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(54) **A METHOD OF IMPROVING THE ADAPTABILITY OF A SUPPORT PILLOW**

METHODE UM EINE BESSERE KISSENANPASSUNG ZU ERHALTEN

PROCEDE POUR CONFERER A UN COUSSIN UNE CAPACITE D'ADAPTATION AMELIOREE

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(56) References cited:
FR-A- 2 305 956 GB-A- 999 217
GB-A- 1 265 480 US-A- 3 148 389
US-A- 4 959 880 US-A- 5 138 732

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Description

[0001] The invention relates to a pillow as featured in the preamble to claim 1.

[0002] In particular in recent years, nape problems have become an increasingly shared ailment. This is often due to lack of exercise in combination with sedentary work in front of a computer screen. Many people complain of soreness and stiffness of the muscles in the nape region, which are felt in particular when one is lying down, in which case it may be difficult to find a position to sleep in, in which the nape is able to relax. To solve the problem of supporting the nape, support pillows are available in the form of foamed pillows configured such that the head is kept in place in the anatomically correct resting position. However, habituation problems have been known to occur in connection with the foamed pillows, as they are difficult to get used to. The result is often that, follow a short period of time, people stop using the foamed pillows since there is too much difference between the conventional pillow known so far and the harder anatomy pillow. One of the drawbacks of the support pillows is that often they are quite hard and they adapt very slowly to the head upon change of sleeping position.

[0003] To make the support pillows more attractive it is therefore the object of the present invention to provide a support pillow, which combines the characteristics of known pillows with the characteristics of an anatomically configured support pillow. This means that it has been an objective to obtain an anatomic support pillow having the above-mentioned supporting qualities and at the same time having the qualities, which are known from ordinary pillows based on feathers or down.

[0004] These qualities e.g. comprise:

- "Hugging" capabilities, the ability to hug the pillow during sleep.
- The feeling of feather filling, which adapts to the head when lying down
- The tempting "fluffy" look known from standard pillow based on feathers or down.

[0005] FR 2,305,956 describes an anatomically configured support pillow of a relatively hard material, whereon a soft layer is mounted. Even though a softer layer is mounted on the surface it does not make the pillow have similar properties as known pillow based on feathers or down, it e.g. still has a hard resting side, whereby the pillow is not huggable and also does not have the tempting fluffy look.

[0006] US 5,138,732 describes an anatomically configured support pillow of rubber or a plastics material comprising a base part and a top part both of a solid material, such as latex, where the top part is a bit softer than the base part, whereby the softer top part adapts to the movements of the head. This pillow holds none of the desired qualities of known pillows based on feathers or down.

[0007] GB 1,265,480 describes a standard pillow, in

which a pre-shaped core is placed in order for the pillow to have a corresponding shape, whereby the pillow looks more attractive. Thus, this is not an anatomic support pillow, but more a standard pillow, which has been modified so as to appear more attractive.

[0008] US 3,148,389 describes a standard pillow based on feathers or down with a filling comprising a space adapted for insertion of one or more flexible insert panels. The panels can be inserted in a space in the middle of the pillow, whereby, depending on the number of panels, the hardness of the pillow can be adjusted. This is not an anatomic support pillow, but a standard pillow, where the hardness of the pillow can be adjusted by inserting more panels.

[0009] It is thus an object of the invention to provide a support pillow solving the above mentioned problems.

[0010] This is accomplished as featured in the characterising part of claim 1.

[0011] Thereby a support pillow is obtained that has similar properties compared to conventional pillows based on downs or feathers. These properties being

- "Hugging" properties,
- The feeling of feather filling, which adapts to the head when the head is placed on the pillow,
- The tempting "fluffy" appearance.

[0012] This result in a support pillow which while having anatomically support properties, it also has the above characteristics of the conventional pillows, which are familiar to the users.

[0013] Further a support pillow is accomplished by which the adaptability is improved to the effect that the support pillow both provides good support to nape and head and simultaneously features a soft support face and is thus able to adapt to the head upon change of sleeping position. Since the adaptation layer can be adapted to various requirements to softness, the method can be adapted to the needs of different users. By mounting of the adaptation layer on the surface of the support pillow it is ensured that the layer does not slide off during use. The mounting may take place eg by stitching of the adaptation layer to the support face of the support pillow. Alternatively it is possible to mount it by means of Velcro or the like, whereby the layer can be dismounted either with a view to replacing it by an adaptation layer having other properties or to be able to wash the adaptation layer.

[0014] When said first and said second layer are mounted on the support pillow via a shared closure device, the support pillow can be located between the two layers, and their shared closure device ensures that the pillow is secured between the two layers. Thereby the option is provided of using a support pillow already bought by a user and improve the adaptability thereof by arranging it between the two adaptation layers. Further it is easy to remove the adaptation layer and optionally replace it with other adaptation layers with another de-

gree of softness.

[0015] When the support pillow is separated from said adaptation layers by a down- or feather-tight material, an efficient separation is accomplished that ensures that down and feathers do not enter the second layer. The first layer that contains down or feathers thereby retains its softness properties and can more easily be substituted.

[0016] The invention will now be explained in further detail with reference to the accompanying figures, wherein:

Figure 1 is a cross-sectional view of a support pillow, wherein the adaptability is further improved on the resting face of the support pillow by use of a method according to the invention; and

Figure 2 shows a support pillow, wherein the adaptation layer is mounted on both the support face of the support pillow and the its resting face in accordance with the invention via a closure device; and

Figure 3 shows a support pillow in the form of a pillow with beads, wherein the adaptability is improved on the support face and the resting face of the pillow and by use of a method according to the invention.

[0017] Figure 1 is a cross-sectional view of a support pillow, wherein the adaptability is improved in accordance with the invention. The improved support pillow comprises the support pillow 11 as such, and wherein, on the support face 15 and on the resting face 17 of the support pillow, adaptation layers 13, 21 is mounted that may be eg layers with down and/or feathers. Furthermore, the adaptation layers may be provided with a softer material on its surface, eg in the form of a synthetic padding. The support pillow might for instance be a pre-formed foamed pillow manufactured from oil-based types of foam. However, the method is in no way limited to use for improving the adaptability of oil-based types of foam; rather, it may just as well be used on other support pillows where it is desired to improve the adaptability.

[0018] Figure 2 shows a support pillow, wherein the adaptation layer is mounted on both the support face and the resting face of the support pillow in accordance with the invention via a shared closure device being in this case a zipper.

[0019] However, the invention is in no way limited to the use of a zipper as closure device. Other closure devices are also an option. For instance, buttons with associated buttonholes, press-fasteners, ribbons, Velcro or the like may be used.

[0020] Figure 3 shows a support pillow in the form of a pillow with beads 51, wherein the adaptability of the supporting face and the resting face of the pillow has been improved by use of a method according to the invention. On the support face of the pillow, an adaptation layer 13 is mounted, and on the resting face of the pillow,

an adaptation layer 21 is mounted.

Claims

1. A method of improving adaptability of an anatomically configured support pillow (11), comprising a support face (15) and a resting face (17), **characterised in that** on the support face (15) of the support pillow a first adaptation layer (13) is mounted that is softer than the support pillow (11) and on the resting face (17) of the support pillow, a second adaptation layer (21) is configured such that said support pillow (11) is located between said first adaptation layer (13) and said second adaptation layer (21), where said adaptation layers (13, 21) comprises a space that has a filling of down or feathers.
2. A method according to claim 1, **characterised in that** the support pillow is an anatomically configured foamed pillow.
3. A method according to claims 1-2, **characterised in that** said first layer (13) and said second layer (21) are mounted on the support pillow via a shared closure device (41).
4. A method according to claim 1-3, **characterised in that** the support pillow (11) is separated from said adaptation layers (13, 21) by of a down- and feather-tight material.
5. An anatomically configured support pillow (11) with improved adaptability, where the support pillow (11) comprises a support face (15) and a resting face (17), **characterised in that** on the support face (15) of the support pillow a first adaptation layer (13) is mounted that is softer than the support pillow (11) and on the resting face (17) of the support pillow, a second adaptation layer (21) is configured such that said support pillow (11) is located between said first adaptation layer (13) and said second adaptation layer (21), where said adaptation layers (13,21) comprise a space that has a filling of down or feathers.
6. An anatomically configured support pillow with improved adaptability according to claim 5, **characterised in that** the support pillow is a pre-formed foamed pillow.
7. An anatomically configured support pillow with improved adaptability according to claims 5-6, **characterised in that** said first layer (13) and said second layer (21) are mounted on the support pillow via a shared closure device (41).
8. An anatomically configured support pillow with improved adaptability according to claim 5-7, **characterised in that** the support pillow (11) is separated from said adaptation layers (13, 21) by of a down- and feather-tight material.

terised in that the support pillow (11) is separated from said adaptation layers (13, 21) by of a down- and feather-tight material.

Patentansprüche

1. Verfahren zum Verbessern der Anpassungsfähigkeit eines anatomisch ausgebildeten Stützkissens (11), umfassend eine Stützfläche (15) und eine Ruhefläche (17), **dadurch gekennzeichnet, dass** an der Stützfläche (15) des Stützkissens eine erste Anpassungsschicht (13) montiert wird, welche sanfter ist als das Stützkissen (11), und an der Ruhefläche (17) des Stützkissens eine zweite Anpassungsschicht (21) derart ausgebildet wird, dass das Stützkissen (11) zwischen der ersten Anpassungsschicht (13) und der zweiten Anpassungsschicht (21) angeordnet ist, wobei die Anpassungsschichten (13, 21) einen Raum mit einer Füllung aus Daunen oder Federn umfassen.
2. Verfahren nach Anspruch 1, **dadurch gekennzeichnet, dass** das Stützkissen ein anatomisch ausgebildetes Schaumkissen ist.
3. Verfahren nach den Ansprüchen 1 bis 2, **dadurch gekennzeichnet, dass** die erste Schicht (13) und die zweite Schicht (21) durch eine geteilte Schließvorrichtung (41) am Stützkissen montiert werden.
4. Verfahren nach den Ansprüchen 1 bis 3, **dadurch gekennzeichnet, dass** das Stützkissen (11) durch einen daunen- und federdichten Werkstoff von den Anpassungsschichten (13, 21) getrennt wird.
5. Anatomisch ausgebildetes Stützkissen (11) mit verbesserter Anpassungsfähigkeit, wobei das Stützkissen (11) eine Stützfläche (15) und eine Ruhefläche (17) umfasst, **dadurch gekennzeichnet, dass** an der Stützfläche (15) des Stützkissens eine erste Anpassungsschicht (13) montiert ist, welche sanfter als das Stützkissen (11) ist, und an der Ruhefläche (17) des Stützkissens eine zweite Anpassungsschicht (21) derart ausgebildet ist, dass das Stützkissen (11) zwischen der ersten Anpassungsschicht (13) und der zweiten Anpassungsschicht (21) angeordnet ist, wobei die Anpassungsschichten (13, 21) einen Raum mit einer Füllung aus Daunen oder Federn umfassen.
6. Anatomisch ausgebildetes Stützkissen mit verbesserter Anpassungsfähigkeit nach Anspruch 5, **dadurch gekennzeichnet, dass** das Stützkissen ein vorgeformtes Schaumkissen ist.
7. Anatomisch ausgebildetes Stützkissen mit verbesserter Anpassungsfähigkeit nach den Ansprüchen 5 und 6, **dadurch gekennzeichnet, dass** die erste Schicht (13) und die zweite Schicht (21) durch eine geteilte Schließvorrichtung (41) am Stützkissen montiert sind.

8. Anatomisch ausgebildetes Stützkissen mit verbesserter Anpassungsfähigkeit nach den Ansprüchen 5 bis 7, **dadurch gekennzeichnet, dass** das Stützkissen (11) durch einen daunen- und federdichten Werkstoff von den Anpassungsschichten (13, 21) getrennt ist.

Revendications

1. Procédé pour améliorer la capacité d'adaptation d'un coussin de support de configuration anatomique (11), comprenant une face de support (15) et une face de repos (17), **caractérisé en ce que** sur la face de support (15) du coussin de support est montée une première couche d'adaptation (13) qui est plus douce que le coussin de support (11) et sur la face de repos (17) du coussin de support, une deuxième couche d'adaptation (21) est configurée de telle sorte que ledit coussin de support (11) soit situé entre ladite première couche d'adaptation (13) et ladite deuxième couche d'adaptation (21), lesdites couches d'adaptation (13, 21) comprenant un espace qui a un remplissage de duvet ou de plumes.
2. Procédé selon la revendication 1, **caractérisé en ce que** le coussin de support est un coussin en mousse de configuration anatomique.
3. Procédé selon les revendications 1 à 2, **caractérisé en ce que** ladite première couche (13) et ladite deuxième couche (21) sont montées sur le coussin de support par le biais d'un dispositif de fermeture partagé (41).
4. Procédé selon les revendications 1 à 3, **caractérisé en ce que** le coussin de support (11) est séparé desdites couches d'adaptation (13, 21) par un matériau imperméable au duvet et aux plumes.
5. Coussin de support de configuration anatomique (11) avec une capacité d'adaptation améliorée, le coussin de support (11) comprenant une face de support (15) et une face de repos (17), **caractérisé en ce que** sur la face de support (15) du coussin de support est montée une première couche d'adaptation (13) qui est plus douce que le coussin de support (11) et sur la face de repos (17) du coussin de support, une deuxième couche d'adaptation (21) est configurée de telle sorte que ledit coussin de support (11) soit situé entre ladite première couche d'adaptation (13) et ladite deuxième couche d'adaptation

(21), lesdites couches d'adaptation (13, 21) comprenant un espace qui a un remplissage de duvet ou de plumes.

6. Coussin de support de configuration anatomique avec une capacité d'adaptation améliorée selon la revendication 5, **caractérisé en ce que** le coussin de support est un coussin en mousse préformé. 5
7. Coussin de support de configuration anatomique avec une capacité d'adaptation améliorée selon les revendications 5 à 6, **caractérisé en ce que** ladite première couche (13) et ladite deuxième couche (21) sont montées sur le coussin de support par le biais d'un dispositif de fermeture partagé (41). 10 15
8. Coussin de support de configuration anatomique avec une capacité d'adaptation améliorée selon les revendications 5 à 7, **caractérisé en ce que** le coussin de support (11) est séparé desdites couches d'adaptation (13, 21) par un matériau imperméable au duvet et aux plumes. 20

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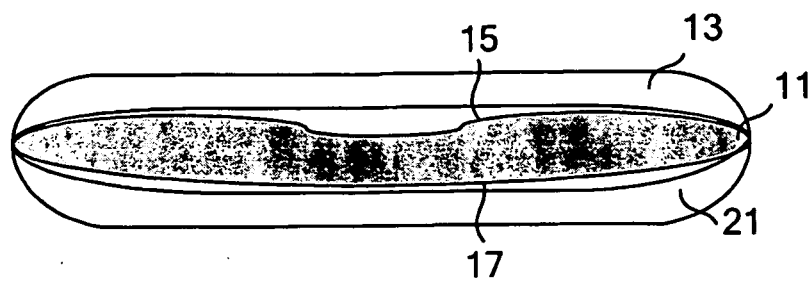


Fig. 1

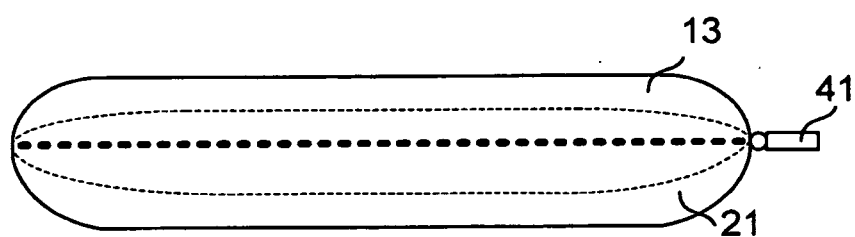


Fig. 2

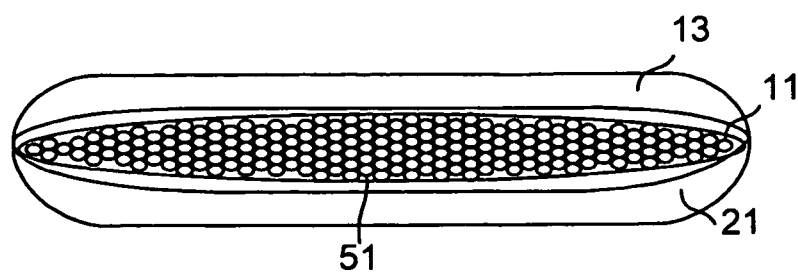


Fig. 3

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- FR 2305956 [0005]
- US 5138732 A [0006]
- GB 1265480 A [0007]
- US 3148389 A [0008]