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(54) Foldable pillow comprising at least three segments

(57) A pillow (1) comprises three cushion segments (4, 6, 8) and a connecting element (2), which is shaped as a bar having, in an unfolded state, a cross-section having the shape of a star comprising at least three points (10, 12, 14) being foldable about the longitudinal axis (LA) of the connecting element (2). Each point (10, 12, 14) has a connecting end (28, 30, 32). The connecting element (2) is adapted for holding one of the cushion segments (4, 6, 8) at each of its connecting ends (28, 30, 32).

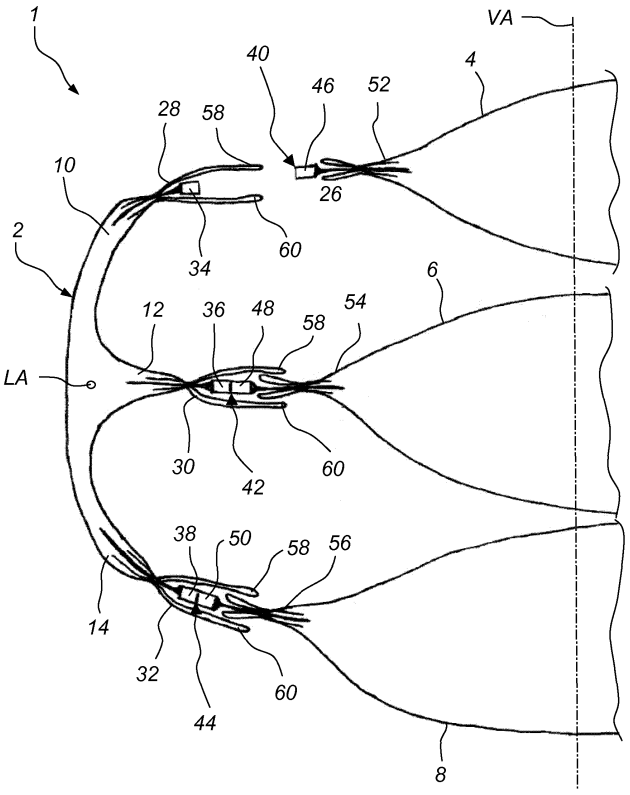


Fig. 5

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Description

Technical Field of the Invention

[0001] The present invention relates to a pillow comprising at least three cushion segments that are operative for being stacked on top of each other.

Background Art

[0002] A pillow is utilized for supporting the head when a person rests or sleeps in his or her bed. The requirement for head support varies much from person to person, as the anatomical and physiological prerequisites and conditions vary from person to person in a wide range, and may also vary from time to time for one and the same person. Furthermore, the requirement for head support may vary, for one and the same person, depending on what type of bed construction, more specifically what kind of mattress and its respective hardness, he or she is sleeping on. Thus, it is difficult for a person to find a standard pillow that suits his or her needs for head support.

[0003] US 5,987,676 describes a foldable pillow having a case. The case is provided with four pockets into which pillow cushions can be inserted. The result is a foldable pillow which can be folded in such a way that a person sleeping on the pillow can be supported by two, three or four pillow cushions.

[0004] A problem with the pillow of US 5,987,676 is that it leaves little freedom as regards the type of pillow cushions that can be combined. Thus, it will be difficult for a user to adapt the pillow of US 5,987,676 to his or her exact needs and desires as regards the head-supporting function of the pillow.

Summary of the Invention

[0005] An object of the present invention is to provide a pillow which is simple to adapt to a persons specific needs for head-support.

[0006] This object is achieved by a pillow comprising at least three cushion segments that are operative for being stacked on top of each other, the pillow being characterized in that it comprises a connecting element, which is shaped as a bar having, in an unfolded state, a cross-section having the shape of a star comprising at least three points being foldable about the longitudinal axis of the connecting element, each point having a connecting end being located at a distance from the longitudinal axis of the connecting element, the connecting element being adapted for holding one of the cushion segments at each of its connecting ends. An advantage of this invention is that a user of a pillow can choose, almost without constraints, in which order that said at least three cushion segments should be located on top of each other. The connecting element ensures that the cushion segments are held firmly on top of each other.

[0007] According to one embodiment each connecting end comprises a first portion of a connecting device, said first portion extending along the connecting element, each of said at least three cushion segments having a second portion of said connecting device, said second portion extending along a side of the respective cushion segment, each of said cushion segments being operative for being attached to one of said connecting ends by connecting the respective said second portion of the connecting device to the respective said first portion of the connecting device. An advantage of this embodiment is that the user may choose to replace or even eliminate one or several of the cushion segments. Washing the pillow also becomes easier when the cushion segments can be detached from the connecting element.

[0008] According to one embodiment each of said cushion segments is operative for being attached to any one of said connecting ends of the connecting element. An advantage of this embodiment is that the user is provided with maximum freedom of selecting in which order the cushion segments should be located in relation to each other, since any cushion segment could be attached to any one of the connecting ends.

[0009] According to one embodiment all of said first portions are identical to each other, and all of said second portions are identical to each other. An advantage of this embodiment is that it provides a simple and cost efficient way of ensuring that any one of the cushion segments can be attached to any one of the connecting ends of the connecting element.

[0010] Preferably said connecting device is chosen among the group of connecting devices comprising zippers, buttons, and strips of Velcro© tape. An advantage of this embodiment is that all these types of connecting devices are available at low cost, and are suitable for being fastened on flexible materials, including, in particular, fabrics. Attaching and detaching the cushion segments to the connecting element becomes simple and quick by means of these types of connecting devices. A person having the skills that could be expected from any private person would be able to operate these connecting devices without problems.

[0011] According to one embodiment the connecting element has been formed from at least three strips of textile fabric that are attached to each other adjacent to said at least three points. An advantage of this embodiment is that it provides a simple, yet effective manner of making the connecting element flexible, such that the said at least three points can be folded about the longitudinal axis. Furthermore, a textile fabric, such as a woven, nonwoven or knitted textile fabric material, is often preferred by the person using the pillow, compared to other materials like plastics and rubber, that are often not preferred for use in beds.

[0012] According to another embodiment the connecting element has been formed from at least two strips of textile fabric that are attached to each other adjacent to the longitudinal axis of the connecting element. An ad-

vantage of this embodiment is that few seams and a limited amount of textile fabric is required for the connecting element, thereby decreasing its cost.

[0013] According to another embodiment at least one of the cushion segments is fixed to a connecting end of the connecting element in a non-detachable manner. An advantage of this embodiment is that attachment of the cushion segment to the connecting element could be made in a very simple and cheap manner, e.g., by means of a simple seam. According to one embodiment all of the cushion segments have been fixed to the connecting element in a non-detachable manner.

[0014] According to one embodiment each connecting end is provided with at least one cover strip extending along the connecting element and covering at least partly said first portion of said connecting device. An advantage of this embodiment is that the connecting device is covered such that the user does not see it, which improves the aesthetical appearance of the pillow. Furthermore, some connecting devices may give a hard and/or cold feeling to the skin of a person using the pillow. By covering the connecting device, partly or entirely, by a covering strip, these negative effects can be decreased or completely avoided.

[0015] According to another embodiment the cushion segments are provided with at least one covering strip in a similar manner, and for a similar reason, as has been described above. It will be appreciated that it will be possible to combine one or several cover strips on the connecting element with one or several cover strips on each cushion segment.

[0016] According to one embodiment said at least three cushion segments comprises a first cushion segment, a second cushion segment, and a third cushion segment, the properties of said first cushion segment being different from that of at least one of the other cushion segments. An advantage of this embodiment is that a person using the pillow can arrange said at least three cushion segments on top of each other in various orders to obtain, thereby, a desired feeling when lying on the pillow. The difference in properties between the cushion segments could reside, e.g., in the type of filling material and/or in the amount of filling material.

[0017] These and other objects of the invention will be further described and elucidated in the following description and the appended claims.

Brief Description of the Drawings

[0018] The invention will now be described in more detail with reference to the appended drawings.

Fig. 1 is a schematic three-dimensional view and illustrates the separate pieces of a pillow in accordance with a first embodiment.

Fig. 2 is a schematic three-dimensional view and illustrates the pillow of Fig. 1 in an assembled state.

Fig. 3 is a schematic three-dimensional view and illustrates a connecting element of the pillow of Fig. 1 and Fig. 2.

Fig. 4 is a cross-sectional view of the connecting element, as seen along the line IV-IV of Fig. 3.

Fig. 5 is a schematic cross-sectional view and illustrates the principles of assembling the pillow of Fig. 1

Fig. 6 is a schematic cross-sectional view and illustrates the assembled pillow of Fig. 2.

Fig. 7 is a schematic side view and illustrates the manner in which cushion segments can be folded about the connecting element.

Fig. 8 is a schematic three-dimensional view and illustrates a connecting element in accordance with a second embodiment.

Fig. 9 is a schematic three-dimensional view and illustrates a connecting element in accordance with a third embodiment.

Fig. 10 is a schematic three-dimensional view and illustrates a connecting element in accordance with a fourth embodiment.

Fig. 11 is a schematic three-dimensional view and illustrates a connecting element in accordance with a fifth embodiment.

Fig. 12 is a schematic cross-sectional view and illustrates the principles of assembling a pillow comprising a connecting element in accordance with Fig. 11.

Fig. 13 is a schematic three-dimensional view and illustrates a pillow in accordance with a further embodiment.

Fig. 14 is a schematic three-dimensional view and illustrates a connecting element in accordance with a sixth embodiment.

Fig. 15 is a schematic side view and illustrates a pillow comprising the connecting element of Fig. 14.

Fig. 16 is a schematic side view and illustrates a pillow in accordance with yet a further embodiment, and the manner in which cushion segments can be folded about a connecting element.

Detailed Description of Preferred Embodiments of the Invention

[0019] Fig. 1 illustrates a foldable pillow 1 before being assembled by a user. The foldable pillow 1 comprises a connecting element 2, a first cushion segment 4, a second cushion segment 6, and a third cushion segment 8. All of the three cushion segments 4, 6, 8 may have exactly the same properties, as regards bulkiness, softness etc. However, it is often preferred that the properties of the three cushion segments are different. For instance, one cushion segment, e.g., the third cushion segment 8, could be a rather supportive cushion segment, providing a certain height and support to compression to the pillow 1, such a third cushion segment 8 still being flexible to bending and of rather light weight. One cushion segment, e.g., the second cushion segment 6, could have an intermediate hardness, and one cushion segment, e.g., the first cushion segment 4, could be very soft, but pro-

vide little of the total height of the pillow 1. The properties of the cushion segments 4, 6, 8 could be determined by the filling material of the respective cushion segment. For instance, the first cushion segment 4 could be filled with a blowable microfibre material like Suprelle ® micro T-111SO, a material which is commercially available from ADVANSA GmbH, Hamm, DE, or a material such as natural goose down, to provide a very soft feeling closest to the head of the user. The second cushion segment 6 could be filled with a polyester filling material, such as a fibre ball filling material like Comforel® T-287 or Comforel® F-91, both materials being commercially available from ADVANSA GmbH, Hamm, DE. The third cushion segment 8 could be filled with, e.g., a foam material, such as a viscoelastic foam, such as a polyurethane or latex foam, or a foam rubber material, as well as a thermally bonded polyester batting material. The material of the third cushion segment 8 could be shaped as a block having any specific height, density and chemical composition to provide a desired bulkiness and support characteristic. Apart from its comfort characteristics, the variable height of a foam can serve as a dedicated spacer medium between a mattress and the user's head, to enable a desired distance, taking into account both the variety of hardness of different mattresses and the variety of body constitution of the population of users.

[0020] It will be appreciated that some types of filling material, such as fibre ball filling materials, provide the opportunity of adding and/or removing filling material to a certain cushion segment, thus providing the user with the option of adjusting the height of, e.g., the cushion segments 4 and 6 to his or her specific and individual needs. It will be appreciated that other natural and synthetic materials commonly used for pillows may also be used in the cushion segments 4, 6, 8.

[0021] Fig. 2 illustrates the pillow 1 after having been assembled by a user. The three cushion segments 4, 6, 8 have been attached, in the order as desired by the user, to the connecting element 2 and form together with the connecting element 2 a complete pillow 1 with properties in accordance with the desires of the user. Optionally the pillow 1 could be put inside a pillow case, not shown in Fig. 2, before the user actually sleeps on it.

[0022] Fig. 3 illustrates the connecting element 2, as seen in an unfolded state, in more detail. As can be seen from Fig. 3 the connecting element 2 is shaped as an elongated bar extending along a central longitudinal axis LA. The total length L of the connecting element 2 is typically in the range of 20-150 cm, more often 30-100 cm. The cross-section of the connecting element 2 has the shape of a star having a first point 10, a second point 12, and a third point 14, each of the points 10, 12, 14 extending from the longitudinal axis LA of the connecting element 2. The three points 10, 12, 14 have a similar size, and thus the cross-section of the connecting element 2 has the shape of a substantially symmetrical star. The connecting element 2 comprises a first, a second, and a third strip, 16, 18, 20, respectively, of textile fabric, preferably a woven textile fabric, each such strip 16, 18, 20 extending along the longitudinal axis LA. The first and second strips 16, 18 have been attached to each other by means of a seam 22 at the second point 12, the second and third strips 18, 20 have been attached to each other by means of a seam 24 at the third point 14, and the third and first strips 20, 16 have been attached to each other by means of a seam 26 at the first point 10. Each of the seams 22, 24, 26 extend along the total length L of the connecting element 2, at the respective point 10, 12, 14. The textile fabric material of the strips 16, 18, 20 is flexible, which makes the points 10, 12, 14 foldable about the longitudinal axis LA of the connecting element 2, as will be illustrated in more detail below. Each of the points 10, 12, 14 has a respective connecting end 28, 30, 32. As can be seen from Fig. 3 each connecting end 28, 30, 32 is located at a distance D, which is typically about 2-15 cm, often about 3-12 cm, from the central longitudinal axis LA of the connecting element 2. As can be seen from Fig. 3, all the connecting ends 28, 30, 32 are located at a similar distance D from the longitudinal axis LA.

[0023] Each connecting end 28, 30, 32 comprises a first portion 34, 36, 38 of a connecting device having the form of first, second and third zippers. Hence, the first connecting end 28 comprises a first portion 34 of the first zipper, the second connecting end 30 comprises a first portion 36 of the second zipper, and the third connecting end 32 comprises a first portion 38 of the third zipper. Each such first portion 34, 36, 38 of the respective zipper extends along the central longitudinal axis LA of the connecting element 2.

[0024] Fig. 4 is a two-dimensional cross-section and illustrates, schematically, the connecting element 2 as seen along the line IV-IV of Fig. 3, and before seams have been applied. Fig. 4 clearly illustrates the cross-section having the shape of a star having the three points 10, 12, 14 extending from the central longitudinal axis LA of the connecting element 2. The first connecting end 28 comprises the first portion 34 of the first zipper, such first portion 34 being located between the strips 16 and 20. When a seam 26, the location of which is illustrated by a dotted line in Fig. 4, is made at the first connecting end 28 such seam 26 will fasten the first portion 34 of the first zipper between the strips 16 and 20. In a similar manner the first portion 36 of the second zipper is to be fastened at the second connecting end 30 by means of a seam 22, and the first portion 38 of the third zipper is to be fastened at the third connecting end 32 by means of a seam 24. Again, the distance D from the central longitudinal axis LA to each connecting end, in Fig. 4 represented by the connecting end 28, and more specifically to the first portion 34 of the first zipper, is typically about 2-15 cm, more often about 3-12 cm.

[0025] Fig. 5 is a cross-section and illustrates the manner in which the pillow 1 is assembled. The first, second and third cushion segments 4, 6, 8 can be attached to the connecting element 2 at any one of the first, second and third connecting ends 28, 30, 32 by means of first,

second and third zippers 40, 42, 44. Hence, each of the cushion segments 4, 6, 8 is provided with a respective second portion 46, 48, 50, respectively, of the respective zipper 40, 42, 44. Each such second portion 46, 48, 50 is attached to, and extends along, a respective side 52, 54, 56 of the respective cushion segment 4, 6, 8. As illustrated in Fig. 5 the second cushion segment 6 has been attached to the second connecting end 30 of the connecting element 2 by connecting the second portion 48 of the second zipper 42 to the first portion 36 of the second zipper 42. The third cushion segment 8 has been attached to the third connecting end 32 in a similar manner by means of the third zipper 44. The first cushion segment 4 is just about to be attached to the first connecting end 28 by means of connecting the second portion 46 of the first zipper 40 to the first portion 34 of the first zipper 40.

[0026] In accordance with a preferred embodiment, all of the first portions 34, 36, 38 are identical to each other, and all of the second portions 46, 48, 50 are identical to each other. Thus, it is possible to attach any one of the cushion segments 4, 6, 8 to any one of the connecting ends 28, 30, 32. Hence, it would be possible, as an example and as alternative to what is shown in Fig. 5, to attach the second cushion segment 6 to the third connecting end 32 by connecting the second portion 48 of the second zipper 42 to the first portion 38 of the third zipper 44. Correspondingly, the third cushion segment 8 could then be attached to the second connecting end 30. The order, from top to bottom, of the cushion segments 4, 6, 8 can thus be altered in all possible ways to suit the desires of the person that is to use the pillow 1. Hence, the connecting element 2 provides for a detachable attachment of each of the cushion segments 4, 6, 8 in any position on the connecting element 2.

[0027] It can be seen, from a comparison between Fig. 5 and Fig. 4, that the points 10, 12, 14, as illustrated in Fig. 5, have been folded about the central longitudinal axis LA of the connecting element 2. This foldability of the points 10, 12, 14 provides for a pillow 1 in which all three cushion segments 4, 6, 8 can be held in a rather parallel relation, as seen along a vertical axis VA of the pillow 1.

[0028] As further illustrated in Fig. 5, each of the connecting ends 28, 30, 32 is provided with two cover strips 58, 60 extending along the sides of the respective first portion 34, 36, 38. The cover strips 58, 60, which are optional, cover the respective zipper in its connected state, see for example the zipper 44 at the third connecting end 32 in Fig. 5, such that a user neither sees or feels the zipper 44. The cover strips 58, 60 can be formed as integral parts of the strips 16, 18, 20 forming the connecting element 2, and can be formed by folding the strips 16 ,18, 20 at their ends located adjacent to the respective connecting end 28, 30, 32, as is best shown in Fig. 4.

[0029] Fig. 6 illustrates the pillow 1 after all three cushion segments 4, 6, 8 have been attached to the connecting element 2 by means of the respective zippers 40, 42, 44. As clearly illustrated in Fig. 6 all three cushion segments 4, 6, 8 are held in a rather parallel relation by means of the connecting element 2, as seen along a vertical axis VA of the pillow 1. The pillow 1 is now ready for being slept on.

[0030] Fig. 7 is a schematic side view and illustrates how easily a user can fold and/or turn the cushion segments 4, 6, 8 around the connecting element 2, almost like a propeller, when selecting the order in which the cushion segments 4, 6, 8 of the pillow 1 should be arranged. By turning the three segments 4, 6, 8 as shown in Fig. 7 the user can obtain all possible combinations of the three segments 4, 6, 8, also without having to make them change their relative positions of attachment on the connecting element 2. After having turned the segments 4, 6, 8 to the desired order, the user simply folds the segments 4, 6, 8 on top of each other in that desired order, and the pillow 1, which then has the general appearance illustrated in Fig. 2, is ready for being slept on. As noted above, the user may also, in addition to turning the cushion segments 4, 6, 8 as shown in Fig. 7, remove a cushion segment entirely, or make it change its place with another cushion segment. Still further, the pillow 1 may comprise further cushion segments, for instance totally 3 to 10 different cushion segments, such that the user may, at each specific instance, select which three of the cushion segments she or he wants to use, and then attach those three selected cushion segments in any desired order on the connecting element 2. Thus, the pillow 1 provides the user with maximum freedom in selecting which cushion segments to attach to the connecting element 2, and the order of attaching those cushion segments.

[0031] Fig. 8 illustrates a connecting element 102 in accordance with a second embodiment. The main difference between the connecting element 102 and the connecting element 2, which has been described hereinbefore with reference to Figs. 1-7, is that the connecting element 102 is shaped, as seen in cross-section, as a symmetrical star having first, second, third and fourth points 110, 112, 114 and 115. Each such point is provided with a connecting end 128, 130, 132, 133 having a respective first portion 134, 136, 138, 139 of a respective zipper extending along the connecting element 102. By means of the connecting element 102 it becomes possible to include in a pillow up to four cushion segments. Thus, the connecting element 102 makes it possible to provide an even larger freedom to the user as regards the selection of cushion segments, and the order in which they are attached to the connecting element 102.

[0032] Fig. 9 illustrates a connecting element 202 in accordance with a third embodiment. The main difference between the connecting element 202 and the connecting element 2, which has been described hereinbefore, is that the connecting element 202 is provided with connecting devices comprising button arrangements instead of zippers. In Fig. 9 it is shown that the connecting element 202 is star shaped in cross-section and has three

points 210, 212, 214 each having a connecting end 228, 230, 232. The first connecting end 228 is provided with a first portion 234 of a button arrangement. This first portion 234 comprises a row of buttons 235, said row extending along the connecting element 202 at the connecting end 228. In a similar manner a first portion comprising a row of buttons is provided at the second connecting end 230, the buttons being concealed in Fig. 9, and a first portion 238 comprising a row of buttons 235 is provided at the third connecting end 232. Each such row of buttons 235 can be attached to a complementary row of buttons extending along a side of a respective cushion segment, not shown in Fig. 9. Hence, the connecting element 202 provides for an alternative manner of attaching cushion segments to the connecting element 202, compared to the connecting element 2.

[0033] Fig. 10 illustrates a connecting element 302 in accordance with a fourth embodiment. The main difference between the connecting element 302 and the connecting element 2, which has been described hereinbefore, is that the connecting element 302 is provided with connecting devices comprising Velcro© tape arrangements, instead of zippers. In Fig. 10 it is shown that the connecting element 302 has three points 310, 312, 314 each having a connecting end 328, 330, 332. The first connecting end 328 is provided with a first portion 334 of a Velcro© tape arrangement. This first portion 334 comprises two strips 335 of Velcro© tape, said strips 335 extending along the connecting element 302 at the connecting end 328. In a similar manner a first portion comprising two strips of Velcro© tape is provided at the second connecting end 330, the strips being concealed in Fig. 10, and a first portion 338 comprising two strips 335 of Velcro© tape is provided at the third connecting end 332. Each such strip 335 can be attached to a complementary strip of Velcro© tape extending along a side of a respective cushion segment, not shown in Fig. 10. Hence, the connecting element 302 provides for a further alternative manner of attaching cushion segments to the connecting element 302. It will be appreciated that, while the strips 335 extend all the length of the connecting element 302, it would also be possible, as alternative, to distribute short portions of Velcro® tape, each such portion being, e.g., 1-6 cm long, along the connecting element 302, at the respective connecting ends 328, 330, 332.

[0034] Fig. 11 illustrates a connecting element 402 in accordance with a fifth embodiment and in an unfolded state. The main difference between the connecting element 402 and the connecting element 2 described hereinbefore is that the connecting element 402 comprises three strips 416, 418, 420 of textile fabric material, each such strip extending from the central longitudinal axis LA of the connecting element 402, the connecting element 402 having the cross-sectional shape of a symmetrical star, as illustrated in Fig. 11. The strips 416, 418, 420 are attached to each other adjacent to the central longitudinal axis LA by means of a seam 426. Thus, contrary to the connecting element 2, each point 410, 412, 414 comprises a single strip 416, 418, 420. Each point 410, 412, 414 has a connecting end 428, 430, 432, each of which is provided with a first portion 434, 436, 438, respectively, of a zipper, in a similar manner as described hereinbefore with reference to Figs. 1-7. The connecting element 402 requires a smaller amount of textile fabric material, since a single strip 416, 418, 420 extends towards each point 410, 412, 414, compared to the connecting element 2.

[0035] Although being described as comprising three individual strips 416, 418, 420 of woven material, it will be appreciated that a connecting element with a similar appearance as that shown in Fig. 11 could also be manufactured using only two strips of textile fabric material. In such a case the second and third strips 418, 420 could form one integral strip, to the centre of which the first strip 416 could be attached by means of a seam.

[0036] Fig. 12 illustrates a pillow 401 comprising three cushion segments 404, 406, 408, and the connecting element 402, which includes the three strips 416, 418, 420 held together by the seam 426. Each cushion segment 404, 406, 408 can be attached to any one of the connecting ends 428, 430, 432 of the connecting element 402 by means of a respective zipper 440, 442, 444 in a similar manner as described hereinbefore with reference to Fig. 5. In Fig. 12 it is illustrated how a second portion 446 of the zipper 440, which second portion 446 is attached to the cushion segment 404, is about to be connected to the first portion 434 of the zipper 440, such that the cushion segment 404 becomes attached to the connecting element 402. It is clear from a comparison between Fig. 5 and Fig. 12 that the connecting element 402 provides for a less bulky attachment compared to the connecting element 2.

[0037] Fig. 13 illustrates a foldable pillow 501. The foldable pillow 501 comprises a connecting element 502, which is similar to the connecting element 2 described hereinbefore, a first cushion segment 504, a second cushion segment 506, and a third cushion segment 508. The first cushion segment 504 is provided, at its upper surface 509, with a pocket 511. A heating device 513 has been placed in the pocket 511. The heating device 513 could be, e.g., a bag of beans which can be charged with heat in a microwave-oven. In an alternative embodiment a cooling device, not shown in Fig. 13, could be put in the pocket 511. The first cushion segment 504 comprising the pocket 511 makes it possible for a user to vary the temperature of the pillow 501 in a desired manner.

[0038] Fig. 14 illustrates a connecting element 602 in accordance with a sixth embodiment, in an unfolded state and without any cushion segments being attached. The connecting element 602 is rather similar to the connecting element 402 described hereinbefore and as such comprises three strips 616, 618, 620 of textile fabric material that are attached to each other adjacent to the central longitudinal axis LA by means of a seam 626. The connecting element 602 has the cross-sectional shape of a star, and each of its points 610, 612, 614 has a con-

necting end 628, 630, 632, each of which is provided with a first portion 634, 636, 638, respectively, of a zipper. The main difference between the connecting element 602 and the connecting element 402 described hereinbefore, is that the connecting element 602 is provided with an additional connecting device in the form of three buttons 639, 641, 643. The three buttons 639, 641, 643 are fastened to the strip 616 in a position between the seam 626 and the first portion 634.

[0039] Fig. 15 illustrates a pillow 601 comprising the connecting element 602, a first cushion segment 604, a second cushion segment 606 and a third cushion segment 608. Each of the cushion segments 604, 606, 608 has been attached to the connecting element 602 by means of zippers in a manner being similar to that described with reference to Fig. 12. At an end 645 of the pillow 601, which end 645 is opposite to the location of the zippers, the first and the third cushion segments 604, 608 have been attached to each other by means of a button 647. Hence, the relative movement of the cushion segments 604, 608 is hindered not only at the connecting element 602, but also at the opposite end 645 of the pillow 601.

[0040] The second cushion segment 606 has been formed as a neck-roll for the purpose of giving additional height to the pillow 601, such additional height being desirable when the user of the pillow 601 is lying in bed and is, e.g., reading a book or watching television. The neck-roll has been formed by attaching a remote end 649 of the second cushion segment 606, such remote end 649 normally being remote from the connecting element 602, to the connecting element 602 by means of the buttons 639, 641, 643, that are illustrated in more detail in Fig. 14, such that the second cushion segment 606 becomes folded in two. The pillow 601 can be used in at least three different modes. In a first mode all three cushion segments 604, 606, 608 are lying flat on top of each other, and are attached to each other at the end 645 by means of the button 647. In a second mode, which is illustrated in Fig. 15, the second cushion segment 606 forms a neck-roll by the remote end 649 being attached to the connecting element 602. In a third mode the first cushion segment 604 could form a neck-roll by its remote end 651 being attached to the connecting element 602 by means of the buttons 639, 641, 643. In the third mode the first cushion segment 604 could form a neck-roll either as alternative to the second cushion segment 606 forming a neck-roll, or in combination with the second cushion segment 606 forming a neck-roll, forming what could be called a dual neck-roll.

[0041] Fig. 16 illustrates a pillow 701 in accordance with yet a further embodiment, as seen in a side view. The pillow 701 comprises a connecting element 702, a first cushion segment 704, a second cushion segment 706, and a third cushion segment 708. The connecting element 702 comprises two strips, i.e., a first strip 716, and a second strip 718, both of which are made of textile fabric material. The first strip 716 is about twice as wide as the second strip 718 and comprises a first portion 719 and a second portion 721. The second strip 718 is attached to the first strip 716 adjacent to the central longitudinal axis LA by means of a seam 726, which is located where the first and second portions 719, 721 of the first strip 716 meet each other. The connecting element 702 is rather similar to the connecting element 402, which has been described hereinbefore with reference to Fig. 11, and comprises, as it has the cross-sectional shape of a symmetrical star, three points 710, 712, 714, each of which has a connecting end 728, 730, 732. Contrary to the pillow 401, which is illustrated in Fig. 12, the cushion segments 704, 706, 708 of the pillow 701 are not detachable from the connecting element 702. The first cushion segment 704 is fixed to the connecting end 728 by means of a seam 734, the second cushion segment 706 is fixed to the connecting end 730 by means of a seam 736, and the third cushion segment 708 is fixed to the connecting end 732 by means of a seam 738.

[0042] By turning the cushion segments 704, 706, 708 around the connecting element 702, almost like a propeller, as indicated by arrows in Fig. 16, it is possible for a user to obtain any desired order of the three cushion segments 704, 706, 708, in the same way as illustrated in Fig. 7. Hence, for example, the user may turn the cushion segments such that the third cushion segment 708 is on top, i.e., closest to the head of the user, and that the second cushion segment 706 is at the bottom, i.e., closest to the mattress, with the first cushion segment 704 located between them. The pillow 701 does, however, not provide the user with the full flexibility of replacing and/or removing cushion segments, as is the case with the pillows 1, 401, 601 described hereinbefore.

[0043] It will be appreciated that numerous modifications of the embodiments described above are possible within the scope of the appended claims.

[0044] Thus, for example, it has been described hereinbefore that the cushion segments 4, 6, 8 are attached to the connecting element 2 at one side 52, 54, 56, respectively, of said cushion segments 4, 6, 8, see for example Fig. 2 and Fig. 5. It is possible to additionally attach the cushion segments to a second connecting element at a second side of the cushion segments, said second side being opposite to said one side 52, 54, 56, to make sure that the cushion segments are kept in a fixed position in relation to each other when a person sleeps on the pillow. Furthermore, it is also, as a further alternative, possible to provide the cushion segments with buttons at said second side, such that the cushion segments could be attached to each other at said second sides, for the purpose of keeping them fixed in relation to each other, as is illustrated in Fig. 15 for the pillow 601, having a button 647 keeping the cushion segments 604, 608 together.

[0045] Above it has been described that the all of the first portions and all of the second portions of the connecting devices are identical, such that any cushion segment can be detachably attached to any connecting end.

It is also possible, however, to provide first portions being different from each other, and corresponding second portions, such that a specific cushion segment can only be attached to one specific connecting end.

[0046] It has been described hereinbefore with reference to Fig. 4 and Fig. 5 that the connecting element 2 may be provided, at each connecting end 28, 30, 32, with two covering strips 58, 60. It will be appreciated that it is also possible to provide only one or two of the connecting ends with such covering strips. Furthermore, it is also possible to provide the connecting ends with only one strip each, thus only covering the respective first portion of the connecting device from one side. Still further, it is also possible to provide the cushion segment with one or two covering strips covering the second portion of the connecting device from one or both sides.

[0047] With reference to Fig. 16 it has been described that all three cushion segments 704, 706, 708 have been attached to the connecting element 702 by means of seams 734, 736, 738 in a non-detachable manner. It will be appreciated that it is also possible to attach only one or two of the cushion segments to the connecting element in a non-detachable manner, and to attach the remaining cushion segments in a detachable manner, e.g., by means of zippers. Such a pillow, in which one or more cushion segments are detachable, will provide a larger flexibility to the user than the pillow 701 in which all of the cushion segments are non-detachable.

Claims

1. A pillow comprising at least three cushion segments (4, 6, 8) that are operative for being stacked on top of each other, **characterized in that** the pillow (1) comprises a connecting element (2), which is shaped as a bar having, in an unfolded state, a cross-section having the shape of a star comprising at least three points (10, 12, 14) being foldable about the longitudinal axis (LA) of the connecting element (2), each point (10, 12, 14) having a connecting end (28, 30, 32) being located at a distance (D) from the longitudinal axis (LA) of the connecting element (2), the connecting element (2) being adapted for holding one of the cushion segments (4, 6, 8) at each of its connecting ends (28, 30, 32).

2. A pillow according to claim 1, wherein each connecting end (28, 30, 32) comprises a first portion (34, 36, 38) of a connecting device (40, 42, 44), said first portion (34, 36, 38) extending along the connecting element (2), each of said at least three cushion segments (4, 6, 8) having a second portion (46, 48, 50) of said connecting device (40, 42, 44), said second portion (46, 48, 50) extending along a side (52, 54, 56) of the respective cushion segment (4, 6, 8), each of said cushion segments (4, 6, 8) being operative for being attached to one of said connecting ends (28, 30, 32) by connecting the respective said second portion (46, 48, 50) of the connecting device (40, 42, 44) to the respective said first portion (34, 36, 38) of the connecting device (40, 42, 44).

3. A pillow according to claim 2, wherein each of said cushion segments (4, 6, 8) is operative for being attached to any one of said connecting ends (28, 30, 32) of the connecting element (2).

4. A pillow according to claim 3, wherein all of said first portions (34, 36, 38) are identical to each other, and all of said second portions (46, 48, 50) are identical to each other.

5. A pillow according to any one of claims 2-4, wherein said connecting device is chosen among the group of connecting devices comprising zippers (40, 42, 44), buttons (235), and strips (335) of Velcro© tape.

6. A pillow according to claim 1, wherein at least one of the cushion segments (704, 706, 708) is fixed to a connecting end (728, 730, 732) of the connecting element (702) in a non-detachable manner.

7. A pillow according to any one of claims 1-6, wherein the connecting element (2; 402) is made of strips (16, 18, 20; 416, 418, 420) of textile fabric that are held together by means of at least one seam (22, 24, 26; 426).

8. A pillow according to claim 7, wherein the connecting element (2) has been formed from at least three strips (16, 18, 20) of textile fabric that are attached to each other adjacent to said at least three points (10, 12, 14).

9. A pillow according to claim 7, wherein the connecting element (402; 702) has been formed from at least two strips (416, 418, 420; 716, 718) of textile fabric that are attached to each other adjacent to the longitudinal axis (LA) of the connecting element (402; 702).

10. A pillow according to any one of claims 2-9, wherein each connecting end (28, 30, 32) is provided with at least one cover strip (58, 60) extending along the connecting element (2) and covering at least partly said first portion (34, 36, 38) of said connecting device (40, 42, 44).

11. A pillow according to any one of claims 2-10, wherein said side (52, 54, 56) of the respective cushion segment (4, 6, 8) is provided with at least one cover strip extending along said side and covering at least partly said second portion (46, 48, 50) of said connecting device (40, 42, 44).

12. A pillow according to any one of claims 1-11, said at least three cushion segments comprising a first cushion segment (4), a second cushion segment (6), and a third cushion segment (8), the properties of said first cushion segment (4) being different from that of at least one of the other cushion segments (6, 8).

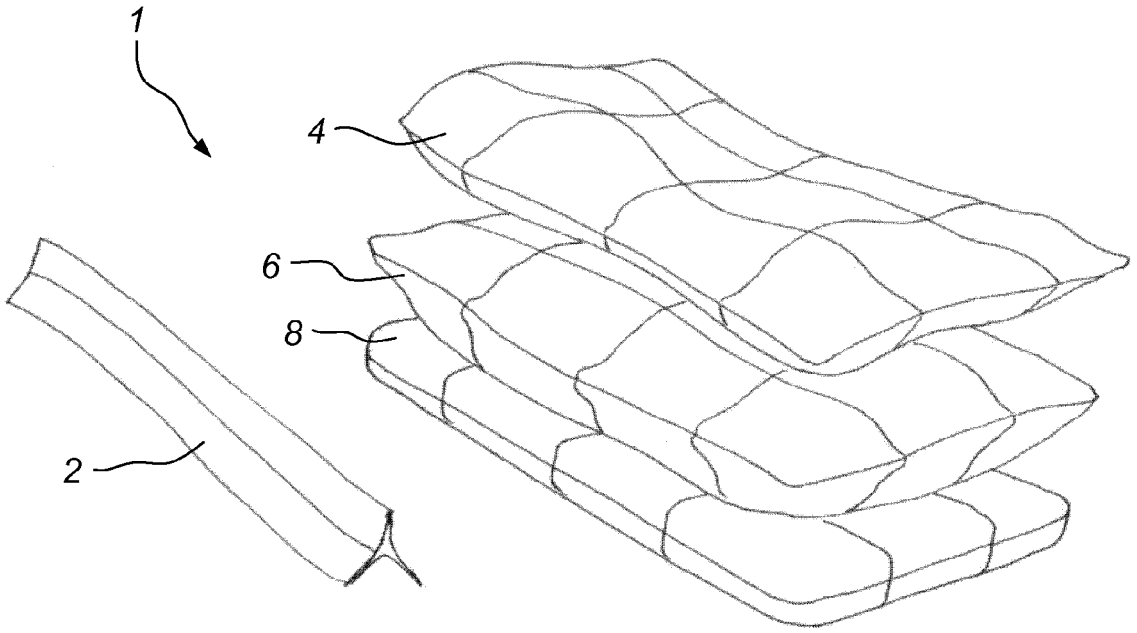


Fig. 1

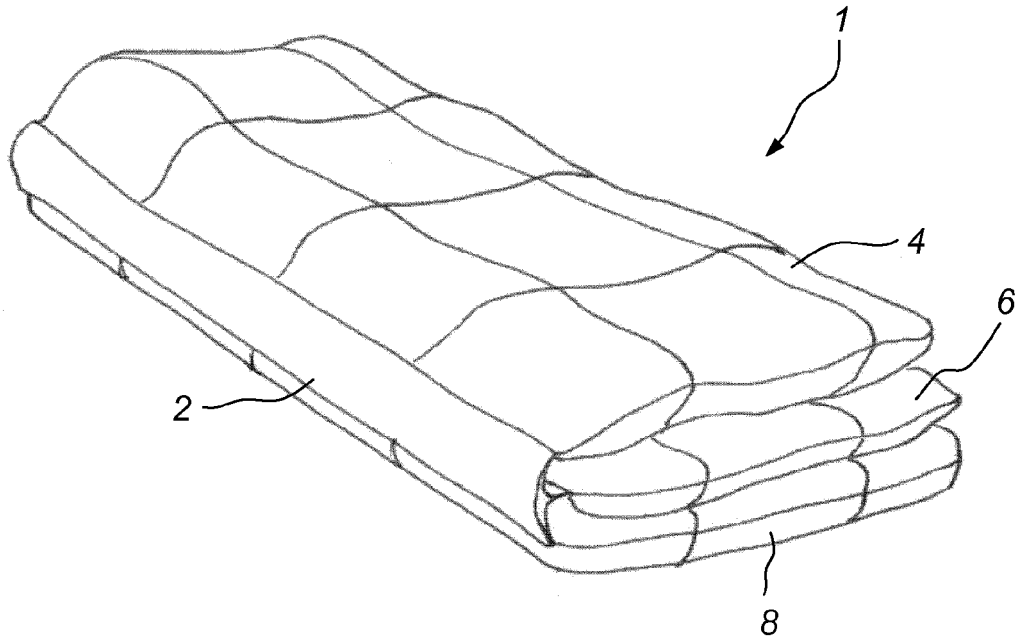


Fig. 2

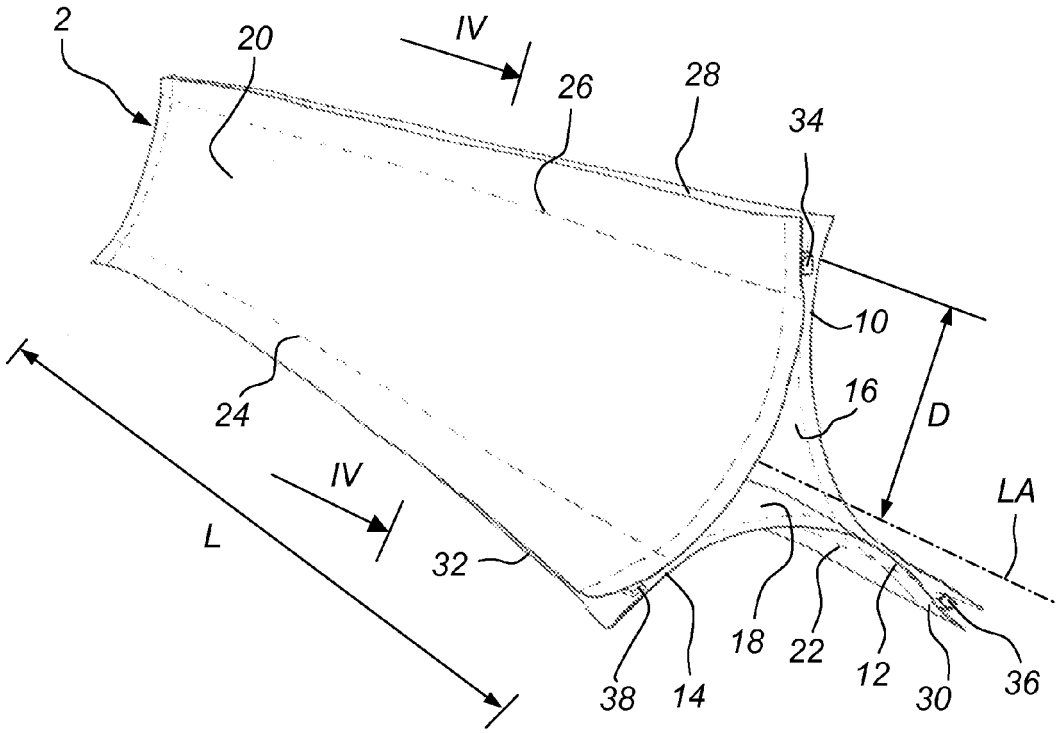

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Fig. 3

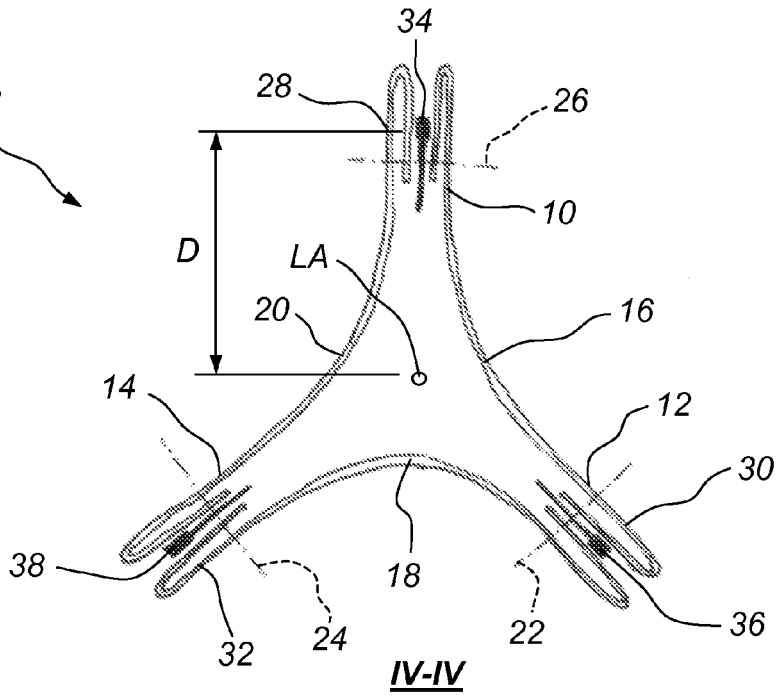

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Fig. 4

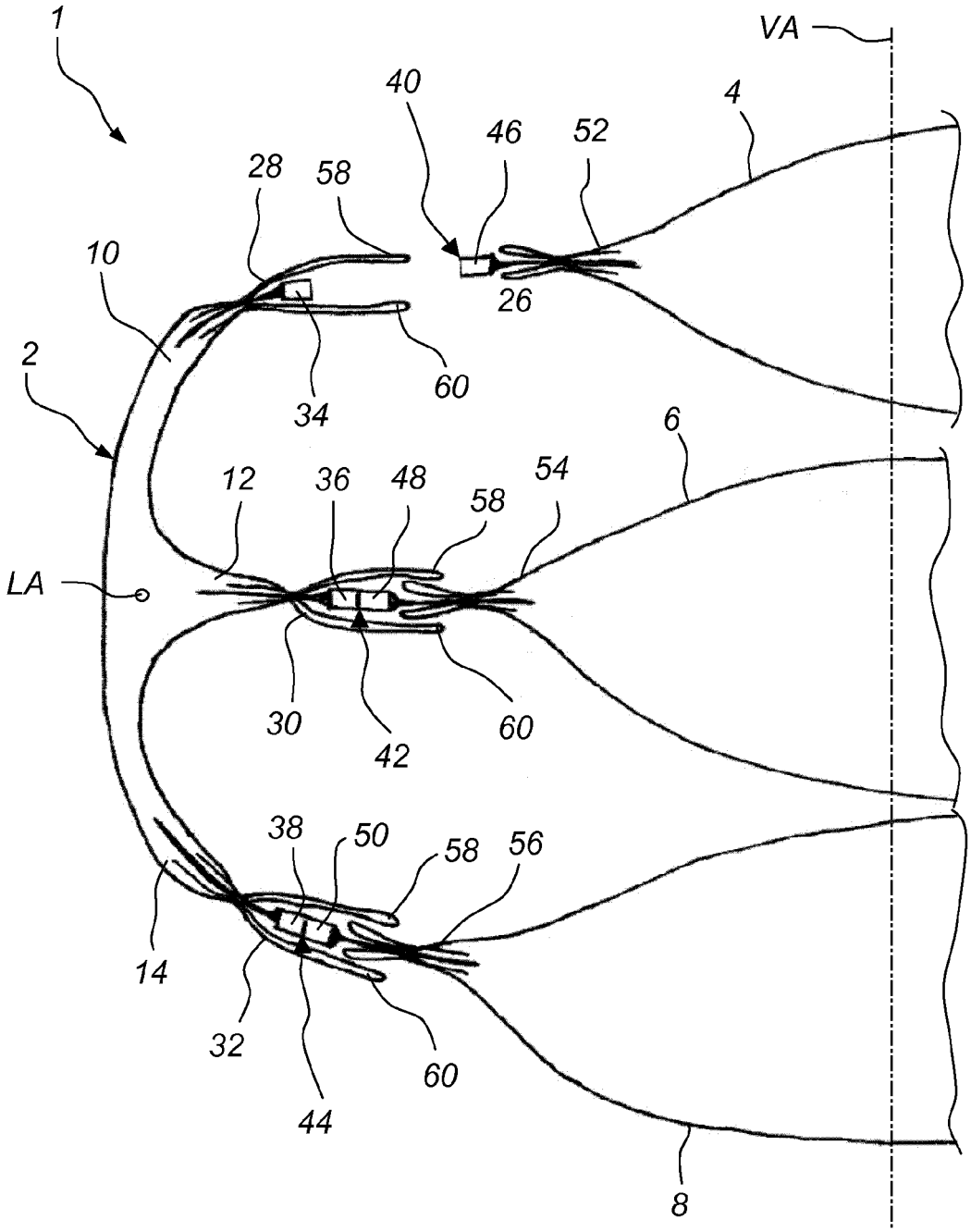

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Fig. 5

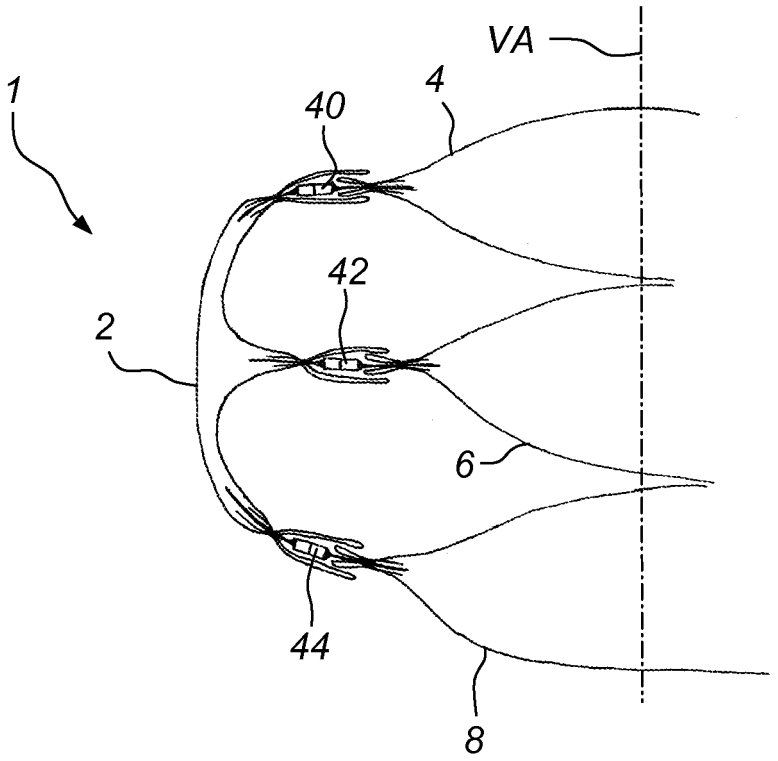


Fig. 6

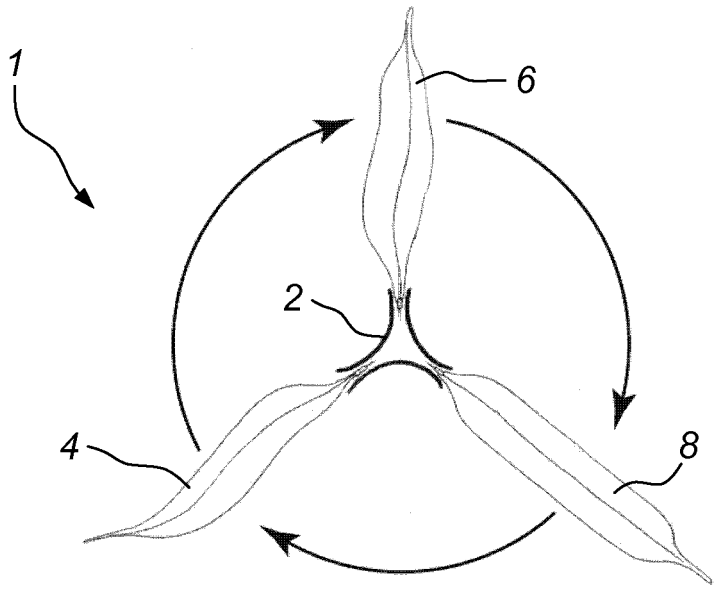


Fig. 7

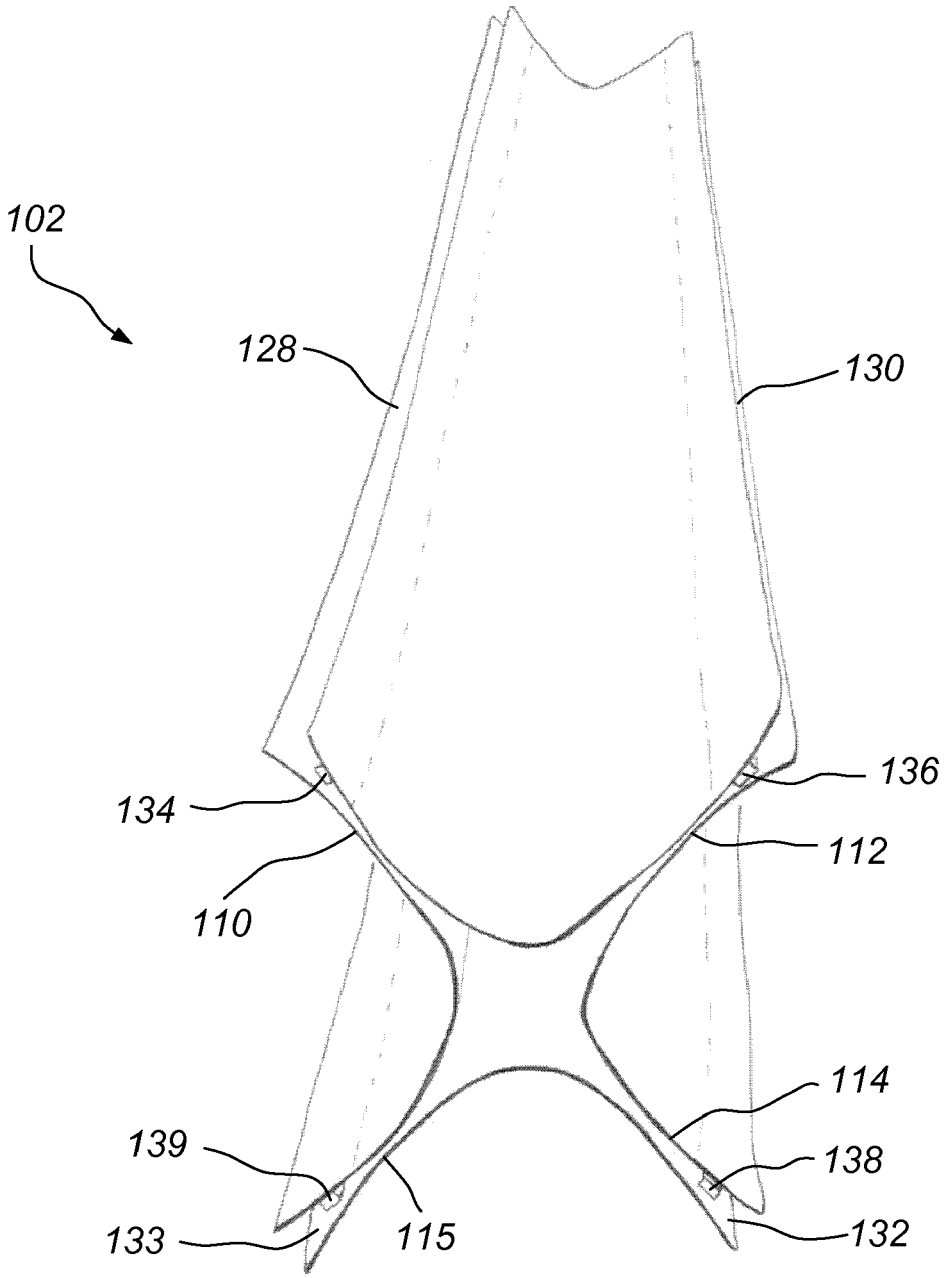


Fig. 8

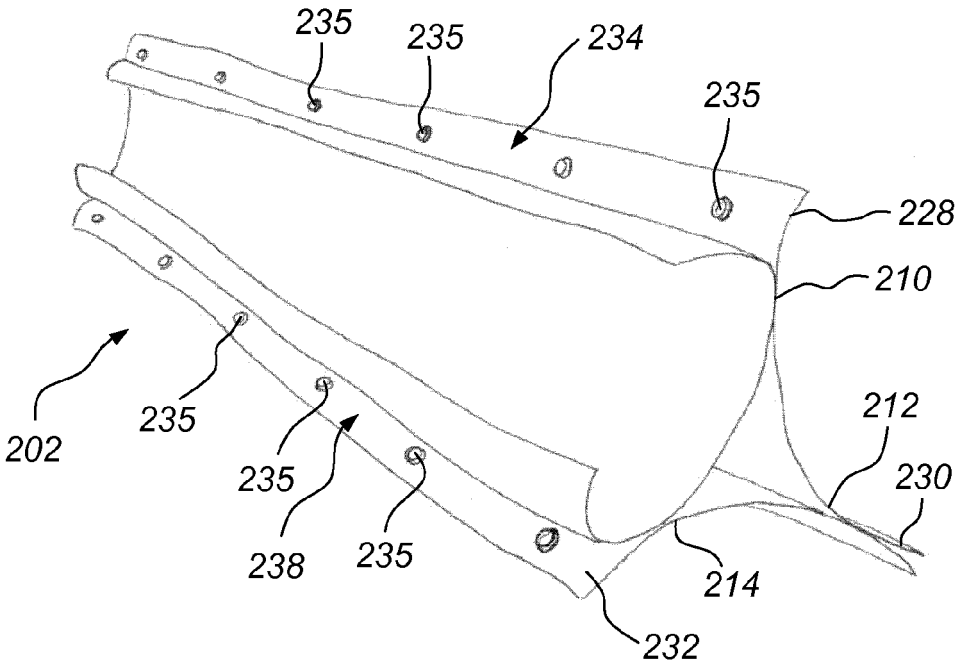

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Fig. 9

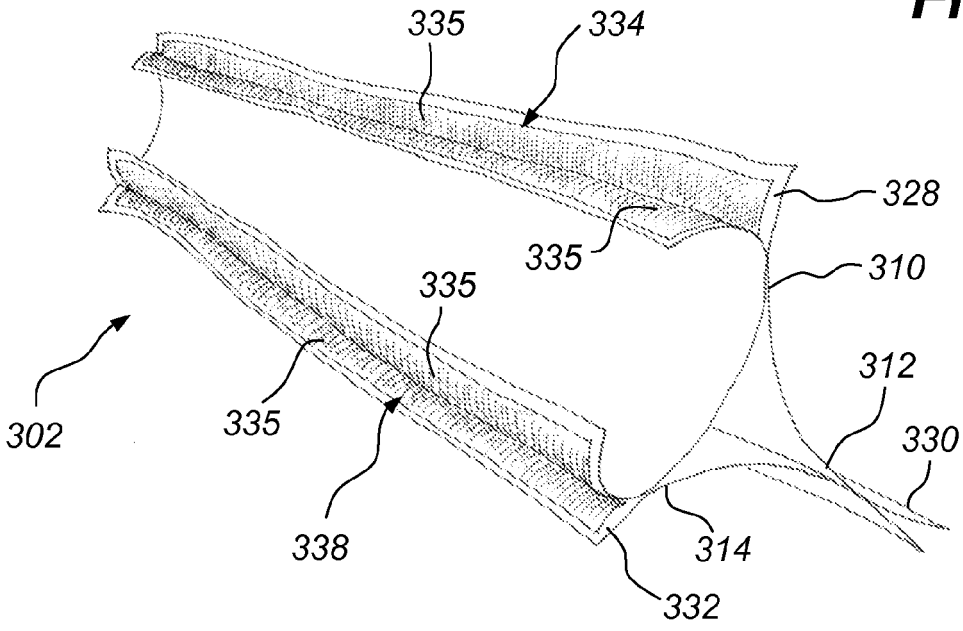

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Fig. 10

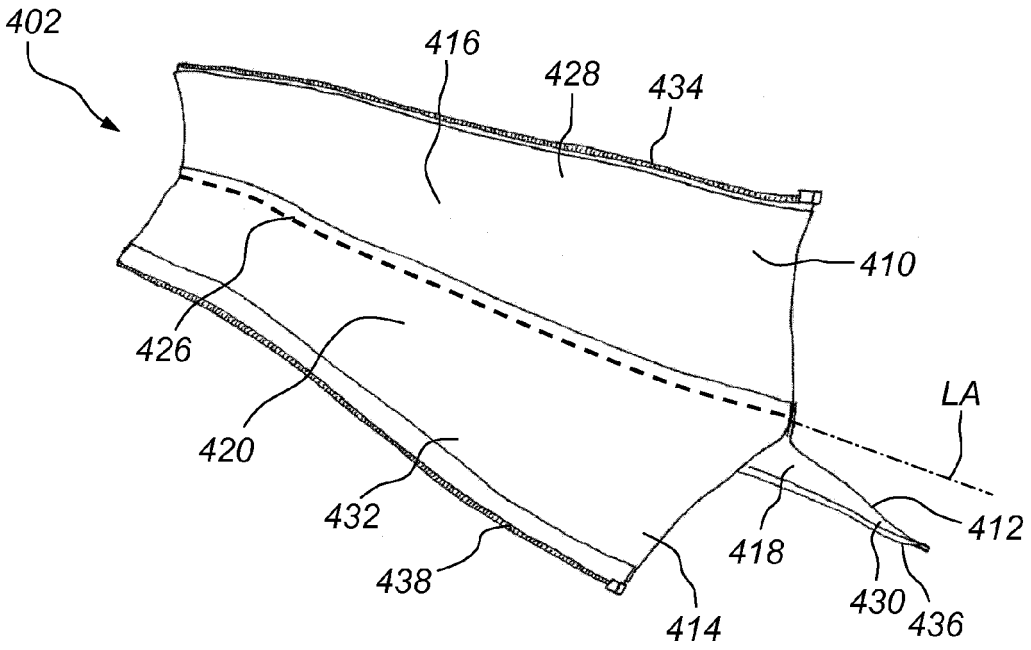

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Fig. 11

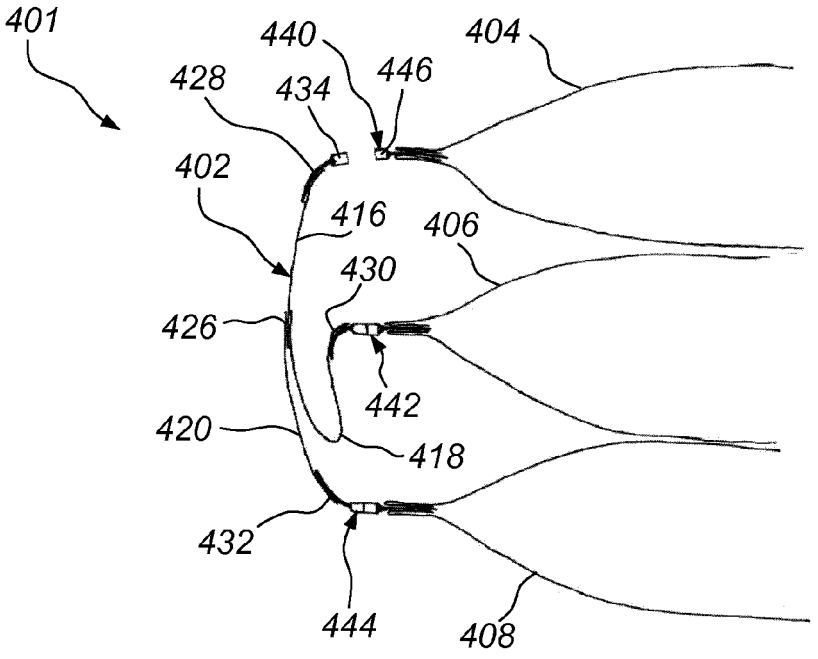

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Fig. 12

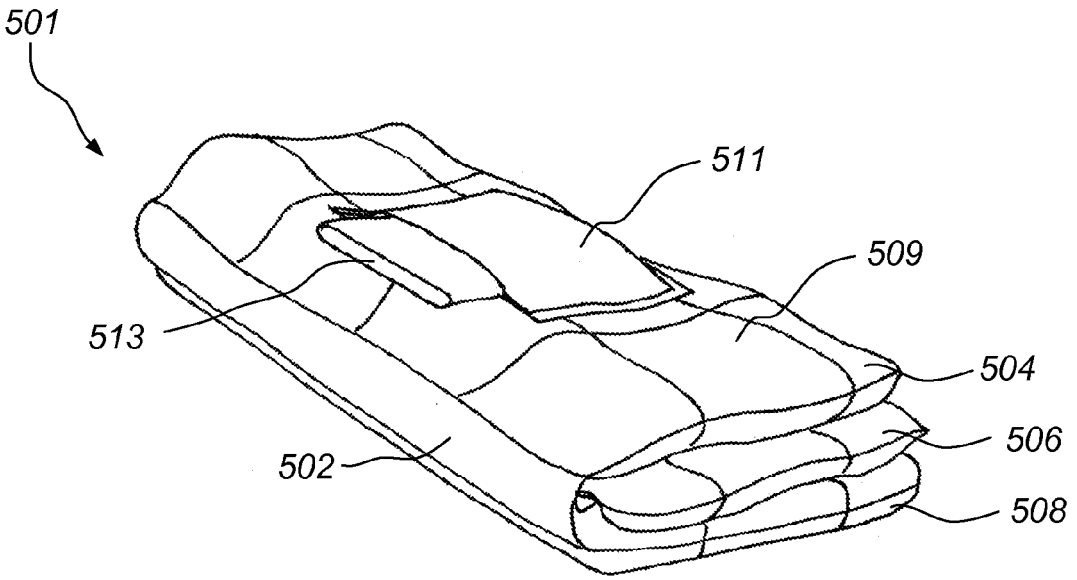

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Fig. 13

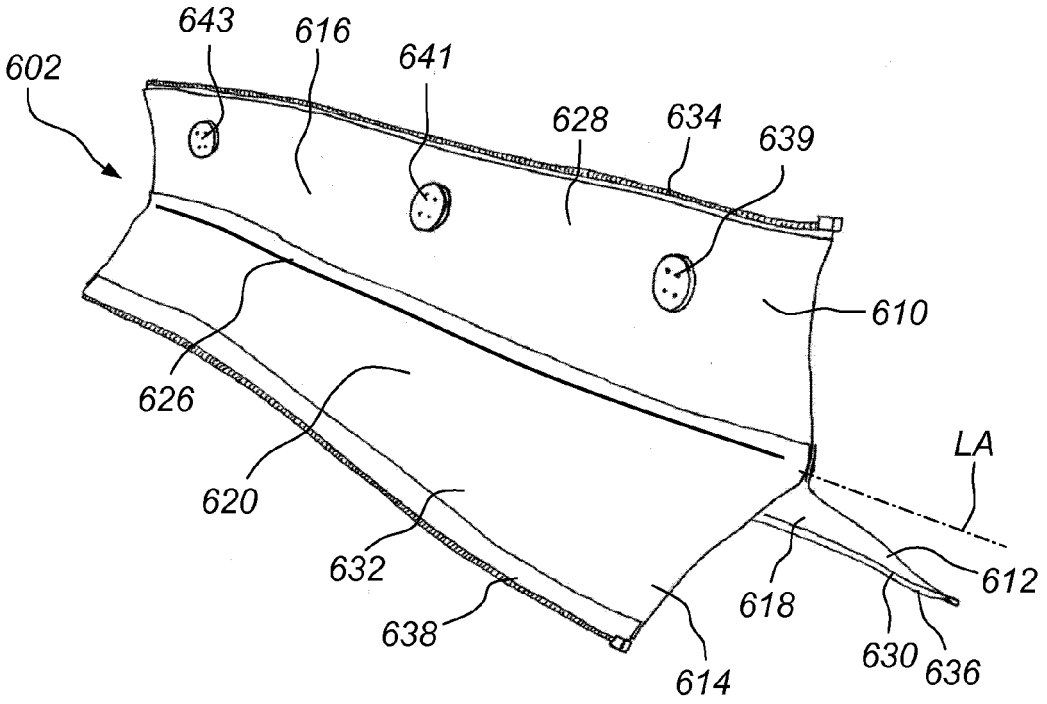

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Fig. 14

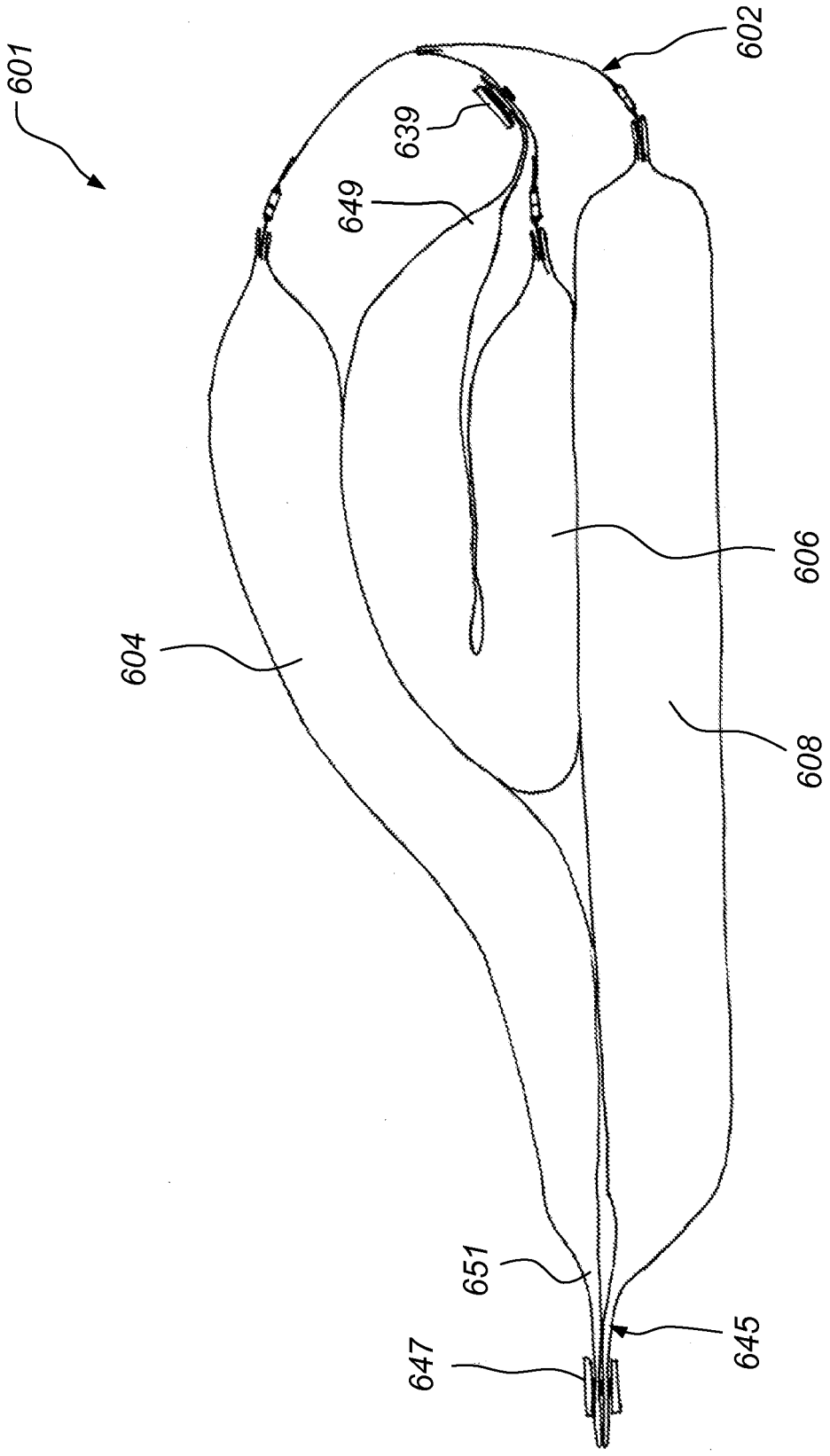


Fig. 15

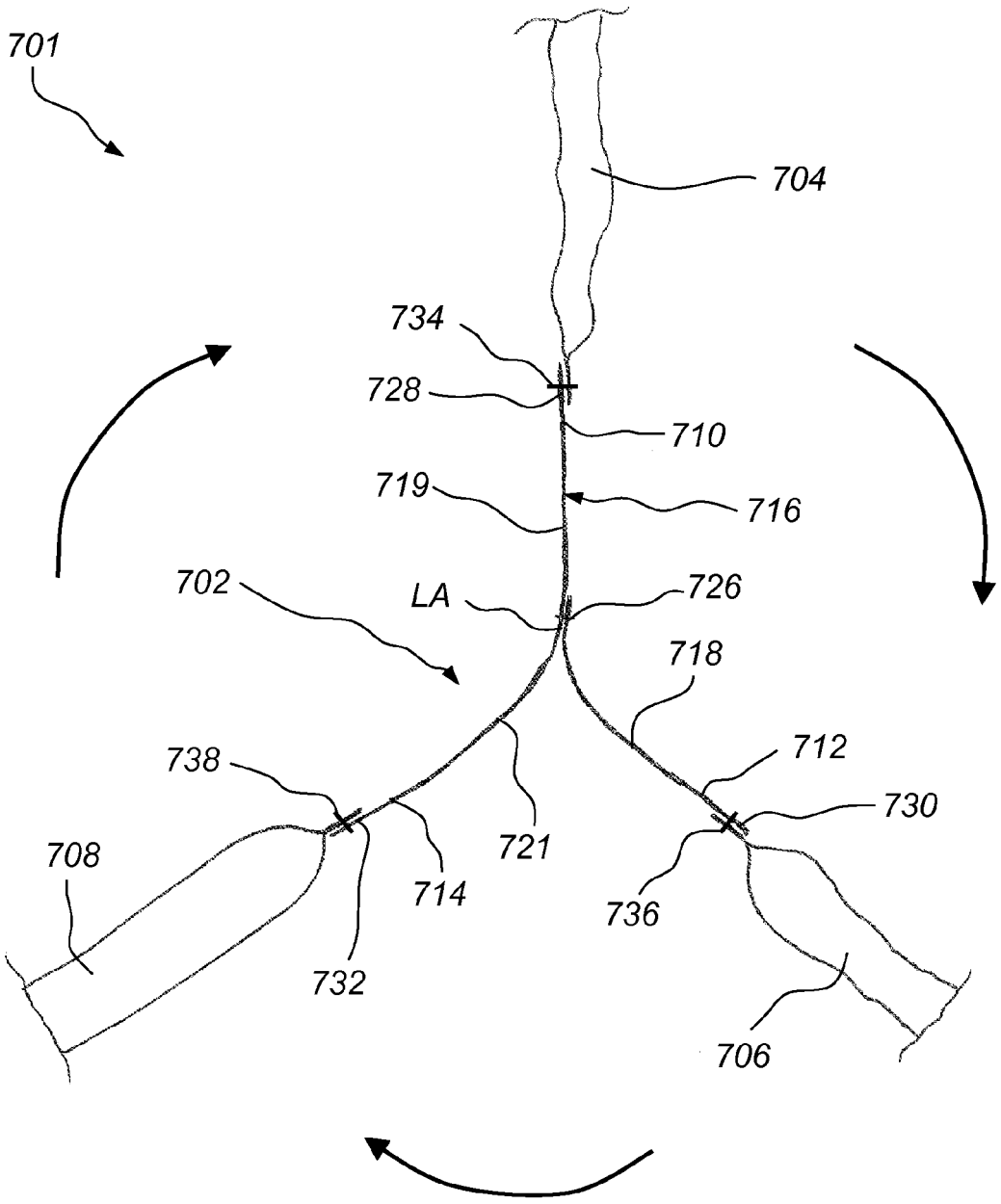

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Fig. 16

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 11 6219

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2 952 856 A (RUFF CLARENCE B) 20 September 1960 (1960-09-20) * figure 1 * -----	1-12	INV. A47C20/02
A	US 2002/138908 A1 (WANG LONG-WIN [US]) 3 October 2002 (2002-10-03) * abstract; figures * -----	1-12	
A	GB 2 330 069 A (BESCHIZZA LEONARD RICHARD [GB]) 14 April 1999 (1999-04-14) * figures * -----	1-12	
A	US 395 043 A (DOREMUS) 25 December 1888 (1888-12-25) * figures 1-3 * -----	1-12	
			TECHNICAL FIELDS SEARCHED (IPC) A47C A47G

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	18 December 2007	MacCormick, Duncan

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18-12-2007

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