

Description

SWINGING AND CLIMBING EXERCISER

[0001] The invention relates to a swinging and climbing or elevating exerciser for conducting swinging and/or climbing and elevating exercises with a single exercise machine.

[0002] Typical swinging exercisers may swing only, but may not be used to conduct the climbing or elevating exercises or operations.

FIG. 1 is a partial exploded view of a swinging exerciser;

FIGS. 2, 3, 4 are perspective views of the swinging exerciser;

FIG. 5 is a partial exploded view of the swinging exerciser;

FIGS. 6 and 7 are side views of the swinging exerciser; and

FIGS. 8 and 9 are perspective views of the swinging exerciser.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0003] Referring to FIGS. 1-4, a swinging and climbing or elevating exerciser comprises a frame 10 including an arc or curved track 11 formed in the rear portion 12, a column 13 extended from the front portion 14, a handle 15 mounted on top of the column 13 for supporting the user 80 (FIGS. 6, 7).

[0004] An anchor 16 is mounted on the upper portion 17 of the column 13 (FIG. 1). A lever 30 includes an upper portion 31 having a barrel 32 which is attached on the upper portion 17 of the column 13 and engaged with the anchor 16 for anchoring the upper portion 31 of the lever 30 to the column 13, the lever 30 includes one or more (such as two) parallel arcs or curved rails 33 secured together.

[0005] The lever 30 includes one or more rollers 34 attached to the lower portion 35 and engaged with the track 11 for guiding the lever 30 to rotate relative to the column 13 and the track 11. A bar 36 is attached to the lower portion 35 of the lever 30 for coupling the rails 33 together and for supporting the rollers 34, and/or a tube 37 is attached to the upper portion 31 of the lever 30 for coupling the rails 33 of the lever 30 together.

[0006] A support 50 includes a casing 51 having one or more (such as two) shafts 52 attached to bottom, a roller 53 attached to each end of the shaft 52 and engaged with the rails 33 for guiding the casing 51 or the support 50 to move up and down along the rails 33 of the lever 30 (FIGS. 6, 7), one or more (such as two) rollers 54 attached to the bottom of the casing 51 and engaged with

the bottom of the rails 33, a cushion 55 mounted on the casing 51 for supporting the buttocks, the knee, the feet, or the other portions of the user 80.

[0007] In operation, the user may hold the handle 15 and may move the casing 51 or the support 50 or the lever 30 along the track 11 (FIGS. 2-4), or may move the casing 51 or the support 50 up and down along the rails 33 (FIGS. 5-7); or the user may move the casing 51 or the support 50 or the lever 30 along the track 11, and simultaneously, may move the casing 51 or the support 50 up and down along the rails 33 (FIGS. 8, 9).

[0008] As shown in FIGS. 1 and 5, a latch 60 may selectively lock the casing 51 or the support 50 to the rails 33 for preventing the casing 51 or the support 50 from moving up and down along the rails 33 inadvertently by children.

[0009] In one embodiment the exerciser includes a frame having a rear track and a front column. A handle is attached to the column for supporting the user. A lever is pivotally attached with one end at a portion of the column. The other end of the lever is movably engaged with the track of the frame and guided by the frame on a circular track around the column. A support for a user is slidably engaged with the lever and movable up and down along the lever and for allowing the user to conduct a swinging exercise around the column and/or climbing up and down along the lever to exercise or train either his upper muscle groups and/or his abdominal muscle groups with a single exercise machine.

Claims

1. An exerciser comprising:

- a frame (10) including a track (11),
 - a column (13) extended from a front portion (14) of the frame (10), and
 - a handle (15) attached to the column (13),
- wherein:

a lever (30) includes an upper portion (32) attached to an upper portion (17) of the column (13), and includes a lower portion (35) movably engaged with the track (11), and a support (50) is slidably engaged with the lever (30) for moving up and down along the lever (30).

2. An exerciser as claimed in claim 1, wherein the lever (30) has a barrel (32) attached to the upper portion and engaged with the column.

3. An exerciser as claimed in claim 1 or 2, wherein the column (13) includes an upper anchor (17) engaged with the barrel.

4. An exerciser as claimed in one of claims 1 to 3,

wherein the lever includes at least one roller (34) engaged with the track (11).

5. An exerciser as claimed in one of claims 1 to 4,
wherein the support (50) includes a casing (51) en- 5
gaged with the lever (30), and a cushion disposed
on the casing.
6. An exerciser as claimed in one of claims 1 to 5,
wherein the support (50) includes at least one roller 10
(54) attached to the casing (51) and engaged with
the lever (30).
7. An exerciser as claimed in one of claims 1 to 6,
wherein the lever (30) includes two parallel rails (33) 15
secured together, and the support (50) includes two
shafts attached to the casing (51), and at least one
roller (54) attached to each of the shafts and engaged
with the rails (33) of the lever. 20
8. An exerciser as claimed in one of claims 1 to 7,
wherein the support (50) includes at least one roller
(54) attached to the casing and engaged with a bot-
tom of the rails (33) of the lever. 25

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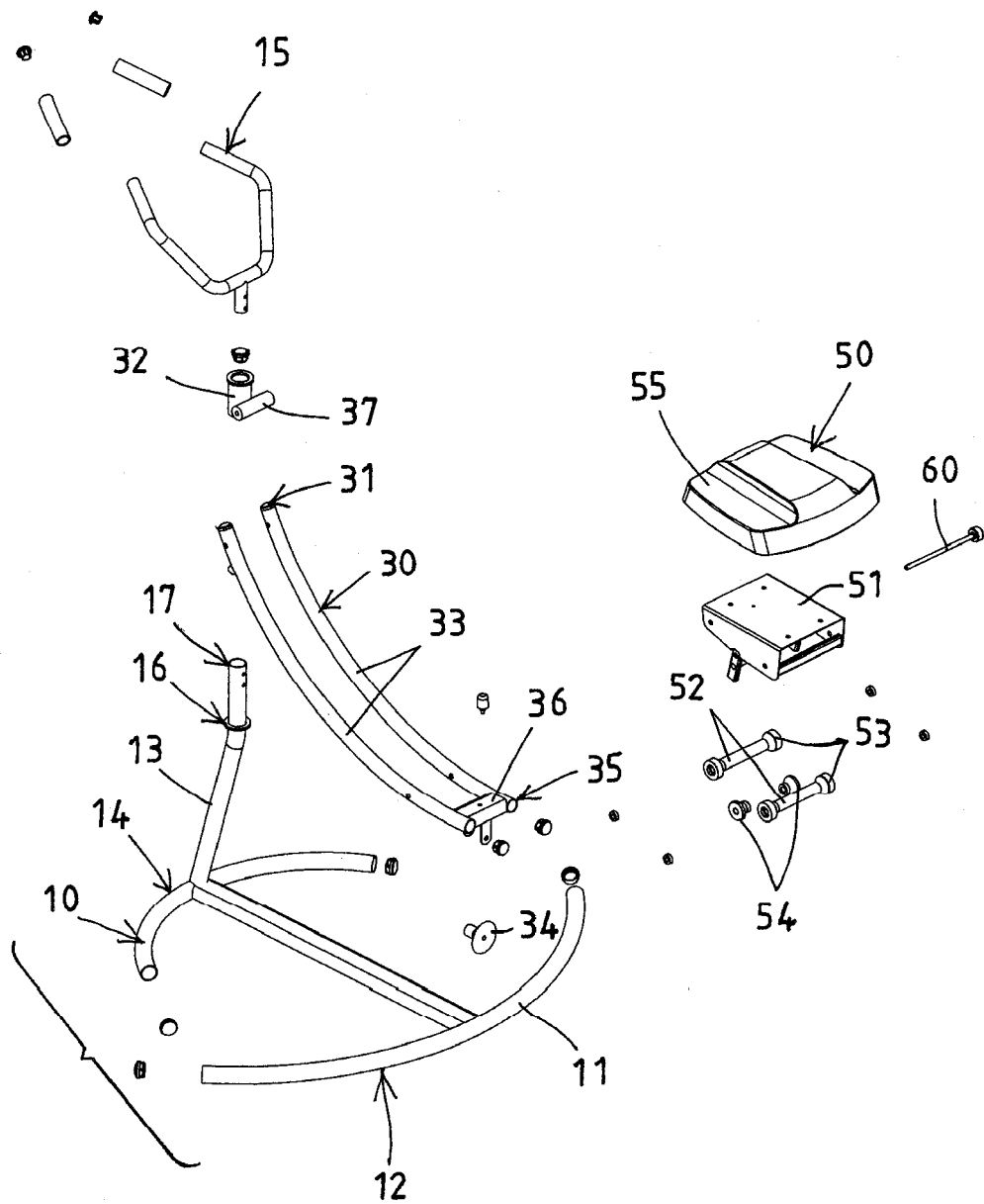


FIG. 1

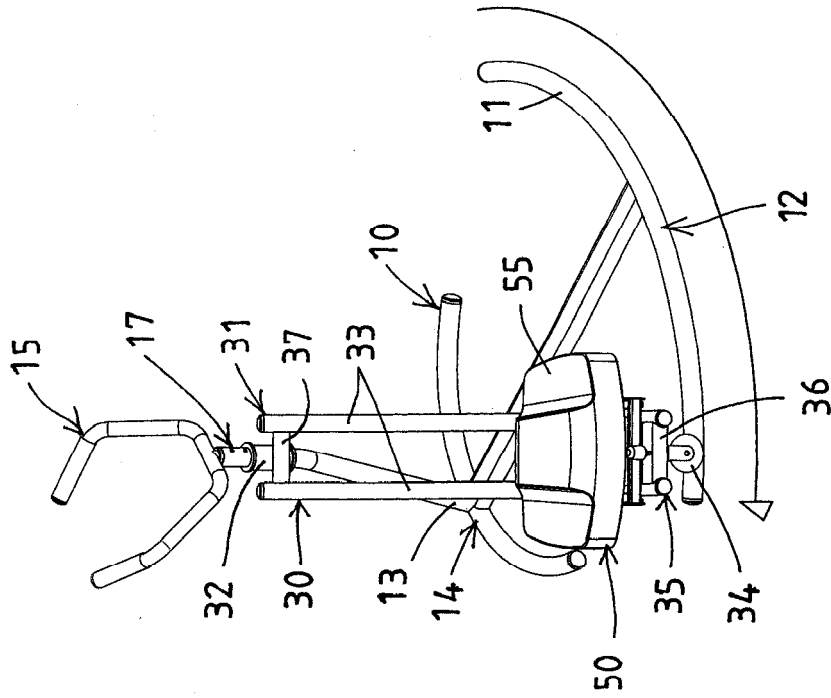


FIG. 3

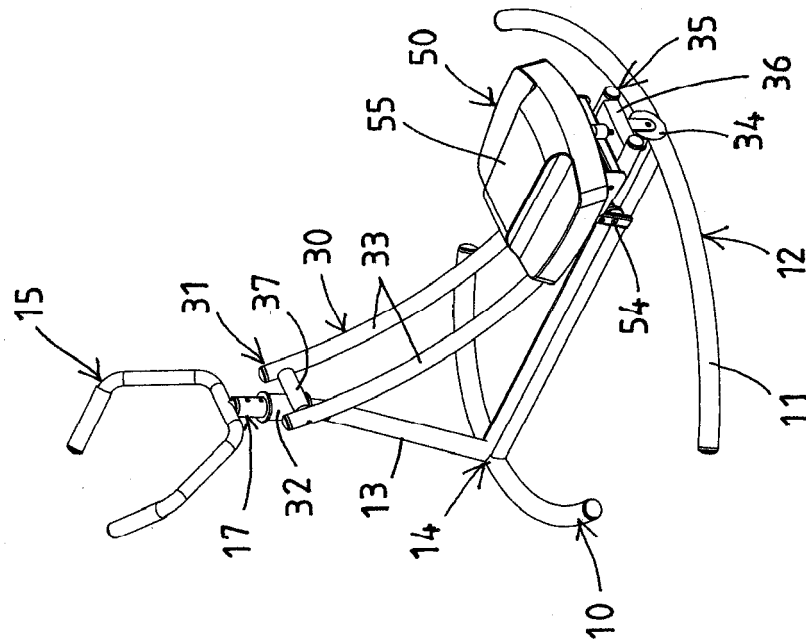


FIG. 2

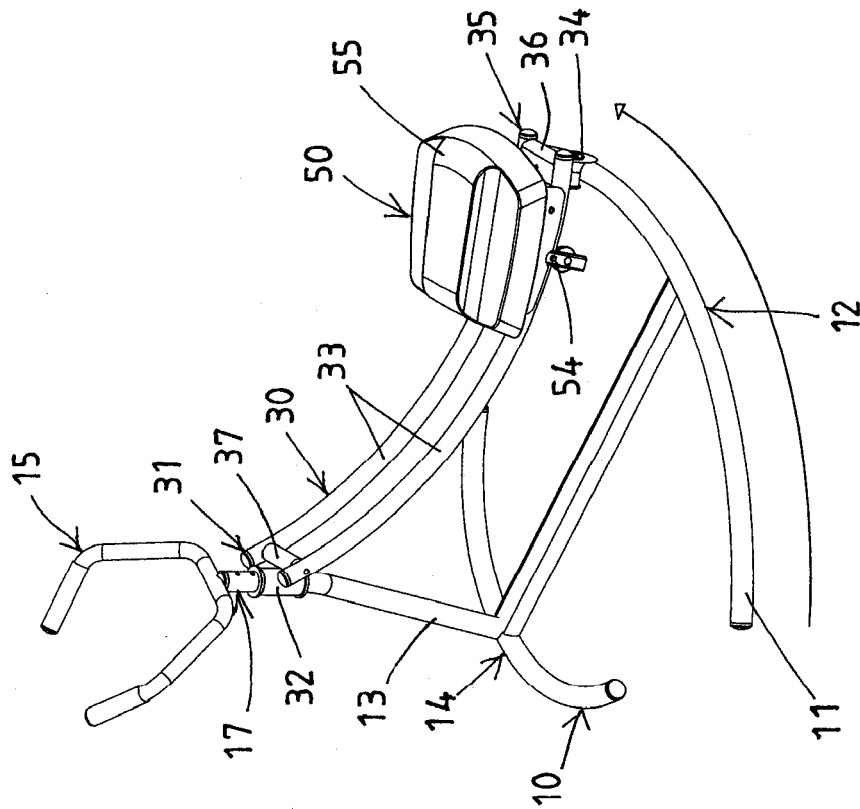


FIG. 4

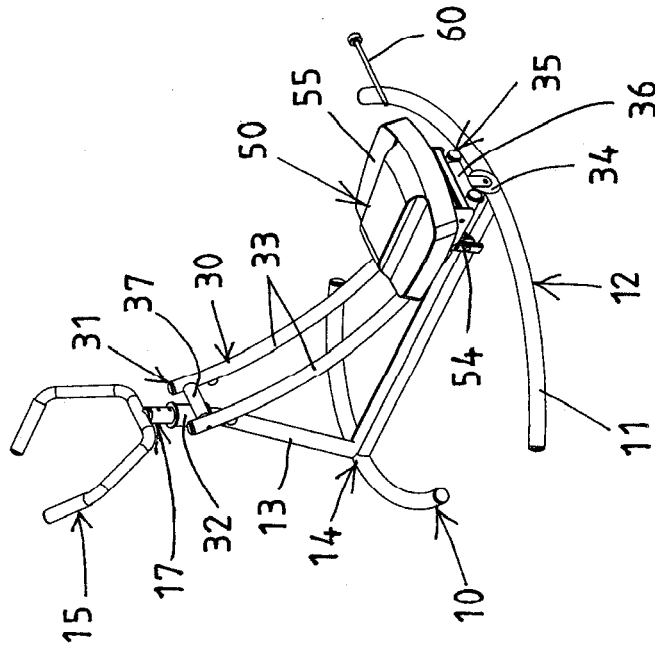


FIG. 5

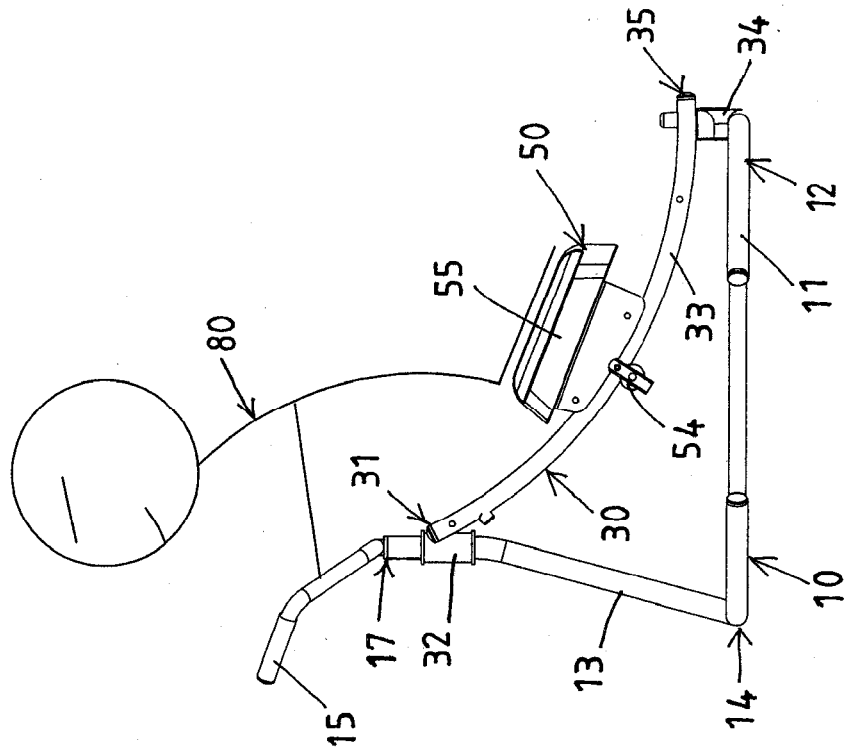


FIG. 7

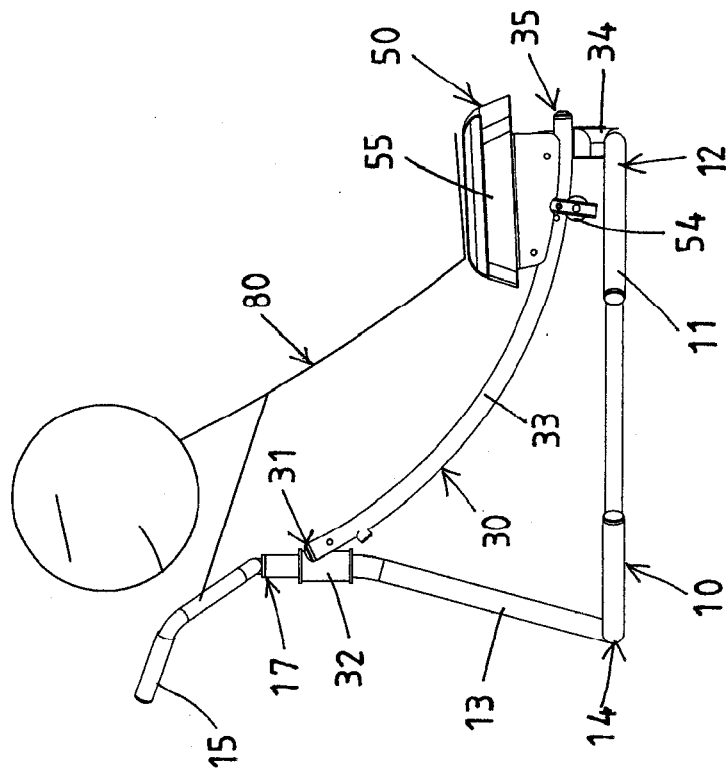


FIG. 6

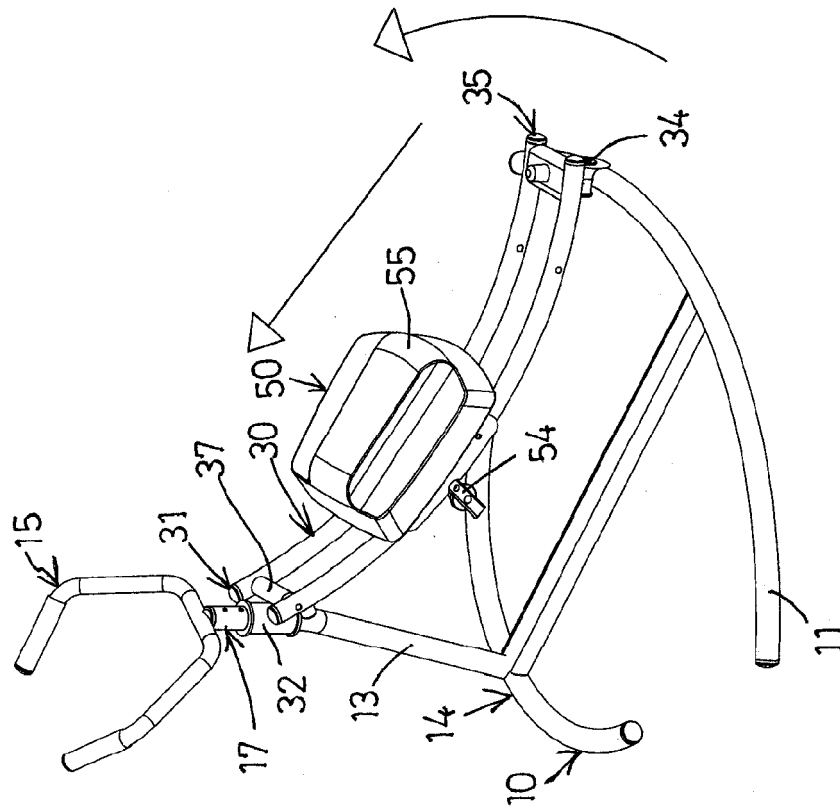


FIG. 8

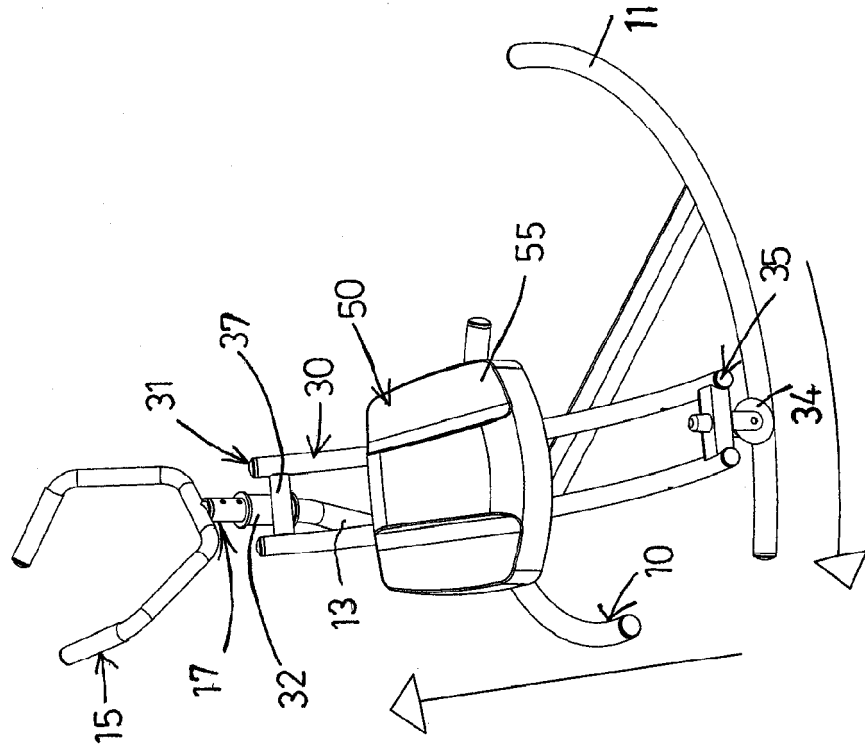


FIG. 9



EUROPEAN SEARCH REPORT

Application Number
EP 10 19 1229

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2004/248705 A1 (RODGERS ROBERT E [US] RODGERS JR ROBERT E [US]) 9 December 2004 (2004-12-09) * figure 11 *	1-8	INV. A63B23/02 A63B22/20
X	----- US 7 637 848 B1 (CHANG SHAO-TSU [TW]) 29 December 2009 (2009-12-29) * the whole document *	1-8	
X	----- US 2001/001304 A1 (MARESH JOSEPH D [US] ET AL) 17 May 2001 (2001-05-17) * the whole document *	1-8	
X	----- US 6 786 847 B1 (MORGAN CURT [US] ET AL) 7 September 2004 (2004-09-07) * the whole document *	1-8	
			TECHNICAL FIELDS SEARCHED (IPC)
			A63B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 31 May 2011	Examiner Millward, Richard
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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

EP 10 19 1229

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
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31-05-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004248705 A1	09-12-2004	NONE	
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US 2001001304 A1	17-05-2001	NONE	
US 6786847 B1	07-09-2004	NONE	