

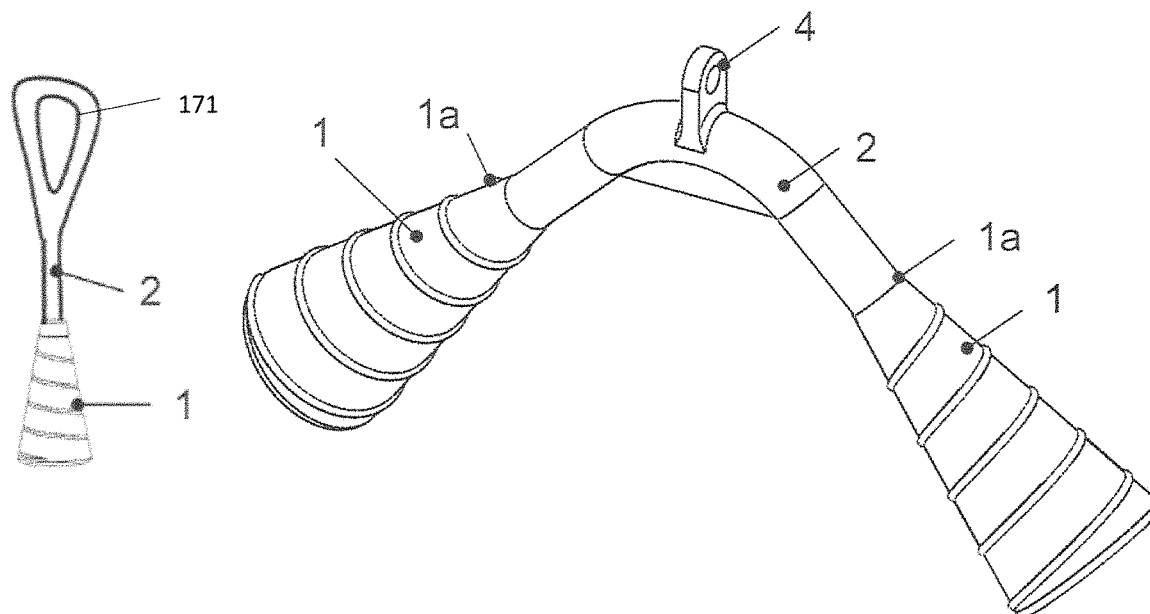
15 Documents

Publication numbers	Title	Current assignees
WO2014158873 A1	Load distributing grip handle	DYNEPIC SPORTS
US20180036579 A1	Exercise device for suspended body weight training	STRIPE FITNESS
EP1212122 A1	Cable crossover exercise apparatus	ICON HEALTH & FITNESS
EP3618934 A1	Strap-based exercise system	AUSTER ENTERPRISES
JP3191375U U	Exercise device	NAKA SHIRO
CN208426588U U	Student uses leg pressing trainer	CHEN HAONAN
CN205924858U U	Multifunctional key property utensil	SHANDONG NORMAL UNIVERSITY
EP1227863 A1	Multi-bay bungee-cord acrobatic suspension and trampoline structure	LEISURE INVENTIONS
TWM356519 U	Composite-type exercise fitness equipment	WU, JIA-LING
CN202777578U U	Resistance adjusting device of exercise bicycle	YU WEIAN
CN105920799 A	Multifunctional fitness furniture	SHANDONG NORMAL UNIVERSITY
CN204106483U U	Combined type motion machine for rehabilitation	SPORTSART FITNESS INDUSTRIAL
EP2575980 A1	Exercise device for use with a prosthesis	CARTER MEDICAL DEVICES
CN2922950U Y	Body building device	XINLONG INDUSTRY
CN209348001U U	Suspension training device	WANG CHUNQIANG

Family 1/15 - FAMPAT - ©Questel

Title

(WO2014158873)

Load distributing **grip** handle**Images****Publication numbers with kind code & date**

US10286251	B2	2019-05-14	US10286251
US20180099175	A9	2018-04-12	US20180099175
US20170296860	A1	2017-10-19	US20170296860
US9370685	B2	2016-06-21	US9370685
US20140329650	A1	2014-11-06	US20140329650
WO2014/158873	A1	2014-10-02	WO2014158873

**Abstract**

(WO2014/158873)

Grip handles for coupling to a resistance force provided by **exercise** equipment, resistance bands, or the user's own bodyweight. Each **grip** handle is defined by an increasing outer surface circumference along the length of the handle to form a generally conical shaped handhold attached to a rigid or flexible member. Where, the member is coupled at the apex of the **grip** handle. The spherical cone shaped handle provides a comfortable and ergonomic surface to securely distribute the user's **grip** force during the **exercise** movements, thus significantly reducing the pressure points and **grip** requirements of current **exercise** handles. Where in one embodiment, the flexible member may be a resistance band or in another embodiment, it may be a rope or other type of flexible cable attached to a cable pull machine, **suspension trainer** anchor, or other type of **exercise** machine.

Inventors

WATRY KRISSA

Latest standardized assignees - inventors removed

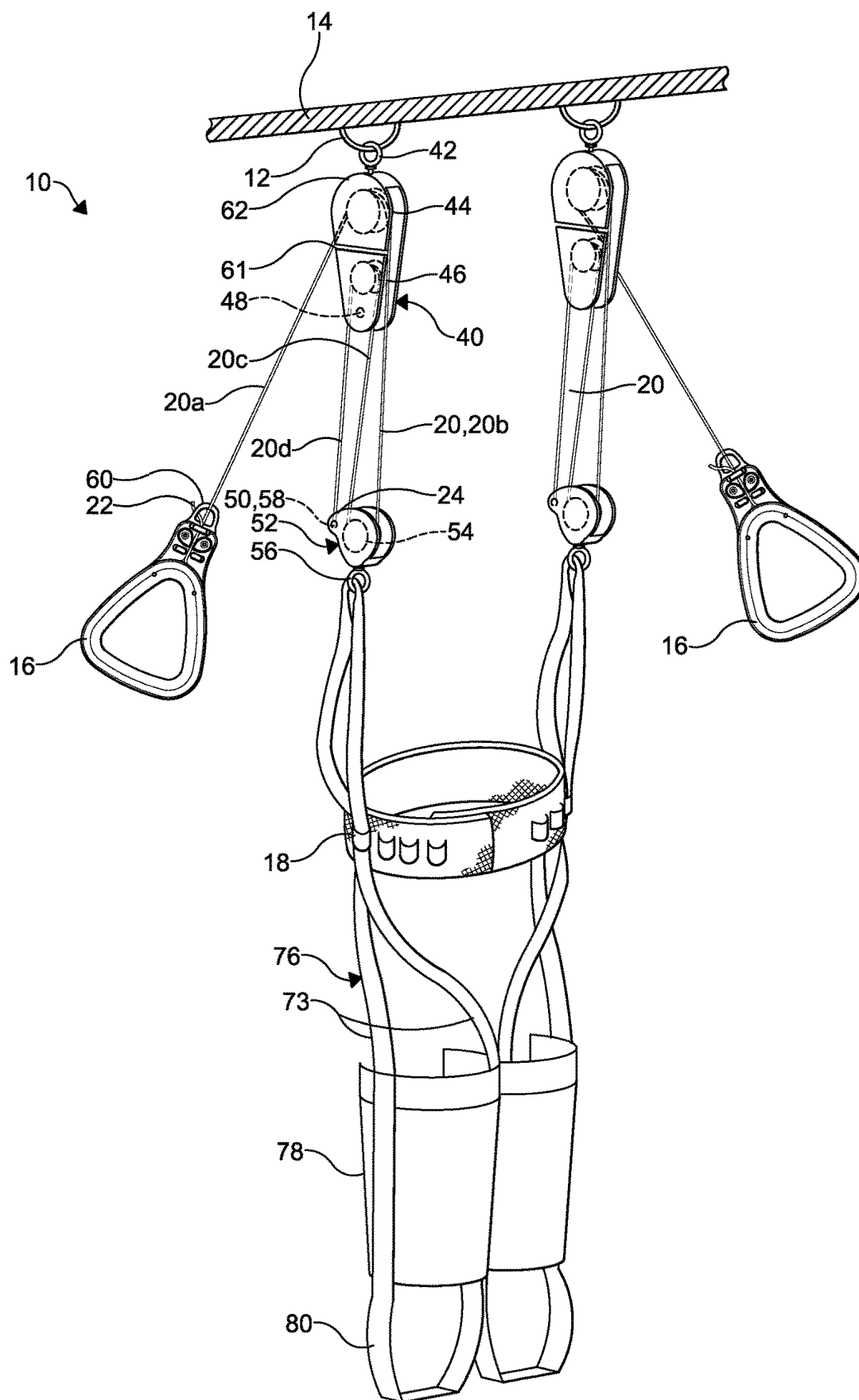
DYNEPIC SPORTS

Family 2/15 - FAMPAT - ©Questel

Title

(US20180036579)

Exercise device for suspended body weight training**Images**



Publication numbers with kind code & date

US20180280755

A1 2018-10-04

US20180280755

US20180036579

A1 2018-02-08

US20180036579

US9821188

B2 2017-11-21

US9821188

US20160045778

A1 2016-02-18

US20160045778



US20160045778

A1

2016-02-18

US20160045778

**Abstract**

(US20180036579)

A **pulley** system of an **exercise** device for suspended weight training includes a first block with a first **pulley**, a second **pulley**, and a first attachment point. A second block is removably coupled to a weight and includes a third **pulley** and a second attachment point. A **grip** is configured to be held by a user while exercising and has a third attachment point. A line having a first line end is fixedly coupled to the **grip** and a second line end fixedly is coupled to a connection element. The connection element is configured to be selectively coupled to each of the first attachment point, the second attachment point, and the third attachment point, permits a user to reduce an effective amount of the weight lifted by the user with movement of the **grip** to a pre-selected fraction of the weight.

Inventors

DWORK MATTHEW

DWORK JOSH

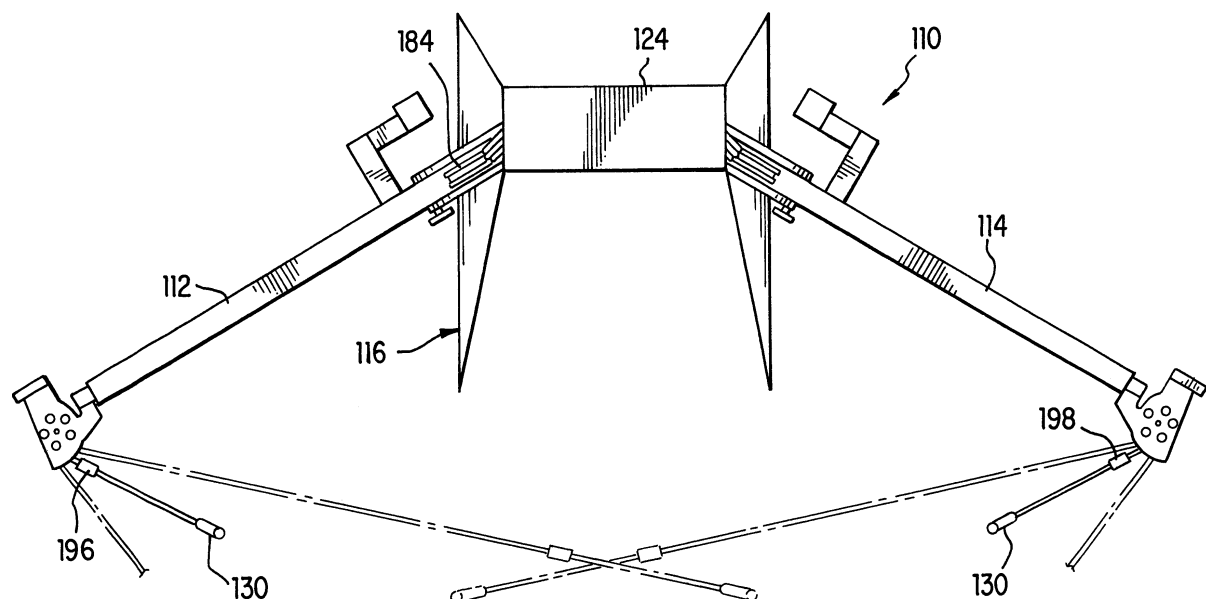
Latest standardized assignees - inventors removed

STRIPE FITNESS

Family 3/15 - FAMPAT - ©Questel

Title

(EP1212122)

Cable crossover **exercise** apparatus**Images****Publication numbers with kind code & date**

HK1047409

A1

2009-06-05

HK1047409

DE60041139

D1

2009-01-29

DE60041139

AT417650

T

2009-01-15

ATE417650

EP1212122

B1

2008-12-17

EP1212122

CA2376705

C

2008-11-18

CA2376705

CN101219264

A

2008-07-16

CN101219264

US7282016

B2

2007-10-16

US7282016

CN100341593

C

2007-10-10

CN100341593C

EP1212122

A4

2004-10-27

EP1212122

AU765635

B2

2003-09-25

AU-765635

DE10084518

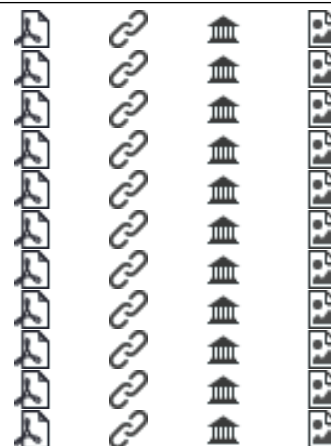
T1

2003-03-27

DE10084518T



JP2003509139	A	2003-03-11	JP2003509139
US20030032531	A1	2003-02-13	US20030032531
US6458061	B2	2002-10-01	US6458061
CN1371296	A	2002-09-25	CN1371296
EP1212122	A1	2002-06-12	EP1212122
DE20022661	U1	2002-03-07	DE20022661
US20010023221	A1	2001-09-20	US20010023221
US6238323	B1	2001-05-29	US6238323
AU7329500	A	2001-04-17	AU200073295
CA2376705	A1	2001-03-22	CA2376705
WO01/19462	A1	2001-03-22	WO200119462



Abstract

(EP1212122)

The invention relates to a cable crossover **exercise** apparatus (110) including a central weight stack (124) and opposed extension arms (112, 114). The invention also relates to a functional lift **exercise** apparatus (10) including a central weight stack (24) and substantially parallel extension arms (12, 14). The invention further relates to a cable **exercise** apparatus employing a **pulley** assembly (42, 44, 50, 52, 56, 58) with a 4:1 load ratio.

Inventors

SIMONSON ROY

Latest standardized assignees - inventors removed

ICON HEALTH & FITNESS

Family 4/15 - FAMPAT - ©Questel

Title

(EP3618934)

Strap-based **exercise** system

Images

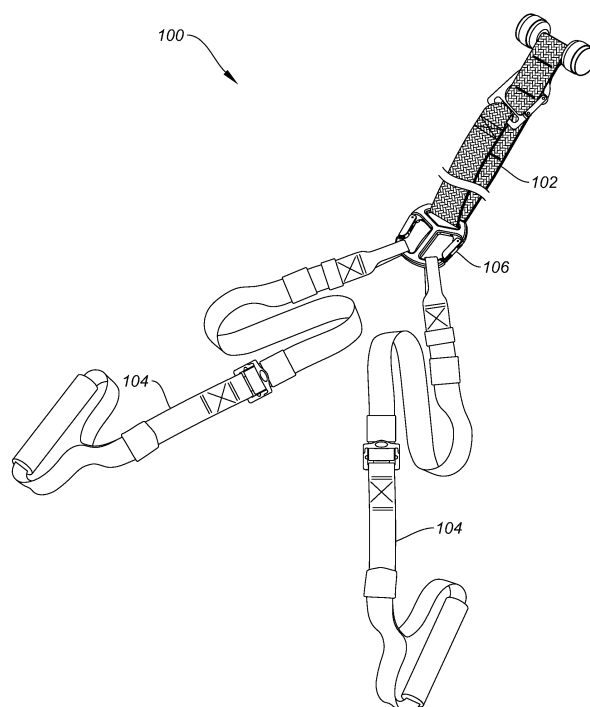


FIG. 1

Publication numbers with kind code & date

EP3618934	A1	2020-03-11	EP3618934
AU2018263156	A1	2019-11-28	AU2018263156
CN208823874	U	2019-05-07	CN208823874U
CN108785965	A	2018-11-13	CN108785965



[WO2018/203286](#)

A1

2018-11-08

WO2018203286

**Abstract**

(EP3618934)

A strap-based **suspension exercise** system (100), includes a main strap (102) that is attached to a fixed or stationary object to anchor the **exercise** system (100) and **exercise** straps (104) that are used to perform a variety of exercises. Different main straps (102) are provided that enable anchoring the **exercise** system (100) virtually anywhere. The **exercise** straps (104), which may be inelastic or elastic are attached to the main strap (102) using a uniquely designed buckle (106) and include a safety strap (1910). The **exercise** system (100) can be used virtually anywhere for perform a wide variety of exercises.

Inventors

SIU ANDREW S P

Latest standardized assignees - inventors removed

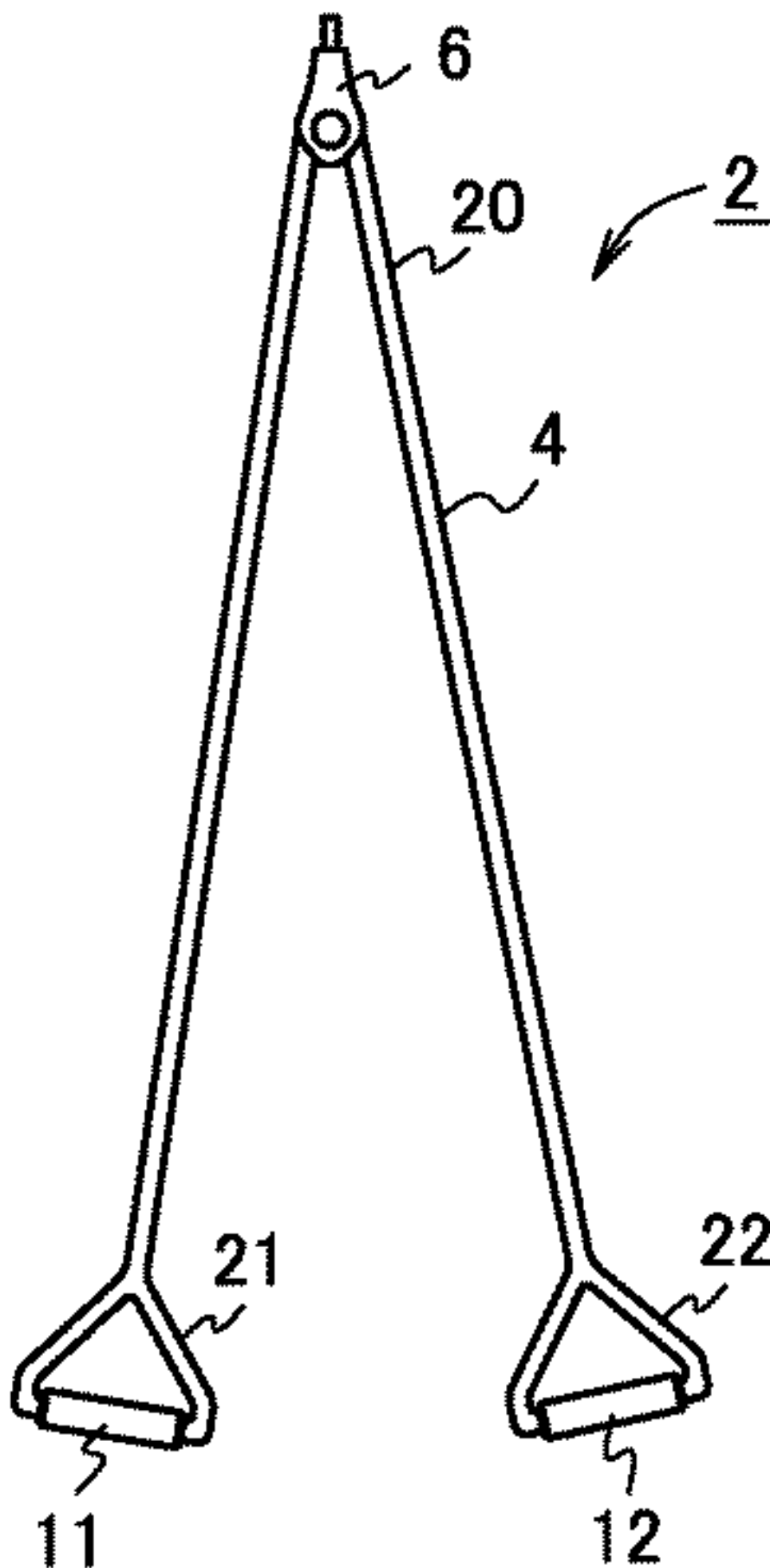
AUSTER ENTERPRISES

Family 5/15 - FAMPAT - ©Questel

Title

(JP3191375U)

Exercise device**Images**



JP3191375

U

2014-05-28

JP3191375U

**Abstract**

(JP3191375)

PROBLEM TO BE SOLVED: Movement even when not in use, one end of the rope extends substantially from the **suspension** device or an obstacle, the hanging tool such as a rope **pulley** will not fall from the upper to provide an **exercise** tool. SOLUTION: A main body of a predetermined length from the ropes 4, first 1 **grip** 11, first 2 **grip** 12, and, the body can be positioned in the body for hoisting hanging fixture 6 provided, for assisting movement of the instrument. A center portion of the body 20, and, at each end of the central portion and a second position 1 loop section 21 and 2 loop section 22 provided, the first 1 of the gripping portion, a first 1 attached to the loop, and then, the first 2 of the gripping portion, a first 2 attached to the loop, the first 1 of the first and second **grip** 2 of each of the gripping portion, a tubular member, a magnet, and, a covering member. SELECTED DRAWING: Fig. 1

Inventors

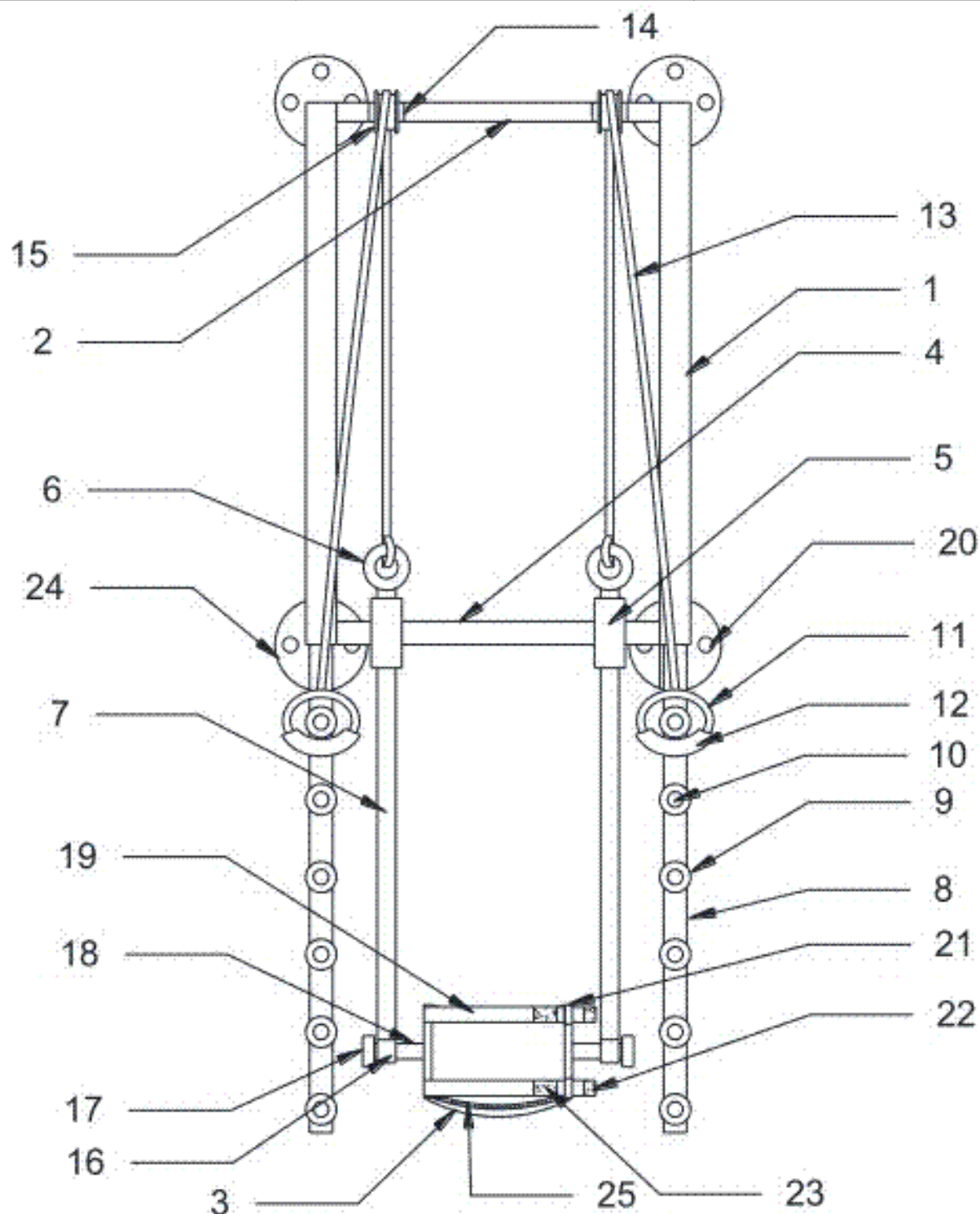
NAKA SHIRO

Family 6/15 - FAMPAT - ©Questel

Title

(CN208426588U)

Student uses leg pressing **trainer****Images**



Publication numbers with kind code & date

CN208426588

U

2019-01-25

CN208426588U



Abstract

(CN208426588)

The utility model belongs to the technical field of student's leg pressing apparatus and specifically relates to a student uses leg pressing **trainer**, hold in the palm including U -shaped frame, peg, bracing piece, ejector pin, fixed **pulley**, guide bar, foot, fixed ejector pin and the bracing piece of being equipped with respectively between the upper and lower branch of the end fixing of U -shapedframe is equipped with the fixed disk about, two vertical fixed U -shaped frames, fixed being equipped with rather than the vertically peg in lower side strut front end below of U -shaped frame, the peg front side evenly is equipped with a plurality ofly rather than the vertically handle, the foot asks both sides to fix and is equipped with the pivot, the end fixing is equipped with the link on the guide bar, and it has the rope of hanging to fix the system on the link, and its end fixing had the oval -shaped to hold the ring after the fixed **pulley** was walked around to a string other end of restricting. The utility model has the advantages of reasonable design, can adjust foot support highly carrying on leg

pressing training as required in a flexible way, the foot holds in the palm the angle can lift angle of rotation along with on the shank, can conveniently put down the foot after having trained, and the travelling comfort is good, and the convenience has improved the training effects safely.

Inventors

CHEN HAONAN

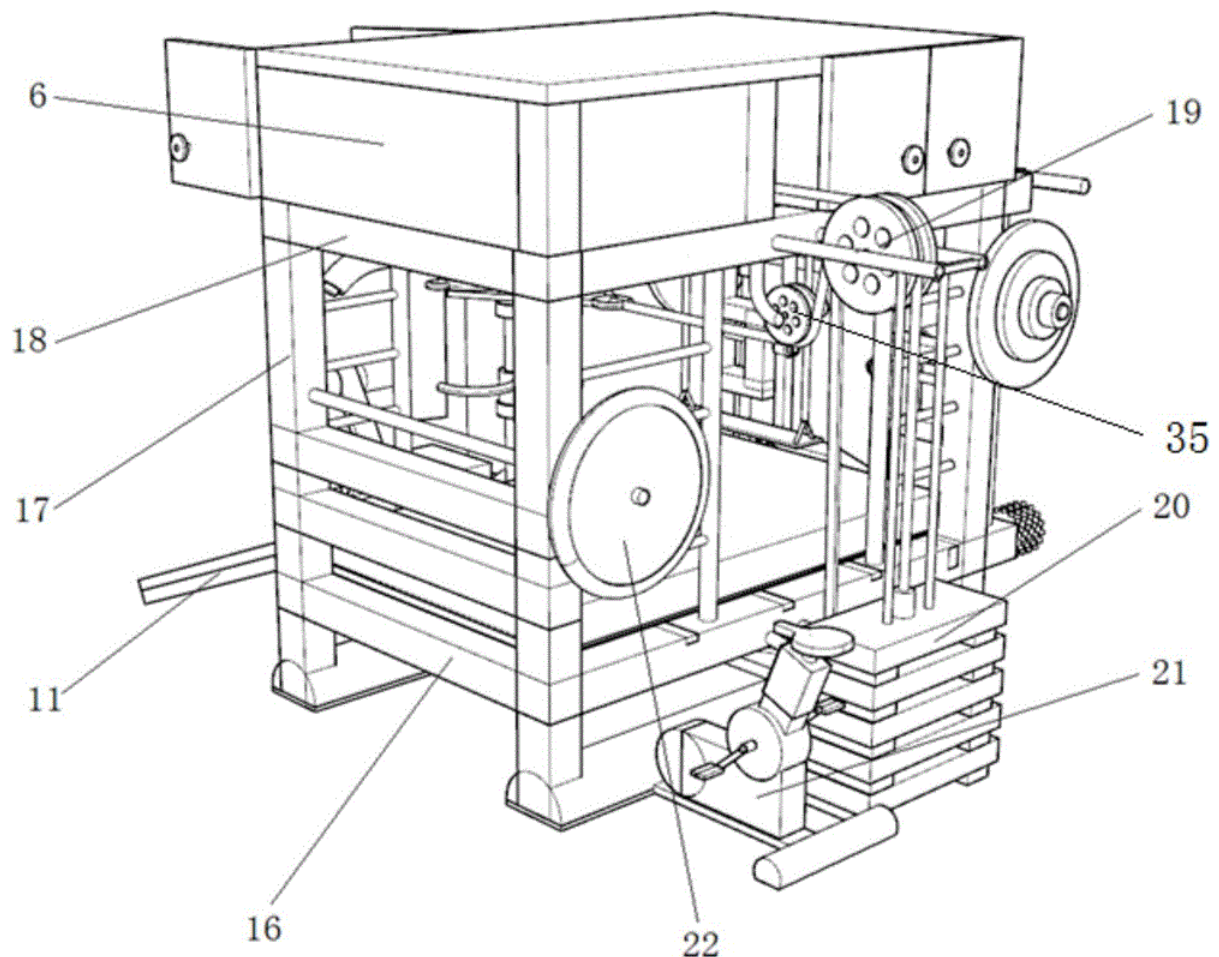
Family 7/15 - FAMPAT - ©Questel

Title

(CN205924858U)

Multifunctional key property utensil

Images



Publication numbers with kind code & date

CN205924858

U

2017-02-08

CN205924858U



Abstract

(CN205924858)

The utility model discloses a multifunctional key property utensil, including the bed body be equipped with a stand on four angles of the bed body respectively, the top of stand is supported there is high ladder, high ladder's top is equipped with the locker, high ladder's both sides are equipped with a pulley respectively, around there being wire rope on the pulley, wire rope's one end is equipped with the girt, and the other end has hung the weight, one side of weight is equipped with the power bicycle, the below of girt is equipped with the training ware of stretching one's legs, stretch one's legs the training ware pass through the stay cord also with the weight connect, the bed position is equipped with in the training ware one side of stretching one's legs and pulls the trainer, be equipped with shank massage device on two stands of bed body one end. The utility model discloses to the training of low limbs and chest muscle with high ladder, the perfect adaptation of weighing the piece, stretching one's legs the training ware and pulling the trainer, it is comprehensive to have realized that the family takes exercise, has reduced the space of placing respectively simultaneously.

Inventors

YUAN FENG

WANG YU

ZHONG WEIBO

ZHANG HONGBING

LI JIQIANG

LIU XIAOYI

LIU RUIJIANG

MA XUEQIANG

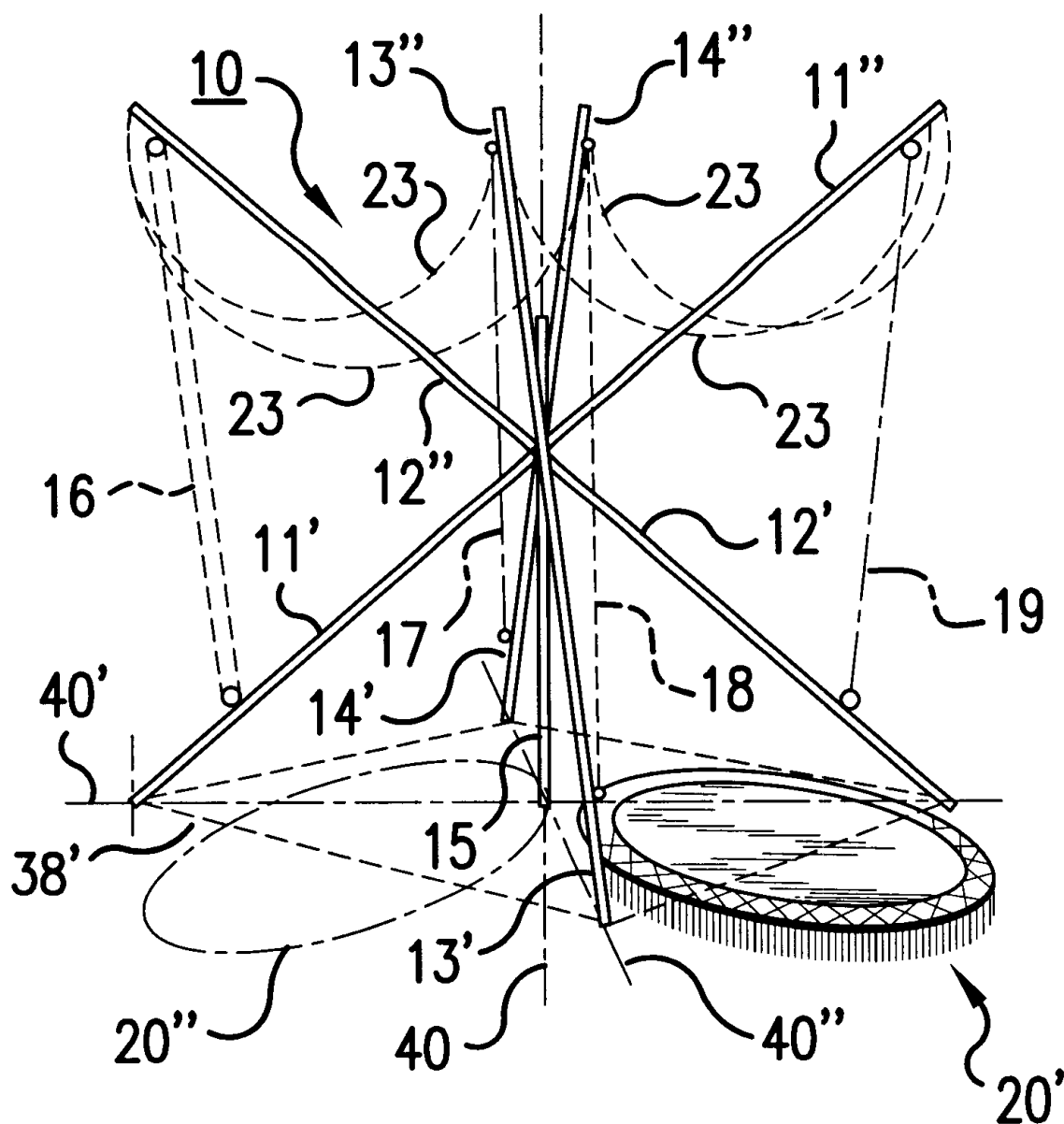
Latest standardized assignees - inventors removed

SHANDONG NORMAL UNIVERSITY

Family 8/15 - FAMPAT - ©Questel

Title

(EP1227863)

Multi-bay bungee-cord acrobatic **suspension** and trampoline structure**Images****Publication numbers with kind code & date**

JP2004513668

A

2004-05-13

JP2004513668

CN1149119

C

2004-05-12

CN1149119C



CN1149119	C	2004-05-12	CN1149119C				
AU768764	B2	2004-01-08	AU-768764				
ES2193004	T1	2003-11-01	ES2193004				
KR20030047869	A	2003-06-18	KR20030047869				
EA003347	B1	2003-04-24	EA---3347				
US6511383	B1	2003-01-28	US6511383				
CN1378476	A	2002-11-06	CN1378476				
EA200200406	A1	2002-10-31	EA200200406				
BR0014535	A	2002-08-27	BR200014535				
EP1227863	A1	2002-08-07	EP1227863				
IL138729	A	2001-10-31	IL-138729				
AU7866000	A	2001-05-10	AU200078660				
CA2388702	A1	2001-04-12	CA2388702				
WO01/24900	A1	2001-04-12	WO200124900				

Abstract

(EP1227863)

A geometric-tree like gymnastic amusement-thrill structure (10) efficiently based upon a central ground-anchored vertical trunk-pylon member (15) employing a preferably four-way arrangement of radially upward and outwardly extending branch support-booms (11', 12', 13', 14'), each in discreet combination with a laterally supporting ground-anchored beam extending upward to a point proximal the base of its respective support-booms. Plus, nearly vertical compression-load beams (16, 17, 18, 19) are secured at their lower-ends near each support-boom's lower terminus, and secured at their upper-ends near the outer ends of the respective overhanging support-boom. This X-shaped structure is additionally secured in rigid stance via a plurality of strategically placed triangulated tension-cables (33') extending upward at an angle from proximal the ground anchoring point of the lateral ground-anchored beams to a point well up on the support booms. The structure also includes separate bungee-cords (23) which are strung between the outer distal ends of each support-boom.

Inventors

RAIDT ALEXANDER

RAIDT PETER

Latest standardized assignees - inventors removed

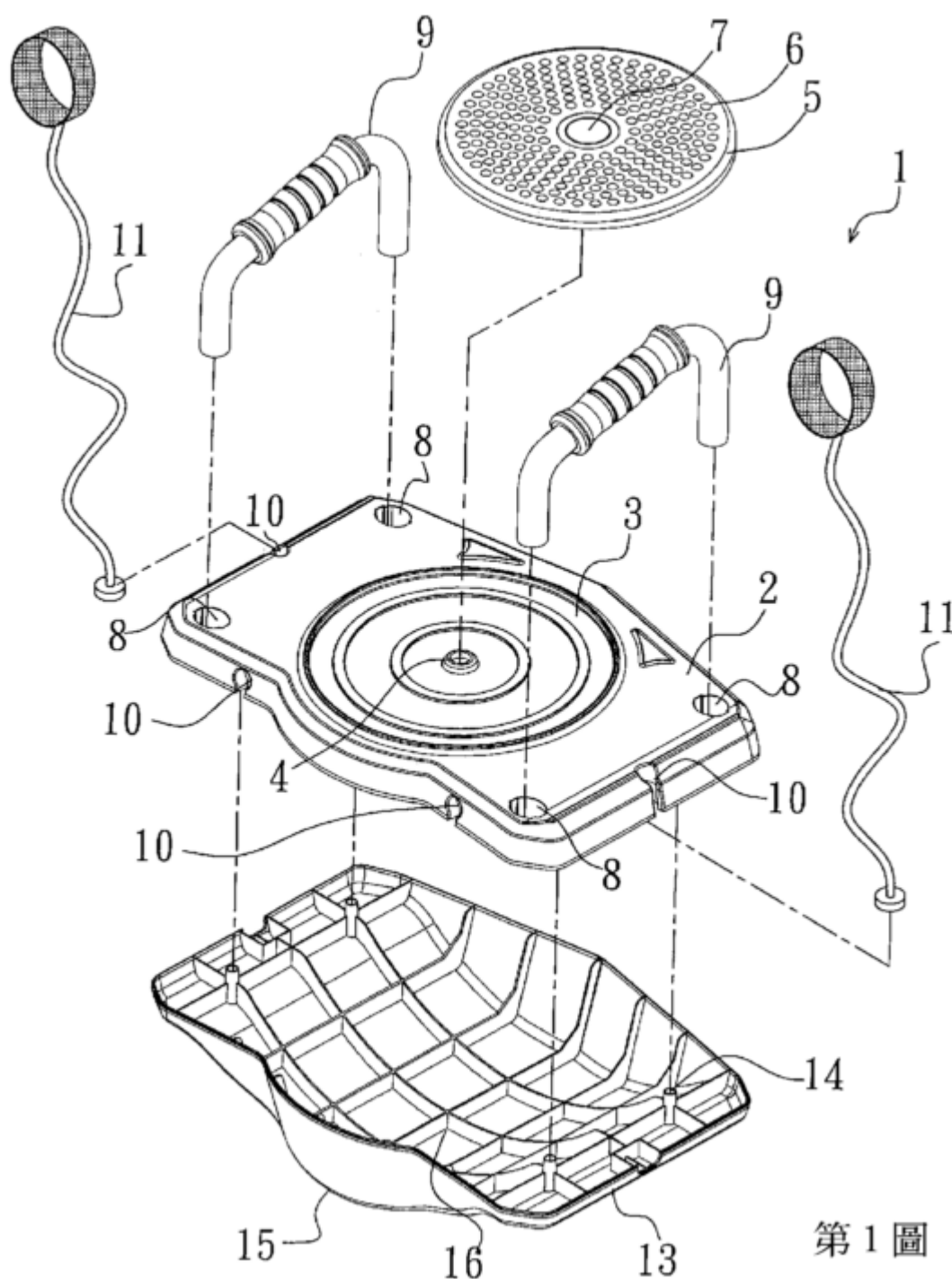
LEISURE INVENTIONS

Family 9/15 - FAMPAT - ©Questel

Title

(TWM356519)

Composite-type **exercise** fitness equipment**Images**



第 1 圖

Publication numbers with kind code & date

TWM356519

U 2009-05-11

TWM356519

**Abstract**

(TWM356519)

This creation related one kind of compound expression health sports equipment, it is in has to turn on the stepping on of edition body plate, is equipped with plural number first to install and plural number above surface second installs the hole to supply to combine to **grip**, the expansion **suspension** link, to reach to its undersurface dismantable to be equipped with plural number third to install the hole to supply to combine to have the round arc ridge or the **pulley** dismantable, takes advantage of this to be possible to use various disassemblages to combine, achieves the movement effect that wants to carry on.

Inventors

WU, JIA-LING

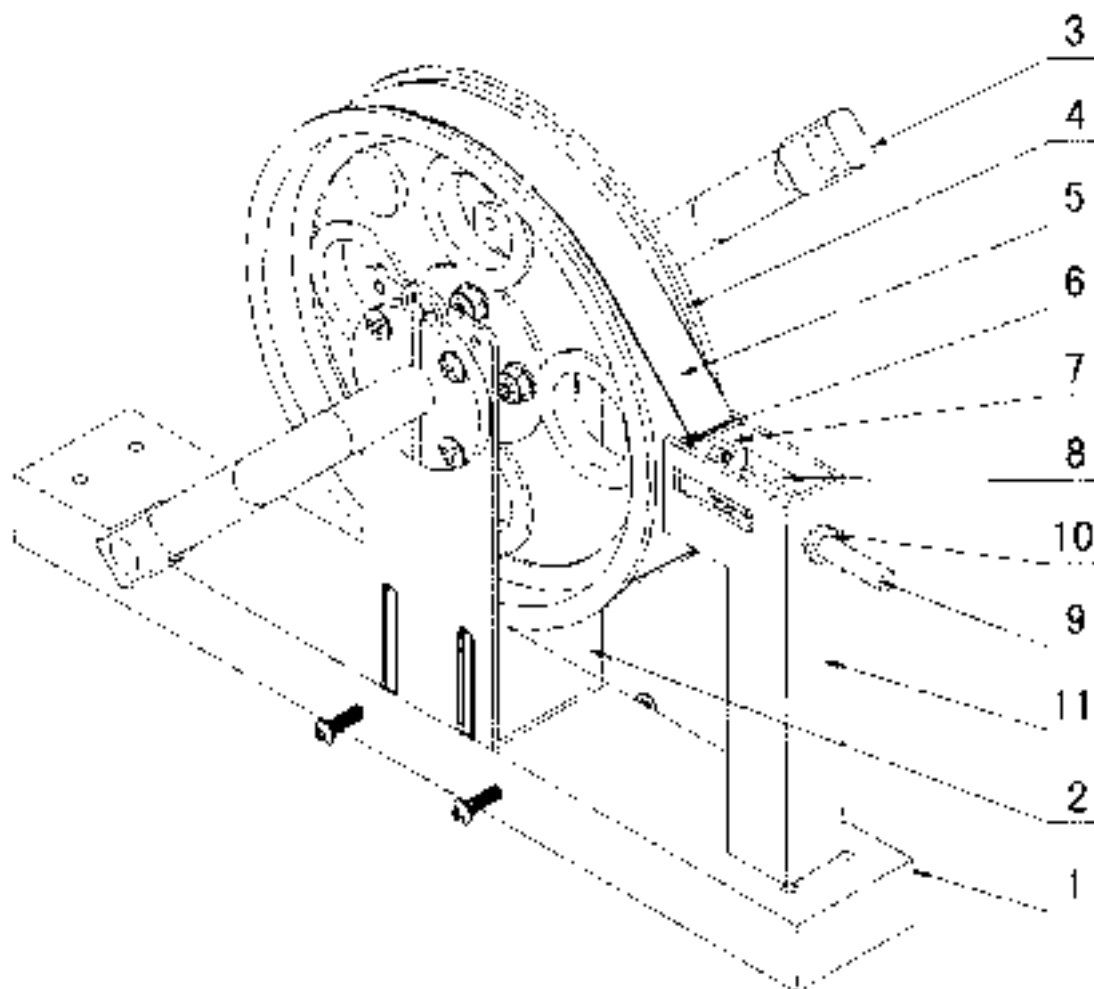
Family 10/15 - FAMPAT - ©Questel

Title

(CN202777578U)

Resistance adjusting device of **exercise** bicycle

Images



Publication numbers with kind code & date

CN202777578

U

2013-03-13

CN202777578U



Abstract

(CN202777578)

The utility model discloses a resistance adjusting device of an **exercise** bicycle. The resistance adjusting device of the **exercise** bicycle comprises a base (1), a balance weight wheel support (2), left and right cranks (3), a balance weight wheel (4), a brake belt (5) and a resistance adjusting support (11), wherein the balance weight wheel (4) is arranged on the balance weight wheel support (2) through the left and right cranks (3), the brake belt (5) is sleeved on the balance weight wheel (4), and horizontal guidance groove openings (8) are arranged on two sides of the resistance adjusting support (11). Connection heads of two ends of the brake belt (5) are fixed by adopting of inner and outer clamping pieces (6,7), protrusion **suspension** loops are arranged on the inner and outer clamping pieces (6,7), the inner and outer clamping pieces (6,7) are arranged on the horizontal guidance groove openings (8) through the protrusion **suspension** loops, a turning threaded rod (9) is arranged on the resistance adjusting support (11), and the threaded rod (9) is connected on threaded holes of the inner and outer clamping pieces (6,7) in a matched mode through threads. With the structure, a theory that two sides of the circumference are tangent and collected on one point is adopted to adjust a resistance structure, and the resistance adjusting device of the **exercise** bicycle has the advantages of being simple and reasonable in structure, convenient to operate and use, obvious in frictional resistance adjusting, stable in motion, long in service life and the like.

Inventors

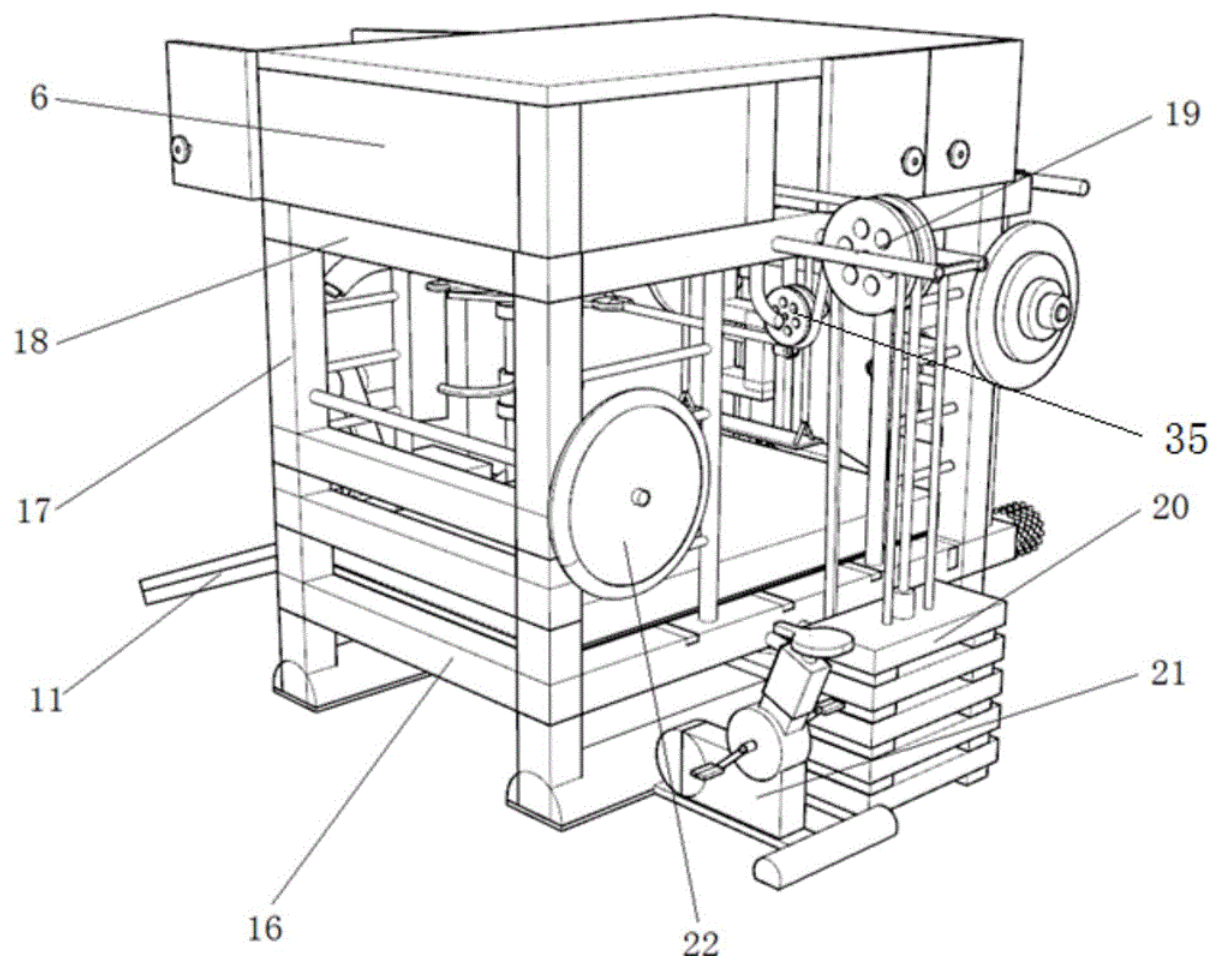
YU WEIAN

Family 11/15 - FAMPAT - ©Questel

Title

(CN105920799)

Multifunctional fitness furniture

Images**Publication numbers with kind code & date**

CN105920799	B	2019-03-19	CN105920799B
CN105920799	A	2016-09-07	CN105920799

**Abstract**

(CN105920799)

The invention discloses a piece of multifunctional fitness furniture which comprises a bed body. Four corners of the bed body each are provided with a column, ladders are supported at the top ends of the columns, the tops of the ladders are provided with storage cabinets, the two sides of the ladders each are provided with a pulley, a steel wire rope is wound around the pulley, one end of the steel wire rope is provided with a horizontal pull rod, and a counter weight is suspended at the other end of the steel wire rope. A power bicycle is arranged on one side of the counter weight, a leg stretching trainer is arranged below the horizontal pull rod and also connected with the counter weight through a pull rope, the bed body is provided with a traction training device located on one side of the leg stretching trainer, and two columns at one end of the bed body are provided with shank massage devices. According to the piece of multifunctional fitness furniture, the ladders, the counter weight, the leg stretching trainer and the traction training device are combined perfectly according to the training of the lower limbs and chest muscle, comprehensiveness of family training is implemented, and spaces for respective placement are shrunk.

Inventors

LIU XIAOYI

WANG MEI

WANG YU

ZHONG WEIBO

ZHANG HONGBING

LI JIQIANG

LIU RUIJIANG

MA XUEQIANG

Latest standardized assignees - inventors removed

SHANDONG NORMAL UNIVERSITY

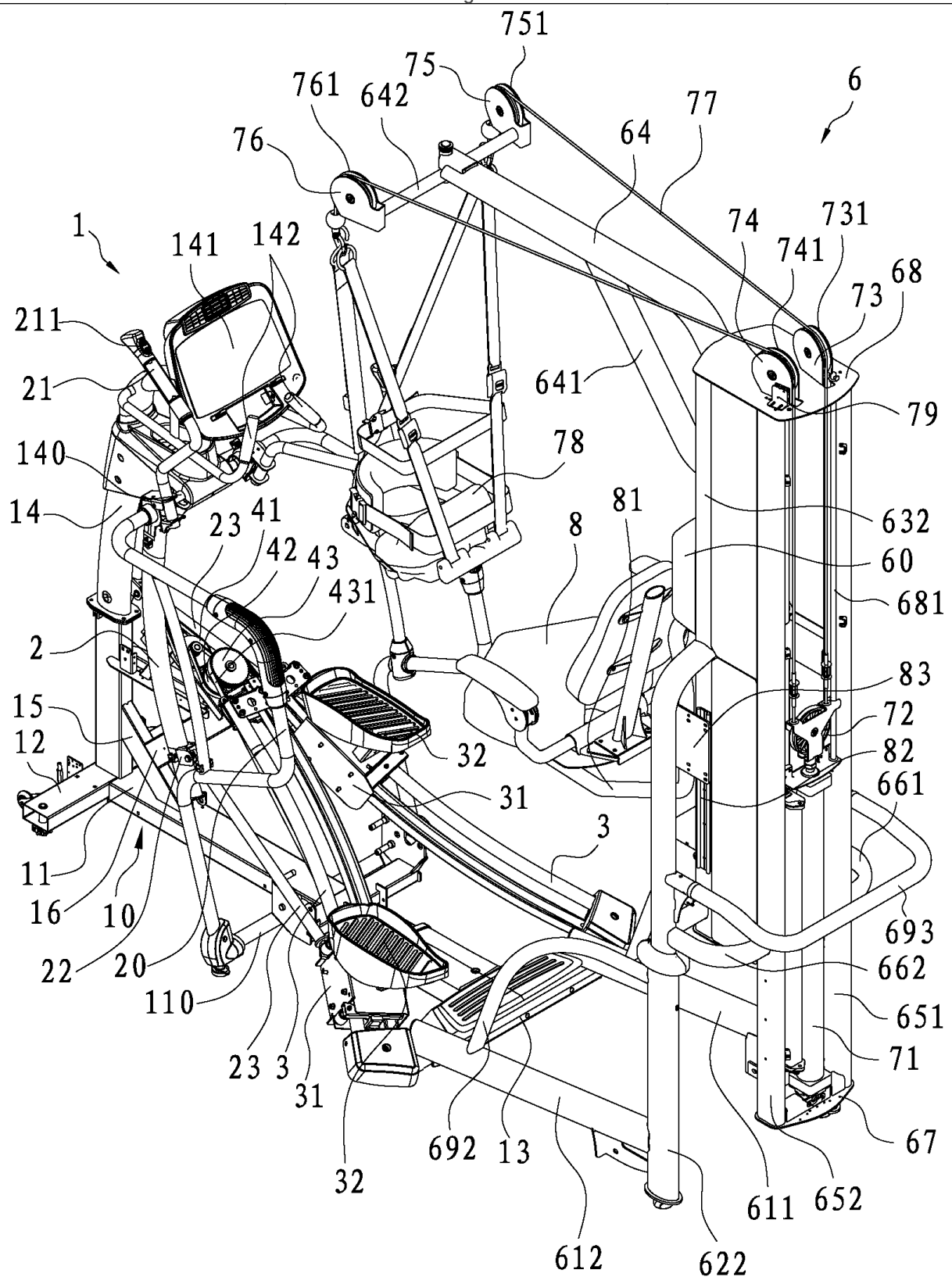
Family 12/15 - FAMPAT - ©Questel

Title

(CN204106483U)

Combined type motion machine for rehabilitation

Images



Publication numbers with kind code & date

CN204106483

U

2015-01-21

CN204106483U



Abstract

(CN204106483)

The utility model provides a combined type motion machine for rehabilitation, and particularly relates to the motion machine which enables the limb disabilities to be supported to a hand-foot combined type motion machine capable of conducting conversion between active actions and passive actions through a **suspension** mechanism so as to achieve the effect of **exercise** rehabilitation. The combined type motion machine for rehabilitation comprises the hand-foot combined type motion machine. The rear side of the hand-foot combined type motion machine is provided with the **suspension** mechanism. When the limb disabilities want to use the combined type motion machine for rehabilitation, a telescopic shaft rod of a pneumatic

cylinder of the **suspension** mechanism can be made to drive a movable **pulley** to move upwards firstly so as to make a carrier to fall down, and the limb disabilities are made to wear the carrier in a sleeving mode and conduct rehabilitation training through the hand-foot combined type motion machine.

Inventors

GUO HAIBIN

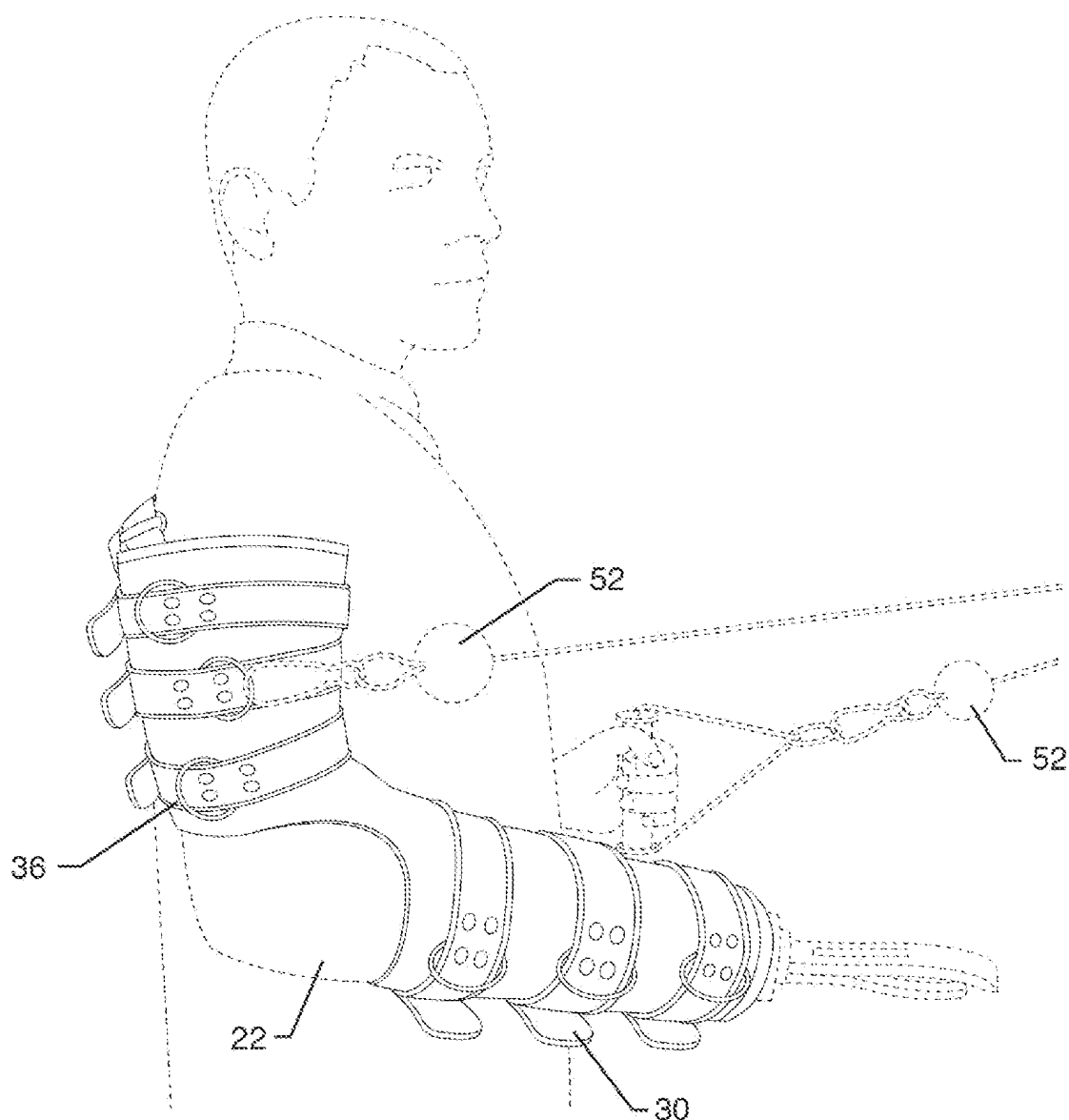
Latest standardized assignees - inventors removed

SPORTSART FITNESS INDUSTRIAL

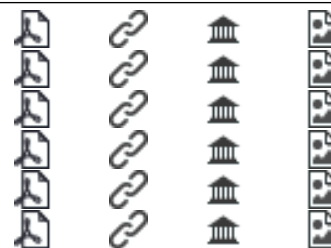
Family 13/15 - FAMPAT - ©Questel

Title

(EP2575980)

Exercise device for use with a prosthesis**Images**

EP2575980	B1	2014-08-13	EP2575980
US8727950	B2	2014-05-20	US8727950
EP2575980	A1	2013-04-10	EP2575980
CA2801173	A1	2011-12-08	CA2801173
US20110301718	A1	2011-12-08	US20110301718
WO2011/153265	A1	2011-12-08	WO2011153265



Abstract

(EP2575980)

The present invention provides an armband (10) designed for wearing by a person who uses a hand prosthesis or a person with impaired hand function. The armband both stabilizes the attachment of the prosthesis thereby allowing pulling exercises that would otherwise be impossible and provides connection to **exercise** machines allowing the wearer to carry out exercises that would otherwise require the wearer to grasp an operational portion of the **exercise** machine. The armband is constructed from a sheet of flexible material (20) that is sized to be wrapped around a wearer's arm enclosing substantially all of the arm and the wrist or base portion of any hand prosthesis. The wrapped armband is tightened by attached cinching straps (30) and D-rings (36) are provided attached to the surface of the armband for attachment of portions of **exercise** machines. An optional shoulder harness (12) can be attached to the armband for additional stability.

Inventors

CARTER ANDREW C

Latest standardized assignees - inventors removed

CARTER MEDICAL DEVICES

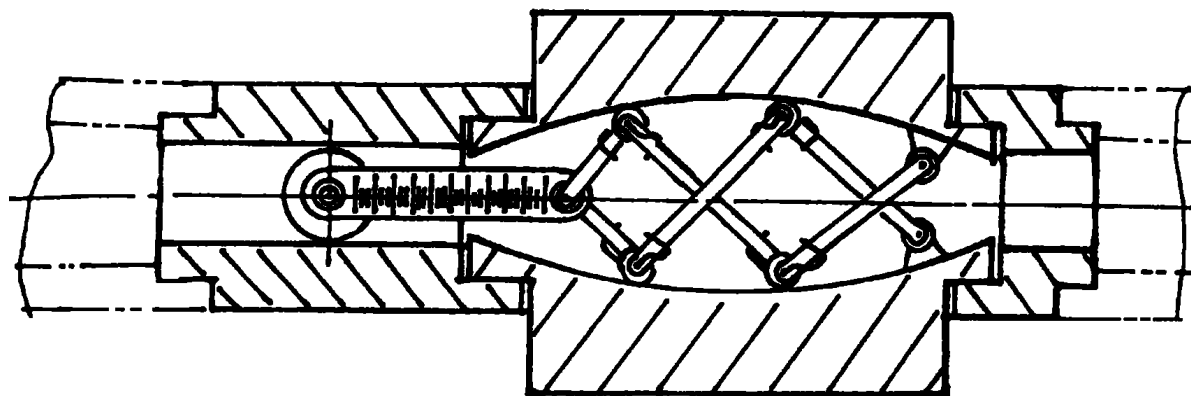
Family 14/15 - FAMPAT - ©Questel

Title

(CN2922950U)

Body building device

Images



Publication numbers with kind code & date

CN2922950	Y	2007-07-18	CN2922950U
---------------------------	---	------------	------------



Abstract

(CN2922950)

The utility model relates to a wrist developer for the grab bar on a bus, comprising a case, a **grip** bond and distortion display system. A pair of radial through-groove and a **grip** strength inspection hole are arranged on the tube-shaped case. The **grip** bond is board-shaped with depressed arc groove milled on one of the narrow faade walls. The distortion display system comprises joining-pieces A, joining-pieces B, a rolling wheel, a torsion spring, a **suspension** shaft, an idler **pulley** and a hinge. The hinge is fixed on the arc groove end of the **grip** bond. A through-hole is arranged in axle centre of the rolling wheel, and joining-pieces A are arranged on both ends of the through-hole to rotationally connect with the rolling wheel axle. The torsion spring is arranged in the through-hole of the rolling wheel, which apply a close force on the joining-pieces A of the same axle. The **grip** bond is arranged with scales, and the **grip** bond is rotationally connect with the **suspension** shaft and the idler **pulley** axle via the ends of the through-hole with the joining-pieces B. The rolling wheel is

rolling connected with the **grip** bond arc groove under the force applied by the torsion spring. The utility model is designed for the standing passengers to practice or test their **grip** strength.

Inventors

SONG CHUNLEI

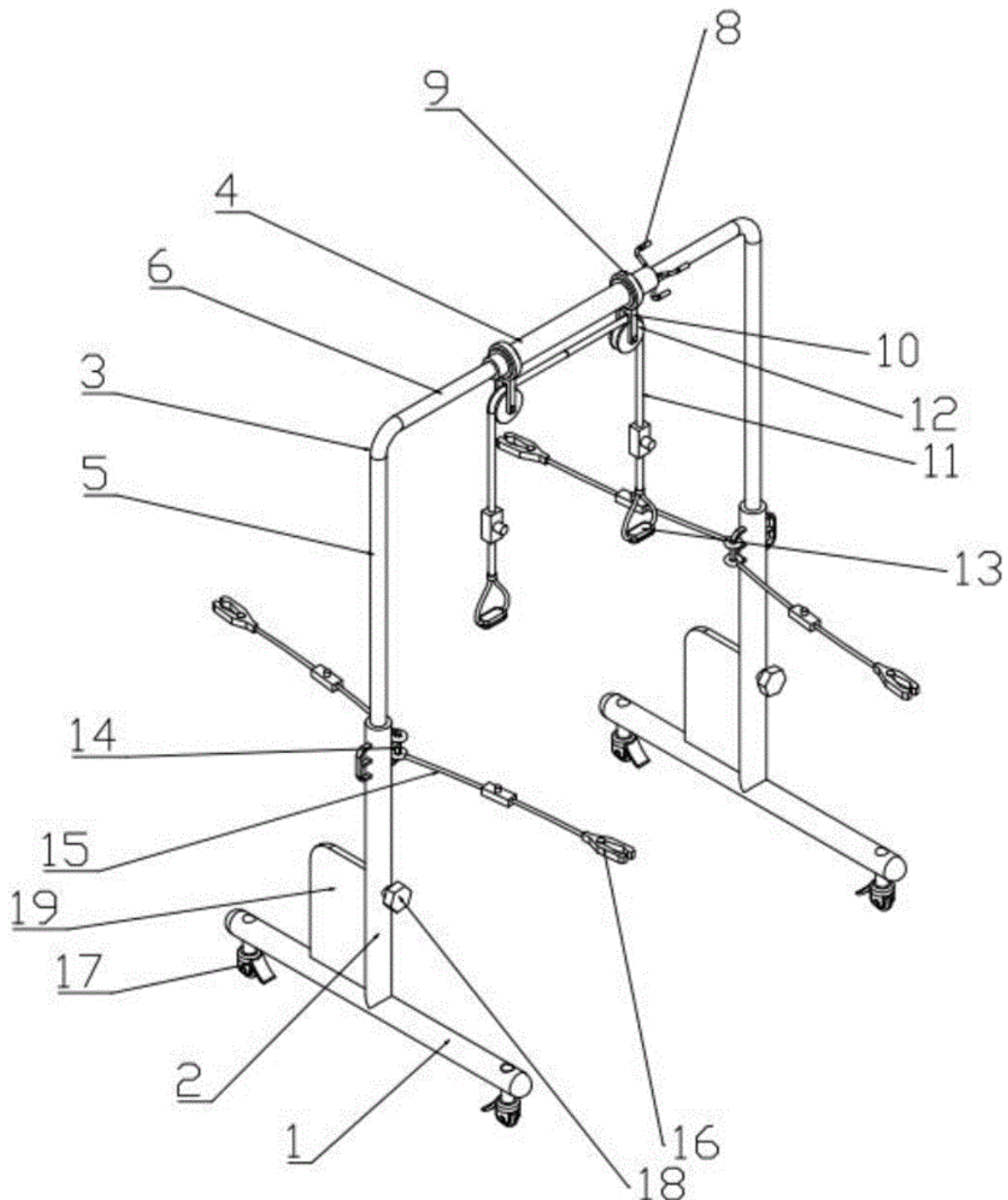
Latest standardized assignees - inventors removed

XINLONG INDUSTRY

Family 15/15 - FAMPAT - ©Questel

Title

(CN209348001U)

Suspension training device**Images****Publication numbers with kind code & date**[CN209348001](#)

U

2019-09-06

CN209348001U



Abstract

(CN209348001)

The utility model discloses a **suspension** training device. The device comprises two bottom rods which are symmetrically arranged, hollow pipes which are symmetrically arranged, L-shaped pipes which are asymmetrically arranged, a middle connecting pipe, a suspending device and a fixing device, the suspending device comprises a circular ring body, a U-shaped piece fixed at the lower end of the circular ring body and a tension rope; a **pulley** is rotationally arranged in the U-shaped piece; the tension rope is matched with the **pulley**; a connecting ring is arranged on the hollow pipe; a connecting rope is arranged on the connecting ring, a clamp is arranged at the other end of the connecting rope, the middle connecting pipe is rotated through a rotating handle, the width of the **suspension** training device is adjusted, the overall height of the **suspension** training device can be adjusted, a user can use the **suspension** training device conveniently, and the clamp on the connecting rope plays a role in being fixed to a bed body.

Inventors

WANG CHUNQIANG