GERHARD

Title: CHEMICAL PRINT ELEMENT

Abstract: Source: US4343555A Disclosed is a novel print element for a serial impact printer having a novel character set which permits the typing of text as well as chemical symbols and formulae with a small number of character elements. Closed ring structures may be formed with the character set which may be expanded to various sizes. Also disclosed is a serial impact printing system using the aforementioned printing element which automatically subscripts small numerals when the printing element is positioned without further action on the part of the typist.

Classifications:

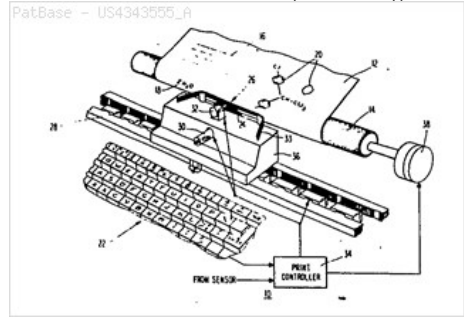
International (IPC 8-9): B41J1/24 B41J1/30 B41J2/22 B41J3/00 (Advanced/Invention); B41J2/22 (Advanced/Non-invention); B41J1/00 B41J2/22 B41J3/00 (Core/Invention)

International (IPC 1-7): B41J1/00 B41J1/24 B41J1/30 B41J3/00 B41J3/02 B41J3/06

CPC: B41J1/30 B41J3/00 Y10S400/90 Y10S400/904

European: B41J1/30 B41J3/00

US: 400/144.2 400/175 400/900 400/904



Family:

Publication number	Publication date	Application number	Application date
AU198170110 A1	19811112	AU19810070110	19810504
AU534039 B2	19831222	AU19810070110	19810504
CA1176592 A1	19841023	CA19810376682	19810501
CA1185553 A1	19850416	CA19810448188	19810501
CA1185553 A2	19850416	CA19840448188	19840223
DE3171382 D1	19850822	DE19813171382	19810430
DE3176804 D1	19880811	DE19813176804	19810430
EP0039584 A1	19811111	EP19810301915	19810430
EP0039584 B1	19850717	EP19810301915	19810430
EP0121156 A2	19841010	EP19840102667	19810430
EP0121156 A3	19841107	EP19840102667	19810430
EP0121156 B1	19880706	EP19840102667	19810430
JP57002761 A2	19820108	JP19810067063	19810506
MX6539 U	19850709	MX19810009410U	19810415
US4343555 A	19820810	US19800146684	19800505

Priority:

US19800146684 19800505 EP19810301915 19810430 AU19810070110 19810504
CA19810376682 19810501 CA19810448188 19810501

Assignee(s): (std): EXXON RESEARCH ENGINEERING CO ; OLIVETTI REALTY N V ; OLIVETTI REALTY

Assignee(s): EXXON ENTERPRISES A DIVISION OF EXXON A CORP OF NEW JERSEY CORP ; OLIVETTI REALTY NV ; EXXON RESEARCH AND ENGINEERING CO ; EXXON ENTERPRISES A DIVISION OF EXXON CORP ; EXXON RESEARCH AND ENGINEERING COMPANY ; ABBOTT DAVID D ; EXXON ENTERPRISES ; EXXON ENTERPRISES A CORP ; EXXON ENTERPRISES A DIVISION OF EXXON A CORP OF NE

Inventor(s): (std): DEBITSUDO DEII ABOTSUTO ; ABBOTT DAVID DUANE ; ABBOTT DAVID D ; ABBOTT D D

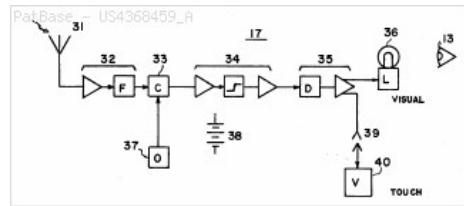
Inventor(s): DAVID DUANE ABBOTT ; DAVID D ABBOTT ; D D ABBOTT

Designated states: BE CH DE FR GB IT LI NL

Title: Educational apparatus and method for control of deaf individuals in a mixed teaching environment

Abstract: Source: US4368459A Radio signaling apparatus is for use, primarily, in classrooms at all educational levels, elementary school through graduate school, in which a teacher and a mixed body of hearing and deaf students participate in a lecture and discussion situation with the support of a trained interpreter in **sign language**. The radio system comprises a voice actuated pulsed omnidirectional radio transmitter, which is worn by the teacher, and a plurality of portable receiving devices, one for each deaf student. The microphone of the transmitter is selected to discriminate against ambient sounds and background voices. The omnidirectional receivers **detect** the pulsed radio transmissions and generate by transducer action a non-audible sensory stimulation to alert each individual deaf student, whereupon each such student should renew his or her observation of the interpreter. In a preferred embodiment the radio apparatus provides a flashing visual signal from each deaf student's receiver. The receiver and transducer are to be worn or placed within the student's peripheral field of vision when the student is working on or is reading his class notes and texts during classroom sessions. The system is adaptable to more general uses outside the classroom.

Classifications:
International (IPC 8-9): G09B21/00 (Advanced/Invention);
G09B21/00 (Core/Invention)
International (IPC 1-7): G08B13/00
CPC: G09B21/009
European: G09B21/00C
US: 340/407 340/407.1 433/112 434/112



Family:

Publication number	Publication date	Application number	Application date
US4368459 A	19830111	US19800217081	19801216

Priority:

US19800217081 19801216

Assignee(s): (std): SAPORA ROBERT

Inventor(s): (std): SAPORA ROBERT

Title: Navigational aid autopilot

Abstract: Source: US4428052A A navigational aid and autopilot in which informational data pertaining to the physical operating conditions of the craft, the external characteristics relevant to the operation of the craft, and a chart mapping a selected portion of the surface of the earth in which the craft is operating are combined into a single communication correlating such data in a manner assisting an operator of the craft in the performance of his duties. The navigational aid measures external physical conditions such as radio transmissions, radar soundings, sonar soundings, and the like, as well as the physical state of the craft such as fuel flow, list of the craft, and speed of the motor. By monitoring these characteristics in association with an electronic chart, the system correlates and combines the total informational content in a comprehensive form so as to relieve the operator pilot of the necessity of integrating and correlating data from a plurality of different sources. The autopilot operation accepts two types of data command, the first being a destination, the second being a bearing and time duration. Through the use of a position determining means, such as a Loran-C receiver, the system controls the craft and its movement to the destination. With the help of the external physical condition monitors, the system provides course direction so that the craft will not collide with another boat nor run aground. The autopilot additionally plots the course for the craft.

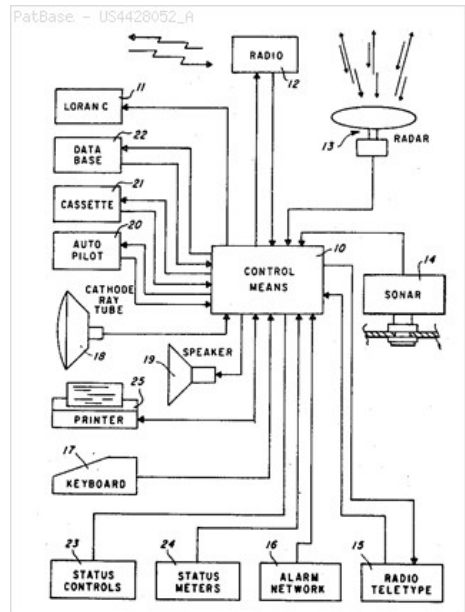
Classifications:

International (IPC 8-9): G01C21/00 G01C21/20 G05D1/00 (Advanced/Invention); G01C21/00 G01C21/20 G05D1/00 (Core/Invention)

International (IPC 1-7): G01C21/00 G01C21/20 G05D1/00 G05D1/02 G06F15/50
CPC: G01C21/20

European: G01C21/20

US: 342/451 364/436 364/521 701/117 701/207 701/217 701/219 701/224 701/225 701/428 701/455 701/464 701/493



Family:

Publication number	Publication date	Application number	Application date
DE3273424 D1	19861030	DE19823273424	19820608
EP0071333 A1	19830209	EP19820302933	19820608
EP0071333 B1	19860924	EP19820302933	19820608
JP58009014 A2	19830119	JP19820098394	19820608
US4428052 A	19840124	US19810271914	19810609
US4428057 A	19840124	US19810271917	19810609

Priority:

US19810271918 19810609 US19810271914 19810609 US19810271917 19810609
US19810271902 19810609

Assignee(s): (std): TEXAS INSTRUMENTS INC

Assignee(s): TEXAS INSTRUMENTS INC A CORP OF DE

Inventor(s): (std): BURNHAM GERALD ; BURNHAM GERALD D ; HOFFMAN RICHARD D ; JIERARUDODEII BAANHAMU ; JIERIIERU SETSUTORIFU ; JIYON PII BORUPI ; MAIKURUDEII SUMISU ; RICHIIYAADO DEII HOFUMAN ; ROBINSON EUGENE A ; SETLIFF JERRY ; SETLIFF JERRY L ; SMITH MICHAEL ; SMITH MICHAEL D ; VOLPI JOHN P ; YUUJIN EI ROBINSON

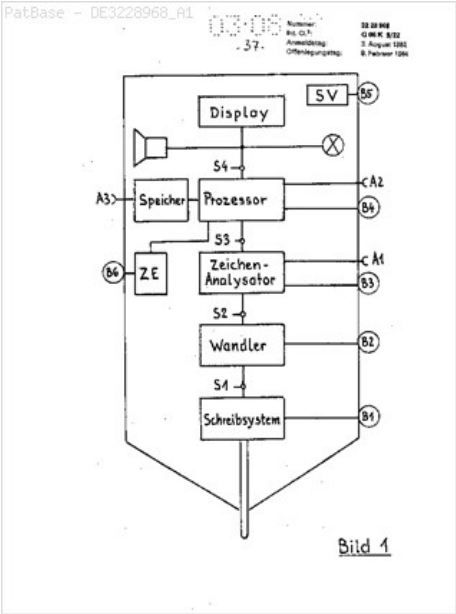
Designated states: DE FR GB

Title: Device for generating, detecting, processing and displaying written symbols

Abstract: Source: DE3228968A1 The invention relates to a "device for generating, detecting, processing and displaying written symbols" such as letters, numbers, mathematical symbols, musical notes and other graphical symbols and is preferably constructed as a writing pen which contains a writing system which consists of a writing point with or without emission of a writing substance, a holder for the writing point and/or sensors, and which, controlled by the writing process during the hand-written writing of a symbol, generates particular physical state sequences typical of this symbol, which are converted into suitable signals in a converter and to which a particular symbol from a finite symbol set is allocated in a symbol analyzer. The symbols detected by the symbol analyzer can be processed in a process, and the symbols detected and/or processing results can be temporarily stored and displayed by means of a display and/or tone generator. The device can contain additional devices such as, for example, an electronic clock or a communication unit which, like the processor, can be controlled in their functions via the symbols written down and detected.

Classifications:

International (IPC 8-9): G06K9/18 G06K9/24 (Advanced/Invention);
G06K9/18 G06K9/22 (Core/Invention)
International (IPC 1-7): G06F3/033 G06F3/16 G06K9/22 G06K9/78 G10L1/00
CPC: G06K9/18 G06K9/24
European: G06K9/18 G06K9/24



Family:

Publication number	Publication date	Application number	Application date
DE3228968 A1	19840209	DE19823228968	19820803
DE3228968 C2	19841011	DE19823228968	19820803

Priority:

DE19823228968 19820803

Assignee(s): (std): HAGEMEYER FRIEDRICH DR PHIL ; KAMMERL ANTON DR ING ; SCHMIDT WALTER ; THOMANEK ULRICH DR RER NAT ; LUEBBERS ANDREAS

Assignee(s): LUEBBERS ANDREAS DIPL ING ; SCHMIDT WALTER DR RER NAT ; THOMANEK ULRICH DR RER NAT 8000 MUENCHEN DE ; KAMMERL ANTON DR ING 8038 GROEBENZELL DE ; HAGEMEYER FRIEDRICH DR PHIL 8000 MUENCHEN DE

Inventor(s): (std): HAGEMEYER FRIEDRICH DR ; HAGEMEYER FRIEDRICH DR PHIL ; KAMMERL ANTON DR ING ; LUEBBERS ANDREAS DIPL ING ; SCHMIDT WALTER DR RER NAT ; THOMANEK ULRICH DR RER NAT

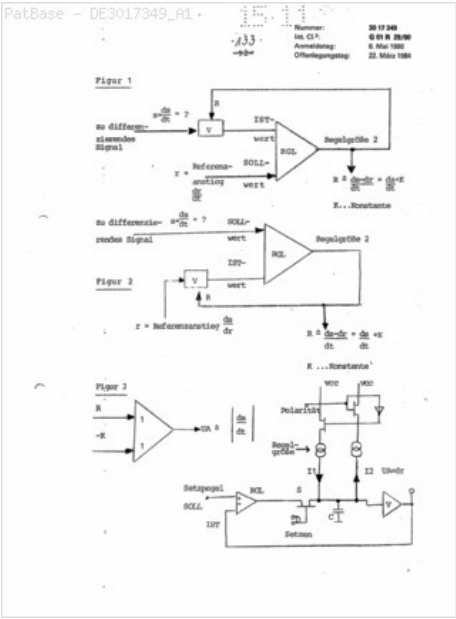
Inventor(s): THOMANEK ULRICH DR RER NAT 8000 MUENCHEN DE ; KAMMERL ANTON DR ING 8038 GROEBENZELL DE ; HAGEMEYER FRIEDRICH DR PHIL 8000 MUENCHEN DE

Title: VERFAHREN UND EINRICHTUNG ZUR PRAEZISEN ABLEITUNG VONFUNKTIONSWERTEN EINES ELEKTRISCHEN SIGNALES METHOD AND DEVICE FOR PRECISE LEAD VONFUNKTIONSWERTEN an electrical signal (Machine translation)

Abstract: Source: DE3017349A1 (Claim 1) Verfahren und Einrichtung zur praezisen Ableitung von Funktionswerten eines elektrischen Signales Patentansprueche 1.

Machine translation: (Claim 1) Method and device for the precise derivation of functional values of an electrical signal CLAIMS 1

Classifications:
International (IPC 8-9): G01R29/00 G06G7/18 (Advanced/Invention);
G01R29/00 G06G7/00 (Core/Invention)
International (IPC 1-7): G01R29/00
CPC: G01R29/00 G06G7/18
European: G01R29/00 G06G7/18



Family:

Publication number	Publication date	Application number	Application date
DE3017349 A1	19840322	DE19803017349	19800506

Priority:
DE19803017349 19800506
Assignee(s): (std): KOLLER ROMAN
Inventor(s): (std): KOLLER ROMAN

Title: Personal computer attachment for host system display station

Abstract: Source: US4641262A A personal computer attachment is provided for a display station of the type that communicates with a host computer (48). The display station has a display unit (10) and a keyboard (12) to which a personal computer system unit (14) is attached. The personal computer system unit typically supports floppy diskette drives (16) and a printer (18). The display unit includes a CRT (38), a regeneration buffer (42), a keyboard adapter (46) and a feature bus (44). The personal computer system unit includes a system bus, a microprocessor, memory, a keyboard adapter and I/O interface connected to the system bus. A display adapter (26 or 28) is connected to the I/O interface. An analog input switch (52) is disposed between the buffer (42) and the analog circuits driving the CRT (38). This switch has a second input from the display adapter (26 or 28) and is controlled from inputs from the keyboard (12) to selectively supply image data from the buffer (42) or the display adapter (26 or 28). An attachment adapter (36) mates with the I/O interface of the personal computer system unit. The adapter (36) includes an input/output interface (54), a switch control (56), a two-way keyboard adapter (58) and a feature bus adapter (60). The keyboard (12) is connected to the two-way keyboard adapter (58). Each of the switch control (56), the two-way keyboard adapter (58) and the feature bus adapter (60) communicate with the system bus of the personal computer system unit via the input/output interface. The switch control (56) is also connected to the control input of the analog input switch (52). The two-way keyboard adapter (58) is also connected to the keyboard adapter in the display station and the keyboard adapter in the personal computer system unit. The feature bus adapter (60) is also connected to the feature bus (44) of the display station. This arrangement allows keystroke signals from the keyboard (12) to be transmitted by the two-way keyboard adapter (58) via the input/output interface (54) and system bus to the memory in the personal computer system unit for interpretation by the microprocessor and then retransmitted back to the two-way keyboard adapter and then to a designated one of the keyboard adapters in either the display station or the personal computer system unit. The switch control is responsive to a unique keystroke signal to control the analog input switch (52). In this way, the operator can control the mode of operation between either a host mode or a personal computer mode. Further, data transfer can be made between the host computer and the personal computer.

Classifications:

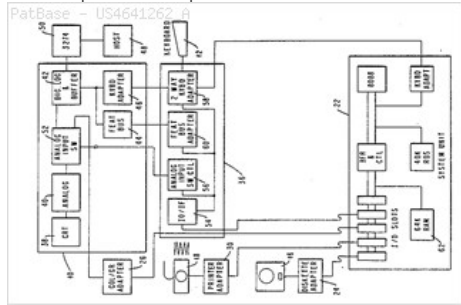
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G06F13/00 G06F13/10 G06F13/14 G06F15/00 G06F15/02 G06F3/02 G06F3/153 (Core/Invention)

International (IPC 1-7): G06F13/10 G06F13/14 G06F15/06 G06F15/16 G06F3/02 G06F3/153

CPC: G06F3/153

European: G06F3/153

US: 340/745 345/168



Family:

Publication number	Publication date	Application number	Application date
DE3377242 D1	19880804	DE19833377242	19831221
EP0121603 A2	19841017	EP19830112892	19831221
EP0121603 A3	19861120	EP19830112892	19831221
EP0121603 B1	19880629	EP19830112892	19831221
JP1705323 C3	19921027	JP19840000128	19840105
JP3074425 B4	19911126	JP19840000128	19840105
JP59165173 A2	19840918	JP19840000128	19840105
US4641262 A	19870203	US19840585813	19840302

Priority:

US19830473058 19830307 US19840585813 19840302

Assignee(s): (std): IBM

Assignee(s): INT BUSINESS MACHINES ARMONK NY 10504 A CORP OF CO ; INT BUSINESS MACHINES ARMONK NY 10504 A CORP OF CORP ; INT BUSINESS MACHINES CORP ; INTERN BUSINESS MACHINES CORP ; LENOVO (SINGAPORE) PTE LTD ; LENOVO PTE LTD ; LENOVO SINGAPORE PTE LTD

Inventor(s): (std): AIRA HAWAADO SHIYUNADAA ; AIRA HAWAADO SHUNADAA ; AREN UIRIAMU MAKUDOERU ; AREN UIRIAMU MAKUDOUERU ; BERII RII BURAIAN ; BRYAN BARRY L ; BRYAN BARRY LEE ; DRUCKERMAN MARTIN ; MAACHIN DORATSUKAAMAN ; MCDOWELL ALLEN W ; MCDOWELL ALLEN WILLIAM ; NEWKIRK GARY L ; SCHNEIDER IRA H ; SCHNEIDER IRA HOWARD

Designated states: DE FR GB

Classifications:

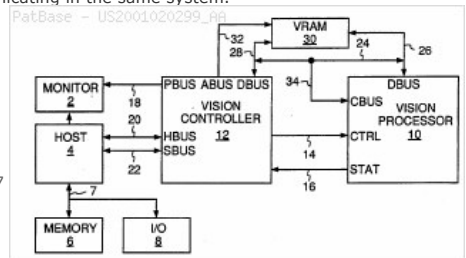
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H04N7/15 H04N7/26F2 H04N7/26L4B H04N7/26P4 H04N7/26T

US: 250/483.1 252/301.4F 252/301.4H 341/94 341/94P 348/14 348/14.01 348/14.08

348/14.130P 348/15 348/17 348/384 348/425.3 348/554 348/571 348/699 348/699S 348/845.2 348/E0.078 348/E0.079 348/E0.083 348/E5.002 348/E7.078 348/E7.079 348/E7.081 348/E7.082 348/E7.083 348/E70.78 348/E70.78S 348/E70.81S 348/E70.82S 348/E70.83 348/E70.83S 375/240.01 375/240.010S 375/240.12 375/240.120P 375/240.16 375/240.160P 375/240.17 375/240.24 375/240.240P 375/240.240S 375/E0.198 375/E7.102 375/E7.198 375/E71.02S 375/E71.98 379/102.01 379/102.02 379/93.08 379/93.17 379/93.21 379/93.26 382/236 382/250 382/276 382/276S 382/41 382/463 708/523 708/603 725/87 976/DIG.439



Publication number	Publication date	Application number	Application date
CA1215212 A1	19861216	CA19840461635	19840823
US2001020299 AA	20010906	US20010842567	20010425
US2001020906 AA	20010913	US20000734280	20001211
US2001046264 AA	20011129	US20010797035	20010301
US2004207725 AA	20041021	US20010470571	20010301
US2005238098 AA	20051027	US20050172633	20050701
US2006013316 AA	20060119	US20050192823	20050729
US4496844 A	19850129	US19830528830	19830902
US5039448 A	19910813	US19890363458	19890606
US5379351 A	19950103	US19920838382	19920219
US5790712 A	19980804	US19970908826	19970808
US5926208 A	19990720	US19960708184	19960906
US5982459 A	19991109	US19970872858	19970611
US6078350 A	20000620	US19970980915	19971201
US6121998 A	20000919	US19980005291	19980109
US6124882 A	20000926	US19980005053	19980109
US6160503 A	20001212	US19980112612	19980709
US6215425 BA	20010410	US19980064397	19980422
US6215515 BA	20010410	US19980095448	19980601
US6225923 BA	20010501	US19990250891	19990216
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US6373517 BA	20020416	US20000547528	20000412
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US20050192823	20050829				

Assignee(s): BRYANT STEPHANE ; INTEGRATED INFORMATION TECHNOLOGY INC ; GENERAL ELECTRIC CO ; MARTIN BRYAN R ; CHIANG MAY SHU PEI ; HU RUILI ; KWAN KATHERINE ; CITICORP USA INC ; CITIBANK NA ; CITIBANK NA ADMINISTRATIVE AGENT AS ; CITICORP USA INC ADMINISTRATIVE AGENT AS ; INTEGRATED INFORMATION TECHNOLOGY INC A CORP OF CA ; DEIERLING KEVIN ; INTEGRATED INFORMATION TECHNOLOGY INC A CORP OF CALIFORNIA ; NING PAUL ; VOOIS PAUL A ; NOONEN MICHAEL ; 8X8 NOW NETERGY NETWORKS INC ; ACKERMAN JOHN F ; ANDREWS BARRY D ; BARRACLough KEITH ; 8X8 ; 8X8 (NOW NETERGY NETWORKS INC)

Inventor(s): WANG CHI : RAINNIE HEDLEY KJ : MARTIN BRYAN

Agent(s): ATTENTION OF ROBERT J CRAWFORD CRAWFORD MAUNU PLLC; ATTENTION ROBERT J CRAWFORD CRAWFORD MAUNU
PLLC; CRAWFORD MAUNU PLLC; ROBERT

Title: Electromagnetic actuator system using stepper motor with closed loop position sensing, electronic commutation and dynamic position and anomaly correction

Abstract: Source: US4618808A Using as an actuator a stepper motor operated in a position-**sensed** closed loop mode via an electronic commutator by position and anomaly corrected motion control signals provided by a programmable logic array and by a microprocessor, provides a precision power positioner. The correct enabling of the motor coils, based on position sensing of the motor phase, using electronic commutation for the stepper motor, transforms the problem of enabling coil selection to the programmable logic array, which by its logic provides a simplified operating control as a function of present armature position feedback, and by a microprocessor corrects for anomalies such as temperature rise, square-law, and phase increase as a function of position desired and present armature position feedback signals, and thus provides high positional accuracy, high speed and force (torque) control independent of the motor cardinal step positions. A standard three phase magnetic resistor is used both to **sense** the motor phase and to feed back the motor position to the microprocessor for calculation of corrections; actual control of the stepper motor is communicated as a single amplitude modulated control signal.

Classifications:

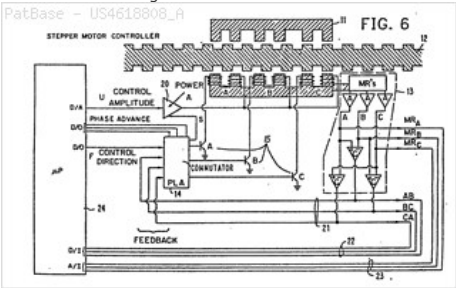
International (IPC 8-9): H02P25/06 H02P25/08 H02P8/00
H02P8/22 (Advanced/Invention);
H02P25/02 H02P8/22 (Core/Invention)

International (IPC 1-7): H02P7/00 H02P8/00

CPC: H02P8/22 H02P25/08

European: H02P25/08 H02P8/22

US: 318/685 318/696



Family:

Publication number	Publication date	Application number	Application date
CA1223632 A1	19870630	CA19850485186	19850625
DE3669968 D1	19900503	DE19863669968	19860117
EP0189794 A2	19860806	EP19860100563	19860117
EP0189794 A3	19870401	EP19860100563	19860117
EP0189794 B1	19900328	EP19860100563	19860117
JP2808275 B2	19981008	JP19850208981	19850924
JP61177191 A2	19860808	JP19850208981	19850924
US4618808 A	19861021	US19850696568	19850130

Priority:

US19850696568 19850130 CA19850485186 19850625

Assignee(s): (std): IBM

Assignee(s): INT BUSINESS MACHINES CORP ; INT BUSINESS MACHINES CORP ARMONK N Y US ; INTAANASHONARU BIJINESU MASHIINZU CORP ; INTERNATL BUSINESS MACH CORP ; ISH SHALOM JEHUDA ; KATZ LEONARD A ; MANZER DENNIS G

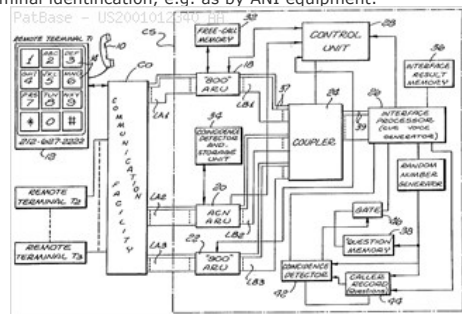
Inventor(s): (std): DENISU JIIN MANZAA ; ISH SHALOM JEHUDA ; JIEEDA ISHIYUUSHIYAROMU ; KATZ LEONARD A ; KATZ LEONARD ALAN ; MANZER DENNIS G ; MANZER DENNIS GENE ; REONAADO ARAN KATSUTSU

Inventor(s): MANZER DENNIS GENE BEDFORD HILLS NEW YORK 10507 US ; KATZ LEONARD ALAN YORKTOWN HEIGHTS NEW YORK 10598 ; KATZ LEONARD ALAN YORKTOWN HEIGHTS NEW YORK 10598 US ; ISH SHALOM JEHUDA CROTON ON HUDSON NEW YORK 10520 ; ISH SHALOM JEHUDA CROTON ON HUDSON NEW YORK 10520 US ; JEEDA ISHUUSHAROMU

Designated states: DE FR GB

Abstract: Source: US2001012340A For use with a public telephone network CO incorporating a vast number of terminals TI-Tn, a system CS limits and controls interface access to implement voice-digital communication for statistical processing. The system CS accommodates calls in different modes, e.g. "800", "900" or area code and incorporates qualifying apparatus to restrict against caller misuse. Alternative calling modes are used to reach an interface facility that also affords some control based on calling terminal identification, e.g. as by ANI equipment.

International (IPC 8-9): A63F3/00 B65G61/00 G06Q30/00 G07C11/00 G07C15/00 G07C9/00 G07F17/32 H04M11/00 H04M3/22 H04M3/36 H04M3/38 H04M3/42 H04M3/46 H04M3/49 H04M3/51 H04Q3/00 H04Q3/545 H04Q3/66 H04Q3/72
H04Q3/74 (Advanced/Invention);
A63F3/06 A63F3/08 A63F9/24 H04M3/436 (Advanced/Non-invention);
G07C11/00 G07C15/00 H04M11/00 H04M3/36 H04M3/38 H04M3/46 H04M3/487
H04M3/50 H04Q3/00 H04Q3/545 H04Q3/64 H04Q3/72 (Core/Invention);
A63F3/08 H04M3/42 (Core/Non-invention)



Publication number	Publication date	Application number	Application date
AT101770 E	19940315	AT19860904668T	19860708
CA2009937 AA	19900821	CA19902009937	19900213
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EP0229170 A1	19870722	EP19860904668	19860708
EP0229170 A4	19890102	EP19860904668	19860708
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EP0342295 A2	19891123	EP19880312001	19881219
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EP0568114 A2	19931103	EP19930110671	19860708
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EP0620669 A1	19941019	EP19940107833	19881219
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EP1148699 A3	20020109	EP200101114139	19860708
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EP1487185 A1	20041215	EP20040022186	19860708
FR2643526 A1	19900824	FR19900002131	19900221
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FR2733109 A1 19961018 FR19960006295 19960521
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Assignee(s): (std): FIRST DATA RESOUCES INC ; FIRST DATA RESOURCES INC ; FUAASUTO DATA RISOOSUIZU INC ; KATZ RONALD ALAN ; FDR INTERACTIVE TECHNOLOGIES ; FIRST DATA CORP INC ; RONALD A KATZ TECHNOLOGY LIC L ; RONALD A KATZ TECHNOLOGY LICENSING L P PARTNERSHI ; RONALD A KATZ TECHNOLOGY LICENSING L P ; RONALD A KATZ TECHNOLOGY LICENSING LP ; RONALD A KATZ TECH LICENSING ; RONALD A KATZ TECHNOLOGY LICEN

Assignee(s): RONALD A KATZ TECHNOLOGIES 570 S MAPLETON DRIVE LO ; RONALD A KATZ TECHNOLOGY LICENSING L P A CALIFORNIA PARTNERSHIP LTD ; FIRST DATA RESOURCES INC A CORP OF DE ; FIRST DATA RESOURCES INC A DE CORP ; AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC ; RONALD A KATZ TECHNOLOGY LICENSING L P PARTNERSHIP ; RONALD A KATZ TECHNOLOGIES A CA CORP CORP ; RONALD A KATZ TECHNOLOGY LIC LP ; RONARUDO EE KATSUTSU TEKUNOROJII RAISENSHINGU LP ; RONALD A KATZ TECHNOLOGIES CORP ; RONALD A KATZ TECHNOLOGY LIC L P ; FIRST DATA RESOURCES INC OMAHA NEBR US ; FIRST DATA RESOURCES INC OMAHA NEBR ; FIRST DATA RESOURCES INC LOS ANGELES CALIF US ; FIRST DATA INC CORP ; FDR INTERACTIVE TECHNOLOGIES A NY PARTNERSHIP ; GENERAL ELECTRIC CAPITAL CORP ; KATZ RONALD A ; P ANGELETTI SPA ; ISTITUTO DI RICERCHE DI BIOLOGIA MOLECOLARE P ANGE

Inventor(s): (std): RONALD ALAN KATZ ; THOMPSON THOMAS D ; RONARUDO EE KATSUTSU ; RONALD A KATZ ; KATZ RONALD ALAN ; KATZ RONALD A ; KATZ RONALD ALAN C O R A KATZ

Inventor(s): KATSUTSU RONARUDO ARAN ; KATZ RONALD ALAN LOS ANGELES CALIFORNIA 90024 ; KATZ RONALD ALANC O RAKATZ TECHL ; KATZ RONALD ALAN LOS ANGELES CALIFORNIA 90024 US ; KATZ RONALD ALAN C O R A KATZ TECH L ; KATZ RONALD ALAN CALIFORNIA 90024 US

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

Title: BROADCAST RECEIVER CAPABLE OF SELECTING STATIONS BASED UPON GEOGRAPHICAL LOCATION AND PROGRAM FORMAT

Abstract: Source: US4969209A A broadcast receiver is capable of selecting a broadcast station based upon a user selected program format and the geographical location of the receiver. The receiver includes a memory storing a database of information relating to frequencies of broadcast stations broadcasting into particular geographical locations and the program format of each such broadcast frequency. After a user inputs the geographical location of the receiver and a desired program format, the database may be scanned to select a broadcast frequency corresponding to the input geographical location and program format for retrieval. This selected frequency is used to tune the receiver. The geographical location, identification information, and program format for the selected frequency are then visually displayed.

Classifications:

International (IPC 8-9): H03J1/00 H03J5/02 H03J5/14 H03J7/18 H04B1/06 H04B1/16 H04H1/00 H04H40/18 H04H60/25 H04H60/51 H04H60/52 H04H60/72 H04H60/74 H04N5/44 H04N7/088 (Advanced/Invention); H04H60/27 H04H60/47 H04H60/51 H04H60/52 H04H60/74 H04N5/50 (Advanced/Non-invention);

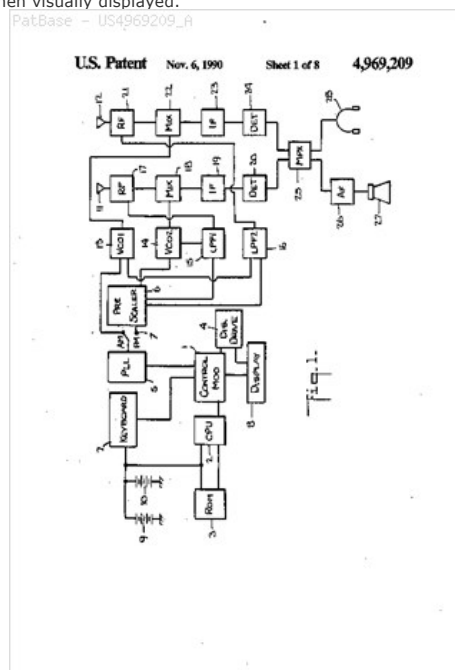
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H04N5/50 (Core/Non-invention)

International (IPC 1-7): H03J1/00 H03J5/02 H03J5/14 H03J7/18 H04B1/06 H04B1/08 H04B1/16 H04B11/16 H04N5/44

CPC: H03J1/0075 H04H60/25 H04H60/47 H04H60/51 H04H60/52 H04H60/74 H04N5/44
H04N5/50 H04N7/0887 H04H40/18 H03J1/0058 H04H60/27 H04H60/72

European: H03J1/00A5 H03J1/00A5B2 H04H1/00A2 H04H240/18 H04H260/52
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H04N5/44 H04N7/088P T04H260/52 T04H260/74 T04H60/18 T04H60/27 T04H60/40
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T04N5/50

US: 348/731 348/732 348/E05.096 348/E05.097 348/E07.036 348/E5.096 348/E5.097
348/E7.036 455/158 455/158.3 455/158.4 455/158.5 455/161 455/161.2 455/181.1
455/186 455/186.1



Family:

Publication number	Publication date	Application number	Application date
CA1324815 A1	19931130	CA19880572406	19880719
CA2043046 AA	19911220	CA19912043046	19910522
EP0301770 A2	19890201	EP19880306748	19880722
EP0301770 A3	19891018	EP19880306748	19880722
EP0462718 A2	19911227	EP19910304984	19910603
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JP1117529 A2	19890510	JP19880186690	19880726
JP6077778 A2	19940318	JP19910147635	19910619
US4969209 A	19901106	US19880212863	19880629
US5152011 A	19920929	US19900540130	19900619
US5152012 A	19920929	US19900515629	19900427
US5393713 A	19950228	US19920951085	19920925
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Priority:

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Assignee(s): (std): P R S CORP : PIERRE AARU SHIYUUBU : PRS CORP : SCHWOB PIERRE R

Assignee(s): PIERRE E SCHWOB : PRS A CORP OF NEW YORK CORP

Inventor(s): (std): PIEERU AARU SHIYUUOBU : SCHWOB PIERRE R

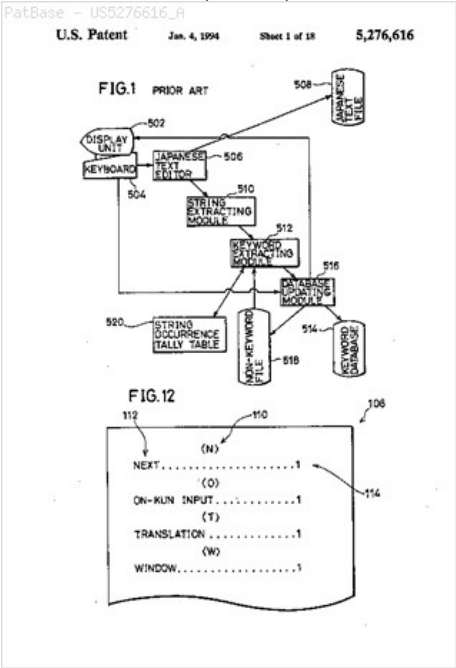
Designated states: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

Title: Apparatus for automatically generating index

Abstract: Source: US5276616A A system for creating an index of textual data stores textual data in memory, and a text analyzing module analyzes the textual data and divides it into a plurality of meaningful strings of characters, punctuation marks, symbols, control codes, etc. A dictionary stores sets of specialized words particular to a field of knowledge related to the textual data in a particular language. An entry selecting module selects as index entries only those strings which match one of those specialized words and notes the location(s) of each occurrence each index entry in the text. A printer outputs the selected index entries together with their occurrence positions. Each entry of the dictionary in the specialized field includes information concerning inflections and variants of that entry. The index is quickly and accurately generated by selecting index entries using a specialized dictionary relevant to a particular, specialized field. Since the selection of index entries is made by referring to such a dictionary, differences in criteria for selection used by different operators can be prevented. Since a specialized dictionary is prepared and updated for each field, the knowledge for generating an index is collected and shared by all the operators.

Classifications:

International (IPC 8-9): G06F17/21 G06F17/30 (Advanced/Invention);
G06F17/30 (Core/Invention)
International (IPC 1-7): G06F1/00 G06F15/20 G06F15/38 G06F15/40 G06F15/401
G06F17/27 G06F17/30
CPC: G06F17/30616
European: G06F17/30A G06F17/30S3 G06F17/30T G06F17/30T1E
US: 704/10 704/9 707/E17.084



Family:

Publication number	Publication date	Application number	Application date
DE69028592 D1	19961024	DE19906028592	19901015
DE69028592 T2	19970417	DE19906028592T	19901015
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US5276616 A	19940104	US19900596283	19901011

Priority:

JP19890269553 19891016 JP19890269554 19891016 JP19890269555 19891016

Assignee(s): (std): SHARP KK

Assignee(s): SHARP CORP ; SHARP K K OSAKA JP ; SHARP KABUSHIKI KAISHA

Inventor(s): (std): KANZA HIROYUKI ; KUGA SHIGEKI ; KUGA SHIGEKI NISHICHIYOGAOKA ; MARUYAMA NAOTOSHI

Inventor(s): MARUYAMA NAOTOSHI YAMATOKORIYAMA SHI NARA KEN JP ; KUGA SHIGEKI 15 15 NISHICHIYOGAOKA ; KUGA SHIGEKI 15 15 NISHICHIYOGAOKA NARA KEN JP ; KANZA HIROYUKI KIZU CHO SOURAKU GUN KYOTO JP

Designated states: DE GB

Abstract: Source: US5181113A A TV system with the functions of Teletext comprising a TV set and a teletext receiving process section, which performs the editing and storing of data received through an antenna in order of determining whether a key interrupt indicates TV mode, teletext mode or memo data mode, so that if the TV mode or the teletext mode is indicated, the associated function is performed according to a given process, performing the corresponding program stored at a memory if the first step indicates the data edit and storing mode, performing each of the programs for storing, fetching and editing the memo data, performing the program for storing the memo data, indicating cursor and switching character mode if the third step indicates the first switching of the TV mode or the teletext mode to the memo data mode, switching the TV set into the TV mode by **detecting** a memo fetching key if the memo data edited and stored by the user in the third step is indicated on the TV screen, and storing memo identifications and memo data at the memory if the third step indicates memo storing mode.

348/E5.102 348/E7.033 348/E7.034 358/142 358/147 386/E09.042 386/E9.042



Inventor(s): CHANG DONG HO KR ; CHANG DONG HO KUMI KR ; DOND HO CHANG ; C DONG HO

Title: BIT STORAGE CELL

Abstract: Source: US5239502A A fast memory bit cell suitable for implementation in VLSI techniques permitting a high cell density. The cell includes a cell circuit in which a logical bit value is storable, a first connection permanently tied to a supply voltage, a second, third and fourth connection, each able to assume a different control state. Each combination of control states on the second, third and fourth connection sets the memory bit cell in an individual among a set of functional states.

Classifications:

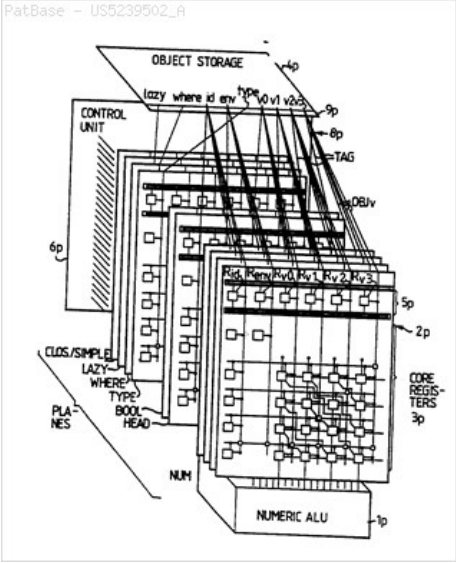
International (IPC 8-9): G06F12/00 G06F15/82 G06F7/00 G06F7/38 G06F7/48 G06F7/483 G06F7/57 G06F9/302 G06F9/44 G11C11/21 G11C11/40 G11C11/412 G11C11/417 G11C11/419 G11C15/00 G11C15/04 H03K19/20 (Advanced/Invention); G06F12/00 G06F7/00 G06F7/38 G11C11/40 G11C11/412 G11C11/417 (Advanced/Non-invention); G06F12/00 G06F15/76 G06F7/00 G06F7/38 G06F7/48 G06F9/302 G06F9/44 G11C11/40 G11C11/412 G11C11/417 G11C11/419 G11C15/00 (Core/Invention); G06F G11C (Subclass/Invention)

International (IPC 1-7): G06F G06F1/00 G06F12/00 G06F13/00 G06F13/14 G06F13/38 G06F15/409 G06F15/72 G06F15/76 G06F15/82 G06F3/00 G06F7/00 G06F7/38 G06F7/48 G06F9/06 G06F9/44 G11B7/00 G11C G11C11/00 G11C11/02 G11C11/21 G11C11/34 G11C11/40 G11C11/41 G11C11/412 G11C11/417 G11C11/419 G11C15/00 G11C15/04 G11C16/00 G11C7/00 H01L27/10 H01L27/108 H03K19/20

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European: G06F7/483 G06F7/48A2 G06F8/31 G06F8/311 G06F9/30A1A G11C11/419 G11C15/04

US: 364/232.22 364/251.5 364/251.6 364/253 364/254.6 364/258 364/716 364/DIG.1 364/DIG.2 365/154 365/156 365/190 365/49 365/49.18 395/375 395/425 395/775 395/800 708/231 711/108 712/11 712/17 712/221 712/38 712/E09.017 712/E9.017



Family:

Publication number	Publication date	Application number	Application date
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US5241491 A	19930831	US19910739535	19910802
US5325501 A	19940628	US19910739541	19910802
US5379387 A	19950103	US19910739532	19910802
US5437049 A	19950725	US19940314404	19940927
US5555434 A	19960910	US19940212566	19940314
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WO9202932 A1	19920220	WO1991SE00513	19910801
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ZA9106119 A	19920527	ZA19910006119	19910802
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Priority:

SE19900002558	19900802	WO1991SE00515	19910801	WO1991SE00515	19910801
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US19940212566	19940314	US19910739536	19910802	US19940314404	19940927
US19910739531	19910802	WO1991SE00514	19910801	WO1991SE00513	19910801

Assignee(s): (std): CARLSTEDT ELEKTRONIC AB ; CARLSTEDT ELECTRONIK AB ; CARLSTEDT ELEKTRONIK AB ; CARLSTEDT ELEKTRONIK AB

Assignee(s): CARLSTEDT ELEKTRONIK AB SE ; CARLSTEDT LARS GUNNAR ; CARLSTEDT LARS G ; CARLSTEDT ELEKTRONIK AB SE ; CARLSTEDT ELEKTRONIK SE AB ; CARLSTEDT ELEKTRONIK SE AB ; CARLSTEDT ELEKTRONIK PARTILLE AB ; CARLSTEDT ELEKTRONIK A SWEDISH BODY CORPORATE TRAR ; CARLSTEDT ELEKTRONIK TRARINGEN AB ; CARLSTEDT ELEKTRONIK AB PARTILLE SE ; CARLSTEDT ELEKTRONIK AB PARTILLE

Inventor(s): (std): CARLSTEDT ; CARLSTEDT LARS GUNNAR ; GUNNAR CARLSTEDT LARS ; GUNNAR LARS ; CARLSTEDT LARS C

Inventor(s): CARLSTEDT LARS G ; LARS GUNNAR ; LARS GUNNAR CARLSTEDT ; CARLSTEDT LARS GUNNAR S 433 70 PARTILLE ; CARLSTEDT LARS GUNNAR S 433 70 PARTILLE SE ; CARLSTEDT LARS GUNNAR SE ; G CARLSTEDT ; CARLSTEDT ELEKTRONIK AB ; CARLSTEDT L GUNNAR

Designated states: AT AU BB BE BG BR CA CH CS DE DK ES FI FR GB GR HU IT JP KP KR LI LK LU MC MG MN MW NL NO PL RO SD SE SU US

Title: MULTIPURPOSE NAVIGATION PLOTTER

Abstract: Source: CA2030511A ABSTRACT. This invention relates to a manually operable "multi-purpose navigation plotter" which allows direct; course, distance and position plotting without: arithmetic calculations, Latitude/Longitude scales, compass roses imprinted on charts or any other instruments commonly used. This plotter is universally applicable for both marine and air navigation using charts scaled in accordance with any measuring system used in the world. The "basic" plotter consist of four layered transparent members held together or taken apart by a special fastener. The "complete plotter" consist of several optional attachments, the "leeway/drift vector" and the "extension ruler/hairline". Each attachment locks- on and rotates on this fastener. Desired "magnetic" values are obtained by the rotational relationship between the "magnetic" rotably protractor disk and the adjacent fixed circular "true" protractor "base" having multiple straight sides, only four shown.

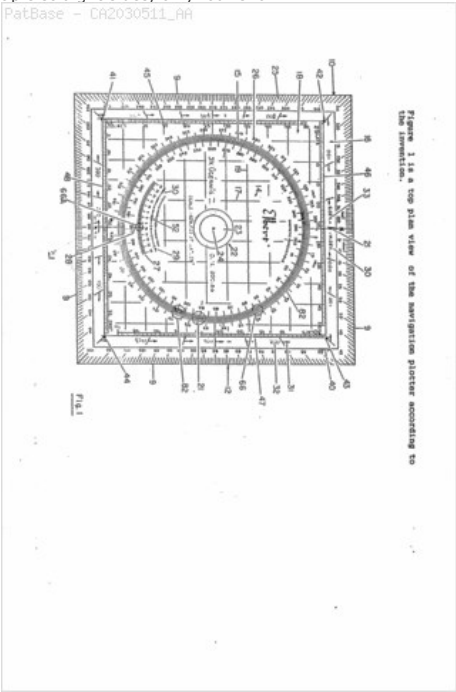
Classifications:

International (IPC 8-9): G01C21/22 (Advanced/Invention);
G01C21/20 (Core/Invention)

International (IPC 1-7): G01C21/22

CPC: G01C21/22

European: G01C21/22



Family:

Publication number	Publication date	Application number	Application date
CA2030511 AA	19920502	CA19902030511	19901101

Priority:

CA19902030511 19901101

Assignee(s): (std): ELBERT JACQUES

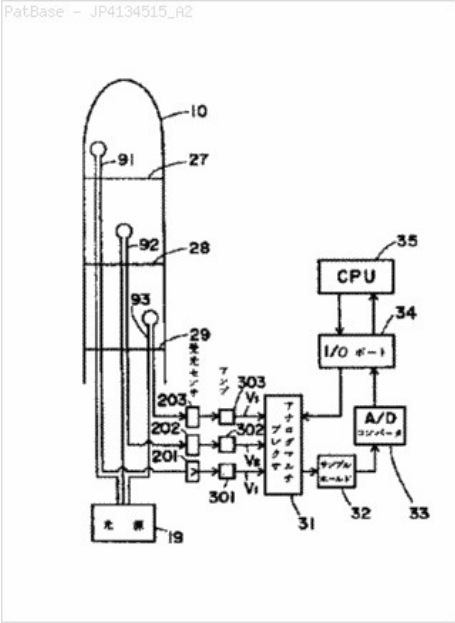
Inventor(s): (std): ELBERT JACQUES

Title: **SIGN LANGUAGE** TRANSLATION DEVICE

Abstract: Source: JP4134515A PURPOSE: To allow even a healthy viewer to comprehend contents, who does not know **sign languages**, by inputting light, which returns through an optical fiber attached to **detect** the bends of joints in fingers, hands and arms, through a photosensor to a **sign language** recognition part. CONSTITUTION: Photosensors 201-203 are irradiated with the light emitted from a light source 19 while attenuating the quantity of light according to the degree of bending the joints through optical fibers 91-93, and the light is converted into an analog electric signal at the photosensors 201-203. Further, the held analog signal of the optical fiber is converted into a digital electric signal by an A/D converter 33 and transmitted to an I/O port 34. The digital signal from the I/O port 34 is inputted to a CPU 35 as the center of a recognition part 2. Thus, only by executing taking with hands as usual, the intension can be transmitted to the healthy viewer.

Classifications:

International (IPC 8-9): G06F3/02 (Advanced/Invention);
G06F3/02 (Core/Invention)
International (IPC 1-7): G06F3/02



Family:

Publication number	Publication date	Application number	Application date
JP4134515 A2	19920508	JP19900256505	19900926

Priority:

JP19900256505 19900926

Assignee(s): (std): DAINIPPON PRINTING CO LTD

Inventor(s): (std): SASAKI MASARU ; SASAKI TAKAYUKI

Title: FOR SHORTENING AN INSTRUCTION CODE LENGTH

Abstract: Source: US5440701A Disclosed is a data processing apparatus comprising a decode device for decoding an instruction code including an operation code and two register designation codes and an instruction execution device for executing appropriate process according to the results decoded by the decode device, wherein the instruction execution device executes a first process when the two register designation codes are different from each other and executes a second process when they are equal.

Classifications:

International (IPC 8-9): G06F9/30 G06F9/318 G06F9/34 (Advanced/Invention)

International (IPC 1-7): G06F9/30 G06F9/318 G06F9/34

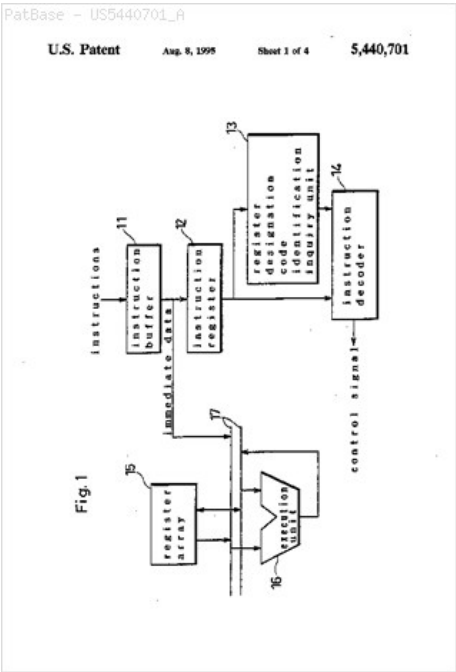
CPC: G06F9/3017 G06F9/30149 G06F9/3013 G06F9/30134 G06F9/30145 G06F9/3016 G06F9/30167 G06F9/30181

European: G06F9/30R2 G06F9/30R5D G06F9/30R5S G06F9/30T G06F9/30T2

G06F9/30T4 G06F9/30T4T G06F9/30X

US: 364/259 364/259.2 364/260.4 364/260.6 364/260.7 364/262.4 364/262.81

364/946.2 364/951.1 364/951.3 364/DIG.1 364/DIG.2 395/375 712/210 712/E09.024 712/E09.027 712/E09.029 712/E09.03 712/E09.035 712/E9.024 712/E9.027 712/E9.029 712/E9.03 712/E9.035 712/E90.24 712/E90.27 712/E90.29 712/E90.3 712/E90.35



Family:

Publication number	Publication date	Application number	Application date
DE69231237 D1	20000817	DE19926031237	19920820
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DE69233282 D1	20040205	DE19926033282	19920820
DE69233282 T2	20040930	DE19926033282T	19920820
DE69233561 D1	20051208	DE19926033561	19920820
DE69233561 T2	20060727	DE19926033561T	19920820
DE69233681 D1	20070329	DE19926033681	19920820
DE69233681 T2	20071025	DE19926033681T	19920820
EP0528695 A2	19930224	EP19920307632	19920820
EP0528695 A3	19940824	EP19920307632	19920820
EP0528695 B1	20000712	EP19920307632	19920820
EP0984358 A2	20000308	EP19990124426	19920820
EP0984358 A3	20001206	EP19990124426	19920820
EP0984358 B1	20070214	EP19990124426	19920820
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EP0989485 A3	20000823	EP19990124499	19920820
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EP1271305 B1	20051102	EP20020078385	19920820
JP2970821 B2	19991102	JP19910209112	19910821
JP5046383 A2	19930226	JP19910209112	19910821
US5440701 A	19950808	US19920932652	19920820

Priority:

JP19910209112 19910821 EP19990124426 19920820 EP19920307632 19920820

Assignee(s): (std): MATSUSHITA ELECTRIC IND CO LTD

Assignee(s): MATSUSHITA ELECTRIC INDUSTRIAL CO ; MATSUSHITA ELECTRIC INDUSTRIAL CO LTD ; PANASONIC CORP ; MATSUSHITA DENKI SANGYO KK

Inventor(s): (std): DEGUCHI MASASHI ; MATSUZAKI TOSHIMICHI

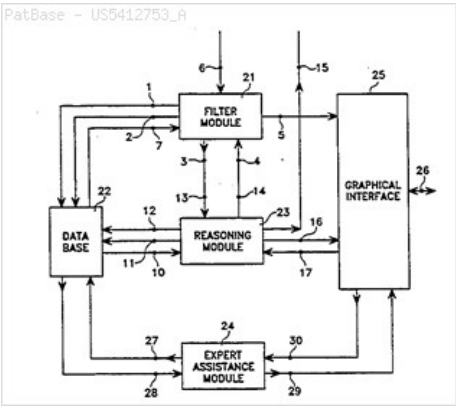
Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

Title: EXPERT SYSTEM CAPABLE OF MEETING REAL TIME CONSTRAINTS

Abstract: Source: US5412753A An expert system capable of meeting real time constraints for solving a problem on the basis of a flow of input messages concerning the operation and the status of a network of machines, this status changing with time, includes a filter module **detecting** in real time significant events on the basis of input messages, each significant event being a manifestation of a problem, as judged by a human expert. A database stores all input messages, the significant events defined by the filter module, intermediate data produced by the expert system, data constituting a model of the network of machines and archives relating to problems processed previously, whether solved or not. A reasoning module comprises a set of rules divided into a plurality of subsets called specialists and each comprising knowledge provided by a human expert required to process part of a problem, specialists being capable of executing in parallel without blocking each other, and a command system for selecting and executing specialists according to heuristic rules provided by a human expert and making a decision or declaring that a decision is impossible at the end of a predetermined time period in respect of a problem represented by significant events communicated to the reasoning module by the filter module. A graphical interface is provided for human/expert system communications. An expert assistant module supplies a human expert with data stored in the database.

Classifications:

International (IPC 8-9): G06F11/25 G06F11/30 G06F15/18 G06F9/44 G06N5/04 H04L12/24 (Advanced/Invention); G06F11/30 G06F9/44 (Advanced/Non-invention); G06F11/25 G06F11/30 G06F9/44 G06N5/00 H04L12/24 (Core/Invention)
International (IPC 1-7): G06F11/22 G06F11/30 G06F15/18 G06F15/20 G06F9/44 G08C25/00 H04B17/00 H04L12/24
CPC: Y10S706/916 Y10S706/917 G06F11/2257 G06N5/043 H04L41/0631 H04L41/0663 H04L41/16 H04L43/0817
European: G06F11/22E G06N5/04D H04L12/24D1 H04L12/24D4 H04L41/06B H04L41/06C1A H04L41/16 H04L43/08D
US: 395/11 395/12 395/916 395/917 706/10 706/11 706/916 706/917 714/E11.157



Family:

Publication number	Publication date	Application number	Application date
AU199228430 A1	19930603	AU19920028430	19921116
AU661348 B2	19950720	AU19920028430	19921116
CA2083880 AA	19930530	CA19922083880	19921126
EP0546882 A1	19930616	EP19920403203	19921127
FR2684472 A1	19930604	FR19910014859	19911129
JP5303494 A2	19931116	JP19920318985	19921127
US5412753 A	19950502	US19920982311	19921127

Priority:

FR19910014859 19911129 CA19922083880 19921126

Assignee(s): (std): ALCATEL NV ; CIT ALCATEL

Assignee(s): ALCATEL STRAWINSKYLAAN NV ; GANDARA MARC ; ALSTON ANDREW ; DELORY JEAN MICHEL ; LAASRI HASSAN ; ALCATEL A CORP NV ; ALCATEL CIT ; ALCATEL N V ; ALCATEL NEAMLOZE VENNOTSHAP

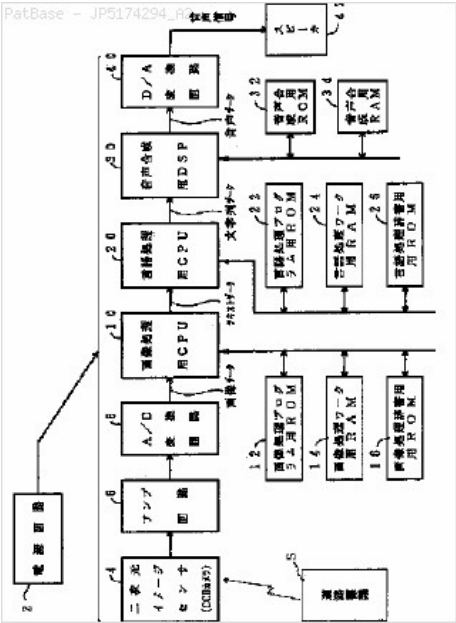
Inventor(s): (std): ALSTON ANDREW ; ANDORIYUU ARUSUTON ; ANDREW ALSTON ; ATSUSAN RAASURI ; DELORY JEAN MICHEL ; GANDARA MARC ; HASSAN LAASRI ; JEAN MICHEL DELORY ; JIYANNMISHIERU DOURORII ; LAASRI HASSAN ; MARC GANDARA ; MARUKU GANDARA

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

Title: ROAD-SIGH READER

Abstract: Source: JP5174294A PURPOSE: To improve the safety of driving by surely recognizing **sign** information inscribed on a road-**sign** without missing, and transmitting the information to a driver in form of voice. CONSTITUTION: This reader is equipped with a two-dimensional image **sensor** 4 which inputs the image of the road-**sign** S, a CPU 10 for image processing which generates the text data of a character and a symbol from inputted image data, a CPU 20 for **language** processing which converts the text data into character string data, a DSP 30 for voice synthesis which performs the voice synthesis of the character string data with voice data, a D/A conversion circuit 40 which converts the voice data into an audio signal, and a speaker 42 which vocalizes the audio signal in voice.

Classifications:
International (IPC 8-9): B60R99/00 G08G1/09 (Advanced/Invention);
B60R99/00 G08G1/09 (Core/Invention)
International (IPC 1-7): B60R27/00 G08G1/09



Family:

Publication number	Publication date	Application number	Application date
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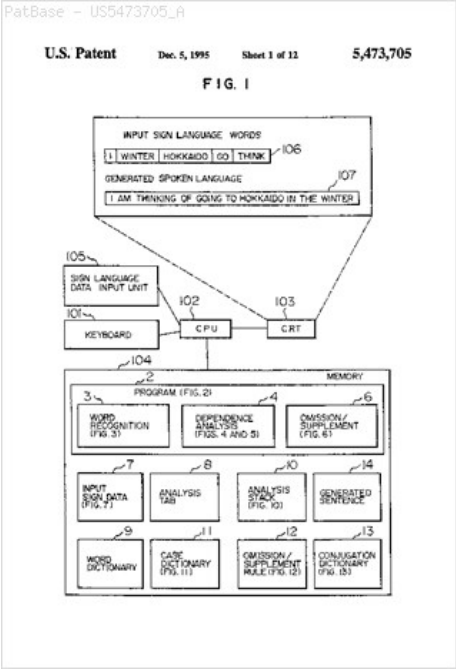
Priority:
JP19910340852 19911224
Assignee(s): (std): SHARP KK
Assignee(s): SHARP CORP ; SHARP KABUSHIKI KAISHA
Inventor(s): (std): OKITA YOSHINORI

Title: **Sign language** translation system and method that includes analysis of dependence relationships between successive words

Abstract: Source: US5473705A A **sign language** translation system and method that not only recognizes words of a **sign language** but also supplements omitted words between the words of the **sign language**, to thereby generate a spoken **language**. The **sign language** translation system has an input unit for inputting at least the motion of hands, a **language** generating unit responsive to the inputted motion of hands for recognizing the words corresponding to the motion of hands and generating a spoken **language** using the relationship between the recognized words, and an output unit for outputting the generated spoken **language**. The **sign language** translation system and method can translate a **sign language** into an easy-to-understand spoken **language**.

Classifications:

International (IPC 8-9): G06F15/18 G06F17/28 G06F3/00 G06F3/01 G06K9/00 G06K9/62 G06K9/68 G06N3/00 G06N99/00 G06T1/00 G06T7/00 G06T7/20 G09B19/06 G09B21/00 G09B21/04 (Advanced/Invention); G06F15/18 G06F17/28 G06K9/00 G06K9/62 G06K9/68 G06N3/00 G06N99/00 G06T1/00 G09B19/06 G09B21/00 (Core/Invention)
International (IPC 1-7): G06F15/18 G06F15/38 G06F15/62 G06F15/70 G06F17/28 G06K9/00 G06T1/00 G09B21/00
CPC: G06F3/017 G06K9/00335 G06K9/6292 G06K9/6293 G09B21/009 G06F17/2872 G06F17/2881 G06K9/685 G09B19/06 G09B21/00 G06K9/00355 G06F17/2818
European: G06F17/28 G06F17/28D2 G06F17/28R G06F17/28R2 G06F3/00B8G G06F3/01G G06K9/00 G06K9/00G G06K9/00G2 G06K9/62F3 G06K9/62F3M G06K9/68B G06K9/68B2 G06K9/68B3 G09B19/06 G09B21/00 G09B21/00C
US: 382/100 382/190 382/209 382/215 382/229 434/112 434/116 704/271



Family:

Publication number	Publication date	Application number	Application date
CA2091293 AA	19930911	CA19932091293	19930309
CA2091293 C	19990511	CA19932091293	19930309
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DE69328147 T2	20001214	DE19936028147T	19930823
DE69419837 D1	19990909	DE19946019837	19940525
DE69419837 T2	20000316	DE19946019837T	19940525
EP0560587 A2	19930915	EP19930301810	19930310
EP0560587 A3	19951206	EP19930301810	19930310
EP0560587 B1	19990602	EP19930301810	19930310
EP0585098 A2	19940302	EP19930306674	19930823
EP0585098 A3	19950111	EP19930306674	19930823
EP0585098 B1	20000322	EP19930306674	19930823
EP0629988 A2	19941221	EP19940303757	19940525
EP0629988 A3	19960828	EP19940303757	19940525
EP0629988 B1	19990804	EP19940303757	19940525
JP3289304 B2	20020604	JP19920051300	19920310
JP3346799 B2	20021118	JP19920247285	19920824
JP5250407 A2	19930928	JP19920051300	19920310
JP6067601 A2	19940311	JP19920247285	19920824
JP6083938 A2	19940325	JP19920235633	19920903
JP6333022 A2	19941202	JP19930125698	19930527
US5473705 A	19951205	US19930029046	19930309
US5699441 A	19971216	US19960716911	19960909
US5887069 A	19990323	US19950567875	19951206

Priority:

JP19920051300	19920310	JP19920247285	19920824	JP19920235633	19920903
US19930029046	19930309	CA19932091293	19930309	CA19932091293	19930309
US19950567875	19951206	US19960716911	19960909	US19940248456	19940524
US19930111380	19930824	JP19930125698	19930527		

Assignee(s): (std): HITACHI LTD ; NITIN INDURKHYA ; SAGAWA HIROHIKO ; SAKOU HIROSHI ; ABE MASAHIRO

Assignee(s): HITACHI

Inventor(s): (std): SAKOU HIROSHI ; SHIMURA TAKANORI ; TODA YUJI ; SAKO YUTAKA ; SAKAWA YUTAKA ; NITEIN INDARUKIA ; ICHIKAWA HIROSHI ; ARAI KIYOSHI ; ICHIKAWA AKIRA ; INOUE KIYOSHI ; NITIN INDURKHYA ; SAGAWA HIROHIKO ; SAGAWA HIROHIKO HITACHI DAIYON ; ABE MASAHIRO ; ABE MASAHIRO HITACHI EUROPE LT

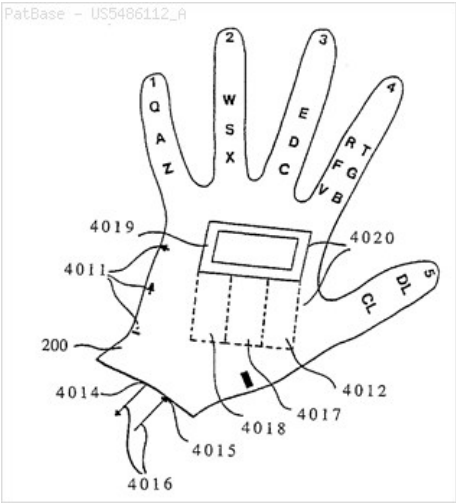
Inventor(s): ABE MASAHIRO HITACHI EUROPE LTDRESEARCH AND DEVE ; SAGAWA HIROHIKO HITACHI DAIYON KYOSHINRYO ; ABE MASAHIRO HITACHI EUROPE LTD RESEARCH AND DEVE

Designated states: DE FR GB

Title: Autonomous wearable computing device and method of artistic expression using same

Abstract: Source: US5486112A Educational devices using process-oriented educational methods are disclosed to prepare pre-school children, school children, and teenagers for keyboarding. The devices include sets of gloves and indicia applied to the fingers of the gloves to provide pictorial and alphanumeric representations of the computer keyboard. The visual and tactile memorization of the glove images are complemented by auditory and associative memorization provided by a story-telling educational method. Synergistic use of the gloves in the context of supervised story-telling also trains the pre-school children to develop and practise both lateral and vertical thinking skills1-2, thus preparing them for coping creatively with the inherent hardware/software limitations of computers. The memorization of the alphanumeric representation of the computer keyboard is reinforced through synergistic use of the gloves in a variety of activities including learning the alphabet, learning word-spelling, and learning **languages**. To best fit the psychology of teenagers, sets of picture-rings and medallion-rings are disclosed to specifically prepare that age-group for keyboarding. A process-oriented method based on the aforementioned devices is disclosed to facilitate the self-expression of children and/or help towards a more healthy communication and healing (therapy). A process-oriented method based on the aforementioned devices is disclosed to assist in the learning of the alphabet and the numbers, and in the learning of **languages** and scientific disciplines (arithmetic, mathematics, physics, chemistry, medical sciences, etc.). The functionality of the aforementioned devices and the efficiency of the aforementioned educational methods are enhanced through a highly integrated device disclosed under the term "keygloves" in analogy with the term "keyboard", since the "keygloves" extends the power of the "keyboard" to the very hands of the learner/user. 1 De Bono, E.: "How To Change Ideas", Seminar Cassettes, Londin, 1973. 2 Troudet, F.: "Can Creativity Be Taught?", Cleveland State University, Cleveland, OH, Dec. 1988.

Classifications:
International (IPC 8-9): G06F1/16 G09B13/00 G09B13/04 G09B17/00 G09B19/00 G09B5/06 (Advanced/Invention); G06F1/16 G09B13/00 (Core/Invention)
International (IPC 1-7): A63B69/00 G09B13/00 G09B13/04
CPC: G09B13/04 G06F1/163 G09B5/065 G09B17/00 G09B19/00
European: G06F1/16P5 G09B13/04 G09B17/00 G09B19/00 G09B5/06C
US: 2/160 341/20 434/112 434/157 434/162 434/167 434/233 434/250 63/15 63/15.2



Family:

Publication number	Publication date	Application number	Application date
AU199347761 A1	19940131	AU19930047761	19930713
AU199511710 A1	19950619	AU19950011710	19941115
AU199535872 A1	19960329	AU19950035872	19950912
CA2118935 AA	19940311	CA19932118935	19930713
CA2176352 AA	19960510	CA19942176352	19941115
EP0611467 A1	19940824	EP19930918242	19930713
EP0611467 A4	19960207	EP19930918242	19930713
GB2299198 A1	19960925	GB19960008759	19950912
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US5486112 A	19960123	US19930159194	19931130
US5507649 A	19960416	US19940101843	19940215
US5554032 A	19960910	US19940328393	19941024
US5571020 A	19961105	US19930128821	19930928
US5655910 A	19970812	US19950551935	19951023
WO9401851 A1	19940120	WO1993US06768	19930713
WO9515547 A1	19950608	WO1994US12682	19941115
WO9608804 A1	19960321	WO1995US11581	19950912

Priority:
US19910770610 19911003 US19920912874 19920713 WO1993US06768 19930713
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Assignee(s): (std): FARIDEH TROUDET ; TERRY TROUDET ; TROUDET FARIDEH ; TROUDET TERRY

Inventor(s): (std): TROUDET TERRY ; TROUDET FARIDEH

Inventor(s): TERRY TROUDET ; FARIDEH TROUDET

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

Abstract: Source: US5457780A The present invention pertains to integrated circuit system based on novel architecture of Video-Instruction-Set-Computing (VISC). The integrated circuit comprises a plurality of functional units to independently execute the tasks of remote communication, bandwidth adaptation, application control, multimedia management, and universal video encoding. The integrated circuit is also comprised of scalable formatter element connecting to the functional units which can inter-operate arbitrary external video formats and intelligently adapt to selective internal format depending upon the system throughput and configuration. Additionally, there is a smart memory element connecting to the functional units and scalable formatter, which can access, store, and transfer blocks of video data based on selective internal format. In the preferred embodiment, the integrated circuit is also comprised of an embedded RISC or CISC co-processor element in order to execute DOS, Window, NT, Macintosh, OS2 or UNIX applications In a more preferred embodiment, the integrated circuit includes a real time object oriented operation system element wherein concurrent execution of the application program and real time VISC based video instruction sets can be performed. The present invention is designed to sustain the evolution of a plurality generations of the VISC microprocessors. These novel VISC microprocessors can be efficiently used to perform wide range of real time distributed video signal processing functions for applications such as interactive video, HDTV, and multimedia communications.

International (IPC 8-9): G06F17/30 G06T1/20 G06T1/60 G06T3/40 H04L12/18 H04L29/06 H04M3/56 H04N21/2383 H04N21/438 H04N7/015 H04N7/14 H04N7/15 H04N7/173 H04N7/24 H04N7/26 H04N7/46 H04N7/50 (Advanced/Invention); H04N5/44 (Advanced/Non-invention); G06F17/30 (Core/Invention)

International (IPC 7): G06F15/21 G06F15/62 G06F17/00 G06F17/21 G06F17/30 G06F7/00 G06K9/36 G06T1/00 G06T1/20 G06T1/60 G09G5/12 H03M1/00 H04N7/015
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395/806 707/100 707/3 707/500 707/500.1 707/526 707/532 707/999.003 707/999.1
707/E17.008 707/E17.098 709/200 709/221 709/300 712/1 712/200 715/202 715/500
715/500.1 715/526 715/532 715/716



Publication number	Publication date	Application number	Application date
AU199347686 A1	19940131	AU19930047686	19930617
AU677791 B2	19970508	AU19930047686	19930617
CA2139660 AA	19950105	CA19932139660	19930617
CA2139660 C	20000314	CA19932139660	19930617
GB2284525 A1	19950607	GB19950000137	19930617
GB2284525 B2	19960320	GB19950000137	19930617
GB9500137 A0	19950308	GB19950000137	19930617
US5457780 A	19951010	US19920909312	19920706
US5611038 A	19970311	US19940297409	19940829
US5754766 A	19980519	US19950514890	19950814
US6091857 A	20000718	US19970810981	19970227
US6151598 A	20001121	US19970985132	19971204
US6404928 BA	20020611	US20000510305	20000222
WO9401824 A1	19940120	WO1993US05863	19930617

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US19970810981 19970227	US19940297409 19940829	

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Inventor(s): (std): SHAW STEVEN M ; SHAW VENSON M ; STEVEN M SHAW ; VENSON M SHAW

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

Title: Magnetic tape player for music class teaching - provides synchronised playback of signal components using recorded address signals

Abstract: Source: DE4218062A1 The music teaching system uses a member of relatively simple cassette players, all of which are linked to a common operating device, the cassette bands being synchronised via address markings which are read independently of the tape velocity to control switching of the signal sources and provide correct playback of the signal components. The acoustic signals may be synchronised with image elements, or position markings to provide an indication of the corresponding musical notes, or the musical timing. ADVANTAGE - Allows use of relatively cheap cassette players in class functioning similarly to **language** laboratory.

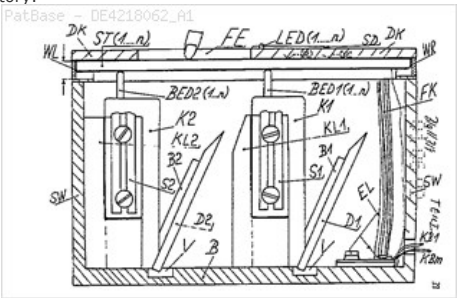
Classifications:

International (IPC 8-9): G09F27/00 (Advanced/Invention); G09F27/00 (Core/Invention)

International (IPC 1-7): G01B7/02 G01B7/30 G01D5/20 G01P3/42 G01R1/28 G09B5/06 G09F19/12 G09F27/00 G10H3/14 H04R3/00

CPC: G01B7/023 G09B5/06 G09B15/002 G09F27/00

European: G01B7/02B G09B15/00B2 G09B5/06 G09F27/00



Family:

Publication number	Publication date	Application number	Application date
DE4218062 A1	19940310	DE19924218062	19920601
DE4240739 A1	19940310	DE19924240739	19921203
DE4240739 C2	19981112	DE19924240739	19921203

Priority:

DE19914139863 19911203	DE19914140363 19911207	DE19914140566 19911209
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Assignee(s): (std): KOLLER ROMAN

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Inventor(s): (std): KOLLER ROMAN

Inventor(s): KOLLER ROMAN 82110 GERMERING DE

Title: DENTAL TREATMENT AID

Abstract: A dental treatment aid consists of an articulated arm (11) in several parts whose rear end (12) is stationarily held and whose front end (14) has at least one opening (15) for the coupling part of a rubber-elastic suction fitting (16) and can be positioned in space according to the needs. The suction fitting (16) has a light head (32) linked by an optical waveguide (31) to a light source (28). The articulated arm (11) has a motor drive with positioning members for adjusting each joint (18, 20, 22). All positioning members are linked to a central controlling device. The controlling device has a preferably programmable memory and can be optically or acoustically, for example verbally, controlled. A suction device (26) and a UV lamp may also be actuated by verbal commands. The suction device at the front end of the articulated arm is rubber-elastic and is provided with a tongue depressor designed as an impression tray wall.

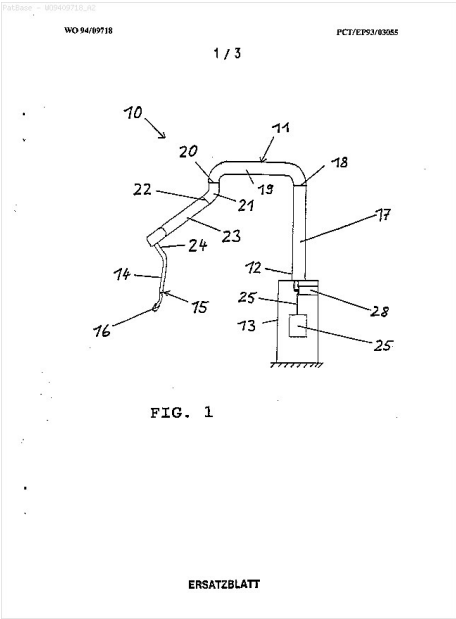
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International (IPC 1-7): A61B1/04 A61B1/06 A61C17/04 A61C17/06 A61C17/12 A61C19/00 A61C5/04

CPC: A61C1/088 A61C17/04

European: A61C1/08L A61C17/04



Family:

Publication number	Publication date	Application number	Application date
AU199454198 A1	19940524	AU19940054198	19931102
DE4306450 A1	19940505	DE19934306450	19930302
KR100155062 B1	19981102	KR19950700801	19950228
KR19950702897 A	19950823	KR19950700801	19950228
WO9409718 A2	19940511	WO1993EP03055	19931102
WO9409718 A3	19940526	WO1993EP03055	19931102

Priority:

DE19924237008 19921102 DE19934306450 19930302 WO1993EP03055 19931102

JP19930250700 19931006

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Inventor(s): WATANABE YUUJI ; HATDORI DAKAO ; HIRI MATARO ; ISHII KENJI ; IWASHITA MASANORI ; KATAE TOORU ; KOBAYASHI DOMOYUKI ; KURZE ULRICH DR 80799 MUENCHEN DE ; MOCHIDA HIROCHIKA ; NAGANO DAKASHI ; NISHIMURA DAKAAKI ; OKADA MAKOTO ; SATO KIMIKAZ

Designated states: AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR KZ LK LU MC MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SK SN TD TG UA US VN

Title: Digital video and audio signal recording and reproducing apparatus efficiently storing a variety of different accompanying video and audio information data

Abstract: Source: US5583654A A video tape recording apparatus records and reproduces digital video and audio signals in the form of coded signals that have a recording format which includes a video signal recording area for recording video data and its respective accompanying information, an audio signal recording area for recording video data and its respective accompanying information, insert and track information and subcode information. Preferably, the recording format includes packs having a pack header having a large data item and a small data item to indicate the format and use of the succeeding pack data. Errors in the recorded and reproduced audio and video signals are **detected** and the value of the respective accompanying information changed to prevent reading of erroneous stored data and thus prevent propagation of errors.

Classifications:

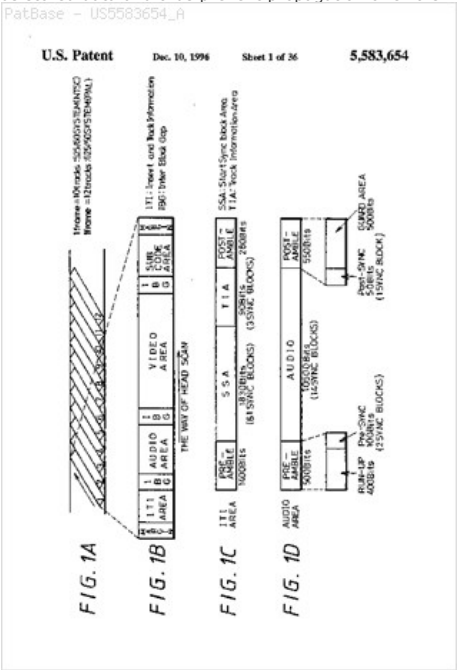
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European: G11B15/07 G11B15/087 G11B20/12B G11B20/12B4 G11B20/12B4C G11B20/18B G11B23/087A1 G11B27/11 G11B27/30C G11B27/30C2 H04N21/235 H04N21/235M H04N21/236W H04N21/2381 H04N21/2383 H04N21/4147 H04N21/41P7 H04N21/434W H04N21/435 H04N21/4363 H04N21/438D H04N21/8352 H04N21/84 H04N21/8547 H04N5/926B H04N5/926S2 H04N5/926S2B H04N9/804B3 S11B20/18 S11B220/65A1 S11B220/90 S11B220/91A T04N21/432P T04N21/433R T04N5/945 T04N9/806S T04N9/82N

US: 360/18 360/19.1 360/27 360/48 360/53 360/60 375/E07.024 375/E07.025 375/E7.024 375/E7.025 375/E70.24 375/E70.25 386/104 386/208 386/246 386/264 386/273 386/318 386/323 386/324 386/337 386/357 386/95 386/96 386/98 386/E05.013 386/E05.017 386/E05.018 386/E09.015 386/E5.013 386/E5.017 386/E5.018 386/E50.13 386/E50.17 386/E50.18 386/E9.015 386/E90.15 G9B/015.009 G9B/015.011 G9B/020.016 G9B/020.020 G9B/020.021 G9B/020.048 G9B/023.064 G9B/027.021 G9B/027.033 G9B/027.037 G9B/15.009 G9B/15.011 G9B/20.016 G9B/20.02 G9B/20.021 G9B/20.048 G9B/23.064 G9B/27.021 G9B/27.033 G9B/27.037



Family:

Publication number	Publication date	Application number	Application date
AU199352062 A1	19940616	AU19930052062	19931130
AU199352063 A1	19940616	AU19930052063	19931130
AU665131 B2	19951214	AU19930052063	19931130
AU676504 B2	19970313	AU19930052062	19931130
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JP3520539 B2	20040419	JP19930296760	19931126
JP6176491 A2	19940624	JP19930096001	19930422
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US5583654 A	19961210	US19930159554	19931201
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Priority:

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Assignee(s): SONY CORP TOKIO TOKYO

Inventor(s): (std): OGURO MASAKI C O SONY CORPORAT ; MASAKI OGURO ; OGURO MASAKI

Inventor(s): OGURO MASAKI C O SONY CORP ; OGURO MASAKI C O SONY CORPORATION ; OGURO MASAKI C O SONY CORPORATION
TOKYO JP ; OGURO MASAKI C O SONY TOKYO JP CORP

Designated states: CH DE ES FR GB LI NL SE

Title: Synthesis-based speech training system

Abstract: Source: US5340316A This invention includes a speech training system that allows a student to enter any utterance to be learned and have the articulatory model movements required to produce the utterance displayed on a CRT screen. The system accepts a typed utterance, breaking it down into a set of phonemes. The set of phonemes is sent to a synthesizer, which produces a set of parameters indicating the acoustic characteristics of the utterance. The acoustic parameters are converted into articulatory parameters emphasizing the frequency, nasality, and tongue-palate contact required to produce the typed utterance. The articulatory parameters are displayed on the CRT screen. The acoustic parameters are also sent to a formant synthesizer which converts the parameters into speech output. The system measures a student's production and then evaluates the student's production against the parameters of the typed utterance for its similarity. Feedback on the similarity is displayed on the CRT screen.

Classifications:

International (IPC 8-9): G09B19/04 G09B19/06 G09B21/00 G09B23/00 G09B5/06 G09B9/00 G10L13/00 G10L15/00 G10L15/02 G10L21/06

H04R1/42 (Advanced/Invention);

G09B23/00 G09B9/00 (Advanced/Non-invention);

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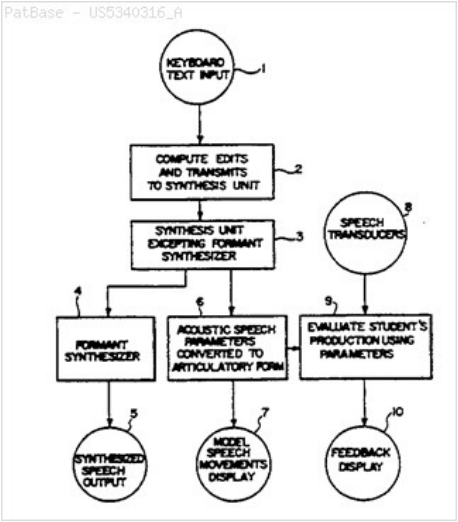
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CPC: G09B5/065 G09B19/04

European: G09B19/04 G09B5/06C

US: 434/112 434/116 434/185 704/239 704/254 704/258 704/260 704/261 704/276 704/278



Family:

Publication number	Publication date	Application number	Application date
CN1064766 C	20010418	CN19951002483	19950312
CN1115900 A	19960131	CN19951002483	19950312
JP2908720 B2	19990621	JP19950085534	19950411
JP7005807 A2	19950110	JP19940097647	19940511
JP8030190 A2	19960202	JP19950085534	19950411
KR0149622 B1	19981015	KR19950005079	19950313
KR19950034012 A	19951226	KR19950005079	19950313
US5340316 A	19940823	US19930068390	19930528
US5536171 A	19960716	US19940226648	19940412

Priority:

US19930068390 19930528 US19940226648 19940412 JP19950085534 19950411
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Assignee(s): (std): MATSUSHITA ELECTRIC IND CO LTD ; PANASONIC TECHNOLOGIES INC

Assignee(s): PANASONIC TECHNOLOGIES ; PANASONIC CORP ; MATSUSHITA DENKI SANGYO KK ; MATSUSHITA ELECTRIC CORP ; MATSUSHITA ELECTRIC INDUSTRIAL CO LTD ; MATSUSHITA ELECTRIC OF AMERICA CORP

Inventor(s): (std): ANTONANZAS BARROSO NORMA ; BURAIAN AREN HANSON ; ERIZABESU GUREISU KIITO ; HANSON BRIAN A ; HEKUTAA RAURU JIYABUKIN ; JAVKIN HECTOR R ; KEATE ELIZABETH G ; NOOMA ANTONANZASU BAROSO ; KEATE ELIZABETH GRACE ; JAVKIN HECTOR RAUL

Inventor(s): NORMA ANTONANZAS BARROSO ; HECTOR RAUL JAVKIN ; ELIZABETH GRACE KEATE ; HEKUTAA RAURU JABUKIN

Title: Sign language generation apparatus and sign language translation apparatus

Abstract: Source: US5659764A A sign language interpretation apparatus for performing sign language recognition and sign language generation generates easily read sign language computer graphics (CG) animation by preparing sign language word CG patterns on the basis of actual motion of the hand through the use of a glove type sensor to generate natural sign language CG animation, and by applying correction to the sign language word CG patterns. Further, in the sign language interpretation apparatus, results of translation of inputted sign language or voice language are confirmed and modified easily by the individual input persons, whereby results of translation of the inputted sign language or voice language are displayed in a combined form desired by the user to realize smooth communication. Also, candidates obtained as a result of translation are all displayed and can be selected easily by the input person with a device such as a mouse. Further, when a polysemous word is available, the word is displayed while being changed in its display form, and other expressions are confirmed and modified with the mouse.

Classifications:

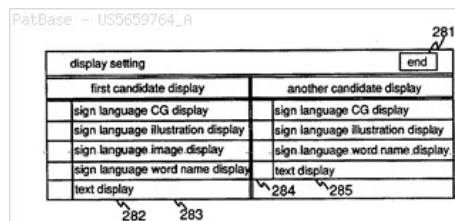
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International (IPC 1-7): G06F15/38 G06F15/62 G06F17/28 G06F3/153 G06T15/70 G06T17/40 G09B21/00 H04N7/18

CPC: G06F3/017 G09B21/009

European: G06F3/00B8G G06F3/01G G09B21/00C

US: 340/4.13 340/825.19 345/419 345/473 395/753 702/153 704/2 704/271 704/3



Family:

Publication number	Publication date	Application number	Application date
JP3169727 B2	20010528	JP19930036346	19930225
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JP6337627 A2	19941206	JP19930125705	19930527
JP6337628 A2	19941206	JP19930128702	19930531
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Priority:

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Assignee(s): (std): HITACHI LTD

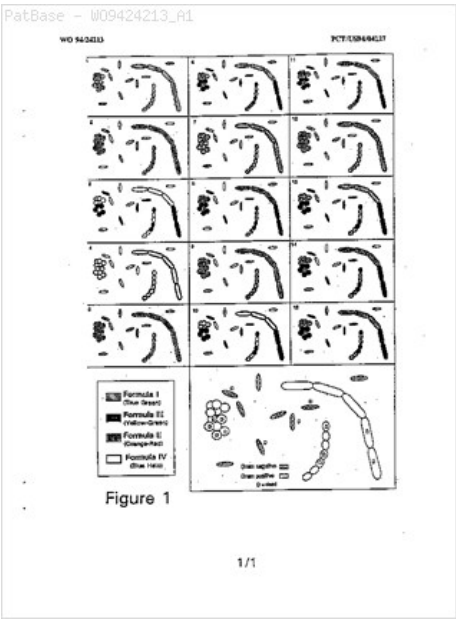
Inventor(s): (std): ABE MASAHIRO ; INOUE KIYOSHI ; OBUCHI YASUNARI ; OHIRA EIJI ; OHKI MASARU ; OKI MASARU ; OOHIRA EIJI ; SAGARA KAZUHIKO ; SAGAWA HIROHIKO ; SAKIYAMA ASAKO ; SAKIYAMA TOMOKO ; TODA YUJI

Title: CYCLIC-SUBSTITUTED UNSYMMETRICAL CYANINE DYES

Abstract: Source: US5436134A The invention describes the preparation and use of fluorescent stains for nucleic acids derived from unsymmetrical cyanine dyes. In particular, the invention describes unsymmetrical cyanine dyes having a saturated or unsaturated cyclic substituent. The dyes of the invention possess superior fluorescent characteristics when complexed with nucleic acids, and have utility in any application which requires **detection** of nucleic acids. The presence of the cyclic substituent results in improved permeability in a wide range of living cells, resulting in improved **detection** of intracellular nucleic acids.

Classifications:

International (IPC 8-9): C07D211/76 C07D213/60 C07D213/61 C07D213/64 C07D215/16 C07D215/18 C07D215/22 C07D215/227 C07D277/64 C07D413/06 C07D417/04 C07D417/06 C07D417/14 C09B23/00 C09B23/02 C09B23/04 C09B69/06 C12Q1/68 G01N21/64 G01N21/78 G01N27/26 G01N31/22 G01N33/48 G01N33/50 G01N33/52 G01N33/58 (Advanced/Invention); C07D215/22 (Advanced/Non-invention); C07D211/00 C07D215/00 C07D417/00 C09B23/00 (Core/Invention)
International (IPC 1-7): C07D213/60 C07D213/61 C07D213/64 C07D215/16 C07D215/18 C07D215/22 C07D215/227 C07D277/64 C07D413/06 C07D417/06 C07D417/14 C07H1/00 C07H17/00 C09B23/00 C09B23/02 C09B23/04 C09B23/08 C09B69/06 C12Q1/02 C12Q1/04 C12Q1/68 G01N21/64 G01N21/78 G01N27/26 G01N31/22 G01N33/00 G01N33/48 G01N33/50 G01N33/52 G01N33/58
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European: C07D211/76 C07D213/64 C07D215/18 C07D215/227 C07D409/04 C07D413/06 C07D417/06 C07D417/14 C09B23/02
US: 435/25 435/26 435/27 435/28 435/29 435/34 435/39 435/4 435/5 435/6 435/6.12 435/6.17 436/172 436/34 436/63 436/800 436/94 536/1.11 536/22.1 536/23.1 536/25.6 536/26.73 536/28.1



Family:

Publication number	Publication date	Application number	Application date
AT210703 E	20011215	AT19940914173T	19940413
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CA2133765 AA	19941005	CA19942133765	19940413
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EP0675924 A1	19951011	EP19940914173	19940413
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JP2005272479 A2	20051006	JP20050167583	20050607
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JP2006111884 A2	20060427	JP20050306416	20051020
JP2010196067 A2	20100909	JP20100097505	20100421
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JP4684016 B2	20110518	JP20050167584	20050607
JP7196930 A2	19950801	JP19940159824	19940712
US5436134 A	19950725	US19930090890	19930712
US5445946 A	19950829	US19940206081	19940303
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Priority:

US19930047683 19930413	US19930090890 19930712	US19930146328 19931101
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Assignee(s): (std): MOLECULAR PROBES INC

Assignee(s): YUE STEPHEN T ; WELLS K SAM ; ROTH BRUCE L ; BANK OF AMERICA NA ; HAUGLAND RICHARD P ; MILLARD PAUL J ; MOL PURUBUZZU INC

Inventor(s): (std): BURUUSU ERU ROSU ; HAUGLAND P ; HAUGLAND RICHARD P ; KEI SAMU UERUSU ; MILLARD J ; MILLARD PAUL J ; RICHIYAADO PII HOOGURANDO ; ROTH BRUCE L ; ROTH L ; POORU JIEI MIRAADO ; SUTEIIBUN TEII YUE ; WELLS K SAM ; WELLS SAM ; YUE STEPHEN T ; YUE T

Inventor(s): BRUCE L ROTH ; WELLS K ; RICHARD P HAUGLAND ; STEPHEN T YUE ; PAUL J MILLARD ; K SAM WELLS

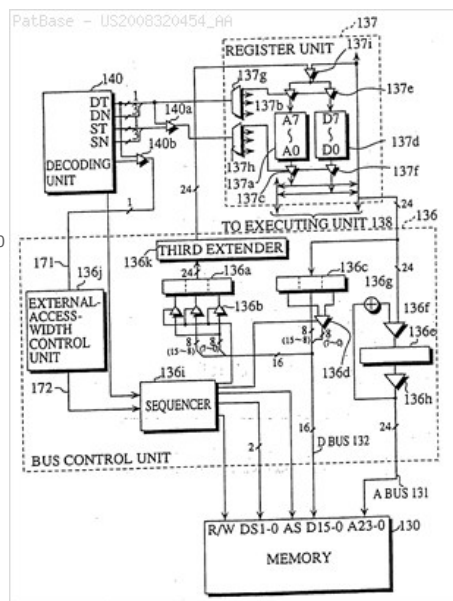
Designated states: AT AU BE CA CH DE DK ES FR GB GR IE IT JP LI LU MC NL PT SE

Abstract: Source: US2008320454A The present invention discloses a program converting unit for generating a machine language instruction from a source program for a processor that manages an N-bit address while processing M-bit data, N being greater than M, and such a processor that runs the converted program. The program converting unit comprising: a parameter holding unit for holding a data width and a pointer width designated by a user; the data width representing the number of bits of data used in the source program while the pointer width representing the number of bits of an address; and a generating unit for generating an instruction to manage the data width when a variable operated by the instruction represents the data, and for generating an instruction to manage the pointer width when a variable operated by the instruction represents the address.

International (IPC 8-9): G06F7/00 G06F7/76 G06F9/30 G06F9/302 G06F9/305 G06F9/318 G06F9/34 G06F9/355 G06F9/45 (Advanced/Invention);
G06F7/00 G06F7/76 G06F9/30 G06F9/305 G06F9/34 G06F9/45 (Core/Invention)

International (IPC 1-7): G06F7/00 G06F9/30 G06F9/302 G06F9/305 G06F9/318 G06F9/34 G06F9/355 G06F9/45

CPC: G06F8/423 G06F8/447 G06F8/47 G06F8/52 G06F9/30014 G06F9/30112
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European: G06F8/423 G06F8/447 G06F8/47 G06F8/52 G06F9/30A1A1 G06F9/30R4C
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US: 395/705 712/210 712/E09.017 712/E09.027 712/E09.028 712/E09.038 712/E09.038
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717/143 717/143P 717/154



Publication number	Publication date	Application number	Application date
DE69432445 D1	20030515	DE19946032445	19940527
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EP1164479 A1	20011219	EP20010202455	19940527
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EP1229440 A2	20020807	EP20020076028	19940527
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US5809306 A	19980915	US19960587338	19960116
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US20060607889	20061204				

Designated states: DE FR GB NL

Title: INTERACTION CONTROLLER IN SIGN LANGUAGE INTERACTION

Abstract: Source: JP6337631A PURPOSE: To embody a device which can conduct an interaction between each person whose language is different from each other and between a person and a machine without making an interpreter of sign language, etc., always reside, so that it is not suspended by an erroneous translation or a misunderstanding, and does not come to a standstill. CONSTITUTION: An interactive information management part 18 records an interactive career of a sound listener and an auditory sense handicapped person. When a standstill is generated in an interaction between the sound listener and the auditory sense handicapped person, it is switched to a conversational form executed through a sign language interpreter by a mutual agreement of both of them. A communication management system 19 can allow the sign language interpreter to access the career of the interactive information management part 18, and also, switches ports 11, 12 and 13 to such a form as a conversation by three persons can be executed, based on an instruction of the sign language interpreter.

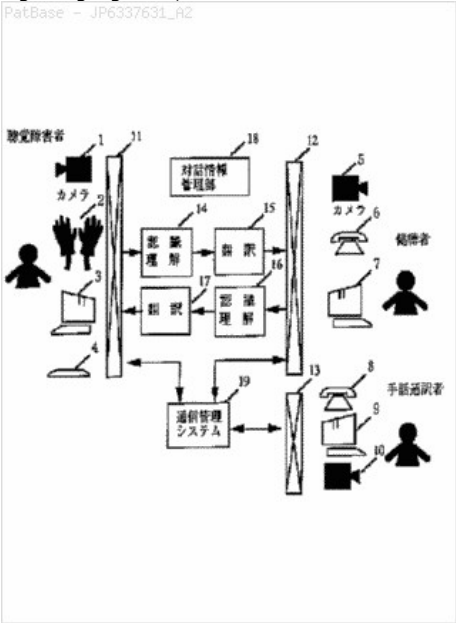
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G09B21/00 (Advanced/Invention);

G06F17/22 G06F3/03 G06F3/033 G09B21/00 (Core/Invention)

International (IPC 1-7): G06F15/20 G06F3/033 G09B21/00



Family:

Publication number	Publication date	Application number	Application date
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Priority:

JP19930125704 19930527

Assignee(s): (std): HITACHI LTD

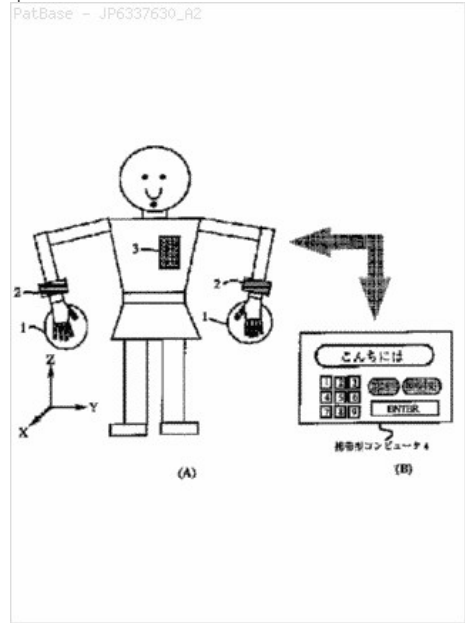
Inventor(s): (std): INOUE KIYOSHI ; OBUCHI YASUNARI ; OHIRA EIJI ; OKI MASARU ; SAGARA KAZUHIKO ; SAGAWA HIROHIKO ; SAKIYAMA ASAKO ; TODA YUJI

Title: PORTABLE TYPE **SIGN LANGUAGE** INPUT DEVICE

Abstract: Source: JP6337630A PURPOSE: To obtain a device which improves portability and easily useability and can be applied in a public place by separating an oscillator held by an auditory **sense** handicapped person and a portable computer held by a sound listener, and exchanging their information by a radio wave. CONSTITUTION: This device consists of input devices 1, 2 and a terminal 3 which an auditory **sense** handicapped person A possesses, and a portable computer 4 which a sound listener B possesses. In the input devices 1, 2, a position of a wrist or a finger is converted to an electric signal, and a signal is sent to the terminal 3 by a radio wave. In the terminal 3, these signals are further summarized and sent to the portable computer 4 by a radio wave. In the portable computer 4, these results are analyzed and a sentence is displayed. As for a function of the input devices 1, 2, an electro myograph input type and a space coordinate input type exist. For instance, in the case of the electro myograph input type, the input device 2 and the terminal 3 are used, a position of each finger is measured by an electro myograph of a wrist by using the input device 2, and to the terminal 3, a signal corresponding to a position of each finger, and a space coordinate and acceleration of the input device 2 in which the terminal 3 is an origin are inputted.

Classifications:

International (IPC 8-9): G06F3/03 G06F3/033 G09B21/00 (Advanced/Invention);
G06F3/03 G06F3/033 G09B21/00 (Core/Invention)
International (IPC 1-7): G06F3/033 G09B21/00



Family:

Publication number	Publication date	Application number	Application date
JP6337630 A2	19941206	JP19930125703	19930527

Priority:

JP19930125703 19930527

Assignee(s): (std): HITACHI LTD

Inventor(s): (std): INOUE KIYOSHI ; OBUCHI YASUNARI ; OHIRA EIJI ; OKI MASARU ; SAGARA KAZUHIKO ; SAGAWA HIROHIKO ; SAKIYAMA ASAKO ; TODA YUJI

Search history

Search 1: TAC=(glove and (capture or sense or sensor or detect)) (Results 2152)

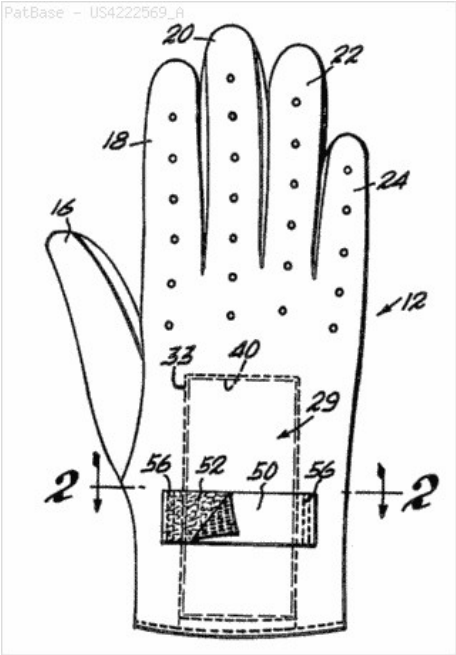
Search 2: TAC=(glove and (capture or sense or sensor or detect) and (flexion or flection)) (Results 53)

Title: BENT WRIST SIGNAL DEVICE

Abstract: Source: US4222569A A wrist signal means in the form of a wrist wrap to encircle the wrist of a user and in which there is a pocket extending across the back of the hand and the forearm at the wrist juncture so that, when the wrist is moved in **flexion** or extension, a flat generally rectangular metal plate in the pocket is **flexed** or bent causing a noise to be emitted to signal that the wrist has been moved. The device may include a tightener strap to tighten the noise-making plate against the wrist.

Classifications:

International (IPC 8-9): A63B69/00 A63B69/36 (Advanced/Invention);
A63B69/00 A63B69/36 (Core/Invention)
International (IPC 1-7): A63B69/36
CPC: A63B2209/10 A63B69/3608 A63B69/0046 A63B2071/0627 A63B2071/0633
European: A63B69/00L A63B69/36B K63B71/06D2A2 K63B71/06D2A6
US: 273/183B 473/213 473/62



Family:

Publication number	Publication date	Application number	Application date
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Priority:

US19780947595 19781002

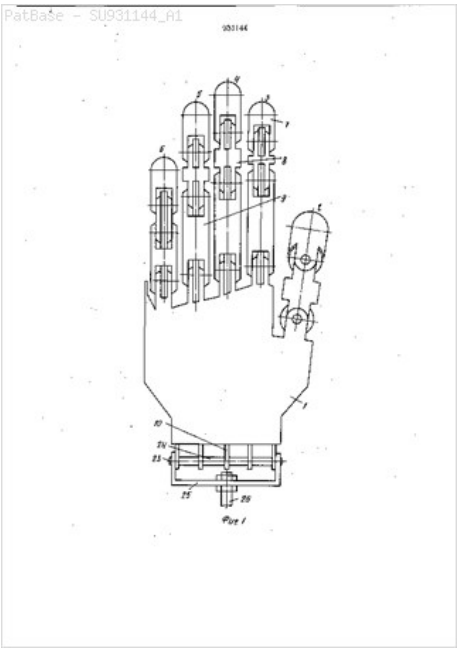
Assignee(s): (std): DEMASCOLO GUY J

Inventor(s): (std): DEMASCOLO GUY J

Title: DEVICE FOR DETERMINING ERGONOMIC QUALITY PARAMETERS OF DESIGN OF GARMENTS

Abstract: Source: SU931144T Invention relates to clothing industry, in particular to a device for evaluating the quality of the **glove** construction products, such as ease of dynamics. A device is known for determining quality indicators ergonomic design of garments, comprising a support for the article, and means for moving the holders relative to one another and relative to the support 1. Known device does not provide for the **glove** test products. A device is known for determining quality indicators ergonomic design of garments, comprising a support for the article carrier is pivotally mounted holders, parts corresponding to the shape of the article, and means for moving the holders relative to one another and relative to the support, having a strain gauge associated with the recording device 2. Construction is known device does not allow to carry out the test **glove** products. The purpose of the invention - getting quality indicators **glove** products corresponding experimental wear. This goal is achieved in that the device for determining quality indicators ergonomic design of garments, comprising a support for the article carrier is pivotally mounted holders, parts corresponding to the shape of the article and means for moving the holders relative to one another and relative to the support, having a strain gauge associated with the recording device, the support for the article is in the shape of the hand and pivotally mounted holders have a shape corresponding to the phalanges, wherein the means for moving the holders consist of rollers disposed between the holders and the support, and a **flexible** strip fixed to the rollers and associated with recording device via a spring-loaded rod. Fig. 1 shows the device general view; Fig. 2 - one finger unit, side view; Fig. 3 - the device during testing. The apparatus comprises a support 1 for an article having a shape of the hand and fingers five 2-6 containing each pivotally associated with a support 1 between an upper 7 and lower 8 intermediate 9 holders. In frame 1 is a drive mechanism consisting of a rod 10, rocker arm 11 and the return spring 12. Yoke And when the pin 13 is rigidly associated with a shaft 14 and a roller 15 hinged to the lower holder 9. Lower holder 9 is connected to eight secondary shaft 16 on which the roller 17 rotates freely. Average holder 8 connected to the upper shaft 7, 18, which are rigidly by a fixed roller 19 schifta 20. means for moving the holders comprises rollers 15-17, 20 that encircle the **flexible** belt 21 associated with the rollers 15 and 20 with pins 22 and 19 respectively. All thumbs operate in a similar manner and are driven by means of attachment rods 10 on a common axis 23 with staged bushing 24. Axle 23 is pivotally coupled to shackle 25, which is attached to the cutting ha t 26 which is fixed in the gap tenzometricheskie ring. or dynamometer with 27 fixed to the load cells 28, it connected to the recording device. The investigated product 29 (Fig. 3). 30 strain gauges mounted to measure deformations in detail its x and seams. On the surface of finger support 1 and 2-6 in the experimentally established strain fixed locations, pneumatic and hydraulic **sensors** 31 for measuring the pressure, and **sensors** for measuring pere.mescheny consisting of an adhesive element 32 and loosely passed through the fabric article 29 filament ends. The device operates as follows obraPri loading rods 10 to the rocker arm 11 is rotated clockwise and the driving roller 15 moves while bending m 21 m, resulting in movement of the driven conductive roller 20. Upper d, erzhatel 7 rotates. After completion of its rotation, or during its rotation as the rocker arm 11 come into the holder 8 the movement of middle and lower 9. Finger back to its original position by a spring 12, is effected after removal of the load from the rods 10. When folding the fingers on the inner side Product formed gusset fabric bends, and the outer side - fabric tension. Thus the article 29 moves relative to arm that fiksiruioT filaments using **sensors** 32, moreover, product pushing surface ua arm that is fixed by the pressure **sensor** 31. B Details x seams and article 29 having tensile strain measured emye **sensors** 30. After decoding the received waveforms determined resistance value product fulfillment finger **flexion** magnitude difference AR efforts on v1polnenie bending fingers in the product P and without RO: AP P-P. The data obtained allow to judge about the convenience of **gloves** or mittens, radion nosti their design. Considered convenient product which when tested naimenschie obtained values of the measured parameters. The proposed device allows to significantly reduce the time and cost to manufacture pilot batches of products and their testing. Device can be used when choosing the rational design of **gloves**, mittens, when selecting materials for their manufacture in terms of the effect of physical and fur yicheskikh properties (hardness, thickness, extensibility, etc.) on product usability. Using rational in design and material selection of personal protective hands (**gloves**, mittens, etc.) allows to reduce the physical load on the hands of employees, which contributes to their u.mensheniyu-fatigue and increased productivity. The formula of the invention apparatus for determining quality indicators ergonomic design of garments, comprising a support for the article, the carrier is pivotally mounted holders, parts corresponding to the shape of the article, and means for pere.mescheni one relative to the other holder and relative to the support, having a strain gauge associated with the recording device, wherein in that, to produce quality indicators **glove** products corresponding experimental sock bearing article has a shape to the brush arm, and is pivotally mounted holders have a shape corresponding to the phalanges, wherein the means for moving the holders consist of rollers disposed between the holder. E and support, and **flexible** tape attached to the rollers and associated with the recording device via a spring-loaded rod. Sources of information received into account in the examination 1. USSR Author's Certificate number 745486, cl. A 41 N 1/00, 1978. 2. USSR Author's Certificate on application number 3224338, cl. A 41 N 1/00, 19.12.80. h -ts N Y 1 y

Classifications:
International (IPC 8-9): A41D19/04 A41H43/00 (Advanced/Invention);
A41D19/04 (Advanced/Non-invention);
A41D19/04 A41H43/00 (Core/Invention);
A41D19/04 (Core/Non-invention)
International (IPC 1-7): A41D19/04 A41H43/00



Family:

Publication number	Publication date	Application number	Application date
SU931144 A1	19820530	SU19803228124	19801230
SU931144 T	19820530	SU19803228124	19801230

Priority:

SU19803228124 19801230

Assignee(s): (std): TSNII SHVEJNOJ PROMY

Assignee(s): TSNII SHVEJNOJ PROMYSHLENNOSTI

Inventor(s): (std): CHUBAROVA ZOYA S ; EMELYANOV ALEKSEJ M ; LIVANOVA TAISIYA E ; POPOV VALENTIN I ; VORONIN EVGENIJ I

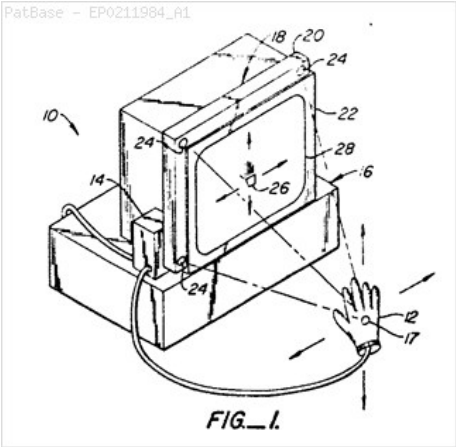
Inventor(s): VORONIN EVGENIJ I SU ; POPOV VALENTIN I SU ; LIVANOVA TAISIYA E SU ; EMELYANOV ALEKSEJ M SU ; CHUBAROVA ZOYA S SU

Title: COMPUTER DATA ENTRY AND MANIPULATION APPARATUS.

Abstract: Source: EP0211984A1 An apparatus as disclosed for manipulating virtual objects defined by a computer according to the gestures and positions of the hand of an operator. The manipulation may include positioning a cursor (26) or other representation on an electronic display terminal (28). The system includes a **glove** (12) which fits over the hand of a user and includes a number of optical **flex sensors** (40,82,84,86,88,94 to **detect** the position of the user's hand. Manipulation of the hand causes changes in the output signals from each **sensor** which are relayed to the computer to cause corresponding changes in the display.

Classifications:

International (IPC 8-9): A61B5/11 G01D5/353 G06F3/00 G06F3/01 G06F3/033 G06F3/0338 G06F3/0346 G06F3/042 G06F3/043 (Advanced/Invention); A61B5/11 G01D5/26 G06F3/00 G06F3/01 G06F3/033 G06F3/041 (Core/Invention)
International (IPC 1-7): A61B5/02 G01D5/26 G06K11/06 G06K11/18
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Family:

Publication number	Publication date	Application number	Application date
AT77164 E	19920615	AT19850110377T	19850819
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DE3586204 T2	19921203	DE19853586204T	19850819
DE3586204 T3	19970123	DE19853586204T	19850819
EP0211984 A1	19870304	EP19850110377	19850819
EP0211984 B1	19920610	EP19850110377	19850819
EP0211984 B2	19960911	EP19850110377	19850819

Priority:

EP19850110377 19850819

Assignee(s): (std): LANIER JARON Z ; VPL RESEARCH INC ; ZIMMERMAN THOMAS G

Assignee(s): ZIMMERMAN THOMAS G SAN FRANCISCO CALIF US ; LANIER JARON Z PALO ALTO CALIF US

Inventor(s): (std): ZIMMERMAN THOMAS G ; VPL RESEARCH INC ; LANIER JARON Z

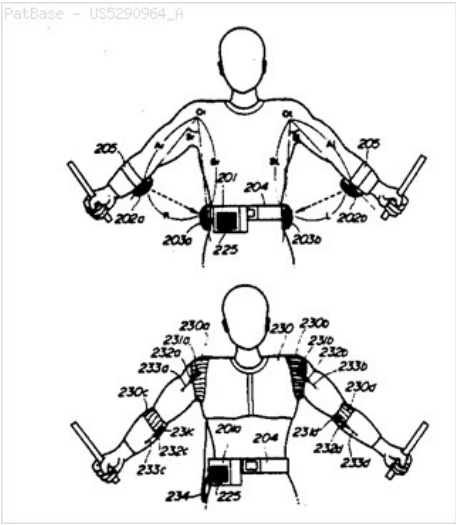
Designated states: AT BE CH DE FR GB IT LI LU NL SE

Title: MUSICAL TONE CONTROL APPARATUS USING A DETECTOR

Abstract: Source: US5290964A A musical tone control apparatus controls a musical tone corresponding to a movement itself of an object and the like which is detected by a detector Such detector detects also a moving speed, a moving force, a moving angle or an intensity of given impulse of the object. In the case where the detector is mounted in the vicinity of a player's joint, the detector detects a revolving or bending angle of the player's joint. Hence, the musical tone can be controlled based on such angle of the player's joint. Thus, through this musical tone control apparatus, the player can generate a musical tone having, for example, a desirable tone pitch, a desirable volume and a desirable tone color based on the movement of the object or the player's joint.

Classifications:

International (IPC 8-9): A61B5/11 A63B15/00 A63B23/00 A63B23/12 A63B24/00 A63B26/00 G01C21/00 G01C21/16 G01C9/06 G01C9/20 G01P15/00 G01P3/42 G01P7/00 G06F3/00 G06F3/01 G10G1/00 G10H1/00 G10H1/053 G10H1/32 G10H1/34 (Advanced/Invention); A63B23/00 A63B24/00 A63B26/00 G01C21/00 G01C21/10 G01P15/00 G01P7/00 G06F3/00 G06F3/01 G10G1/00 G10H1/00 G10H1/053 G10H1/32 G10H1/34 (Core/Invention)
International (IPC 1-7): A61B5/10 A63B23/00 A63B24/00 G01C21/00 G01C21/16 G01C9/06 G01C9/20 G01H5/00 G01P15/00 G01P3/42 G01P7/00 G10F1/00 G10G1/00 G10H G10H1/00 G10H1/053 G10H1/32 G10H1/34 G10H5/00 G10H7/00
CPC: Y10S84/07 Y10S84/12 G06F3/014 G10H1/00 G10H1/32 G10H2220/326 G10H2220/401 G10H2240/211
European: G06F3/00B8H G06F3/01B6 G10H1/00 G10H1/32 S10H220/326 S10H220/401 S10H240/211
US: 84/600 84/615 84/622 84/626 84/644 84/653 84/658 84/670 84/723 84/735 84/737 84/743 84/DIG.12 84/DIG.7



MAMORU ; KANEHARA MAMORU ; KIMPARA MAMORU ; KINPARA MAMORU ; MAMORU KANAHARA ; MAMORU KINPARA ;
MASAO SAKAMA ; NAKADA AKIRA ; AOKI EIRO ; EIICHIRO AOKI ; NICHIIYOSHI AKIO ; SAKAMA MASAO ; SAKAMA
SANE0 ; SURUKI HIDEO ; SUZUKI HIDEO ; TERUO HIYOSHI

Inventor(s): SUZUKI HIDEO HAMAMATSU SHI SHIZUOKA KEN JP ; SAKAMA MASAO HAMAMATSU SHI SHIZUOKA KEN JP ; HIDEO
SURUKI ; NAKADA AKIRA HAMAMATSU SHI SHIZUOKA KEN JP ; KINPARA MAMORU HAMAMATSU SHI SHIZUOKA KEN JP ;
HIYOSHI TERUO HAMAMATSU SHI SHIZUOKA KEN JP ; HYOSHI AKIO ; AOKI EIICHIRO HAMAMATSU SHI SHIZUOKA KEN JP

Designated states: DE FR GB IT NL SE

Title: Haptic computer output device

Abstract: Source: US5945978A PCT No. PCT/GB92/00729 Sec. 371 Date Sep. 28, 1993 Sec. 102(e) Date Sep. 28, 1993 PCT Filed Apr. 21, 1992 PCT Pub. No. WO92/18925 PCT Pub. Date Oct. 29, 1992A haptic computer output device comprises a data **glove** 10 the finger and thumb extension 10A and 10B of which have spaced ring formations 13 and 14. Each ring formation 13 and 13 is formed with an inwardly-opening blind bore 21 spanned in gas-tight manner by a membrane 23 and conduits 20 within the ring formations selectively apply pressurised air to or relieve it from the bores 21 under the control of a valve assembly 34 in turn controlled by a computer 30. The computer generates images perceived on a visual system 32 by a wearer of the **glove**. Data concerning the spatial position and **flexing** of the **glove** 10 is transmitted via line 31 to the computer, which additionally generates a cursor on the visual system 32. When this interacts with other virtual objects to simulate a "touch" the appropriate bore 21 is inflated via valve assembly 34 to apply a tactile stimulus to the wearer of the **glove**.

Classifications:

International (IPC 8-9): G06F3/00 G06F3/01 G09B21/00

G09B9/00 (Advanced/Invention);

G09B9/00 (Advanced/Non-invention);

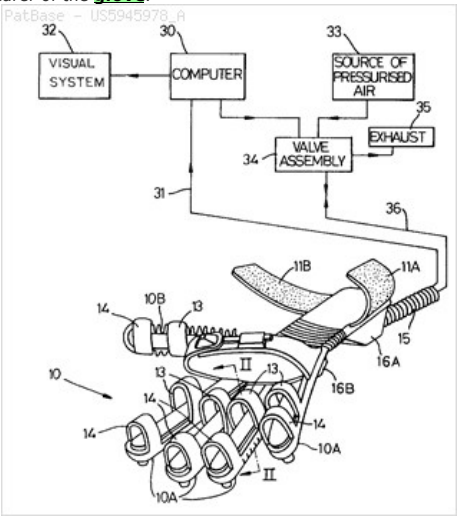
G06F3/00 G06F3/01 G09B21/00 G09B9/00 (Core/Invention)

International (IPC 1-7): G06F3/00 G06F3/02 G09B9/00 G09G5/00 G09G5/08

CPC: G06F3/014 G09B21/003 G09B21/009

European: G06F3/00B8H G06F3/01B6 G09B21/00B3 G09B21/00C

US: 345/156 345/157



Family:

Publication number	Publication date	Application number	Application date
AU199216779 A1	19921117	AU19920016779	19920421
GB2254911 A1	19921021	GB19920008585	19920421
GB2254911 B2	19941214	GB19920008585	19920421
GB9108497 A0	19910605	GB19910008497	19910420
GB9208585 A0	19920603	GB19920008585	19920421
JP6507032 T2	19940804	JP19920508612T	19920421
US5945978 A	19990831	US19930122412	19930928
US6239784 BA	20010529	US19940329994	19941027
WO9218925 A1	19921029	WO1992GB00729	19920421

Priority:

GB19910008497 19910420 GB19910008497 19920420 WO1992GB00729 19920421

Assignee(s): (std): RETINAL DISPLAYS INC ; IND LIMITED W ; IND W LTD ; VIRTUALITY ENTERTAINMENT LTD

Assignee(s): INTEL CORP ; GATX VENTURES INC ; HOYA CORP ; W IND ; VIRTUALITY LTD ; TRANSAMERICA BUSINESS CREDIT CORP ; SBG LABS INC ; W IND LTD ; W INDUSTRIES LIMITED ; VIRTUALITY ENTERTAINMENT LIMITED

Inventor(s): (std): HOLMES RICHARD

Inventor(s): RICHARD HOLMES

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

Title: NERVE CONDITION MONITORING SYSTEM AND ELECTRODE SUPPORTING STRUCTURE

Abstract: Source: US5215100A A portable system for substantially automated monitoring of nerve conduction velocity through the carpal tunnel of a patient includes an electrode supporting structure which supports stimulating and pickup electrodes in a predetermined spatial relationship so as to contact the patient's arm and hand. The electrode supporting structure is a part of a housing which contains stimulating signal generating and response signal processing circuitry, which operates substantially automatically under control of a microprocessor. The microprocessor controls generation of stimulating pulses and determines the elapsed time until the occurrence of a predetermined response signal characteristic, such as its peak. Data relating to nerve conduction time or velocity measurements and response signal waveform are stored in a removable memory to permit later analysis and treatment recommendation by a physician. The system is useful for screening large groups of people at remote locations, such as workers at an employer's facilities, for evaluating their median nerve condition and likelihood of developing carpal tunnel syndrome.

Classifications:

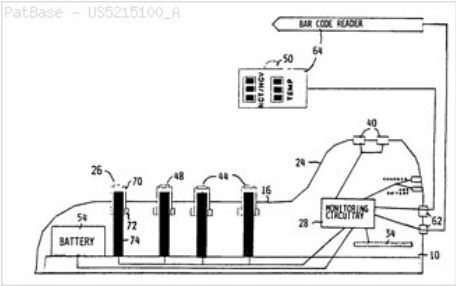
International (IPC 8-9): A61B5/05 (Advanced/Invention);
A61B5/05 (Core/Invention)

International (IPC 1-7): A61B5/05

CPC: A61B5/05

European: A61B5/05

US: 128/420.5 128/639 128/741 600/554



Family:

Publication number	Publication date	Application number	Application date
CA2109519 AA	19931028	CA19922109519	19920429
EP0591273 A1	19940413	EP19920912151	19920429
EP0591273 A4	19951102	EP19920912151	19920429
US5215100 A	19930601	US19910692930	19910429
WO9219156 A1	19921112	WO1992US03559	19920429

Priority:

US19910692930 19910429 WO1992US03559 19920429

Assignee(s): (std): HEALTHSOUTH OCCUPATIONAL AND P ; OCCUPATIONAL PREVENTIVE DIAGNO

Assignee(s): OCCUPATIONAL PREVENTIVE DIAGNOSTICS INC ; OCCUPATIONAL PREVENTIVE DIAGNOSTIC INC ; SPITZ LAWRENCE K ; HEALTHSOUTH OCCUPATIONAL AND PREVENTIVE DIAGNOSTIC ; HEALTHSOUTH OCCUPATIONAL AND PREVENTIVE DIAGNOSTICS LIMITED PARTNERSHIP ; HEALTHSOUTH OCCUPATIONAL AND PREVENTIVE DIAGNOSTICS PARTNERSHIP LTD ; JAEGER SCOTT N ; MUSSER SCOTT N

Inventor(s): (std): JAEGER SCOTT ; JAEGER SCOTT N ; MUSSER SCOTT N ; SPITZ LAWRENCE K

Inventor(s): OCCUPATIONAL PREVENTIVE DIAGNOSTICS INC

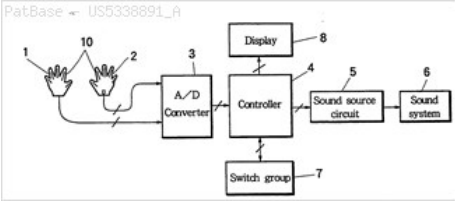
Designated states: AT BE CA CH DE DK ES FR GB GR IT LI LU MC NL SE

Title: Musical tone control device with performing **glove**

Abstract: Source: US5338891A The electronic musical instrument is constructed such as to **detect** key-on/key-off performed by physical **flexion** movements of fingers through a pair of performing **gloves** 1 and 2 so as to effect generation and erase of musical tones in real timings practically matching with fingering performance. An A/D converter 3 converts signals from bend **sensors** 10 of the performing **gloves** 1, 2 into digital **flexion** data. A controller 4 processes the digital **flexion** data such as to **detect** a stop motion of a finger to judge a key-on event according to bending velocity information calculated from the sequentially sampled **flexion** data, thereby generating musical tones. Further, the controller 4 **detects** a maximum angle according to the **flexion** data of the finger restored from the key-on state so as to judge a key-off event according to an off-threshold level correlated to the maximum bend depth to thereby erase musical tones.

Classifications:

International (IPC 8-9): G10H1/00 G10H1/053 G10H1/055 G10H1/34 (Advanced/Invention);
G10H1/00 G10H1/053 G10H1/055 G10H1/34 (Core/Invention)
International (IPC 1-7): G10H1/00 G10H1/053 G10H1/18 G10H1/34 G10H1/46
CPC: G10H1/0558 G10H1/34 G10H2220/326
European: G10H1/055R G10H1/34 S10H220/326
US: 84/600 84/658 84/666 84/670



Family:

Publication number	Publication date	Application number	Application date
JP2500544 B2	19960529	JP19910127294	19910530
JP4352195 A2	19921207	JP19910127294	19910530
US5338891 A	19940816	US19920890575	19920528

Priority:

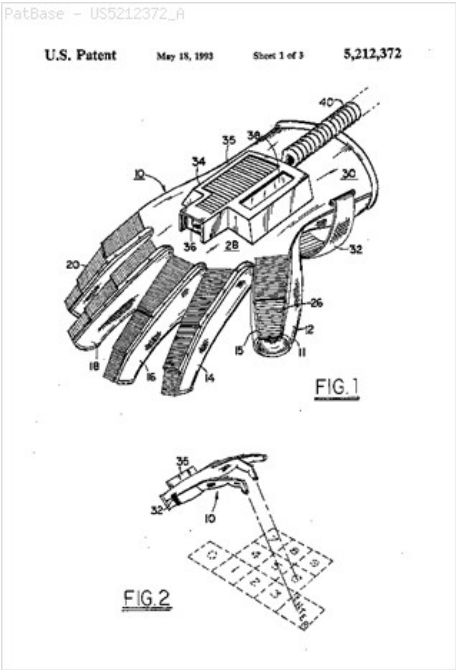
JP19910127294 19910530
Assignee(s): (std): YAMAHA CORP
Inventor(s): (std): MASUBUCHI TAKAMICHI ; KOUCHI KATUTOSHI ; KAWACHI KATSUTOSHI

Title: PORTABLE TRANSACTION TERMINAL FOR OPTICAL AND KEY ENTRY OF DATA WITHOUT KEYBOARDS AND MANUALLY ACTUATED SCANNERS

Abstract: Source: US5212372A To increase the efficiency of personnel conducting inventory management operations, including data entry of products and information as to their absence, presence or location, the operator is provided with a **glove** having finger sheaths and a portion for the posterior or dorsal surface of the hand which covers that surface. A bar code reader is located in a housing on the cover and flexural strain gauge elements are located in the sheaths in the vicinity of the joints of the fingers. Signals from these elements are digitized and provide for manual data entry and also for commands to operate the bar code reader. The **glove** and the **sensors** constitute a portable transaction or data entry terminal which does not require manual actuation of a trigger to operate the bar code scanner or a keyboard for manual entry of data concerning the products to be managed. Electronics for processing signals from the **sensors**, for operating a display to indicate the data entered upon selective movement of the fingers between **flexion** and extension and from the bar code reading operations, are all contained in a housing which also contains the bar code reader.

Classifications:

International (IPC 8-9): G06F17/40 G06F3/00 G06F3/01 G06F3/033 G06K7/10 (Advanced/Invention); G06F17/40 G06F3/00 G06F3/01 G06F3/033 G06K7/10 (Core/Invention)
International (IPC 1-7): G06F17/40 G06F3/033 G06K11/18 G06K7/10
CPC: G06F3/014 G06K7/10891 G06K2007/10534
European: G06F3/00B8H G06F3/01B6 G06K7/10S9F2 S06K7/10F2
US: 235/462.44 235/462.48 235/472 341/20



Family:

Publication number	Publication date	Application number	Application date
EP0531644 A2	19930317	EP19920111281	19920703
EP0531644 A3	19931215	EP19920111281	19920703
JP9016316 A2	19970117	JP19920265404	19920908
US5212372 A	19930518	US19910756636	19910909

Priority:

US19910756636 19910909

Assignee(s): (std): PSC INC

Assignee(s): WELLS FARGO FOOTHILL INC ; PSC SCANNING INC ; PSC INC A NEW YORK CORP ; DATALOGIC MOBILE INC ; FLEET BANK ; P S C INC ; PHOTOGRAPHIC SCIENCES CORP

Inventor(s): (std): BOLES JOHN A ; DASUTEI ERU KUIITSUKU ; EASTMAN JAY M ; JIEI EMU IISUTOMAN ; JIYON EI BOORUZU ; QUICK DUSTY L

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

Title: Device for monitoring the configuration of a distal physiological unit for use, in particular, as an advanced interface for machine and computers

Abstract: Source: US5715834A PCT No. PCT/EP93/03238 Sec. 371 Date Aug. 7, 1995 Sec. 102(e) Date Aug. 7, 1995 PCT Filed May 16, 1995 PCT Pub. No. WO94/12925 PCT Pub. Date Jun. 9, 1994A device for monitoring the configuration of a distal physiological unit comprises first position **sensors** for **detecting** quantities relating to the relative positions of a digit of an extremity of a limb and to the adduction-abduction of the digit. The device also comprises second position **sensors** for **detecting** quantities relating to the pronation-supination position of a distal portion of the limb, to the **flexion**-extension position of the wrist and to the adduction-abduction position of the wrist. The device comprises a **glove** structure bearing the first **sensors** and an exoskeleton structure bearing the second **sensors**.

Classifications:

International (IPC 8-9): A61B5/11 B25J9/00 G06F3/00 G06F3/01 G06F3/03

G10H1/00 (Advanced/Invention);

A61B5/11 B25J9/00 G06F3/00 G06F3/01 G10H1/00 (Core/Invention);

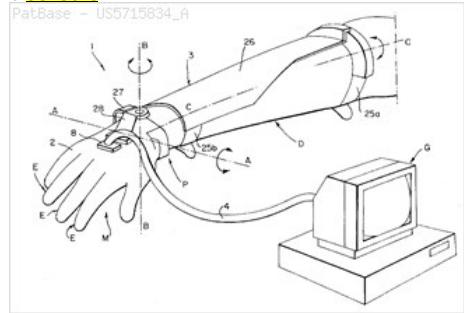
G06G (Subclass/Invention)

International (IPC 1-7): A61B5/10 B25J9/00 G06F3/00 G06F3/03 G06G

CPC: A61B5/1125 A61B5/4528 B25J9/0006 G06F3/014 G10H1/00 G10H2220/371

European: A61B5/11U2 A61B5/45K B25J9/00E G06F3/00B8H G06F3/01B6 G10H1/00 S10H220/371

US: 128/782 600/595



Family:

Publication number	Publication date	Application number	Application date
AU199456254 A1	19940622	AU19940056254	19931119
CA2149342 AA	19950512	CA19932149342	19931119
DE69311364 D1	19970710	DE19936011364	19931119
EP0670059 A1	19950906	EP19940901822	19931119
EP0670059 B1	19970604	EP19940901822	19931119
IT1257294 A	19960112	IT1992T000941	19921120
IT1257294 B	19960112	IT1992T000941	19921120
ITTO920941 A0	19921120	IT1992T000941	19921120
ITTO920941 A1	19940521	IT1992T000941	19921120
US5715834 A	19980210	US19950428217	19950807
WO9412925 A1	19940609	WO1993EP03238	19931119

Priority:

IT1992T000941 19921120 WO1993EP03238 19931119

Assignee(s): (std): PARRINI GIANLUCA ; SALSEDO FABIO ; SCATTAREGGIA MARCHESE SANDRO ; SCUOLA SUPERIORE DI STUDI UNI ; SCUOLA SUPERIORE DI STUDI UNI E DI PERFEZ ; BERGAMASCO MASSIMO

Assignee(s): MARCHESE SANDRO SCATTAREGGIA ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZ ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZ ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI AND DI PERF ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO S ; SCUOLA SUPERIORE DI STUDI UNIVERSITARE E DI PERFEZIONAMENTO S ANNA PISA IT ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO S ANNA ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI AND DI PERFEZIONAMENTO S ANNA ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO SANNA

Inventor(s): (std): SALSEDO FABIO ; PARRINI GIANLUCA ; MARCHESE SANDRO SCATTAREGGIA ; BERGAMASCO MASSIMO ; SCATTAREGGIA MARCHESE SANDRO

Inventor(s): SCATTAREGGIA MARCHESE SANDRO I 56100 PISA IT ; BERGAMASCO MASSIMO I 28020 AGRANDO DI OMEGNA IT ; FABIO SALSEDO ; GIANLUCA PARRINI ; MASSIMO BERGAMASCO ; PARRINI GIANLUCA I 56021 CASCINA IT ; SALSEDO FABIO I 04100 LATINA IT ; SANDRO SCATTAREGGIA MARCHESE

Designated states: AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR KZ LK LU LV MC MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SK SN TD TG UA US UZ VN

Title: Device operable to supply a force feedback to a physiological unit to be used in particular as an advanced interface for machines and computers

Abstract: Source: US5912658A PCT No. PCT/EP94/03311 Sec. 371 Date Jun. 10, 1996 Sec. 102(e) Date Jun. 10, 1996 PCT Filed Oct. 6, 1994 PCT Pub. No. WO95/10396 PCT Pub. Date Apr. 20, 1995A device operable to supply a force feedback to a physiological unit to be used as an advanced interface for machines and computers, including an exoskeleton which includes kinematic elements articulated about articulation axes arranged coincident with or in close proximity to the physiological axes of the physiological unit such as, for example, the **flexion-extension** axes of the phalanges of the fingers of a hand of an operator. A series of electrical actuators controls the degree of tension on traction cables applying a force feedback to the kinematic elements and consequently to the physiological unit, so as to simulate an interaction between the operator and a virtual object. The device includes position **sensors** for **detecting** the configuration of the physiological unit and force **sensors** for measuring the strength of the force locally applied thereto by the actuators controlled by a processing system.

Classifications:

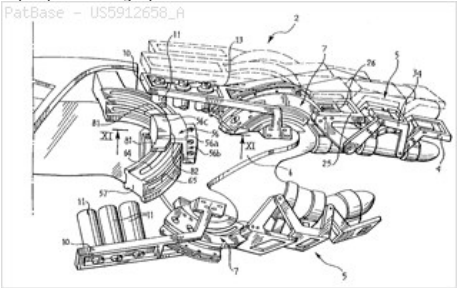
International (IPC 8-9): B25J13/02 B25J9/00 (Advanced/Invention); B25J (Subclass/Invention)

International (IPC 1-7): B25J13/02 G09G5/00

CPC: B25J9/0006 B25J13/02

European: B25J13/02 B25J9/00E

US: 345/156 414/5 600/595



Family:

Publication number	Publication date	Application number	Application date
AU199478119 A1	19950504	AU19940078119	19941006
CA2173749 AA	19960409	CA19942173749	19941006
DE69418217 D1	19990602	DE19946018217	19941006
EP0740594 A1	19961106	EP19940928872	19941006
EP0740594 B1	19990428	EP19940928872	19941006
IT1264718 B1	19961004	IT1993B000397	19931008
ITB0930397 A0	19931008	IT1993B000397	19931008
ITB0930397 A1	19950409	IT1993B000397	19931008
US5912658 A	19990615	US19960628657	19960610
WO9510396 A1	19950420	WO1994EP03311	19941006

Priority:

IT1993B000397 19931008 WO1994EP03311 19941006

Assignee(s): (std): SALSEDO FABIO ; SCATTAREGGIA MARCHESE SANDRO ; SCUOLA SUPERIORE DI STUDI UNI ; SCUOLA SUPERIORE DI STUDI UNI E DI PERFEZ ; BERGAMASCO MASSIMO ; FERRETTI LUCA

Assignee(s): MARCHESE SANDRO SCATTAREGGIA ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO S ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO S ANNA ; SCUOLA SUPERIORE DI STUDI UNIVERSITARE E DI PERFEZIONAMENTO S ANNA PISA IT ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI VIA G ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI ; SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZ ; SCUOLA SUPERIORE DI STUDI UNIVERSITARE E DI PERFEZ

Inventor(s): (std): BERGAMASCO MASSIMO ; BERGAMASO MASSIMO ; FERRETTI LUCA ; MARCHESE SANDRO SCATTAREGGIA ; MARCHESE SANDRO SCATTAREGGIA ; SALSEDO FABIO ; SCATTAREGGIA MARCHESE SANDRO

Inventor(s): SALSEDO FABIO I 04100 LATINA IT ; FERRETTI LUCA I 56025 PONTEDERA IT ; BERGAMASCO MASSIMO I 28020 AGRANO DI OMEGNA IT ; SANDRO SCATTAREGGIA MARCHESE ; SCATTAREGGIA MARCHESE SANDRO I 56100 PISA IT ; MASSIMO BERGAMASCO ; LUCA FERRETTI ; FABIO SALSEDO

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 LK LR LT LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA US UZ VN

Title: Garment for applying controlled electrical stimulation to restore motor function

Abstract: Source: US5562707A A non-invasive self-contained functional electrical stimulation garment is disclosed. The garment, which is preferably in the form of a **glove**, may be donned in one piece by a user of reduced motor ability e.g. a person exhibiting hand tremors or who is a quadriplegic, paraplegic or hemiplegic. The garment is preferably made of a perforated elastic material and being adapted to fit over a part of said user's body. The garment has electrical connections internal to the garment that are adapted to make electrical contact with self-adhesive skin electrodes on the user. A joint movement **sensor** and a battery-driven electronic controller-stimulator located on the garment, with the electrical connections, **sensor** and controller-stimulator being electrically and cooperatively interconnected. In the form of a **glove**, the garment can permit a user of reduced motor ability to grip objects.

Classifications:

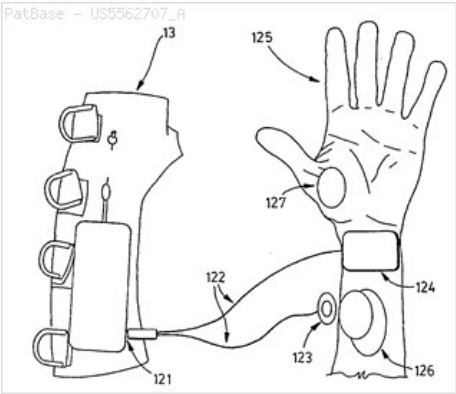
International (IPC 8-9): A61N1/04 A61N1/05 A61N1/18 A61N1/36 A61N1/372 (Advanced/Invention);
A61N1/04 A61N1/18 A61N1/36 A61N1/372 (Advanced/Non-invention);
A61N1/04 A61N1/05 A61N1/36 (Core/Invention);
A61N1/372 (Core/Non-invention)

International (IPC 1-7): A61N1/04 A61N1/18 A61N1/36

CPC: A61N1/05 A61N1/36003 A61N1/37205

European: A61N1/05 A61N1/36A K61N1/372A

US: 607/2 607/48



Family:

Publication number	Publication date	Application number	Application date
AT162089 E	19980115	AT19940929437T	19941013
AU199478506 A1	19950504	AU19940078506	19941013
AU678065 B2	19970515	AU19940078506	19941013
BRPI9407821 A	19970506	BR1994PI07821	19941013
CA2173430 AA	19960403	CA19942173430	19941013
CA2173430 C	19971223	CA19942173430	19941013
CN1135722 A	19961113	CN19941094267	19941013
DE69407987 D1	19980219	DE19946007987	19941013
DE69407987 T2	19980610	DE19946007987T	19941013
DK0725665 T3	19980414	DK19940929437T	19941013
EP0725665 A1	19960814	EP19940929437	19941013
EP0725665 B1	19980114	EP19940929437	19941013
ES2111336 T3	19980301	ES19940929437T	19941013
GB9321086 A0	19931201	GB19930021086	19931013
JP9503937 T2	19970422	JP19940511129T	19941013
KR19960704599 A	19961009	KR19960701895	19960412
PL174876 B1	19980930	PL19940313937	19941013
PL313937 A1	19960805	PL19940313937	19941013
US5562707 A	19961008	US19950408828	19950322
WO9510323 A1	19950420	WO1994CA00570	19941013

Priority:

GB19930021086 19931013 WO1994CA00570 19941013

Assignee(s): (std): GAUTHIER MICHEL ; KENWELL ZOLTAN R ; NEUROMOTION INC ; UNIV ALBERTA ; PROCHAZKA ARTHUR ; WIELER MARGUERITE ; SIM AND MCBURNEY

Assignee(s): UNIVERSITY OF ALBERTA ; OF ALBERTA UNIV ; UNIV OF ALBERTA ; NEUROMOTION INC EDMONTON ALBERTA CA ; OF ALBERTA 1 3 HALL IND UNIV

Inventor(s): (std): GAUTHIER MICHEL J A ; KENWELL ZOLTAN R ; PROCHAZKA A ; PROCHAZKA ARTHUR ; GAUTHIER MICHEL ; WIELER M ; WIELER MARGUERITE ; Z R KENWELL

Inventor(s): ZOLTAN R KENWELL ; MICHEL GAUTHIER ; MARGUERITE WIELER ; M WIELER ; ARTHUR PROCHAZKA ; A PROCHAZKA ; WIELER MARGUERITE EDMONTON ALBERTA T6G 2S2 CA ; GAUTHIER MICHEL EDMONTON ALBERTA T6E 1K3 CA ; PROCHAZKA ARTHUR EDMONTON ALBERTA T6G 2S2 CA

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

Abstract: Source: US5641457A An apparatus and process for measuring particles that prevents the particles from being contaminated during the measuring and optional sorting process wherein a flow chamber or region is mechanically isolated from a sterile enclosure which surrounds the flow chamber. The present invention in one embodiment provides an apparatus comprising of a droplet generator, a charging system, a deflecting system, a sterilization system, a light source, a detector, a cooling system and a vacuum system. The droplet generator and the charging system and the flow chamber associated with the droplet generator operate within an illumination frame where the particles (e.g. biological cells) are actually measured. In order to prevent the biological cells from being contaminated, the illumination frame is located within an isolation chamber which provides an environment that can be sterilized before and after the actual measuring and sorting of the cells, but the illumination frame is mechanically isolated from the isolation chamber. The sterilization system, located outside the isolation chamber sterilizes the isolation chamber before cells are measured and sorted within the isolation chamber, and furthermore, ensures that the isolation chamber is maintained at a pressure above (or alternatively, below) atmospheric pressure during the measuring and sorting of the biological cells. The illumination frame, the light source and the detector are supported by a table to enable the light beam(s) from the light source to intersect the biological cells flowing through the illumination frame, thereby emitting flashes of light (or otherwise effecting the light beam) which are **detected** by the detector.

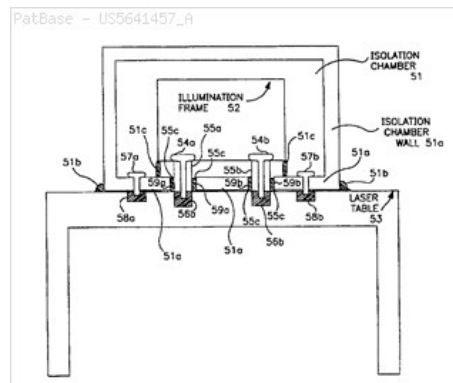
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International (IPC 1-7): B01L1/04 G01N15/14 G01N27/00 G01N29/00
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CPC: B01L1/04 G01N15/1404 G01N2015/149 G01N2035/00277

European: B01L1/04 G01N15/14C S01N15/14T S01N35/00D7

US: 209/3.1 250/461.2 356/244 356/72 356/73 422/104 422/295 422/33 422/504
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Publication number	Publication date	Application number	Application date
AU1996050900 A1	19961118	AU19960050900	19960222
US5641457 A	19970624	US19950428693	19950425
US5776781 A	19980707	US19970803439	19970220
WO9633806 A1	19961031	WO19960502729	19960222

US19950428693 19950425 WO1996US02729 19960222 US19970803439 19970220

Assignee(s): (std): SYSTEMIX

Assignee(s): SYSTEMIX INC ; NOVARTIS AG

Inventor(s): (std): JOUBRAN JOHN ; LEWIS HUGH ; MEDEIROS DAVID J ; SWAN RAYMOND ; TICHENOR EDIE ; VARDANEGA MICHAEL H

Inventor(s): RAYMOND SWAN ; MICHAEL H VARDANEGA ; JOHN JOUBRAN ; HUGH LEWIS ; EDIE TICHENOR ; DAVID J MEDEIROS

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

Title: ELECTRONIC EXERCISE ENHANCER

Abstract: Source: US5702323A An apparatus for providing stimuli to a user while sensing the performance and condition of the user may rely on a controller for programmably coordinating a tracking device and a sensory interface device. The tracking device may be equipped with **sensors** for sensing position, displacement, motion, deflection, velocity, speed, temperature, humidity, heart rate, internal or external images, and the like. The sensory interface device may produce outputs presented as stimuli to a user. The sensory interface device may include one or more actuators for providing aural, optical, tactile, and electromuscular stimulation to a user. The controller, tracking device, and sensory interface device may all be microprocessor controlled for providing coordinated sensory perceptions of complex events.

Classifications:

International (IPC 8-9): A63B24/00 A63B69/16 (Advanced/Invention);

A63B69/16 (Advanced/Non-invention);

A63B24/00 (Core/Invention);

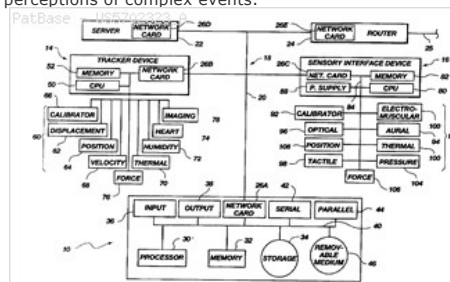
A63B69/16 (Core/Non-invention)

International (IPC 1-7): A61B5/04 A63B24/00 A63B69/00 H04N7/24

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European: A63B23/035G A63B24/00 K63B213/00E K63B220/34 K63B220/51

US: 434/247 434/29 482/1 482/8 482/9 482/900



Family:

Publication number	Publication date	Application number	Application date
AU199665482 A1	19970226	AU19966065482	19960719
DE69634915 D1	20050811	DE19966034915	19960719
EP0840638 A1	19980513	EP19960925358	19960719
EP0840638 A4	20021009	EP19960925358	19960719
EP0840638 B1	20050706	EP19960925358	19960719
US5702323 A	19971230	US19950507550	19950726
US666075 A	20000523	US19970999487	19971229
WO9704840 A1	19970213	WO19961511885	19960719

Priority:

US19950507550 19950726 WO1996US11885 19960719 US19970999487 19971229

Assignee(s): (std): CRAIG K POULTON ; POULTON CRAIG K

Assignee(s): RPX CORP

Inventor(s): (std): POULTON CRAIG K

Inventor(s): CRAIG K POULTON

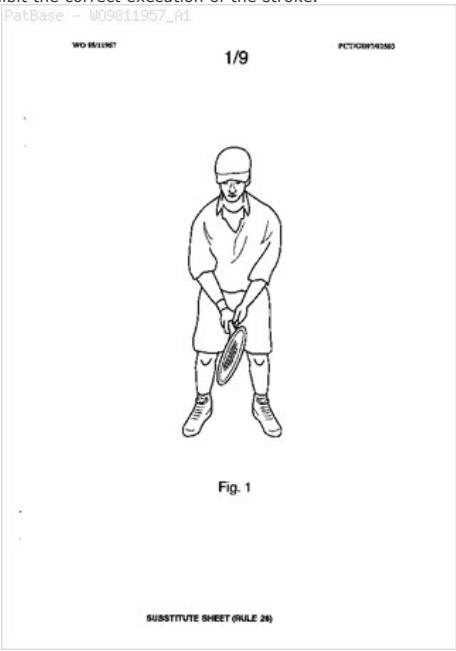
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KG KP KR KZ LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG
US UZ VN

Title: TRAINING AID FOR TENNIS AND SIMILAR SPORTS

Abstract: A racquet sports training aid to develop the correct sensory-motor skills of the player in order to properly execute the forehand drive and backhand drive comprises a member (1) to locate the players hand, wrist and forearm in the correct spatial relationship, for each type of stroke, relative to the racquet handle and racquet head. The device has a simple means of attachment which does not interfere with the stroke being played. The device is proactive in the **sense** that the necessary relationship of the arm/wrist/hand and racquet position is held throughout the stroke thus eliminating incorrect or spontaneous movements that would otherwise inhibit the correct execution of the stroke.

Classifications:

International (IPC 8-9): A63B69/00 A63B69/38 (Advanced/Invention);
A63B69/00 (Advanced/Non-invention);
A63B69/38 (Core/Invention);
A63B69/00 (Core/Non-invention)
International (IPC 1-7): A63B69/38
CPC: A63B69/0059 A63B69/38
European: A63B69/38 K63B69/00N4B



Family:

Publication number	Publication date	Application number	Application date
AU199742160 A1	19980414	AU19970042160	19970917
GB2317345 A1	19980325	GB19960019466	19960918
GB9619466 A0	19961030	GB19960019466	19960918
WO9811957 A1	19980326	WO1997GB02503	19970917

Priority:

GB19960019466 19960918 WO1997GB02503 19970917

Assignee(s): (std): GIBBS MICHAEL WILLIAM ; GRIST HEDLEY S ; GRIST HEDLEY STEWART

Assignee(s): HEDLEY STEWART GRIST ; MICHAEL WILLIAM GIBBS

Inventor(s): (std): GIBBS MICHAEL WILLIAM ; GRIST HEDLEY STEWART

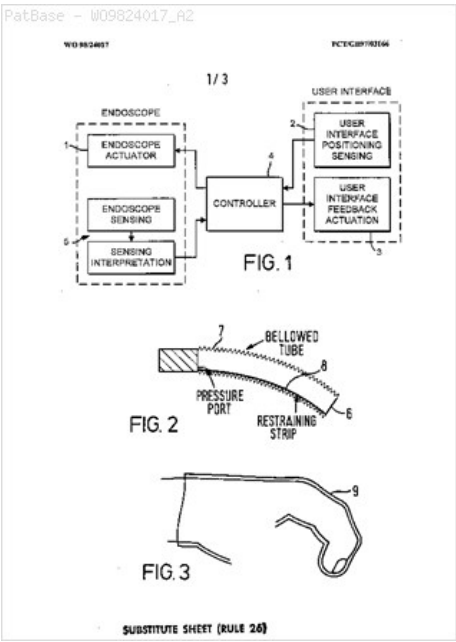
Inventor(s): HEDLEY STEWART GRIST ; MICHAEL WILLIAM GIBBS

Designated states: AL AM AT AU AZ BA BB BE BG BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SL SZ TJ TM TR TT UA UG US UZ VN YU ZW

Title: CONTROL MEANS

Abstract: This invention relates to control means and actuators (1) with feed-back **sensors** (5) suitable for use in tele-operated systems, especially surgical tools and endoscopes. A membrane (9) is provided to **flex** with an operator's finger, and a **sensor** (20) responsive to longitudinal **flexing** of the membrane produces an output signal dependent on the position of the finger. The membrane (9) covers the finger like a **glove**, and extends across the back of the hand. The **sensor** (20) preferably comprises an optic fibre (13). The actuator (1) is fluid-operated and comprises a corrugated tube (7) with a length-restraining member (8) along one side so that the tube curves when it is extended by internal fluid pressure. A feedback **sensor** (5) is responsive to the position of the tube (7) and/or lateral force experienced by the tube (7) when it engages an external object. A feedback signal from the **sensor** (5) operates a feedback force generator (3) in contact with the operator's finger.

Classifications:
International (IPC 8-9): A61B19/00 G06F3/00 G06F3/01 (Advanced/Invention)
International (IPC 1-7): A61B19/00 G06F3/00
CPC: A61B19/22 A61B2019/2223 A61B2019/223 A61B2019/2269 A61B2019/2273 A61B2019/2292 G06F3/014
European: A61B19/22 G06F3/00B8H G06F3/01B6 K61B19/22B10 K61B19/22B14 K61B19/22J K61B19/22J2 K61B19/22N



Family:

Publication number	Publication date	Application number	Application date
GB9624486 A0	19970115	GB19960024486	19961126
WO9824017 A2	19980604	WO1997GB03166	19971126
WO9824017 A3	19981008	WO1997GB03166	19971126

Priority:

GB19960024486 19961126

Assignee(s): (std): BRETT PETER NIGEL ; GRIFFITHS MANSEL VALMOND ; UNIV BRISTOL ; TRITTO GIUSEPPE ; STONE RHODRI SIMON WATCYN

Assignee(s): OF BRISTOL UNIV ; UNIVERSITY OF BRISTOL

Inventor(s): (std): BRETT PETER NIGEL ; GRIFFITHS MANSEL VALMOND ; STONE RHODRI SIMON WATCYN ; TRITTO GIUSEPPE

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

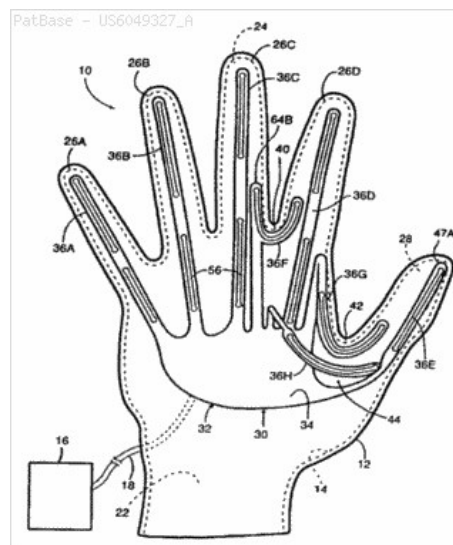
Abstract: Source: US6049327A A system is provided for manipulating computer generated animation in real time, such as a virtual reality program running on a computer. The system includes a data **glove** for managing data based on an operator's hand gestures. The invented data **glove** comprises an elastic material that closely matches the shape of a wearer's hand, enabling the wearer to move their hand freely. A movement sensing unit is provided for sensing any hand gestures of the wearer. The movement sensing unit comprises a **flexible** circuit board that extends along the dorsal region of the wearer's fingers and hand. The circuit board includes a base with a signal processor for processing received signals generated by a plurality of movement **sensors**. The **sensors** transmit signals to the processor for determining any movement of the wearer's hand. The **sensors** have a resistive material disposed on each side thereof, so that any flexure of the **sensor** causes the resistance values to diverge, preferably linearly. The resistance values on each side of the **sensor** diverge to a value corresponding to the degree of flexure of the **sensor**. A reference voltage is applied to each side of the **sensor** for establishing a voltage differential between its two sides. Any flexure of the **sensor** causes the resistance value of each side to change, for changing the reference voltage level between the two sides to indicate that the **sensor** has been **flexed** and the degree of flexure.

International (IPC 8-9): G06F3/00 G06F3/01 (Advanced/Invention);
G06F3/00 G06F3/01 (Core/Invention)

CPC: G06F3/014

European: G06F3/00B8H G06F3/01B6

US: 345/158



Publication number	Publication date	Application number	Application date
US6049327 A	20000411	US19970838938	19970423
US6452584 BA	20020917	US19990466527	19991217
WO9850839 A2	19981112	WO1998US08450	19980423
WO9850839 A3	19990318	WO1998US08450	19980423

US19970838938 19970423 US19990466527 19991217

Assignee(s): (std): MODERN CARTOON LTD ; MODERN CARTOONS LTD

Inventor(s): (std): BEHESHTI BABAK ; WALKER CHRISTOPHER ; WALKER CHRIS ; BAHESHTI BABAK

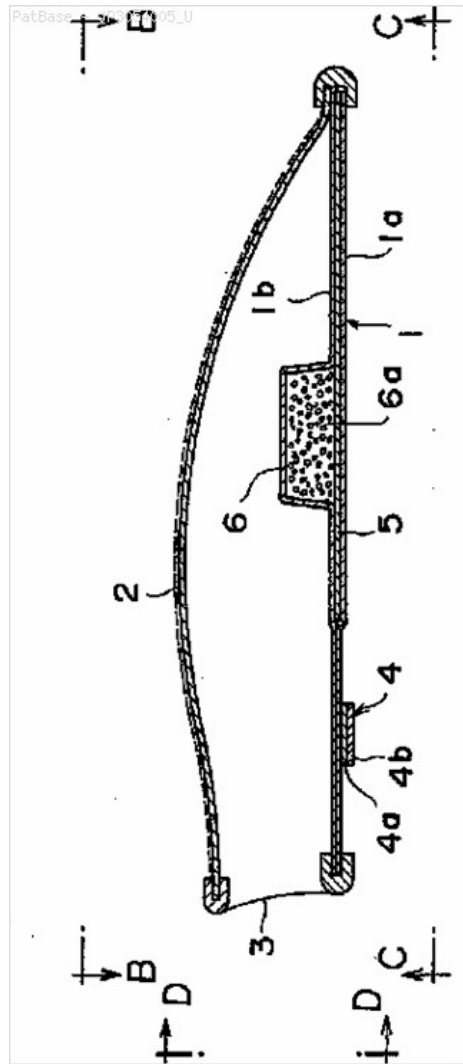
Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT JP LU MC NL PT SE

Title: Hand bag (Machine translation)

Abstract: Source: JP3054005U

Machine translation: [summary] **Gloves** can be [problems] in, to wear for long periods of time without feeling a **sense** of restraint, to be able to enjoy wearing for the play as a tool wear. bondage **gloves** and a 4 means according to claim 1, volar cover material, and the instep cover member (2), to bondage on the peripheral surface of the wrist unit near the mouth of three hand insertion, hand insertion to allow free movement and **flexion** of the fingers on each hand and the mutual contact of the hand was inserted through the mouth 3. A material covering the palm, the layer plate elastic light-weight than five plate elasticity of the lightweight with the elasticity of the degree can be the flexural deformation supply in the direction perpendicular to the plate surface with the movement of fingers in the **gloves** with a between the fingers the hand from the palm, at least the inner side of a material covering the palm, it deform freely and gripping by the fingers and hand and the palm of the hand was inserted into the **glove** body (6) grips can be provided have been.

Classifications:



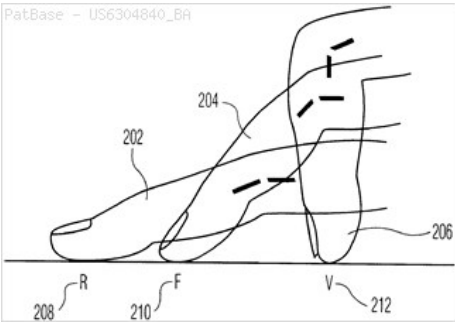
Family:

Publication number	Publication date	Application number	Application date
JP3054005 U	19981117	JP19980003688U	19980512

Title: Fingerless **glove** for interacting with data processing system

Abstract: Source: US6304840B A data **glove** is used for enabling ten-finger-typing with a virtual keyboard. The angle at which the user's; finger bends at the proximal interphalangeal joint is used to decode a particular row of the keyboard. Each finger controls one or more columns. Discrimination between columns operated by the same finger is achieved through an abduction/adduction **sensor**. The **glove** is fingerless and allows normal hand functions in addition to the virtual typing

Classifications:
International (IPC 8-9): G06F3/00 G06F3/01 G06F3/02 (Advanced/Invention); G06F3/00 G06F3/01 G06F3/02 (Core/Invention)
International (IPC 1-7): G06F13/10 G06F3/02 G06F9/44 G06K11/18
CPC: G06F3/014
European: G06F3/00B8H G06F3/01B6
US: 341/20 702/150 703/21



Family:

Publication number	Publication date	Application number	Application date
CN1165830 C	20040908	CN19998001045	19990614
CN1273649 A	20001115	CN19998001045	19990614
DE69919836 D1	20041007	DE19996019836	19990614
DE69919836 T2	20050901	DE19996019836T	19990614
EP1034468 A1	20000913	EP19990922450	19990614
EP1034468 B1	20040901	EP19990922450	19990614
JP2002519783 T2	20020702	JP20000557191T	19990614
US6304840 BA	20011016	US19980107527	19980630
WO0000883 A1	20000106	WO1999IB01095	19990614

Priority:
US19980107527 19980630 WO1999IB01095 19990614

Assignee(s): (std): KONINKL PHILIPS ELECTRONICS NV ; PHILIPS CORP ; PHILIPS SVENSKA AB

Assignee(s): PHILIPS ELECTRONICS N V KONINKLL ; US PHILIPS CORP ; U S PHILIPS CORP ; PHILIPS ELECTRONICS KONINKLL NV ; PHILIPS ELECTRONICS N V EINDHOVEN KONINKLL ; PHILIPS AB

Inventor(s): (std): FU W ; FU WAYNE ; HAJJAR IRA ; MIGACHYOV L ; MIGACHYOV LARISA ; VANCE S ; VANCE SCOTT

Inventor(s): W FU ; S VANCE ; L MIGACHYOV

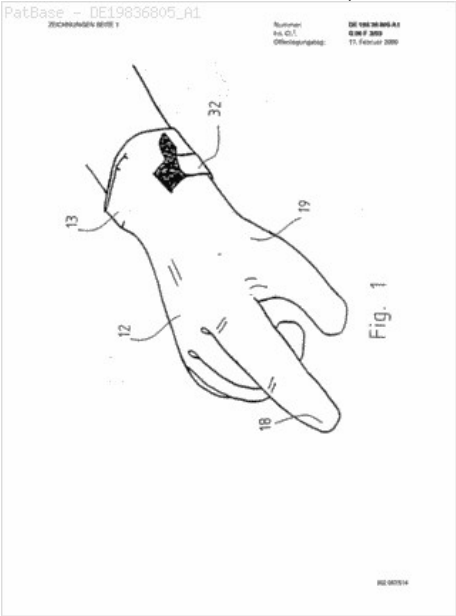
Designated states: AT BE CH CN CY DE DK ES FI FR GB GR IE IT JP KR LU MC NL PT SE

Title: System in form of data **glove** for scanning human hand movement and entering this in computer and **glove** is made of stitched **flexible** material so that it matches human hand back

Abstract: The data **glove** (12) is made of stitched **flexible** material, matching shape of human hand, with hand back side made of top and a bottom material with **sensor** layer between. All **sensors** are arranged in a conductive rubber matrix so their positions do not alter. **Sensor** electrodes have two ends stripped of insulation lying opposite, which lie at a determined distance from each other inside the rubber. Independent claims are included for the **sensor** material, movement detector, method to measure hand movement and method to measure body movement.

Classifications:

International (IPC 8-9): G06F3/00 G06F3/01 H01H13/702 H01H13/785 (Advanced/Invention)
International (IPC 1-7): G01B21/32 G01L1/22 G06F3/03 G06K11/06 H01H1/12
CPC: G06F3/014 H01H13/702 H01H13/785 H01H2009/0221 H01H2201/036 H01H2223/026 H01H2223/04 H01H2239/052
European: G06F3/00B8H G06F3/01B6 H01H13/702 H01H13/70B H01H13/785 T01H201/036 T01H223/026 T01H223/040 T01H239/052 T01H9/02C1



Family:

Publication number	Publication date	Application number	Application date
DE19836805 A1	20000217	DE19981036805	19980814

Priority:

DE19981036805 19980814

Assignee(s): (std): DAUM GMBH

Inventor(s): (std): DAUM WOLFGANG ; GUENTHER THOMAS ; HUSERT JOERN ; SCHERR PATRICK

Title: ORTHOTIC APPARATUS AND METHOD FOR USING SAME

Abstract: Source: US2001018565A An inflatable bladder position a distance from a joint is attached to an external structural support which crosses the joint but does not support it. By inflating the bladder one limb segment is forced towards the external support thereby increasing the ranges of motion of that joint. Further, the inflatable bladder has an instant release valve which, when pressed, will instantly release the pressure within the bladder. The limb is positioned intermediate the bladder and the external structural support for optimal biomechanical efficiency.

Classifications:

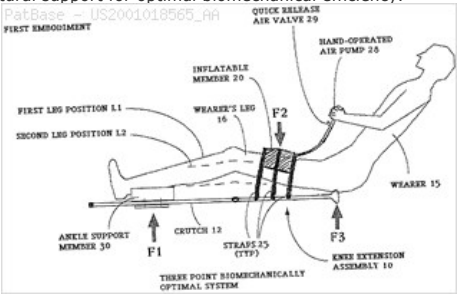
International (IPC 8-9): A61F5/00 A61F5/01 A61H1/00 A61H1/02 A61H23/04
A61H7/00 (Advanced/Invention);
A61F5/01 A61H23/04 (Advanced/Non-invention)

International (IPC 1-7): A61F5/00 A61F5/01 A61H1/02 A61H3/02

CPC: A61H1/024 A61H1/0266 A61H1/0277 A61H1/0285 A61H1/0288 A61H3/02
A61H2201/0119 A61H2201/1238 A61H2201/1253 A61H2201/1638 A61H2201/1642
A61H2201/1635 A61H2201/164 A61H2201/0157 A61H2201/1645 A61H2205/10
A61H2201/0103 A61F5/012 A61F7/007 A61F7/02 A61F2007/0054 A61H1/0237
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US: 601/148 601/148S 601/18 601/18P 601/33 601/33S 601/5 601/5S 602/13 602/13P
602/16 602/19 602/20 602/23 602/27 602/5 602/5S



Family:

Publication number	Publication date	Application number	Application date
AT330573 E	20060715	AT19990941003T	19990810
AU199954737 A1	20000306	AU19990054737	19990810
AU199954737 A5	20000306	AU19990054737	19990810
CA2340089 AA	20010209	CA19992340089	19990810
CA2340089 C	20090623	CA19992340089	19990810
CA2583077 AA	20000224	CA19992583077	19990810
CA2583077 C	20110712	CA19992583077	19990810
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ES2267284 T3	20070301	ES19990941003T	19990810
US2001018565 AA	20010830	US20010779329	20010208
US2004171973 AA	20040902	US20030720023	20031119
US2009143708 AA	20090604	US20080328539	20081204
US2011218469 AA	20110908	US20110018992	20110201
US2012143103 AA	20120607	US20110269289	20111007
US6669660 BB	20031230	US20010779329	20010208
US7479121 BB	20090120	US20030720023	20031119
US8361002 BB	20130129	US20110018992	20110201
WO0009066 A2	20000224	WO1999US18074	19990810
WO0009066 A3	20030703	WO1999US18074	19990810
WO0009066 C2	20011220	WO1999US18074	19990810

Priority:

US19980096105P 19980810	US19980096104P 19980810	US19980095952P 19980810
CA19992340089 19990810	US20080328539 20081204	US20110018992 20110201
US20100390868P 20101007	US20110269289 20111007	US20030720023 20031119
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Assignee(s): (std): BRANCH THOMAS P ; BRANCH THOMAS P M D ; DITTMAR EDWARD ; ERMI INC ; JACOBS CALE ; THOMAS P M D
BRANCH ; WESTIN FREDRIK

Assignee(s): THOMAS P MD BRANCH ; BRANCH THOMAS P MD ; BRANCH THOMAS PMD

Inventor(s): (std): BRANCH THOMAS P ; BRANCH THOMAS P M D ; DITTMAR EDWARD ; JACOBS CALE ; THOMAS P MD BRANCH ; WESTIN
FREDRIK

Inventor(s): THOMAS P M D BRANCH ; BRANCH THOMAS P MD

Agent(s): ALSTON AND BIRD LLP

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 MC MD MG MK ML MN MR MW MX NE
NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

Title: THERAPEUTIC COOLING DEVICES

Abstract: Source: US2002103520A A thermal regulatory system to reduce swelling caused by trauma to a variety of tissues and limbs is provided. One or more substantially **flexible**, at least partially thermally conductive housing containing optionally activatable thermal regulatory medium may be coupled with one or more applicator, such as a splint, that is adapted to apply the medium housing to the tissue. Methods of therapeutically regulating tissue temperature are also provided.

Classifications:

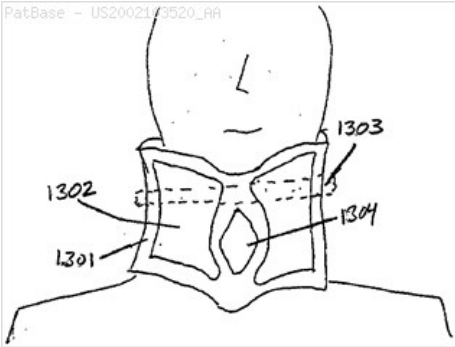
International (IPC 8-9): A61F5/00 A61F5/01 A61F5/055 A61F5/058 A61F7/00 A61F7/08 A61F7/10 (Advanced/Invention); A61F7/00 A61F7/02 A61F7/03 (Advanced/Non-invention); A61F7/00 (Core/Non-invention)

International (IPC 1-7): A61F5/00 A61F7/00 A61F7/10 A61H

CPC: A61F2007/0002 A61F2007/0096 A61F7/00 A61F7/08 A61F7/03 A61F7/10 A61F7/106 A61F2007/0008 A61F2007/0009 A61F2007/0018 A61F2007/0042 A61F2007/0056 A61F2007/0238

European: A61F7/04A A61F7/10 K61F7/00A2 K61F7/00A2G K61F7/00A2H K61F7/00A3 K61F7/00A5D K61F7/00C2 K61F7/00T1 K61F7/02G5P K61F7/03 K61F7/10C

US: 607/108 607/108P 607/109 607/109S 607/110 607/110 607/111 607/111S 607/112 607/112P 607/112S 607/114 607/114S 607/96



Family:

Publication number	Publication date	Application number	Application date
AT300263 E	20050815	AT20000973884T	20001026
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AU2003216344 BB	20090226	AU20030216344	20030221
CA2476992 AA	20040820	CA20032476992	20030221
CA2476992 C	20130514	CA20032476992	20030221
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DE60021626 T2	20060524	DE20006021626T	20001026
EP1333786 A1	20030813	EP20000973884	20001026
EP1333786 B1	20050727	EP20000973884	20001026
EP1482880 A2	20041208	EP20030743173	20030221
EP1482880 A4	20060510	EP20030743173	20030221
US2002103520 AA	20020801	US20020080351	20020221
US2011054577 AA	20110303	US20100871875	20100830
US2013123890 AA	20130516	US20120717274	20121217
US6183501 BA	20010206	US19980215988	19981218
US7785359 BB	20100831	US20020080351	20020221
US8603151 BB	20131210	US20100871875	20100830
WO0234177 A1	20020502	WO2000US29509	20001026
WO03072008 A2	20030904	WO2003US05131	20030221
WO03072008 A3	20040205	WO2003US05131	20030221

Priority:

US19980215988 19981218

WO2000US29509 20001026

US20020080351 20020221

WO2003US05131 20030221

US20100871875 20100830

US20120717274 20121217

Assignee(s): (std): JEFFREY LATHAM ; LATHAM JEFFREY W ; LATHAM JEFFREY WADE ; TRAUMATEC INC

Assignee(s): QUALIS INC ; TRAUMA TEC INC

Inventor(s): (std): LATHAM JEFFREY WADE ; LATHAM JEFFREY W

Inventor(s): JEFFREY WADE LATHAM

Agent(s): CHALKER FLORES LLP; EDWIN S; DANIEL J

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

Title: HAND FORCE FEEDBACK AND SENSING SYSTEM

Abstract: Source: US7138976B The present invention relates to a force feedback and sensing system for a hand in which an actuator system and sensing system is coupled to a palm base attached to the hand or a **glove**. The actuator system includes double acting actuators which provide force feedback against digits of the hand to simulate a real experience a user would have if directly manipulating a real object. The actuators are rotatably mounted to the palm base through a two degrees of freedom rotation joint.

Classifications:

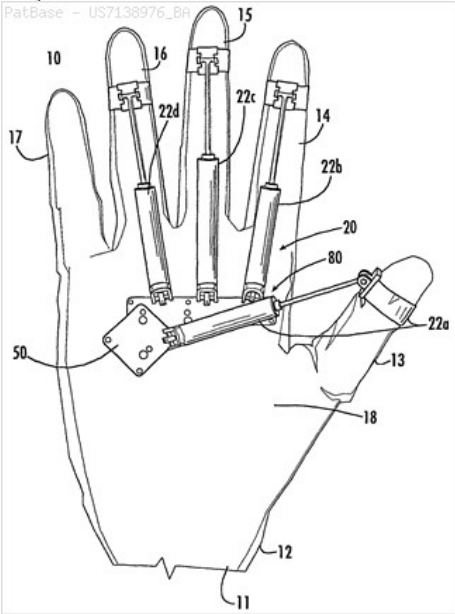
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G06F3/00 G06F3/01 G09G5/00 (Core/Invention)

International (IPC 1-7): G09G5/00

CPC: G06F3/014 G06F3/016

European: G06F3/00B8H G06F3/01B6 G06F3/01F

US: 345/156 414/5



Family:

Publication number	Publication date	Application number	Application date
AU2000060964 A5	20020130	AU20000060964	20000713
US7138976 BA	20061121	US20000332661	20000713
WO0207143 A1	20020124	WO2000US19137	20000713

Priority:

WO2000US19137 20000713 US20000332661 20000713 US20030332661 20030509

Assignee(s): (std): BOUZIT MOURAD ; BURDEA GRIGORE C ; UNIV RUTGERS

Assignee(s): RUTGERS THE STATE UNIVERSITY OF NEW JERSEY ; RUTGERS STATE UNIV NEW JERSEY ; RUTGERS STATE UNIV OF NEW JERSEY ; RUTGERS STATE UNIV

Inventor(s): (std): BOUZIT MOURAD ; BURDEA GRIGORE C

Inventor(s): GRIGORE C BURDEA ; MOURAD BOUZIT

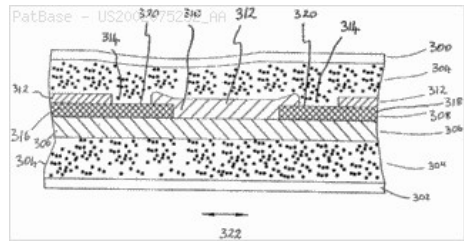
Agent(s): MATHEWS SHEPHERD MCKAY AND BRUNEAU PA

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

Title: Data **glove**

Abstract: Source: US2002075232A A **sensor** material for fabricating instrumented clothing includes conductive rubber layer. Two electrodes are disposed within the rubber layer, are connectable to an external circuit and are separated by a separation distance to form an electrical path from one electrode to the other through an intermediate portion of the conducting rubber layer. The electrical resistance measured between the electrodes is indicative of strain in the intermediate portion of the conducting rubber layer, thus permitting measurements of movement of the fabric to be made. The fabric may be used to form articles that a user can wear, including a data **glove**, so that movements of the user may be **detected** and measured.

Classifications:
International (IPC 8-9): G06F3/00 G06F3/01 (Advanced/Invention)
International (IPC 1-7): G09G5/08
CPC: G06F3/014 H01H2009/0221
European: G06F3/00B8H G06F3/01B6 T01H9/02C1
US: 345/158 345/158P



Family:

Publication number	Publication date	Application number	Application date
US2002075232 AA	20020620	US20010015909	20011210

Priority:

US19970912029 19970815 US20010015909 20011210

Assignee(s): (std): SCHERR PATRICK

Assignee(s): DAUM WOLFGANG ; GUNTHER THOMAS ; HUSERT JORN

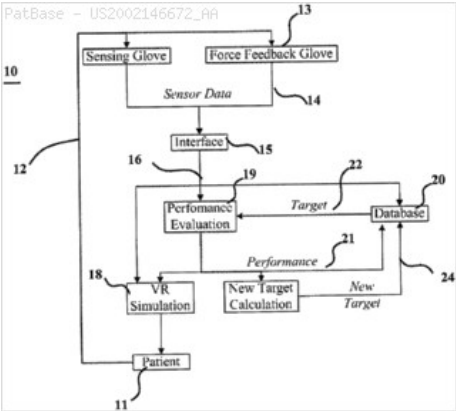
Inventor(s): (std): DAUM WOLFGANG ; GUNTHER THOMAS ; HUSERT JORN ; SCHERR PATRICK

Title: Method and apparatus for rehabilitation of neuromotor disorders

Abstract: Source: US2002146672A The invention relates to a method and system for individually exercising one or more parameters of hand movement such as range, speed, fractionation and strength in a virtual reality environment and for providing performance-based interaction with the user to increase user motivation while exercising. The present invention can be used for rehabilitation of neuromotor disorders, such as a stroke. A first input device **senses** position of digits of the hand of the user while the user is performing an exercise by interacting with a virtual image. A second input device provides force feedback to the user and measures position of the digits of the hand while the user is performing an exercise by interacting with a virtual image. The virtual images are updated based on targets determined for the user's performance in order to provide harder or easier exercises.

Classifications:

International (IPC 8-9): A63B23/16 B01J19/00 C12Q1/68 G01N33/50 G01N33/543 G01N33/68 (Advanced/Invention); A63B21/00 A63B24/00 C07B61/00 (Advanced/Non-invention); A63B23/035 (Core/Invention); A63B21/00 A63B24/00 (Core/Non-invention)
International (IPC 1-7): C07H21/00 C07H21/04 C07K16/00 C12Q1/68 C12Q1/70 G01N33/53 G09B19/00
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US: 434/247 434/258 434/262 434/274



Family:

Publication number	Publication date	Application number	Application date
EP1432817 A1	20040630	EP20020742197	20020618
EP1432817 A4	20061227	EP20020742197	20020618
US2002146672 AA	20021010	US20010008406	20011113
US6827579 BB	20041207	US20010008406	20011113
WO03029490 A1	20030410	WO2002US19346	20020618

Priority:
US20000248574P 20001116 US20010329311P 20011016 US20010008406 20011113
WO2002US19346 20020618

Assignee(s): (std): UNIV RUTGERS ; WANG YINGJIAN
Assignee(s): BOIAN RARES ; BURDEA GRIGORE C ; RUTGERS THE STATE UNIVERSITY OF NJ
Inventor(s): (std): BOIAN RARES ; BURDEA GRIGORE C ; WANG YINGJIAN
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 UZ VN YU ZA ZM ZW

Title: CATCHING TRAINING APPARATUS

Abstract: Source: US2003138761A An apparatus for assisting the user to catch a thrown object with fingers rather than palms, comprising a means for sensing pressure exerted on the user's palm, a means for deactivating said palm pressure sensing means when at least one of the user's fingers is **flexed** inwardly toward the palm, and a means for indicating when non-bypassed palm pressure occurs.

Classifications:

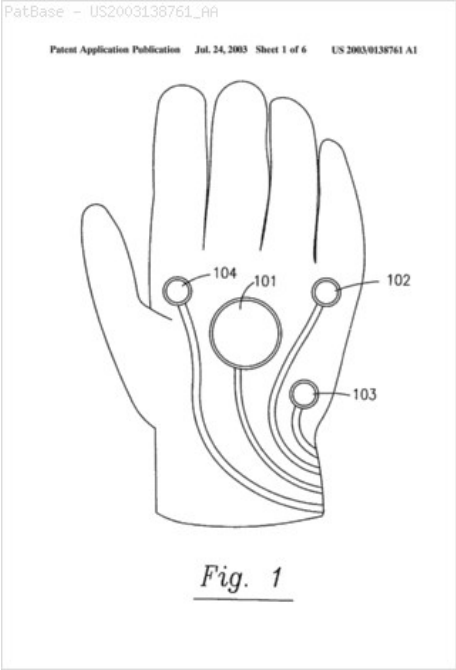
International (IPC 8-9): A63B59/02 G09B19/00 G09B9/00 (Advanced/Invention);
A63B69/00 A63B71/14 (Advanced/Non-invention);
A63B59/00 G09B19/00 G09B9/00 (Core/Invention);
A63B69/00 A63B71/08 (Core/Non-invention)

International (IPC 1-7): G09B19/00 G09B9/00

CPC: Y10S482/90 A63B59/02 A63B71/141 A63B2059/0022 A63B2069/0011
G09B19/0038

European: A63B59/02 G09B19/00E2 K63B59/00B2 K63B69/00B1C K63B71/14G

US: 345/156 434/247 434/247P 434/258 434/258S 434/365 482/900 600/595



Family:

Publication number	Publication date	Application number	Application date
US2003138761 AA	20030724	US20020263180	20021003
US7008231 BB	20060307	US20020263180	20021003

Priority:

US20020349966P 20020123 US20020263180 20021003

Assignee(s): (std): ERSKINE GLENN ; PESNELL PATRICK

Inventor(s): (std): ERSKINE GLENN ; PESNELL PATRICK

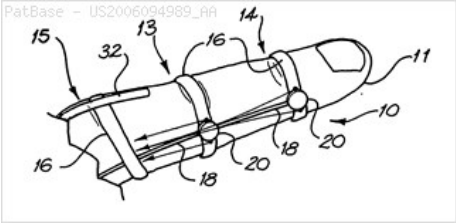
Agent(s): JOE D

Title: MOVEMENT FACILITATION DEVICE

Abstract: Source: US2006094989A The present invention concerns movement facilitation devices for facilitating movement between a first portion of a first object and a second portion of the first object. One or more of the movement facilitation devices may be combined to form a movement device for facilitating movement of at least one joint or limb of a patient's body. One form of a movement device according to the invention is a **glove** which at least partially encloses the joint or limb. The invention also encompasses systems for applying Continuous Passive Motion therapy to a joint or limb of a patient using the devices of the invention. The invention also encompasses the use of shape memory materials and of conducting polymers in the devices and systems of the invention, as well as the design of force transducers and actuators that may be used in the devices.

Classifications:

International (IPC 8-9): A61F2/54 A61F2/56 A61F2/58 A61F2/62 A61F2/70 A61F2/72 A61F5/00 A61F5/10 A61H1/00 A61H1/02 A61H5/00 A63B23/03 A63B23/035 A63B23/16 G01L1/24 (Advanced/Invention); A61F2/70 A61F2/76 (Advanced/Non-invention); A61F2/50 A61F2/60 A61F5/00 A61F5/01 A61H1/00 A61H1/02 A61H5/00 A63B23/03 A63B23/035 G01L1/24 (Core/Invention)
International (IPC 1-7): A61F2/56 A61F2/62 A61F2/70 A61F5/10 A61H1/02 A63B23/035 A63B23/16
CPC: A61F2/54 A61F2/586 A61F2/72 A61F2002/587 A61F2002/701 A61F2002/704 A61F2002/7625 A61F2002/7635 A61H1/02 A61H2201/5007 A63B2209/14
European: A61F2/54 A61F2/58H4 A61F2/72 A61H1/02 K61F2/58H4T K61F2/70A K61F2/70C K61F2/76M2 K61F2/76M4 K61H201/11D K61H201/50C K63B209/14
US: 601/23 601/33 601/40 601/5 602/20 602/22 73/862.624



Family:

Publication number	Publication date	Application number	Application date
AT472304 E	20100715	AT20030793471T	20030904
AU2002951193 A0	20020919	AU20020951193	20020904
AU2003257253 AA	20040329	AU20030257253	20030904
AU2003257253 BB	20090903	AU20030257253	20030904
CA2536981 AA	20060224	CA20032536981	20030904
CA2536981 C	20130820	CA20032536981	20030904
DE60333208 D1	20100812	DE20036033208	20030904
EP1549263 A1	20050706	EP20030793471	20030904
EP1549263 A4	20070425	EP20030793471	20030904
EP1549263 B1	20100630	EP20030793471	20030904
HK1077729 A3	20060224	HK20060100138	20060104
US2006094989 AA	20060504	US20030526713	20030904
US7481782 BB	20090127	US20030526713	20030904
WO04021936 A1	20040318	WO2003AU01138	20030904

Priority:
AU20020951193 20020904 AU20030257253 20030904 WO2003AU01138 20030904

Assignee(s): (std): SCOTT TIMOTHY RODERICK DALKEIT ; VARE VERONICA A ; WALLACE GORDON G ; SPINKS GEOFFREY M ; ZHOU DEZHI ; SCOTT TIMOTHY RODERICK D ; WALLACE GORDEN G ; ABOLFATHI PETER P ; ABOLFATHI PETER PUYA ; NORTH SYDNEY AREA HEALTH SERV ; NORTHERN SYDNEY AND CENTRAL CO ; UNIV WOLLONGONG

Assignee(s): THE UNIVERSITY OF WOLLONGONG ; NORTHERN SYDNEY AREA HEALTH SERVICE ; NORTHERN SYDNEY AREA HEATH SERVICE ; NORTHERN SYDNEY AND CENTRAL COAST AREA HEALTH SERV ; NORTHERN SYDNEY AND CENTRAL COAST AREA HEALTH SERVICE ; NORTHERN SYDNEY AND CENTRAL COAST AREA HEALTH SERVICE GOSFORD ; OF WOLLONGONG UNIV ; SCOTT TIMOTHY RODERICK DALKEITH ; UNIVERSITY OF WOLLONGONG

Inventor(s): (std): ABOLFATHI PETER P ; ABOLFATHI PETER PUYA ; DEZHI ZHOU ; GEOFFREY M SPINKS ; GORDON G WALLACE ; PETER PUYA ABOLFATHI ; SCOTT TIMOTHY RODERICK D ; SCOTT TIMOTHY RODERICK DALKEIT ; SPINKS GEOFFREY M ; TIMOTHY RODERICK DALKEITH SCOTT ; VARE VERONICA A ; VERONICA A VARE ; WALLACE GORDEN G ; ZHOU DEZHI ; WALLACE GORDON G ; WALLACE GORDON ; VARE VERONICA ; SPINKS GEOFFREY ; SCOTT TIMOTHY RODERICK DALKEITH ; SCOTT TIMOTHY RODERICK ; SCOTT TIMOTHY ; ABOLFATHI PETER

Inventor(s): WALLACE GORDEN

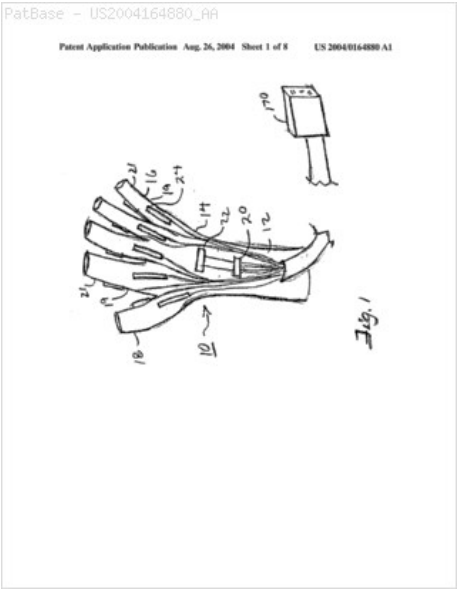
Agent(s): BATES PHILIP IAN; KNOBBE MARTENS OLSON AND BEAR LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM 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

Title: Wearable data input device employing wrist and finger movements

Abstract: Source: US2004164880A A data input device that substitutes for a traditional keyboard employs the same finger and wrist movements that a user employs on a keyboard but without a keyboard enabling a user's hands to rest comfortably in the user's lap or otherwise as the user may choose. Finger positions are identified for symbols and commands by tracking a user's wrist movement in pitch and yaw, which when combined with traditional finger movements multiplies the number of positions representative of symbols and commands. The data input device thus identifies and communicates a full set of symbols and commands of a traditional keyboard to a computer processor. The device typically employs a **glove** adapted to fit snugly on a user's hand outfitted with necessary switches to track the user's finger and wrist movement. With the finger and wrist moved to identify a selected symbol or command, a dichotomous finger switch connected between the metacarpus and each finger is actuated by downward movement of a finger similar to that employed in operation of a traditional keyboard. Finger and thumb movement is tracked between at least three pitch positions. Wrist movement is likewise tracked between at least three yaw positions and three pitch positions.

Classifications:
International (IPC 8-9): G06F3/00 G06F3/01 (Advanced/Invention); G06F3/00 G06F3/01 (Core/Invention)
International (IPC 1-7): H03K17/94 H03M11/00
CPC: G06F3/014 G06F3/017
European: G06F3/00B8G G06F3/00B8H G06F3/01B6 G06F3/01G
US: 341/2 341/20 345/157 345/168 463/37



Family:

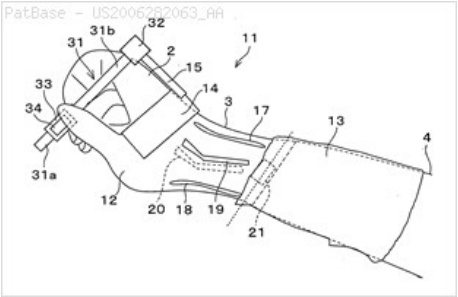
Publication number	Publication date	Application number	Application date
US2004164880 AA	20040826	US20030373123	20030224
US6967596 BB	20051122	US20030373123	20030224

Priority:
US20030373123 20030224
Assignee(s): (std): NGUYEN QUANG Q
Inventor(s): (std): NGUYEN QUANG Q

Title: SURGICAL OPERATION DEVICE

Abstract: Source: US2006282063A In order to rotate and move an arm of a slave which supports a needle-holder, the rotation and movement of a pen-shaped operating section (31) caused by the fingers of the operator's hand are directly transmitted as the rotation and movement of the needle-holder, as **sensors** for **detecting** the rotation and movement of the operating section, an X-axis torque **sensor**, Y-axis torque **sensor**, Z-axis torque **sensor**, and a rotation **detecting** potentiometer (33) are installed thereon. As a result, the rotation and movement of the pen-shaped operating section (31) caused by the fingers of the operator's hand are transmitted as the rotation and movement of the needle-holder in optimum proportions through a computing section. Therefore, when the needle-holder is to be finely moved, a subtle motion of the fingers of the hand can be satisfactorily transmitted. Thereby, it is possible to provide a surgical operation device capable of doing minute surgical operations with ease.

Classifications:
International (IPC 8-9): A61B1/00 A61B17/00 A61B17/04 A61B17/06 A61B17/28 A61B17/42 A61B19/00 A61D1/06 B25J13/08 B25J3/00 G05B19/18 (Advanced/Invention); B25J17/00 G06F19/00 (Advanced/Non-invention); A61B17/00 A61B17/04 A61B17/28 A61B19/00 B25J13/08 B25J3/00 (Core/Invention)
International (IPC 1-7): A61B17/04 A61B17/28 A61B19/00 B25J13/08 B25J3/00
CPC: Y10T74/20305 Y10T74/20335 A61B19/2203 A61B19/201 A61B2019/2223 A61B2019/223 A61B2019/2273 A61B2019/464
European: A61B19/22B K61B19/20B K61B19/22B10 K61B19/22B14 K61B19/22J2 K61B19/46H
US: 128/897 600/102 600/146 606/1 606/125 606/137 606/1P 606/222 700/245 700/3 700/66 74/490.01 74/490.06



Family:

Publication number	Publication date	Application number	Application date
EP1611864 A1	20060104	EP20040723029	20040324
EP1611864 A4	20101020	EP20040723029	20040324
EP1611864 B1	20131120	EP20040723029	20040324
JP2004344180 A2	20041209	JP20030095905	20030331
JP4286571 B2	20090701	JP20030095905	20030331
US2006282063 AA	20061214	US20040551641	20040324
US7572253 BB	20090811	US20040551641	20040324
WO04086996 A1	20041014	WO2004JP04098	20040324

Priority:
JP20030095905 20030331 WO2004JP04098 20040324

Assignee(s): (std): GOTANI HIROYUKI ; JAPAN SCIENCE AND TECH AGENCY

Assignee(s): JAPAN SCIENCE AND TECHNOLOGY AGENCY ; GOTANI HIROYUKI JAPAN SCIENCE AND TECH AGENCY

Inventor(s): (std): GOKOKU HIROYUKI ; GOTANI HIROYUKI

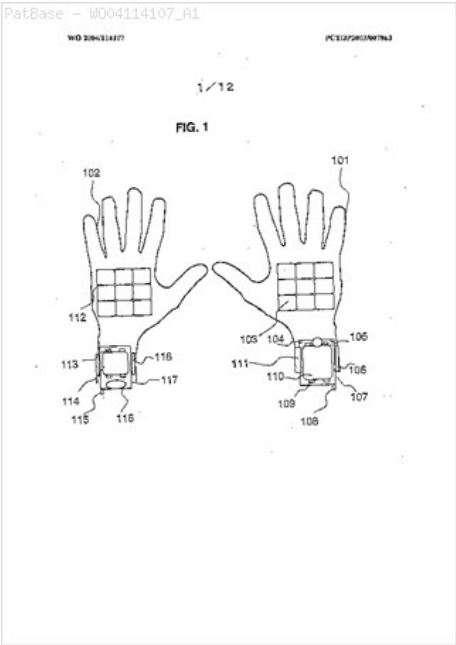
Agent(s): NOVAGRAAF TECHNOLOGIES; HARNESS DICKEY AND PIERCE PLC; HARNES DICKEY AND PIERCE PLC

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

Title: HUMAN-ASSISTIVE WEARABLE AUDIO-VISUAL INTER-COMMUNICATION APPARATUS.

Abstract: In this wearable human-assistive audio-visual inter-communication apparatus, bend **sensors**, force **sensors** and one or more accelerometer are installed to two **gloves** for a right hand and a left hand, and two wrist devices are mounted within the **gloves**. Each device receives **sensor** data from the **sensors** installed to the **glove**. Two wrist devices communicate with each other. One of them gathers **sensor** data **detected** by two wrist devices and the data to digitally coded sign language information, and output speech, text, graphical animation, etc. corresponding to the sign language information for both face-to-face, and face-to-remote distance without the need of external processing and communication devices.

Classifications:
International (IPC 8-9): G06F3/00 G06F3/01 G09B21/00 G09B21/04 (Advanced/Invention);
G06F3/00 G06F3/01 G09B21/00 (Core/Invention)
International (IPC 1-7): G06F3/00 G09B21/04
CPC: G06F3/014 G09B21/009 G09B21/04
European: G06F3/00B8H G06F3/01B6 G09B21/00C G09B21/04



Family:

Publication number	Publication date	Application number	Application date
AU2003243003 AA	20050104	AU20030243003	20030620
WO04114107 A1	20041229	WO2003JP07863	20030620

Priority:

WO2003JP07863 20030620

Assignee(s): (std): QADIR NADEEM MOHAMMAD

Inventor(s): (std): QADIR NADEEM MOHAMMAD

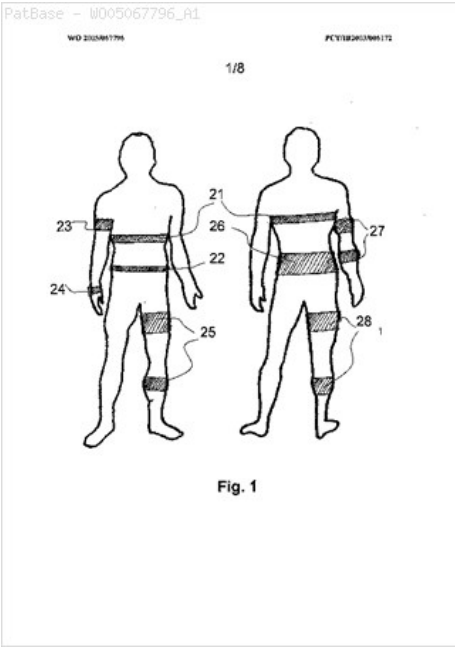
Inventor(s): NADEEM MOHAMMAD QADIR

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 NI NL NO NZ OM PG 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

Title: ELASTIC TEXTILE STRUCTURES FOR SENSING BODY MOVEMENTS

Abstract: System for evaluating and monitoring physiological parameters in living systems' bodies comprising **sensor** devices, **sensor** holders and signal processing devices for assessing body form, body posture and body movements, by measuring contraction and elongation of surfaces which are in direct contact to the body surface, around vessels and cavities, above muscles and joints, along the spine and along the extremities by using highly elastic textile structures wherein said **sensor** devices are the elastics of the textile itself. The **sensors** are integrated in the supporting or protecting textile as highly elastic threads that are preferably made of electrically conductive, resistive plastics, changing their resistance as nearly linear function of elongation.

Classifications:
International (IPC 8-9): A61B5/103 A61B5/11 A61B5/113 (Advanced/Invention); A45F3/04 (Advanced/Non-invention); A61B5/103 A61B5/11 (Core/Invention); A45F3/04 (Core/Non-invention)
International (IPC 1-7): A61B5/103 A61B5/11 A61B5/113
CPC: A61B5/6831 A61B5/6806 A45F3/04 A61B5/1071 A61B5/1073 A61B5/1116 A61B5/1126 A61B5/1135 A61B5/4528 A61B5/6804 A61B5/6892
European: A61B5/107A A61B5/107C A61B5/113B A61B5/11W A61B5/68B1D A61B5/68B1D2 A61B5/68F4 K45F3/04 K61B5/11P K61B5/45K



Family:

Publication number	Publication date	Application number	Application date
AU2003285679 AA	20050803	AU20030285679	20031219
WO05067796 A1	20050728	WO2003IB06172	20031219

Priority:

WO2003IB06172 20031219

Assignee(s): (std): RUFER MICHAEL ; VOEGELI FRIDOLIN

Inventor(s): (std): RUFER MICHAEL ; VOEGELI FRIDOLIN

Inventor(s): FRIDOLIN VOEGELI ; MICHAEL RUFER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ 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

Abstract: Source: US2006207409A An apparatus for remotely controlling a selectively operable device is provided. The apparatus includes a **glove assembly (102)** comprising a **material (104)** worn on a hand. The apparatus also includes **sensors (116a -d)** mounted to the **glove assembly (102)**, each of the **sensors** generating at least one response signal in response to a movement of the hand or a **flexing of a finger of the hand**. The apparatus also includes a control circuit **(106)** mounted to the **glove assembly (102)** and communicatively connected to the **sensors (116a -d)** for generating at least one control instruction in response to the response signals. The apparatus further includes a signal transmitter **(108)** mounted to the **glove assembly (102)** and communicatively connected to the control circuit **(106)** for transmitting a wireless signal containing the at least one control instruction, the at least one control signal causing the device to perform at least one predefined electromechanical function.

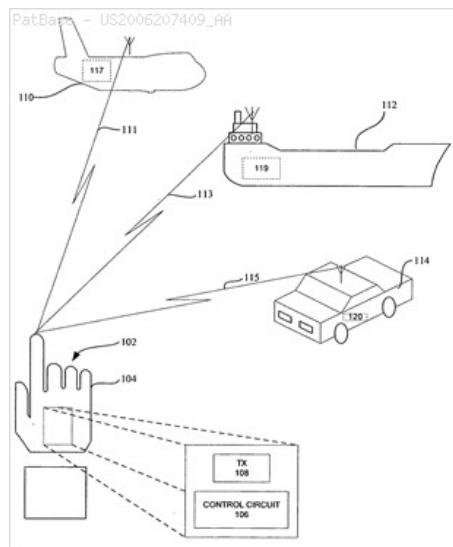
International (IPC 8-9): G10H1/00 (Advanced/Invention);

CPC: A63H30/04 G10H7/00 G10H2220/311 G10H2220/326 G10H2220/395

European: A63H30/04 G10H7/00 S10H220/311 S10H220/326 S10H220/395

S10H220/461 S10H240/211

US: 84/600 84/600P



Publication number	Publication date	Application number	Application date
US2006207409 AA	20060921	US20050082484	20050317

UIS20050082484 20050317

Assignee(s): (std): GROUP IND FAR EAST LTD K

Assignee(s): K GROUP IND ; K GROUP IND (FAR EAST) LTD ; K GROUP IND FAR EAST LTD ; K GROUP IND LTD ; K GROUP INDUSTRIES FAR EAST LTD

Inventor(s): (std): KAVANA JORDAN S

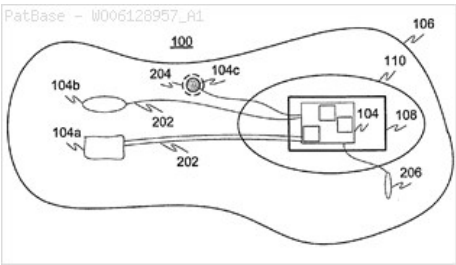
Inventor(s): KAVANA JORDAN STEVEN ; KAVANA JORDAN

Agent(s): AKERMAN SENTERFITT

Title: METHOD AND ARRANGEMENT FOR PROTECTING SENSITIVE COMPONENTS BY TEXTILE AND PRODUCT INCLUDING SAID ARRANGEMENT

Abstract: The invention relates to a method and arrangement (100) for protecting sensitive components (104, 104a, 104b, 104c) by means of textile and to a product provided with a corresponding arrangement. In particular, the invention relates to protecting electronic components connected to textile accessories and remote controls, clocks, data processing devices or elements measuring the user's bodily functions or parameters, so that the component in question is at least partly surrounded by a permanently closed first cover structure (106) made of textile, which cover structure is realized by laminating, adhesion, welding, taping and/or sewing.

Classifications:
International (IPC 8-9): A41D1/00 A41D13/12 A41D27/00 H05K3/28 (Advanced/Invention); H05K1/00 (Advanced/Non-invention); H05K (Subclass/Invention)
International (IPC 1-7): H05K
CPC: A41D1/002 A41D13/1281 H05K1/00 H05K1/038 H05K3/284 H05K2201/029 H05K2203/1311
European: H05K3/28D K41D1/00B K41D13/12C10 T05K1/00 T05K1/03D T05K201/02B5 T05K203/13A1



Family:

Publication number	Publication date	Application number	Application date
AT503369 E	20110415	AT20060755395T	20060602
DE602006020859 D1	20110505	DE200660020859T	20060602
EP1886544 A1	20080213	EP20060755395	20060602
EP1886544 A4	20090812	EP20060755395	20060602
EP1886544 B1	20110323	EP20060755395	20060602
FI20050593 A0	20050603	FI20050000593	20050603
WO06128957 A1	20061207	WO2006FI00173	20060602

Priority:
FI20050000593 20050603 WO2006FI00173 20060602

Assignee(s): (std): CLOTHING PLUS OY ; REHO AKSELI ; TASANEN MIKKO ; Vaelimaeki Elina ; VanHALA JUKKA

Inventor(s): (std): REHO AKSELI ; TASANEN MIKKO ; Vaelimaeki Elina ; VanHALA JUKKA

Agent(s): BRAX MATTI JUHANI

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

Title: EXERCISE DEVICE AND METHOD OF EXERCISING

Abstract: Source: US2008194390A An exercise device includes a belt configured to be secured around the waist, hips or torso of a person, or to a fixed object adjacent a person. The belt has a front portion configured to be disposed at the front of the person and a back portion configured to be disposed at the back of a person. A pair of spaced apart elastomeric cords are mounted from a proximal cord end to the front portion of the belt and a grip mounted to a distal end of the elastomeric cord. A method of using the device and exercises that can be used therewith are also disclosed.

Classifications:

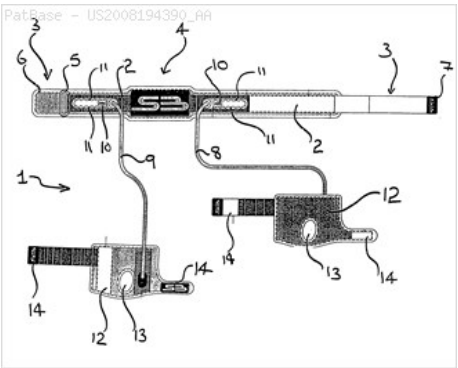
International (IPC 8-9): A63B21/018 A63B21/02 A63B23/035 A63B23/12 (Advanced/Invention)

International (IPC 1-7): A63B21/02

CPC: A63B21/00185 A63B21/1442 A63B21/1469 A63B2220/10 A63B2220/40 A63B2225/20 A63B2225/50 A63B21/0552 A63B21/0442 A63B21/0557 A63B21/1403 A63B21/1415 A63B21/1419 A63B21/1426 A63B21/1434 A63B21/1449 A63B23/0355 A63B2208/0204 A63B2208/0223 A63B21/1484

European: A63B21/00U A63B21/055D A63B21/14A A63B21/14A4 A63B21/14A5 A63B21/14A7A A63B21/14A8 A63B21/14A8W A63B21/14D2 A63B21/14K4H K63B208/02B K63B208/02D K63B21/04C K63B21/055D4 K63B21/14A8 K63B23/035F

US: 482/124 482/124P



Family:

Publication number	Publication date	Application number	Application date
AU2006274515 AA	20070201	AU20060274515	20060728
AU2012204016 AA	20120802	AU20120204016	20120705
CA2616614 AA	20080125	CA20062616614	20060728
CN101247864 A	20080820	CN200680027708	20060728
EP1912710 A1	20080423	EP20060760927	20060728
EP1912710 A4	20090603	EP20060760927	20060728
IN01690DN2008 A	20080627	IN2008DN01690	20080226
JP2009502262 T2	20090129	JP20080523079T	20060728
US2008194390 AA	20080814	US20060908764	20060728
US2010041528 AA	20100218	US20090582402	20091020
US2012245002 AA	20120927	US20120430458	20120326
WO07012139 A1	20070201	WO2006AU01070	20060728

Priority:

AU20050904094 20050729	AU20060274515 20060728	WO2006AU01070 20060728
US20080908764 20080207	US20090582402 20091020	US20120430458 20120326
AU20120204016 20120705		

Assignee(s): (std): SHADOW BOXER GROUP PTY LTD ; SHADOWBOXER SYSTEMS PTY LTD ; TODD PAUL

Assignee(s): WOODWARD INC ; SHADOWBOXER SYSTEM PTY LTD

Inventor(s): (std): PAUL TODD ; TODD PAUL

Agent(s): ASQUITH JULIAN PETER; PILLSBURY WINTHROP SHAW PITTMAN 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

Title: WEARABLE DEVICE

Abstract: Source: US2007298893A An interactive wrist cover for simulating riding a vehicle, such as a motorcycle, is provided. The interactive wrist cover includes various components that respond to realistic driving or riding motions of the user by generating appropriate outputs, such as increasing engine speed sound in response to wrist flexure to simulate throttle operation, even if no handlebar is present.

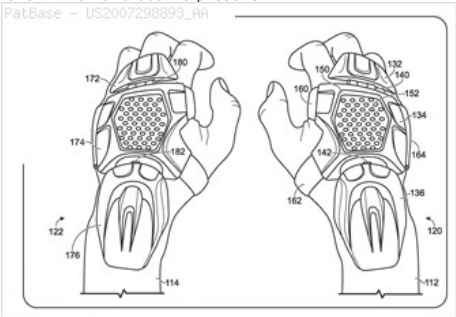
Classifications:

International (IPC 8-9): A41D19/00 A63F11/00 A63F13/02 A63G31/16 A63H5/00 G09B9/058 (Advanced/Invention); A41D19/00 A63G31/00 G09B9/04 (Core/Invention)

CPC: A63F13/06 A63F2300/1012 A63F2300/6063 A63F2300/8017 A63H5/00 A63H33/3033

European: A63F13/06 A63F9/24 A63H33/30G A63H5/00 K63F300/10B K63F300/60S K63F300/80D K63F50/10A K63F50/49H K63F9/24P4C

US: 472/133



Family:

Publication number	Publication date	Application number	Application date
CA2587585 AA	20071104	CA20072587585	20070504
CN201436044 U	20100407	CN200720004697U	20070430
DE202007006364 U1	20071011	DE200720006364U	20070503
FR2900757 A1	20071109	FR20070054893	20070504
FR2900757 B1	20090213	FR20070054893	20070504
GB200708263 A0	20070606	GB20070008263	20070430
GB2437823 A1	20071107	GB20070008263	20070430
US2007298893 AA	20071227	US20070744320	20070504

Priority:

US20060798033P 20060504

US20060812213P 20060609

US20060846210P 20060920

US20070744320 20070504

CA20072587585 20070504

Assignee(s): (std): MATTEL INC

Assignee(s): MORAN STEVEN ; YU GLEN ; HEIMANN KEN

Inventor(s): (std): HEIMANN KENNETH R ; REUEL JOHN ; YU GLENN ; YU GLEN ; MORAN STEVEN ; HEIMANN KEN

Inventor(s): GLEN YU ; KEN HEIMANN ; STEVEN MORAN ; JOHN REUEL ; GLENN YU ; HEIMANN KENNETH

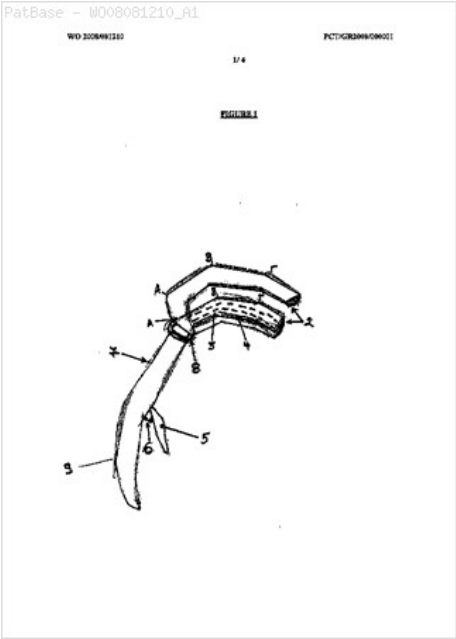
Agent(s): ALLEMAN HALL MCCOY RUSSELL AND TUTTLE LLP

Title: SURGICAL STAPLER ADJUSTED TO A SPECIAL SURGICAL **GLOVE**

Abstract: A surgical stapler incorporated in a special surgical **glove** used in the procedure of stapling and anastomosis of hollow abdominal organs. Due to its shape, size and ergonomy, it can reach anatomic spaces to which the usual lineal articulating staplers (Roticulator - TYCO, Proximate Access - ETHICON) and the modern curved head fixed staplers (Contour - ETHICON) cannot access. This is achieved due to the minimization of the voluminous accessories compared to the usual surgical staplers and due to the incorporation of the stapler in the surgeon's hand, a fact that is correlated with the great ergonomy and ease of use. It is mainly used in the low anterior resection of the rectum, where it replaces the voluminous and inconvenient staplers such as TYCO's Roticulator, ETHICON' s Proximate Access and Contour, during the procedure of stapling and the division of the rectum in a distal and a proximal part. The other operation stages for the placement of the circular stapler (CEEA) device and the anastomosis remain the same.

Classifications:

International (IPC 8-9): A41D19/015 A61B17/00 A61B17/068 A61B17/072 A61B17/115 A61B19/04 (Advanced/Invention); A41D19/015 A61B17/00 A61B17/03 A61B17/068 A61B19/00 (Core/Invention)
CPC: A41D19/01594 A61B17/068 A61B17/072 A61B2017/00265 A61B2017/00438 A61B2017/07221 A61B19/04 A61B17/115
European: A41D19/015T A61B17/068 A61B17/072 A61B19/04 K61B17/00E1H K61B17/00G6 K61B17/072H2



Family:

Publication number	Publication date	Application number	Application date
GR1005765 B	20080116	GR20070100004	20070105
GR1005765 B2	20080116	GR20070100004	20070105
WO08081210 A1	20080710	WO2008GR00001	20080107

Priority:

GR20070100004 20070105

Assignee(s): (std): TROGADAS GEORGIOS ; TROGADAS GEORGIOS VASILEIOU

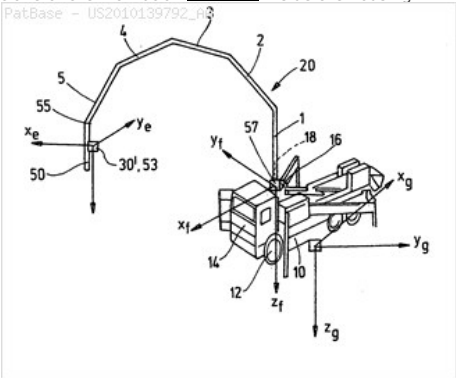
Inventor(s): (std): TROGADAS GEORGIOS ; TROGADAS GEORGIOS VASILEIOU

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

Title: LARGE MANIPULATOR

Abstract: Source: US2010139792A A large manipulator, especially a truck-mounted concrete pump, has a boom base that can be arranged on a frame so as to be pivoted about a substantially vertical axis of rotation. The large manipulator has a pendular element, that hangs down as an articulated boom and a control device for controlling the drive units of the axes of articulation and rotation of the articulated boom. The remote control has at least one inclination **sensor** which is housed in a housing that is detachably fastened on the pendular element. Two inclination **sensors** are housed in the housing and are bent at an angle of 90 degrees with respect to each other and with respect to an axis that is parallel to the pendular element axis. The housing has a mark indicating the orientation of at least one of the inclination **sensors** inside the housing.

Classifications:
International (IPC 8-9): B25J18/00 B66C23/00 E04G21/04
G05B19/02 (Advanced/Invention);
B25J18/00 B66C23/00 E04G21/04 G05B19/02 (Core/Invention)
CPC: Y10T74/20305 B66C13/063 B66C1/44 B66C13/08 B66C13/40 B66C13/44
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European: B66C1/44 B66C13/06B B66C13/08 B66C13/40 B66C13/44 B66C13/46
E04G21/04
US: 137/556 137/615 141/387 340/12.51 340/12.510S 340/4.3 340/4.300S 340/825.22
74/490.01 74/490.010S



Family:

Publication number	Publication date	Application number	Application date
AT510978 E	20110615	AT20080708080T	20080122
AT550503 E	20120415	AT20080166553T	20080122
CN101641485 A	20100203	CN200880004078	20080122
CN101641485 B	20130102	CN200880004078	20080122
DE102007012575 A1	20080918	DE200710012575	20070313
EP2118404 A1	20091118	EP20080708080	20080122
EP2118404 B1	20110525	EP20080708080	20080122
EP2186968 A1	20100519	EP20090166553	20080122
EP2186968 B1	20120321	EP20090166553	20080122
ES2364940 T3	20110919	ES20080708080T	20080122
ES2382591 T3	20120611	ES20090166553T	20080122
KR101449077 B1	20141008	KR20097015938	20080122
KR20090119756 A	20091119	KR20097015938	20080122
US2010139792 AA	20100610	US20080449365	20080122
US8281811 BB	20121009	US20080449365	20080122
WO08110397 A1	20080918	WO2008EP50715	20080122

Priority:

DE200710012575 20070313 WO2008EP50715 20080122 EP20080708080 20080122

Assignee(s): (std): PUTZMEISTER CONCRETE PUMPS ; PUTZMEISTER CONCRETE PUMPS DE ; PUTZMEISTER ENGINEERING GMBH ; RAU KURT ; RAU LEGAL REPRESENTATIVE UTE ELSE MARGARETHE ; RAU LEGAL REPRESENTATIVE CHRISTINE ; RAU LEGAL REPRESENTATIVE MICHAEL ; RAU LEGAL REPRESENTATIVE ANDREAS

Assignee(s): PUTZMEISTER CONCRETE PUMPS GMBH

Inventor(s): (std): RAU ANDREAS ; RAU CHRISTINE ; RAU KURT ; RAU LEGAL REPRESENTATIVE ANDREAS ; RAU LEGAL REPRESENTATIVE CHRISTINE ; RAU LEGAL REPRESENTATIVE MICHAEL ; RAU LEGAL REPRESENTATIVE UTE ELSE MARGARETHE ; RAU MICHAEL ; RAU UTE ELSE MARGARETHE ; KURT RAU

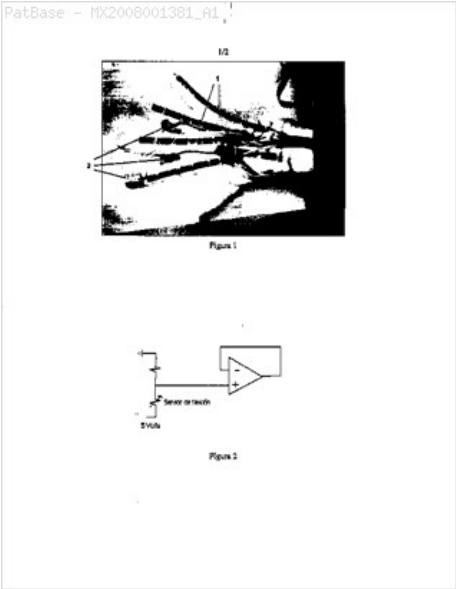
Agent(s): WOLF ECKHARD; COLLARD AND ROE PC

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

Title: DESIGN AND IMPLEMENTATION OF A SYSTEM FOR POSITIONING THE FINGERS OF THE HAND, APPLIED IN THE TREATMENT OF VISUAL-HEARING PROCESSING DISORDERS.

Abstract: The present invention consists in the design and implementation of a system for positioning the fingers of the hand, which is applied in the treatment of visual-hearing processing disorders and which is based on the measurement of the position of the fingers of the hand using devices know as **flexion sensors**. Said **sensors** are mounted over a **glove** where metallic sheets are included so as to act as contact **sensors** between the ring finger, index finger and middle finger, and between the fingernail and the fingertip since some characters require to **detect** the joint between some fingers. The data obtained from the **glove** is acquired and processed by a data acquisition card using a software, where the system allows an image corresponding to the symbol, represented by the position of the fingers, and the symbol meaning to be displayed in a screen, thereby allowing the invention to be used by people having hearing or speaking disorders or by those being interested in learning the sign language for deaf and dumb people.

Classifications:
International (IPC 8-9): G09B21/04 (Advanced/Invention);
G09B21/00 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
MX2008001381 A1	20090729	MX20080001381	20080129

Priority:

MX20080001381 20080129

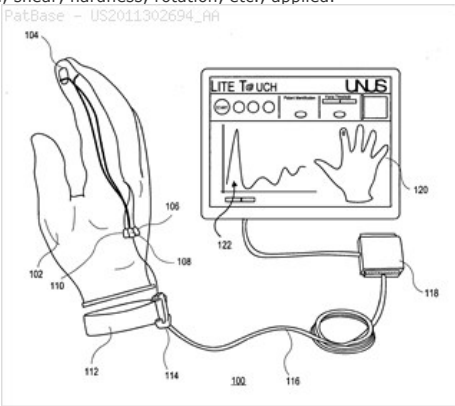
Assignee(s): (std): UNIV AUTONOMA DEL ESTADO DE ME
Assignee(s): UNIVERSIDAD AUTONOMA DEL ESTADO DE MEXICO
Inventor(s): (std): HERNANDEZ GERMAN GONZALEZ ; MEJIA JOSE ANTONIO GARCIA ; MEJIA JUAN FERNANDO GARCIA ; MONROY LUZ ADRIANA TINOCO
Inventor(s): GERMAN GONZALEZ HERNANDEZ ; JOSE ANTONIO GARCIA MEJIA ; JUAN FERNANDO GARCIA MEJIA ; LUZ ADRIANA TINOCO MONROY

Title: CLINICAL FORCE SENSING **GLOVE**

Abstract: Source: US2011302694A A clinical sensing **glove** system to quantify force, shear, hardness, etc., measured in manual therapies is disclosed. A **sensor** is disposed in a clinical **glove**. The **sensor** undergoes micro-bending, macro-bending, evanescent coupling, a change in resonance, a change in polarization, a change in phase modulation, in response to pressure/force applied. The amount of micro-bending, macro-bending, evanescent coupling, change in resonance, change in polarization, and/or change in phase modulation is proportional to the intensity of the pressure/force. A clinician can quantitatively determine the amount of pressure, force, shear, hardness, rotation, etc., applied.

Classifications:

International (IPC 8-9): A41D19/00 A61B5/02 A61B5/22 (Advanced/Invention)
CPC: A61B5/103 A61B5/02 A61B5/4528 A61B5/6806 A61B5/7207 A61B5/7257 A61B2562/0247 A61B2562/0266 A61B2562/043
European: A61B5/103 A61B5/68B1D2 K61B5/02 K61B5/45K K61B5/72B2 K61B5/72K10B K61B562/02H K61B562/02L2 K61B562/04B
US: 2/160 2/160P



Family:

Publication number	Publication date	Application number	Application date
US2011302694 AA	20111215	US20090058523	20090403
WO09146142 A2	20091203	WO2009US39562	20090403
WO09146142 A3	20100318	WO2009US39562	20090403

Priority:

US20080042214P 20080403 WO2009US39562 20090403 US20090058523 20090403

Assignee(s): (std): LINDERS DAVID ; NUCKLEY DAVID J ; REINHALL P G ; REINHALL PER G ; WANG WEI CHIH ; UNIV WASHINGTON

Assignee(s): UNIVERSITY OF WASHINGTON ; OF WASHINGTON UNIV

Inventor(s): (std): LINDERS DAVID ; NUCKLEY DAVID J ; REINHALL PER G ; WANG WEI CHIH

Agent(s): VINCENT LESTER 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 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

Title: NEUROLOGICAL DEVICE

Abstract: Source: US2010234182A A neurological device having a forearm support releasably attached to a user's arm, at least one finger sleeve adapted to be releasably attached to at least one finger, at least one tensor strut having a first end releasably coupled to the at least one finger sleeve and an opposite second end coupled to the forearm support, at least one **sensor** coupled to at least one of the at least one finger sleeve and the at least tensor strut and configured to **detect** finger movement and generate electrical signals that are indicative of the movement, and a data device coupled to the **sensor** and configured to receive the electrical signals and calculate at least one of a range of motion of the at least one finger, a speed of movement of the at least one finger, number of repetitions between **flexion** and extension of the at least one finger and a pressure exerted by the at least one finger during **flexion** from the electrical signals. The calculated data is used to remotely track user compliance and rehabilitation compliance by a healthcare provider.

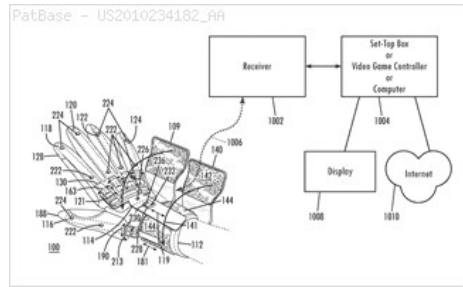
Classifications:

International (IPC 8-9): A61F5/00 A63B21/00 (Advanced/Invention)

CPC: A61F5/013 A61B5/1125 A61B5/4528 A61B5/6806 A61B5/6825 A61B5/6826 A61B5/6838 A61B5/7475 G06F3/014

European: A61B5/11U2 A61B5/68B1D2 A61B5/68B2J A61B5/68B2J1 A61B5/68B3L A61B5/74M A61F5/01D7 G06F3/01B6 K61B5/45K

US: 482/8 482/8P 602/22 602/22S



Family:

Publication number	Publication date	Application number	Application date
US2010234182 AA	20100916	US20100688208	20100115
WO10083389 A1	20100722	WO2010US21163	20100115

Priority:

US20090144952P 20090115 US20100688208 20100115

Assignee(s): (std): HOFFMAN HENRY B ; KLETT CHRISTOPHER L ; KOVACEVICH IAN D ; SAEBO INC

Inventor(s): (std): HOFFMAN HENRY B ; KLETT CHRISTOPHER L ; KOVACEVICH IAN D

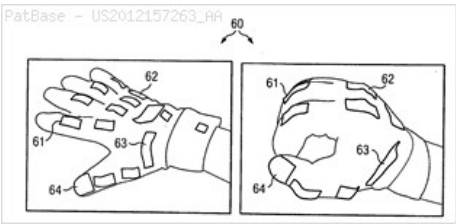
Agent(s): NELSON MULLINS RILEY AND SCARBOROUGH LLP,IP DEPARTMENT; NELSON MULLINS RILEY AND SCARBOROUGH LLP IP DEPARTMENT; GLOBERMAN KYLE M

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

Title: MULTI-USER SMARTGLOVE FOR VIRTUAL ENVIRONMENT-BASED REHABILITATION

Abstract: Source: US2012157263A A low-cost, virtual environment, rehabilitation system and a **glove** input device for patients suffering from stroke or other neurological impairments for independent, in-home use, to improve upper extremity motor function, including hand and finger control. The system includes a low-cost input device for tracking arm, hand, and finger movement; an open source gaming engine; and a processing device. The system is controllable to provide four types of multiple patient/user interactions: competition, cooperation, counter-operative, and mixed.

Classifications:
International (IPC 8-9): A61H1/00 A63B24/00 (Advanced/Invention)
CPC: A61H1/0285 A61H2201/5058 G06F3/014
European: A61H1/02M5 G06F3/01B6 K61H201/50S
US: 482/4 482/4P



Family:

Publication number	Publication date	Application number	Application date
EP2389152 A1	20111130	EP20100733800	20100120
US2012157263 AA	20120621	US20100145436	20100120
WO10085476 A1	20100729	WO2010US21483	20100120

Priority:
US20090145825P 20090120 US20090266543P 20091204 WO2010US21483 20100120
US20100145436 20100120

Assignee(s): (std): BAJPAI AVI ; BINTZ CAITLYN ; CHRISOS JASON ; CLARK ANDREW ; HOLDEN MAUREEN K ; SIVAK MARK ; UNIV NORTHEASTERN ; LENTZ DREW ; MAVROIDIS CONSTANTINOS

Assignee(s): NORTHEASTERN UNIV ; NORTHEASTERN UNIVERSITY

Inventor(s): (std): BAJPAI AVI ; BINTZ CAITLYN ; CHRISOS JASON ; CLARK ANDREW ; HOLDEN MAUREEN K ; LENTZ DREW ; MAVROIDIS CONSTANTINOS ; SIVAK MARK

Agent(s): PFISTER STEFAN HELMUT ULRICH; HARTNELL GEORGE W III 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

Title: WEARABLE TYPE MOVEMENT ASSISTING APPARATUS

Abstract: Source: US2012029399A A wearable type movement assisting apparatus includes a movement assisting **glove** including a finger insertion part into which a finger of a wearer is inserted, a driving part arranged on a backhand side of the movement assisting **glove** and configured to drive the finger insertion part, a linear member arranged along the finger insertion part and configured to transmit a driving force of the driving part to the finger insertion part, a biosignal **detection** part configured to **detect** a biosignal that causes the finger of the wearer to move, and a control part configured to output a drive control signal to the driving part based on the biosignal **detected** by the biosignal **detection** part. The driving part is configured to move the linear member in an extending direction or a bending direction of the finger insertion part based on the drive control signal from the control part.

Classifications:

International (IPC 8-9): A61F2/56 A61F2/72 A61H1/02

A63B23/16 (Advanced/Invention);

A63B69/00 (Advanced/Non-invention)

CPC: A61H1/0285 A61B5/04001 A61B5/0476 A61B5/04888 A61B5/1121 A61B5/1125

A61B5/6806 A61B5/6812 A61F2/72 A61F5/013 A61F2002/7625 A61F2002/7635

A61F2005/0188 A61H1/0288 A61H2201/149 A61H2201/165 A61H2201/5058

A61H2201/5061 A61H2201/5069 A61H2230/105 A61H2230/605

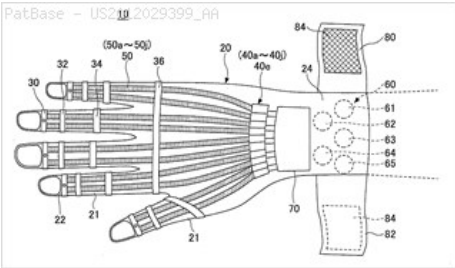
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K61F2/76M4 K61F5/01D12 K61H201/14M2 K61H201/16A20 K61H201/50S K61H201/50S2

K61H201/50S6 K61H230/10A K61H230/60A

US: 601/40 601/40P



Family:

Publication number	Publication date	Application number	Application date
CN102387760 A	20120321	CN201080016060	20100409
CN104188739 A	20141210	CN201410415108	20100409
CN104188740 A	20141210	CN201410415255	20100409
EP2417941 A1	20120215	EP20100761764	20100409
EP2417941 A4	20121031	EP20100761764	20100409
JP2010240285 A2	20101028	JP20090094695	20090409
JP5472680 B2	20140416	JP20090094695	20090409
KR101361999 B1	20140211	KR20117023351	20100409
KR20110127252 A	20111124	KR20117023351	20100409
US2012029399 AA	20120202	US20100263082	20100409
WO10117065 A1	20101014	WO2010JP56470	20100409

Priority:

JP20090094695 20090409 WO2010JP56470 20100409

Assignee(s): (std): SANKAI YOSHIYUKI ; UNIV TSUKUBA

Assignee(s): UNIVERSITY OF TSUKUBA ; UNIV OF TSUKUBA ; OF TSUKUBA UNIV

Inventor(s): (std): SANKAI YOSHIYUKI ; YOSHIYUKI SANKAI

Agent(s): COLLIN JEROME; ITOH TADAHIKO

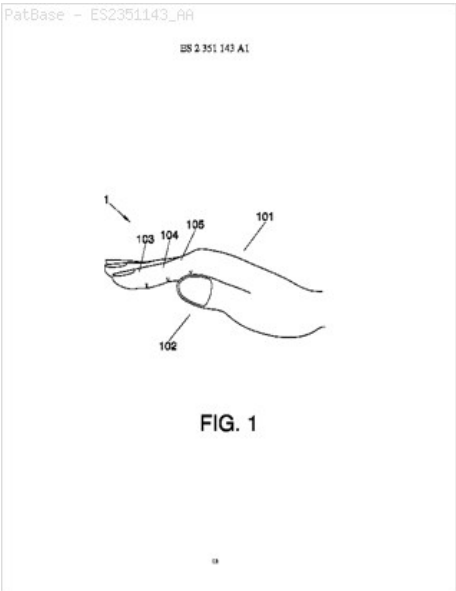
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ 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

Title: SISTEMA Y PROCEDIMIENTO DE CONTROL PARA MANIPULADORES CONTROL SYSTEM AND METHOD FOR HANDLERS (Machine translation)

Abstract: Source: ES2351143A Sistema y procedimiento de control para manipuladores. Basado en guantes (5) dotados de **sensores**, que permite a un operario (6) controlar cualquier manipulador (4) con uno o mas grados de libertad, coordinando su movimiento de acuerdo con la magnitud, direccion y sentido de la fuerza aplicada por el operario (6), ejercida sobre la estructura del manipulador (4) o sobre la carga movilizada (406). Dicho sistema de control comprende al menos un guante (5) dotado de **sensores**, un computador (411), un receptor inalambrico (412) y unos variadores de frecuencia (413). Cada guante (5) posee en su zona dorsal un sistema de posicionamiento dactilar (2) que mide la **flexion** y abduccion de los cinco dedos, un sistema de posicionamiento espacial (7) que mide la posicion y orientacion absoluta del guante (5) y por ende de la mano (1) en el espacio, y en su zona palmar un sistema de medicion de fuerza (3) que mide las fuerzas aplicadas por el operario (6).

Machine translation: Control system and method for manipulators. Based on **gloves** (5) equipped with **sensors**, which allows an operator (6) controlling any manipulator (4) with one or more degrees of freedom, coordinating their movement in accordance with the magnitude and direction of the force applied by the operator (6), exerted on the structure of the manipulator (4) or on the cargo handled (406). Said control system comprising at least one **glove** (5) equipped with **sensors**, a computer (411), a wireless receiver (412) and a frequency inverter (413). Each **glove** (5) has in its dorsal finger positioning system (2) measuring the **flexion** and abduction of the five fingers, spatial positioning system (7) which measures the absolute position and orientation of the **glove** (5) and hence the hand (1) in space, and its area measurement system palmar force (3) measuring the forces applied by the operator (6).

Classifications:
International (IPC 8-9): G06F3/01 (Advanced/Invention)
CPC: G06F3/014



Family:

Publication number	Publication date	Application number	Application date
ES2351143 AA	20110201	ES20090030173	20090514
ES2351143 BA	20111118	ES20090030173	20090514

Priority:
ES20090030173 20090514

Assignee(s): (std): CONSEJO SUPERIOR INVESTIGACION
Assignee(s): CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS CSIC
Inventor(s): (std): GONZALEZ DE SANTOS PABLO ; PAREDES MADRID LEONEL
Inventor(s): LEONEL PAREDES MADRID ; PABLO GONZALEZ DE SANTOS

Title: ARTIFICIAL HAND PROSTHESIS, HAS **DETECTING** DEVICE **DETECTING** TOUCH ON PULP PARTS OF PHALANX EQUIPPED WITH TRANSMISSION DEVICE, AND ENGINE INFLECTING FINGERS AND SET UNDER OPERATION BY **SENSORS** AND ELECTRONIC CIRCUIT THAT POWERS ENGINE

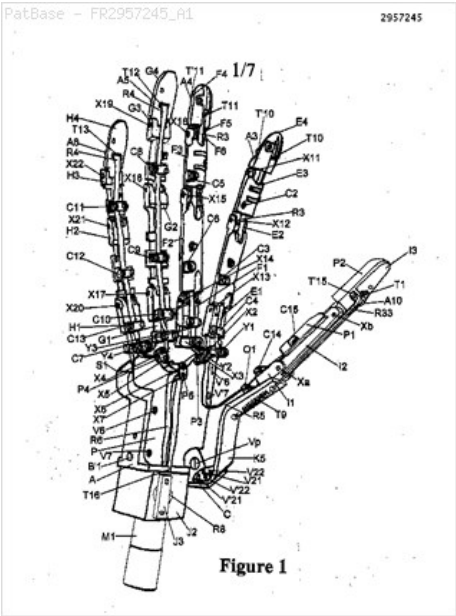
Abstract: The prosthesis has a **detecting** device **detecting** a touch on all pulp parts of a mobile phalanx equipped with a transmission device. The transmission device transmits the touch on a stump of a patient for conferring sensitivity of the touch. A three-row integrated device includes side mobilities that are used as supports with long fingers. A micro engine (M1) extends and inflects the fingers and is set under operation by myoelectric **sensors** and an electronic circuit, which powers the micro engine. **USE:** Artificial hand prosthesis. **ADVANTAGE:** The micro engine extends and inflects the fingers and is set under operation by the myoelectric **sensors** and the electronic circuit, which powers the micro engine, thus easily enabling opening and closing of the hand prosthesis during movement. The prosthesis is easy to manufacture and aesthetic in appearance. **DESCRIPTION OF DRAWINGS:** The drawing shows a perspective view of artificial hand prosthesis. C: Machined part M1: Micro engine P: Protection plate T1: Hole Vp: Screw.

Classifications:

International (IPC 8-9): A61F2/54 (Advanced/Invention)

CPC: A61F2/583 A61F2/586 A61F2/68 A61F2/72 A61F2002/5061 A61F2002/5093 A61F2002/587 A61F2002/6827 A61F2002/6845 A61F2002/701 A61F2002/7635

European: A61F2/58H A61F2/58H4 A61F2/68 K61F2/50P2 K61F2/50Y K61F2/58H4T K61F2/68F K61F2/68K K61F2/70A K61F2/72 K61F2/76M4

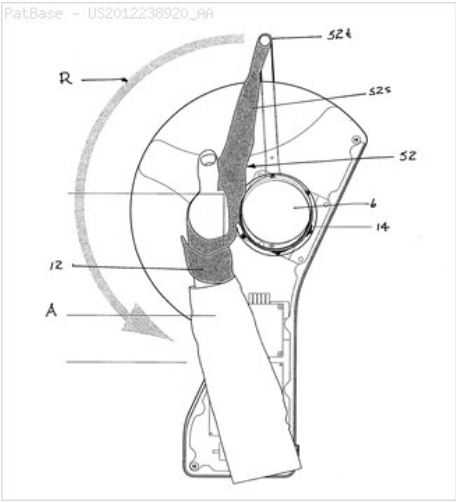


Title: REHABILITATIVE APPARATUS FOR TREATING REFLEX SYMPATHETIC DYSTROPHY

Abstract: Source: US2012238920A The apparatus provides active and passive exercise to the hand and wrist of a patient afflicted with the symptoms of reflex sympathetic dystrophy. The apparatus employs a hand or wrist **glove** to be worn by the patient's affected hand, the back of which is attached through an arm to a central post and the distal portion encasing the fingers, is attached to a vertical handle, which is rotated about the post, serving as the axis of rotation. A torque **sensor** is coupled to the motor shaft to measure the degree of patient input from a programmed speed and force rate by sensing the active input of the patient and reducing the motor input to the cycle allowing the patient to "drive" the exercise.

Classifications:

International (IPC 8-9): A61H1/00 A61H1/02 A63B23/00
A63B23/035 (Advanced/Invention)
CPC: A61H1/0285 A61H1/0288 A61H2201/1638 A61H2201/1671 A61H2201/5007
A61H2201/5035 A61H2201/5061 A61H2201/5064
US: 601/5



Family:

Publication number	Publication date	Application number	Application date
CA2752619 AA	20120316	CA20112752619	20110916
US2012238920 AA	20120920	US20110234325	20110916

Priority:

US20100403458P 20100916 US20110234325 20110916 CA20112752619 20110916

Assignee(s): (std): HWANG MARGARET J ; MAYS KIT S ; NOVOKINETICS LLC ; SCHNAPP MOACIR ; TRIMBLE MATTHEW A

Inventor(s): (std): HWANG MARGARET J ; MAYS KIT S ; SCHNAPP MOACIR ; TRIMBLE MATTHEW A

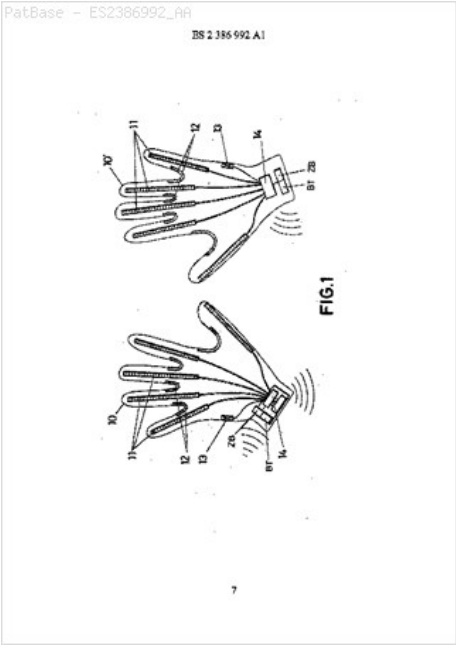
Title: SISTEMA Y PROCEDIMIENTO DE INTERPRETACION DEL LENGUAJE DE SIGNOS

Abstract: Source: ES2386992B Sistema y procedimiento de interpretacion del lenguaje de signos.#Destaca fundamentalmente por su caracter bidireccional, permitiendo la traduccion del lenguaje de signos (LS) a lenguaje oral y viceversa, siendo dicho sistema totalmente portatil para su utilizacion en cualquier lugar o situacion, comprendiendo un par de guantes (10, 10?) destinados a ser llevados por la persona con discapacidad vocal, cada uno de los cuales esta dotado de unos **sensores de flexion** (11, 12) y al menos un acelerometro (13), adaptados para recoger informacion sobre la posicion y movimientos realizados; y donde cada guante (10, 10?) dispone asimismo de un microcontrolador (14) que recibe la informacion procedente de los **sensores** (11, 12, 13) y la convierte en una senal digital para su posterior envio por?bluetooth? hasta un dispositivo movil (20), el cual esta dotado de medios de procesamiento, transcripcion y animacion 3D para la reproduccion del mensaje en lenguaje oral y viceversa, de leguaje oral a LS.

Classifications:

International (IPC 8-9): G06F3/01 G09B21/04 (Advanced/Invention)

CPC: G06F3/014 G09B21/04



Family:

Publication number	Publication date	Application number	Application date
ES2386992 AA	20120910	ES20110030193	20110214
ES2386992 BA	20130712	ES20110030193	20110214

Priority:

ES20110030193 20110214

Assignee(s): (std): ALVAREZ ALVAREZ JUAN ; LEON GIL SALVADOR ; LOPEZ BARRANCO GUILLERMO

Assignee(s): SALVADOR LEON GIL ; GUILLERMO LOPEZ BARRANCO ; JUAN ALVAREZ ALVAREZ

Inventor(s): (std): LOPEZ BARRANCO GUILLERMO ; LEON GIL SALVADOR ; ALVAREZ ALVAREZ JUAN

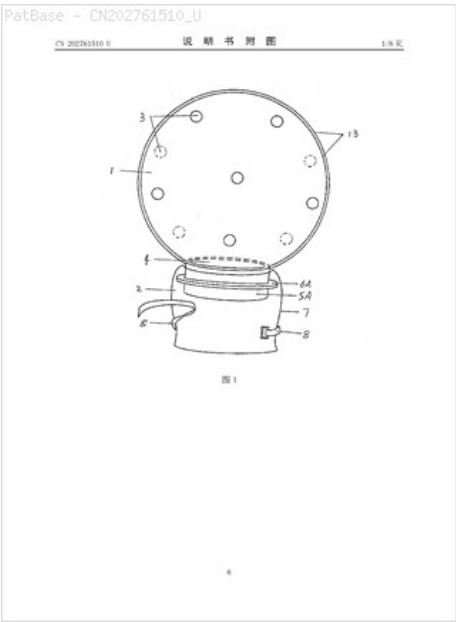
Inventor(s): GUILLERMO LOPEZ BARRANCO ; JUAN ALVAREZ ALVAREZ ; SALVADOR LEON GIL

Title: MEDICAL CONSTRAINT **GLOVES**

Abstract: Source: CN202761510U

Machine translation: The utility model relates to a method for preventing the patient's accidental disconnect the nasogastric infusion pipeline Medical constraint **gloves**, including the transparent rigid plates ellipsoid hand accommodating cavity wrist fixtures cavity with air holes. The alternative to the traditional constraints **gloves** to the sphere-sided hard board structure, even if the **gloves** axial rotation of its security will not be affected, patients unable to grip wear **gloves** outside the object, but also comfortable **flexion** and extension finger **glove** more without quadratic constraints arm fixed to the bed railing. Due to the transparent properties of the **gloves**, the patient can see clearly with the ball or mobile phone into the health patients required items in their own hands, **gloves**. The medical staff at no additional operation can directly observe the skin and body position of the hand, to keep abreast of the patient's condition. The more traditional constraints **gloves** safer from all aspects of reducing the patient in the physical and psychological **sense** of restraint, and to improve the patient's quality of life, while simplifying care steps.

Classifications:
International (IPC 8-9): A61F5/37 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN202761510 U	20130306	CN201220257764U	20120604

Priority:
CN201220257764U 20120604
Assignee(s): (std): LING MO
Inventor(s): (std): LING MO

Title: METHOD OF CORRECTING FINE MOTOR SKILLS WITH APPLICATION OF **SENSOR GLOVES**

Abstract: Source: RU2494670C FIELD: medicine.SUBSTANCE: invention relates to medicine, rehabilitation, in particular, of patients with hand paresis. Patient's hand is placed and fixed in device in form of **sensor glove**; sensitive and current-conducting elements are placed and fixed relative to device. Device is switched to computer; computer game programme is downloaded and started. **Sensor glove** is used as manipulator in such a way that patients makes active movements of **flexion**-extension of hand and fingers, providing in this way corresponding specified movements of computer game object on monitor screen and causing by this activation of sensitive elements and their registration in computer. Course of correction sessions constitutes 28-30, 1-2 times per day 5 days per week. Duration of one session is determined by severity of patient's general state and constitutes in average 30-40 minutes.EFFECT: method ensures extension of functional possibilities, effective rehabilitation in case of motor disorders due to objective computer analysis of sensomotor processes with smaller time consumption, as well as possibility of rehabilitation of motor function of hand with participation of patient with impaired nervous system in rehabilitation process.2 cl, 1 ex, 1 tbl

Classifications:

International (IPC 8-9): A61B5/00 A61B5/04 A61B5/11 G09B19/00 G09B9/00 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
RU2011150588 A	20130620	RU20110150588	20111212
RU2494670 C2	20131010	RU20110150588	20111212

Priority:

RU20110150588 20111212

Assignee(s): (std): G BJUDZHETNOE OBRAZOVATEL NOE UCHREZHDENIE VYSSHEGO PROFESSIONAL NOGO OBRAZOVANIJA KRASNOJARSKIJ G M

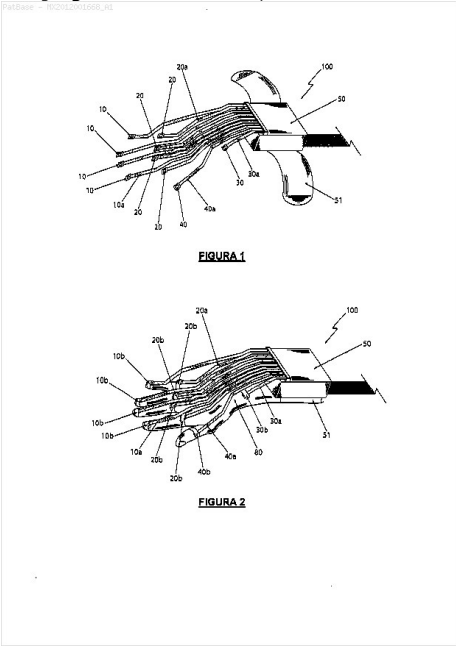
Assignee(s): GOSUDARSTVENNOE BJUDZHETNOE OBRAZOVATEL NOE UCHREZHDENIE VYSSHEGO PROFESSIONAL NOGO OBRAZOVANIJA KRASNOJARSKIJ GOSUDARSTVENNYJ MEDITSINSKIY UNIVERSITET IMENI PROFESSORA VF VOJNO JASENETSKOGO MINISTERSTVA ZDRAVOOKHRANENIJA I SOTSIAL NOGO RAZVITIJA...

Inventor(s): (std): MOZHEJKO ELENA JUR EVNA ; PROKOPENKO SEMEN VLADIMIROVICH

Title: DEVICE FOR MEASURING THE **FLEXION** AND EXTENSION ANGLES IN THE JOINTS OF THE HUMAN HAND.

Abstract: The present invention refers to a device for measuring the angles of **flexion** and extension of the human joints, which includes ten acceleration **sensors** identified according to their different arrangement positions, the following groups being defined: four distal **sensors**, four metacarpophalangeal **sensors**, a wrist **sensor** and a thumb **sensor**, which are interconnected through connection cables to a data acquisition board included inside a protector unit. The device is intended to be arranged over the hand of a user for measuring the ranges of movement of the joints of that hand; the protecting unit including the data acquisition board comprises a fastening band made of a **flexible** material that is wound around the forearm of the user, allowing said protecting unit and the device to be firmly attached to the user. In addition, each one of the ten acceleration **sensors** is firmly positioned in the distal, metacarpophalangeal, thumb and wrist levels with the help of fastening belts of the Velcro type, this allowing the accelerometers to be located in the suitable position without using a **glove** or a similar complex structure.

Classifications:
International (IPC 8-9): A61B5/103 (Advanced/Invention);
G01G7/00 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
MX2012001668 A1	20130826	MX20120001668	20120208

Priority:

MX20120001668 20120208

Assignee(s): (std): CT INVESTIG Y ESTUDIOS DEL IPN
Assignee(s): CENTRO DE INVESTIGACION Y DE ESTUDIOS AVANZADOS DEL I P N
Inventor(s): (std): GUZMAN SANDRA ARIAS ; MARTINEZ JOSEFINA GUTIERREZ ; PEREZ ELADIO CARDIEL ; RODRIGUEZ PABLO ROGELIO HERNANDEZ
Inventor(s): SANDRA ARIAS GUZMAN ; ELADIO CARDIEL PEREZ ; JOSEFINA GUTIERREZ MARTINEZ ; PABLO ROGELIO HERNANDEZ RODRIGUEZ

Classifications:

Classifications:
International (IPC 8-9): A63B22/00 A63B24/00 A63B26/00 A63B69/00 A63B69/20 A63B69/34 G01S17/10 H04N5/30 (Advanced/Invention)
CPC: A63B24/00 A63B69/34 H04N5/30 A63B5/11 A63B43/00 A63B49/00 A63B63/083 A63B67/18 A63B69/20 A63B71/02 A63B71/0619 A63B71/145 A63B2069/0044 A63B2207/02 A63B2220/20 A63B2220/40 A63B2220/54 A63B2220/56 A63B2220/64 A63B2220/806 A63B2220/808 A63B2225/105 A63B2225/20 A63B2225/50 A63B2225/54 A63B2230/00 G01S17/10 A61H2003/043 A61H2003/046 A61H2201/501 A61H2201/5012 A61H2201/5061 A61H2201/5071 A61H2201/5084 A61H2201/5092 A61H2201/5097 A63B6/00 A63B21/00061 A63B21/00185 A63B21/025 A63B21/0421 A63B21/0552 A63B21/0557 A63B21/06 A63B21/0726 A63B21/1415 A63B21/1419 A63B21/143 A63B21/1438 A63B21/1449 A63B21/1469 A63B21/1492 A63B23/16 A63B71/0697 A63B2204/0096 A63B2071/0081 A63B2071/0625 A63B2209/10 A63B2225/305 A63F13/00 G06Q10/02 G08C2021/93 H04M1/725 H04Q9/00 H04Q2209/40 H04Q2209/50 A63F13/65 G09B19/0038



Publication number	Publication date	Application number	Application date
CA2797151 AA	20140426	CA20122797151	20121026

CA20122797151 20121026

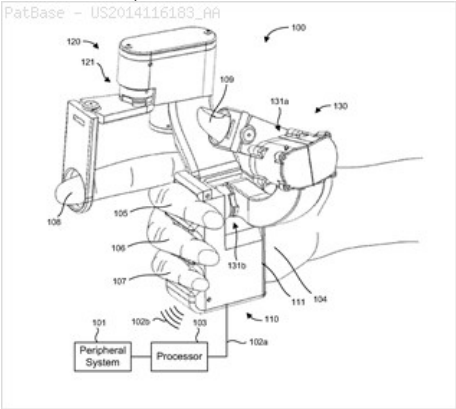
Assignee(s): (std): LAVALLEE ERIC

Inventor(s): (std): LAVALLEE ERIC

Title: HAND CONTROL DEVICE FOR CONRTROLLING A PERIPHERAL SYSTEM

Abstract: Source: US2014116183A A hand control device for controlling a peripheral system is disclosed. The hand control device can include a handle configured to be grasped by a user. The handle can comprise a body portion to be supported against a palm of the user. The hand control device can also include a finger control supported about the handle and comprising a rotatable joint to facilitate control based on **flexion**/extension of an index finger of the user. In addition, the hand control device can include a thumb control supported about the handle and comprising first and second rotatable joints to facilitate control based on **flexion**/extension and abduction/adduction of a thumb of the user.

Classifications:
International (IPC 8-9): G05G11/00 (Advanced/Invention)
CPC: G05G9/047 G05G13/00 G06F3/0338 Y10T74/20372
US: 74/490.12



Family:

Publication number	Publication date	Application number	Application date
US2014116183 AA	20140501	US20120665697	20121031

Priority:

US20120665697 20121031

Assignee(s): (std): RAYTHEON CO

Assignee(s): SARCOS LC

Inventor(s): (std): OLSEN SHANE ; SMITH FRASER M

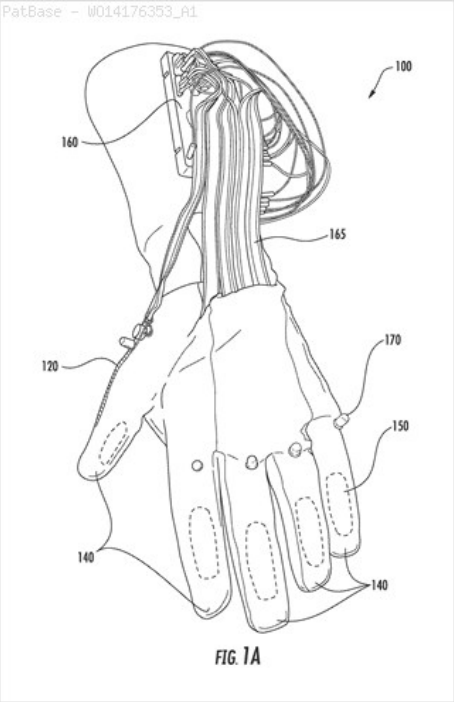
Title: REHABILITATION MONITORING DEVICE

Abstract: A wearable rehabilitation monitoring device is disclosed that can be used by patients and medical professionals to monitor progress and compliance with at-home rehabilitation programs. Also disclosed is a method for monitoring rehabilitation by a subject that involves collecting data from a rehabilitation monitoring device worn by the subject during at-home rehabilitation exercise.

Classifications:

International (IPC 8-9): A61B5/11 (Advanced/Invention)

CPC: A61B5/1071 A61B5/1121 A61B5/1125 A61B5/225 A61B5/4528 A61B5/6806



Family:

Publication number	Publication date	Application number	Application date
WO14176353 A1	20141030	WO2014US35174	20140423

Priority:

US20130815425P 20130424

Assignee(s): (std): TL TECHNOLOGIES LLC

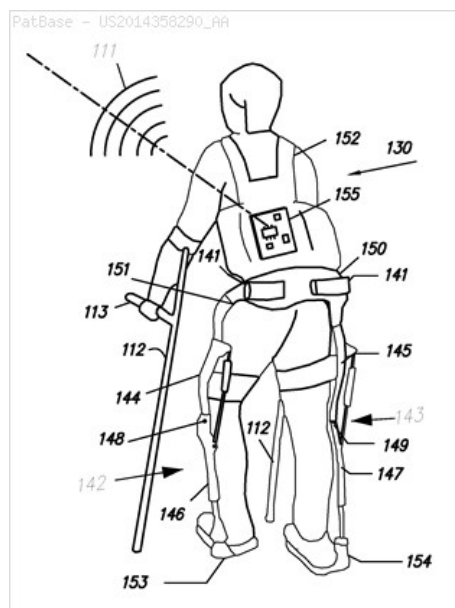
Inventor(s): (std): EDWARDS LUKE ; JOSEPH ANISH ; WESLEY TYLER

Agent(s): GILES BRIAN 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

Abstract: Source: US2014358290A An input device for commanding an exoskeleton worn by a person, adapted to be coupled to the person, the input device comprising: at least one signal generator adapted to be coupled to the user's finger capable of generating at least one electric signal when said one signal generator gets contacted and, an input device controller adapted to be coupled to the user's body capable of receiving and processing at least one signal and transmitting a command signal to the exoskeleton.

US: 700/275



Publication number	Publication date	Application number	Application date
US2014358290 AA	20141204	US20140291101	20140530
WO14194163 A2	20141204	WO2014US40155	20140530

US20130828885P 20130530 US20140291101 20140530

Assignee(s): (std): JEONG YOON JUNG : KAZEROONI HOMAYOON : KIM KYUNAM : UNIV CALIFORNIA

Assignee(s): THE UNIV OF CALIFORNIA

Inventor(s): (std): JEONG YOON JUNG : KAZEROONI HOMAYOON : KIM KYUNAM

Agent(s): STROUP JORIE

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

Title: SYSTEM, DEVICE AND METHOD FOR QUANTIFYING MOTION

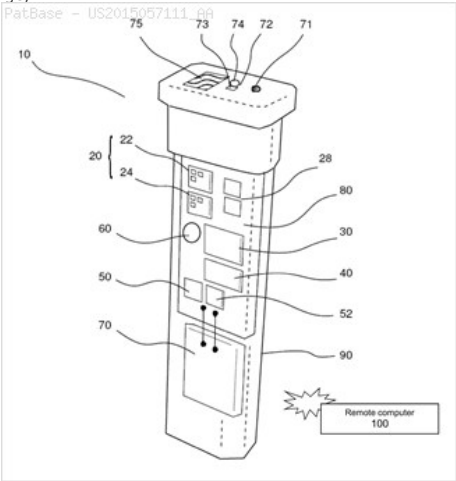
Abstract: Source: US2015057111A There is provided a device for motion identification, the device comprising: an enclosure and a plurality of **sensors** being provided with the enclosure and configured to measure acceleration in three axes and angular motion in three axes. The acceleration may be measured in a first acceleration range and a second acceleration range,

Classifications:

International (IPC 8-9): A63B24/00 A63B59/14 A63B69/00 A63B71/06 G01C19/00 G01P13/00 G01P15/18 (Advanced/Invention); G01P15/14 (Advanced/Non-invention)

CPC: A63B69/0026 A63B24/0021 A63B59/14 A63B2220/40 A63B2220/30 A63B2220/62 A63B2220/18 A63B2220/833 A63B2220/72 A63B2220/75 A63B2220/20 A63B2220/76 A63B2230/04 A63B2220/51 A63B2220/31

US: 473/446



Family:

Publication number	Publication date	Application number	Application date
CA2860129 AA	20150220	CA20142860129	20140820
US2015057111 AA	20150226	US20140463630	20140819

Priority:

US20130867703P 20130820 US20140463630 20140819

Assignee(s): (std): QUATTRIUM INC

Assignee(s): TREMBLAY MUNGER OLIVIER ; LAVOIE PHILIPPE ; QUATTRIUM INC

Inventor(s): (std): LAVOIE PHILIPPE ; TREMBLAY MUNGER OLIVIER

INFORME DE BÚSQUEDA DE PATENTES PARA EL No de Radicación:						
CRITERIOS PARA LA BÚSQUEDA (anexar pantallazo o reporte en PDF, junto con los boleanos utilizados)						
Palabras clave utilizadas		glove and (capture or sense or sensor or detect) and (flexion or flection) system or device or appara*) interpreting and sign and language) sensor or sense or detect) and sign and language)				
CLASIFICACIONES INTERNACIONALES UTILIZADAS PARA LA BÚSQUEDA		A61D19/00; G06F 17/28; G09B 21/04; G10L 13/00				
BASES DE DATOS CONSULTADAS.						
ESPACENET		COLOMBIANA		USPTO		Patbase
INFORMES DE EXÁMENES REALIZADOS EN OTRAS OFICINAS (documentos patentes, literatura no patente etc...)						
Oficina	Fecha del examen o de reporte de búsqueda de documentos	Anterioridades encontradas para el examen o reportados en el examen de búsqueda(relacionarlos todos)	Reiv. afectadas	RELEVANCIA (requisito que afecta)	FUERON TENIDOS EN CUENTA PARA EL EXAMEN EN LA OFICINA COLOMBIANA	
					SI	NO
EUROPEA	06-03-2015	US2010063794	1, 7, 9 – 13	Novedad	x	
DOCUMENTOS ADICIONALES ENCONTRADOS POR EL EXAMINADOR DE ACUERDO A LOS CRITERIOS DE BÚSQUEDA.						
Observaciones						
Fecha del reporte de búsqueda:						