

(19)



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11)

**EP 1 472 942 B1**

(12)

## EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention  
of the grant of the patent:  
**13.09.2006 Bulletin 2006/37**

(21) Application number: **03729493.1**

(22) Date of filing: **17.01.2003**

(51) Int Cl.:  
**A42B 1/12** (2006.01) **A63B 33/00** (2006.01)

(86) International application number:  
**PCT/ES2003/000020**

(87) International publication number:  
**WO 2003/059103 (24.07.2003 Gazette 2003/30)**

(54) **IMPROVED SWIMMING CAP**

VERBESSERTE BADEMÜTZE

BONNET DE NATATION AMELIORE

(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 PT SE SI SK TR**

(30) Priority: **18.01.2002 ES 200200121 U**

(43) Date of publication of application:  
**03.11.2004 Bulletin 2004/45**

(73) Proprietor: **Registros Internacionales Aplicados  
S.L.  
08021 Barcelona (ES)**

(72) Inventor: **MASSO REMIRO, José Maria  
E-0821 Barcelona (ES)**

(74) Representative: **Ungria Lopez, Javier et al  
Avda. Ramon y Cajal, 78  
28043 Madrid (ES)**

(56) References cited:  
**EP-A1- 0 056 883 EP-A2- 0 034 130  
EP-A2- 0 182 599 US-A- 4 357 951  
US-A- 4 724 852 US-A- 5 685 018**

• **DATABASE WPI Week 199704, Derwent  
Publications Ltd., London, GB; AN 1997-035623,  
XP002967499 & DE 296 14 560 U1 (HOPPE R.) 12  
December 1996**

**EP 1 472 942 B1**

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

**Description**

**OBJECT OF THE INVENTION**

5 [0001] As stated in the title of this specification, the present invention refers to an improved swimming cap whose purpose is to facilitate the elimination of the water that penetrates in certain swimmer's caps, as well as to improve the fastening of the cap on the swimmer's head.

**BACKGROUND OF THE INVENTION**

10 [0002] Caps that are used in swimming competitions and that consist of a material provided with two fastening straps and two side openings in which some ear protectors made out of resistant material and provided with some perforations are coupled, are known (see EP-A-0 056 883).

15 [0003] These known caps have inconveniences resulting from the fact that the water that penetrates inside the cap is not eliminated as rapidly as it would be desired and water pockets are produced between the swimmer's head and the cap. These water pockets bother said swimmer and make it difficult for the cap to fit perfectly on the swimmer's head.

**DESCRIPTION OF THE INVENTION**

20 [0004] In order to achieve the purposes of the invention and to prevent the above-cited inconveniences, the invention consists of an improved swimming cap of those that can be used in swimming competitions and that have a material provided with two fastening straps and two side openings in which some ear protectors made out of resistant material and provided with some perforations are coupled.

25 [0005] As an innovation, according to the invention, the cap has in the material that constitutes it a plurality of small holes that facilitate the elimination of the water that penetrates into the cap and that improve the fastening of the cap on the swimmer's head by virtue of which the formation of water pockets between said cap and head is prevented.

[0006] In a preferred embodiment of the invention the cited holes are distributed uniformly through all the material that constitutes the cap in staggered parallel rows.

30 [0007] Hereinafter to provide a better understanding of this specification and forming an integral part thereof, a single figure in which the object of the invention has been represented in an illustrative and non-restrictive manner is attached hereto.

**BRIEF DESCRIPTION OF THE FIGURE**

35 [0008]

Figure 1 represents a perspective view of an improved swimming cap made according to the invention, showing an enlarged close-up view of the material constituting said cap in order to see the characteristic holes thereof.

**DESCRIPTION OF AN EMBODIMENT OF THE INVENTION**

[0009] Hereinafter a description is made of an embodiment of the invention, making reference to the numbers used in the figure.

45 [0010] Hence, the improved swimming cap of this embodiment of the invention consists of a cap (1) formed by a material (2) and provided with some fastening straps (5).

[0011] Furthermore, in two side areas of the cap (1) there are some openings wherein some hard plastic ear protectors (4) provided with some perforations (6) are coupled.

[0012] The material (2) has all over it and with a uniform distribution in staggered parallel rows some small holes (3), just as it is represented in the close-up view of figure 1.

50 [0013] These holes (3) of the material (2) determine that the water that penetrates inside the cap is eliminated immediately to the outside, preventing the forming of water pockets as it used to happen in conventional caps made out of continuous material.

[0014] Besides this also improves the fastening of the cap (1) on the corresponding swimmer's head.

55 **Claims**

1. Swimming cap made of an elastic material (2), provided with two side openings in opposite side areas of a body (1)

## EP 1 472 942 B1

in order to couple respective ear protectors (4) optionally provided with perforations (6), **characterized in that** said material (2) is provided with a plurality of small holes (3) for eliminating water.

- 5
2. Swimming cap, according to claim 1, **characterized in that** said holes (3) are distributed around most of the material (2).
  3. Swimming cap, according to claim 1 or 2, **characterized in that** said holes (3) are distributed around the material (2) in staggered parallel rows.
  - 10 4. Swimming cap, according to claim 1, **characterized in that** it is provided with fastening straps (5) attached to side surfaces of the cap (1).

### Patentansprüche

- 15
1. Schwimmkappe, die aus einem elastischen Material (2) besteht, das mit zwei seitlichen Öffnungen in einander gegenüberliegenden Seitenbereichen eines Hauptkörpers (1) versehen ist, um jeweilige Ohrschützer (4) anzubringen, die wahlweise mit Perforationen (6) versehen sind, **dadurch gekennzeichnet, dass** das Material (2) mit einer Vielzahl kleiner Löcher (3) zum Entfernen von Wasser versehen ist.
  - 20 2. Schwimmkappe nach Anspruch 1, **dadurch gekennzeichnet, dass** die Löcher (3) um den größten Teil des Materials (2) herum verteilt sind.
  3. Schwimmkappe nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** die Löcher (3) in zueinander versetzten parallelen Reihen um das Material (2) herum verteilt sind.
  - 25 4. Schwimmkappe nach Anspruch 1, **dadurch gekennzeichnet, dass** sie mit Befestigungsriemen (5) versehen ist, die an Seitenflächen der Kappe (1) angebracht sind.

30

### Revendications

- 35 1. Bonnet de natation constitué d'une matière élastique (2), comportant deux ouvertures latérales dans des surfaces latérales opposées d'un corps (1) destinées à recevoir des protecteurs d'oreille respectifs (4) comportant optionnellement des perforations (6), **caractérisé en ce que** ladite matière (2) comporte une pluralité de petits trous (3) pour éliminer l'eau.
- 40 2. Bonnet de natation selon la revendication 1, **caractérisé en ce que** lesdits trous (3) sont répartis autour d'une majeure partie de la matière (2).
3. Bonnet de natation selon la revendication 1 ou 2, **caractérisé en ce que** lesdits trous (3) sont répartis autour de la matière (2) en quinconce.
- 45 4. Bonnet de natation selon la revendication 1, **caractérisé en ce qu'il** comporte des lanières de fixation (5) attachées à des surfaces latérales du bonnet (1).

50

55

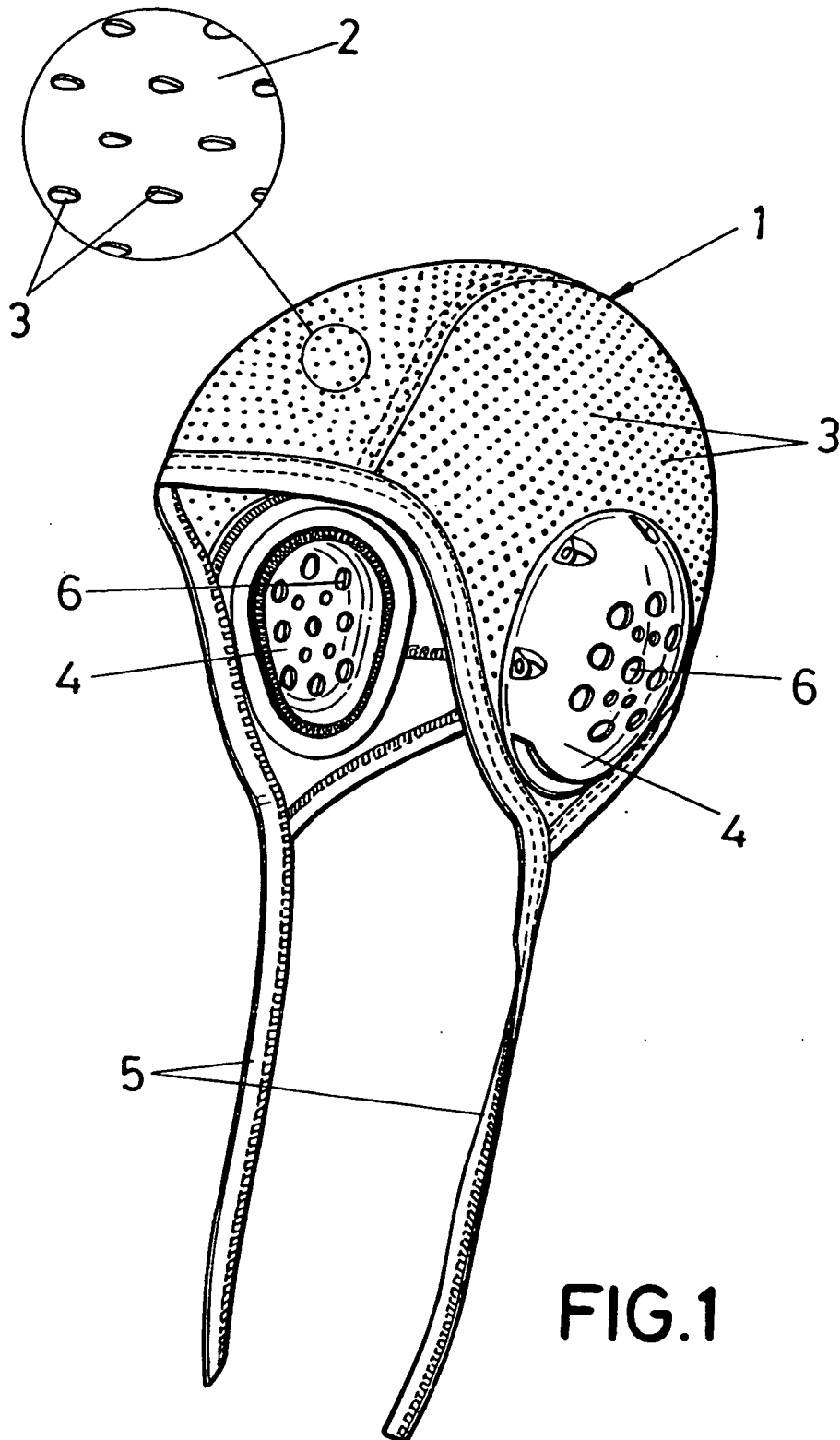


FIG.1