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Description

TECHNICAL FIELD

[0001] The present disclosure relates generally to product displays and more particularly to a product display for foodstuffs.

BACKGROUND

[0002] This section provides background information related to the present disclosure which is not necessarily prior art.

[0003] Marketing and advertising play a significant role in selling products. Accordingly, product manufacturers go to great lengths to package products in an aesthetically pleasing fashion that attracts consumers. Further, manufacturers and retailers often cooperate to create product displays that not only support and display the particular product but, also, attract consumers by providing a unique display and/or by facilitating the purchase of the product. For example, hygiene products such as shaving cream and deodorant are often displayed in brand-specific containers that bias the product toward the front of the display. That way, when a product is removed from the display, the next product in the display is immediately brought to the front with the signage located on the front of the packaging properly oriented and prominently displayed.

[0004] In addition to providing an advertising and marketing advantage, packaging is particularly useful if the packaging itself provides a particular benefit to the consumer. Such packaging may provide a consumer with the ability to use the product in an environment or in a different way simply because the packaging allows for such use. For example, it is typically not practical to pack large bags of snacks such as popcorn or chips when traveling. Further, such large bags are not useful for individuals or small families, as the foodstuff contained within the bag may go stale before the product is consumed. Providing smaller bags of such snacks allows for smaller quantities to easily be packed when traveling and maintains the freshness of the foodstuffs contained therein when only a small quantity of foodstuff is required.

[0005] While unique packaging provides advantages to consumers, such packaging may be problematic to manufacturers and retailers. For example, packaging snacks in smaller bags requires manufacturers to package such smaller bags in larger boxes and/or larger bags to bundle the smaller bags together for shipment to retailers. In some instances, the larger packaging does not create a problem for the retailer, as the retailer may simply maintain the smaller bags in the larger packaging to sell the smaller bags in bulk (i.e., in a warehouse-type store). However, if a retailer sells such smaller bags individually, the smaller bags are typically removed from the larger packaging prior to sale. In this scenario, the larger packaging is discarded and the smaller bags are sold individually.

[0006] Retailers typically display smaller packages on a rack or other stand that advertises the particular product being sold. For the snack bag example above, individual bags may be removed from a larger box and may be hung from a rack or other support device that allows the bags to be individually removed and purchased. This process not only creates unnecessary waste due to the larger box being discarded but also results in the retailer having to incur the expense of removing and hanging each individual bag and maintaining each display. Further, as products are removed and product is replenished, the retailer is charged with rotating the bags so that old product is moved to the front of the display and new product is moved to the back. In short, while unique packaging-such as smaller packages-provides a benefit to the consumer, such unique packaging typically adds to the cost and complexity of manufacturing and selling the product contained therein.

[7(i)] In the state of the art are known the following documents related with the object of the invention.

[7(ii)] DE 8621549U discloses a Flexible bag for storage and successive removal of pliable, especially foldable products.

[7(iii)] US5704714 discloses a Flexible tubular bag for hygienic articles and method for producing same.

[7(iv)] DE7603597U1 discloses a Bag for storage and removal of a pliable product such as cotton or the like.

[7 (v)] WO9104920 A1 discloses a reclosable container.

[7 (vi)] US5150561 discloses a Method and apparatus for making an easy open substantially rectangular bag of compressed flexible articles having a handle extending in a direction substantially parallel to the direction of compression of the article

SUMMARY

[0007] A display bag according to claim 1 is provided and comprises a housing formed from a flexible material and having a first end, a second end, and an inner volume extending between the first end and the second end. The display bag also comprises a hanging device disposed proximate to the first end and a first panel disposed proximate to the second end and movable from a closed state closing a first opening formed in the housing and restricting access to the inner volume and an open state permitting access to the inner volume via the first opening. Additionally, the housing includes a front panel and side panels, wherein the first end is closed by a first, seal and the second end is closed by a second seal. Further, the first opening extends across the entire width of the front panel and into the side panels.

[0008] In one configuration, the first panel is formed from the flexible material, whereby the flexible material includes perforations that define a shape of the first panel

and the first opening. The first panel may be integrally formed with the flexible material. In this configuration, the flexible material includes perforations that define a shape of the first panel and the first opening.

[0009] A second panel may be disposed proximate to the first end and may be movable from a closed state closing a second opening formed in the housing and restricting access to the inner volume and an open state permitting access to the inner volume via the second opening. The second panel and the second opening may be disposed on an opposite side of the housing than the first panel and the first opening.

[0010] As with the first panel, the second panel may be formed from the flexible material. In this configuration, the flexible material includes perforations that define a shape of the second panel and the second opening. The second panel may be integrally formed with the flexible material. In this configuration, the flexible material includes perforations that define a shape of the second panel and the second opening. Regardless of the particular construction of the second panel, the second opening is disposed proximate to the hanging device.

[0011] According to the invention, the first end is closed by a first seal and the second end is closed by a second seal. A portion of the flexible material extends between the second seal and the first opening. The hanging device includes an aperture formed through the first seal.

[0012] In one configuration, the hanging device includes an aperture formed through the flexible material and a reinforcement member at least partially surrounds the first opening.

[0013] In another configuration not being part of the invention, a display bag is provided and may include a housing formed from a flexible material. The housing may include a first end, a second end, and an inner volume extending between the first end and the second end. The display bag may also include a first panel disposed proximate to the second end and movable from a closed state closing a first opening formed in the housing and restricting access to the inner volume and an open state permitting access to the inner volume via the first opening. A second panel may be disposed proximate to the first end and may be movable from a closed state closing a second opening formed in the housing and restricting access to the inner volume and an open state permitting access to the inner volume via the second opening.

[0014] In one configuration, the first panel and the first opening are disposed on an opposite side of the housing than the second panel and the second opening.

[0015] The first panel and the second panel may be formed from the flexible material. A first series of perforations are formed in the flexible material and a second series of perforations are formed in the flexible material, whereby the first series of perforations define a shape of the first panel and the first opening and the second series of perforations define a shape of the second panel and the second opening. The first panel and the second panel may be integrally formed with the flexible material. In this configuration, a first series of perforations are formed in the flexible material and a second series of perforations are formed in the flexible material, whereby the first series of perforations define a shape of the first panel and the first opening and the second series of perforations define a shape of the second panel and the second opening.

[0016] In one configuration, a hanging device is disposed proximate to the first end. The second opening is disposed proximate to the hanging device. Further, the hanging device includes an aperture formed through the flexible material.

[0017] The first end is closed by a first seal and the second end is closed by a second seal. A portion of the flexible material extends between the second seal and the first opening.

[0018] In one configuration, a first reinforcement member at least partially surrounds the first opening and a second reinforcement member at least partially surrounds the second opening.

[0019] Further areas of applicability will become apparent from the description provided herein. The description and specific examples in this summary are intended for purposes of illustration only and are not intended to limit the scope of the present disclosure.

DRAWINGS

[0020] The drawings described herein are for illustrative purposes only of selected configurations and are not intended to limit the scope of the present disclosure.

FIG. 1 is a partial perspective view of a display bag in accordance with the principles of the present disclosure.

FIG. 2 is a perspective view of the display bag of FIG. 1 showing an access panel in a closed state.

FIG. 3 is a perspective view of the display bag of FIG. 1 showing an access panel in an open state.

FIG. 4 is a partial side view of the display bag of FIG. 1 showing an access panel in a closed state.

FIG. 5 is a partial side view of the display bag of FIG. 1 showing an access panel in an open state.

FIG. 6 is a partial perspective view of a top portion of the display bag of FIG. 1 showing an access panel in a closed state.

FIG. 7 is a partial perspective view of a top portion of the display bag of FIG. 1 showing an access panel is an open state.

FIG. 8 is a front view of a hanging device of the display bag of FIG. 1.

FIG. 9 is a partial perspective view of a display bag in accordance with an example not being part of the present invention.

FIG. 10 is a partial perspective view of the display bag of FIG. 9 showing an access panel in a closed state.

FIG. 11 is a partial perspective view of the display bag of FIG. 9 showing an access panel in an open

state.

FIG. 12 is a partial side view of the display bag of FIG. 9 showing an access panel in an open state.

FIG. 13 is a partial perspective view of a machine used to form a display bag in accordance with the principles of the present disclosure.

FIG. 14 is a partial perspective view of a machine used to form a display bag in accordance with the principles of the present disclosure showing a filling apparatus.

FIG. 15 is a partial perspective view of a machine used to form a display bag in accordance with the principles of the present disclosure showing a sealing and cutting apparatus.

[0021] Corresponding reference numerals indicate corresponding parts throughout the drawings.

DETAILED DESCRIPTION

[0022] Example configurations will now be described more fully with reference to the accompanying drawings. Example configurations are provided so that this disclosure will be thorough, and will fully convey the scope of the disclosure to those of ordinary skill in the art. Specific details are set forth such as examples of specific components, devices, and methods, to provide a thorough understanding of configurations of the present disclosure. It will be apparent to those of ordinary skill in the art that specific details need not be employed, that example configurations may be embodied in many different forms, and that the specific details and the example configurations should not be construed to limit the scope of the disclosure.

[0023] The terminology used herein is for the purpose of describing particular exemplary configurations only and is not intended to be limiting. As used herein, the singular articles "a," "an," and "the" may be intended to include the plural forms as well, unless the context clearly indicates otherwise. The terms "comprises," "comprising," "including," and "having," are inclusive and therefore specify the presence of features, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, steps, operations, elements, components, and/or groups thereof. The method steps, processes, and operations described herein are not to be construed as necessarily requiring their performance in the particular order discussed or illustrated, unless specifically identified as an order of performance. Additional or alternative steps may be employed.

[0024] When an element or layer is referred to as being "on," "engaged to," "connected to," "attached to," or "coupled to" another element or layer, it may be directly on, engaged, connected, attached, or coupled to the other element or layer, or intervening elements or layers may be present. In contrast, when an element is referred to as being "directly on," "directly engaged to," "directly connected to," "directly attached to," or "directly coupled to" another element or layer, there may be no intervening elements or layers present. Other words used to describe the relationship between elements should be interpreted in a like fashion (e.g., "between" versus "directly between," "adjacent" versus "directly adjacent," etc.). As used herein, the term "and/or" includes any and all combinations of one or more of the associated listed items.

[0025] The terms first, second, third, etc. may be used herein to describe various elements, components, regions, layers, and/or sections. These elements, components, regions, layers and/or sections should not be limited by these terms. These terms may be only used to distinguish one element, component, region, layer, or section from another region, layer, or section. Terms such as "first," "second," and other numerical terms do not imply a sequence or order unless clearly indicated by the context. Thus, a first element, component, region, layer, or section discussed below could be termed a second element, component, region, layer, or section without departing from the teachings of the example configurations.

[0026] With reference to the Figures, a display bag 10 is provided and may include a flexible housing 12, a hanging device 14, and a first or dispensing panel 16. As will be described in greater detail below, the hanging device 14 allows the flexible housing 12 to be attached to an external structure (not shown) to allow items contained within the flexible housing 12 to be supported by the external structure via the display bag 10 and to be selectively dispensed from the flexible housing 12 upon removal of the dispensing panel 16.

[0027] The flexible housing 12 may be formed from a flexible material. For example, the flexible housing 12 may be formed from a sheet of metalized film that is folded into the shape shown in FIG. 1. While the flexible housing 12 is described as being form from a metalized film, the flexible housing 12 may be form from virtually any material.

[0028] The flexible housing 12 includes a first end 18, a second end 20, and a main body 22 extending between the first end 18 and the second end 20. The first end 18 includes a first seal 24 that extends in a direction substantially perpendicular to a longitudinal axis 26 of the housing 12. As shown in FIG. 1, the first seal 24 may include a first portion 28 that is disposed between the hanging device 14 and the second end 20 and a second portion 30 that is disposed between the hanging device 14 and the first end 18. As shown and described, the first seal 24 essentially includes a pair of seals 28, 30 that are respectively disposed on opposite sides of the hanging device 14. While the first seal 24 is described as including a pair of seals 28, 30 that are disposed on opposite sides of the hanging device 14, the first seal 24 could include only a single seal or, alternatively, could include a pair of seals that are disposed on the same side of the hanging device 14. For example, the first seal 24 may include a pair of seals 28, 30 that are disposed between

the hanging device 14 and the first end 18 of the housing 12 or, alternatively, may include a pair of seals 28, 30 that are disposed between the hanging device 14 and the second end 20 of the housing 12.

[0029] A second seal 32 is disposed on an opposite end of the flexible housing 12 than the first seal 24 and is disposed proximate to the second end 20. The second seal 32 extends substantially perpendicular to the longitudinal axis 26 of the housing 12 and is substantially parallel to the first seal 24.

[0030] The first seal 24 and the second seal 32 respectively seal the first end 18 and the second end 20 of the flexible housing 12. In so doing, the first seal 24 and the second seal 32 cooperate with the main body 22 to provide the housing 12 with an interior or inner volume 34 extending between the first end 18 and the second end 20.

[0031] The first seal 24 and the second seal 32 seal the interior volume 34 by attaching an inner surface 36 of the housing 12 to itself at the first end 18 and at the second end 20. For example, once the material of the flexible housing 12 is formed into the shape shown in FIG. 1, a portion of the inner surface 36 of the housing 12 opposes another portion of the inner surface 36 at the first end 18 and at the second end 20. The inner surfaces 36 are attached to one another at the first end 18 and at the second end 20, thereby creating the first seal 24 and the second seal 32. The surfaces 36 may be attached to one another via an adhesive and/or a weld. For example, the surfaces 36 may be attached to one another by an ultrasonic weld. The ultrasonic weld is created by applying vibration and pressure to an outer surface 38 of the housing 12 at the location of the first seal 24 and the second seal 32. Applying vibration and pressure at the first end 18 and at the second end 20 generates sufficient heat due to friction such that the material of the flexible housing 12 is joined at the opposed inner surfaces 36 at the first end 18 and the second end 20.

[0032] Joining the inner surfaces 36 at the first end 18 and at the second end 20 creates the first seal 24 and the second seal 32, thereby sealing the interior volume 34 of the housing 12 at the first end 18 and the second end 20. As shown in FIG. 1, the first seal 24 and the second seal 32 extend in a direction substantially perpendicular to the longitudinal axis 26 of the housing 12 and may extend across an entire width of the housing 12 to ensure that the first end 18 and the second end 20 are completely sealed by the first seal 24 and the second seal 32.

[0033] The main body 22 extends between the first end 18 and the second end 20 and includes a front panel 40, a rear panel 42, and a pair of side panels 44. Each side panel 44 extends substantially along the length of the main body 22 and between the front panel 40 and the rear panel 42. The front panel 40 extends between the first end 18 and the second end 20 and includes the dispensing panel 16 disposed proximate to the second end 20. The front panel 40 may additionally include one or more display portions 46 (FIG. 1) that identifies the contents of the display bag 10 by way of text, graphics, or other indicia.

[0034] The dispensing panel 16 is disposed proximate to the second end 20 and is formed in a portion of the front panel 40 and, in some configurations, extends into each of the side panels 44. The dispensing panel 16 is movable from a closed state closing a first or dispensing opening 50 formed in the housing 12 and restricting access to the interior volume 34 and an open state permitting access to the inner volume 34 via the first or dispensing opening 50. The dispensing panel 16 may be formed from the material of the flexible housing 12 and may be formed by providing the material of the flexible housing 12 with a series of perforations 48. In some embodiments, the perforations 48 define a shape of the first or dispensing panel 16 and the first or dispensing opening 50. The perforations 48 locally weaken the material of the housing 12 at the dispensing panel 16, thereby allowing the dispensing panel 16 to be removed from the housing 12 by tearing the material of the housing 12 along the perforations 48. In short, the perforations 48 locally weaken the material of the housing 12 at the dispensing panel 16 to ensure that the dispensing panel 16 is removable from the front panel 40 and portions of the side panel 44 when an appropriate force is applied to the dispensing panel 16 without concurrently causing adjacent portions of the front panel 40 and the side panels 44 to tear.

[0035] While the display panel 16 is described as being formed by providing the front panel 40 and the side panel 44 with a series of perforations 48, the dispensing panel 16 could alternatively be formed in the material of the flexible housing 12 via any suitable process that locally weakens the material of the flexible housing 12 at a periphery of the dispensing panel 16. For example, the dispensing panel 16 may be formed in a material of the flexible housing 12 at the front panel 40 and the side panels 44 by laser scoring the material of the housing 12 at the front panel 40 and the side panels 44.

[0036] As shown in FIG. 1, the dispensing panel 16 includes a substantially rectangular shape. Further, the dispensing panel 16 is shown and described as extending across an entire width of the front panel 40 and into the side portions 44 such that a width of the dispensing panel 16 is greater than a width of the front panel 40. While the dispensing panel 16 is shown and described as including a substantially rectangular shape that extends across an entire width of the front panel 40 and into the side panels 44, the dispensing panel 16 could include a different shape that is entirely contained within the front panel 40. For example, the dispensing panel 16 may include a substantially square shape that extends only across a portion of the width of the front panel 40 and is spaced apart and separated from the side panels 44. As will be described below, the shape of the dispensing panel 16 is largely dependent on the contents stored within the flexible housing 12.

[0037] When a sufficient force is applied to the dispens-

ing panel 16, the material of the flexible housing 12 is torn along the perimeter of the dispensing panel 16 as defined by the perforations 48. Accordingly, the dispensing panel 16 is separated from the housing 12. Upon separation of the dispensing panel 16 from the flexible housing 12, a dispensing opening 50 (FIG. 3) is provided in the housing 12. The dispensing opening 50 includes a shape defined by the perforations 48 and is in fluid communication with the interior volume 34 of the flexible housing 12. Accordingly, when the dispensing panel 16 is removed from the housing 12, the interior volume 34 of the flexible housing 12 is accessible via the dispensing opening 50.

[0038] The dispensing opening 50 includes a top edge 52, a bottom 54 edge, and pair of side edges 56 that extend between the top edge 52 and the bottom edge 54. As shown in FIGS. 3 and 5, the top edge 52 is substantially parallel to the bottom edge 54 and the side edges 56 are substantially parallel to one another. Accordingly, the side edges 56 are substantially perpendicular to each of the top edge 52 and the bottom edge 54 and cooperate with the top edge 52 and the bottom edge 54 to define the overall shape of the dispensing opening 50.

[0039] As described above, a portion of the dispensing panel 16 may extend across the entire front panel 40 and into the side panels 44. In this configuration, the side edges 56 of the dispensing opening 50 are respectively associated with and are formed along the side panels 44, as shown in FIG. 5. The side edges 56 terminate at the top edge 52 and bottom edge 54, which likewise extend partially into the respective side panels 44.

[0040] The top edge 52 of the dispensing opening 50 is disposed generally between the bottom edge 54 and the first end 18 of the flexible housing 12 while the bottom edge 54 is disposed between the top edge 52 of the dispensing opening 50 and the second end 20 of the flexible housing 12. The bottom edge 54 may be spaced apart and separated from the second seal 32 such that a portion 58 of the front panel 40 extends between the bottom edge 54 of the dispensing opening 50 and the second seal 32. As will be described below, the portion 58 of the front panel 40 that extends between the bottom edge 54 of the display dispensing opening 50 and the second seal 32 serves to inhibit items stored within the interior volume 34 of the housing 12 from inadvertently falling out of the housing 12 at the dispensing opening 50 when the dispensing panel 16 is removed from the front panel 40.

[0041] The rear panel 42 of the main body 22 is formed on an opposite side of the housing 12 then the front panel 40. The rear panel 42 may include a longitudinal fin seal 59 created by joining longitudinal ends of the sheet of material used in forming the housing 12. For example, when the sheet of material is formed into the shape of the housing 12, longitudinal edges of the sheet may be joined to one another via a suitable adhesive and/or by welding the longitudinal edges together. For example, the longitudinal edges of the sheet of material may be welded to one another at the inner surface 36 of the housing 12 along the entire length of the housing 12 at the rear panel 42. By joining the opposed, inner surfaces 36 of the housing 12 at the rear panel 42 via a weld, the inner surfaces 36 are sealed to one another and cooperate with first seal 24 and the second seal 32 to seal the interior volume 34 of the housing 12. As with the first seal 24 and the second seal 32, the longitudinal fin seal 59 may be created by ultrasonically welding the longitudinal edges of the sheet of material to one another along the entire length of the rear panel 42. Ultrasonically welding the longitudinal edges of the sheet of material together at the rear panel 42 joins the edges of the sheet to one another, thereby providing the housing 12 with the generally tubular shape shown in Figure 1.

[0042] The side panels 44 may each include a gusset 60 that causes a portion of the side panels 44 to extend toward one another within the interior volume 34. The gussets 60 may crease the side panels 44 along a portion of each side panel 44 to provide the main body 22 with the shape shown in Figure 1. Providing the side panels 44 with gussets 60 allows the side panels 44 to extend into the interior volume 34 of the housing 12, thereby providing the main body 22 with a degree of rigidity at the side panels 44 by restricting the side panels 44 from extending laterally from the front panel 40 in a direction away from one another. Additionally, the gussets 60 provide the main body 22 with a substantially compact shape by causing the side panels 44 to extend into the interior volume 34 rather than in a direction away from one another.

[0043] The rear panel 42 may additional include a second or refill panel 62 that is selectively removable from the rear panel 42 in a similar fashion as the dispensing panel 16 is selectively removable from the front panel 40. The refill panel 62 is disposed on an opposite side of the housing 12 then the dispensing panel 16 and is disposed proximate to the first end 18 of the housing 12. As shown in FIG. 6, the refill panel 62 is formed from the same material as the flexible housing 12 and may be formed by providing the material of the flexible housing 12 with perforations 64 around a perimeter of the refill panel 62. As with the dispensing panel 16, perforating or laser-scoring the material of the flexible housing 12 at the rear panel 42 to define the refill panel 62 allows the refill panel 62 to be removed from the rear panel 42 along the perforations 64 without tearing adjacent portions of the rear panel 42 and/or the side panels 44.

[0044] As shown in FIG. 6, the refill panel 62 includes a substantially rectangular shape and extends across an entire width of the rear panel 42 and into the side panels 44. As such, when the refill panel 62 is removed, a refill opening 66 (FIG. 7) having a substantially rectangular shape is formed. The refill opening 66 includes a top edge a 68, a bottom edge 70, and a pair of side edges 72 that extend between and substantially perpendicular to the top edge 68 and the bottom edge 70. The second or refill panel 62 is movable from a closed state closing the second or refill opening 66 formed in the housing and re-

stricting access to the inner volume 34 and an open state permitting access to the inner volume 34 via the second or refill opening 66.

[0045] As shown in FIG. 7, the top edge 68 is substantially parallel to the bottom edge 70 and is disposed between the bottom edge 70 and the first end 18 of the housing 12 while the bottom edge 70 is disposed between the top edge 68 and the second end 20 of the housing 12. The top edge 68 and the bottom edge 70 extend across and sever the fin seal 59 at the refill opening 66 when the refill panel 62 is removed from the rear panel 42. The side edges 72 extend substantially parallel to one another and are substantially perpendicular to the top edge 68 and the bottom edge 70.

[0046] As shown and described, a portion 74 of the rear panel 42 extends between the first end 18 and the top edge 68 of the refill opening 66. While the a portion 74 of the rear panel 42 extends between the first end 18 of the housing 12 and the top edge 68 of the refill opening 66, the top edge 68 of the refill opening 66 could alternatively be disposed adjacent to and/or abutting a bottom edge of the first seal 24. For example, the top edge 68 of the refill opening 66 may abut a bottom edge of the first portion 28 of the first seal 24 such that the refill opening 66 is disposed at the very top of the rear panel 42.

[0047] Each of the dispensing opening 50 and the refill opening 66 may include a reinforcement member 76. The reinforcement member 76 may be formed from a relatively rigid material such as, for example, paperboard, and/or plastic and may be attached to the main body 22 at the inner surface 36. A reinforcement member 76 may be associated with the dispensing opening 50 and also may be associated with the refill opening 66 such that each opening 50, 66 includes a reinforcement member 76. Alternatively, a reinforcement member 76 may only be associated with one of the openings 50, 66. For example, the refill opening 66 may not include a reinforcement member 76 while the dispensing opening 50 includes a reinforcement member 76. Regardless of whether one or both of the openings 50, 66 includes a reinforcement member 76, the reinforcement member 76 surrounds at least a portion of the opening 50, 66-and in some instances the entire opening 50, 66-to reduce the likelihood that the material of the housing 12 will tear in the area of the openings 50, 66 when the panels 16, 62 are removed from the housing 12.

[0048] The reinforcement member 76 may be attached to the interior surface 36 of the housing 12 via a suitable adhesive. Alternatively or additionally, the reinforcement member 76 may be welded to the inner surface 36 of the housing 12 if the reinforcement member 76 is formed from a material that permits the reinforcement member 76 to be attached to the material of the housing 12 via an ultrasonic weld, for example. Regardless of how the reinforcement member 76 is attached to the inner surface 36, the reinforcement member 76 is disposed within the interior volume 34 and extends at least around a portion of the respective openings 50, 66 in an effort to locally strengthen the main body 22 in the areas of the openings 50, 66.

[0049] With particular reference to FIGS. 1, 6, and 7, the hanging device 14 is shown as being disposed proximate to the first end 18 of the housing 12 and as including an aperture 78. The aperture 78 is formed through the sheet of material that forms the front panel 40 and extends through the material that forms the rear panel 42 such that the aperture 78 extends completely through the first end 18 of the housing 12. In one configuration, the aperture 78 extends through the first seal 24. In another configuration, the aperture 78 is disposed between the first portion 28 and the second portion 30 of the first seal 24. Positioning the aperture 78 proximate to or through a portion of the first seal 24 strengthens the area of the housing 12 at the aperture 78 and reduces the likelihood that the housing 12 will tear in an area of the aperture 78.

[0050] Forming the aperture 78 through the first end 18 of the housing 12 at or proximate to the first seal 24 allows the display bag 10 to be attached to an external structure such as, for example, a rack or other fixture (none shown) of a retail store, for example. The aperture 78 is permitted to receive a peg, screw, or other projection (none shown), which, in turn, allows the display bag 10 to be attached to the external structure via the first end 18. Interaction between the aperture 78 of the hanging device 14 and the external structure allows the display bag 10 to be attached to and hang from the external structure.

[0051] In some embodiments, a display bag 10 is provided. The display bag 10 comprises a housing 12 formed from a flexible material having a first end 18, a second end 20, and an inner volume 34 extending between the first end 18 and the second end 20. The display bag 10 further comprises a hanging device 14 disposed proximate to the first end 18 and a first panel 16 disposed proximate to the second end 20 and movable from a closed state closing a first opening 50 formed in the housing 12 and restricting access to the inner volume 34 and an open state permitting access to the inner volume 34 via the first opening 50.

[0052] In some embodiments, the display bag 10 further includes a housing 12 formed from a flexible material and having front panel 40, a rear panel 42, and a pair of side panels 44. In some embodiments, the display bag 10 includes a first panel 16 disposed on the front panel 40 of the housing 12. In other embodiments, the display bag 10 includes a first panel 16 disposed on one of the side panels 44 of the housing 12.

[0053] In some embodiments, the first panel 16 is formed from the flexible material. In some embodiments, the display bag 10 further comprises perforations 48 formed from the flexible material, where the perforations 48 define a shape of the first panel 16 and the first opening 50. In still other embodiments, the first panel 16 is integrally formed with the flexible material.

[0054] In some embodiments, the display bag 10 fur-

ther includes a second panel 62 disposed proximate to the first end 18 and movable from a closed state closing the second opening 66 formed in the housing 12 and restricting access to the inner volume 34 and an open state permitting access to the inner volume 34 via the second opening 66.

[0055] In some embodiments, the second panel 62 of the display bag 10 and the second opening 66 are disposed on an opposite side of the housing 12 than the first panel 16 and the first opening 50. In some embodiments, the second panel 62 is formed from the flexible material. In some embodiments, the display bag 10 also includes perforations 64 formed in the flexible material that define a shape of the second panel 62 and the second opening 66. In still other embodiments, the second panel 62 is integrally formed with the flexible material. In some embodiments, the second opening 62 is disposed proximate to the hanging device 14.

[0056] In some embodiments, the first end 18 is closed by a first seal 24 and the second end 20 is closed by a second seal 32. In some embodiments, a portion of the flexible material extends between the second seal 32 and the first opening 50. In some embodiments, the hanging 14 device includes an aperture 78 formed through the first seal 24. In some embodiments, the hanging device 14 includes an aperture 78 formed through the flexible material. In some embodiments, the display bag 10 further includes a reinforcement member 76 that at least partially surrounds the first opening 50.

[0057] In some embodiments, another display bag 10 is provided. The display bag 10 comprises a housing 12 formed from a flexible material having a first end 18, a second end 20, and an inner volume 34 extending between the first end 18 and the second end 20. The display bag 10 further comprises a first panel 16 disposed proximate to the second end 20 and movable from a closed state closing a first opening 50 formed in the housing 12 and restricting access to the inner volume 34 and an open state permitting access to the inner volume 34 via the first opening 50. The display bag 10 also comprises a second panel 62 disposed proximate to the first end 18 and movable from a closed state closing a second opening 66 formed in the housing 12 and restricting access to the inner volume 34 and an open state permitting access to the inner volume 34a via the second opening 66.

[0058] In some embodiments, the first panel 16 and first opening 50 are disposed on an opposite side of the housing 12 than the second panel 62 and the second opening 66.

[0059] In some embodiments, the first panel 16 and the second panel 62 are formed from the flexible material. In some embodiments, the display bag 10 further comprises a first series of perforations 48 and a second series of perforations 64 formed in the flexible material, where the first series of perforations 48 define a shape of the first panel 16 and the first opening 50 and the second series of perforations 64 define a shape of the second panel 62 and the second opening 66. In still other embodiments, the first panel 16 and the second panel 62 are integrally formed with the flexible material.

[0060] In some embodiments, the display bag 10 further includes a hanging device 14 disposed proximate to the first end 18. In some embodiments, the second opening 66 is disposed proximate to the hanging device 14. In some embodiments, the hanging device 14 includes an aperture 78 formed through the flexible material.

[0061] In some embodiments, the first end 18 is closed by a first seal 24 and the second end 20 is closed by a second seal 32. In some embodiments, a portion of the flexible material extends between the second seal 32 and the first opening 50.

[0062] In some embodiments, the display bag 10 further includes a first reinforcement member 76 that at least partially surrounds the first opening 50. In some embodiments, the display bag 10 further includes a second reinforcement member 76 that at least partially surrounds the second opening 66.

[0063] With particular reference to FIGS. 9-12, a display bag 10a is provided. In view of the substantial similarity in structure and function of the components associated with the display bag 10 with respect to the display bag 10a, like reference numerals are used hereinafter and in the drawings to identify like components while like reference numerals containing letter extensions are used to identify those components that have been modified.

[0064] The display bag 10a includes a flexible housing 12a having a main body 22a. As with the main body 22 of the display bag 10, the main body 22a includes a front panel 40a, a rear panel 42a, and a pair of side panels 44a. The display bag 10a is virtually identical to the display bag 10 with the exception of the position of the dispensing panel 16a. Namely, the dispensing panel 16a of the display bag 10a is offset from the position of the dispensing panel 16 of the display bag 10 by approximately ninety degrees (90°). As shown in FIGS. 9 and 10, the dispensing panel 16a is moved from the front panel 40 onto one of the side panels 44a. In so doing, the dispensing panel 16a extends across the entire width of one of the side panels 44a and at least partially into the front panel 40a and into the rear panel 42a. As with the dispensing panel 16 of the display bag 10, the dispensing panel 16a of the display bag 10a may include a different shape and may only partially extend across the side panel 44a. Accordingly, the dispensing panel 16a may be spaced apart and separated from the front panel 40a and the rear panel 42a and may therefore be entirely contained within the particular side panel 44a. As will be described below, positioning the dispensing panel 16a in the foregoing manner allows the display bag 10a to contain different articles when compared to the display bag 10.

[0065] Moving the dispensing panel 16 to the side panel 44a, as shown in FIGS. 9-12 allows the interior volume 34 of the housing 12a to be accessible at the side panel 44a. While a position of the refill panel 62 may likewise be moved to the side panel 44a, the refill panel 62 may

also be maintained in the same position on the display bag 10a, as shown and described above with respect to the display bag 10. Accordingly, a description of the refill panel 62 being disposed on one of the side panels 44a is foregone. If the refill panel 62 were moved from the rear panel 42a and onto one of the side panels 44a, the refill panel 62 could be positioned on the same side panel 44a as the dispensing panel 16a or, alternatively, could be positioned on the other side panel 44a located on an opposite side of the housing 12 than the dispensing panel 16a.

[0066] With particular reference to FIGS. 1-12, operation of the display bag 10 will be described in detail. In one configuration, the display bag 10 contains a quantity of individually packaged items such as, for example, bags of food product 80. The bags 80 may contain food product such as, for example, chips, pretzels, or other snacks and may be stacked on one another within the interior volume 34 of the display bag 10, as shown in FIGS. 2 and 3. When the bags 80 are initially stacked and received within the interior volume 34, the bags 80 are prevented from being removed from the interior volume 34 due to the dispensing panel 16 being attached to the housing 12.

[0067] A force may be applied to the dispensing panel 16 to remove the dispensing panel 16 from the housing 12, as described above. When the dispensing panel 16 is removed from the housing 12, the bags 80 may be individually removed from the interior volume 34 of the housing 12 via the dispensing opening 50, which is sized and shaped to accommodate the particulate bags 80. The bags 80 are restricted from inadvertently being removed from the dispensing opening 50 due to interaction of the portion 58 of the front panel 40 and the individual bags 80. Specifically, gravity causes the bags 80 to collect proximate to the second end 20 of the housing 12. Accordingly, the bottommost bag 80 engages the inner surface 36 of the housing 12 at the portion 58 of the front panel 40, thereby restricting the bag 80 from inadvertently falling out of the housing 12 at the dispensing opening 50.

[0068] The bottommost bag 80 may be removed from the interior volume 34 of the housing 12 by applying a force on the bag 80 (i.e. by a hand of a consumer, for example) and removing the bag 80 from the interior volume 34 via the dispensing opening 50. When the bottommost bag 80 is removed from the interior volume 34, gravity once again causes the adjacent, upstream bag to drop to the bottom of the interior volume 34 proximate to the second end 20 of the housing 12 and engage the interior surface 36 of the housing 12 at the portion 58 of the front panel 40. The bags 80 disposed within the interior volume 34 remain in this position until another bag 80 is removed from the interior volume 34 and the process is repeated.

[0069] When a predetermined number of bags 80 are removed from the interior volume 34, the refill panel 62 may be removed from the rear panel 42 along the perforations 64 to permit access to the interior volume 34 at the refill opening 66. Permitting access to the interior volume 34 at the refill opening 66 allows a store clerk or other retail personnel to refill the display bag 10 at the refill opening 66 with additional bags 80, thereby allowing the display bag 10 to be reused once the individual bags 80 are partially or wholly removed from the interior volume 34. Further, allowing the display bag 10 to be refilled allows the bag 10 to be used with bags 80 containing different product once the original product is consumed (i.e., a bag 10 originally containing individual bags 80 of potato chips may be used to dispense similarly sized bags 80 containing cereal or pretzels). In short, allowing the bag 10 to be refilled allows the bag 10 to be reused with the same or different products contained within the individual bags 80 and, thus, reduces the costs associated with displaying individual bags 80 and reduces the impact on the environment, as the original bag 10 is reused.

[0070] The display bag 10 may be hung from an external structure such as a rack or a shelving unit of a retail store, for example, such that the refill opening 66 faces the rack and the dispensing opening 50 faces a consumer. Accordingly, the display portion 46 of the front panel 40 may be located approximate to the dispensing opening 50 to permit a consumer to readily identify the contents of the individuals bags 80 disposed within the display bag 10 when shopping.

[0071] The display bag 10a may be used in an identical fashion but may receive different contents than the bags 80 of the display bag 10. For example, the display bag 10a may receive cylindrical items such as cans that are stacked on top of one another within the interior volume 34 of the housing 12. As shown in FIGS. 10-12, the cans 82 are received within the interior volume 34 and are stacked on top of one another such that a cylindrical end portion 84 of the bottommost can 82 is exposed at the dispensing opening 50a (FIG.11) when the dispensing panel 16a is removed from the side panel 44a.

[0072] As with the individual bags 80, the bottommost can 82 is prevented from inadvertently falling out of the interior volume 34 of the housing 12a due to interaction between the bottommost can 82 and a portion 86 of the sidewall 44a. The portion 86 of the sidewall 44a that engages the bottommost can 82 extends between the bottom edge 54a of the dispensing opening 50a and the second end 20 of the housing 12a in a similar fashion as the portion 58 of the display bag 10.

[0073] When a predetermined number of cans 82 are removed from the interior volume 34 of the housing 12a, new cans 82 may be inserted into the interior volume 34 at the refill opening 66. Namely, the refill panel 62 may be removed from the rear panel 42a of the housing 12a, thereby providing access to the interior volume 34 at the refill opening 66.

[0074] With particular reference to FIGS. 13-15, formation of the display bag 10 will be described in detail. A description of the formation of the display bag 10a is

foregone, as formation of the display bag 10a is virtually identical to the formation of the display bag 10 with the exception of the location of the dispensing panels 16, 16a.

[0075] In another embodiment, a method of forming a display bag 10 is provided. In some embodiments, the method of forming a display bag 10 comprises feeding a sheet of material 110 comprising a pair of longitudinal edges through a series of rollers 104 and onto a forming tube 102, wrapping the sheet of material 110 around an outer perimeter of the forming tube 102 and imparting a substantially tubular shape to the sheet of material 110, sealing the longitudinal edges together using a vertical sealing mechanism 106 to create a fin seal 59, forming a second seal 32 with a cut/seal mechanism to create a partially formed display bag 10_{UB} from the sheet of material 110, dispensing bulk goods 80 into the partially formed display bag 10_{UB} via a funnel 116 of the forming tube 102, and creating a first seal 24 after filling the partially formed display bag 10_{UB} to form the display bag 10, the cut/sealing mechanism 108 simultaneously creating the first seal 24 and forming a seal 32 at a second end 20 of an upstream display bag 10_{UB}.

[0076] The display bag 10 may be formed using a vertical form, fill, and seal system (VFFS) 100. The VFFS system 100 includes a forming tube 102, a series of rollers 104, a vertical sealing mechanism 106, and an integrated cut/sealing mechanism 108. In operation, a sheet of material 110 that forms the material of the display bag 10 is fed through a series of rollers 112 prior to encountering the forming tube 102. Once the sheet of material 110 encounters the forming tube 102, the material 110 is wrapped around an outer perimeter of the forming tube 102. In so doing, the material 110 surrounds the outer perimeter of the forming tube 102 and takes a substantially tubular shape. At this point, longitudinal edges of the sheet of material 110 are brought into close proximity to one another. In one configuration, the inner surfaces 36 of each longitudinal edge oppose one another and are brought into contact with one another. In another configuration, the inner surface 36 of one longitudinal edge opposes the outer surface 38 of the other longitudinal edge and is brought into contact with the outer surface 38. Regardless of the relationship between the longitudinal edges, the longitudinal edges and are sealed together by the vertical sealing mechanism 106 through a suitable process such as, for example, ultrasonic welding. Sealing the longitudinal edges of the sheet of material 110 by the vertical sealing mechanism 106 creates the fin seal 59 that extends along the length of the rear panel 42.

[0077] The rollers 104 exert a force on the sheet of material 110 via a pair of belts 105 driven by the rollers 104, thereby causing the sheet of material 110 to move along the forming tube 102 and through the vertical sealing mechanism 106. In so doing, the vertical sealing mechanism 106 creates the fin seal 59 and causes the material 110 to encounter the cut/sealing mechanism 108.

[0078] The cut/sealing mechanism 108 includes a pair of jaws 114 that are selectively brought toward one another to clamp a portion of the material 110 therebetween. In so doing, the cut/sealing mechanism 108 simultaneously severs a formed display bag 10 from the sheet of material 110 and creates the second seal 32 of the display bag 10_{UB} disposed upstream of the formed display bag 10. As shown in FIG. 14, the formed display bag 10 is shown as being severed from the cut/sealing mechanism 108 by the jaws 114 and, thus, from the sheet of material 110, while the partially formed, upstream display bag 10_{UB} is concurrently sealed to form the second seal 32 of the partially formed display bag 10_{UB}.

[0079] As the material 110 advances along the forming tube 102 and the cut/sealing mechanism 108 creates the second seal 32, the contents of the display bag 10 may be inserted into a partially formed display bag 10_{UB} via a funnel 116 of the forming tube 102. Specifically, the individual bags 80, for example, may be stacked and sequenced prior to the bags 80 being inserted into the display bag 10_{UB} via the funnel 116. The bags 80 travel through an interior portion of the forming tube 102 prior to engaging the sealed, second end 20 of a display bag 10_{UB} being formed. Once the bags 80 are disposed within the interior volume 34 of the housing 12, the jaws 114 of the cut/sealing mechanism 108 are brought toward one another to clamp the material 110 therebetween. The jaws 114 simultaneously seal the first end 18 of the housing 12 by creating the first seal 24, thereby finalizing the display bag 10. In so doing, the jaws 114 sever the formed display bag 10 from the next partially formed, upstream display bag 10_{UB} and concurrently form the seal 32 of the second end 20 of the upstream display bag 10_{UB}. Utilizing the VFFS 100 to form the display bags 10 allows the display bags 10 to be simultaneously formed and filled.

[0080] As shown in FIGS. 13-15, the perforations 48, 64 that respectively define the shape, size, and location of the dispensing panel 16 and the refill panel 62 may be formed in the sheet of material 110 prior to the sheet of material encountering the forming tube 102. Alternatively, the VFFS 100 may include a station (not shown) that forms the perforations 48, 64 in the sheet of material 110, as the sheet of material 110 passes through the VFFS 100.

[0081] The foregoing description is provided for purposes of illustration and description. It is not intended to be exhaustive or to limit the disclosure. Individual elements or features of a particular configuration are generally not limited to that particular configuration, but, where applicable, are interchangeable and can be used in a selected configuration, within the scope of the attached claims.

Claims

1. A display bag (10) comprising:

   a housing (12) formed from a flexible material and having a first end (18), a second end (20), and an inner volume extending between the first end and the second end; the housing (12) including a front panel (40) and side panels (44) and wherein the first end is closed by a first seal (24) and the second end is closed by a second seal (32);
   a hanging device (14) disposed proximate to the first end;
   a first panel (16) disposed proximate to the second end and movable from a closed state closing a first opening (50) formed in the housing and restricting access to the inner volume and an open state permitting access to the inner volume via the first opening (50);
   characterized in than the first opening extending across an entire width of the front panel and into the side panels.

2. The display bag of claim 1, wherein the first panel is formed from the flexible material.

3. The display bag of claim 2, further comprising perforations (48) formed in the flexible material, wherein the perforations (48) define a shape of the first panel and the first opening.

4. The display bag of claim 1, wherein the first panel is integrally formed with the flexible material.

5. The display bag of claim 1, further comprising a second panel (26) disposed proximate to the first end and movable from a closed state closing a second opening (66) formed in the housing and restricting access to the inner volume and an open state permitting access to the inner volume via the second opening.

6. The display bag of claim 5, wherein the second panel is formed from the flexible material.

7. The display bag of claim 6, further comprising perforations (64) formed in the flexible material, wherein the perforations define a shape of the second panel and the second opening.

8. The display bag of claim 7, wherein the second panel is integrally formed with the flexible material.

9. The display bag of claim 1, wherein the hanging device includes an aperture (78) formed through the flexible material.

10. The display bag of claim 1, further comprising a reinforcement member (76) that at least partially surrounds the first opening.

11. The display bag of claims 1 or 10 wherein the hanging device (14) includes an aperture (78) formed through the first seal.

12. The display bag according to any of the claims 5 to 10, wherein the first panel and the first opening are disposed on an opposite side of the housing than the second panel and the second opening.

13. The display bag according to any of the claims 5 to 10, wherein a portion of the flexible material extends between the second seal (32) and the first opening (50).

14. The display bag according to any of the claims 5 to 10, further comprising a first reinforcement member that at least partially surrounds the first opening or a second reinforcement member that at least partially surrounds the second opening.

Patentansprüche

1. Präsentationsbeutel (10) umfassend:
   ein Gehäuse (12), das aus einem flexiblen Material gebildet ist und ein erstes Ende (18), ein zweites Ende (20) und ein Innenvolumen aufweist, das sich zwischen dem ersten Ende und dem zweiten Ende erstreckt; das Gehäuse (12) einschließlich einer Frontplatte (40) und Seitenplatten (44) und wobei das erste Ende durch einen ersten Verschluss (24) und das zweite Ende durch einen zweiten Verschluss (32) verschlossen ist;

   eine Aufhängevorrichtung (14), die in der Nähe des ersten Endes angeordnet ist;
   eine erste Platte (16), die in der Nähe des zweiten Endes angeordnet und aus einem geschlossenen Zustand, in dem eine erste Öffnung (50), die in dem Gehäuse ausgebildet ist, geschlossen ist und in dem der Zugang zum Innenvolumen begrenzt ist, und einem offenen Zustand, in dem der Zugang zum Innenvolumen über die erste Öffnung (50) möglich ist, beweglich ist; **dadurch gekennzeichnet, dass** sich die erste Öffnung über die gesamte Breite der Frontplatte und in die Seitenplatten erstreckt.

2. Präsentationsbeutel nach Anspruch 1, wobei die erste Platte aus dem flexiblen Material gebildet ist.

3. Präsentationsbeutel nach Anspruch 2, ferner umfassend Perforationen (48), die in dem flexiblen Material ausgebildet sind, wobei die Perforationen (48) eine

Form der ersten Platte und der ersten Öffnung definieren.

4. Präsentationsbeutel nach Anspruch 1, wobei die erste Platte einstückig mit dem flexiblen Material gebildet ist.

5. Präsentationsbeutel nach Anspruch 1, ferner umfassend eine zweite Platte (26), die in der Nähe des ersten Endes angeordnet und aus einem geschlossenen Zustand, in dem eine zweite Öffnung (66), die im Gehäuse ausgebildet ist, geschlossen ist und in dem der Zugang zum Innenvolumen begrenzt ist, und einem offenen Zustand, in dem der Zugang zum Innenvolumen über die zweite Öffnung möglich ist, bewegbar ist.

6. Präsentationsbeutel nach Anspruch 5, wobei die zweite Platte aus dem flexiblen Material gebildet ist.

7. Präsentationsbeutel nach Anspruch 6, ferner umfassend Perforationen (64), die in dem flexiblen Material ausgebildet sind, wobei die Perforationen eine Form der zweiten Platte und der zweiten Öffnung definieren.

8. Präsentationsbeutel nach Anspruch 7, wobei die zweite Platte einstückig mit dem flexiblen Material gebildet ist.

9. Präsentationsbeutel nach Anspruch 1, wobei die Aufhängevorrichtung eine durch das flexible Material geformte Öffnung (78) einschließt.

10. Präsentationsbeutel von Anspruch 1, ferner umfassend ein Verstärkungselement (76), das die erste Öffnung zumindest teilweise umgibt.

11. Präsentationsbeutel nach Anspruch 1 oder 10, wobei die Aufhängevorrichtung (14) eine durch den ersten Verschluss gebildete Öffnung (78) einschließt.

12. Präsentationsbeutel nach einem der Ansprüche 5 bis 10, wobei die erste Platte und die erste Öffnung auf einer gegenüberliegenden Seite des Gehäuses angeordnet sind als die zweite Platte und die zweite Öffnung.

13. Präsentationsbeutel nach einem der Ansprüche 5 bis 10, wobei ein Teil des flexiblen Materials sich zwischen dem zweiten Verschluss (32) und der ersten Öffnung (50) erstreckt.

14. Präsentationsbeutel nach einem der Ansprüche 5 bis 10, ferner umfassend ein erstes Verstärkungselement, das die erste Öffnung zumindest teilweise umgibt, oder ein zweites Verstärkungselement, das die zweite Öffnung zumindest teilweise umgibt.

Revendications

1. Un sac d'affichage (10) comprenant :
un logement (12) formé à partir d'un matériau flexible et ayant une première extrémité (18), une seconde extrémité (20) et un volume intérieur s'étendant entre la première extrémité et la seconde extrémité; le logement (12) comprenant un panneau avant (40) et des panneaux latéraux (44), et dans lequel la première extrémité est fermée par un premier joint (24) et la seconde extrémité est fermée par un second joint (32) ;

un dispositif de suspension (14) disposé à proximité de la première extrémité ;
un premier panneau (16) disposé à proximité de la seconde extrémité et mobile à partir d'un état fermé fermant une première ouverture (50) formée dans le logement et restreignant l'accès au volume intérieur, et un état ouvert permettant l'accès au volume intérieur via la première ouverture (50) ; caractérisé parce que la première ouverture s'étend sur toute une largeur du panneau avant et sur les panneaux latéraux.

2. Le sac d'affichage selon la revendication 1, dans lequel le premier panneau est formé à partir du matériau flexible.

3. Le sac d'affichage selon la revendication 2, comprenant en outre des perforations (48) formées dans le matériau flexible, dans lequel les perforations (48) définissent une forme du premier panneau et de la première ouverture.

4. Le sac d'affichage selon la revendication 1, dans lequel le premier panneau est formé intégralement avec le matériau flexible.

5. Le sac d'affichage selon la revendication 1, comprenant en outre un second panneau (26) disposé à proximité de la première extrémité et mobile à partir d'un état fermé fermant une seconde ouverture (66) formée dans le logement et restreignant l'accès au volume intérieur et un état ouvert permettant l'accès au volume intérieur via la seconde ouverture.

6. Le sac d'affichage selon la revendication 5, dans lequel le second panneau est formé à partir du matériau flexible.

7. Le sac d'affichage selon la revendication 6, comprenant en outre des perforations (64) formées dans le matériau flexible, dans lequel les perforations définissent une forme du second panneau et de la seconde ouverture.

8. Le sac d'affichage selon la revendication 7, dans le-

quel le second panneau est formé intégralement avec le matériau flexible.

9. Le sac d'affichage selon la revendication 1, dans lequel le dispositif de suspension comprend une ouverture (78) formée à travers le matériau flexible.

10. Le sac d'affichage selon la revendication 1, comprenant en outre un élément de renforcement (76) qui entoure au moins partiellement la première ouverture.

11. Le sac d'affichage selon les revendications 1 ou 10, dans lequel le dispositif de suspension (14) comprend une ouverture (78) formée à travers le premier joint.

12. Le sac d'affichage selon l'une quelconque des revendications 5 à 10, dans lequel le premier panneau et la première ouverture sont disposés sur un côté opposé du logement par rapport au second panneau et à la seconde ouverture.

13. Le sac d'affichage selon l'une quelconque des revendications 5 à 10, dans lequel une partie du matériau flexible s'étend entre le second joint (32) et la première ouverture (50).

14. Le sac d'affichage selon l'une quelconque des revendications 5 à 10, comprenant en outre un premier élément de renforcement qui entoure au moins partiellement la première ouverture ou un second élément de renforcement qui entoure au moins partiellement la seconde ouverture.

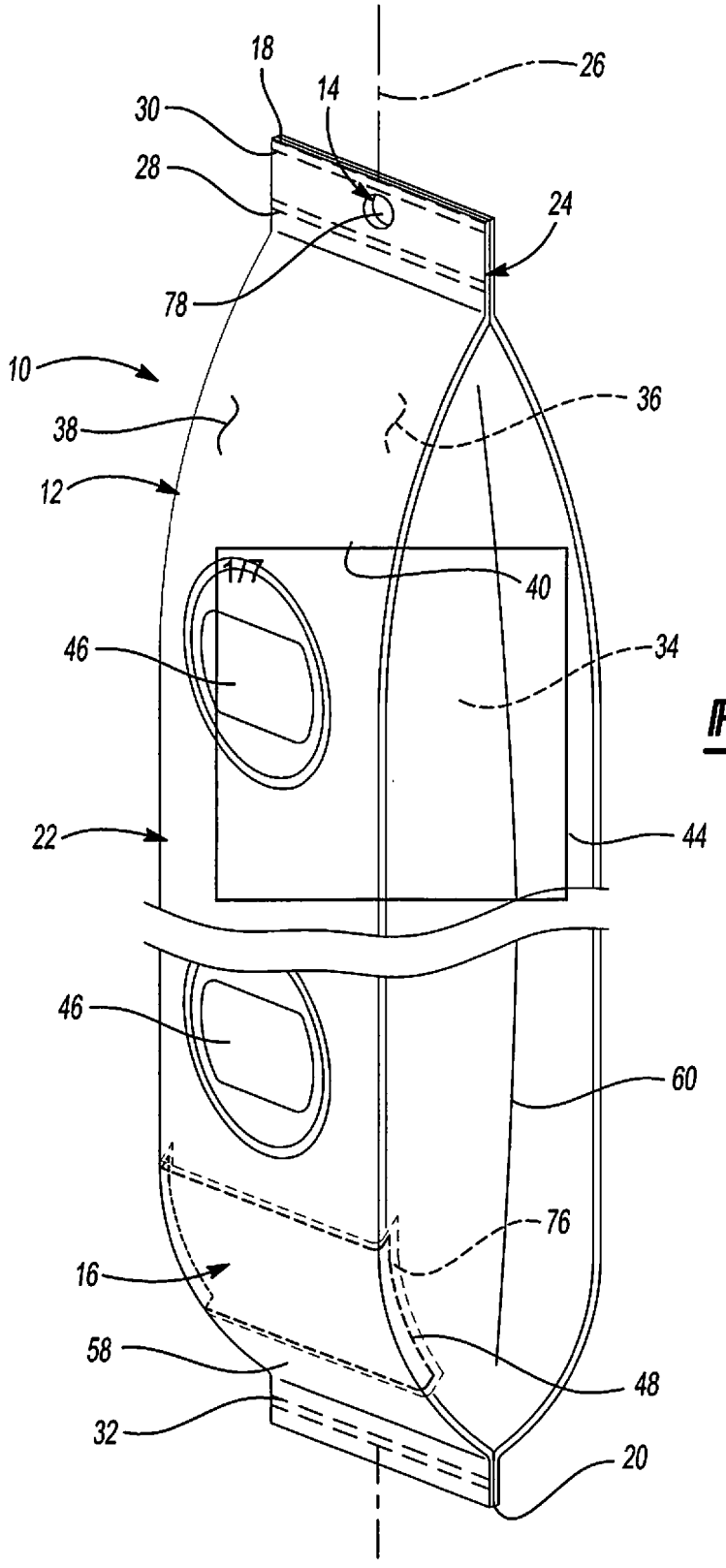
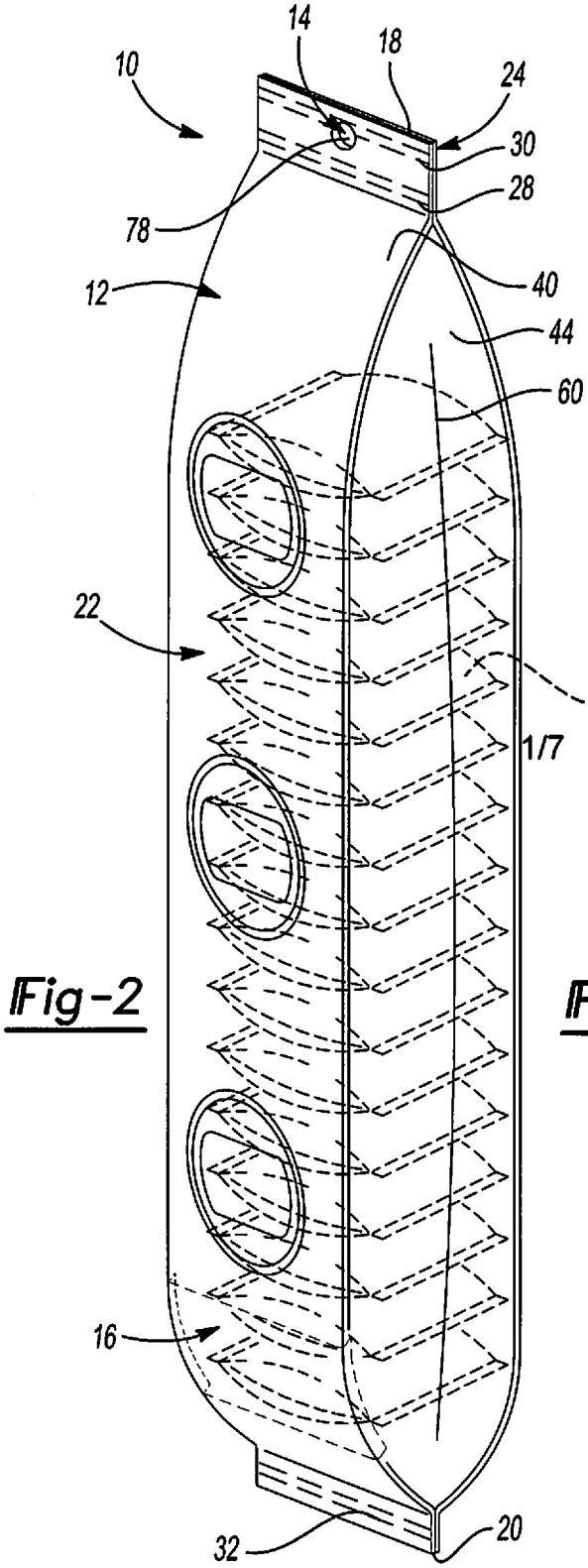


Fig-1


14
18
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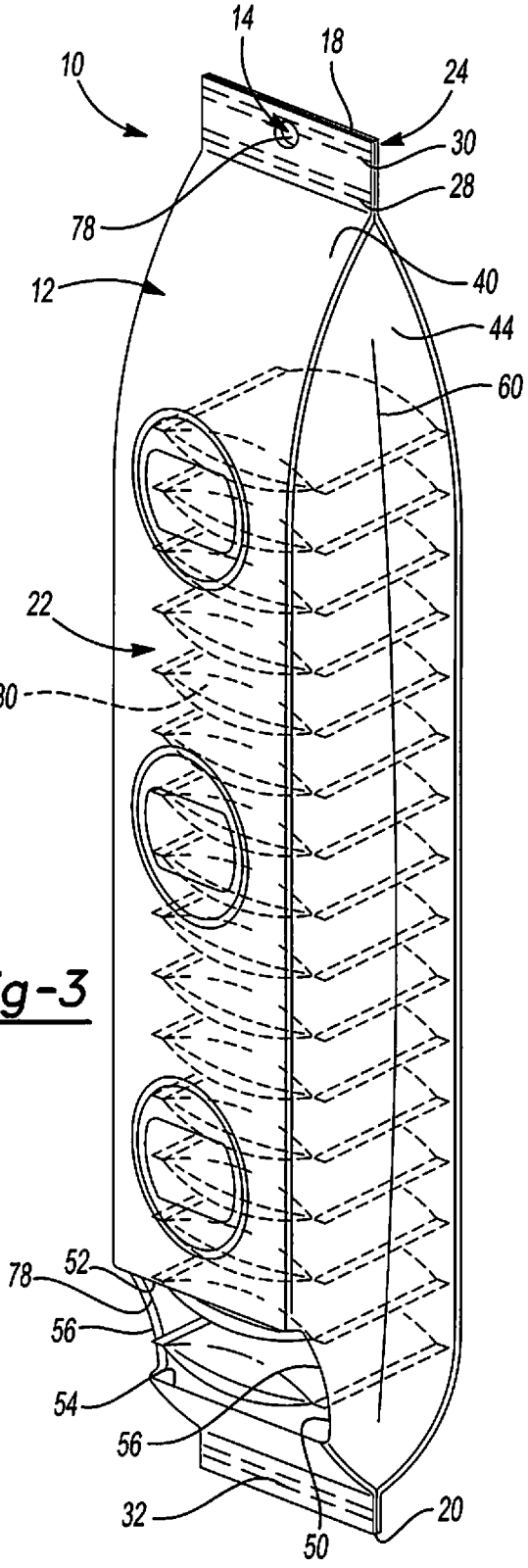
30
28
78
40
12
44
60
22
80
1/7
16
32
20

Fig-2


14
18
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54
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32
50
20

Fig-3

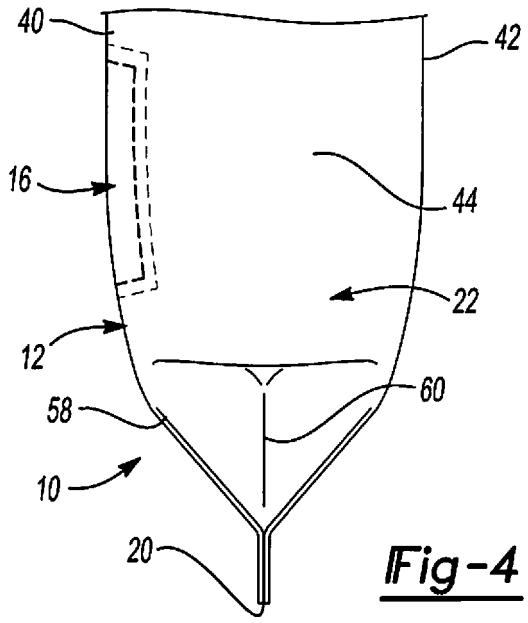


Fig-4

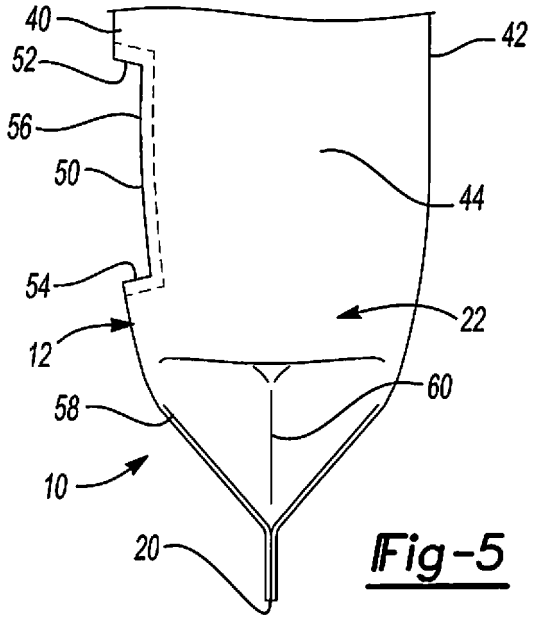


Fig-5

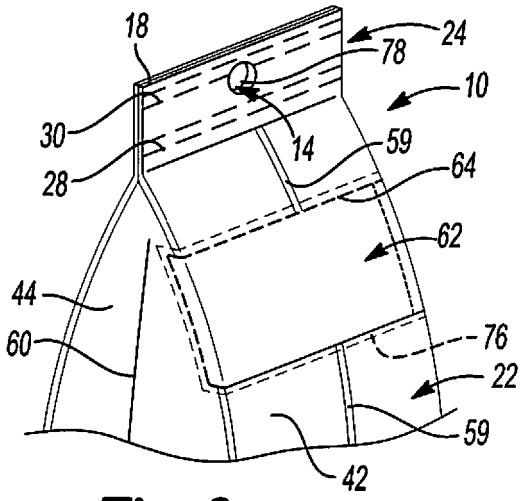


Fig-6

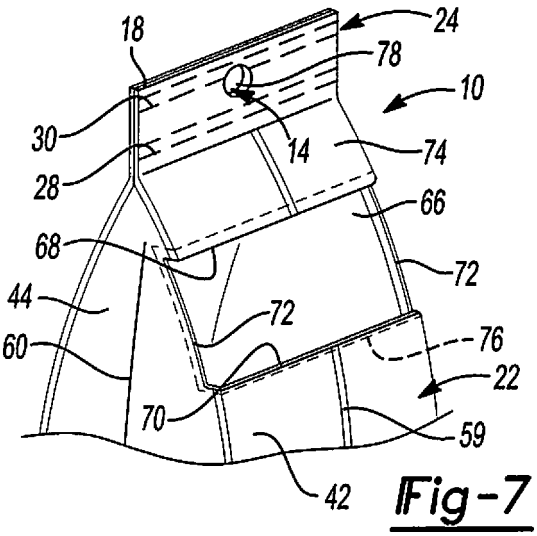


Fig-7

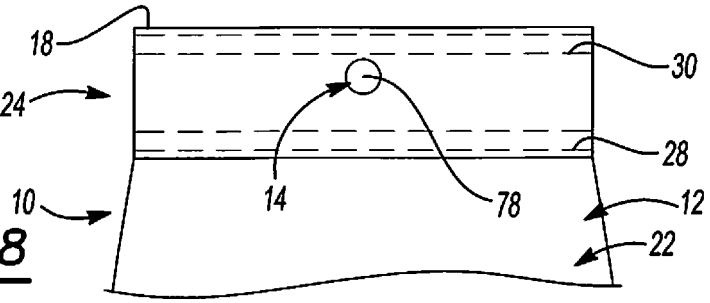
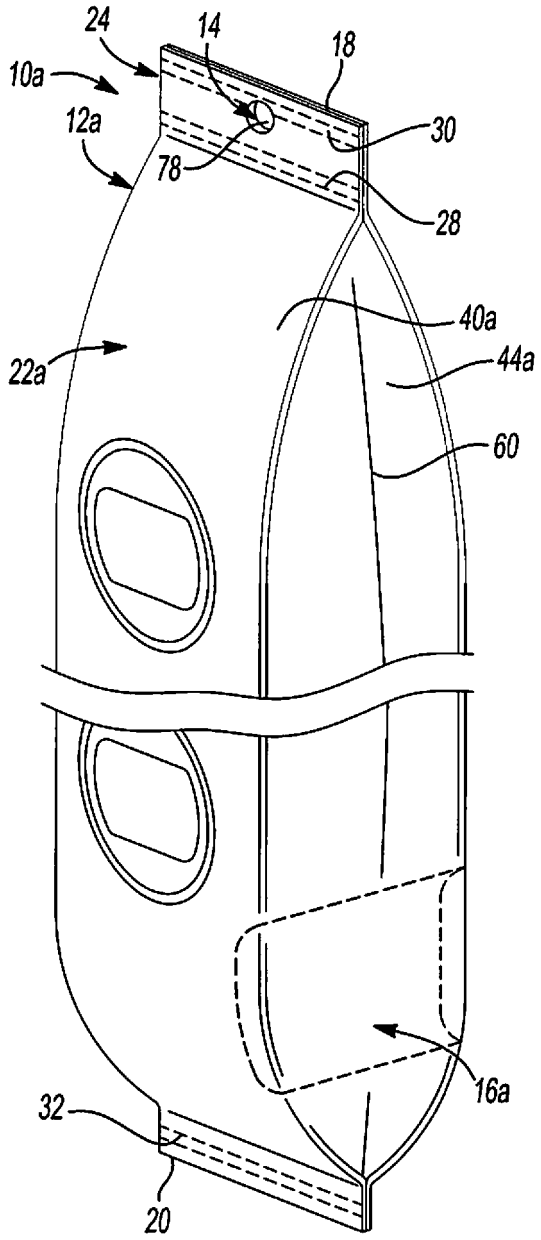


Fig-8


24
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40a
22a
44a
60
16a
32
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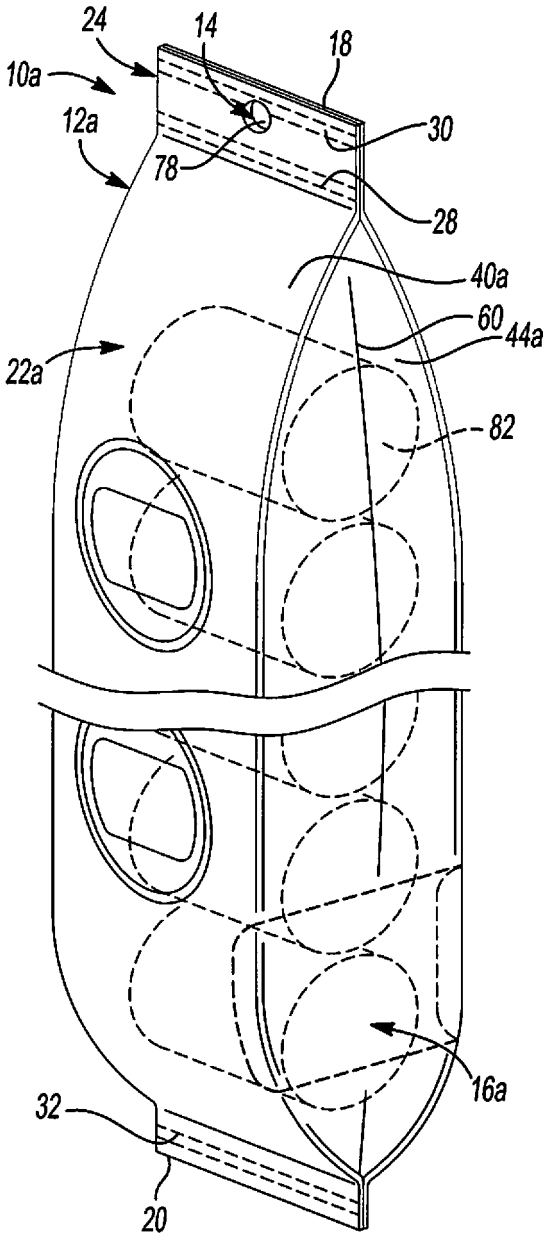
Fig-9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12a
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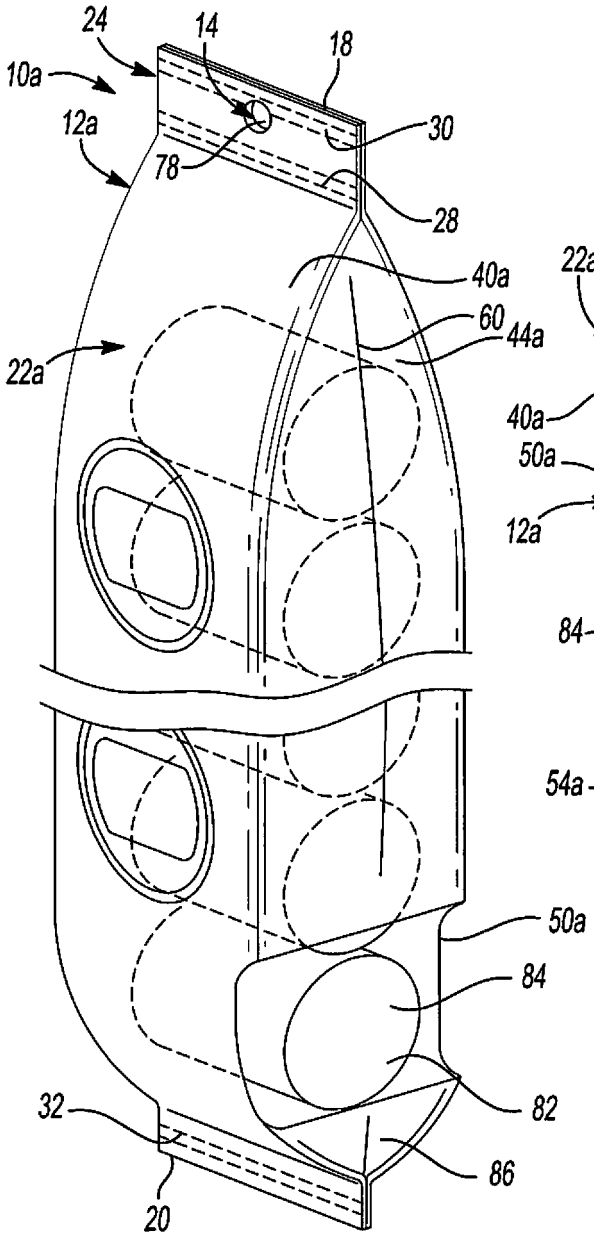
22a
82
16a
32
20

Fig-10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44a
22a
50a
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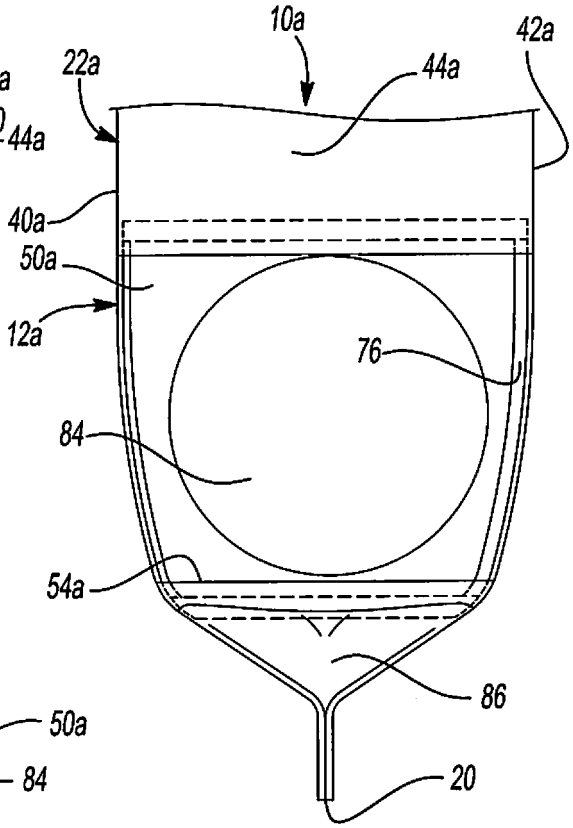
Fig-11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54a
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Fig-12

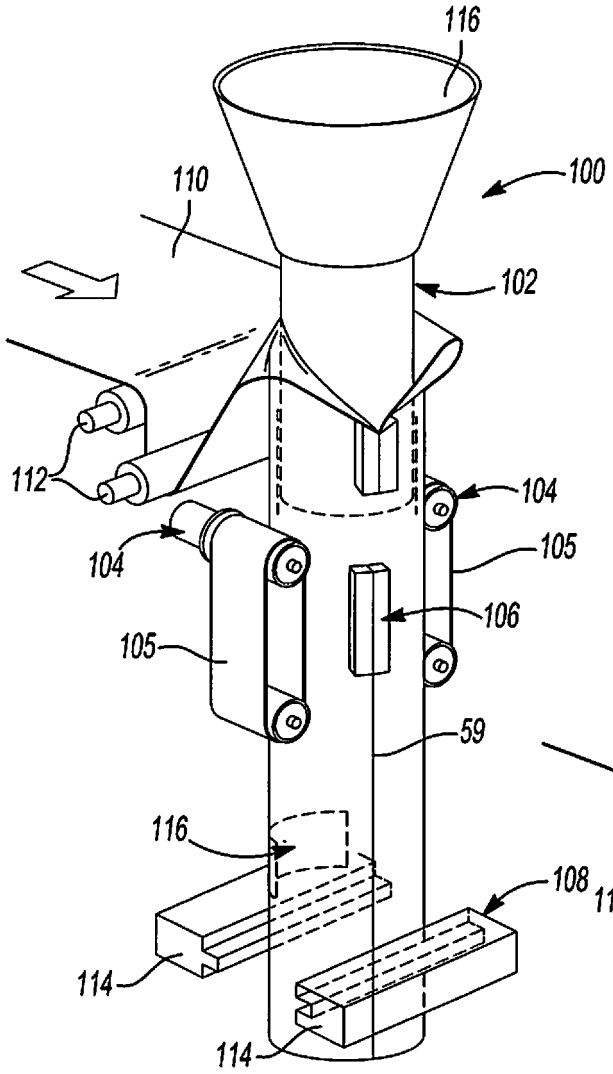
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Fig-13

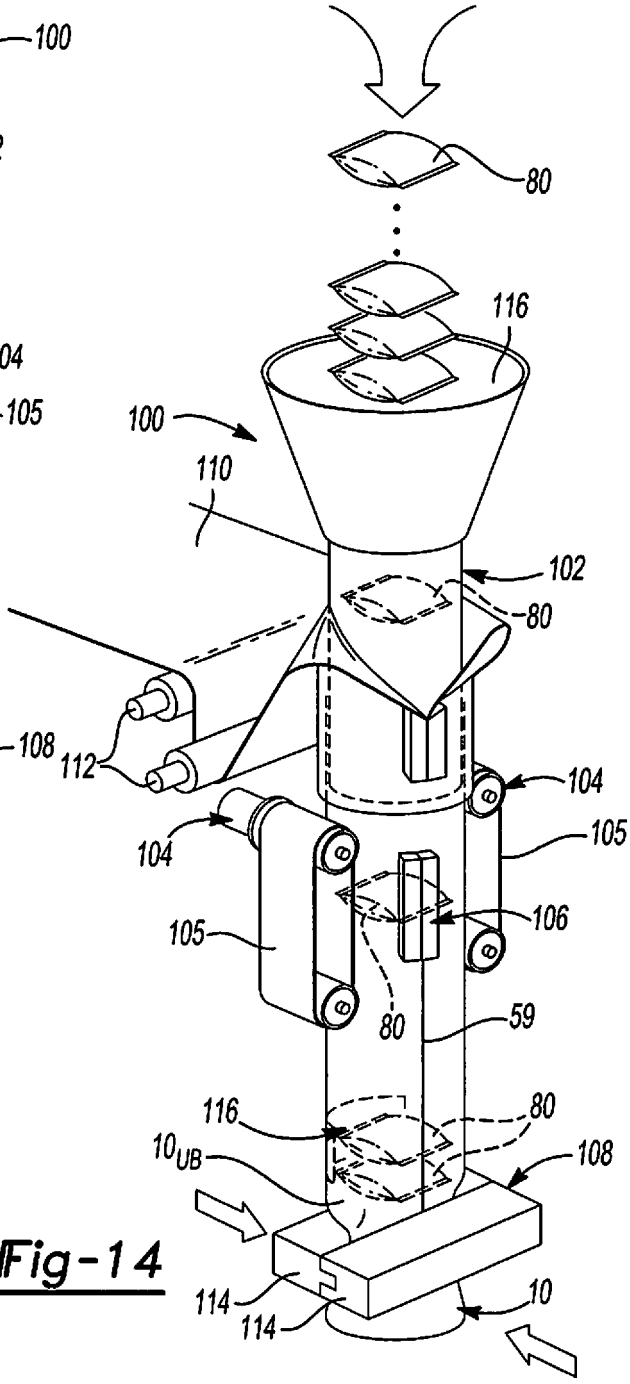
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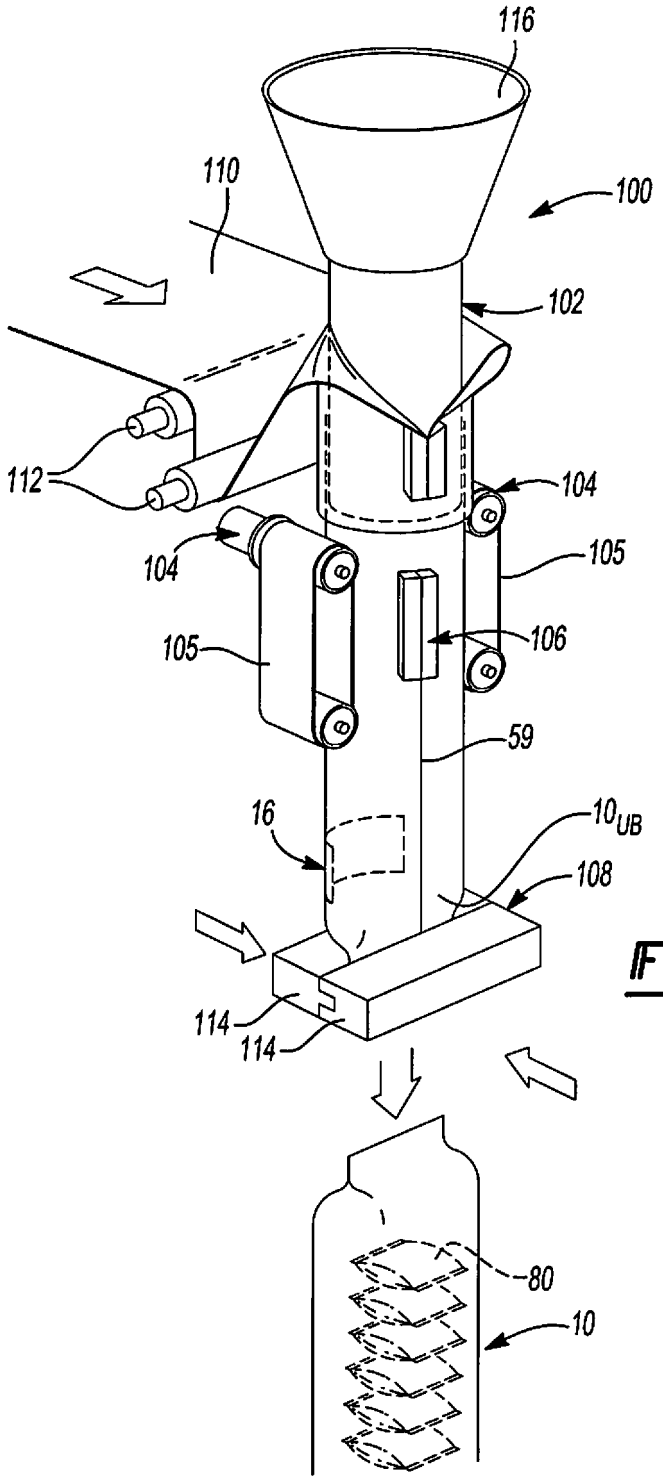
Fig-14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114
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10

Fig-15

REFERENCES CITED IN THE DESCRIPTION

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