

Nicolas Vargas

Search history

Search 1: TA=(REHABILITATION) (Results 38272)
Search 2: 1 and (hypothenar eminence w10 sensor) (Results 0)
Search 3: 1 and hypothenar eminence (Results 1)
Search 4: FT=((hypothenar eminence w10 sensor*) and glove and thenar) and PD<20161219 (Results 3)
Search 5: FT=((hypothenar eminence w10 sensor*) and thenar) and PD<20161219 (Results 5)
Search 6: TA=(rehabilitation) and PD<20161219 (Results 20020)
Search 7: 6 and (palm w10 sensor*) (Results 17)

1) Family number: 33550174 (US2008319349A)

© PatBase

Title: SYSTEM AND RELATED METHOD FOR DETERMINING A MEASUREMENT BETWEEN LOCATIONS ON A BODY

Abstract: A system and related method for characterizing an effect of a **rehabilitation** therapy on a body. The apparatus includes a first device, which is configured to be coupled to the body at a first location, and a second device, which is configured to be coupled to the body at a second location that is separated from the first location by a distance. The first device is configured to generate a wireless signal. The second device is configured to detect the wireless signal and to generate data based on the detected wireless signal that is configured to be used to calculate the distance. The distance is used to characterize the effect of the **rehabilitation** therapy on the body.

Classifications:

International (IPC 8-9): A61B5/00 A61B5/103

A61B5/11 (Advanced/Invention);

A61B5/00 A61B5/103 (Advanced/Non-invention);

A61B5/00 A61B5/103 A61B5/11 (Core/Invention);

A61B5/00 A61B5/103 (Core/Non-invention)

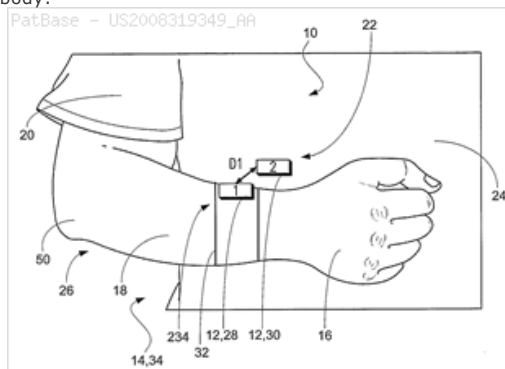
CPC: A61B5/6823 A61B5/6831 A61B5/1127 A61B5/0031 A61B5/103

A61B5/1071 A61B5/6824

European: A61B5/00B8 A61B5/00B9 A61B5/103 A61B5/11W2

K61B5/00B9 K61B5/107A K61B5/68B2H

US: 600/587 600/587P



Family:

Publication number	Publication date	Application number	Application date
AU2006236428 AA	20061026	AU20060236428	20060417
CA2605016 AA	20071015	CA20062605016	20060417
EP1871228 A1	20080102	EP20060750483	20060417
JP2008536583 T2	20080911	JP20080506814T	20060417
MX2007013000 A1	20080318	MX20070013000	20060417
US2008319349 AA	20081225	US20060911882	20060417
WO06113654 A1	20061026	WO2006US14455	20060417

Priority:

US20050672915P 20050418 US20060911882 20060417 WO2006US14455 20060417

Probable Assignee: BIONESS INC

Assignee(s): (std): BIONESS DEV LLC ; ZILBERMAN YITZHAK

Assignee(s): BIONESS DEVELOPMENT LLC ; BIONESS INC

Inventor(s): (std): ZILBERMAN YITZHAK

Inventor(s): YITZHAK ZILBERMAN

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; BORDEN LADNER GERVAIS LLP; HALEY STEPHEN; COOLEY GODWARD KRONISH LLP, ATTN: PATENT GROUP; COOLEY GODWARD KRONISH LLP ATTN PATENT GROUP

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

2) Family number: 57981217 (WO14195292A1)

© PatBase

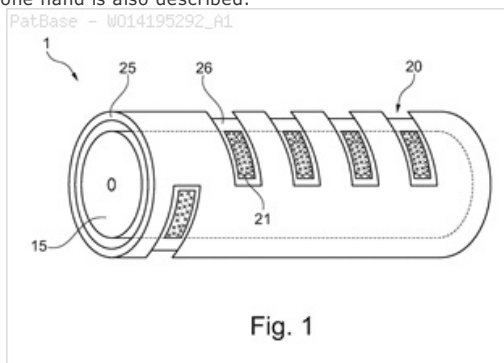
Title: SENSORY STIMULATION SYSTEM FOR PATIENTS WITH BRAIN DAMAGE

Abstract: The invention relates to a system for the release of **sensory** stimulations on the fingers and/or on the **palm** of one hand, adapted to **rehabilitation** in patients who have sustained brain damage. A kit for neurological **rehabilitation** by means of the **sensory** stimulation of the fingers and/or the **palm** of one hand is also described.

Classifications:

International (IPC 8-9): A61H15/00 A61H7/00 (Advanced/Invention)

CPC: A61H7/005 A61H15/0085 A61H2015/0014 A61H2201/0207 A61H2201/0214 A61H2201/0228 A61H2201/1635 A61H2201/1671 A61H2201/169 A61H2205/067



Family:

Publication number	Publication date	Application number	Application date
EP2810635 A1	20141210	EP20130170220	20130603
WO14195292 A1	20141211	WO2014EP61450	20140603

Priority:

EP20130170220 20130603

Probable Assignee: APOLET JOSEK BEREK

Assignee(s): (std): APOLET JOSEK BEREK

Inventor(s): (std): APOLET JOSEK BEREK

Agent(s): ZACCARO ELISABETTA; ZACCARO ELISABETTA ET AL

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

3) Family number: 62842239 (CN105739698A)

© PatBase

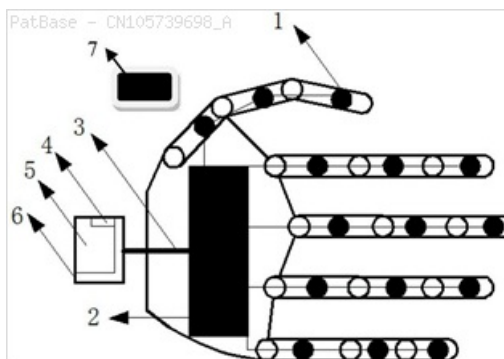
Title: TOUCH SENSING DATA GLOVE

Abstract: The invention relates to a touch sensing data glove, and belongs to the technical field of human-computer interaction equipment. The touch sensing data glove comprises 15 finger touch **sensors** and one **palm** touch **sensor**, wherein the finger touch **sensors** and the **palm** touch **sensor** are multi-array flexible touch **sensors**; and according to the touch sensing data glove, the touch information in hand operation is acquired through a microprocessor, the touch pressure change condition is displayed at a central processing unit in real time, and the functions of knowing the pressure sensing condition and the hardness or softness of the contact substances, and distinguishing the object shapes and surface textures are realized at the same time. The data glove is convenient to wear, is capable of effectively reflecting the touch information of hands and realizing the recognition function, and can be applied to a plurality of fields such as human-computer interaction, remote operation and **rehabilitation** monitoring.

Classifications:

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

CPC: G06F3/014 G06F3/016



Family:

Publication number	Publication date	Application number	Application date
CN105739698 A	20160706	CN201610064011	20160129

Priority:

CN201610064011 20160129

Probable Assignee: UNIV TSINGHUA

Assignee(s): (std): TSINGHUA UNIV ; UNIV TSINGHUA

Inventor(s): (std): LI QIANG ; SUN FUCHUN ; LIU HUAPING ; YANG HAOLIN ; FANG BIN ; ZHANG HAO

4) Family number: 53485257 (SI23866C)

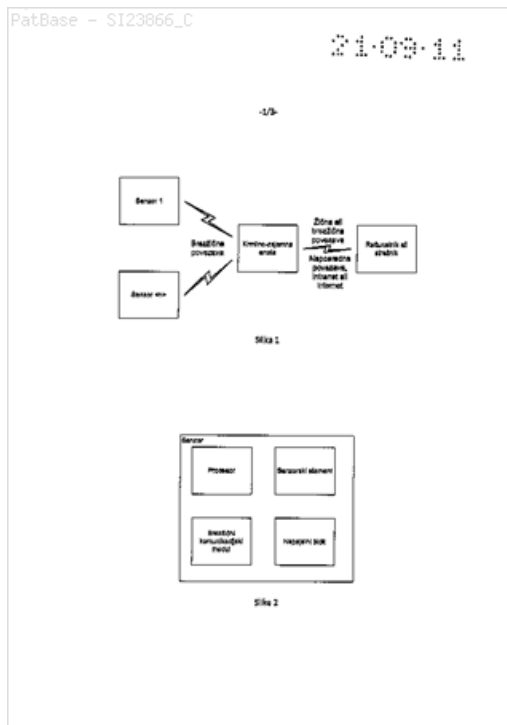
© PatBase

Title: DEVICE FOR MEASURING MOBILITY OF JOINTS

Abstract: Source: SI23866C [SL] Izum se nanaša na napravo za merjenje gibljivosti vseh cloveških sklepov in omogoca meritve kota gibov v ravnini, kot tudi rotacije. Sistem vsebuje avtonomne senzorzje z lastnim napajanjem, ki so brez gibljivih delov (elektronske komponente so ulite v umetno maso), krmilno-zajemno enoto in racunalnik (osebni ali prenosni racunalnik, streznik, tablicni racunalnik, pametni telefon, oz. katerakoli druga naprava, ki lahko obdeluje s strani krmilno-zajemne enote posredovane podatke). Senzorja(e), ki se jupitrdi nad in pod sklep merita svojo orientacijo v 3D prostoru s pomocjo senzorskega elementa za merjenje geomagnetnega polja, lahko tudi pospeške oz. pojemke v vseh treh oseh, brezicno komunicirata s krmilno-zajemno enoto, katera posreduje podatke racunalniku v realnem casu, kjer se ti obdelujejo in prikazejo. Pri tem programska oprema omogoca skoraj poljubno nadaljnjo obdelavo zajetih podatkov. Merjenje gibljivosti sklepov je zelo pomembno v fizioterapiji za spremljanje napredka pacienta teroptimizacijo rehabilitacijskega programa po poskodbah gibalnega sistema. **Machine translation:** The invention relates to a device for measuring the motility of human joints and allows the measurement of the angle of movements in a plane, as well as rotation. The system comprises an autonomous sensors with their own power cords that have no moving parts (electronic components are molded in plastic material), steering-zajemno unit and your computer (PC or laptop, server, tablet PC, smartphone, or. Any other device can be processed by the control-unit sampling data to be transmitted). Sensor (s), which jupitrdi above and below the decision measured its orientation in 3D space by means of the sensor element for measuring the geomagnetic field, it may also be acceleration respectively. decelerations in all three axes to wirelessly communicate with a control-zajemno unit which communicates data computer in real time, where they are processed and displayed. The software enables almost any further processing of the acquired data. Measurement of joint mobility is very important in physiotherapy for monitoring progress teroptimizacijo patient **rehabilitation** program after injuries of the locomotor system.

Classifications:

International (IPC 8-9): A61B5/00 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
SI23866 C	20130329	SI20110000378	20110921

Priority:

SI20110000378 20110921

Probable Assignee: MEDIFORTIS D O O

Assignee(s): (std): MEDIFORTIS D O O

Assignee(s): MEDIFORTIS DOO

Inventor(s): (std): OMEJEC GREGOR ; GRADISEK MATEVZ ; ZILIC IVAN

5) Family number: 24122424 (TW476643B)

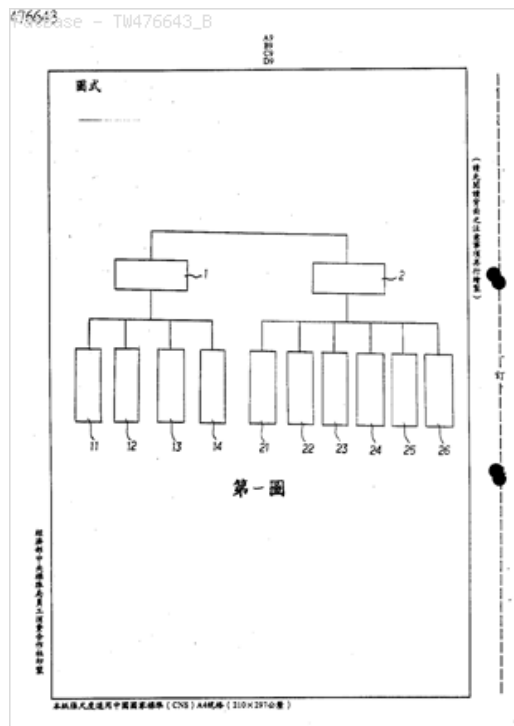
© PatBase

Title: Exercise control glove for diagnostic evaluation and **rehabilitation** of palm and system device thereofcomprise a hardware part...

Abstract: The present invention relates to a exercise control glove for diagnostic evaluation, and **rehabilitation** of palm and a system device thereof, which mainly comprise a hardware part and a software part. The hardware part comprises: a 5DT sensing glove, a pressure sensing unit, an EMG measuring unit, and a palm tremble measuring unit. The 5DT sensing glove measures the joint movement of the palm. A RS-232 interface transmits the signal of the bending angle of the fingers to a computer. The pressure sensing unit comprises 12 to 24 membrane pressure-resistance type pressure sensors attached at the suitable positions on the fingers and the **palm**. The **sensors** measure the contact pressure between the finger tips or the **palm** while holding an object by measuring the resistance caused by a changing pressure. The pressure signals go through an amplification circuit and an analog/digital converter to be input into a computer. The EMG measuring unit has 12 muscle electric potential sampling and input channels. The muscle electric potential is received by an electrode plate and processed by a signal processing amplification circuit device, and input into the computer by an analog/digital converter. The palm tremble measuring unit measures the real time variation of spatial coordinates in the palm of a person receiving the test by using an ultrasonic 3D tracking unit to measure the ultrasonic transmission between the transmitter and the receiver, and uses a spectrum analysis to evaluate the degree of trembling of the palm. The software part comprises: a patient data input, data processing program module; a physiological signal data retrieval program module, a real time display and dynamic simulation program module, a gesture recognition module, a palm exercise control evaluation training program module, and a palm functional gesture evaluation training program module. The degree of joint movement and the pressure signals at the fingers and palm measured by the system go through the interface card and the analog/digital converter to be input into the computer. The information is processed, displayed and analyzed by the software program module, and is processed by a program design into a 3D pseudo-palm model. The interactive pictures generated by the movement of the joint of the palm can be used for diagnostic evaluation and **rehabilitation** training by a clinician.

Classifications:

International (IPC 8-9): A61F2/68 (Advanced/Invention);
A61F2/50 (Core/Invention)
International (IPC 1-7): A61F2/68



Family:

Publication number	Publication date	Application number	Application date
TW476643 B	20020221	TW19990103652	19990310

Priority:

TW19990103652 19990310

Probable Assignee: LEE MING YIH
Assignee(s): (std): LEE MING YIH
Inventor(s): (std): JEN JE REN ; LEE MING YIH

6) Family number: 34026533 (US2006287617A)

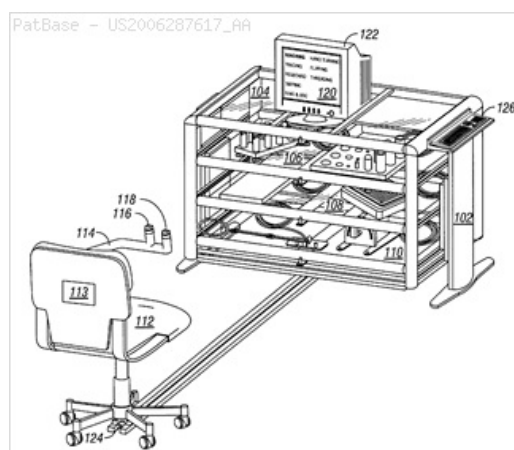
© PatBase

Title: AUTOCITE WORKSTATION AND SYSTEMS AND METHODS THEREFOR

Abstract: Automated constraint-induced therapy extension (AutoCITE) workstation and systems and methods therefor. Use of the AutoCITE workstation (and associated systems and methods) allows constraint-induced movement therapy (CI therapy) to be extended to certain patients who have suffered a stroke, traumatic brain injury, brain resection, Multiple Sclerosis or spinal cord injury and for whom continuous one-on-one supervision by a therapist is not practicable or financially feasible. Use of the AutoCITE workstation (and associated systems and methods) further allows a tele-[rehabilitation](#) approach that is based directly on CI therapy to be implemented.

Classifications:

International (IPC 8-9): A61H1/02 (Advanced/Invention);
A61H1/02 (Core/Invention)
CPC: A61H1/02 A61H1/0274 A63B23/12 A63B23/16
European: A61H1/02 A61H1/02M A63B23/12 A63B23/16
US: 601/24 601/24P



Family:

Publication number	Publication date	Application number	Application date
US2006287617 AA	20061221	US20060425105	20060619

Priority:

US20050692331P 20050620 US20060425105 20060619

Probable Assignee: DEPARTMENT OF VETERANS AFFAIRS OFFICE OF GENERAL COUNSEL PSG IV 024

Assignee(s): (std): US DEPT VETERANS AFFAIRS

Assignee(s): DEPARTMENT OF VETERANS AFFAIRS ; DEPARTMENT OF VETERANS AFFAIRS OFFICE OF GENERAL C ;
DEPARTMENT OF VETERANS AFFAIRS OFFICE OF GENERAL COUNSEL PSG IV (024) ; DEPARTMENT OF
VETERANS AFFAIRS OFFICE OF GENERAL COUNSEL PSG IV 024

Agent(s): JENKENS AND GILCHRIST

Title: METHOD AND APPARATUS FOR **REHABILITATION** OF NEUROMOTOR DISORDERS

Abstract: 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:

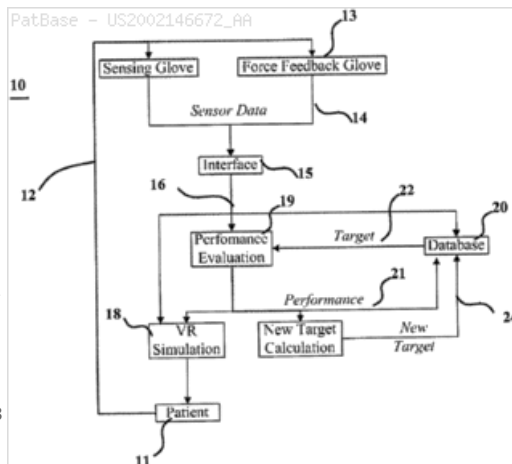
International (IPC 8-9): A63B23/16 B01J19/00 C12Q1/68
G01N33/50 G01N33/543 G01N33/68 (Advanced/Invention);
A63B21/00 A63B24/00 C07B61/00 (Advanced/Non-invention);
A63B23/035 (Core/Invention);
A63B21/00 A63B24/00 (Core/Non-invention)

International (IPC 1-7): C07H21/00 C07H21/04 C07K16/00
C12Q1/68 C12Q1/70 G01N33/53 G09B19/00

CPC: G01N33/682 B01119/0046 B01J2219/00387 B01J2219/00497
B01J2219/0052 B01J2219/00527 B01J2219/00576 B01J2219/00659
B01J2219/00673 B01J2219/00675 B01J2219/00677 B01J2219/00722
B01J2219/00725 B01J2219/00743 B28Y30/00 C07B2200/11
C12Q1/6837 C40B40/00 G01N33/5005 G01N33/54306
G01N33/54366 G01N33/6854 A63B23/16 A63B71/0622 A63B2208/12
A63B2202/13

European: A63B33/16 B01J19/00C B82Y30/00 C12Q1/68B10A
G01N33/50D G01N33/543B G01N33/543K G01N33/68A8
G01N33/68B K63B208/12 K63B220/13 K63B71/06D2
L01J219/00C L01B16B L01J219/00C10B2 L01J219/00C10B4
L01J219/00C2D10 L01J219/00C2L L01J219/00C2L7F L01J219/00C2L8
L01J219/00C2N14D L01J219/00C4L12 L01J219/00C4L16
L01J219/00C4L20 L01J219/00C4L24 M07B200/11 M40B40/00

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
WQ2002US19346 20020618

Probable Assignee: UNIV RUTGERS

Assignee(s): (std): UNIV RUTGERS ; WANG YINGJIAN

Assignee(s): BOIAN RARES : BURDEA GRIGORE C : RUTGERS THE STATE UNIVERSITY OF NJ

Inventor(s): (std): WANG YINGJIAN ; BURDEA GRIGORE C ; BOIAN RARES

Inventor(s): GRIGORE C BURDEA : RARES BOIAN

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 LV MA MC MD MG MK ML MN MR MW MX MY NZ NO NM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG VN YU ZA ZM ZW

Title: DATA GLOVES FOR FUNCTION REHABILITATION TRAINING AND ASSESSMENT OF HANDS AND MONITORING METHOD THEREOF

Abstract: The invention discloses data gloves for function **rehabilitation** training and assessment of hands. Each data glove further comprises bent sensor groups which are arranged on the hand back side inside the each data glove in a packaged mode and flexible pressure **sensor** groups which are arranged on the **palm** side inside each data glove. The bent **sensor** groups are placed on finger joints, the pressure sensor groups are placed on the a plurality of key nodes where a hand is in contact with an object when the object is grabbed, and lead-out lines of the bent sensor groups and lead-out lines of the pressure sensor groups are packaged inside each data glove, collected to the outer side of a forearm via the hand back side, and connected with a subsequent hardware processing circuit. The data gloves for the function **rehabilitation** training and the assessment of the hands are strong in wearability and capable of collecting finger bending angle information and palm pressure information of the hands of a patient, the finger bending angle information and the palm pressure information are used in the hand function **rehabilitation** training under a virtual environment, and quantitative assessment results of a muscle force range from no joint movement to movement capable of resisting normal resistance can be given.

Classifications:

International (IPC 8-9): A61B5/11 A61B5/22 (Advanced/Invention)

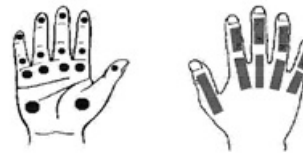


图 1

图 2

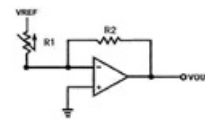


图 3

11

Family:

Publication number	Publication date	Application number	Application date
CN103251419 A	20130821	CN201310149065	20130425
CN203564250 U	20140430	CN201320214790U	20130425

Priority:

CN201310149065 20130425 CN201320214790U 20130425

Probable Assignee: SUZHOU SUBITE MEDICAL TECHNOLOGY CO LTD**Assignee(s):** (std): SUZHOU SUBITE MEDICAL TECHNOLOGY CO LTD ; UNIV XI AN JIAOTONG ; UNIV XI AN JIAOTONG SUZHOU ACADEMY ; XI AN JIAOTONG UNIV ; XI AN JIAOTONG UNIV SUZHOU ACADEMY ; SUZHOU SUBITE MEDICAL SCIENCE AND TECHNOLOGY CO LTD**Assignee(s):** SUZHOU SUBITE MEDICAL TECHNOLOGY CO ; SUZHOU SUBITE MEDICAL SCIENCE AND TECHNOLOGY CO**Inventor(s):** (std): WANG GANG ; QIN YONGHUI ; GUO XIAOFENG ; WANG JUE ; ZHENG YANG ; ZHANG MINGMING**9) Family number: 15453669 (US6273863B)**

© PatBase

Title: ADAPTIVE WEIGHT BEARING MONITORING SYSTEM FOR **REHABILITATION** OF INJURIES TO THE LOWER EXTREMITIES

Abstract: A portable, self-learning adaptive weight bearing monitoring system for personal use during **rehabilitation** of orthopedic patients with fractures of the lower extremities. The system includes a flexible insole which is worn inside the shoe. The insole includes pressure and/or force sensor that measure the GRF force applied at key bearing points under the foot or other portions of the patient's lower extremity. The sensors are, in turn, connected through an A/D converter to a CPU that is connected so as to drive a stimulator that delivers closed-loop sensory stimulation (electrical, mechanical, and/or audio) as feedback to encourage the patient to load the optimal target weight for the limb for which the weight bearing force is being measured. Accurate real-time monitoring of the weight bearing during physical **rehabilitation** is also provided, and, through the use of closed-loop sensory stimulation, the patient is given continuous feedback for improving **rehabilitation**.

Classifications:**International (IPC 8-9):** A61B5/00 A61B5/103

A61H3/00 (Advanced/Invention);

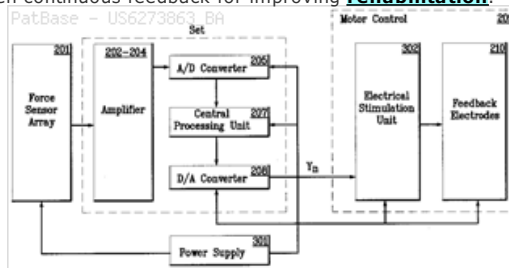
A61B5/103 (Advanced/Non-invention);

A61B5/00 A61B5/103 A61H3/00 (Core/Invention);

A61B5/103 (Core/Non-invention)

International (IPC 1-7): A61B5/103 A61B5/117 A63B**CPC:** A61B5/1036 A61B5/4528 A61B5/486 A61H3/00 A43B3/0005 A61B5/4504**European:** A43B3/00E A61B5/103P A61B5/48S A61H3/00

K61B5/103P K61B5/45B K61B5/45K

US: 600/587**Family:**

Publication number	Publication date	Application number	Application date
AU200111693 A1	20010530	AU20010011693	20001027
AU200111693 A5	20010530	AU20010011693D	20001027
US6273863 BA	20010814	US19990439007	19991112
WO0136051 A2	20010525	WO2000IB01670	20001027
WO0136051 A3	20020131	WO2000IB01670	20001027

Priority:

US19990161433P 19991026 US19990439007 19991112 WO2000IB01670 20001027

Probable Assignee: ANDANTE MEDICAL DEVICES LTD**Assignee(s):** (std): ANDANTE MEDICAL DEVICES LTD ; AVNI ARIK

Inventor(s): (std): SOSMAN INNA ; AVNI ARIK
Inventor(s): INNA SOSMAN ; ARIK AVNI
Agent(s): WOODCOCK WASHBURN KURTZ MACKIEWICZ AND NORRIS LLP
Designated states: AT AU BE CA CH CN CY DE DK ES FI FR GB GR IE IL IT JP LU MC NL PT SE US ZA

10) Family number: 59914720 (CN204655913U)

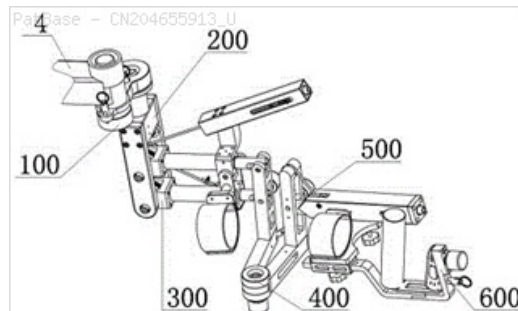
© PatBase

Title: UPPER LIMBS **REHABILITATION** TRAINING DEVICE

Abstract: The utility model discloses an upper limbs **rehabilitation** training device belongs to recovered medical instrument field. This training ware includes the base, directly or indirectly rotates on the base and connects the crossbeam, and the horizontal hunting is put up and is rotated the other end of connecting at the crossbeam, and the horizontal hunting frame is gone up to rotate through the pivot of horizontal direction and is connected with big arm luffing motion frame, and the forearm luffing motion was put up vertical direction pivot no. 5 and is rotated at big arm luffing motion frame front end, install fore -and -aft direction adjustable forearm on the flexible pulling force device no. 2 of forearm luffing motion shelf location, elasticity pulling force device no. 2 and hold in the palm, the forearm be provided with the hand support before holding in the palm, hand support front end rotates through the pivot seven of level setting and is connected with the palm rotating turret, is fixed with the force transducer that holds of vertical direction setting on the palm rotating turret. This training ware need not the external world and provides power, but band stop power can be furnished with the multi -media from the main motion, improves patient's recovered interest.

Classifications:

International (IPC 8-9): A63B23/12 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN104784889 A	20150722	CN201510213122	20150430
CN104784889 B	20170616	CN201510213122	20150430
CN204655913 U	20150923	CN201520270612U	20150430

Priority:

CN201510213122 20150430 CN201520270612U 20150430

Probable Assignee: ANYANG XIANGYU MEDICAL EQUIPMENT CO LTD

Assignee(s): (std): ANYANG XIANGYU MEDICAL EQUIPMENT CO LTD

Assignee(s): ANYANG XIANGYU MEDICAL EQUIPMENT CO

Inventor(s): (std): LI ZHIQIANG

11) Family number: 47098803 (US2010262047A)

© PatBase

Title: PHYSICAL THERAPY SYSTEMS AND METHODS

Abstract: The invention is directed to a physical therapy system including a glove with a set of acoustic sensors and a positive feedback system and method for teaching finger extension. The system may also include a pair of gloves with a set of acoustic sensors and a positive feedback system to teach clapping. In another aspect, the system may include a glove with an acoustic sensor, an object with a corresponding sensor and a positive feedback system for teaching arm extension. The invention may be particularly useful for providing a **rehabilitation** method for individuals affected with hemiplegic cerebral palsy.

Classifications:

International (IPC 8-9): A41D19/00 A61B5/00

A61H1/00 (Advanced/Invention)

CPC: A61B5/1124 A61B5/1125 A61B5/1126 A61B5/411 A61B5/4528

A61B5/6806 A61B2562/0204 A61H1/0288 A61H2201/165

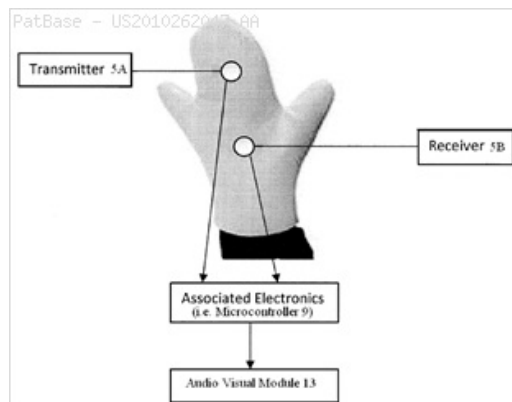
A61H2201/5043 A61H2201/5064

European: A61B5/11U A61B5/11U2 A61B5/11W A61B5/41B

A61B5/68B1D2 K61B5/45K K61B562/02A K61H1/02M5F

K61H201/16A20 K61H201/50F10 K61H201/50S4

US: 2/159 2/159S 600/309 600/309S 601/5 601/5P



Family:

Publication number	Publication date	Application number	Application date
US2010262047 AA	20101014	US20100725239	20100316

Priority:

US20090167679P 20090408 US20100725239 20100316

Probable Assignee: DREXEL UNIV
Assignee(s): (std): UNIV DREXEL
Assignee(s): DREXEL UNIV ; DREXEL UNIVERSITY
Inventor(s): (std): GENIS VLADIMIR
Agent(s): KNOBLE YOSHIDA AND DUNLEAVY

12) Family number: 47456846 (CN101869526A)

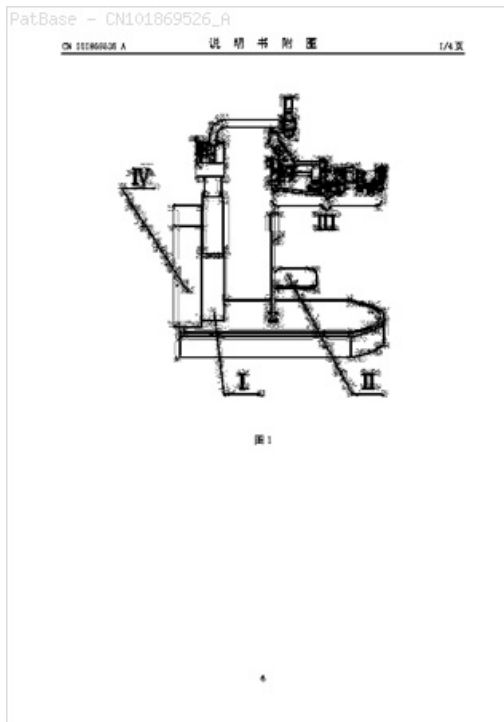
© PatBase

Title: Upper limb **rehabilitation** training robot

Abstract: The invention discloses an upper limb **rehabilitation** training robot. The upper limb **rehabilitation** training robot comprises a pedestal, an ergonomic seat, a **rehabilitation** mechanical arm and a man-machine interaction control cabinet, wherein the pedestal is provided with a height adjusting mechanism and a transversing mechanism; the transversing mechanism is provided with a suspending arm; the **rehabilitation** mechanical arm comprises a shoulder abduction/adduction joint, a shoulder bending/stretching joint, an upper arm, an elbow joint, a front arm inward turning/outward turning joint, a front arm, a wrist bending/stretching joint, a palm and fingers, wherein the shoulder abduction/adduction joint is arranged on the suspending arm; the shoulder bending/stretching joint is connected with the shoulder abduction/adduction joint; the front arm is connected with the upper arm by the elbow joint and provided with the front arm inward turning/outward turning joint; the palm is connected with the front arm by the wrist bending/stretching joint and connected with the fingers by a connecting rod; the upper arm, the front arm and the **palm** are fixedly connected with three force **sensors**; and the **sensor** fixedly connected to the upper arm is a two-dimensional sensor. The robot provides composite **rehabilitation** motion for each joint of the upper limb of a patient in a three-dimensional space and can finish the **rehabilitation** training of the upper limb with high quality.

Classifications:

International (IPC 8-9): A61H1/00 A61H1/02 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN101869526 A	20101027	CN201010222010	20100709
CN201743884 U	20110216	CN201020252886U	20100901

Priority:

CN201010193189 20100607 CN201010222010 20100709 CN201020252886U 20100901

Probable Assignee: ANYANG SHENFANG REHABILITATION ROBOT CO LTD

Assignee(s): (std): ANYANG SHENFANG REHABILITATION ROBOT CO LTD ; FENGSHENG FU

Assignee(s): FU FENGSHENG ; ANYANG SHENFANG REHABILITATION ROBOT CO

Inventor(s): (std): GUIJUN WU ; ZHI LAN ; JIANMIN LIU ; FENGSHENG FU

Inventor(s): LAN ZHI ; FU FENGSHENG ; WU GUIJUN ; LIU JIANMIN

13) Family number: 23931850 (US2003054923A)

© PatBase

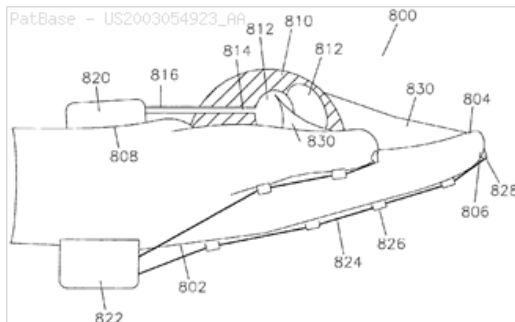
Title: HAND **REHABILITATION** GLOVE

Abstract: A hand therapy system having a glove including a compressible substance coupled to a palm portion providing resistance to the closing motion of the hand and one or more elastic members spanning from the compressible substance to respective ones of one or more finger portions, the one or more elastic members provide resistance to the opening of the hand. Also included are a means for providing a signal proportional to the movement of the digits of the hand while opening and closing and a means for providing a signal proportional to the pressure applied by one or more of the digits of the hand on the compressible substance. A controller is coupled to the means for providing a signal proportional to the movement and the means for providing a signal proportional to the pressure and also a computer coupled to the controller via a computer link.

Classifications:

International (IPC 8-9): A63B23/14 A63B23/16 (Advanced/Invention);

A63B21/008 A63B21/02 A63B21/055 A63B24/00 (Advanced/Non-invention);
A63B23/03 A63B23/035 (Core/Invention)
International (IPC 1-7): A63B2/316 A63B23/16
CPC: A63B21/0004 A63B21/00061 A63B21/028 A63B21/0552 A63B21/1438 A63B21/4025 A63B2225/20 G06F19/3418 G06F19/3456 G06F19/3481 A63B23/16 A63B21/008 A63B21/02 A63B2220/54
European: A63B21/00D A63B21/055D A63B21/14A8H A63B21/14D2 A63B23/16 G06F19/34L G06F19/34N K63B21/008 K63B21/02 K63B21/12 K63B220/54 K63B225/20 S06F19/34C
US: 482/44 482/44P 482/47 482/49 482/49P 482/49S



Family:

Publication number	Publication date	Application number	Application date
CA2282072 AA	20010310	CA19992282072	19990910
US2003054923 AA	20030320	US20020212485	20020805
US2007087901 AA	20070419	US20060639998	20061216
US6454681 BA	20020924	US19990475793	19991230

Priority:

US19980070380P 19980105 US19980197035 19981121 CA19992282072 19990910
US19990475793 19991230 US20020212485 20020805 US20060639998 20061216

Probable Assignee: THOMAS BRASSIL

Assignee(s): (std): BRASSIL JOHN M ; BRASSIL THOMAS ; BRASSIL THOMAS W

Assignee(s): THOMAS BRASSIL

Inventor(s): (std): BRASSIL THOMAS ; BRASSIL JOHN M ; BRASSIL THOMAS W

Inventor(s): BRASSIL THOMAS WILLIAM ; BRASSIL JOHN MICHAEL ; BRASSIL JOHN ; THOMAS BRASSIL ; JOHN M BRASSIL

Agent(s): MACRAE AND CO; THOMAS BRASSIL; FITCH EVEN TABIN AND FLANNERY

14) Family number: 33476896 (US2008167580A)

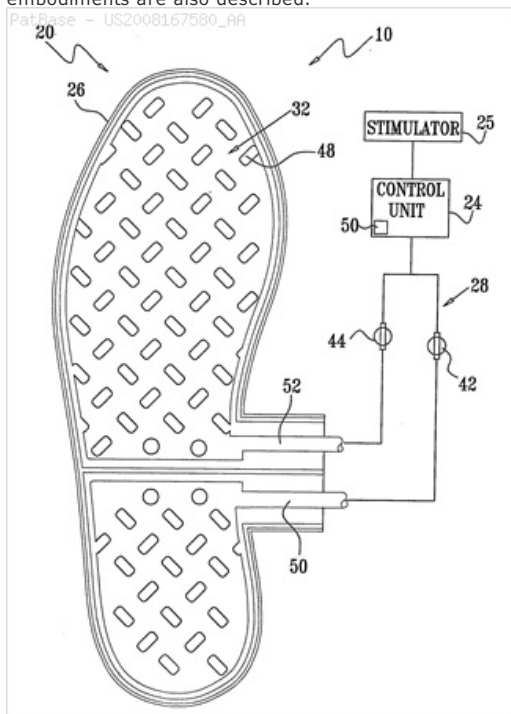
© PatBase

Title: **REHABILITATION** SYSTEM

Abstract: Apparatus (10) is provided for use with a shoe worn by a subject, the apparatus (10) including an insole system (20), adapted to be inserted into the shoe, the insole system (20) including a flexible insole (26) and at least one force sensor (28), adapted to generate a force measurement; and a control unit (24), adapted to receive the force measurement, and convert the force measurement to a weight measurement. Other embodiments are also described.

Classifications:

International (IPC 8-9): A43B13/38 A61B5/103 A61B5/117
A61H1/00 (Advanced/Invention);
A43B13/38 A61B5/103 (Core/Invention)
CPC: A43B3/0005 A43B7/00 A43B7/1455 A43D1/00 A61B5/1038 A61B5/6807 A61H3/00 A61H2230/62
European: A43B3/00E A43B7/00 A43B7/14A30 A43D1/00 A61B5/103P2 A61B5/68B1D3 A61H3/00 K61H230/62
US: 36/43 36/43S 600/587 600/587P



Family:

Publication number	Publication date	Application number	Application date
US2008167580 AA	20080710	US20060910699	20060405
WO06106516 A2	20061012	WO2006IL00432	20060405
WO06106516 A3	20090507	WO2006IL00432	20060405

Priority:

US20050668738P 20050405 US20060910699 20060405 WO2006IL00432 20060405

Probable Assignee: ANDANTE MEDICAL DEVICES LTD

Assignee(s): (std): ANDANTE MEDICAL DEVICES LTD ; AVNI ARIK ; BAR NES LIOR ; FRIEDMAN RONIT ; SALAH DROR

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

15) Family number: 60548933 (US2017113015A)

© PatBase

Title: DEVICE FOR **REHABILITATION**, **REHABILITATION** SYSTEM PROVIDED THEREWITH, PROGRAM FOR **REHABILITATION** AND **REHABILITATION** METHOD

Abstract: The device for **rehabilitation** includes: a biological signal acquisition unit 71 that acquires biological signals from a patient imparted with illusory stimulation for inducing a kinesthetic illusion; a characteristic biological signal detection unit 72 that analyzes the biological signals and detects a characteristic biological signal indicating a state where the kinesthetic illusion is induced; and a control signal output unit 73 that outputs control signals for controlling body driving means 4 and/or brain simulating means 5, when the characteristic biological signal is detected.

Classifications:

International (IPC 8-9): A61B5/00 A61B5/026 A61B5/0482 A61B5/0488 A61B5/11 A61H1/02 A61M21/00 A61N1/08 A61N1/36 A61N2/00 (Advanced/Invention)

CPC: A61M21/00 A61B5/0261 A61B2505/09 A61B2562/0219 A61M2021/0022 A61M2021/005 A61M2205/3303 A61B5/0075 A61B5/4836 A61N1/36025 A61N2/006 A61N2/02 A61N1/0456 A61B5/0482 A61B5/0488 A61B5/1121 A61B5/1128 A61B5/486

US: 1/1 600/27

PatBase - US2017113015_AA



Family:

Publication number	Publication date	Application number	Application date
EP3127526 A1	20170208	EP20150774409	20150330
EP3127526 A4	20171220	EP20150774409	20150330
JP2015152122 A1	20170413	JP20160511867T	20150330
JP6557652 B1	20190807	JP20160511867T	20150330
US2017113015 AA	20170427	US20150301796	20150330
US10549066 BB	20200204	US20150301796	20150330
WO15152122 A1	20151008	WO2015JP59851	20150330

Priority:

JP20140077972 20140404 WO2015JP59851 20150330

Probable Assignee: KEIO UNIV

Assignee(s): (std): KEIO GIJUKU ; SAPPORO MEDICAL UNIV ; UNIV SAPPORO MEDICAL ; UNIV KEIO

Assignee(s): KEIO UNIV ; HOKKAIDO PUBLIC UNIV SAPPORO MEDICAL UNIV CORP

Inventor(s): (std): KANEKO FUMINARI

Agent(s): VOSSIUS AND PARTNER PATENTANWALTE RECHTSANWALTE MBB; MUNCY GEISSLER OLDS AND LOWE PC; SAGAWA SHINGO ET AL

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

16) Family number: 61657988 (TWM517000Y)

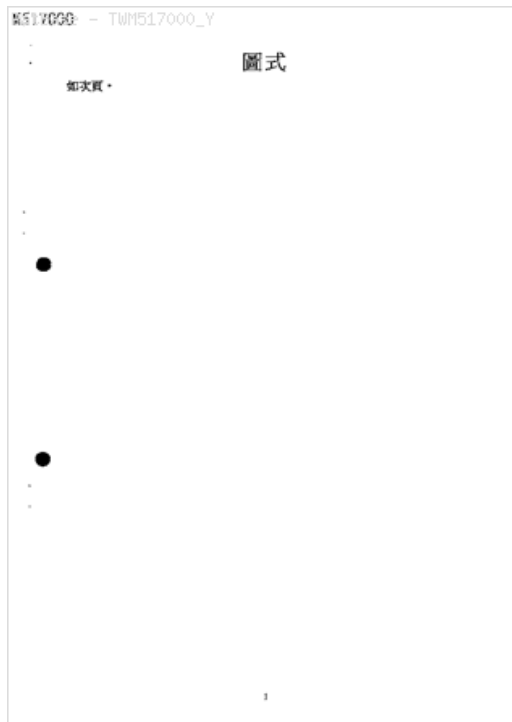
© PatBase

Title: HAND **REHABILITATION** BALL

Abstract: Source: TWM517000Y **Machine translation:** A hand **rehabilitation** ball, comprising a spherical system, at least one pressure sensor, a controller and a processor core, which comprises a spherical ball and the core of the ball on one of the external cladding of nuclear elastic layer, the elastic layer is made of an elastic material so that it is available to users of the palm and fingers to hold and compression, and restore the status quo at the **palm** and fingers open, the pressure **sensor** is provided in the circumferential surface of the core for the ball detecting whether the elastic layer is depressed and the pressure strength of the palm and fingers of the user, the processor core being provided in the nuclear sphere and connected electrically to the pressure sensor, for receiving from the pressure sensing results detect and calculate the number of users of the elastic layer by pressing the palm and fingers, time, pressure strength and frequency of the filter and generate the corresponding number of fast, and the signal transmission out, the controller can be wired or department the wireless way to connect with the core processor, and **rehabilitation** can be set to display the playback mode and the elastic layer of the pressure generated data and voice **rehabilitation**; with the above structure system can produce good effect in order to facilitate user interaction in order to achieve the independent exercise effective prevention and **rehabilitation** of hand muscle atrophy results.

Classifications:

International (IPC 8-9): A63B23/16 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
TWM517000 Y	20160211	TW20150213443U	20150820

Priority:

TW20150213443U 20150820

Probable Assignee: ORIENTAL INST TECHNOLOGY

Assignee(s): (std): ORIENTAL INST TECHNOLOGY

Assignee(s): ORIENTAL INST OF TECHNOLOGY

Inventor(s): (std): LIN JHIH YI ; CHEN LI LIN ; CHU YIU TONG ; HSIEH TONG LIN ; CHENG LING

17) Family number: 46403999 (US2012157263A)

© PatBase

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

Abstract: 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 A61H1/02 A63B24/00

G06F3/01 (Advanced/Invention);

A61B5/00 A63B24/00 G06F19/00 (Advanced/Non-invention);

A61H1/00 (Core/Invention)

CPC: A61B5/0022 A61B5/1114 A61B5/6806 A61B5/7475

A61B2505/09 A63B2225/20 A63F2300/1012 A63F2300/105

G06F3/014 A63B23/08 A63B23/16 A63B2022/0094 A63B2024/0096

A63B2071/0638 A63B2071/0655 A63B2220/10 A63B2220/16

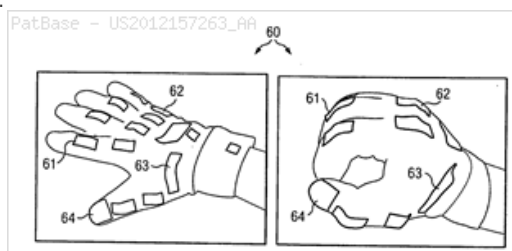
A63B2220/40 A63B2220/51 A63B2220/805 A63B2220/89

A63B2225/50 A63B2225/54 G06F3/011 G09B19/003 G06F19/3481

A63F13/212 G16H40/63

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
EP2389152 A4	20160511	EP20100733800	20100120
US2012157263 AA	20120621	US20100145436	20100120
WO10085476 A1	20100729	WO2010US21483	20100120

Priority:

US20090145825P 20090120

US20090266543P 20091204

WO2010US21483 20100120

US20100145436 20100120

Probable Assignee: NORTHEASTERN UNIV

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

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