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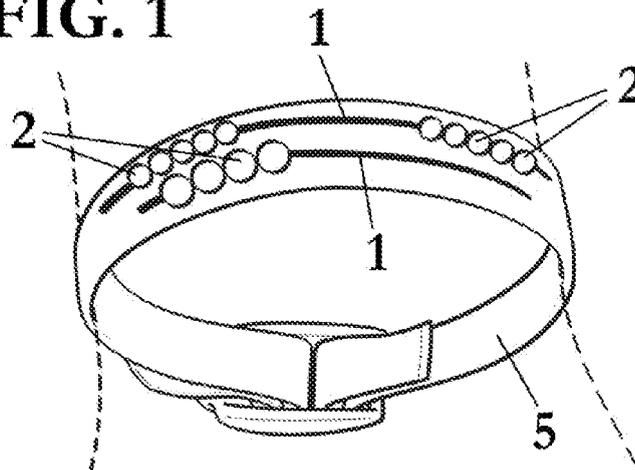
(54) **Counting device for swimming pools**

(57) The counting device for swimming pools, that counts swung swimming pool lengths, or two lengths, round trip, or exercises done in the swimming pools, and comprising placing means (3; 5), and it is **characterised in that** it comprises at least one guide (1) along which a plurality of counting elements (2) can slide. Said counting

elements (2) are preferably of two or more different kinds to each other.

It permits to obtain a counting device of the swung swimming pool lengths, or exercises done, very simple and cheap, completely mechanical and that is accessible for any swimmer.

FIG. 1



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Description

[0001] The present invention refers to a counting device for swimming pools that permits to count the number of swimming pool lengths that a swimmer has swung or the number of exercises done in a swimming pool.

BACKGROUND OF THE INVENTION

[0002] The swimmers and users of swimming pools, professional, schoolchildren or amateurs, try to count the number of swimming pool lengths that he/she wants to swim or the number of exercises that he/she must do, on his/her own or according to instructions from the instructor. There is also people that want to know how many swimming pool lengths has swim in a preset period of time.

[0003] In the practice, it has been proved that it is necessary the presence of any device for counting said swimming pool lengths already swung, during a training session or to control the physical exercise, and the fact that the swimmer must remember and count each time one or two swimming pool lengths, round trip, is uncomfortable, and it can be even unfeasible if the number of swimming pool lengths or exercises that are done is relatively high, or if the time for swimming is relatively long, because it is usual and easy to discount.

[0004] Now some different kinds of devices for the counting swimming pool lengths that a swimmer has swung are known.

[0005] E.g. US-7,081,809 discloses an electronic device that permits to count the number of swimming pool lengths swung by a swimmer. This device comprises a display and the swimmer must push a push-button each time he/she swims the distance equivalent to two swimming pool lengths. The drawback of this device is that its cost is high, mainly for amateur swimmers, because it is an electronic device.

[0006] Therefore, it is apparent the need for a new counting device for swimming pools that is extremely simple and with a very affordable cost, even for any amateur swimmer, that wants just to count the swimming pool lengths he/she has swung, not being necessary to provide any further information, obtaining just the essential information, the swung distance.

SUMMARY OF THE INVENTION

[0007] With the counting device of the invention said drawbacks can be solved, presenting other advantages that will be described.

[0008] The counting device for swimming pools, that counts swimming pool lengths swung by a swimmer, or two lengths, round trip, or exercises done in a swimming pool, and it comprises placing means, characterised in that it comprises at least one guide along which a plurality of counting elements can slide.

[0009] Thanks to this feature, it can be obtained a

counting device of the swimming pool lengths swung or exercises done, very simple and cheap, completely mechanical and that any swimmer can use, including amateur swimmers, schoolchildren and users of the swimming pool.

[0010] Advantageously, said counting elements can be of the same kind or of two or more different kinds to each other, and can be placed in one or several guides, so that more swimming pool lengths can be counted with a lower number of counting elements, because e.g. a kind of counting elements can count the tens and the other kind can count the units of the quantity of swung lengths, or one kind can count a kind of exercise and the other kind the swimming style for each length, and other ones another kind of exercise or swimming style.

[0011] As different kinds of counting element is meant that they have different sizes, textures or colours.

[0012] According to a first embodiment, said placing means comprises a belt or bracelet-like band, and according to a second embodiment, said placing means comprises a pair of suction pads to be attached to the wall of the swimming pool and telescopic joint of the guide, that permits to lengthen it enough to guarantee that once the first suction pad is attached at the centre of a tile, the second suction pad is always attached at the centre of a tile, and not at a joint, and to guarantee that it works properly, and at the same time the joint of the guide is the divider of the two kinds of counting elements.

[0013] Advantageously, in the first embodiment, the friction needed to prevent the accidental movement of said counting elements along said guide is obtained because the band and the guide are flexible, and once the device is placed in position, they adapt at the same time to the perimeter of the waist and wrist, providing a stress enough between both components, so that the counting elements are relatively retained between the guide and the band, preventing the accidental movement of them, not preventing their voluntary movement.

[0014] Preferably, said counting elements are spheres or disks provided with a through hole for said guide.

[0015] If wished, said guide can comprise one divider or more, that separates said counting elements into groups, so that their function is the same as the two or more different kinds of counting elements, i.e. to provide the minimum number of counting elements to count a great quantity of lengths swung or exercises done.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] For a better understanding of what has been disclosed, some drawings are attached in which, diagrammatically and only as a non-limitative example, a practical case of embodiment is shown.

[0017] Figs. 1 and 2 are perspective views of two embodiments of the counting device for swimming pools of the present invention, according to a first version; and

[0018] Fig. 3 is a perspective view of an embodiment

of the counting device for swimming pools of the present invention, according to a second version.

DESCRIPTION OF PREFERRED EMBODIMENTS

[0019] In Fig. 1 is shown a first embodiment of the counting device for swimming pools of the present invention. As stated previously, the counting device of the present invention is used to count the number of swimming pool lengths, or two lengths, round trip, that a swimmer has swung, or the quantity of exercises he/she has done.

[0020] In this first embodiment, the device of the present invention comprises a band 5 provided with a pair of guides 1 along which a plurality of counting elements 2 can slide.

[0021] The friction necessary that prevents the accidental sliding of the counting elements 2 along the guides 1 is obtained because the band 5 and the guides are flexible, and when the device is placed in position, they are adapted together to the radius of the wrist, providing the necessary stress between both components, the guides 1 and the band 5, so that the counting elements 2 remain relatively retained between the guides and the band, preventing the accidental movement of them, not preventing their voluntary movement.

[0022] According to this embodiment, the counting device comprises two guides 1 formed by two parallel stretches joined by their ends and superposed to the band 5 that as a bracelet has the function of placing means.

[0023] Along said guides 1 a plurality of counting elements 2 can slide, that in this case as spheres provided with a through hole for said guide 1.

[0024] Said counting elements 2 are of two different kinds, in a guide the spheres are of different colours between equal spheres to permit a visual counting. This way, a first kind of counting elements 2, e.g. the ten elements of the first guide, can be used to count the units of the quantity of the number of lengths, or two lengths, round trip, swung by a swimmer. When all the counting elements 2 of the first guide 1 are used, all the elements are moved to their original position, and the first counting element 2 of the second guide 1 is used, that counts tens, starting the process again and successively, so that with few counting elements, and in a simple way, a lot of lengths can be counted. On the other hand, if we know the length of the swimming pool, the conversion into meters swung by the swimmer is trivial.

[0025] Alternatively, the device of the present invention can comprise a divider element (not shown in Figs. 1 and 2) in the guides 1, or other guides can be added if the band 5 is wider, to increase its counting capacity, or to count the number of lengths swung with the different swimming styles or different exercises of training or gymnastics.

[0026] In Fig. 2 a second embodiment of the counting device of the present invention is shown. This device

comprises a belt-like band 5 that comprises a pair of guides 1 provided with a plurality of counting elements 2, that in this case are spheres, that can slide along said guides 1.

[0027] In this embodiment, the friction enough that prevents the accidental movement of the counting elements 2 along the guides 1 is obtained because the band 5 and the guides are flexible, and when the device is placed in position, they are adapted together to the radius of the waist, providing the stress enough between both components, the guides 1 and the band 5, so that the counting elements 2 remain relatively retained between the guides and the band, preventing the accidental movement of them, but not preventing their voluntary movement.

[0028] In this case, the counting elements 2 are of different sizes for the same end as cited previously, to permit to count a greater number of swimming pool lengths with a reduced number of counting elements 2. They could also be spheres of the same size and to use the right ones from the buckle as units, and the left ones from the buckle as tens, or vice versa.

[0029] Also in this case, each time the user swims a swimming pool length or two, round trip, or does exercises, for counting them it is just necessary to move a counting element 2.

[0030] In Fig. 3 is shown an alternative embodiment of the counting device of the present invention, that comprises a guide 1 formed by two stretches telescopically joined, to adjust the length of said guide 1. This joining also acts as a divider 4, to divide a first and a second group of counting elements 2, so that when the divider 4 acts because it has a diameter greater than that of the guide 1 and than the hole of the counting elements 2, the device has two independent guide stretches, that have the same end than that described previously, i.e. to count a greater number of two swimming pool lengths, round trip, or exercises, with a reduced number of counting elements 2.

[0031] A plurality of counting elements 2 can slide along the guide 1, that in this case are disks provided with a through hole for said guide 1, but not said divider 4.

[0032] Said counting elements 2 can be considered of two different kinds even being equal, those that are at the right from the divider, and those that are at the left of the divider, even though between them they can be of different colours to permit a visual counting. This way, a first kind of counting elements can be used to count the units and a second kind can be used to count tens of the quantity of the number of two swung swimming pool lengths, round trip, or exercises done.

[0033] To place it on the submerged wall of the swimming pool, the device of the present invention comprises a pair of suction pads 3, that have a diameter suitable to adhere each suction pad in just a tile, that they are usually square with a size 25 mm x 25 mm, so that the diameter of each suction pad 3 could be about 20 mm.

[0034] The telescopic joining of the guide 4, that permits to lengthen it enough to guarantee that after the

attachment of the first suction pad at the centre of a tile, the second suction pad is always attached inside the tiled where it is attached, and not on a joint, where it could not work efficiently. If the tiles are of greater dimensions it would be any problem, because there are no joints of 25 mm. 5

[0035] To count the number of two swimming pool lengths swung by a swimmer it is just necessary to move a counting element 2 each time two lengths of the swimming pool are swung. 10

[0036] Even though reference is made to specific embodiments of the invention, it is apparent for a person skilled in the art that the described counting device is susceptible of numerous variations and modifications, and that all the details cited can be substituted by other technically equivalent ones, without departing from the scope of protection defined by the attached claims. 15

Claims 20

1. Counting device for swimming pools, that counts swung swimming pool lengths, or two lengths, round trip, or exercises done in the swimming pools, and comprising placing means (3; 5), **characterised in that** it comprises at least one guide (1) along which a plurality of counting elements (2) can slide. 25
2. Device according to claim 1, wherein said counting elements (2) are of two or more kinds different to each other. 30
3. Device according to claim 1, wherein said placing means comprises a pair of sucking pads (3), for its engagement to a wall of a swimming pools and a telescopic joining of the guide (1). 35
4. Device according to claim 1, wherein said placing means comprises a belt or bracelet-like band (5). 40
5. Device according to claim 4, wherein said band (5) and the guide (1) placed on it are made from a flexible material, so that the when the device is placed they are mutually adapted to the perimeter of the wrist or waist, generating a stress enough to press the counting elements (2), between the guide (1) and the band (5), so that the accidental movement of said counting elements (2) along said guide (1) is prevented, but not preventing the voluntary movement. 45
6. Device according to claim 1 or 2, wherein said counting elements (2) are spheres, cubes, tokens or disks provided with a trough hole for said guide (1). 50
7. Device according to claim 1, wherein said guide (1) comprises at least a divider (4) that divides said counting elements (2) into two or more groups. 55

FIG. 1

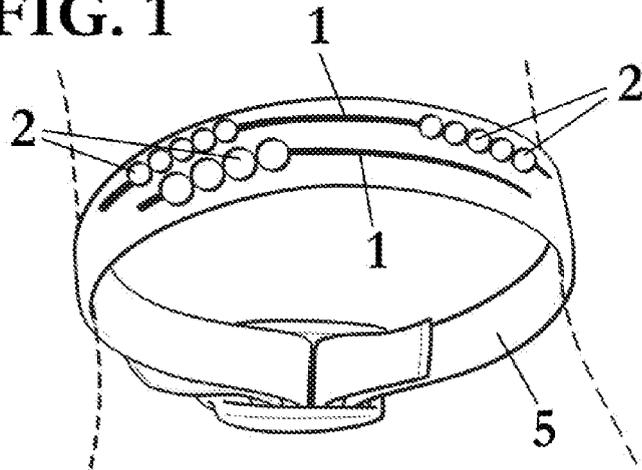


FIG. 2

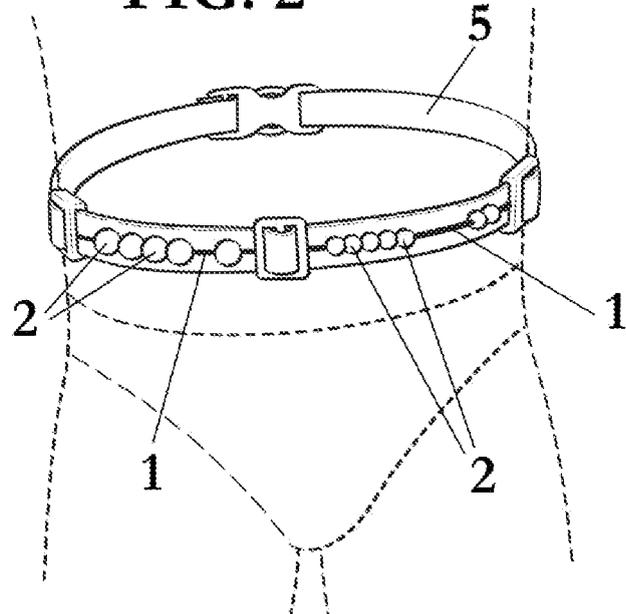
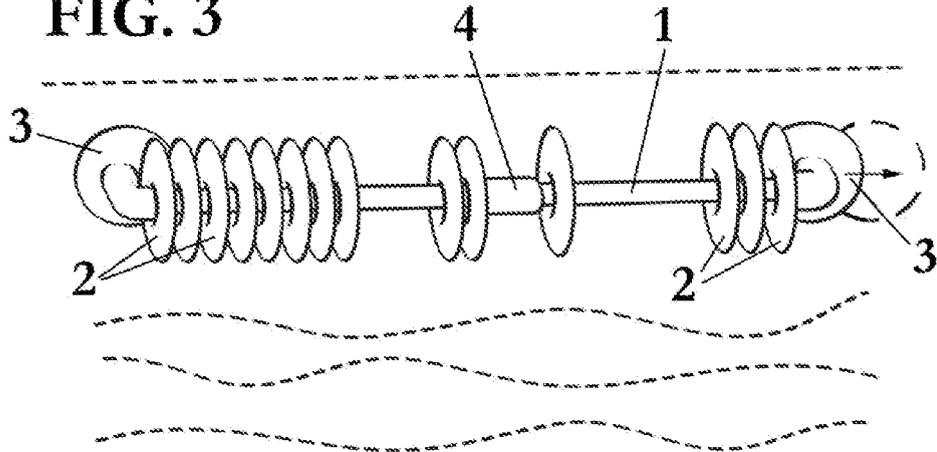


FIG. 3





EUROPEAN SEARCH REPORT

Application Number
EP 08 38 4008

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Place of search		Date of completion of the search	Examiner
The Hague		28 October 2008	Gélébart, Yves
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
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EP 08 38 4008

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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28-10-2008

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

REFERENCES CITED IN THE DESCRIPTION

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