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(54) **BODY FORM-FITTING DUVET**

(57) A body form-fitting duvet (1) comprising a top layer of cloth (T1, T3) and a bottom layer of cloth (T2, T4) and a plurality of compartments (P1, P2) which are located between the top layer and the bottom layer, wherein the compartments are defined by multiple seams connecting the top layer and the bottom layer to one another, and wherein each compartment is filled with a filling material, the body form-fitting duvet comprising:

- a flat part,
 - one or two dome-shaped parts which have two planes of curvature (C1, C2), wherein each dome-shaped part has a perimeter via which it is connected to the flat part,
- wherein said perimeter comprises a head section (H), a foot section (F), a left section (L) and a right section (R), and wherein the flat part forms a flat peripheral zone surrounding the one or two dome-shaped parts (2), wherein the flat part has a greater mass (g) per m² than the one or two dome-shaped parts, and wherein the one or two dome-shaped parts (2) are completely detachable in one piece from the flat part (4) via the one or two first releasable fastening means (F₁) and completely replaceable in one piece by one or two spare dome-shaped parts (2') which have different insulation properties than the original one or two dome-shaped parts (2), by connecting said one or two spare dome-shaped parts (2') to the flat part (4) via the one or two first releasable fastening means (F₁).

Fig. 1

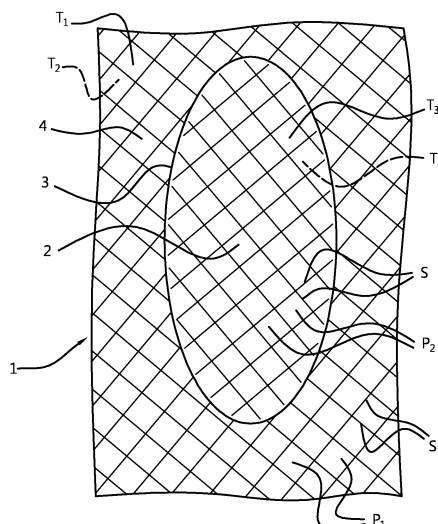
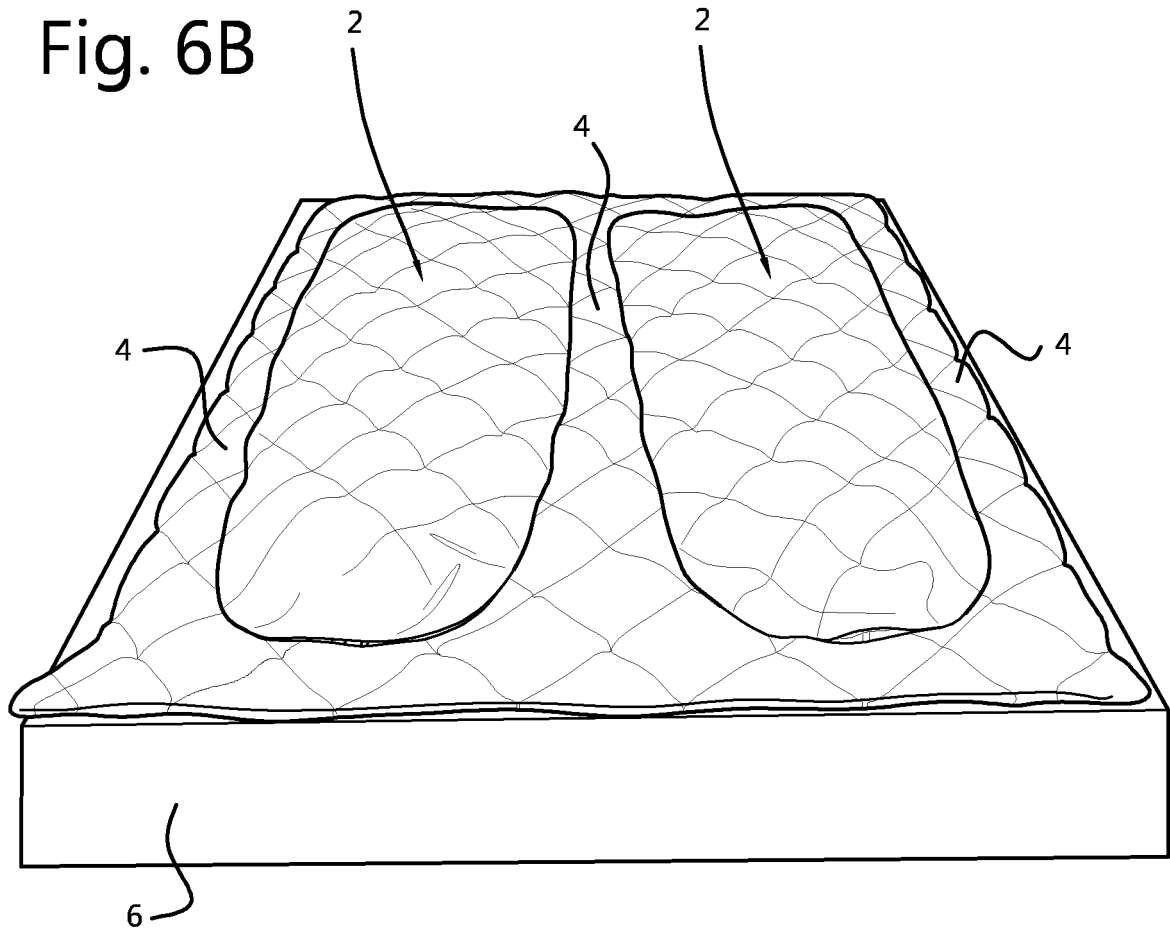


Fig. 6B



Description

FIELD OF THE INVENTION

[0001] The present invention relates to a body form-fitting duvet, which is suitable to cover one or two persons lying in a bed in a body form-fitting manner. The invention also relates to a duvet that does not easily drift away from the user(s) when the user(s) moves during the night. Also provided is a duvet where the insulating properties and warmth of one or more areas of the duvet can be varied independently to accommodate two persons having different sleeping temperature preferences and/or to vary the insulating properties and warmth of one or more areas of the duvet to accommodate the sleeping temperature preferences one or two persons covered by the duvet across different seasons.

BACKGROUND OF THE INVENTION

[0002] Duvets are widely used in the Western world as substitute for blankets. Duvets are particularly liked by people because of their light weight and warm properties, which confer a feeling of comfort to the user. Duvets are traditionally filled with down or feathers (also referred to as down feathers of the Eider duck), which explains their lightweight. However, such duvets may not always be very comfortable because they tend to cause large gaps and openings around the user, which allow cold air to reach the user.

[0003] In order to get a better coverage of the body and prevent drifting of the duvet from the body, the user has to tuck the duvet under his body or wrap the duvet around his body so as to secure the duvet in place, reduce the gaps and openings around him and shelter himself from external cold air.

[0004] This situation is not optimal since the duvet may still drift away for the user during the night when the user moves, causing gaps and openings to form around the user again or causing some body parts to be exposed to ambient air. This situation may be even more unpleasant when two users are sleeping in the same bed. For instance, if one user wraps himself/herself in the duvet, it may leave the other user without a duvet covering his/her body during the night. Overall this situation may cause the user(s) to be cold and/or sleep-deprived.

[0005] Another issue associated with duvets is that the duvet warmth or its degree of insulation cannot easily be adjusted to accommodate varying preferences and needs or differing preferences and needs in terms of sleeping temperatures of two persons sleeping under a same duvet.

[0006] In the past, alternative duvets have been developed. One such duvet is described in US5,528,781. The duvet is a dome-type feather quilt or duvet having a dome-shape portion, matching a body shape. The dome-shape portion of the duvet provides a cover surrounding the body that minimizes the formation of gaps and open-

ings around the body, so as to confer a sensation of warmth and comfort to the user. This type of duvet is particularly suitable for users with bigger bodies because the dome-shape portion accommodates a relatively large surface. However, this type of duvet does not solve the problem that duvets do not stay in their intended position and drift away from the user when the user moves during the night, causing gaps. Further such duvets have uniform thermal insulating properties.

[0007] Another duvet is disclosed in EP0254087. The duvet is characterized in that it has a mild dome-shape like portion endowed with a great heat retaining capacity. The dome-shape structure is achieved by filling the portion of the duvet covering the body with more feathers, and by filling the sides portion of the duvet with less feather. Thus, when the duvet is put on a person, the center portion rises over the other portions because it is filled with a thicker cushion of feathers. When the users moves, the feathers in the central portion of the duvet do not move, thus conferring a superior insulation in the part of the duvet covering the body. However, this type of duvet does not stay in place during the night and drift away from the user when the user moves, causing gaps.

[0008] Further, none of the duvets described above offer the ability to easily adjust the duvet warmth or its degree of isolation to accommodate varying preferences, in terms of sleeping temperature, of two persons sleeping under a same duvet.

OBJECT OF THE INVENTION

[0009] It is an object of the invention to provide a duvet suitable to cover one or two persons lying in a bed, which covers the body(ies) in a body form-fitting manner.

[0010] It is an object of the invention to provide a duvet which provides a high degree of comfort for the user(s).

[0011] It is an object of the invention to provide a duvet suitable to cover one or two persons lying in a bed, wherein the insulating properties of the part(s) of the duvet covering the body of one or two persons can be varied to simultaneously and differentially accommodate the needs of two persons having different preferences for sleeping temperatures and/or to accommodate the needs of one or two persons having different preferences for sleeping temperatures across seasons.

[0012] It is a further object of the invention to provide a duvet suitable to cover one or two persons lying horizontally on a bed, wherein the insulating properties of the part(s) of the duvet covering different parts of the body can be locally varied to accommodate the need of one or two persons having different preferences for sleeping temperatures for particular areas of the body.

SUMMARY OF THE INVENTION

[0013] In order to achieve at least one object, the invention provides a body form-fitting duvet comprising a top layer of cloth and a bottom layer of cloth and a plurality

of compartments which are located between the top layer and the bottom layer, wherein the compartments are defined by multiple seams connecting the top layer and the bottom layer to one another, and wherein each compartment is filled with a filling material, the body form-fitting duvet comprising:

- a flat part,
- one or two dome-shaped parts which have two planes of curvature, wherein each dome-shaped part has a perimeter via which it is connected to the flat part, wherein said perimeter comprises a head section, a foot section, a left section and a right section, and

wherein the flat part forms a flat peripheral zone surrounding the one or two dome-shaped parts, wherein the flat part has a greater mass per m² than the one or two dome-shaped parts, and wherein the one or two dome-shaped parts are completely detachable in one piece from the flat part via the one or two first releasable fastening means and completely replaceable in one piece by one or two spare dome-shaped parts which have different insulation properties than the original one or two dome-shaped parts, by connecting said one or two spare dome-shaped parts to the flat part via the one or two first releasable fastening means.

[0014] The invention provides a high degree of form fit and stays in contact with the mattress underneath the user and the body form-fitting duvet very well. The user does not feel the extra weight, because the dome shaped part(s) are relatively light. The extra weight is provided in the flat part only and rests directly on the mattress. Cold air cannot easily reach the user(s) because the heavier flat part forms a seal and prevents the cold air from reaching the user. Further, the user can easily vary the degree of insulation of parts of the duvet, when desired, without having to purchase or use another duvet having different insulation properties. This combination of features into a single duvet offers a high level of versatility and comfort for the user(s).

[0015] A further advantage of the duvet as taught herein is that the spare dome shaped part, which is to be stored when it is not in use, requires less storage space than a complete duvet having different insulation properties.

[0016] In an embodiment, the compartments of the flat part are filled with more filling material than the compartments of the one or two dome-shaped parts. This effectively results in a higher weight.

[0017] In an embodiment, the flat part has a mass per m² which is at least 30 percent greater than the mass per m² of the one or two dome-shaped parts.

[0018] In an embodiment, the filling material may comprise one or more fillers selected from the group consisting of down, feathers, polyester batting, wool, and silk. These are the standard filling materials of duvets.

[0019] In an embodiment, all sections of the circumferential perimeter are curved, wherein the curvature of the foot section and the head section is stronger than the curvature of the left section and right section of the circumferential perimeter, wherein a width of the one or two dome-shaped parts increases from the foot section towards the head section. This provides a very good fit to a body shape.

[0020] In an embodiment, the compartments of the flat part are filled with a filling material which is substantially heavier than feathers. Said filling material may be selected from the group consisting of polyester batting, wool, and silk.

[0021] In an embodiment, the duvet as taught herein may further comprise one or two first releasable fastening means via which the one or two dome-shaped parts are connected to the flat part.

[0022] In an embodiment, each dome-shaped part is divided into an upper body dome part and a lower body dome part and comprises a second releasable fastening means via which the upper body dome part is connected to the lower body dome part; and wherein the first releasable fastening means comprises:

- an upper body fastening means via which the upper body dome part is connected to the flat part; and
- a lower body fastening means via which the lower body dome part is connected to the flat part.

[0023] This embodiment provides a benefit in that the insulation properties can be varied locally, which can be an advantage for users having cold feet.

[0024] The present invention further relates to an assembly of a duvet according to the invention and :

- a spare upper body dome part, and
- a spare lower body dome part,

wherein the upper body dome part is completely detachable from the lower body dome part via the second releasable fastening means and completely detachable from the flat part via the upper body fastening means and completely replaceable by the spare upper body dome part having different insulation properties than the original upper body dome part by connecting said spare upper body dome part to the lower body dome part via the second releasable fastening means and by connecting said spare upper body dome part to the flat part via the upper body fastening means; and

wherein the lower body dome part is completely detachable from the upper body dome part via the second releasable fastening means and completely detachable from the flat part via the lower body fastening means and completely replaceable by the spare lower body dome part having different insulation properties than the original lower body dome part by connecting said spare lower body dome part to the upper body dome part via the second releasable fastening means and by connecting said

spare lower body dome part to the flat part via the lower body fastening means.

[0025] In a preferred embodiment, the first, second, upper body and lower body releasable fastening means are zippers.

[0026] In a further aspect, the present invention relates to the use of a duvet as taught herein for covering one or two persons lying horizontally on a bed in a body form-fitting manner.

[0027] In an embodiment, the use as taught herein is further characterized in that the one or two dome-shaped parts substantially fit the body shape of one or two persons lying horizontally on a bed, and the flat part substantially surrounds the body shape of said persons and substantially contacts the surface of the bed in a tight manner as a result of its greater mass (g) per m².

[0028] In an embodiment, the use as taught herein is further characterized in that the one or two dome-shaped parts substantially fit the body shape of one or two persons lying horizontally on a bed, and the flat part of the duvet remains substantially in contact with the surface of the bed when the one or two persons move as a result of its greater mass (g) per m².

[0029] In an embodiment, the duvet as taught herein may be used for varying the insulation properties of the duvet in one or more areas of the duvet that is substantially covering the body shape of one or two persons lying horizontally on a bed by detaching in one piece the one or two dome-shaped parts from the flat part and by replacing in one piece said one or two dome-shaped parts by one or two spare dome-shaped parts having different insulating properties than the original one or two dome-shaped parts.

[0030] In a further embodiment, the duvet as taught herein may be used for varying the insulation properties of the duvet in one or more areas of the duvet that is substantially covering the upper body parts of one or two persons lying horizontally on a bed by detaching the one or two upper body dome parts of the one or two dome-shaped parts from the flat part and from the one or two lower body parts and by replacing said one or two upper body dome parts by one or two spare upper body dome parts having different insulating properties than the original one or two upper body dome parts.

[0031] In a further embodiment, the duvet as taught herein may be used for varying the insulation properties of the duvet in one or more areas of the duvet that is substantially covering the feet of one or two persons lying horizontally on a bed by detaching the one or two lower body dome parts of the one or two dome-shaped parts from the flat part and from the one or two upper body parts and replacing said one or two lower body dome parts by one or two spare lower body dome parts having different insulating properties than the original one or two lower body dome parts.

[0032] These and other aspects of the invention will be more readily appreciated as the same becomes better understood by reference to the following detailed descrip-

tion and considered in connection with the accompanying drawings in which like reference symbols designate like parts.

5 BRIEF DESCRIPTION OF THE FIGURES

[0033]

Figure 1 shows a schematic top view of a duvet according to the invention.

Figures 2A and 2B show further diagrammatic top views of a duvet according to the invention.

Figure 3 shows a 3D diagrammatic view of a dome shaped part of the duvet according to the invention.

Figure 4 shows a diagrammatic top view of an assembly of a dome and a spare dome shaped part according to the invention.

Figures 5A, 5B, 5C and 5D show diagrammatic top views of an assembly of a duvet having a divided dome shaped part and a spare divided dome shaped part.

Figure 6A shows a diagrammatic sectional view of a two person duvet according to the invention in use.

Figure 6B shows a diagrammatic view from above of a two person duvet according to the invention.

[0034] In the present invention, all figures are intended to be representative schematic views (i.e. not drawn to scale) of various embodiments of the invention.

DETAILED DESCRIPTION OF THE INVENTION

[0035] Turning to figure 1, a single person body form-fitting duvet 1 is shown which is intended for a person lying horizontally on a bed in a body shape-fitting manner. The term 'body shape-fitting manner' as used herein refers to a situation wherein the duvet according to the invention tightly covers and surrounds the body shape or the body contours of one or two persons lying horizontally on a bed in a manner that substantially shelters said person(s) from the external environment and blocks cold air from reaching said person(s) so as to provide more warmth and comfort to said person(s). This body form-fitting quality is achieved by the combination of a flat part 4 and a dome shaped part 2. For a two person version, two dome parts can be provided, as will be discussed below.

[0036] As shown in figure 1, the body form-fitting duvet 1 is made of a top layer of cloth T₁ and T₃ and a bottom layer of cloth T₂ and T₄ and comprises a plurality of compartments P₁ and P₂ which are located between said top layers T₁ and T₃ and bottom layers T₂ and T₄. The reference numerals T₁, T₂ and P₁ refer to the flat part 4 and the reference numerals T₃, T₃, P₂ refer to the dome shaped part(s) 4.

[0037] The top layers of cloth T₁ and T₃ and a bottom layers of cloth T₂ and T₄ can be made of any material suitable for the confection of a duvet. Non-limiting exam-

ples of suitable material include cotton, polyester. In a preferred embodiment the top layers of cloth T_1 and T_3 and the bottom layers of cloth T_2 and T_4 are made of cotton.

[0038] As shown in figure 1, the plurality of compartments P_1 and P_2 are defined by multiple seams S connecting the top layers T_1 and T_3 and the bottom layers T_2 and T_4 of the duvet 1.

[0039] The seams S may extend at right angles to the sides of the duvet, or may extend diagonally or in another way. The seams may be straight or be curved.

[0040] When seen in top view the compartments P_1 and P_2 may be rectangular or square shaped. Obviously the dimensions (cm) of the plurality of compartments P_1 and P_2 will vary depending on the size of the bed for which the duvet is intended for, e.g. single bed, double bed, king-size bed, queen-size bed, and the like. The skilled person is well-acquainted with bed size-specific measurements in relation to duvet confection.

[0041] Further, the plurality of compartments P_1 and P_2 may be filled with any filling material suitable for duvet confection. Non-limiting examples of suitable filling material include feathers, polyester battings, wool, silk and the like.

[0042] Turning to figures 2A and 2B, the duvet 1 comprises one or two dome-shaped parts 2, wherein each dome-shaped part has a perimeter 3 via which it is connected to a flat part 4 of the duvet. The perimeter 3 comprises a head section H, a foot section F, a left section L and a right section R. The foot section F is intended to cover the feet and part of the legs of one or two persons while the head section H is intended to cover the rest of the body parts of said one or two persons, including the shoulders, torso and legs of said person(s) being covered by the duvet 1.

[0043] As shown in figures 2A and 2B, the one or two dome-shaped parts 2 are configured so that all sections of the perimeter 3 are curved. The curvature of the foot section F and the head section H is stronger than the curvature of the left section L and right section R of the perimeter 3. The stronger curvature at the foot F and head H sections relative to the curvature at the left section L and right section R, is intended to give the one or two dome-shape parts 2 a shape that better matches the body shape or body contours of one or two persons lying horizontally on a bed.

[0044] Figure 2A shows an embodiment in which the curvature of the foot section F is the same as the curvature of the head section H, so as to give the one or two dome-shaped parts 2 an oval shape. The width of the foot section F and the width of the head section H are the same, and the width of the one or two dome-shaped parts 2 gradually increases starting from both the foot section F and head section H towards the mid section of the one or two dome-shaped parts 2.

[0045] Figure 2B shows a preferred embodiment in which the curvature of the foot section F is stronger than the curvature of the head section H, in order to give the

one or two dome-shaped parts a more anatomical shape. The width of the one or two dome-shaped parts 2 gradually increases from the foot section F towards the head section H. Such construction allows for the provision of a duvet which better matches the natural contours of the body of one or two persons lying horizontally in a bed relative to traditional duvets by providing for larger coverage where needed, i.e. at the head section H, including the shoulders and torso, and providing for a narrower coverage where needed, i.e. at the foot section F, including the foot and part of the legs.

[0046] As shown in figures 1, 2A and 2B, the duvet 1 further comprises the flat part 4, which forms a flat peripheral zone surrounding the one or two dome-shaped parts 2. The flat part 4 has a greater mass (g) per m^2 than the one or two dome-shaped parts 2. The term 'flat part' as used herein refers to an horizontal surface that is substantially plane when the duvet 1 covers one or two persons lying horizontally on a bed, even when the one or two persons move during the night.

[0047] In an embodiment, the compartments P_1 of the flat part 4 have a greater mass (g) per m^2 than the mass (g) per m^2 of the plurality of compartments P_2 of the one or two dome-shaped parts 2. The mass per m^2 of the flat part 4 may be 30 percent greater than the mass per m^2 of the dome shaped part(s) 2. In a further embodiment, the mass per m^2 of the flat part 4 may be 50 percent greater than the mass per m^2 of the dome shaped part(s) 2.

[0048] The greater mass per m^2 may be created by filling the compartments of the flat part with a filling material which is substantially heavier than the filling material of the compartments of the dome shaped part 2. Non-limiting examples of suitable, relatively heavy filling materials include polyester batting, wool, silk, and the like.

[0049] In another embodiment, the compartments P_1 of the flat part 4 have a greater mass (g) per m^2 than the mass (g) per m^2 of the plurality of compartments P_2 of the one or two dome-shaped parts 2 as a result of being filled with more filling material of a same kind. Any filling material suitable for duvet confection may be used. Non-limiting examples of suitable filling material include feathers, polyester batting, wool, and silk, and the like. A combination is also possible, i.e. more filling material of a different kind.

[0050] In another embodiment, the compartments of the flat part are filled with a combination of two different materials, a first material which is similar to the material of the compartments of the dome shaped part and a second material which is substantially heavier. The second material may have a sole purpose of increasing the weight, i.e. the second material may not add anything to the thermal insulation characteristics.

[0051] The advantage of giving the flat part 4 of the duvet 1 a greater mass (g) per m^2 than the mass (g) per m^2 of the one or two dome-shaped parts 2, is that draft will be substantially avoided, in particular when the user(s) move(s) during the night. That is because the flat

part 4 of the duvet 1, due to its greater mass (g) per m², will have the tendency to stay flat and in place and not let any air pass between the flat part and the underlying mattress. In particular air channels between the flat part and the mattress as a result of folds in the flat part are substantially avoided.

[0052] In this way, cold air cannot reach the person(s), even when they move during the night. Overall, this provides more comfort and warmth to the user(s). In other words, the flat part forms a heavy sealing ring around the dome shaped part(s). because the dome shaped part(s) is/are light, the user does not feel the extra weight.

[0053] Turning to figure 3, the one or two dome-shaped parts 2 are configured so as to have two planes C₁ and C₂ of curvature. The domes are convex when seen from above.

[0054] Turning to figure 4, in an embodiment the duvet 1 further comprises one or two first releasable fastening means F₁ via which the one or two dome-shaped parts 2 are connected to the flat part 4 of the duvet 1. The term 'releasable fastening means' as used herein refers to any releasable fastening means suitable for duvet confection. Non-limiting examples of suitable releasable fastening means include zippers, ties, cords, button and holes, Velcro, press studs and sockets, hooks and eyes, and the like. In an embodiment, zippers are preferred.

[0055] The releasable fastening means F₁ comprises a first cooperating part Co₁ located on the one or two dome-shaped parts 2 and a second cooperating part Co₂ located on the flat part 4. The second cooperating part Co₂ is complementary to the first cooperating part Co₁. The one or two first releasable fastening means F₁ are further configured to extend around substantially the entire perimeter 3 of the one or two dome-shaped parts 2.

[0056] The configuration of the releasable fastening means F₁ is such that it allows a user to independently replace the one or two dome-shaped parts 2 by one or two spare dome-shaped parts 2' having different insulating properties than the original one or two dome-shaped parts 2. Figure 4 further shows that the one or two dome-shaped parts 2' comprise one or two first releasable fastening means F₁' which is configured to comprise a further first cooperating part Co₁' located on the one or two dome-shaped parts 2', wherein said second cooperating part Co₂ is complementary to the second cooperating part Co₂ located on the flat part 4. Obviously, the one or two first releasable fastening means F₁' is also configured to extend around substantially the entire perimeter 3 of the one or two dome-shaped parts 2'.

[0057] This embodiment is suitable for a user having different preferences for the sleeping temperature across seasons.

[0058] In an embodiment, the duvet 1 comprises two first releasable fastening means F₁ as taught herein which allows the two dome-shaped parts 2 to be completely detachable in one piece from the flat part 4 via the two releasable fastening means F₁ and completely replaceable in one piece by two spare dome-shaped

parts 2' having different insulation properties than the original two dome-shaped parts 2 by connecting said two spare dome-shaped parts 2' to the flat part 4 via the two first releasable fastening means F₁'.

[0059] This embodiment is particularly suitable for covering 2 persons lying horizontally on a same bed, which have different preferences for sleeping temperatures. The duvet 1 as taught herein can easily accommodate such preferences by allowing the one or two dome-shaped parts 2 to be replaced independently and as frequently as desired.

[0060] Turning to figure 5A, the duvet 1 as taught herein may be configured so that the one or two dome-shaped parts 2 are further divided into an upper body dome part D₁ and a lower body dome part D₂.

[0061] Figure 5B shows an embodiment wherein each dome-shaped part 2 comprises a second releasable fastening means F₂ located on the one or two dome-shaped parts 2 between the upper body dome part D₁ and a lower body dome part D₂. The upper body dome part D₁ is connected to the lower body dome part D₂ via the second releasable fastening means. In top view, the boundary between the upper and lower body dome part is a straight line. The second releasable fastening means F₂ comprises a third cooperating part Co₃ located on the upper body dome part D₁ and a fourth cooperating part Co₄ located on the lower body dome part D₂. The fourth cooperating part Co₄ is complementary to the third cooperating part Co₃. The second releasable fastening means F₂ extends along substantially the entire straight portion of the perimeter of the upper and lower body dome parts D₁ and D₂.

[0062] Figure 5C shows an embodiment in which the upper and lower body dome part are separately connected to the flat part. To this end, the first releasable fastening means F₁' comprises a third releasable fastening means F₃ via which the upper body dome part D₁ is connected to the flat part 4. The third releasable fastening means F₃ comprises a fifth cooperating part Co₅ located on the upper body dome part D₁ and a sixth cooperating part Co₆ located on the flat part 4. The sixth cooperating part Co₆ is complementary to the fifth cooperating part Co₅. The third fastening means F₃ extends around substantially the entire perimeter of the curved portion of the upper body dome part D₁.

[0063] Turning to figure 5D, the first releasable fastening means F₁' further comprises a fourth releasable fastening means F₄ which connects the lower body dome part D₂ to the flat part 4. The fourth releasable fastening means F₄ comprises a seventh cooperating part Co₇ located on the lower dome part D₂ and an eighth cooperating part Co₈ located on the flat part 4. The eighth cooperating part Co₈ is complementary to the seventh cooperating part Co₇. Figure 5D further shows that the fourth fastening means F₄ extends around substantially the entire perimeter of the curved portion of the lower body dome part D₂.

[0064] The upper body dome part D₁ is completely de-

tachable from the lower body dome part D₂ via the second releasable fastening means F₂ and is completely detachable from the flat part 4 via the third releasable fastening means F₃. This configuration allows the upper body dome part D₁ to be completely replaceable by a spare upper body dome part D₁' as shown in figure 5C, having different insulation properties than the original upper body dome part D₁ and comprising a further third cooperation part Co₃' and a further fifth cooperation part Co₅' located on the one or two upper body parts D₁' said further third cooperation part Co₃' and further fifth cooperation part Co₅' being complementary to the fourth cooperation part Co₄ located on the lower body part D₂ and sixth cooperation part Co₆ located in the flat part 4, respectively.

[0065] The replacement is accomplished by connecting said spare upper body dome part D₁' to the lower body dome part D₂ via the second releasable fastening means F₂ and by connecting said spare upper body dome part D₁' to the flat part 4 via the third releasable fastening means F₃.

[0066] The duvet 1 comprises a second F₂, a third F₃ and a fourth F₄ releasable fastening means, configured as described above, which further allows the lower body dome part D₂ to be completely detachable from the upper body dome part D₁ via the second releasable fastening means F₂ and to be completely detachable from the flat part 4 via the fourth releasable fastening means F₄. The lower body dome part D₂ is completely replaceable by a spare lower body dome part D₂', as shown in figure 5D, having different insulation properties than the original lower body dome part D₂ and comprising a further fourth cooperation part Co₄' and a further seventh cooperation part Co₇' located on the one or two lower body parts D₂'. The replacement is achieved by connecting said spare lower body dome part D₂' to the upper body dome part D₁ via the second releasable fastening means F₂ and by connecting said spare lower body dome part D₂' to the flat part 4 via the fourth releasable fastening means F₄.

[0067] The first, second, third and fourth releasable fastening means F₁, F₂, F₃ and F₄ may be any releasable fastening means suitable for duvet convection. Non-limiting suitable releasable fastening means include zippers, ties, cords, button and holes, velcro, press studs and sockets, hooks and eyes, and the like. In a preferred embodiment, first, second, third and fourth releasable fastening means F₁, F₂, F₃ and F₄ are zippers.

[0068] In a further aspect, the present invention relates to the use of a duvet 1 as taught herein for covering one or two persons lying horizontally on a bed in a body form-fitting manner.

[0069] Figures 6A and 6B illustrate the duvet 1 as taught herein for covering two persons lying horizontally on a bed in a body form-fitting manner. It was observed that the duvet 1 covers the body of one or two persons in a body form-fitting manner due to the combination of:

- 1) the shape and curvature of the one or two dome-shaped parts 2, as described herein, which allow to

substantially fit the contours of the body (ies) of one or two persons 5 lying horizontally on a bed 6, and 2) the flat part 4, as described herein, which not only substantially surrounds the contours of the body (ies) of one or two persons 5 and but also contacts the surface of the bed 6 in a tight manner as a result of its greater mass (g).

[0070] It was further observed that the duvet 1 as taught herein may be used as an anti-drift duvet because the flat part 4 of the duvet, as described herein, and remains substantially in contact with the surface of the bed 6 as a result of its greater mass (g), even when the one or two persons 5 move.

[0071] The seams S in this embodiment extend diagonally.

[0072] It will be recognized that an embodiment may not achieve all of the stated objects.

[0073] As required, detailed embodiments of the present invention are disclosed herein; however, it is to be understood that the disclosed embodiments are merely exemplary of the invention, which can be embodied in various forms. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representative basis for teaching one skilled in the art to variously employ the present invention in virtually any appropriately detailed structure. Further, the terms and phrases used herein are not intended to be limiting, but rather, to provide an understandable description of the invention.

[0074] The terms "a" or "an", as used herein, are defined as one or more than one. The term plurality, as used herein, is defined as two or more than two. The term another, as used herein, is defined as at least a second or more. The terms including and/or having, as used herein, are defined as comprising (i.e., open language, not excluding other elements or steps). Any reference signs in the claims should not be construed as limiting the scope of the claims or the invention.

[0075] The mere fact that certain measures are recited in mutually different dependent claims does not indicate that a combination of these measures cannot be used to advantage.

Claims

1. A body form-fitting duvet (1) comprising a top layer of cloth (T₁, T₃) and a bottom layer of cloth (T₂, T₄) and a plurality of compartments (P₁, P₂), which are located between the top layer (T₁, T₃) and the bottom layer (T₂, T₄), wherein the compartments (P₁, P₂) are defined by multiple seams (S) connecting the top layer (T₁, T₃) and the bottom (T₂, T₄) layer to one another, and wherein each compartment is filled with a filling material, the body form-fitting duvet comprising:

- a flat part (4),
- one or two dome-shaped parts (2) which have two planes (C_1 , C_2) of curvature, wherein each dome-shaped part has a perimeter (3) via which it is connected to the flat part (4), wherein said perimeter (3) comprises a head section (H), a foot section (F), a left section (L) and a right section (R), and

wherein the flat part (4) forms a flat peripheral zone surrounding the one or two dome-shaped parts (2), wherein the flat part (4) has a greater mass (g) per m^2 than the one or two dome-shaped parts (2), and wherein the one or two dome-shaped parts (2) are completely detachable in one piece from the flat part (4) via the one or two first releasable fastening means (F_1) and completely replaceable in one piece by one or two spare dome-shaped parts (2') which have different insulation properties than the original one or two dome-shaped parts (2), by connecting said one or two spare dome-shaped parts (2') to the flat part (4) via the one or two first releasable fastening means (F_1).

2. Duvet according to claim 1, wherein the flat part has a mass per m^2 which is at least 30 percent greater than the mass per m^2 of the one or two dome-shaped parts.
3. Duvet according to claim 1 or 2, wherein the compartments (P_1) of the flat part (4) are filled with more filling material than the compartments (P_2) of the one or two dome-shaped parts (2).
4. Duvet according to any of the preceding claims, wherein the filling material in the plurality of compartments (P_1) of the flat part (4) is a different kind of filling material than the filling material in the plurality of compartments (P_2) of the one or two dome-shaped parts (2).
5. Duvet according to any of the preceding claims, wherein the compartments (P_1) of the flat part (4) are filled with a filling material which is substantially heavier than down or feathers.
6. Duvet according to claim 5, wherein said filling material is selected from the group consisting of polyester batting, wool, and silk.
7. Duvet according to any of the preceding claims, wherein all sections of the circumferential perimeter (3) are curved, wherein the curvature of the foot section (F) and the head section (H) is stronger than the curvature of the left section (L) and right section (R) of the circumferential perimeter, wherein a width of the one or two dome-shaped parts (2) increases from the foot section (F) towards the head section (H).

8. Duvet according to any of the preceding claims, comprising one or two first releasable fastening means (F_1) via which the one or two dome-shaped parts (2) are connected to the flat part (4).

9. Duvet according to any of the preceding claims, wherein each dome-shaped part (2) is divided into an upper body dome part (D_1) and a lower body dome part (D_2) and comprises a second releasable fastening means (F_2) via which the upper body dome part (D_1) is connected to the lower body dome part (D_2); and wherein the first releasable fastening means (F_1) comprises:
 - an upper body fastening means (F_3) via which the upper body dome part (D_1) is connected to the flat part (4); and
 - a lower body fastening means (F_4) via which the lower body dome part (D_2) is connected to the flat part (4).

10. Duvet according to claim 9, and :
 - at least one spare upper body dome part (D_1'), and
 - at least one spare lower body dome part (D_2'),

wherein the upper body dome part (D_1) is completely detachable from the lower body dome part (D_2) via the second releasable fastening means (F_2) and completely detachable from the flat part (4) via the upper body fastening means (F_3) and completely replaceable by the spare upper body dome part (D_1') having different insulation properties than the original upper body dome part (D_1) by connecting said spare upper body dome part (D_1') to the lower body dome part (D_2) via the second releasable fastening means (F_2) and by connecting said spare upper body dome part (D_1') to the flat part (4) via the upper body fastening means (F_3); and the lower body dome part (D_2) is completely detachable from the upper body dome part (D_1) via the second releasable fastening means (F_2) and completely detachable from the flat part (4) via the lower body fastening means (F_4) and completely replaceable by the spare lower body dome part (D_2') having different insulation properties than the original lower body dome part (D_2) by connecting said further lower body dome part (D_2') to the upper body dome part (D_1) via the second releasable fastening means (F_2) and by connecting said spare lower body dome part (D_2') to the flat part (4) via the lower body fastening means (F_4).

11. Duvet according to any of claims 8 - 10, wherein the first (F_1), second (F_2), upper body (F_3) and lower body (F_4) releasable fastening means are zippers.

12. Use of a duvet according to any of claims 1 - 11 for covering one or two persons (5) lying horizontally on a bed (6) in a body form-fitting manner.
13. Use according to any of claims 12- for varying the insulation properties of the duvet in one or more areas of the duvet that is substantially covering the body shape of one or two persons (5) lying horizontally on a bed (6) by detaching in one piece the one or two dome-shaped parts (2) from the flat part (4) and by replacing in one piece said one or two dome-shaped parts (2) by one or two spare dome-shaped parts (2') having different insulating properties than the original one or two dome-shaped parts (2).
14. Use according to any of claims 12 - 13 for varying the insulation properties of the duvet in one or more areas of the duvet that is substantially covering the upper body parts of one or two persons (5) lying horizontally on a bed by detaching the one or two upper body dome parts (D₁) of the one or two dome-shaped parts (2) from the flat part (4) and from the lower body part (D₂) and by replacing said one or two upper body dome parts (D₁) by one or two further upper body dome parts (D₁') having different insulating properties than the original one or two upper body dome parts (D₁).
15. Use according to any of claims 12 - 14 for varying the insulation properties of the duvet in one or more areas of the duvet that is substantially covering the feet of one or two persons (5) lying horizontally on a bed (6) by detaching the one or two lower body dome parts (D₂) of the one or two dome-shaped parts (2) from the flat part (4) and from the upper body part (D₁) and replacing said one or two lower body dome parts (D₂) by one or two further lower body dome parts (D₂') having different insulating properties than the original one or two lower body dome parts (D₂).

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Fig. 1

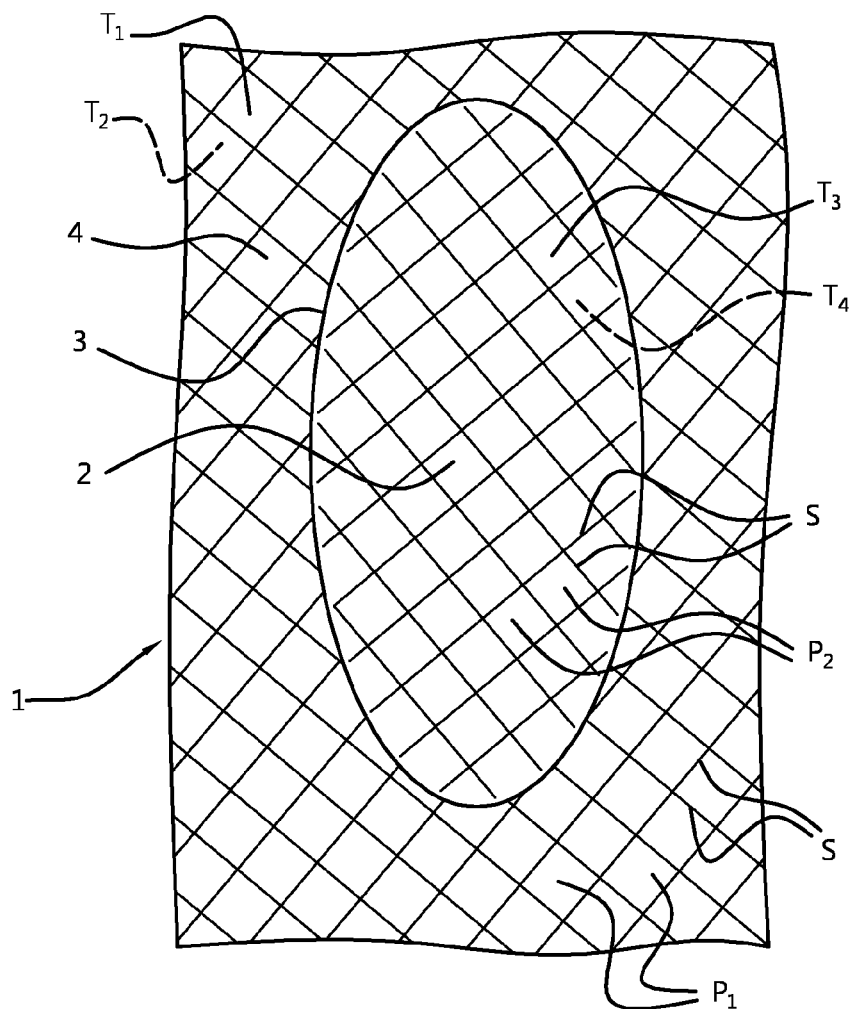


Fig. 2a

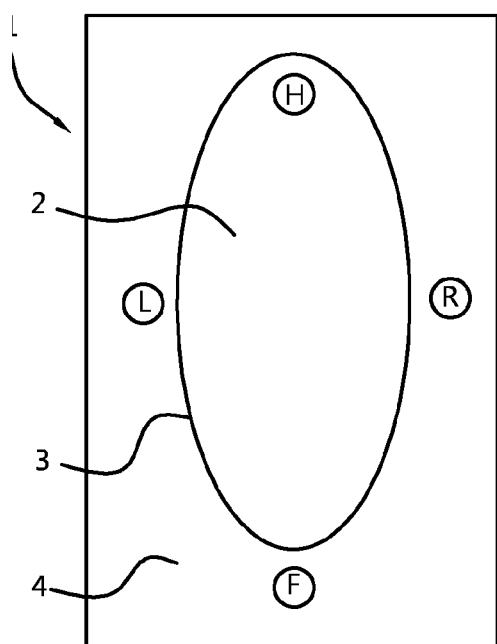


Fig. 2b

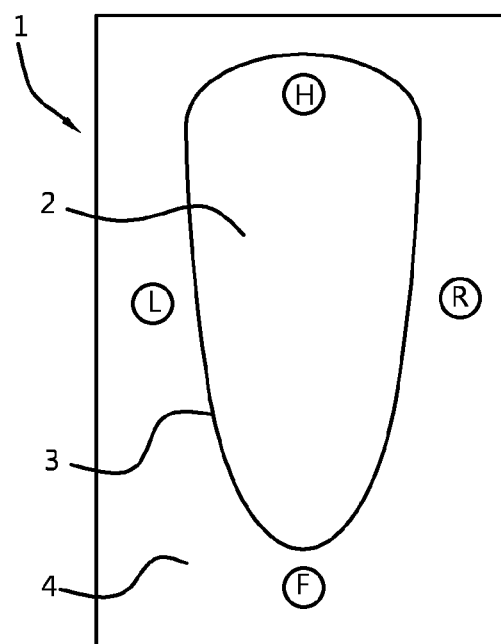


Fig. 3

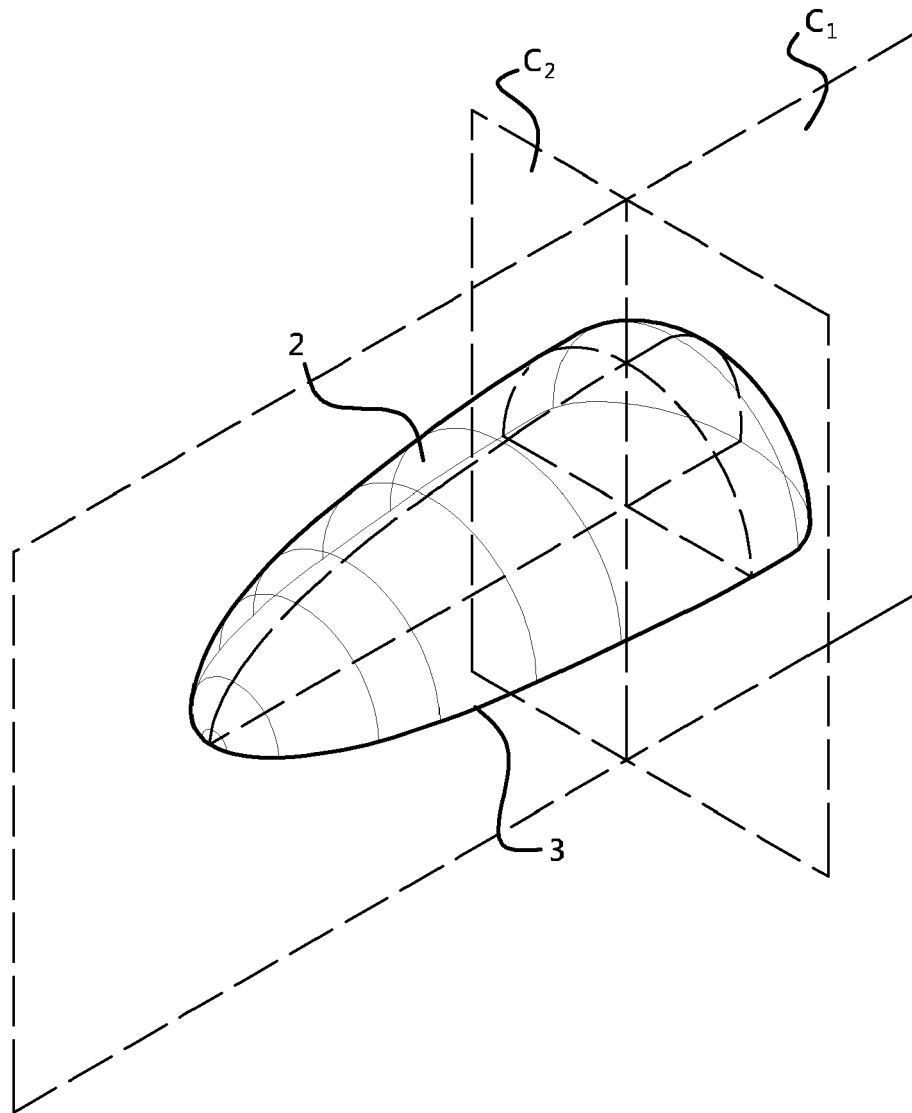
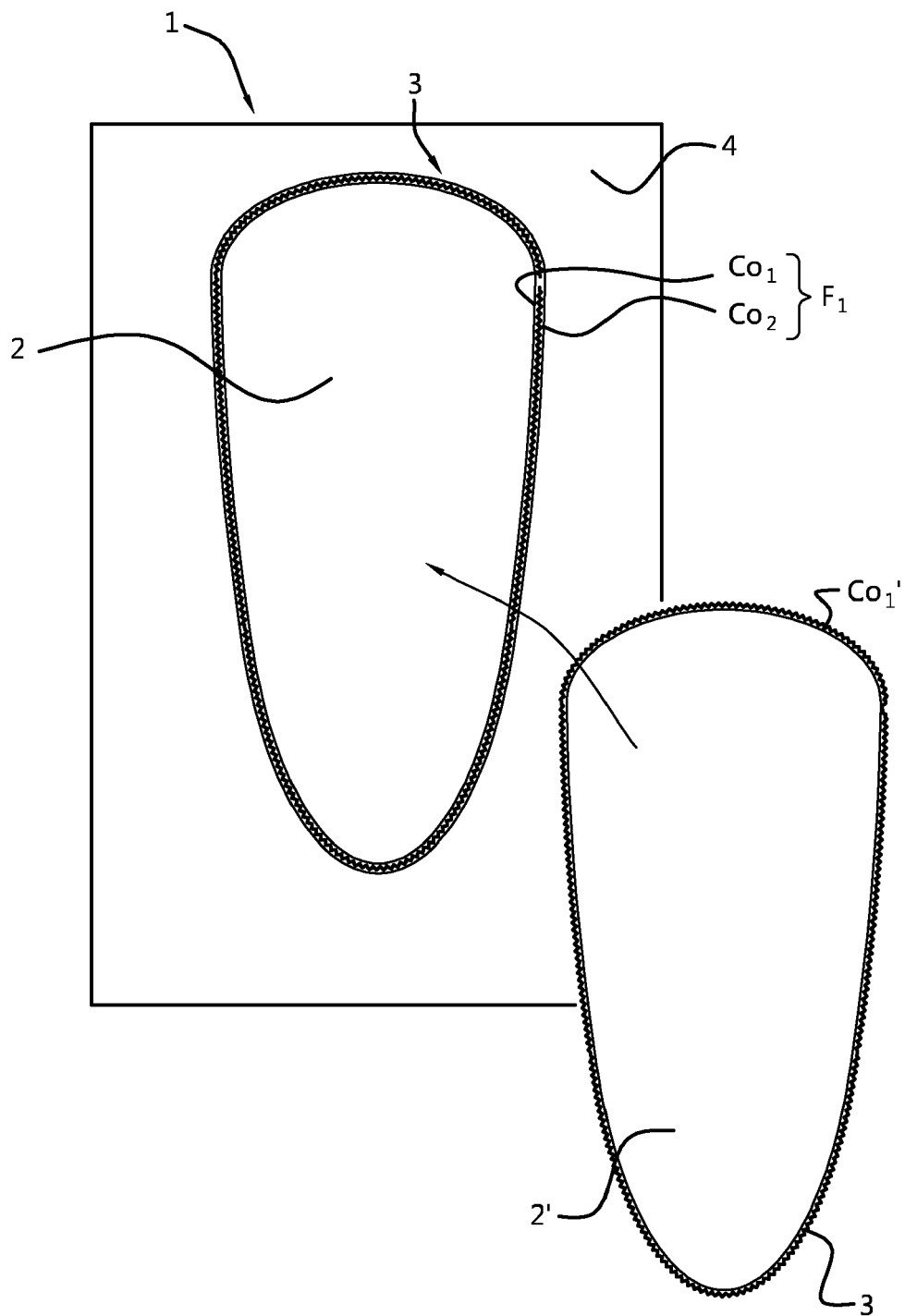


Fig. 4



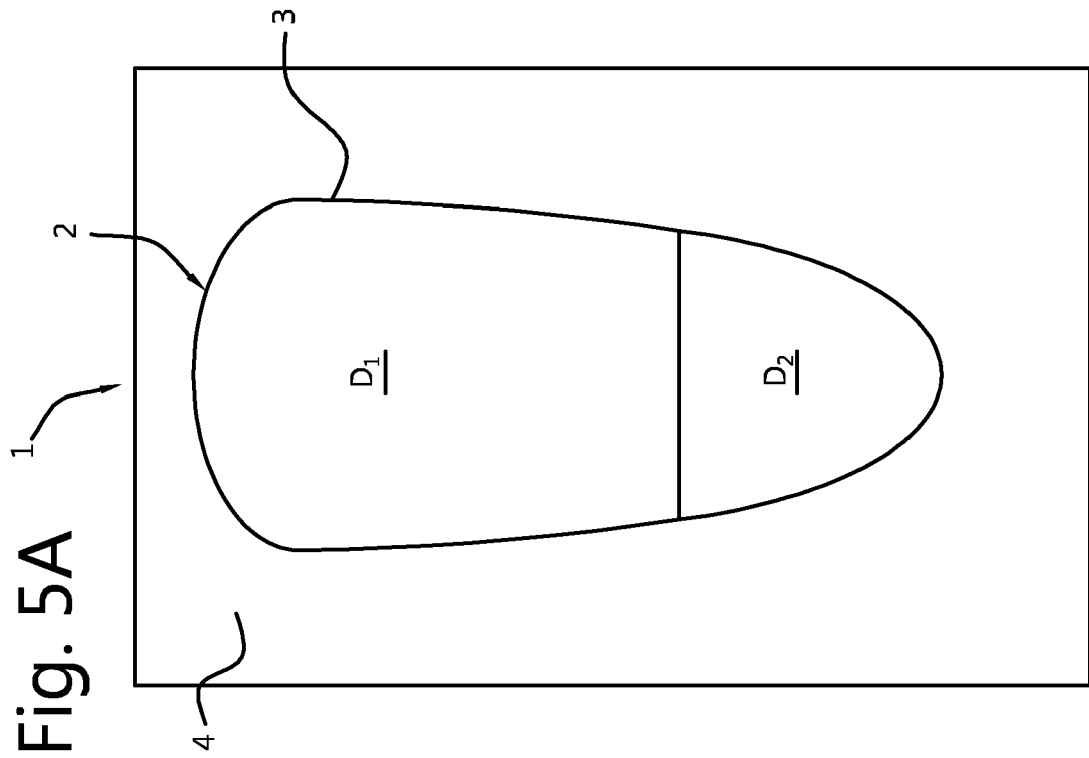
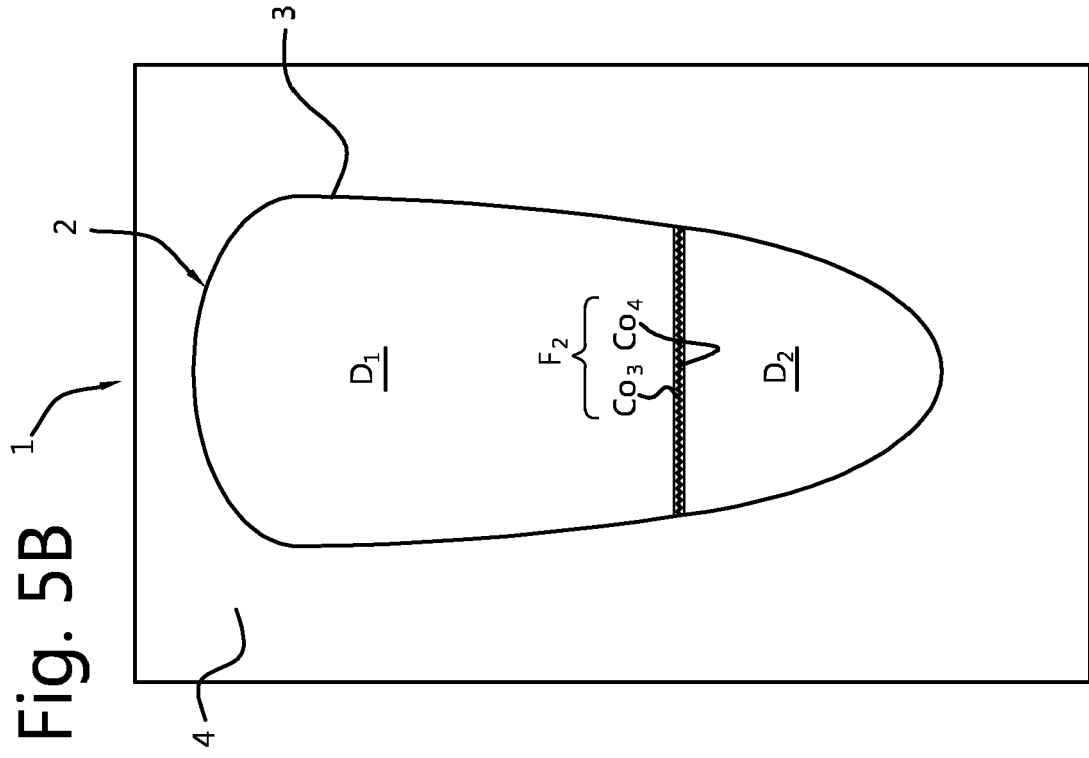


Fig. 6A

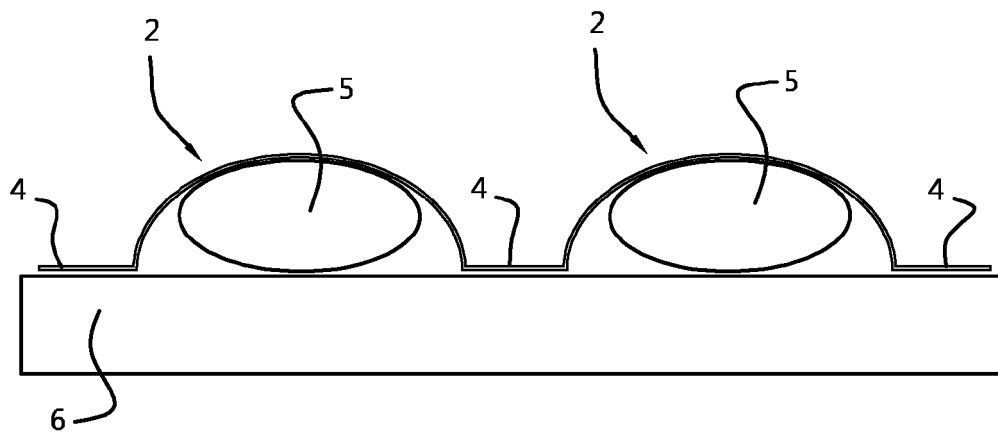
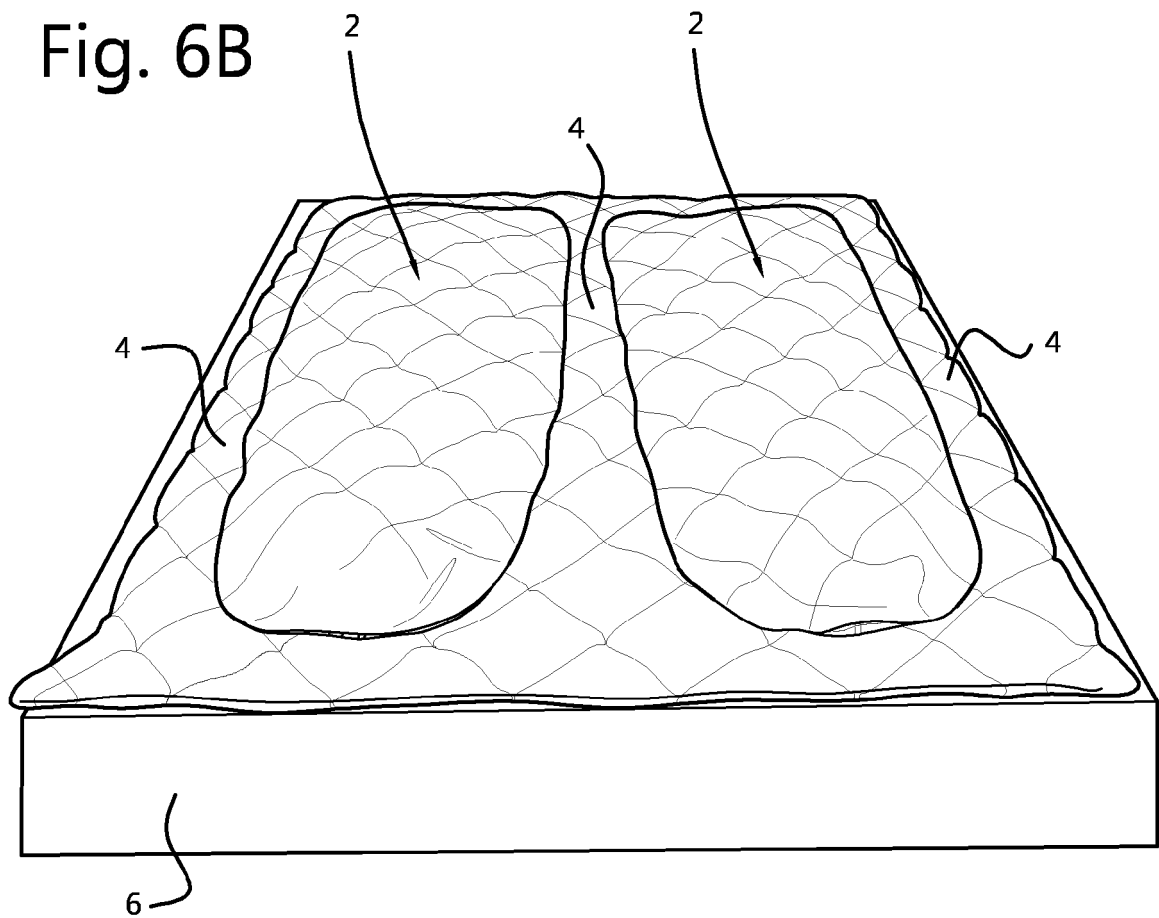


Fig. 6B





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Application Number
EP 16 17 8525

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Y	EP 0 562 256 A1 (DORBENA AG [LI]) 29 September 1993 (1993-09-29) * abstract * * column 1, line 17 - line 23 * * column 2, line 31 - line 42 * * column 2, line 53 - column 3, line 8 * * column 4, line 14 - line 17 *	1-7	
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Place of search The Hague		Date of completion of the search 6 December 2016	Examiner van Overbeek, Kajsa
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