



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
30.03.2005 Bulletin 2005/13

(51) Int Cl.7: **A63B 26/00**, A63B 22/16,
A63G 13/06

(21) Application number: **04445096.3**

(22) Date of filing: **16.09.2004**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL HR LT LV MK

(72) Inventors:
• **Sjöström, Sven-Ake**
578 00 Aneby (SE)
• **Granström, John**
578 33 Aneby (SE)

(30) Priority: **19.09.2003 SE 0302510**

(74) Representative: **Arwidi, Bengt et al**
Awapatent i Linköping AB
Gjuterigatan 9
553 18 Jönköping (SE)

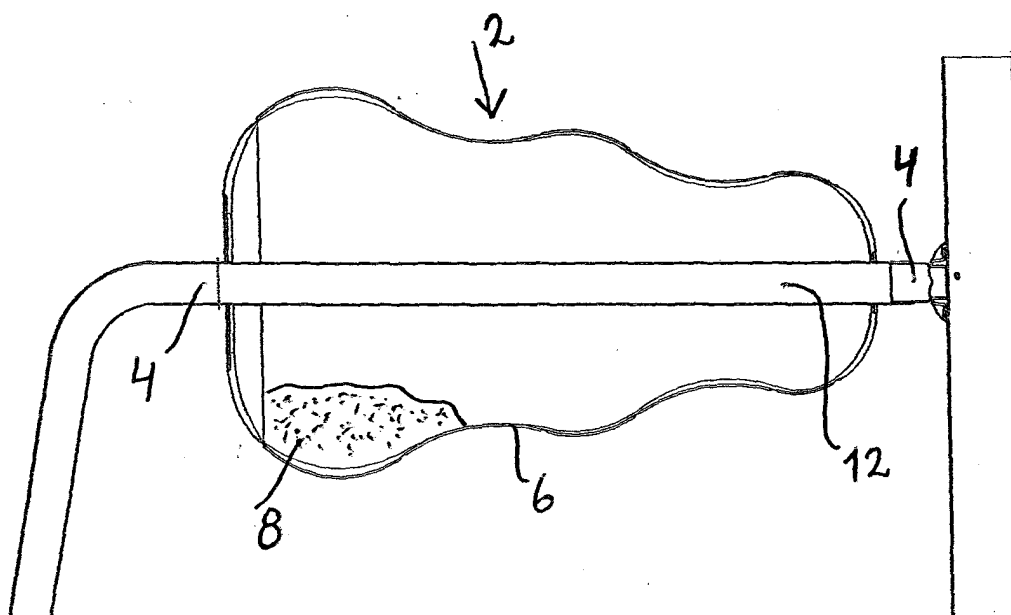
(71) Applicant: **HAGS Aneby AB**
578 23 Aneby (SE)

(54) **Playing and training appliance**

(57) The present invention relates to a playing and training appliance, which is characterised in that it comprises at least one closed body (2) with a central pivot shaft (4) which is essentially horizontal or is inclined less

than 45° to the horizontal plane. The closed body (2) is arranged to pivot freely on the central pivot shaft (4). The closed body (2) holds a ballast (8) damping the pivoting motion.

FIG. 2



Description

Field of the Invention

[0001] The present invention relates a playing and training appliance. The appliance is in the first place intended for use in playgrounds and similar environments, but can also be used in other places.

Background Art

[0002] An appliance according to the present invention comprises a closed body which is freely mounted in bearings so as to pivot when a user tries to sit on it, stand on it or run on it. The main function of the invention is for the user to try to ride on it and, as an element of competition, try to reach a certain position by pivoting the closed body under himself.

Summary of the Invention

[0003] An object of the present invention is to provide a playing and training appliance which

- is arranged to be adjusted to users of different ages and sizes
- is ergonomically correct
- offers a possible element of competition
- can be used separately or be combined with several such appliances
- gives the user a chance of training his coordination
- has tactile position indications which can be felt by a visually handicapped user
- satisfies all safety requirements that are placed on this type of product
- can be made in one piece (shape based on a cone)
- is of educational interest in terms of geometric shapes and power conditions.

[0004] According to the invention, this object is achieved by a playing and training appliance, which comprises at least one closed body with a central pivot shaft which is essentially horizontal or is inclined less than 45° to the horizontal plane. The closed body is arranged to pivot freely on the central pivot shaft. The closed body holds a ballast which affects the pivoting motion. The ballast can counteract and/or coact with the pivoting motion.

Brief Description of the Drawings

[0005] The invention will now be described in detail by means of a number of embodiments and with reference to the accompanying drawings in which

Fig. 1 is a side view of a closed body according to the invention,

Fig. 2 is a cross-section of the closed body in Fig.

1, freely mounted in bearings on a pivot shaft, the cross-section being taken along the pivot shaft, Fig. 3a is cross-section, perpendicular to the pivot shaft, of the closed body in Figs 1 and 2, Fig. 3b is a cross-section, perpendicular to the pivot shaft, of the closed body in Figs 1 and 2, and Fig. 4 illustrates two closed bodies according to the invention which are arranged with a common pivot shaft.

Description of Preferred Embodiments

[0006] The playing and training appliance according to the invention comprises at least one closed body which is designated 2 in the drawings. The closed body 2 is arranged with a pivot shaft 4, on which the closed body 2 pivots; the pivot shaft 4 will be described below. The closed body 2 is intended for a user in the first place to sit on, like on a horse, for instance in a straddling position. The closed body is also intended for a user to stand or run on.

[0007] In a first embodiment, the main shape of the closed body 2 is conical in relation to the pivot shaft 4, see Fig. 2. In another embodiment, the main shape of the closed body 2 can be cylindrical (not shown) in relation to the pivot shaft 4, or otherwise symmetrical or unsymmetrical, for instance triangular.

[0008] The closed body 2 is further marked with at least one indication 6 indicating where the user is intended to sit or stand. The indication 6 is formed as a recess or a plurality of recesses in the closed body 2. Thus the closed body 2 has a wavelike surface which makes it possible for at least two users to sit on it at the same time, in a wave shape each. Clear indications 6 give a more ergonomic fit for the user to sit, which is adjusted to different ages and sizes.

[0009] The closed body 2 is also provided with tactile marks which are arranged round the closed body 2. These marks give the user a possible element of competition, in which the user should pivot the closed body 2 under himself and reach a certain mark. The surface structure of the closed body 2 is designed so that the indications 6 are perfectly smooth while the other surfaces have a friction surface. The surfaces are prepared so that also a visually handicapped person can decide where the intended sitting surface is to be found.

[0010] In a first embodiment of the invention, see the Figures, the closed body 2 has five different extreme radii, see Figs 1 and 2. To make the closed body 2 pivot requires less physical efforts where the radius is greater. The differences between the varying power conditions between the radii affect the sitting, walking and running function.

[0011] The closed body 2 is advantageously made in one piece by rotation casting; in this way the closed body 2 will have no joints and the like, which may rip open or may scratch a user. The closed body 2 can also be made of two or more parts which can be joined, for instance

using glue, or the like.

[0012] The closed body 2 holds a freely movable ballast 8, which affects the pivoting motion and which preferably is sand or gravel. The ballast 8 can also consist of steel balls, different types of liquids, oil, polymer mixtures and the like. The ballast 8 has a weight of about 10-40 kg, preferably about 15-25 kg. The closed body 2 can on the inside be provided with low partition walls 10 or the like, which affect the ballast, "the sand is to swish about", see Fig. 3b. When the ballast 8 consists of sand or gravel, its angle of repose should not be affected by outer circumstances; for instance the ballast should not stick if it is wet and damp outside.

[0013] When testing the ballast 8, it has been found that the counteracting effect of the ballast 8 arises when the person "riding on" the closed body 2 tries to change his posture.

[0014] The closed body 2 is provided with a through tube 12. In both ends 14 of the through tube 12, bearings 16 are arranged, for instance slide bearings, in which bearings 16 the closed body 2 is mounted on the pivot shaft 4. The pivot shaft 4 may consist of, for example, some kind of prior-art stand, such as a bent steel tube. A strip is arranged between the bearing 16 and the pivot shaft 4 to have a damping and/or sealing effect, such as a stop strip, strip seal or the like. In one embodiment, the closed body 2 can be provided without the through tube 12. In that case, the bearings 16 are mounted directly on fastening elements (not shown) arranged on the closed body 2.

[0015] The central pivot shaft 4 is essentially horizontal. It may also be angled so as to be inclined, but less than 45° to the horizontal plane. The closed body 2 is arranged to pivot freely on the central pivot shaft 4. The ballast 8 held by the closed body 2 affects the pivoting motion by counteracting and, thus, damping it. The ballast 8 can also coact with the pivoting motion and, thus, reinforce it.

[0016] In another embodiment, two closed bodies 2 are arranged on a common pivot shaft 4 (see Fig. 4).

[0017] The present invention has now been described by means of a number of embodiments, and it should be understood that various modifications and supplements can be made within the scope of the invention as defined in the appended claims.

Reference Numerals	
Closed body	2
Pivot shaft	4
Indication	6
Ballast	8
Partition wall	10
Through tube	12
End	14
Bearing	16

Claims

1. A playing and training appliance, which comprises at least one closed body (2) with a central pivot shaft (4) which is essentially horizontal or is inclined less than 45° to the horizontal plane, said closed body (2) being arranged to pivot freely on said central pivot shaft (4), said closed body (2) holding a freely movable ballast (8) which affects the pivoting motion,
characterised in
that said ballast (8) is sand or gravel.
2. A playing and training appliance as claimed in claim 1,
characterised in
that said closed body (2) is freely mounted in bearings at least at two ends (14).
3. A playing and training appliance as claimed in claim 2,
characterised in
that said closed body (2) is freely mounted in bearings by at least one through hole (12) in the closed body (2).
4. A playing and training appliance as claimed in claim 1,
characterised in
that said ballast (8) has a weight of about 10-40 kg, preferably about 15-25 kg, which counteracts the pivoting motion.
5. A playing and training appliance as claimed in claim 1,
characterised in
that the main shape of said closed body (2) is conical in relation to the pivot shaft (4).
6. A playing and training appliance as claimed in claims 1-4,
characterised in
that the main shape of said closed body (2) is cylindrical in relation to the pivot shaft (4).
7. A playing and training appliance as claimed in claims 5 and 6,
characterised in
that said closed body (2) has a wavelike surface.
8. A playing and training appliance as claimed in claim 1,
characterised in
that said closed body (2) is marked with at least one indication (6) to indicate the intended sitting surface or position.

9. A playing and training appliance as claimed in claim 8,

characterised in

that said indication (6) is formed as a recess in said closed body (2).

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10. A playing and training appliance as claimed in claim 1,

characterised in

that said closed body (2) is rotationally cast.

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11. A playing and training appliance as claimed in claim 1,

characterised in

that two closed bodies (2) are arranged on a common pivot shaft (4).

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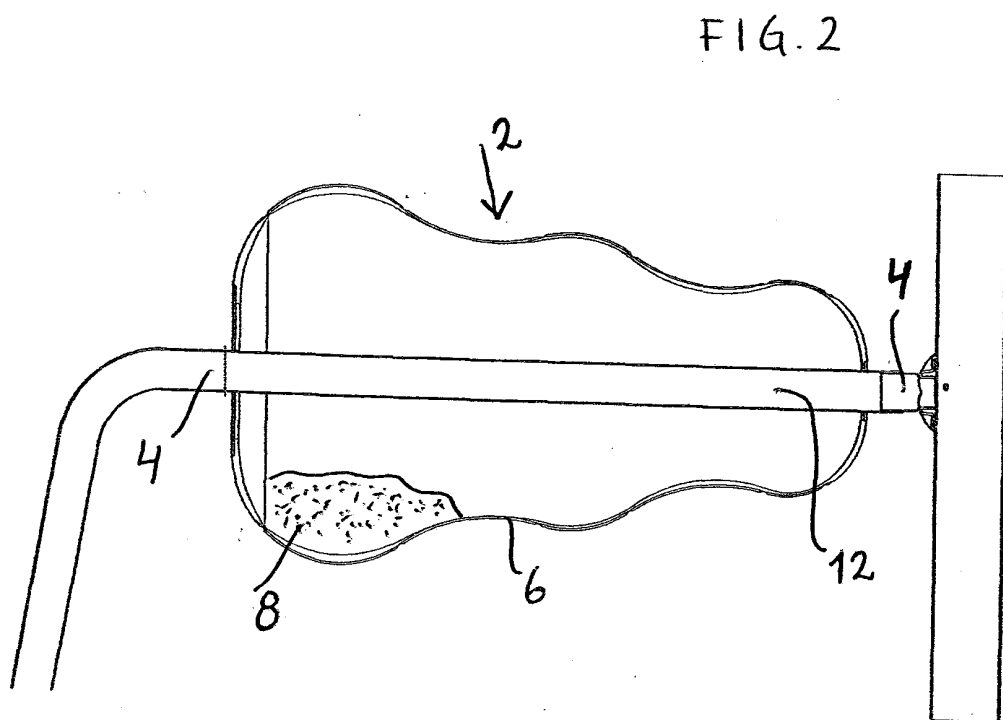
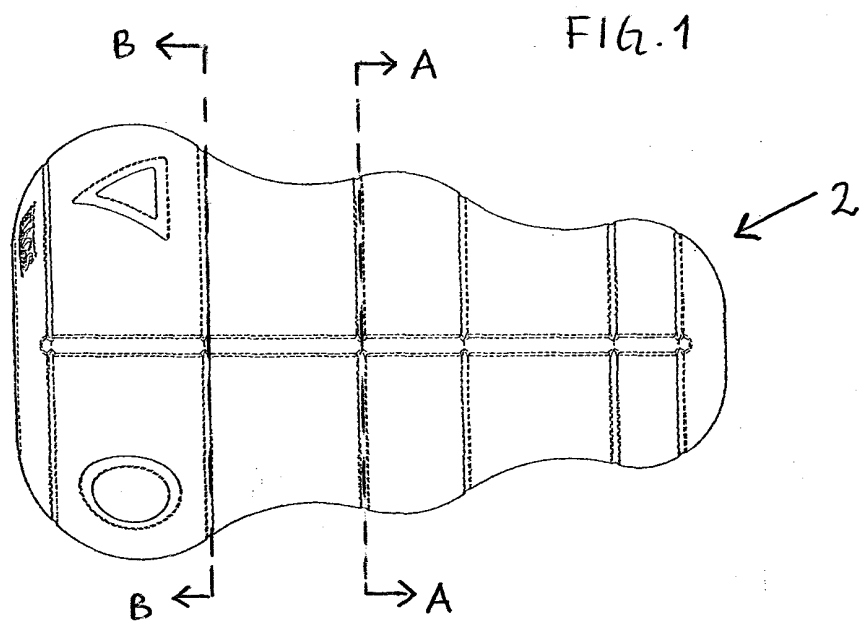


FIG. 3a

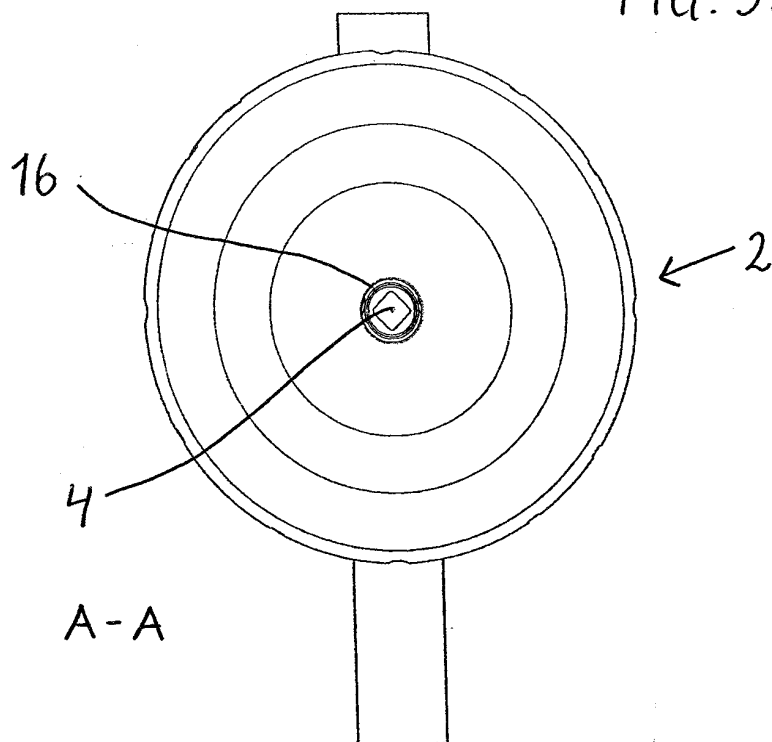


FIG. 3b

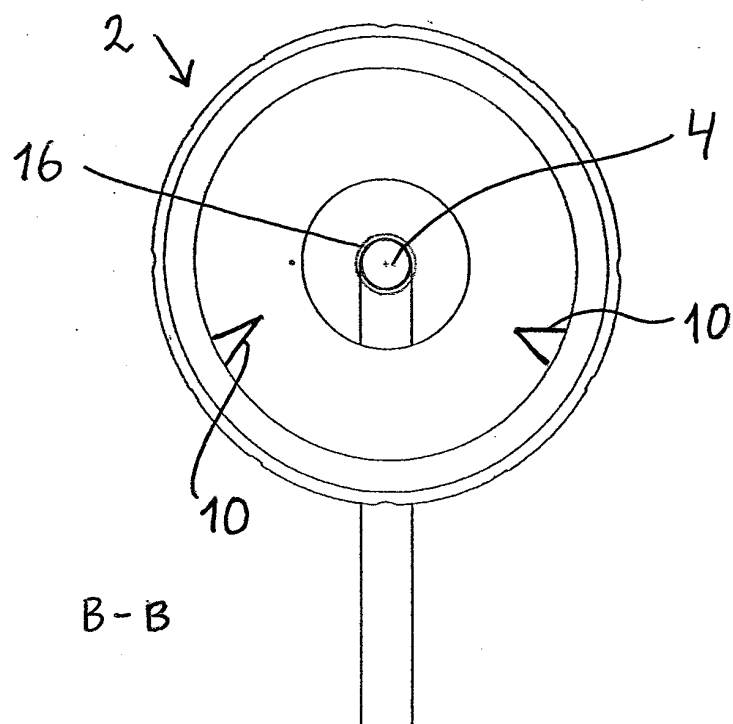
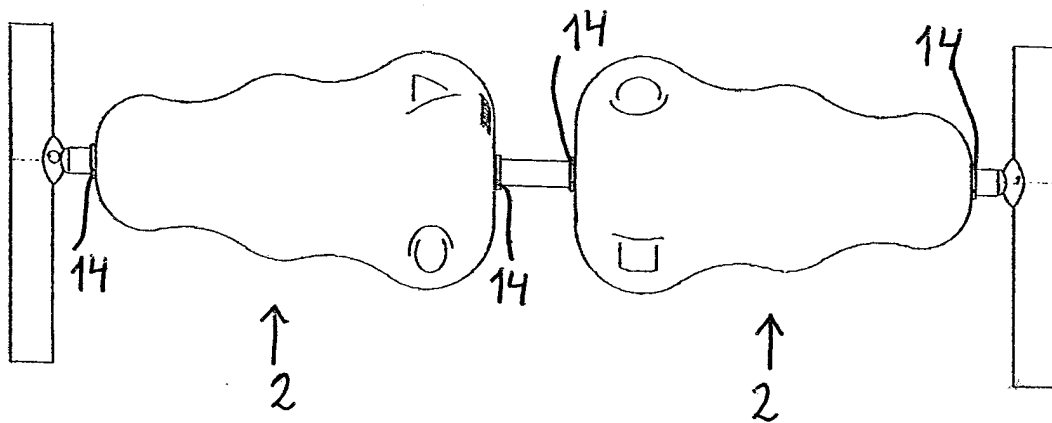


FIG. 4





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 04 44 5096

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 18 January 2005	Examiner Squeri, M
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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EPO FORM 1503 03 82 (P04C01)

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

EP 04 44 5096

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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