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PILLOW

This invention relates to a pillow and in particular to a bed pillow.

Many attempts have been made to make pillows adjustable in
5 thickness so that a pillow can be easily converted to suit
the requirements of individual users. Such pillows have met
with varying degrees of success and a pillow proposed by us
in our co-pending patent application 84545/91 includes a
10 number of different sections that sit on top of one another
which can be removed to change the thickness or height of
the pillow as well as the pillow contour.

This invention provides an alternative pillow and
alternative manner of forming the pillow.

The invention may be said to reside in a pillow including:
15 a pillow body having an upper surface and a lower
surface; and

a removable insert cut from the pillow body
between the upper and lower surfaces, the insert being
removable to decrease the height of the pillow.
20 Since the insert portion is embedded within the pillow it
effectively forms part of the pillow and is not merely a
separate slab or section which is placed on or below
another section of the pillow. In order to reduce the
thickness of the pillow the insert section is merely
25 removed from the interior of the pillow thereby reducing
its thickness or height.

The invention may also be said to reside in a method of
manufacturing a pillow including the steps of:

cutting a pillow body from a block of material to
30 provide a pillow body having an upper surface and a lower
surface and a pair of ends;
making a cut between the upper surface or the

lower surface and an intermediate point within the pillow body; and

cutting a removable insert from the pillow body between the upper and lower surfaces so that the height of the pillow can be reduced by removing the removable insert from the pillow body.

Preferably the upper and lower surfaces have a corrugated or battlement like shape. However, in other embodiments they could be smooth surfaces.

10 Preferably the surfaces are contoured to provide a pair of ridges separated by a valley.

A preferred embodiment of the invention will be described, by way of example, with reference to the accompanying drawings in which:

15 Figure 1 is a perspective view of a pillow embodying the invention;

Figure 2 is a view along the line II-II of Figure 1;

20 Figure 3 is a view along the line III-III of Figure 1;

Figure 4 is a view of the pillow similar to Figure 2 but with an insert portion removed;

Figure 5 shows the method of cutting the pillow of Figure 1 from a body of material; and

25 Figure 6 is a detailed view of the circled portion A of Figure 2 but showing a different surface profile.

30 With reference to Figure 1 a pillow 10 is shown which has an upper surface 12 and a lower surface 14. Rounded side portions 16 and 18 join the upper surface 12 to the lower surface 14.

The upper and lower surfaces 12 and 14 are contoured and

have a pair of ridges 20 which are separated by valleys 22.

As best shown in Figures 2 and 3 the pillow 10 is provided with an internal insert portion 30 which is cut from the pillow 10 and which is removable from the pillow 10 by
5 drawing the insert out of the pillow 10 in a direction of arrow B or arrow C in Figure 1.

When the insert 30 is withdrawn from the pillow 10 the pillow 10 takes on a thinner or reduced height profile as shown in Figure 4 to thereby enable the height or thickness
10 of the pillow to be reduced at will by removing the insert portion 30.

The pillow of Figures 1 to 4 is preferably made by cutting the pillow from a block of material in a single cycle with a conventional cutting tool. Preferably the block is of
15 foam material and the cutting tool is a saw or blade for cutting foam which is under computer control.

The pillow is cut from the material by cutting the block of material shown in Figure 5 in the following manner:

The block of material 50 is firstly cut from a mid-point 52
20 into the block of material to a point 53. The lower surface 14 is then cut from point 53 to point 54. The side surface 18 is then cut from point 54 to point 56. The upper surface 12 is then cut from point 56 to point 58. The other side surface 16 is cut from point 58 to point 60. The remainder
25 of the bottom surface 14 is cut from point 60 to point 62. The cutting saw then makes a cut inwardly from point 62 to point 64 and then continues to point 66, to point 68, to point 70 to point 72, and then back to point 64 and out of the block of material. Rather than moving the cutting
30 blade out of the block of material, in one embodiment of the invention, a further cut can be made from the point 64 to the point 66 to cut the insert 30 in half. After making

the cut to the point 66, the cutting blade can be removed from the block from the point 66, past the points 64 and 52 out of the block of material. Thus, the entire pillow including the insert 30 is cut in a single cycle of the cutting blade under computer control to thereby cut the pillow and the insert 30 from a block of material. The block of material made then further be cut to produce further pillows in the same manner.

Cutting of the insert 30 in half by the cut from the point 64 to the point 66 enables the insert 30 to be removed in three different ways. Firstly, one half of the insert can be removed to reduce the effective height of half of the pillow, secondly the other half of the insert can be removed to reduce the effective height of the other half of the pillow and, thirdly the entire insert 30 (that is both halves) can be removed as previously described to reduce the overall height of the pillow.

Preferably the width of the block of material from which the pillow is cut is selected to be equivalent to the desired length of the pillow so that no cutting of the ends of the pillow is required. If desired the block of material could be pre-cut to provide a block of the desired width to thereby result in pillows of the required length without additional cutting.

Although in the embodiment of Figures 1 to 4 the surface of the pillow is shown as generally smooth, the pillow could have a shaped upper surface 12 and lower surface 14 such as a generally corrugated surface configuration or "battlement type configuration" as shown in Figure 6. Furthermore, the surfaces could be flat rather than contoured as shown in Figures 1 to 4.

Since modifications within the spirit and scope of the invention may readily be effected by persons skilled within

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the art, it is to be understood that this invention is not limited to the particular embodiment described by way of example hereinabove.



THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A pillow including:
a pillow body having an upper surface and a lower surface; and
5 a removable insert cut from the pillow body between the upper and lower surfaces, the insert being removable to decrease the height of the pillow.
2. The pillow of claim 1 wherein the upper and lower surfaces have a corrugated or battlement like shape.
- 10 3. The pillow of claim 1 or 3 wherein the surfaces are contoured to provide a pair of ridges separated by a valley.
4. The pillow of claim 1 wherein the insert is cut into two parts so that one part or both parts can be
15 removed.
5. A method of manufacturing a pillow including the steps of:
cutting a pillow body from a block of material to provide a pillow body having an upper surface and a lower
20 surface and a pair of ends;
making a cut between the upper surface or the lower surface and an intermediate point within the pillow body; and
cutting a removable insert from the pillow body
25 between the upper and lower surfaces so that the height of the pillow can be reduced by removing the removable insert from the pillow body.
6. The method of claim 5, wherein the cut between the upper surface or lower surface and the intermediate
30 point into the pillow body extends from one end of the pillow to the other end of the pillow.

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7. The method of claim 6, wherein the block of material is cut to form both the upper and lower surfaces of the pillow body.

5 8. The method of claim 7, wherein the pillow body and removable insert are cut in a single cutting operation comprising making a cut into the block of material, cutting a first portion of the upper or lower surface, cutting the other of the upper or lower surface, cutting the other portion of the said upper or lower surface, making the cut
10 from the upper surface or the lower surface into the pillow body to the intermediate point within the pillow body, making a cut through the pillow body and back to the said intermediate point within the pillow body to thereby cut the insert from the pillow body.

15 9. The method of claim 8, wherein the removable insert is cut into two parts so that one part or both parts can be removed from the pillow, the cut separates the insert into the two parts being made in a single cutting operation with the cutting of the pillow body and the
20 removable insert after cutting of the insert.

10. The method of claim 7, wherein the cut through the pillow body and back to said intermediate point includes a cut extending generally parallel to the upper surface of the pillow body and a cut extending generally
25 parallel to the lower surface of the pillow body.

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ABSTRACT OF THE DISCLOSURE

PILLOW

A pillow is disclosed which is cut from a block of material (50) and which includes a removable insert (30) within the pillow body which is able to be removed to thereby decrease the height of the pillow. The pillow is cut by cutting part of an upper or lower surface (20, 22), cutting the other of the upper or lower surface (20, 22), cutting the remaining of part of the upper or lower surface (20, 22), making a cut into the pillow body, cutting the insert (30) from within the pillow body and by making a cut through the insert (32) divide the insert (30) into two halves. The cutting is preferably performed in a single cutting pass of a cutting blade.

(FIGURE 5 IS SUGGESTED FOR PUBLICATION)

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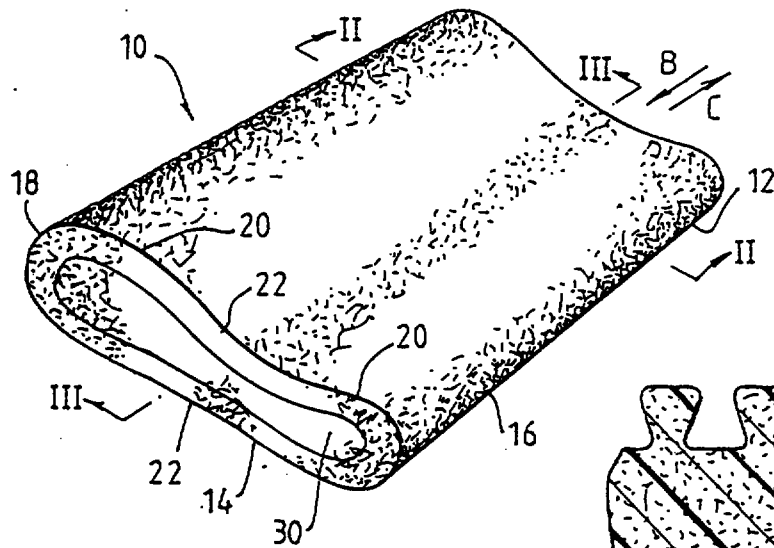


FIG. 1.

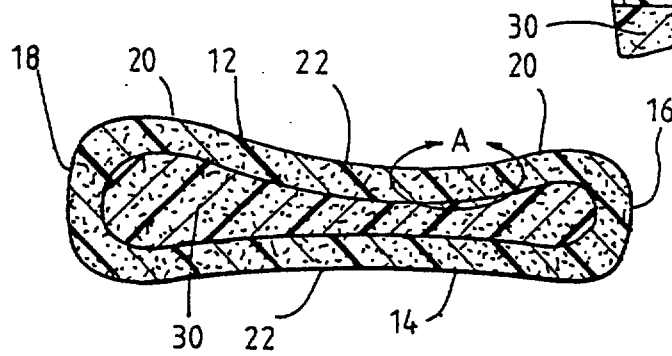


FIG. 2.

FIG. 3.

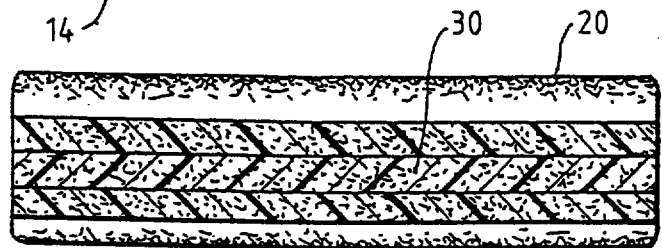


FIG. 4.

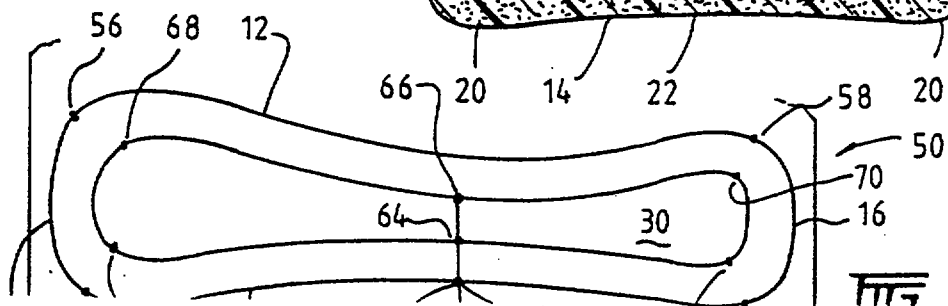
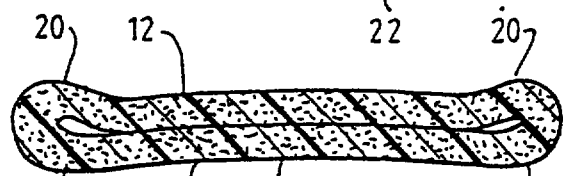


FIG. 5.

CLAIMS

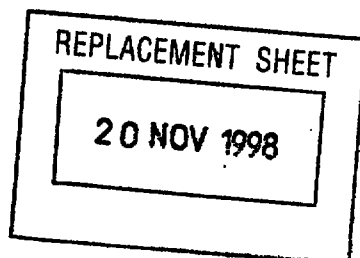


1. A pillow including :

a pillow body having an upper surface and a lower surface; and

a removable insert out from the pillow body between the upper and lower surfaces, the insert being physically unattached to the remainder of the pillow body so that the insert is removable to decrease the height of the pillow and reinsertable into the pillow body to readjust the height of the pillow, the removable insert comprising two longitudinal parts longitudinally cut form the removable insert.
2. The pillow of claim 1 wherein the upper and lower surfaces have a corrugated or battlement like shape.
3. The pillow of claim 1 wherein the surface are contoured to provide a pair of ridges separated by a valley.
4. The pillow of claim 1, wherein the removable insert is unsymmetrical about a longitudinal line and wherein the two parts extend along the line so that the two parts of the removable insert are of different shape to one another.
5. A method of manufacturing a pillow including the steps of :

cutting out from a block of material a pillow body having an upper surface, a lower surface, and a pair of ends;
cutting a removable insert from the pillow body between the upper and lower surfaces; cutting the removable insert into two parts; and maintaining the two parts within the pillow but physically unconnected to the pillow so that the two parts are separately removable therefrom to decrease the height of the pillow and reinsertable into the pillow to increase the height of the pillow.
6. The method of claim 5, wherein cutting the removable insert further comprises moving a cutting line, from a starting line located between (1) either of the upper surface or lower surface and (2) an intermediate location in the pillow body, said starting line extending between the pair of ends, and then moving said cutting line around and within the pillow body back to said starting line so as to form said removable insert.
7. The method of claim 6, wherein the block of material is cut to form both the upper and lower surfaces of the pillow body.
8. The method of claim 7, wherein the cut through the pillow body and back to said intermediate point includes a cut extending generally parallel to the upper surface of the pillow body and a cut extending generally parallel to the lower surface of the pillow body.





9. The method of claim 6, wherein the pillow body and removable insert are cut in a single cutting operation comprising making a cut into the block of material, cutting a first portion of the upper or lower surface, cutting the other of the upper or lower surface, cutting the remaining portion of the said upper or lower surface, making the cut form the upper surface or the lower surface into the pillow body to the intermediate location within the pillow body, making a cut around and within the pillow body and back to the said intermediate location within the pillow body to thereby cut the removable insert from the pillow body.
10. The method of claim 9 wherein said single cutting operation cuts said removable insert into said two parts.

