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(54) **Swimming cap**

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- **PATENT ABSTRACTS OF JAPAN vol. 17 no. 321**  
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## Description

This invention relates to swimming caps. A swimming cap is known which is of substantially pouch-like form comprising a substantially flat front wall, a substantially flat rear wall, a generally U-shaped intermediate wall between the said front and rear walls, and an opening, the intermediate wall having opposite side regions and a crown region (GB-A-347 336 or FR-A-650 378). In such a known cap, when it is in a relaxed condition, i.e. not being worn by a user, the said front and rear walls are substantially parallel, i.e. substantially the same distance apart, between the said crown portion and the opening of the cap.

Consequently the side regions of the intermediate wall are of substantially constant width.

Such known caps have certain disadvantages. One of these is that they tend not to fit closely to a user's head, with the result that wrinkles are formed in the cap when it is being worn, which cause increased resistance to movement through the water, i.e. reduced speed, and are also unsightly. Furthermore, if the user pulls the cap tightly down on his head in an effort to reduce this problem, the cap becomes uncomfortably tight and tends to slip off.

The present invention is characterised in that the said front and rear walls of the cap converge towards one another in the direction from the crown region towards the opening of the cap.

We have found that such a cap, in use, has a substantially reduced tendency to form wrinkles, and is more comfortable to wear, compared with the known caps referred to above.

Preferably the angle between the said front and rear walls is in the range of about 4° to about 10°.

Preferably the cap is made of hydrophobic silicone rubber or soft synthetic resin material.

An embodiment of the invention will now be described by way of example and with reference to the accompanying drawings, in which:-

Figure 1 is a perspective view of a swimming cap according to the invention, in its relaxed condition; and

Figure 2 is a cross-section on the line II-II of Figure 1.

The swimming cap of this embodiment is made as a one-piece moulding from hydrophobic silicone rubber or soft synthetic resin material. It is of substantially pouch-like form having a substantially flat front wall 1, a substantially flat rear wall 2, and a generally U-shaped intermediate wall 3 between the front and rear walls, all formed as a one-piece moulding and of substantially uniform thickness. The intermediate wall 3 has opposite side regions 4 and also provides a crown region 5 of the cap. The opening of the cap is indicated at 6.

As will be clear from Figure 2, the front and rear

walls 1 and 2 converge towards one another in the direction from the crown 5 towards the opening 6 of the cap, the angle A between them being approximately 10°. This naturally results in the side regions 4 of the intermediate wall 3 becoming wider in the direction from the opening 6 towards the crown 5.

This configuration of the cap has the benefit that, when in use, the upper part of the cap fits closely to the user's head, without any substantial amount of empty space being left inside, whereby the tendency for wrinkles to be formed is greatly reduced, the cap is comfortable to wear, and it does not tend to slip off.

It is to be understood that the references herein to the "front", "rear" and "sides" of the swimming cap do not necessarily bear any relation to the orientation in which it is to be worn by a user, but are used only for convenience of description.

## Claims

1. A swimming cap of substantially pouch-like form comprising a substantially flat front wall (1), a substantially flat rear wall (2), a generally U-shaped intermediate wall (3) between the said front and rear walls, and an opening (6), the intermediate wall having opposite side regions (4) and a crown region (5), characterised in that the said front and rear walls (1,2) converge towards one another in the direction from the crown region (5) towards the opening (6) of the cap.
2. A swimming cap as claimed in claim 1, wherein the angle (A) between the said front and rear walls (1,2) is in the range of about 4° to about 10°.
3. A swimming cap as claimed in claim 2, wherein the said angle (A) is about 10°.
4. A swimming cap as claimed in any of claims 1 to 3, which is made of hydrophobic silicone rubber or soft synthetic resin material.

## Patentansprüche

1. Schwimmhaube in im wesentlichen Beutelform, umfassend eine im wesentlichen flache Vorderwandung (1), eine im wesentlichen flache Rückwandung (2), eine im wesentlichen U-förmige Zwischenwandung (3) zwischen der Vorderwandung und der Rückwandung und eine Öffnung (6), wobei die Zwischenwandung gegenüberliegende Seitenbereiche (4) und einen Scheitelbereich (5) aufweist, dadurch gekennzeichnet, daß die Vorderwandung und die Rückwandung (1, 2) in Richtung der vom Scheitelbereich (5) zur Öffnung (6) der Haube hin aufeinander zu laufen.

2. Schwimmhaube nach Anspruch 1, wobei der Winkel (A) zwischen der Vorderwandung und der Rückwandung (1, 2) im Bereich von ungefähr 4° bis ungefähr 10° liegt. 5
3. Schwimmhaube nach Anspruch 2, wobei der Winkel (A) ungefähr 10° beträgt.
4. Schwimmhaube nach einem der Ansprüche 1 bis 3, welche aus hydrophobem Silikongummi oder weichem Kunstharzmaterial hergestellt ist. 10

### Revendications

1. Bonnet de bain ayant sensiblement la forme d'une poche, comprenant une paroi avant sensiblement plate (1), une paroi arrière sensiblement plate (2) et une paroi intermédiaire (3) de forme générale en U entre lesdites parois avant et arrière, et une ouverture (6), la paroi intermédiaire comportant des régions latérales opposées (4) et une région en couronne (5), caractérisé en ce que lesdites parois avant et arrière (1, 2) convergent l'une vers l'autre de la région en couronne (5) vers l'ouverture (6) du bonnet. 15  
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2. Bonnet de bain selon la revendication 1, dans lequel l'angle (A) formé par lesdites parois avant et arrière (1, 2) est dans la gamme allant d'environ 4° à environ 10°. 30
3. Bonnet de bain selon la revendication 2, dans lequel ledit angle (A) est d'environ 10°.
4. Bonnet de bain selon l'une quelconque des revendications 1 à 3, qui est fait de caoutchouc siliconé hydrophobe ou d'une résine synthétique souple. 35

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