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WEIGHTLIFTING BODY FORM SUPPORT

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ABSTRACT

A body form support 10 comprising a body 12 having a flat base 14 with an upper end edge 16 and a lower end edge 18. The upper end edge 16 is narrower in width than the lower end edge 18. The flat base 14 further comprises side edges 20 which are generally concave in that they curve inwardly. The body 12 further comprises an upper layer 22 which is a curved layer extending from the upper end edge 16 to the lower end edge 18. The upper layer 22 thus extends as an arch upwardly from the upper end edge 16 and the lower end edge 18 to a peak section 23 at a mid-portion thereof. A retaining means 40 is provided to ensure the body 12 remains in position during powerlifting exercises.

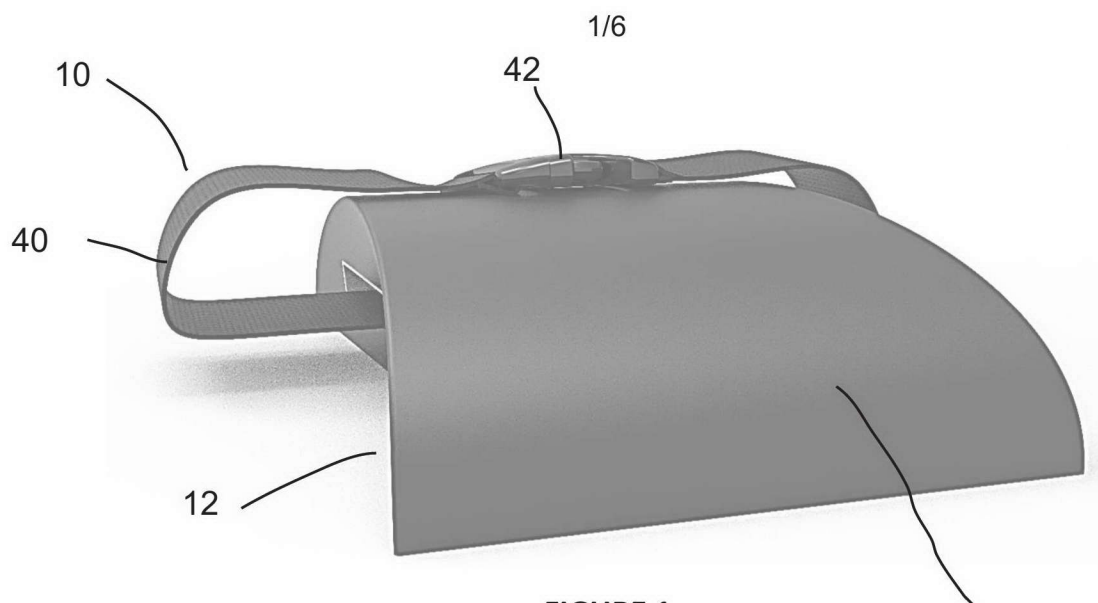


FIGURE 1

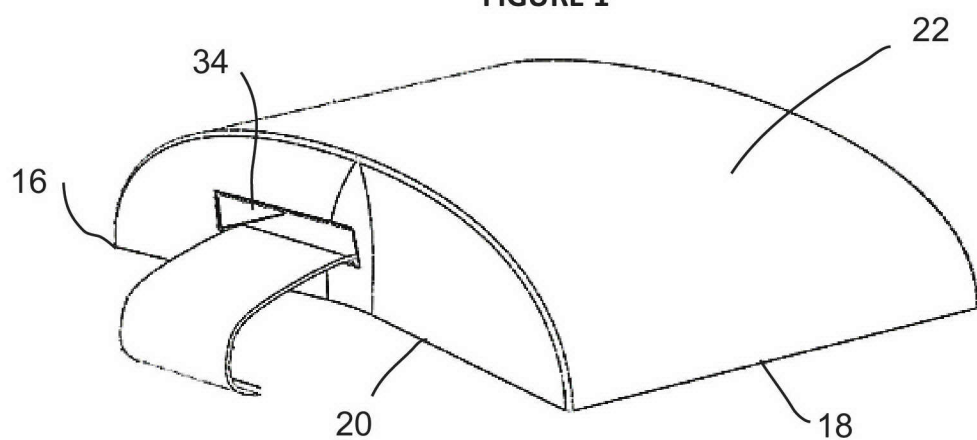


FIGURE 2

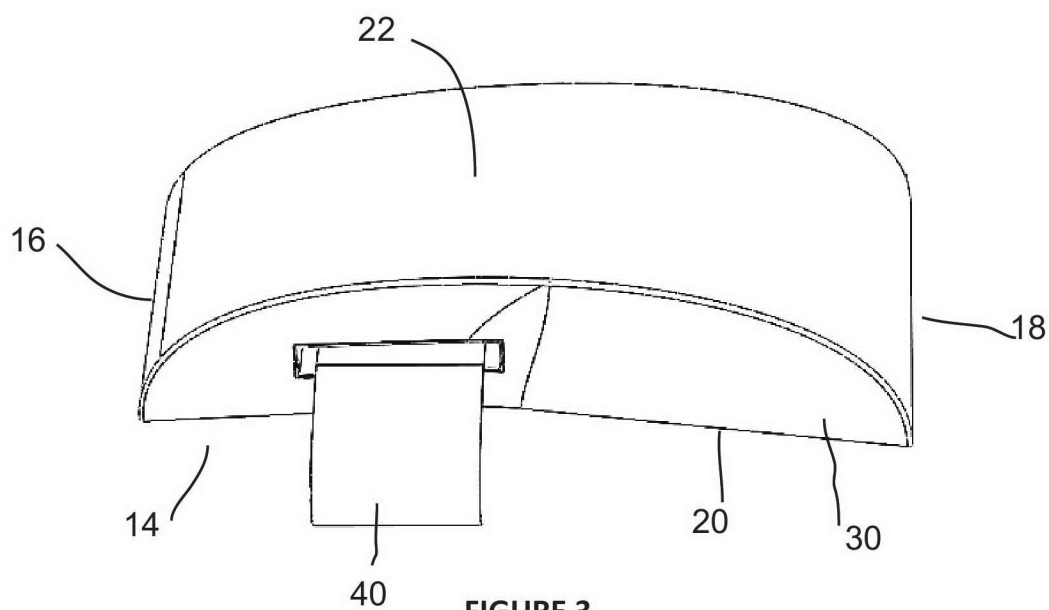


FIGURE 3

WEIGHTLIFTING BODY FORM SUPPORT

Field of the Invention

[1] The present invention relates to a support for use with gym equipment benches and backrests.

Background of the Invention

[2] When performing exercise such as weightlifting where a user is laying on a bench (e.g., flat bench) or a bench with a back rest (e.g., incline bench, exercise machine bench), it is desirable for the user to maintain proper form. It is however often difficult to teach form to a new user or for a user to maintain such form especially when fatigued.

[3] The present invention seeks to overcome or substantially ameliorate at least some of the deficiencies of the prior art, or to at least provide an alternative.

[4] It is to be understood that, if any prior art information is referred to herein, such reference does not constitute an admission that the information forms part of the common general knowledge in the art, in Australia or any other country.

Summary of the Invention

[5] According to a first aspect, the present invention provides a body form support for use with an exercise bench or backrest, the support comprising

a body having a flat base with an upper end edge and a lower end edge,
an upper curved layer extending from the upper end edge to the lower end edge, and
retention means for retaining the support to the exercise bench or backrest.

[6] Preferably, the upper end edge is narrower in width than the lower end edge.

[7] Preferably, the flat base further comprises side edges which are generally concave.

[8] Preferably, the upper layer extends as an arch upwardly from the upper end edge and the lower end edge to a peak section at a mid-portion thereof which is spaced from the base.

[9] Preferably, the peripheral outline of the upper layer follows the peripheral outline shape of the base.

[10] Preferably, the body further comprises side walls extending between respective side edges of the base and the upper layer, the side walls being generally inwardly concave.

[11] Preferably, the body is filled with suitable material such as firm foam, resilient foam, or any combination thereof which provides the arch shape for the body.

[12] Preferably, a cavity is defined at the front portion of the body, the cavity extending between the side walls.

[13] Preferably, the cavity defined by a rectangular hollow tube received in the body.

[14] Preferably, the retaining means comprises a retaining strap having a section thereof received through the tube, the retaining strap having an adjustable length with buckles at ends thereof for securing the body to an exercise bench or backrest.

[15] Preferably, body height is adjustable.

[16] Preferably, the retaining means comprises a strap attached to the base.

[17] Other aspects of the invention are also disclosed.

Brief Description of the Drawings

[18] Notwithstanding any other forms which may fall within the scope of the present invention, preferred embodiments of the present invention will now be described, by way of examples only, with reference to the accompanying drawings in which:

[19] Figure 1 is an upper end perspective view of a body form support according to a preferred embodiment of the present invention,

[20] Figure 2 is an upper end left side perspective view of the body form support with the strap shown partially for illustration purposes,

[21] Figure 3 is a left side perspective view of the body form support with the strap shown partially,

[22] Figure 4 is an upper end right side perspective view of the body form support with the strap shown partially,

[23] Figure 5 is a lower end right side perspective view of the body form support with the strap shown partially,

[24] Figure 6 is a right side view of the body form support with the strap shown partially,

[25] Figure 7 is a lower end elevation view of the body form support with the strap omitted for illustration purposes,

[26] Figure 8 is an upper end elevation view of the body form support with the strap omitted,

[27] Figure 9 shows the body form support in an example use on a flat bench,

[28] Figure 10 corresponds to Figure 9 showing (a) top view, (b) bottom view, (c) left side view and (d) upper end view.

Description of Embodiments

[29] It should be noted in the following description that like or the same reference numerals in different embodiments denote the same or similar features.

[30] The figures show a body form support 10 according to a preferred embodiment of the present invention. The body form support 10 comprises a body 12 having a flat base 14 with an upper end edge 16 and a lower end edge 18. The upper end edge 16 is narrower in width than the lower end edge 18. In the example shown, the upper end edge 16 is 19 cm in length and the lower end edge 18 is 24 cm in length. The flat base 14 further comprises side edges 20 which are generally concave in that they curve inwardly from ends of the upper end edge 16 before curving outwardly to the ends of the lower end edge 18. The body 12 can be provided in different widths and lengths. The upper end edge 16 can be in the range between 16 cm to 20 cm, the lower end edge can be in the range between 20 cm and 28 cm, and the length can be in the range between 20 cm to 30 cm. This will allow the body 12 to cater for different user torso dimensions.

[31] The body 12 further comprises an upper layer 22 which is a curved layer extending from the upper end edge 16 to the lower end edge 18. The upper layer 22 thus extends as an arch upwardly from the upper end edge 16 and the lower end edge 18 to a peak section 23 at a mid-portion thereof which is spaced from the base 14. The distance between the base 14 and the peak section 23 is defined as the thickness of the body 12, and in the example shown can be 4 cm, 6 cm, 8 cm, or 10 cm. The thickness is preferably in the range between 4 cm to 15 cm.

[32] The peripheral outline of the upper layer 22 follows the peripheral outline shape of the base 14. The body 12 further comprises side walls 30 extending between respective side edges of the base 14 and the upper layer 22. The side walls 30 are thus also generally inwardly concave. The body 12 is filled with suitable material such as firm foam, resilient foam, or any combination thereof, which provides the arch shape for the body 12.

[33] A cavity 34 is defined at the front portion of the body 12, the cavity 34 extending between the side walls 30. In the example, the cavity 34 is defined by a rectangular hollow plastic tube being 10 cm in width and 2 cm in height. The cavity 34 is disposed about mid-way between the base 14 and the upper layer 22.

[34] The cavity 34 is for receiving a section of a retaining strap 40 therethrough. The retaining strap is an adjustable length strap with buckles 42 at ends thereof for securing the body 12 to an exercise bench or backrest. This retaining means ensures the body 12 remains in position which is important during powerlifting exercises with very heavy weights.

[35] In use, for example shown in Figures 9 and 10, the base 14 is laid on the bench 100 with the upper end edge 16 to be close user's shoulder blades in use and the lower end edge 18 to be close to the user's buttocks. The strap 40 extends below the bench 100 with the buckles connected to each other under the bench 100 to retain the body 12 in position.

[36] As shown in the example use in Figure 12(a), the body 12 is dimensioned with the peak section 23 supporting the user's lumbar region 120 and the remainder of the arched upper layer 22 supporting the user's back between the dorsal region 130 and the gluteal region 140'. This supports the user in the optimal back arched lifting exercise position, where the user's shoulder blades and buttocks engage the bench 100 with the user's back between these regions being arched upwardly.

[37] The inwardly curved side walls 30 of the body 12 define spaces which allows for full movement of the user's arms and does not interfere therewith. As noted above, the body 12 can be provided in different thicknesses to suit different users. Figure 11 shows side profiles of the body 12 with different thicknesses, being (a) 6 cm, (b) 8 cm and (d) 10 cm.

[38] The invention thus provides a support which allows a user to maintain proper body from when performing weightlifting exercises. The support can also be used with the backrest of other exercise equipment such as chest press, shoulder press, incline bench, dumbbell press or dumbbell machine. The support can also be used in bicep, tricep overhead extensions, leg press, leg extension, leg curl (seated) exercises or machine where the user is required to have a rest position on a bench or backrest 150 such as shown in Figure 12(b). The support enhances results in the chest, shoulders, and arms. The support also assists in back exercises such as pull-overs and lateral pull downs while correcting posture.

[39] Although a preferred embodiment of the present invention has been described, it will be apparent to skilled persons that modifications can be made to the embodiment shown. The support can be provided in different dimensions to that described above. Also, the body 12 can be adapted such that the height thereof is adjustable to allow a user to use a single support 10 where the thickness can be increased or decreased as desired. The body for example can have an inflatable bladder to provide the adjustable thickness. The cavity 34 can also be omitted and the strap can be attached to the base 14.

Claims

The claims defining the invention are as follows:

1. A body form support for use with an exercise bench or backrest, the support comprising a body having a flat base with an upper end edge and a lower end edge, an upper curved layer extending from the upper end edge to the lower end edge, and retention means for retaining the support to the exercise bench or backrest.
2. The support of claim 1 wherein the upper end edge is narrower in width than the lower end edge.
3. The support of claim 2 wherein the flat base further comprises side edges which are generally concave.
4. The support of claim 3 wherein the upper layer extends as an arch upwardly from the upper end edge and the lower end edge to a peak section at a mid-portion thereof which is spaced from the base.
5. The support of claim 4 wherein the peripheral outline of the upper layer follows the peripheral outline shape of the base.
6. The support of claim 5 wherein the body further comprises side walls extending between respective side edges of the base and the upper layer, the side walls being generally inwardly concave.
7. The support of claim 7 wherein the body is filled with suitable material such as firm foam, resilient foam, or any combination thereof which provides the arch shape for the body.
8. The support of claim 6 wherein a cavity is defined at the front portion of the body, the cavity extending between the side walls.
9. The support of claim 8 wherein the cavity defined by a rectangular hollow tube received in the body.
10. The support of claim 9 wherein the retaining means comprises a retaining strap having a section thereof received through the tube, the retaining strap having an adjustable length with buckles at ends thereof for securing the body to an exercise bench or backrest.
11. The support of claim 4 wherein body height is adjustable.
12. The support of claim 1 wherein the retaining means comprises a strap attached to the base.

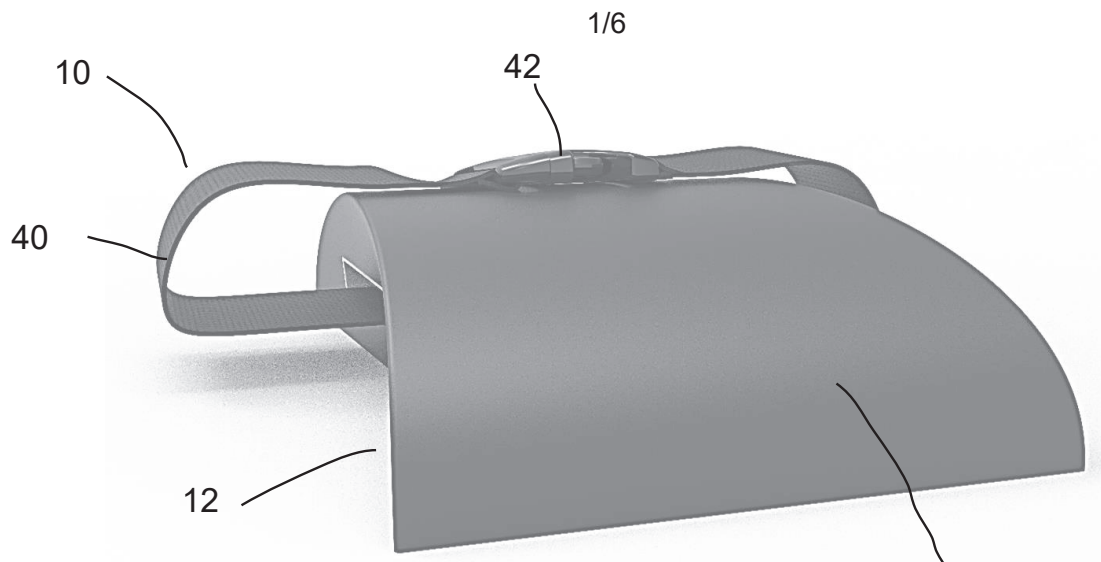


FIGURE 1

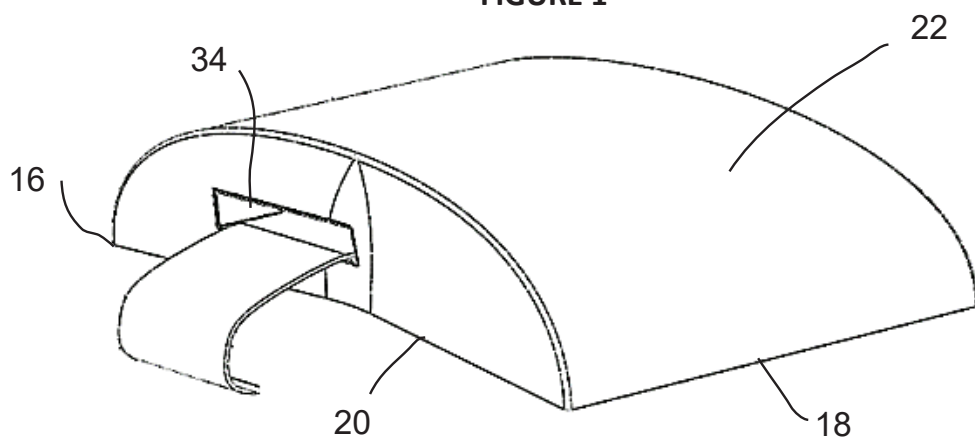


FIGURE 2

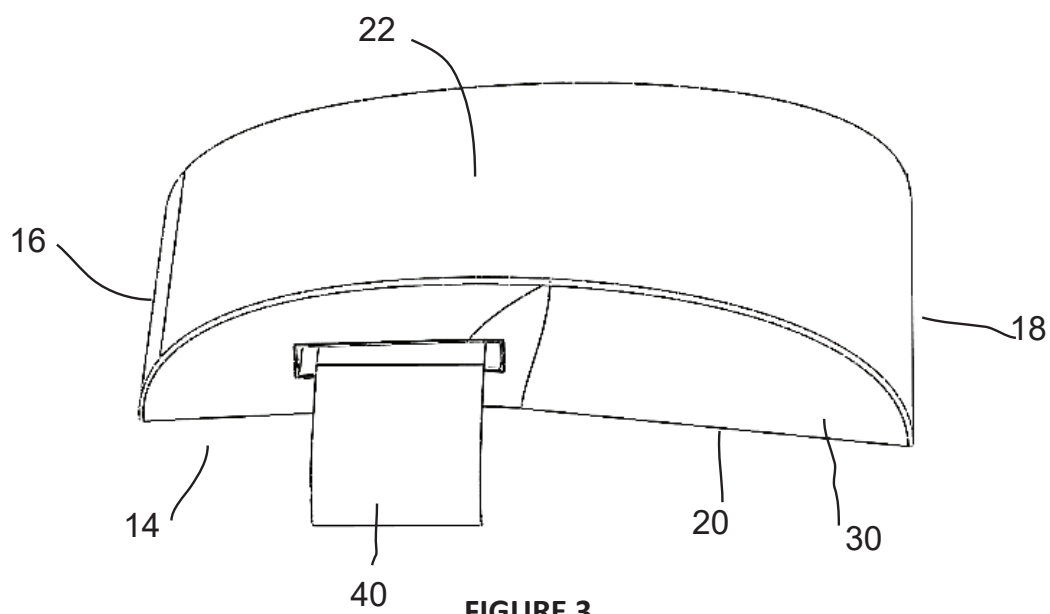


FIGURE 3

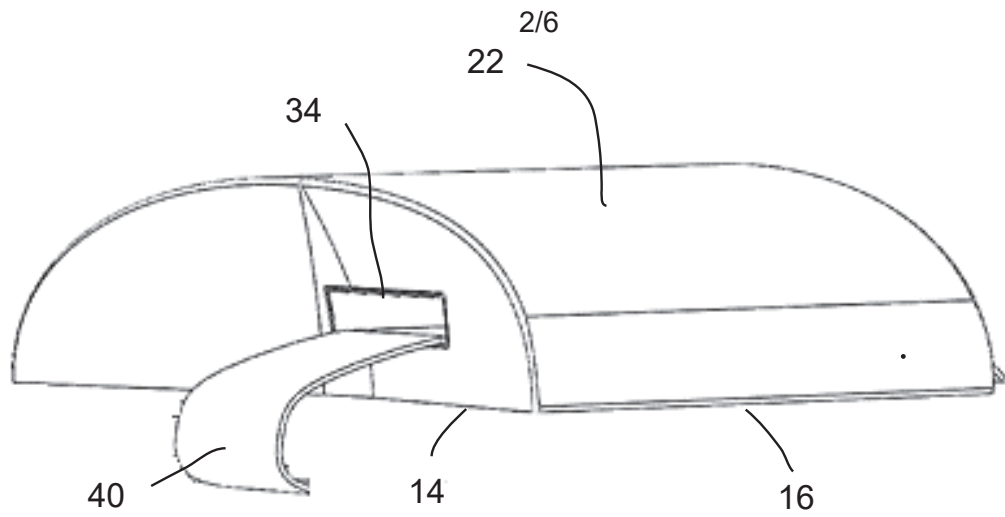


FIGURE 4

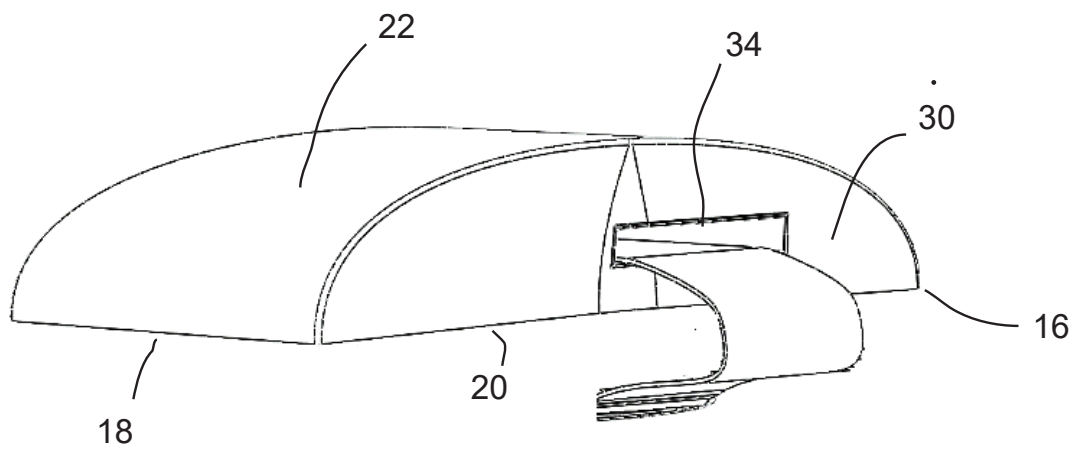


FIGURE 5

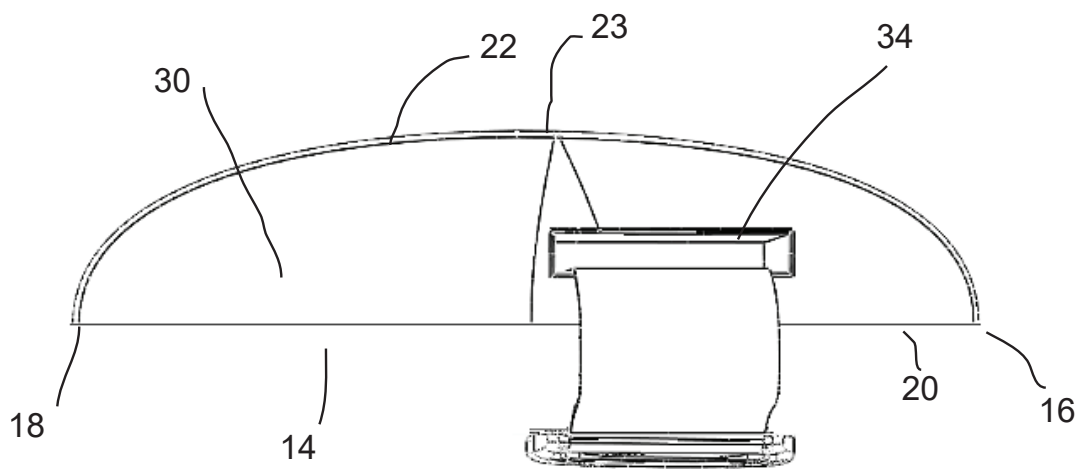


FIGURE 6

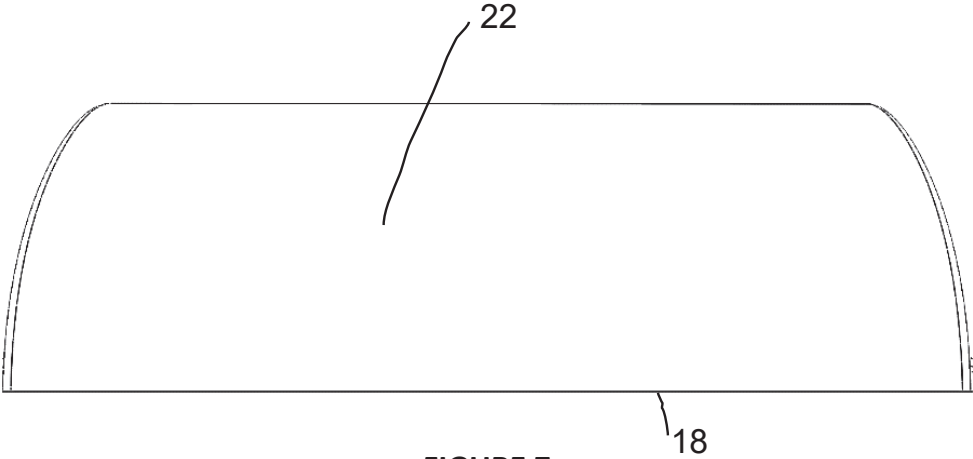


FIGURE 7

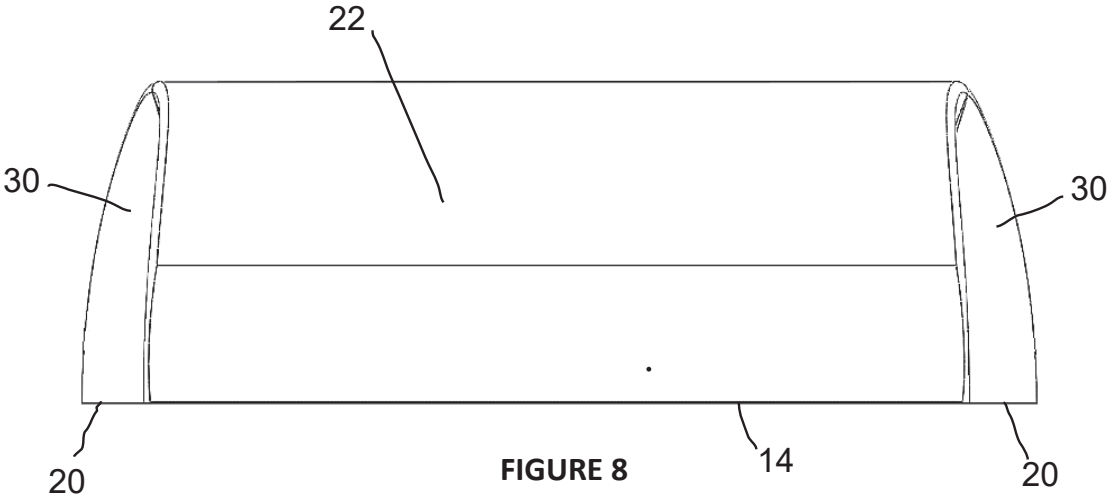


FIGURE 8

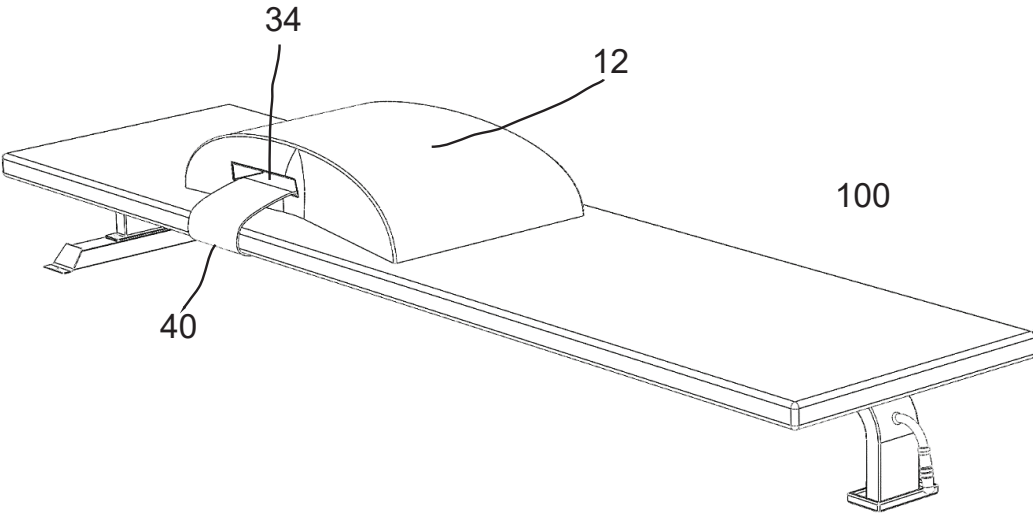


FIGURE 9

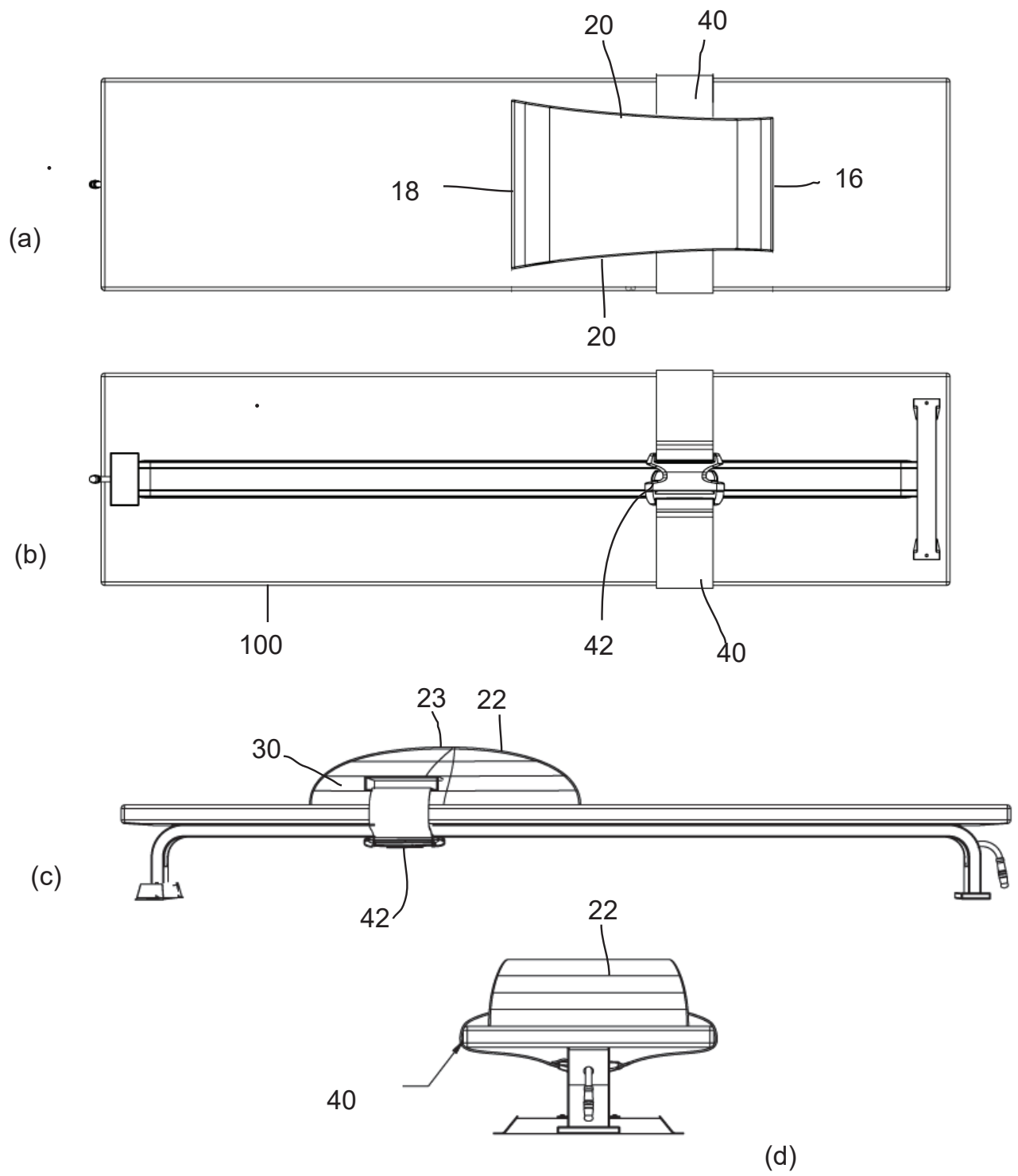
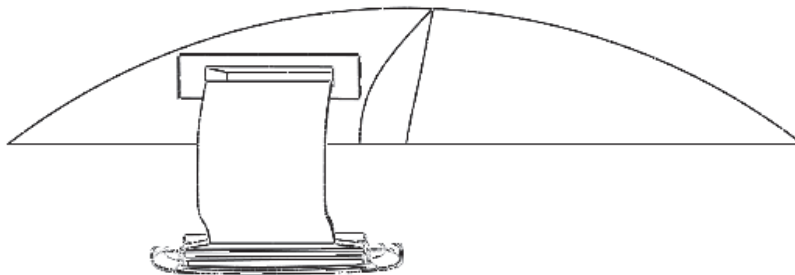
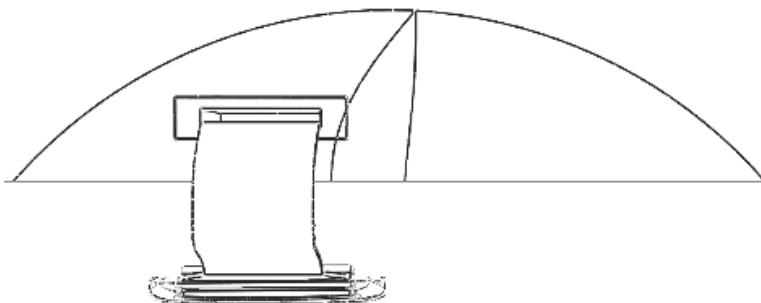


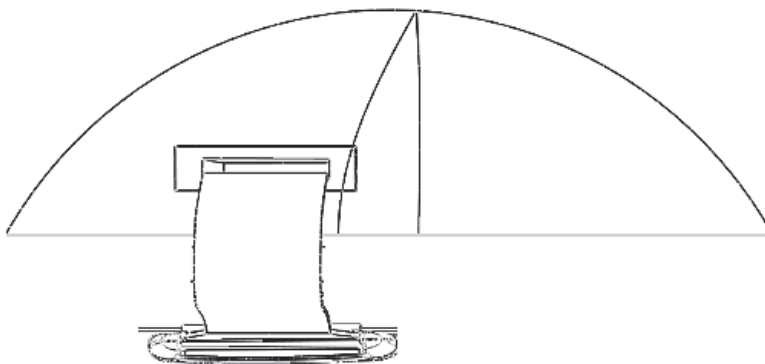
FIGURE 10



(a)



(b)



(c)

FIGURE 11

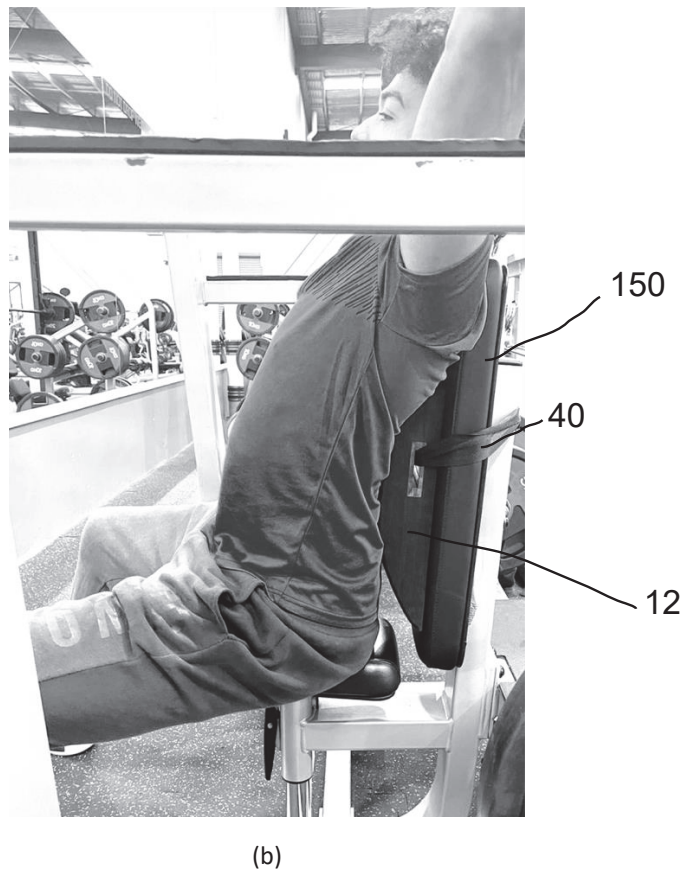
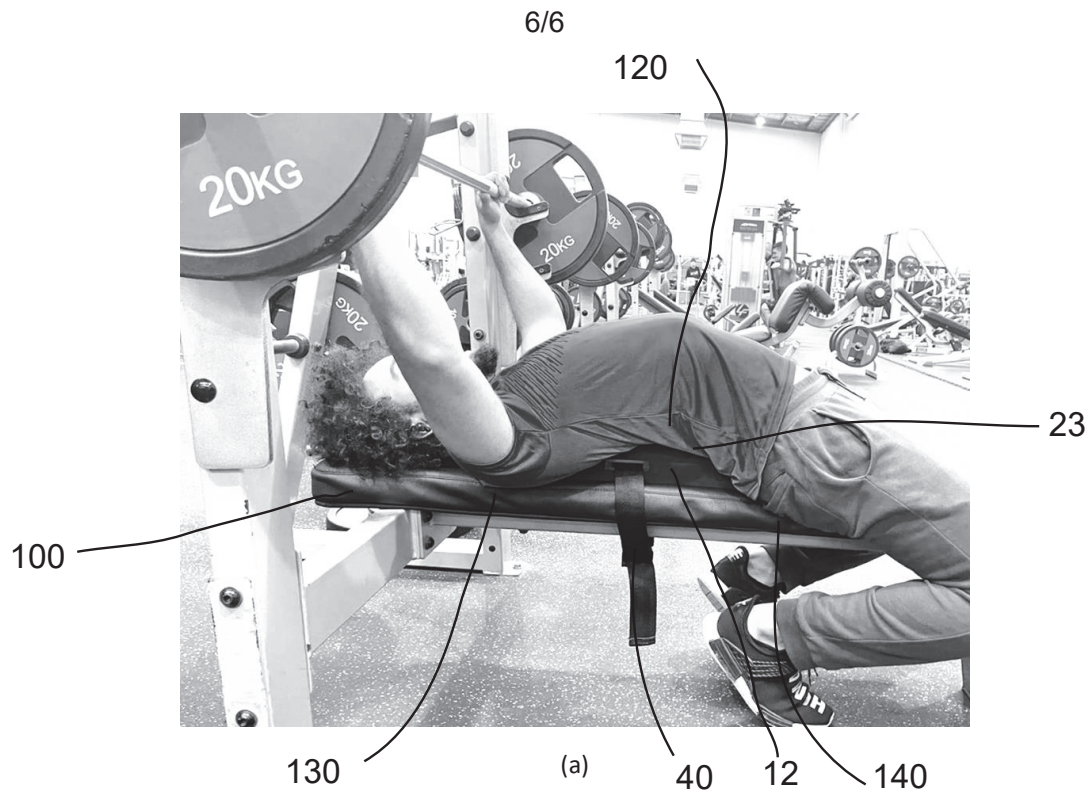


Figure 12