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(52) UK CL (Edition X):
A6M MBL

(56) Documents Cited:
US 4185819 A **US 4176471 A**
US 2891793 A **US 2017536 A**
US 20030104910 A1 **US 20030022760 A1**
US 20020098947 A1

(58) Field of Search:
UK CL (Edition W) **A6M**
INT CL⁷ **A63B, A63C, E06C**
Other: **WPI, EPODOC, PAJ. Internet keyword search**
using Google (RTM).

(54) Abstract Title: **Exercise mat in the form of a horizontal ladder**

(57) An exercise pad or mat comprises a slip-proof band 1 which can be rolled up e.g. for storage (see fig. 4) and, in use, forms a horizontal exercise ladder defined by apertures 13 and partitions 14. The slip-proof band may comprise a first face adapted to abut a supporting surface and a second face having friction-increasing pimples (11, fig. 2). The slip-proof band may also include a reinforcing fibre layer (12, fig. 2), and the exercise pad may be used for practicing steps, warming up etc.. In a second embodiment, the exercise pad has widened partitions (14A, fig. 6) which allow a user to stretch his/her vertebrae when lying down. In a third embodiment, the exercise pad has elongated apertures (13B, fig. 7) suitable for users having longer legs are requiring a greater step.

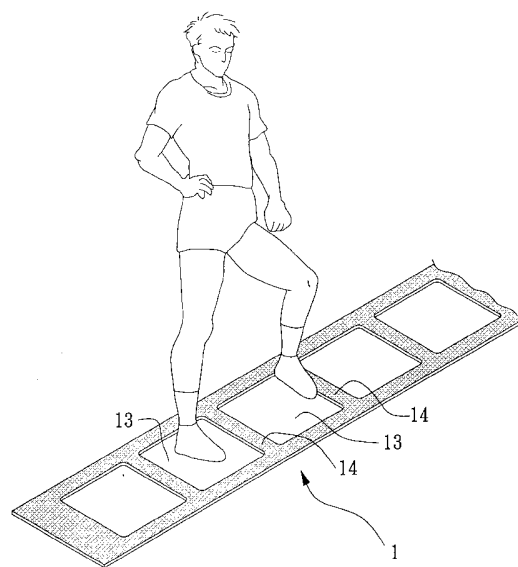


FIG. 3

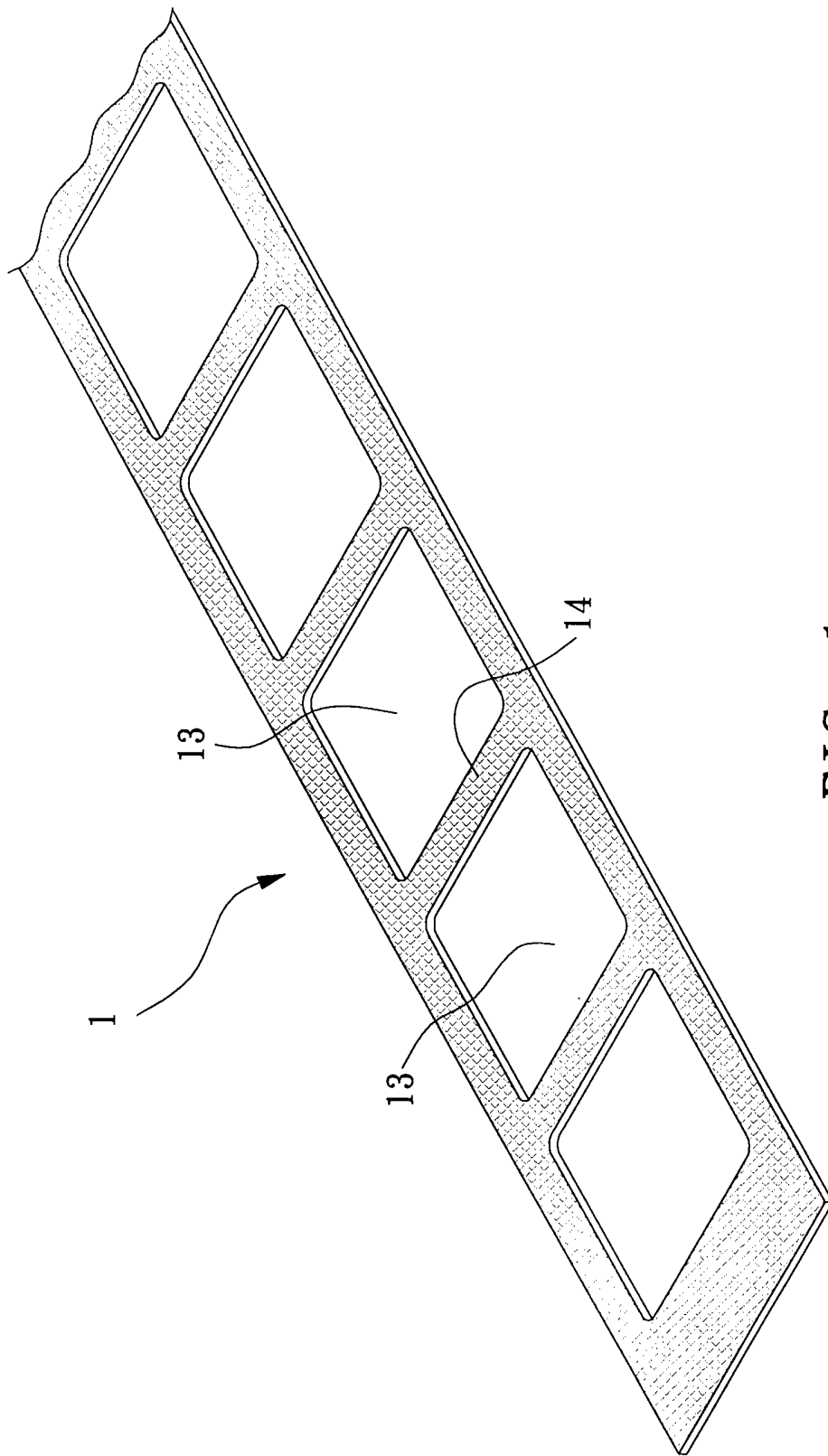


FIG. 1

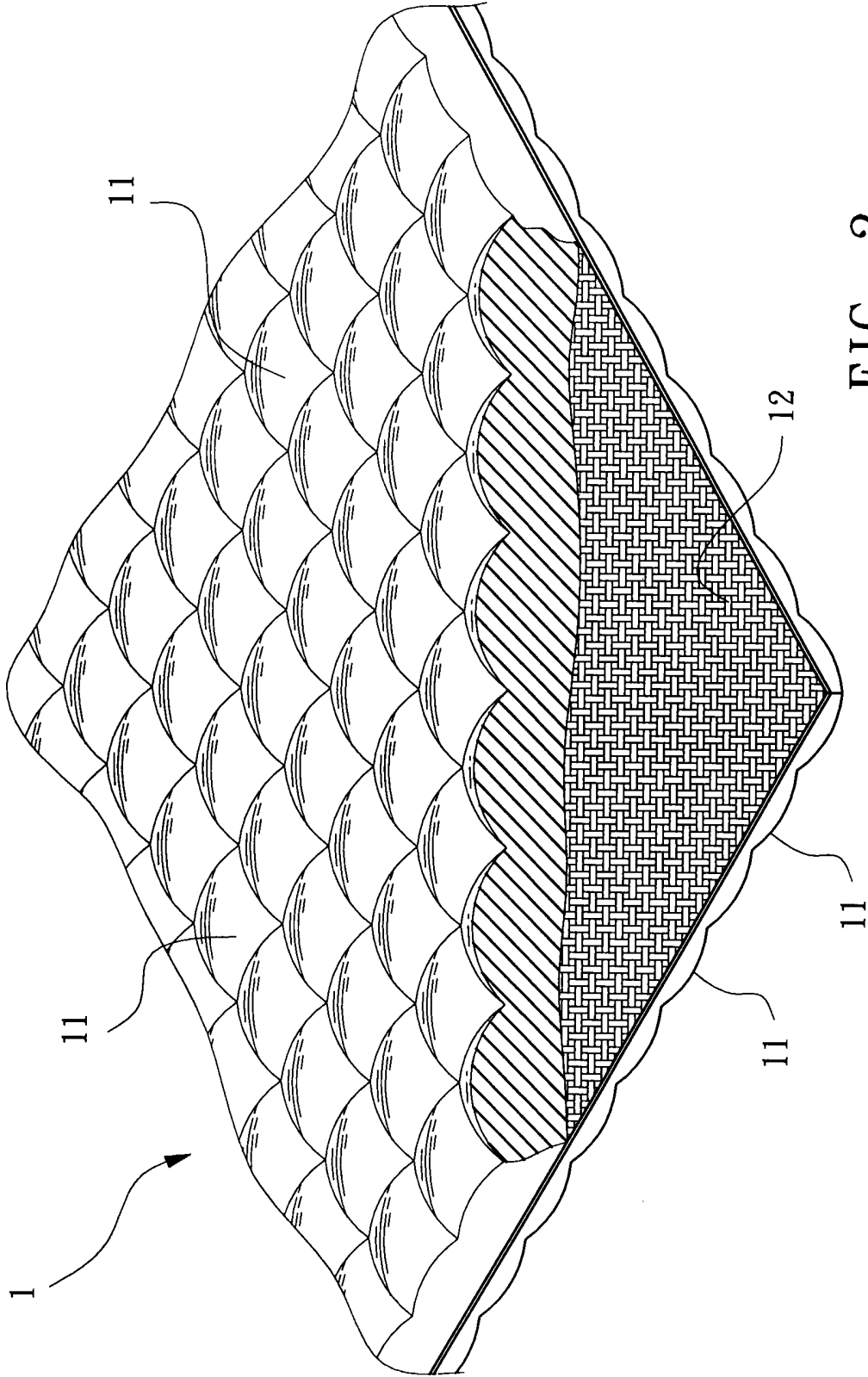


FIG. 2

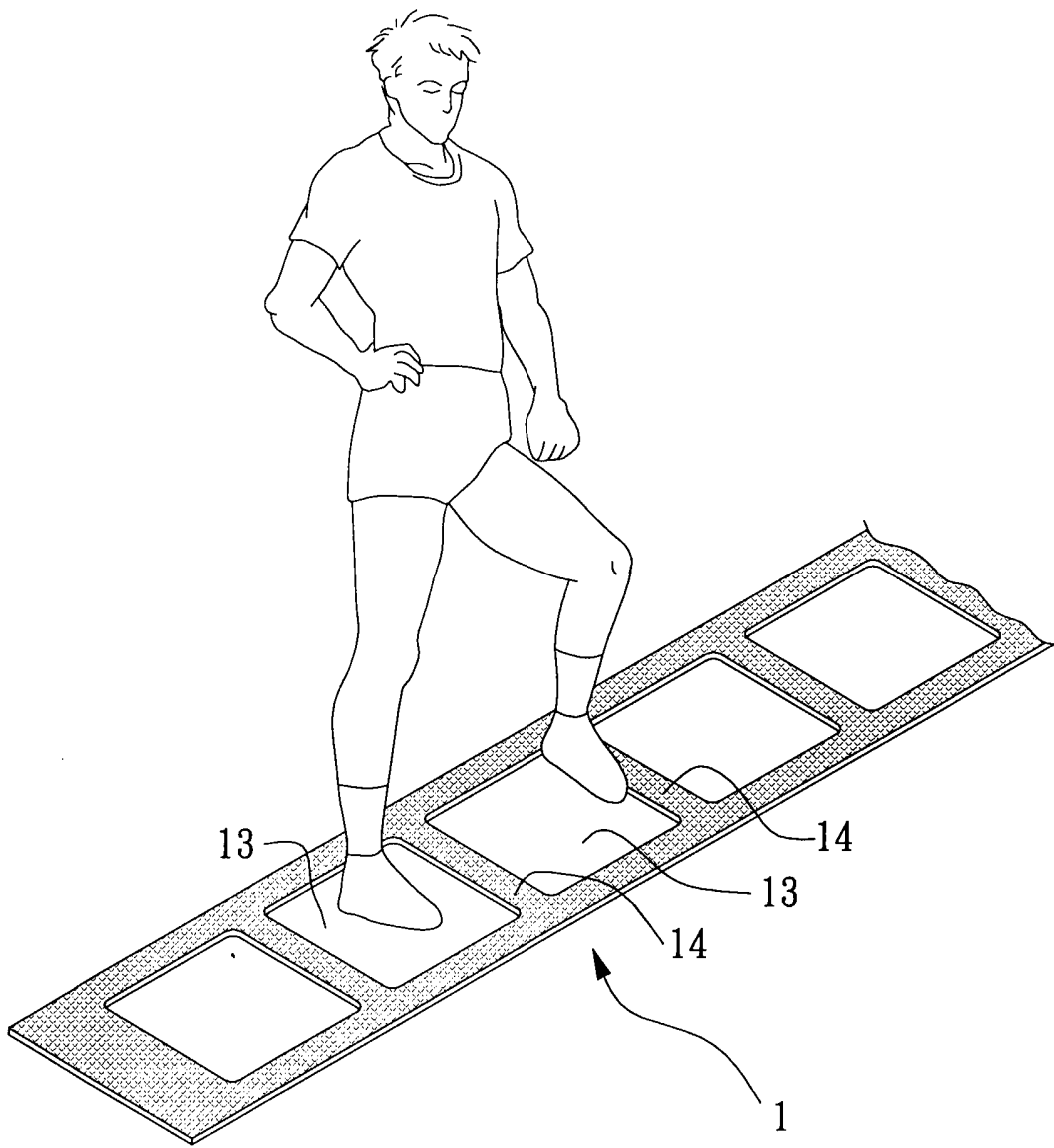


FIG. 3

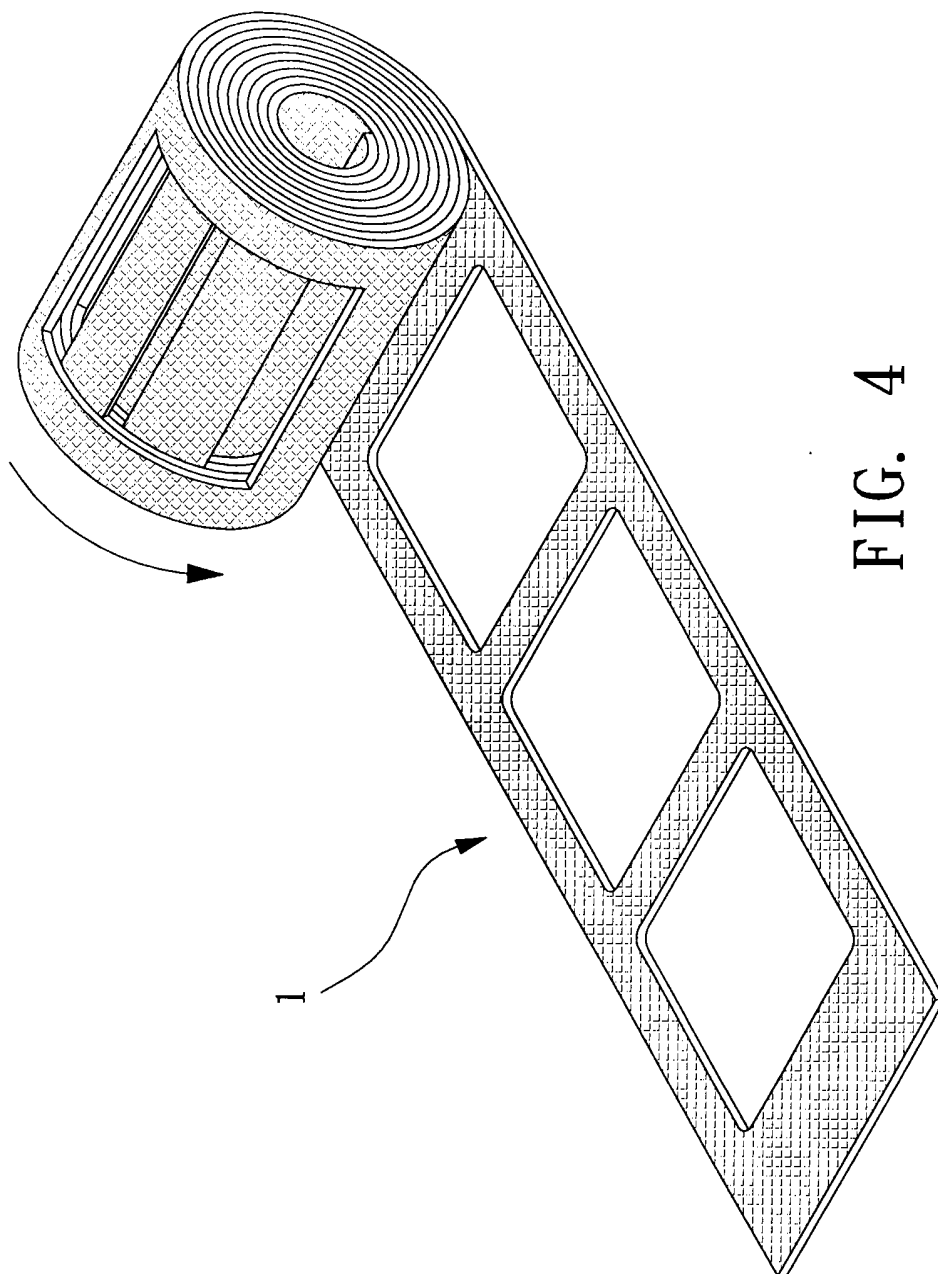


FIG. 4

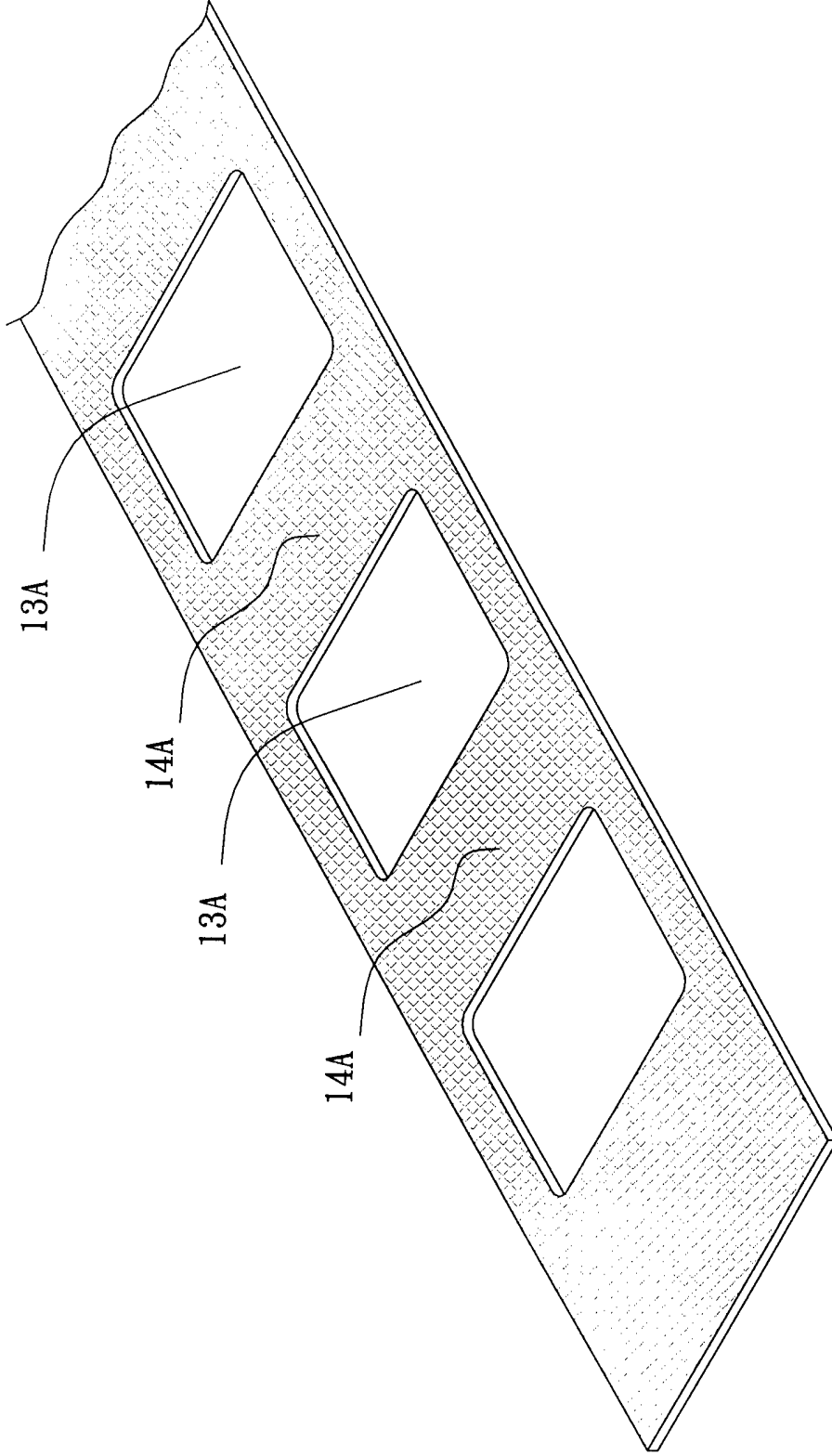


FIG. 5

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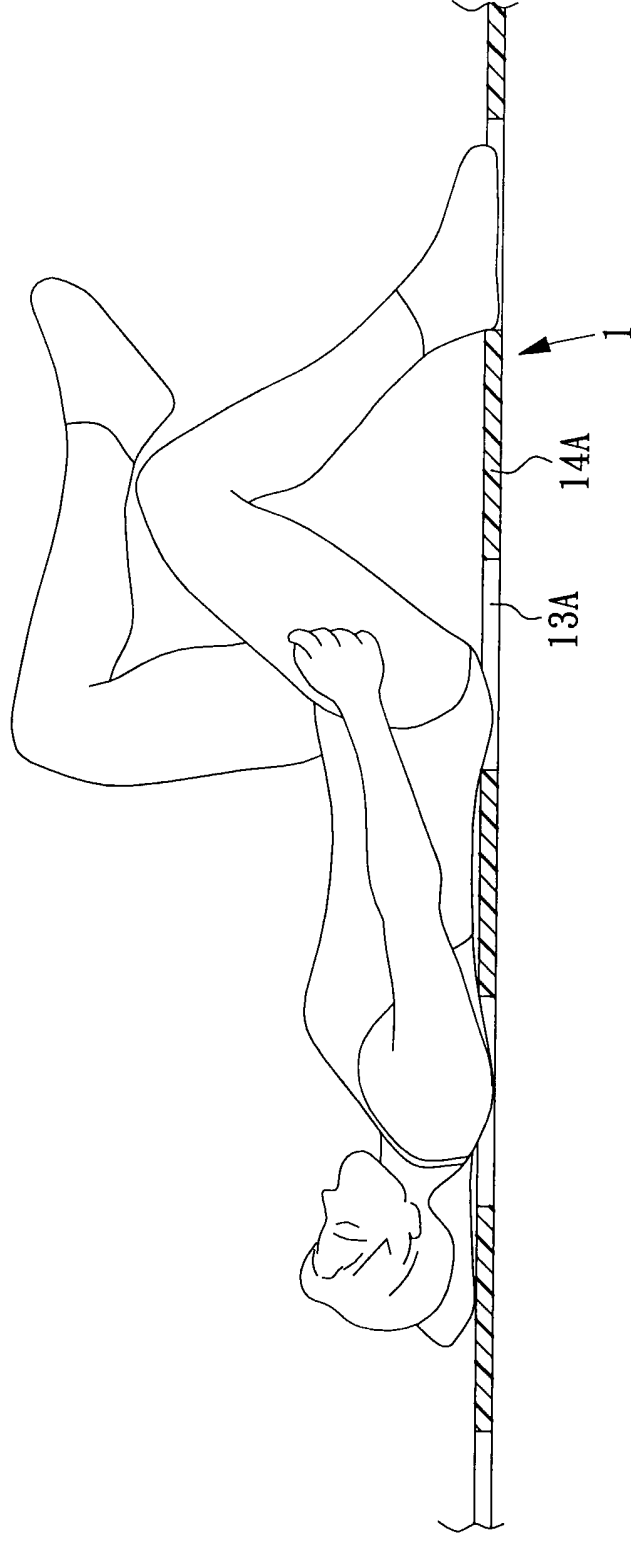


FIG. 6

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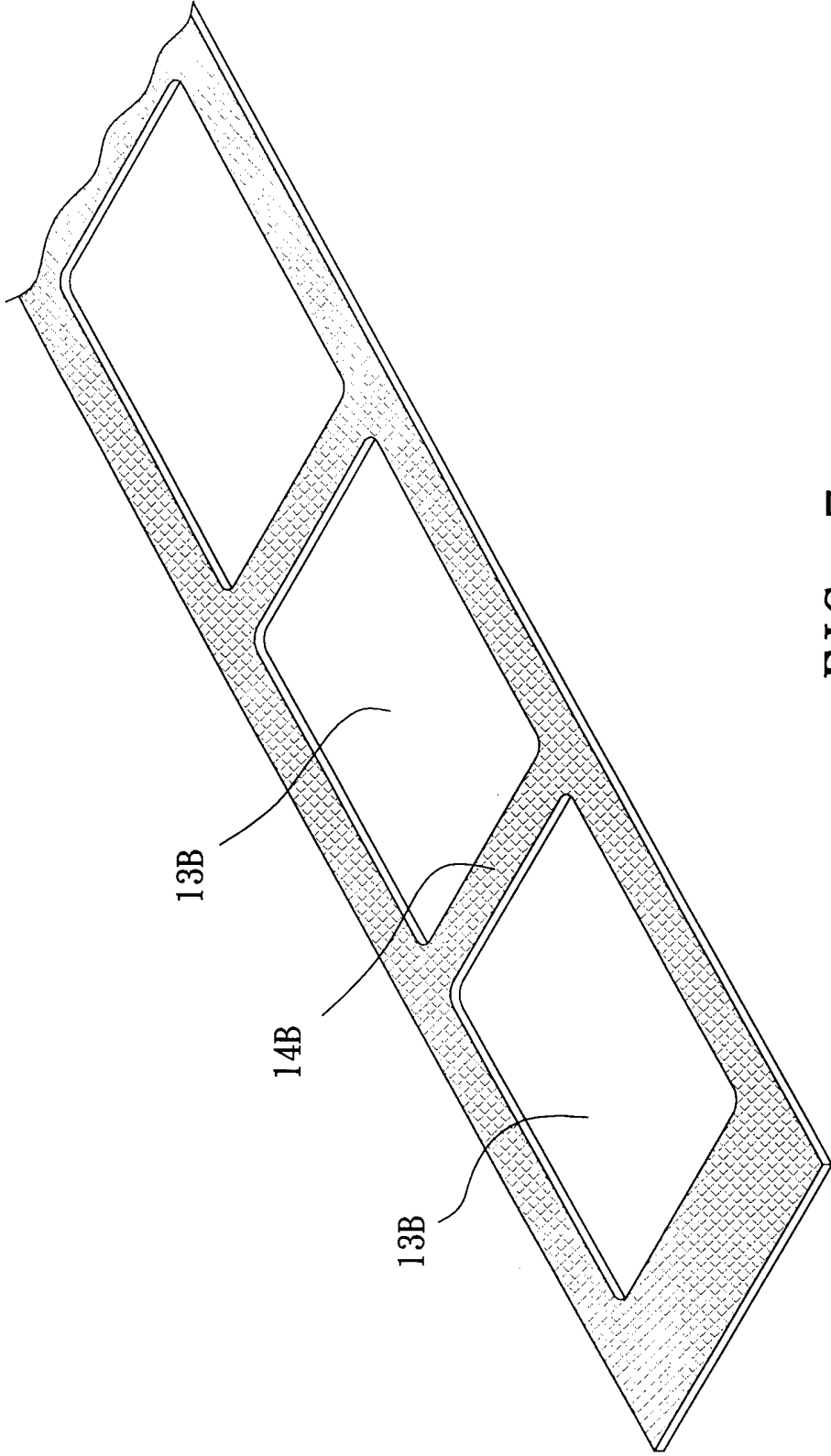


FIG. 7

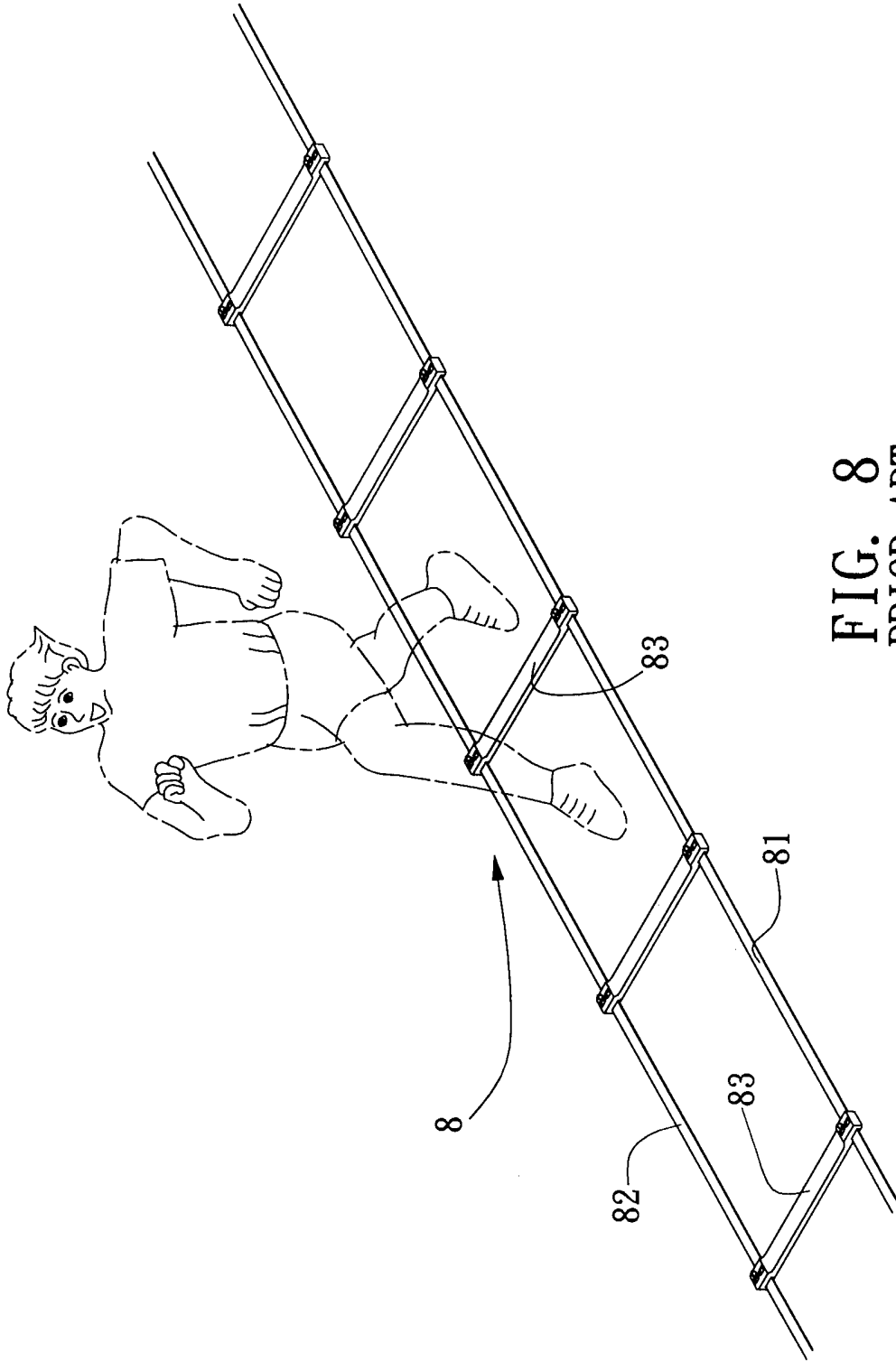


FIG. 8
PRIOR ART

EXERCISE PAD

1. Field of the Invention

The present invention relates to an exercise pad, and more particularly to an exercise pad that is easily rolled for being stored and slip-proof.

2. Description of Related Art

A conventional step exerciser (8) in accordance with the prior art shown in Fig. 8 comprises a first strap (81) and a second strap (82) parallel to the first strap (81). Multiple partitions (83) are equally separately mounted to the first strap (81) and the second strap (82). Each partition (83) has two opposite ends respectively secured on the first strap (81) and the second strap (82) such that the multiple partitions (83) are parallel to one another.

The conventional step exerciser (8) is designed for runner to practice his/her steps and for outdoor use, especially used on a track. The conventional step exerciser (8) has no slid-proof structure such that the step exerciser (8) is unstable when being indoors used on the flooring. The user may slip and fall when step on the straps (81, 82) or the partitions (83). Furthermore, each partition (83) needs to be detached from the two straps (81, 82) and piled up a bracket before storing. It is very inconvenient.

However, a suitable auxiliary device is necessary to some indoor exercise, such as aerobic dance, for training the steps of the exerciser.

The present invention has arisen to mitigate and/or obviate the disadvantages of the conventional step exerciser (8).

The main objective of the present invention is to provide an improved exercise pad that is easily rolled for being stored and slip-proof.

To achieve the objective, the exercise pad in accordance with the

present invention comprises a slip-proof band that is made of soft foamed material and can be rolled as a column. The slip-proof band includes a first face adapted to abut a supporting surface, such as flooring, and a second face having multiple protuberances, bumps or pimple-like structures, hereinafter referred to simply as “pimples”, formed thereon for promoting a surface friction of the slip-proof band. A fiber layer is situated in the slip-proof band for promoting a toughness of the slip-proof band. The slip-proof band includes a series of apertures defined therein along an axis of the slip-proof band and a partition formed between every two adjacent apertures for user to practice his/her steps.

Further benefits and advantages of the present invention will become apparent after a careful reading of the detailed description with appropriate reference to the accompanying drawings.

IN THE DRAWINGS

Fig. 1 is a perspective view of an exercise pad in accordance with the present invention;

Fig. 2 is a partially enlarged perspective view in partial cross-section of the exercise pad in Fig. 1;

Fig. 3 is a perspective schematic view of the exercise pad in Fig. 1;

Fig. 4 is a perspective operational view of the exercise pad in Fig. 1 for showing how to roll the exercise pad of the present invention;

Fig. 5 is a perspective view of a second embodiment of an exercise pad in accordance with the present invention;

Fig. 6 is a plan schematic view of the exercise pad in Fig. 5;

Fig. 7 is a perspective view of a third embodiment of an exercise pad in accordance with the present invention; and

Fig. 8 is a perspective schematic view of a conventional step exerciser in accordance with the prior art.

Referring to the drawings and initially to Figs. 1 and 2, an exercise pad in accordance with the present invention comprises slip-proof band (1) that is made of soft foamed material, such as a foam EVA or a foam rubber, and can be rolled as a column. The slip-proof band (1) includes a first face adapted to abut a supporting surface, such as flooring, and a second face having multiple pimples (11) formed thereon for promoting a surface friction of the slip-proof band (1). A fiber layer (12) is situated in the slip-proof band (1) for promoting a toughness of the slip-proof band (1). The slip-proof band (1) includes a series of apertures (13) defined therein along an axis of the slip-proof band (1) and a partition (14) formed between every two adjacent apertures (13) for user to practice his/her steps.

With reference to Fig. 3, the exercise pad of the present invention is unfolded on the flooring and forms a certain friction between the slip-proof band (1) and the flooring. The series of pimples (11) provides a suitable friction that can prevent the user from slipping and falling when stepping on the slip-proof band (1).

The series of apertures (13) are provided for user to step into the slip-proof band (1) for training his/her steps during moving. Furthermore, the user can step on the partitions (14) to control his/her step range in a fixed distance.

As described above, the slip-proof band (1) of the present invention is provide for user to stably step thereon such that the slip-proof band (1) can be used to train a runner and aerobic dance to make the user has a fixed step range.

The slip-proof band (1) can further provide to warm up body before operating a violent sport.

With reference to Fig. 4, the slip-proof band (1) is directly rolled as a column along the axis thereof before being stored because the slip-proof band
5 (1) is made of soft foamed material. It is a convenient design for storing.

With reference to Fig. 5 that shows a second embodiment of the present invention, the partitions (14A) of the present invention are widened, that is, the distance between every two adjacent apertures (13A) is widened. This embodiment of the present invention can be provided to a user who has a long
10 leg or needs a great step range. With reference to Fig. 6, the user can stretch his/her vertebra when lie down on the slip-proof band (1) and make his/her vertebra abut against one of the widened partitions (14A).

With reference to Fig. 7 that shows a third embodiment of the present invention, the aperture (13B) is elongated, that is, the distance of every two
15 adjacent partitions (14B) is elongated. This embodiment of the present invention can be provided to a user who has a long leg or needs a great step range when stepping on the partition (14B).

Although the invention has been explained in relation to its preferred embodiment, it is to be understood that many other possible modifications and
20 variations can be made without departing from the spirit and scope of the invention as hereinafter claimed.

CLAIMS:

1. An exercise pad comprising a slip-proof band that can be rolled as a column and includes a series of apertures defined therein along an axis of the slip-proof band and a partition formed between every two adjacent apertures for
5 user to practice his/her steps.

2. The exercise pad as claimed in claim 1, wherein the slip-proof band comprises a first face adapted to abut a supporting surface and a second face having multiple pimples formed thereon for promoting a surface friction of the slip-proof band.

10 3. The exercise pad as claimed in claim 1, wherein the slip-proof band comprises a fiber layer situated therein for promoting a toughness of the slip-proof band.

4. The exercise pad as claimed in claim 2, wherein the slip-proof band comprises a fiber layer situated therein for promoting a toughness of the
15 slip-proof band.

5. An exercise pad and adapted to operate substantially as hereinbefore described with reference to Figs. 1 to 7 of the accompanying drawings.

6. An exercise pad as described herein and illustrated with reference to the drawings.



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Application No: GB0405436.7

Examiner: Mr Brendan Donohoe

Claims searched: All

Date of search: 30 June 2004

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular reference
X	1-4	US 2891793 A (MUDRY) - See whole document, especially col 1 lines 36-39 & 53-60, and col 2 lines 19-30.
X	1-4	US 2017536 A (HASE) - See whole document, especially fig 1, col 1 lines 28-32, and col 2 lines 10-18.
X	1-4	US 4185819 A (HARTLEY) - See whole document, especially fig's 1, 3A & 3B.
X	1-4	US 2003/0022760 A1 (CHEN WU) - See especially fig 21.
X	1-4	US 4176471 A (ROE) - See whole document.
X	1-4	US 2003/0104910 A1 (McCOY) - See especially line 2 of para 0035, and lines 1-3 of para 0037.
X	1-4	US 2002/0098947 A1 (BROWN) - See especially para 0021 and lines 7-9 of para 0030.

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.



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Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^W :

A6M

Worldwide search of patent documents classified in the following areas of the IPC⁰⁷

A63B; A63C; E06C

The following online and other databases have been used in the preparation of this search report

WPI, EPODOC, PAJ. Internet keyword search using Google (RTM).