



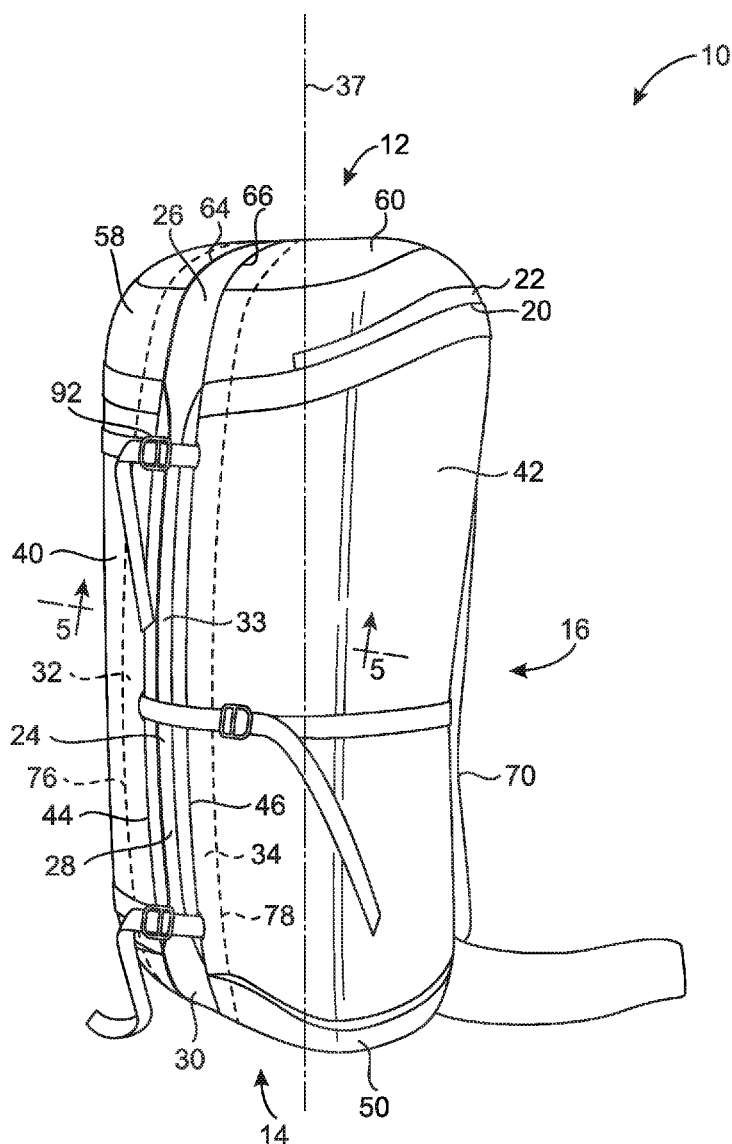
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(19) **United States**(12) **Patent Application Publication**
Schofield(10) **Pub. No.: US 2017/0143105 A1**(43) **Pub. Date: May 25, 2017**(54) **BACKPACK HAVING HORIZONTAL
EXPANSION****Publication Classification**(51) **Int. Cl.**
A45F 3/04 (2006.01)
(52) **U.S. Cl.**
CPC *A45F 3/04* (2013.01)(71) Applicant: **Exxel Outdoors, LLC**, Boulder, CO
(US)(72) Inventor: **Chase C. Schofield**, Ramsey, MN (US)(21) Appl. No.: **15/327,523**(57) **ABSTRACT**(22) PCT Filed: **Jul. 14, 2015**(86) PCT No.: **PCT/US2015/040398**

§ 371 (c)(1),

(2) Date: **Jan. 19, 2017****Related U.S. Application Data**(60) Provisional application No. 62/026,863, filed on Jul.
21, 2014.

A backpack having a longitudinal axis and a perpendicular transverse axis includes a top end, a bottom end, and a body portion extending between the top end and the bottom end. The backpack also includes an expansion panel attached to each of the top end, the bottom end, and the body portion. The expansion panel is longitudinally-oriented and is configured to expand in a transverse direction between a collapsed configuration and an expanded configuration.



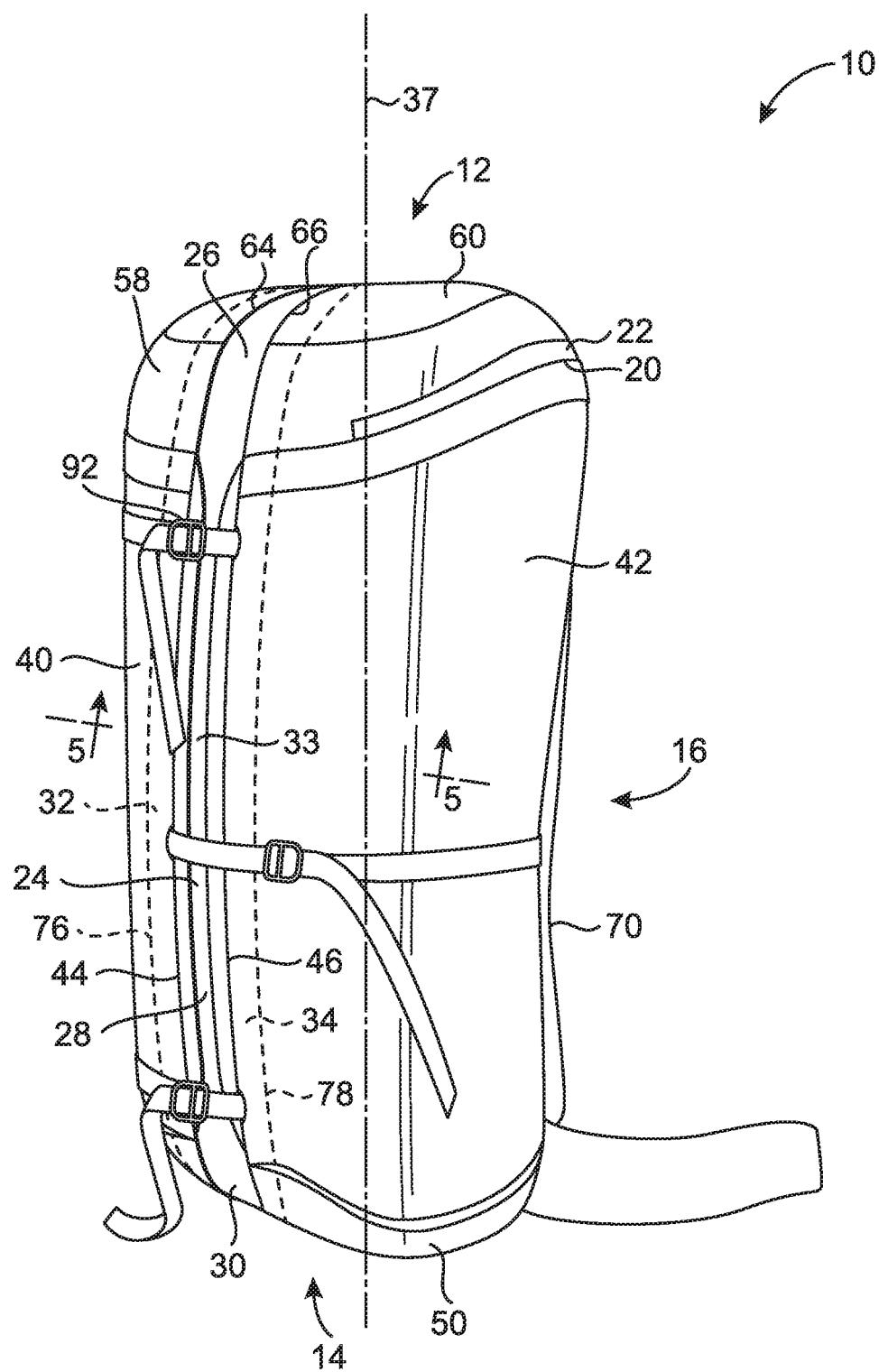


FIG. 1

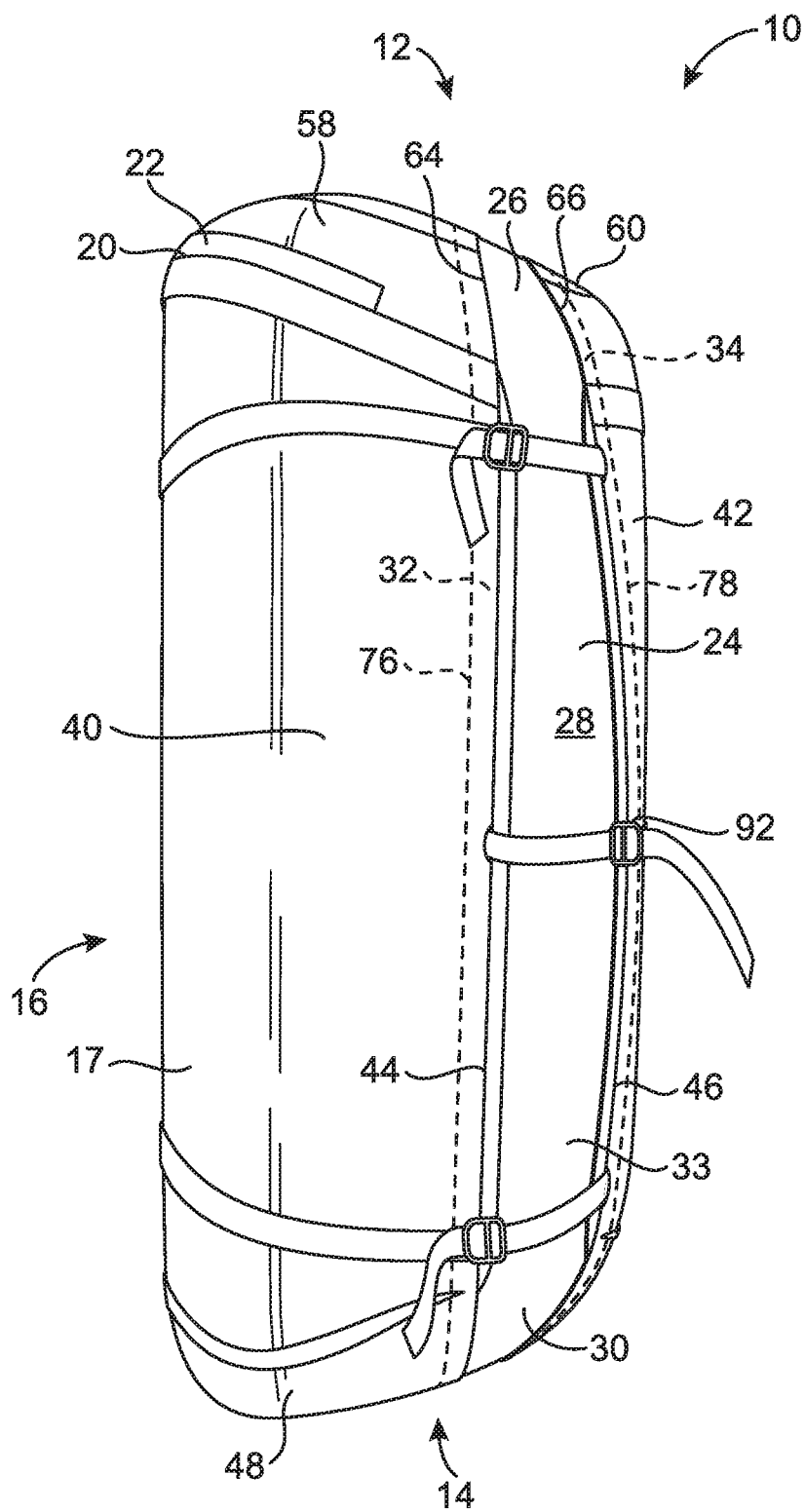


FIG. 2

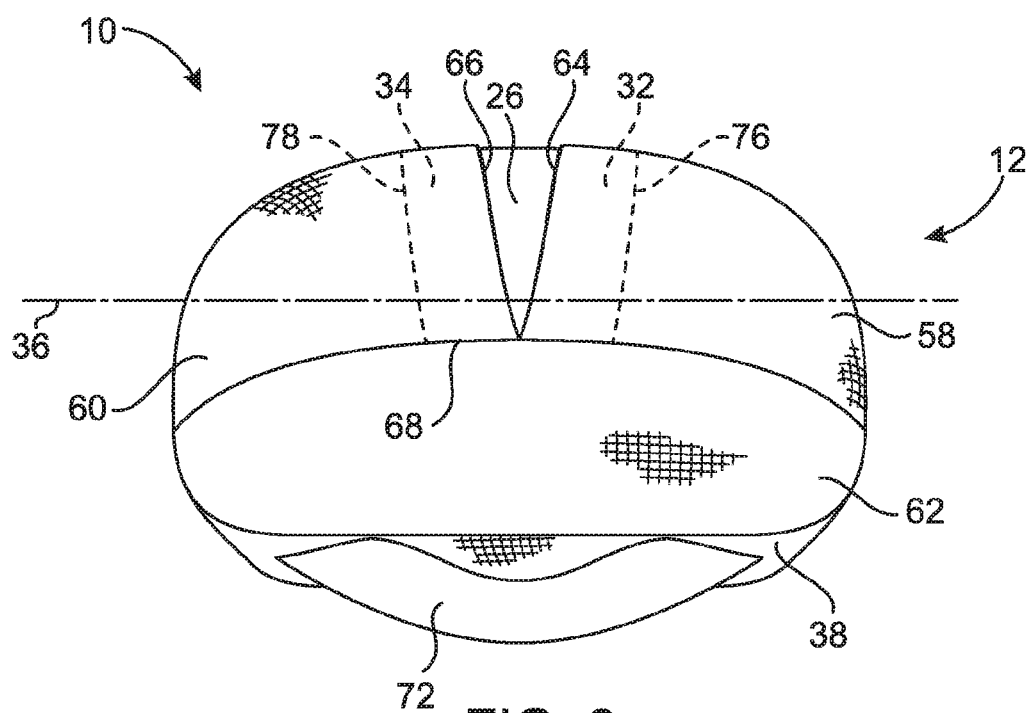


FIG. 3

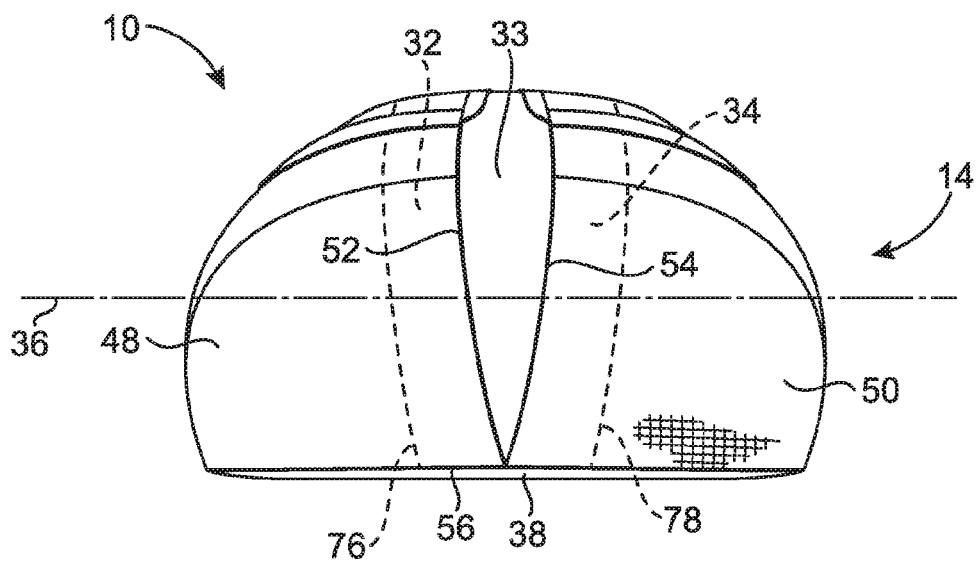
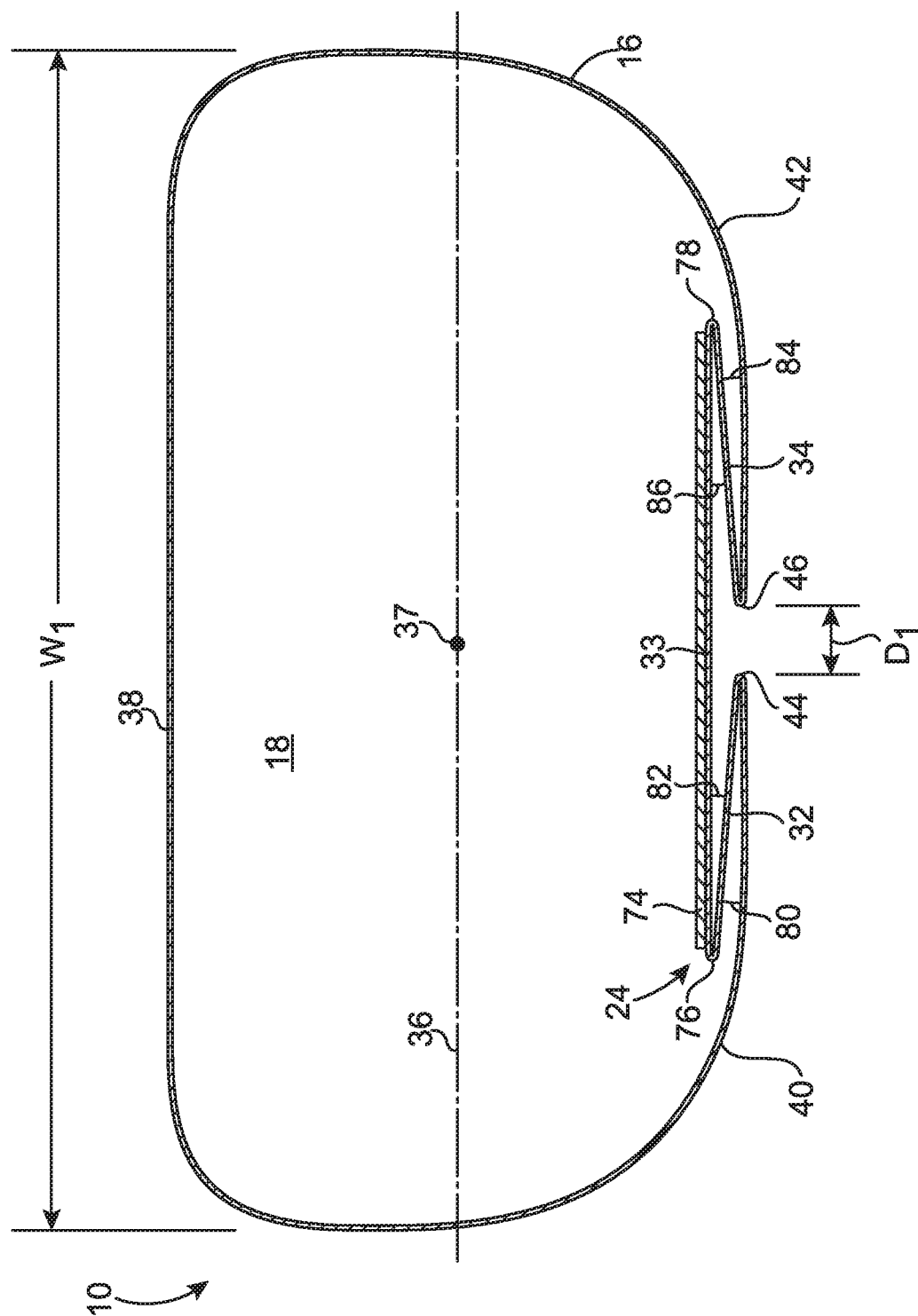


FIG. 4



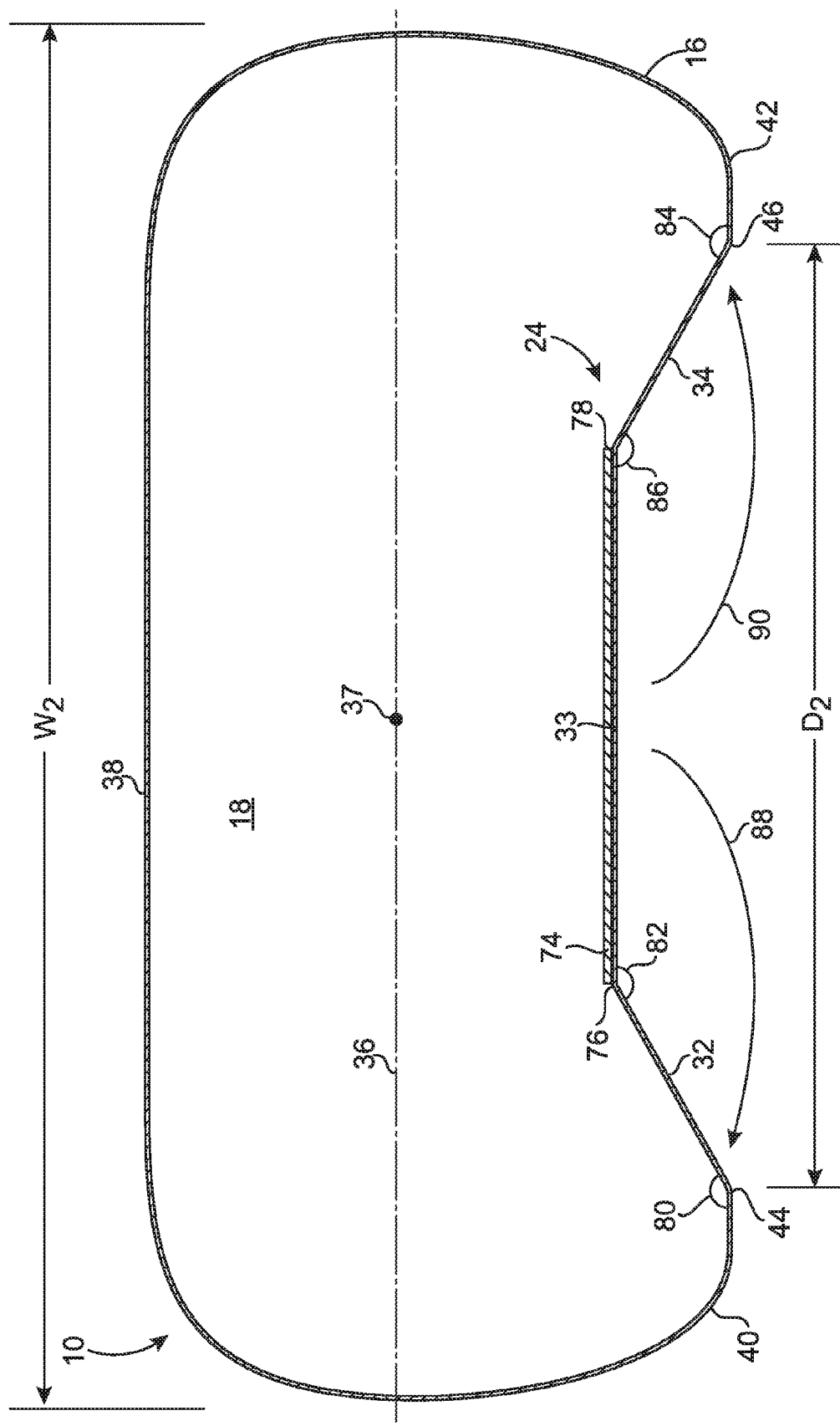


FIG. 6

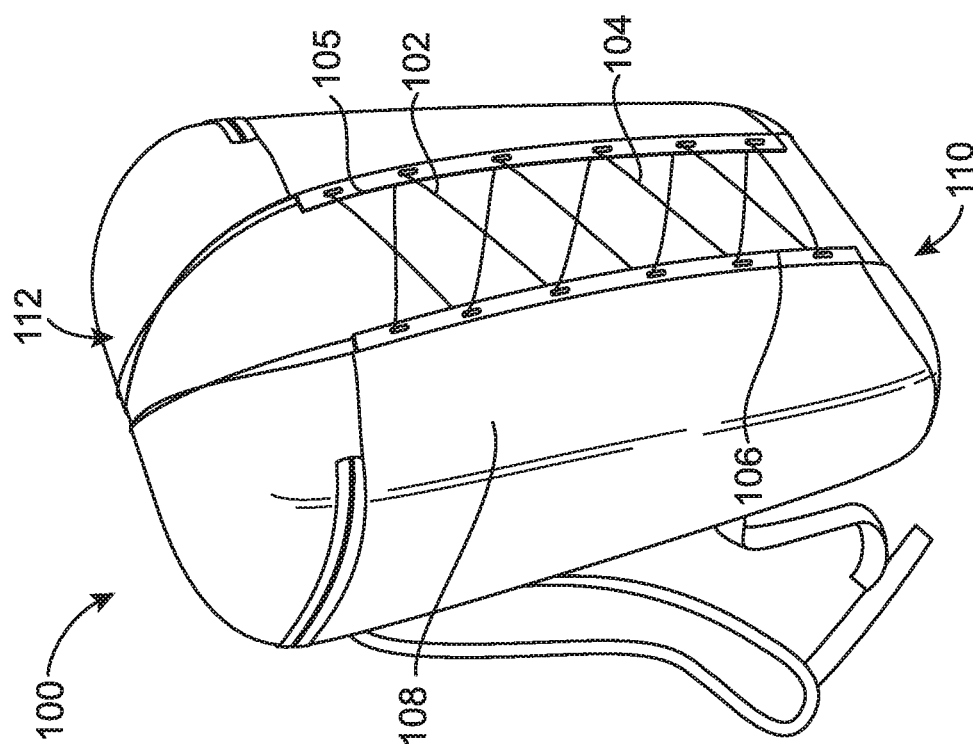


FIG. 8

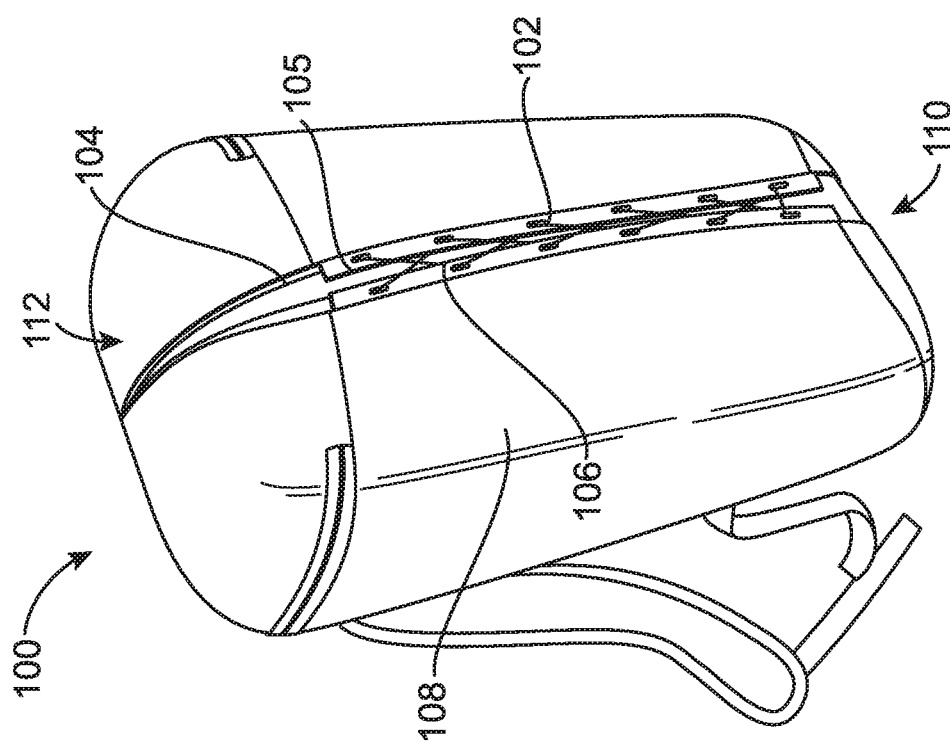


FIG. 7

BACKPACK HAVING HORIZONTAL EXPANSION

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims priority to U.S. Provisional Patent Application Ser. No. 62/026,863, filed on Jul. 21, 2014, which is incorporated in its entirety by reference.

FIELD

[0002] The field of this disclosure relates generally to backpacks used to carry a load on the back of a user and, more particularly, to a backpack having horizontal expansion to selectively increase the usable interior volume of the backpack.

BACKGROUND

[0003] Conventional backpacks typically comprise a plurality of panels stitched together to cooperatively define an interior compartment adapted to store objects for transport in the backpack and a pair of shoulder straps attached to one or more of the panels for carrying the backpack on a user's back. The interior compartment is often selectively accessible by moving a suitable fastening system comprising one or more suitable fasteners (e.g., a slide fastener, straps, hook and loop, snaps, buttons) between a closed position and an opened position. At least some known backpacks have vertical expansion that enables a user to choose between a collapsed configuration and a vertically expanded configuration that has an increased volume of the interior compartment. In such backpacks, the expansion panel is typically a cylindrical portion of fabric that is selectively extendible to increase the overall length of the backpack. However, increasing the length changes the location of the center of gravity of the backpack on the user, which may have an adverse effect on the stability of the backpack.

BRIEF DESCRIPTION

[0004] In one aspect, a backpack having a longitudinal axis and a perpendicular transverse axis generally comprises a top end, a bottom end, and a body portion extending between the top end and the bottom end. The backpack also includes an expansion panel attached to each of the top end, the bottom end, and the body portion. The expansion panel is longitudinally-oriented and is configured to expand in a transverse direction between a collapsed configuration and an expanded configuration.

[0005] In another aspect, a vertically oriented expansion panel for use in a backpack general comprises a first flap, a second flap, and a center portion attached to the first and the second flaps such that the center portion extends therebetween. A first angle is defined between the first flap and the center portion in a collapsed configuration and a second angle that is greater than the first angle is defined between the first flap and the center portion in an expanded configuration.

[0006] In yet another aspect, a backpack having a longitudinal axis and a perpendicular transverse axis generally comprises a shell and an expansion panel attached to the shell, wherein the expansion panel is longitudinally-oriented and configured to expand along the transverse axis such that the shell transitions between a collapsed configuration and an expanded configuration.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Features, aspects, and advantages of the present disclosure will become better understood when the following Detailed Description is read with reference to the accompanying drawings in which like characters represent like parts throughout, wherein:

[0008] FIG. 1 is a perspective of one suitable embodiment of a backpack having horizontal expansion in a collapsed configuration;

[0009] FIG. 2 is a perspective of the backpack shown in FIG. 1 in a partially expanded configuration;

[0010] FIG. 3 is a top view of the backpack shown in FIG. 1 in the collapsed configuration;

[0011] FIG. 4 is a bottom view of the backpack shown in FIG. 1 in the collapsed configuration;

[0012] FIG. 5 is a cross-sectional view of the backpack shown in FIG. 1 taken along line 5-5;

[0013] FIG. 6 is a cross-sectional view of the backpack shown in FIG. 2;

[0014] FIG. 7 is a perspective of another suitable embodiment of a backpack having horizontal expansion in a collapsed configuration; and

[0015] FIG. 8 is a perspective of the backpack illustrated in FIG. 7 in an expanded configuration.

DETAILED DESCRIPTION OF THE DRAWINGS

[0016] With reference now to the drawings, FIGS. 1-6 illustrate one suitable embodiment of a backpack, indicated generally at 10, of the present disclosure. The backpack 10 includes a top end 12, a bottom end 14, and a body portion 16 extending therebetween that cooperatively define a shell 17 having at least one interior compartment 18 adapted to store objects for transport in the backpack 10. In the illustrated embodiment, the interior compartment 18 can be accessed by moving the top end 12 from a closed position (FIGS. 1-6) to an opened position (not shown) such that an opening 20 is defined between the top end 12 and the body portion 16. The top end 12 can be secured in the closed position to the body portion 16 using any suitable fastening system comprising one or more suitable fasteners 22 as seen in FIGS. 1 and 2. Although FIGS. 1 and 2 illustrate the use of a slide fastener, it is understood that any suitable fastener (e.g., straps, hook and loop, snaps, buttons, buckles, and clips) can be used to secure the top end 12 to the body portion 16 in the closed position. It is also understood that the interior compartment 18 can be accessed in a different manner without departing from some aspects of this disclosure.

[0017] The backpack 10 also includes a vertically-oriented expansion panel 24 that includes a top portion 26 corresponding to the top end 12, a body portion 28 corresponding to the body portion 16, and a bottom portion 30 corresponding to the bottom end 14. In the exemplary embodiment, each of the portions 26, 28, 30 of the expansion panel 24 includes a first flap 32 and a second flap 34 with a central portion 33 extending therebetween that together enable the backpack 10 to expand horizontally along a horizontally-oriented transverse axis 36, which is perpendicular to a vertically-oriented longitudinal axis 37. The expansion panel 24 enables conversion of the backpack 10 from a collapsed configuration 25 (FIGS. 1 and 5), where the interior compartment 18 has a first volume, to a horizontally expanded configuration 27 (FIGS. 2 and 6) where the

interior compartment 18 has a second volume that is larger than the first volume. In the exemplary embodiment, the first volume is approximately 40 liters (L) and the second volume is approximately 60L. It is understood, however, that the interior compartment 18 may have any volume that facilitates operation of the backpack 10 as described herein such that the collapsed interior volume is smaller than the expanded interior volume. Notably, the length of the backpack 10 does not change when the backpack 10 is transitioned between the collapsed configuration 25 and the expanded configuration 27.

[0018] In the collapsed configuration 25, the body portion 16 of backpack 10 has a first maximum width dimension W1 that is smaller than a second maximum width dimension W2 of the body portion 16 in the expanded configuration 27 when the expansion panel 24 is at least partially expanded. The body portion 16 may have any width dimension between the first width dimension W1 and the second width dimension W2 wherein the expansion panel 24 is only partially expanded. Furthermore, as the width dimension of the body portion 16 increases, as does the width dimension of the opening 20, correspondingly. As such, in the expanded configuration 27, the opening 20 includes width dimension W2, and, in the collapsed configuration 25, the opening 20 includes width dimension W1. A larger width dimension in the expanded configuration 27 allows the user to more easily pack and unpack the interior compartment 18 of the backpack 10.

[0019] The body portion 16 includes a back panel 38 and a first side panel 40 and a second side panel 42 that each extend around the backpack 10 from opposing ends of the back panel 38. The first side panel 40 includes an edge 44 that is attached (e.g. stitched) to an edge of the first flap 32 of the expansion panel body portion 28 such that at least a portion of the first side panel 40 overlaps the first flap 32 and a portion of the center portion 33 in the collapsed configuration 25, as best shown in FIG. 5. Similarly, the second side panel 42 includes an edge 46 that is attached (e.g. stitched) to an edge of the second flap 34 of the expansion panel body portion 28 such that at least a portion of the second side panel 42 overlaps the second flap 34 and a portion of the center portion 33 in the collapsed configuration 25, as best shown in FIG. 5. In the exemplary embodiment, the expansion panel 24 and the edges 44, 46 are located approximately at a center of the body portion 16 of the backpack 10. It is understood, however, that the expansion panel 24 and the edges 44, 46 can be located at any position on the body portion 16 that facilitates operation of the backpack 10 as described herein.

[0020] In the collapsed configuration 25, the edges 44, 46 are spaced a first distance D1 apart from one another (see FIG. 5). In one suitable embodiment, the edges 44, 46 may contact each other such that the center portion 33 of the expansion panel 24 is substantially hidden from sight. It is contemplated, however, that the edge 44, 46 can be spaced or overlapped relative to each other. In the expanded configuration 27, the edges 44, 46 are spaced a second distance D2 apart from one another that is larger than the first distance D1 such that a larger portion of the center portion 33 is exposed between the edges 44, 46.

[0021] Furthermore, the bottom end 14 includes a first bottom panel 48 and a second bottom panel 50 that are each attached (e.g. stitched) to the back panel 38. The first bottom panel 48 is also attached to the first side panel 40, and,

similarly, the second bottom panel 50 is attached to the second side panel 42. The first bottom panel 48 includes an edge 52 that is attached to the bottom portion 30 of the expansion panel first flap 32 such that at least a portion of the first bottom panel 48 overlaps the first flap 32 and a portion of the center portion 33. Similarly, the second bottom panel 50 includes an edge 54 that is attached to the bottom portion 30 of the second flap 34 such that at least a portion of the second bottom panel 50 overlaps the second flap 34 and a portion of the center portion 33. In the exemplary embodiment, the edges 52, 54 form a “V” shape having a vertex positioned approximately at the seam between the bottom end 14 and the back panel 38 such that a portion of the center portion 33 is exposed between the edges 52, 54. The “V” shape formed by the edges 52, 54 is configured to facilitate expansion of the expansion panel 24. In other suitable embodiments, the edges 52, 54 may be parallel to each other or form any shape that facilitates operation of the backpack 10 as described herein. Furthermore, the first and second flaps 32, 33 and the center portion 33 each include an end 56 that is attached to the back panel 38. More specifically, the first and second flaps 32, 34 are folded over and attached to the center portion 33 at the ends 56 thereof. As such, the ends 56 of the flaps 32, 34 are captured at the end 56 of the center portion 33 to limit expansion of the expansion panel 24.

[0022] Similarly, the top end 12 includes a first top panel 58 and a second top panel 60 that are each attached to the back panel 38. In some embodiments, the first and second top panels 58, 60 may be attached to the back panel 38 via a spacer panel 62. The first top panel 58 is also attached to the first side panel 40 with the fastener 22 extending therebetween, and, similarly, the second top panel 60 is attached to the second side panel 42 with the fastener 22 extending therebetween. The fastener 22 extends about the seam between the body portion 16 and the top end 12 such that the fastener 22 only partially circumscribes the body portion 16. More specifically, the fastener 22 extends about a portion of the first side panel 40, the entire back panel 38, and a portion of the second side panel 42 such that the fastener 22 does not extend across the expansion panel 24. As such, in the exemplary embodiment, the expansion panel 24 is a single continuous component extending from the top end 12, through the body portion 16, to the bottom end 14.

[0023] The first top panel 58 includes an edge 64 that is attached to the top portion 26 of the expansion panel first flap 32 such that at least a portion of the first top panel 58 overlaps the first flap 32 and a portion of the center portion 33. Similarly, the second top panel 60 includes an edge 66 that is attached to the top portion 26 of the expansion panel second flap 34 such that at least a portion of the second top panel 60 overlaps the second flap 34 and a portion of the center portion 33. In the exemplary embodiment, the edges 64, 66 form a “V” shape having a vertex positioned approximately at a seam between the spacer panel 62 and the first and second top panels 58, 60 such that a portion of the center portion 33 is exposed between the edges 64, 66. The “V” shape formed by the edges 64, 66 is configured to facilitate expansion of the expansion panel 24. In other suitable embodiments, the edges 64, 66 may be parallel to each other or form any shape that facilitates operation of the backpack 10 as described herein. Furthermore, the first and second flaps 32, 33 and the center portion 33 each include an end 68 that is attached to the spacer panel 62. More specifically, the first and second flaps 32, 34 are folded over and attached to

the center portion 33 at the ends 68 thereof. As such, the ends 56 of the flaps 32, 34 are captured at the end 56 of the center portion 33 to limit expansion of the expansion panel 24. Alternatively, the backpack 10 may not include the spacer panel 62 such that the first and second top panels 58, 60 and the expansion panel end 68 are attached to the back panel 38.

[0024] In one suitable embodiment, the backpack 10 is assembled using stitching and is formed from a sufficiently durable and compliant material, such as, but not limited to, nylon and polyester. Suitably, the material of the backpack 10 is relatively soft, durable, water resistant, and stain resistant. Furthermore, with reference to FIG. 1, the back panel 38 of the backpack 10 includes at least one shoulder strap 70 for carrying the backpack 10 on a user's back. In one suitable embodiment, the backpack 10 has two shoulder straps 70. The backpack 10 also includes a handle strap 72 (shown in FIG. 3) disposed between the back panel 38 and the spacer panel 62 for manually carrying the backpack with a single hand or for hanging the backpack (e.g., on a suitable hook).

[0025] Although not shown in the Figures, it is contemplated that each of the side panels 40, 42 may include at least one pocket for receiving objects. It is also contemplated the pockets of the backpack 10 can be secured or fastened using any suitable fastener, such as, elastomeric bands, slide fasteners, hook and loop, straps, buckles, buttons, clips, and snaps. It is further contemplated that the backpack 10 can include pockets on other panels (e.g., the first and second top panels 58, 60). Furthermore, each of the shoulder straps 70 may include at least one pocket (not shown) for receiving objects. It is also contemplated the pockets of the shoulder straps 70 can be secured or fastened using any suitable fastener, such as, elastomeric bands, slide fasteners, hook and loop, straps, buckles, buttons, clips, and snaps.

[0026] FIG. 5 is a cross-sectional view of the body portion 16 of the backpack 10 shown in the collapsed configuration 25, and FIG. 6 is a cross-sectional view of the body portion 16 of the backpack 10 in the partially expanded configuration 27. Although the body portion 28 of the extension panel 24 is shown and described in FIGS. 5 and 6, the top and bottom portions 26, 30 of the expansion panel 24 operate substantially similarly. As described above, the expansion panel 24 includes the first flap 32, the second flap 34, and the center portion 33 extending therebetween. The expansion panel 24 also includes a stiffener 74 attached to the center portion 33 to provide stiffness to the expansion panel 24 to allow flaps 32, 34 to slide over the center portion 33. In the exemplary embodiment, the stiffener 74 is formed from a thin (approximately 3 millimeters) sheet of foam. More specifically, the stiffener 74 is formed from a closed cell polyurethane material. It is understood that the stiffener 74 is formed from a material that maintains flexibility and resists creasing even after the stress of repeated collapsing and expanding cycles and exposure to extreme temperature variations. It is understood, however, that the stiffener 74 may be formed from any material and be of any size that facilitates operation of the expansion panel 24 as described herein.

[0027] As shown in FIGS. 5 and 6, the expansion panel also includes a first fold line 76 between the first flap 32 and the center portion 33 and a second fold line 78 between the second flap 34 and the center portion 33. In the collapsed configuration 25, the edges 44, 46 of the first and second side panels 40, 42 are positioned proximate each other such that

at least a portion of the first side panel 40 overlaps the first flap 32 and a portion of the center portion 33 and such that at least a portion of the second side panel 42 overlaps the second flap 34 and a portion of the center portion 33. More specifically, in the collapsed configuration 25, the first side panel 40 and the first flap 32 define an acute angle 80 therebetween, while the first flap 32 and the center portion 33 also define an acute angle 82 therebetween. Similarly, the second side panel 42 and the second flap 34 define an acute angle 84 therebetween, while the second flap 34 and the center portion 33 also define an acute angle 86 therebetween. In the exemplary embodiment, each of the angles 80, 82, 84, 86 are within a range of approximately 0° to approximately 15° in the collapsed configuration 25.

[0028] FIG. 6 shows the backpack 10 in a partially expanded configuration 27 where a user has either pulled side panels 40, 42 away from each other or expanded the interior compartment 18 to cause side panels 40, 42 to move as such. In the expanded configuration 27, edges 44, 46 move away from one another and from the center portion 33 causing rotation or pivoting of the first flap 32 about the fold line 76 in a first direction 88 and rotation or pivoting of the second flap 34 about the fold line 78 in a second direction 90. As such, first and second side panels 40, 42 overlap less of the center portion 33 in the expanded configuration 27 as in the collapsed configuration 25, if the panels 40, 42 overlap the center portion 33 at all. In the expanded configuration 27, the angles 80, 82, 84, 86 increase in size such that the angles 80, 82, 84, 86 may vary within a range of approximately 30° to approximately 45° when only slightly expanded to within a range of approximately 110° to approximately 160° when fully expanded. In the exemplary embodiment, the angles 80, 82, 84, 86 may reach 180° or greater when the backpack 10 is over expanded.

[0029] Returning now to FIGS. 1 and 2, backpack 10 also includes a closure assembly 92 configured to control the amount of expansion available from the expansion panel 24. In the exemplary embodiment, the closure assembly 92 can attach to at least one of the first side panel 40 and the second side panel 42. The closure assembly 92 includes a plurality of straps 94 that each extend between the edges 44, 46. In operation, once the backpack 10 is packed as desired, a user may pull the straps 94 to bring the first and second side panels 40, 42, and, therefore, the edges 44, 46, together. More specifically, the user may use the closure assembly 92 to cinch or compress the body portion 16 tightly about the interior compartment 18 and prevent further expansion of the expansion panel 24.

[0030] The closure assembly 92 is configured to selectively move the straps 94 between the edges 44, 46 to selectively control expansion of the expansion panel 24. For example, the user may adjust the length of the straps 94 between the edges 44, 46 to facilitate different expansion lengths or sizes of the expansion panel 24, and accordingly, different lengths or sizes of the interior volume 18 and/or the opening 20. The user can selectively control the expansion of the expansion panel 24 via the closure assembly 92 to accommodate for varying sizes and/or shapes of loads (not shown), for example only gear, that is placed within the interior volume 18. Moreover, the user can adjust selectively control the expansion of the expansion panel 24 via the closure assembly 92 to adjust the center of gravity of the load and/or backpack 10 to facilitate safe, convenient, and efficient use of the backpack 10. For example, the user may

elect to allow for significant expansion in a lower portion of the body portion 16 proximate the bottom end 14, while tightening the closure assembly 92 in an upper portion of the body portion 16 proximate the top end 12. Such a configuration positions the center of gravity of the backpack 10 proximate to the user's center of gravity to allow for ease of use.

[0031] FIG. 7 is a perspective view of another suitable embodiment of a backpack 100 in a collapsed configuration 101. FIG. 8 is a perspective view of the backpack 100 in an expanded configuration 103. The backpack 100 is substantially similar to the backpack 10 shown in FIGS. 1-6 with the exception that the backpack 100 includes another suitable closure assembly 102. In the illustrated embodiment, the closure assembly 102 is a drawstring cord 104 that is threaded through openings along opposing side panel edges 105, 106. Drawstring cord 104 allows for a user to customize the amount of expansion along a body portion 108 of the backpack 100. For example, the user may elect to allow for significant expansion in a lower portion of the body portion 108 proximate a bottom end 110, while tightening the drawstring 104 in an upper portion of the body portion 108 proximate a top end 112. More specifically, the edges 105, 106 can be drawn closer together near the top end 112 as compared to the spacing between the edges 105, 106 near the bottom end 110. Such a configuration positions the center of gravity of the backpack 100 proximate to the user's center of gravity to allow for ease of use. Such customization may also be accomplished with the plurality of straps 94 of the closure assembly 92 shown in FIGS. 1 and 2.

[0032] The embodiments described herein include an expansion panel attached to each of a top end, a bottom end, and a body portion of a backpack, wherein the expansion panel is longitudinally-oriented and is configured to expand in a transverse (horizontal) direction between a collapsed configuration and an expanded configuration. The expansion panel includes opposing side flaps and a center portion extending therebetween. Each of the side flaps is attached to a side panel of the backpack. To transition from the collapsed configuration to the expanded configuration, the side flaps rotate with respect to the side panels and the center portion such that the side panels move apart to expose a greater portion of the center portion than in the collapsed configurations. As such, the volume of the backpack's interior compartment and the diameter of the backpack's opening is significantly increased to allow for carrying of additional goods and easier access to such goods. Furthermore, because the backpack expands in a horizontal direction while maintaining the same vertical length, the backpack's center of gravity remains substantially constant in both the collapsed and the expanded configurations. As such, the horizontal expansion panel creates a more stable weight distribution when in the expanded configuration than known backpacks having a vertical expansion.

[0033] When introducing elements of the present invention or the preferred embodiment(s) thereof, the articles "a", "an", "the" and "said" are intended to mean that there are one or more of the elements. The terms "comprising", "including" and "having" are intended to be inclusive and mean that there may be additional elements other than the listed elements. Moreover, the use of "top", "bottom", "above", "below" and variations of these terms is made for convenience, and does not require any particular orientation of the components.

[0034] Exemplary embodiments of a backpack are described herein. The methods and assemblies are not limited to the specific embodiments described herein, but rather, components of assemblies and/or steps of the methods may be utilized independently and separately from other components and/or steps described herein. For example, the methods may also be used in combination with other assemblies and methods, and are not limited to practice with only the assemblies and methods described herein. Rather, the exemplary embodiments may be implemented and utilized in connection with many other structures and packs.

[0035] Although specific features of various embodiments of the invention may be shown in some drawings and not in others, this is for convenience only. In accordance with the principles of the invention, any feature of a drawing may be referenced and/or claimed in combination with any feature of any other drawing.

[0036] This written description uses examples to disclose the invention, including the best mode, and also to enable any person skilled in the art to practice the invention, including making and using devices or assemblies or systems and performing any incorporated method. The patentable scope of the invention is defined by the claims, and may include other examples that occur to those skilled in the art. Such other examples are intended to be within the scope of the claims if they have structural elements that do not differ from the literal language of the claims, or if they include equivalent structural elements with insubstantial differences from the literal languages of the claims.

What is claimed is:

1. A backpack having a longitudinal axis and a perpendicular transverse axis, the backpack comprising:
 - a top end;
 - a bottom end;
 - a body portion extending between the top end and the bottom end; and
 - an expansion panel attached to each of the top end, the bottom end, and the body portion, wherein the expansion panel is longitudinally-oriented and is configured to expand in a transverse direction between a collapsed configuration and an expanded configuration.
2. The backpack in accordance with claim 1, further comprising an opening defined between the body portion and the top end, wherein the opening defines a first width in the collapsed configuration and a second width in the expanded configuration, wherein the second width is larger than the first width.
3. The backpack in accordance with claim 1, wherein the top end, the bottom end, and the body portion collectively define an interior compartment having a first volume in the collapsed configuration and a second volume in the expanded configuration, wherein the second volume is larger than the first volume.
4. The backpack in accordance with claim 1, wherein the expansion panel comprises:
 - a first flap;
 - a second flap; and
 - a center portion attached to the first and the second flaps such that the center portion extends therebetween.
5. The backpack in accordance with claim 4, wherein a first angle is defined between the first flap and the center portion in the collapsed configuration and a second angle that is greater than the first angle is defined between the first flap and the center portion in the expanded configuration.

6. The backpack in accordance with claim 1, wherein the body portion comprises a first side panel having a first edge and a second side panel having a second edge, the expansion panel being attached to the first and the second side panels.

7. The backpack in accordance with claim 6, wherein the first and the second edges are spaced apart by a first distance in the collapsed configuration and by a second distance, which is greater than the first distance, in the expanded configuration.

8. The backpack in accordance with claim 6, further comprising a closure assembly attached to the first side panel and the second side panel, wherein the closure assembly is configured to limit expansion of the expansion panel.

9. The backpack in accordance with claim 1, wherein the top end comprises a first edge and a second edge which are configured to form a “V”-shape.

10. The backpack in accordance with claim 1, wherein the bottom end comprises a first edge and a second edge which are configured to form a “V”-shape.

11. The backpack in accordance with claim 1, further comprising a fastener attached to the top end and the body portion wherein the fastener is configured to extend about a seam between the top end and the body portion such that the fastener partially circumscribes the body portion.

12. The backpack in accordance with claim 1, wherein the expansion panel comprises a single continuous component extending from the top end, through the body portion, and to the bottom end.

13. A vertically oriented expansion panel for use in a backpack, the expansion panel comprising:

- a first flap;
- a second flap; and
- a center portion attached to the first and the second flaps such that the center portion extends therebetween, wherein a first angle is defined between the first flap and the center portion in a collapsed configuration and a second angle that is greater than the first angle is defined between the first flap and the center portion in an expanded configuration.

14. The expansion panel in accordance with claim 13, wherein the first and the second flaps each overlap at least a portion of the center portion in the collapsed configuration.

15. The expansion panel in accordance with claim 13, further comprising a stiffener.

16. Cancelled.

17. The expansion panel in accordance with claim 13, wherein each of the first and second flaps and the center portion includes an end edge, wherein the end edge of the first and the second flaps is attached to the end edge of the center portion to limit expansion of the expansion panel.

18. The expansion panel in accordance with claim 13, wherein the first flap includes a first side edge opposite the center portion and the second flap includes a second side edge opposite the center portion, wherein the first and the second side edges are spaced apart a first distance in the collapsed configuration and a second distance that is greater than the first distance in the expanded configuration.

19. A backpack having a longitudinal axis and a perpendicular transverse axis, the backpack comprising:

- a shell; and
- an expansion panel attached to the shell, wherein the expansion panel is longitudinally-oriented and configured to expand along the transverse axis such that the shell transitions between a collapsed configuration and an expanded configuration.

20. (canceled)

21. (canceled)

22. The backpack in accordance with claim 19, wherein the expansion panel comprises:

- a first flap;
- a second flap; and
- a center portion attached to the first and the second flaps such that the center portion extends therebetween.

23. (canceled)

24. The backpack in accordance with claim 19, wherein the shell comprises a first side panel having a first edge and a second side panel having a second edge, the expansion panel is attached between the first and the second side panels such that the first and the second edges are spaced apart by a first distance in the collapsed configuration and by a second distance, which is longer than the first distance, in the expanded configuration.

* * * * *