EP 2 591 828 A1 (11)

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

15.05.2013 Bulletin 2013/20

(21) Application number: 11188442.5

(22) Date of filing: 09.11.2011

(51) Int Cl.: A63B 26/00 (2006.01) A63B 21/055 (2006.01)

A63B 69/18 (2006.01)

(84) Designated Contracting States:

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

Designated Extension States:

BA ME

(71) Applicant: Chen, Paul Vancouver, BC V7A 1S5 (CA)

(72) Inventor: Chen, Paul Vancouver, **BC V7A 1S5 (CA)**

(74) Representative: Beck & Rössig **European Patent Attorneys** Cuvilliésstrasse 14 81679 München (DE)

(54)Skiing exerciser

(57)A skiing exerciser includes a base (10) for supporting a user, a pair of retractable couplers (20) attached to the base (10), and a pair of handles (30) coupled to the retractable couplers (20) for being grasped by the user and for simulating a skiing operation. The base (10) includes a beam (11) for mounting the retractable couplers (20), the retractable couplers (20) each include a rod (24) slidably engaged in a housing (21), and a spring (25) coupled between the rod (24) and the housing (21) for retracting the rod (24) into the housing (21). The retractable couplers (20) each include a wheel (26) attached to the rod (24) for allowing the rod (24) to be smoothly moved into and out of the housing (21).

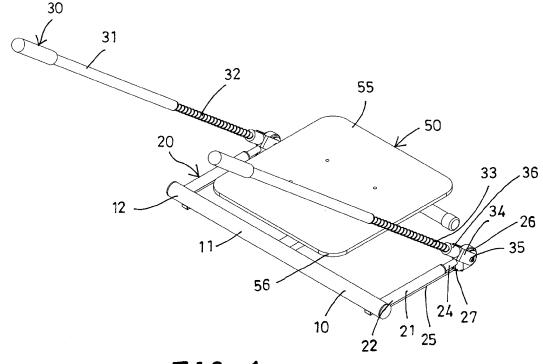


FIG. 1

[0001] The invention relates to a skiing simulating exerciser.

1

[0002] Typical skiing exercisers comprise a pair of handles supported on top of a base support, and a pair of foot supports slidably engaged with tracks or rails to simulate the skiing operations.

[0003] However, the hand grips may not be moved relative to the tracks or rails and the lower base support.

[0004] The invention is to provide an exerciser for better simulating the actual skiing operations or exercises.

[0005] This technical problem is solved by a skiing exerciser according to claim 1. Advantageous embodiments are indicated in further claims.

FIG. 1 is a perspective view of a skiing exerciser;

FIG. 2 is a partial exploded view of the skiing exerciser;

FIG. 3 is a side plan view of the skiing exerciser;

FIGS. 4, 5, 6, 7 are perspective views;

FIGS. 8, 9, 10, 11 are plan views of the skiing exerciser; and

FIG. 12 is an exploded view of the skiing exerciser.

[0006] Referring to FIGS. 1-3, a skiing exerciser comprises a base 10 including a beam 11 having two ends 12, and a foot support 50 for supporting a user 8.

[0007] A pair of retractable couplers 20 each include a housing 21 having one end 22 coupled to the end 12 of the beam 11. The housings 21 are hollow for receiving a rod 24 (FIG. 6). A cable or spring 25 is coupled between the rod 24 and the housing 21 or the base 10 for retracting the rod 24 into the housing 21. A wheel 26 is attached to an outer end 27 of the rod 24.

[0008] A pair of handles 30 each include a hand grip 31, and an extension 32 (FIG. 2) slidably engaged in the hand grip 31 for forming a retractable structure. Another spring 33 may be coupled between the hand grip 31 and the extension 32 for biasing the hand grip 31 out of the extension 32 (FIGS. 5-6). The handles 30 may include a solid but not retractable structure. The extension 32 includes a bracket or free end 34 secured to the outer end 27 of the rod 24 with a pivot axle 35. The wheel 26 may be secured to the outer end 27 of the rod 24 with the pivot axle 35. The outer or free end 34 of the extension 32 may be a bracket separated from the extension 32 (FIG. 12), and the handle 30 may include an adapter 36 attached to the outer or free end 34 of the extension 32 for engaging with the extension 32 with a screw thread 37, or the extension 32 itself may be used as the handle 30 to operate the couplers 20.

[0009] In operation, the user 8 may hold and move the

hand grips 31 toward or onto the extension 32 (FIGS. 5-6) and to compress the springs 33, and may pivot the hand grips 31 of the handles 30 relative to the couplers 20 or the base 10 (FIG. 4), the rod 24 may be moved into and out of the housings 21 with the spring 25 (FIG. 6) to simulate the skiing operations or exercises.

[0010] As shown in FIGS. 2-3, 8-9, the foot support 50 includes a cushion 51 disposed on the base 10 and having a (cylindrical) chamber 52 for forming a tubular element 53, and an outer peripheral recess 54 is formed in the cushion 51.

[0011] A platform 55 is mounted on the cushion 51 and includes an area or dimension greater than that of the cushion 51 and includes an outer peripheral portion 56 extended out of the cushion 51, the cushion 51 is made of resilient rubber and deformable for simulating the skiing operations or exercises (FIGS. 5-11).

20 Claims

1. A skiing exerciser, comprising:

a base (10), and a pair of handles (30),

characterized in that

a pair of retractable couplers (20) are attached to the base (10), and

the handles (30) are coupled to the retractable couplers (20).

2. The skiing exerciser as claimed in claim 1, wherein the base (10) includes a beam (11) for attaching the couplers (20).

3. The skiing exerciser as claimed in claim 1 or 2, wherein the couplers (20) each include a housing (21), and a rod (24) engaged in the housing (21).

40 **4.** The skiing exerciser as claimed in claim 3, wherein the couplers (20) each include a spring (25) coupled between the rod (24) and the housing (21).

- 5. The skiing exerciser as claimed in claim 3 or 4, wherein the couplers (20) each include a wheel (26) attached to the rod (24).
 - 6. The skiing exerciser as claimed in one of claims 3 to 5, wherein the handles (30) each include an extension (32) coupled to the rod (24), and a hand grip (31) attached to the extension (32).
 - 7. The skiing exerciser as claimed in one of claims 1 to 6 further comprising a foot support (50) disposed on the base (10).
 - **8.** The skiing exerciser as claimed in claim 7, wherein a cushion (51) is disposed on the base (10), and the

25

30

35

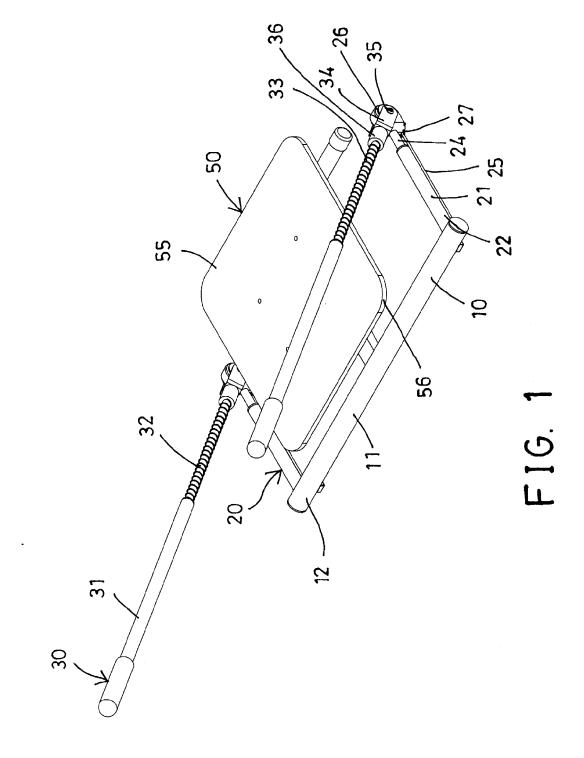
2

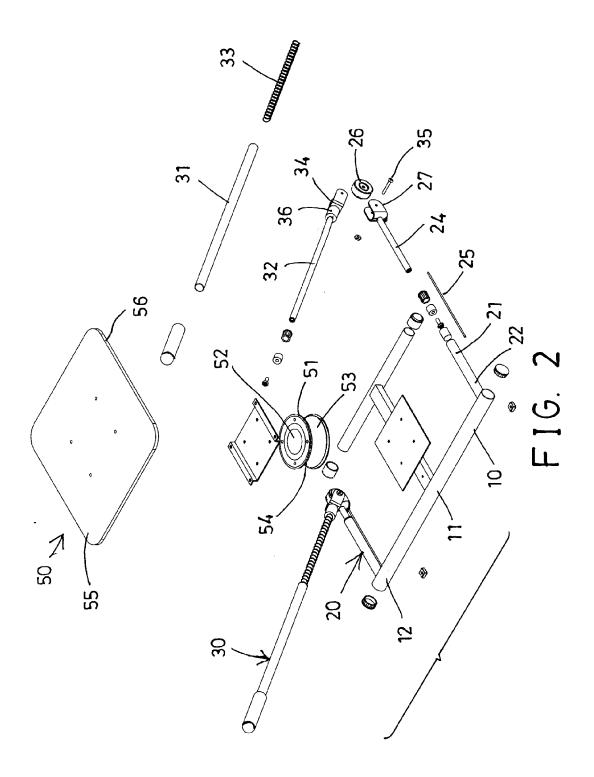
50

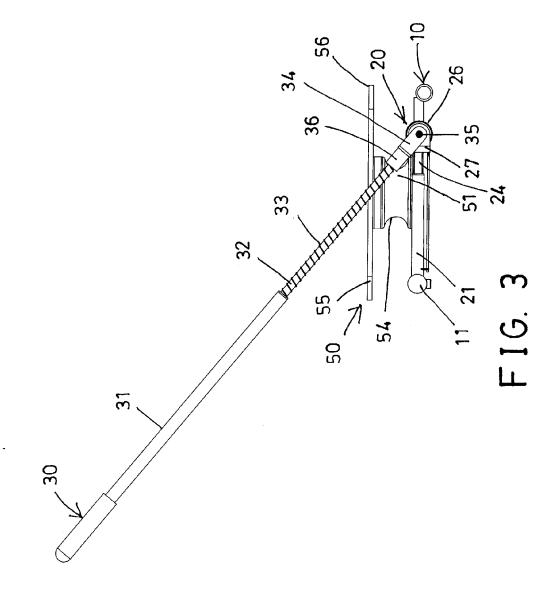
55

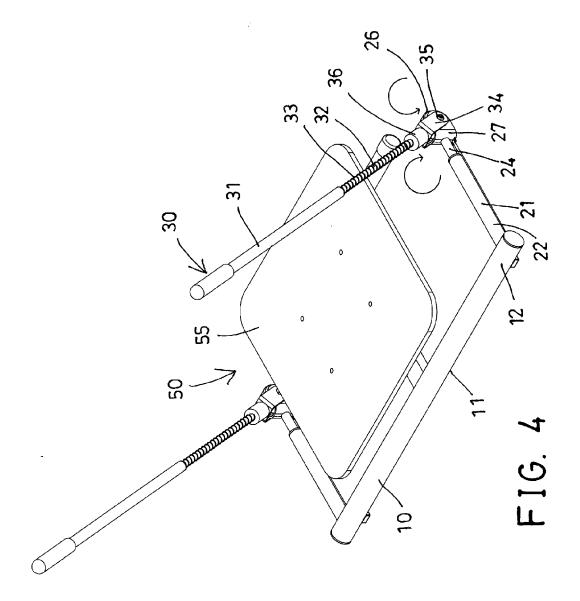
foot support (50) includes a platform (55) mounted on the cushion (51).

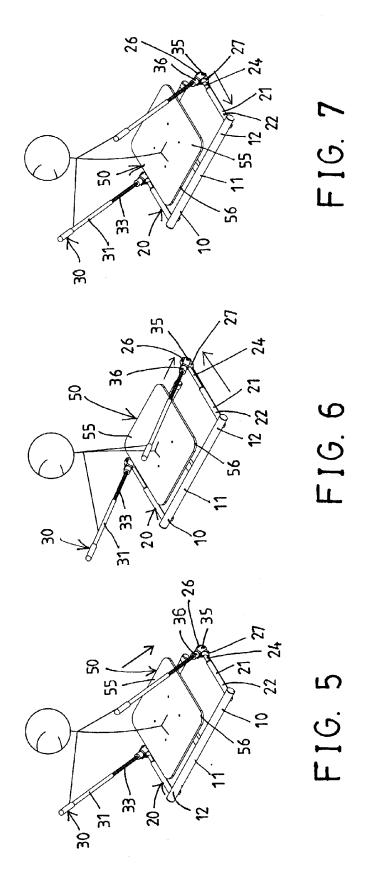
9. The skiing exerciser as claimed in claim 8, wherein the cushion (51) includes a chamber (52) for forming a tubular element (53).

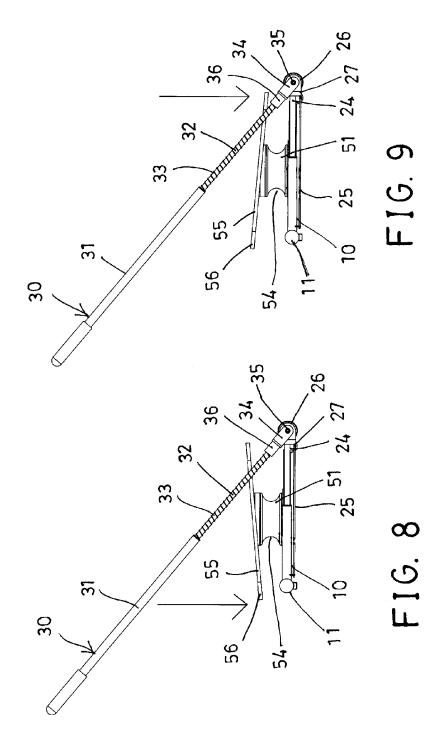


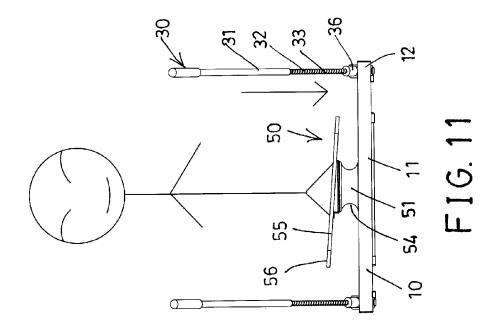


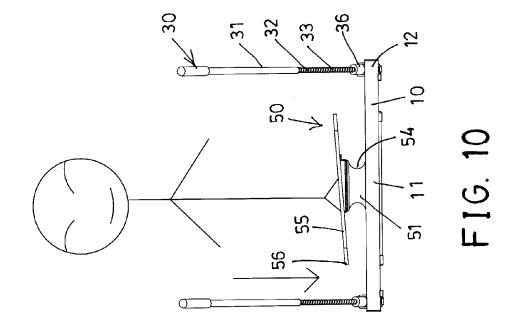


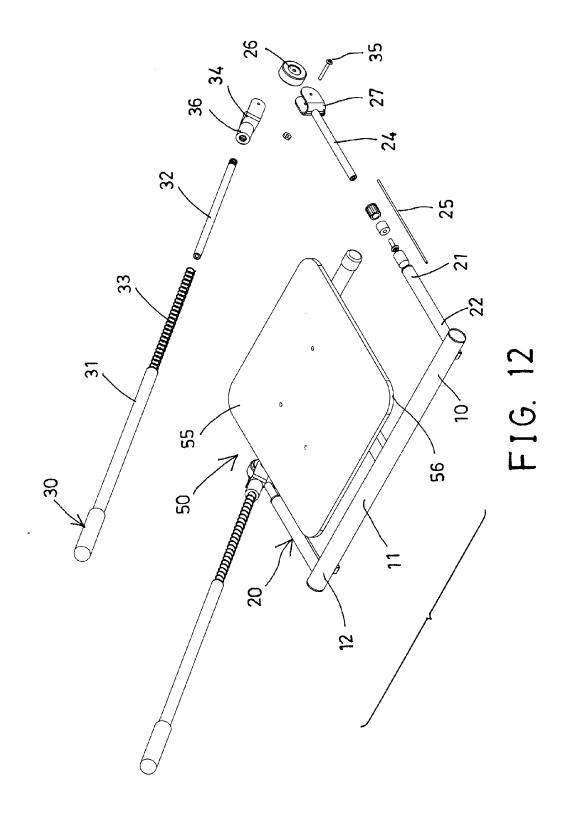














EUROPEAN SEARCH REPORT

Application Number EP 11 18 8442

Category	Citation of document with ir of relevant pass	ndication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
x	US 2010/317497 A1 (1-3,6,7	INV.
Y	16 December 2010 (2	010-12-16) - paragraph [0046];	8,9	A63B26/00 A63B69/18 A63B21/055
(US 2004/023766 A1 (5 February 2004 (20 * paragraph [0017] figures 1-6 *	SLONE BOBBY [US]) 104-02-05) - paragraph [0035];	8,9	
(14 September 2006 (3 (MUELLER ULRICH [DE]) 2006-09-14) - paragraph [0047];	1,3,4,6,	
(10 May 1988 (1988-0	SHALL FRANK E [US]) 15-10) 1- column 4, line 30;	1,3,6,7	
X	11 July 2002 (2002-	LKINSON WILLIAM T [US]) 07-11) - line 26; figure 5a *	1,7	TECHNICAL FIELDS SEARCHED (IPC)
	The present search report has	been drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
	Munich	24 April 2012	Jek	kabsons, Armands
X : part Y : part docu	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone cularly relevant if combined with anotiment of the same category nological background	T : theory or princip E : earlier patent do after the filing da her D : document oited L : document oited	cument, but publi te in the application	

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 11 18 8442

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-04-2012

S 20	010317497						
		A1	16-12-2010	NONE			
E 10	004023766	A1	05-02-2004	NONE			
	02005024295	В3	14-09-2006	AT DE 1 EP ES	461734 02005024295 1723991 2345564	B3 A1	15-04-201 14-09-200 22-11-200 27-09-201
S 47	743015	Α	10-05-1988	NONE			
0 02	2053234	A2	11-07-2002	AU CA EP MX	2002232894 2434165 1575676 PA03006551	A1 A2	16-07-200 11-07-200 21-09-200 15-10-200 11-07-200

FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82