



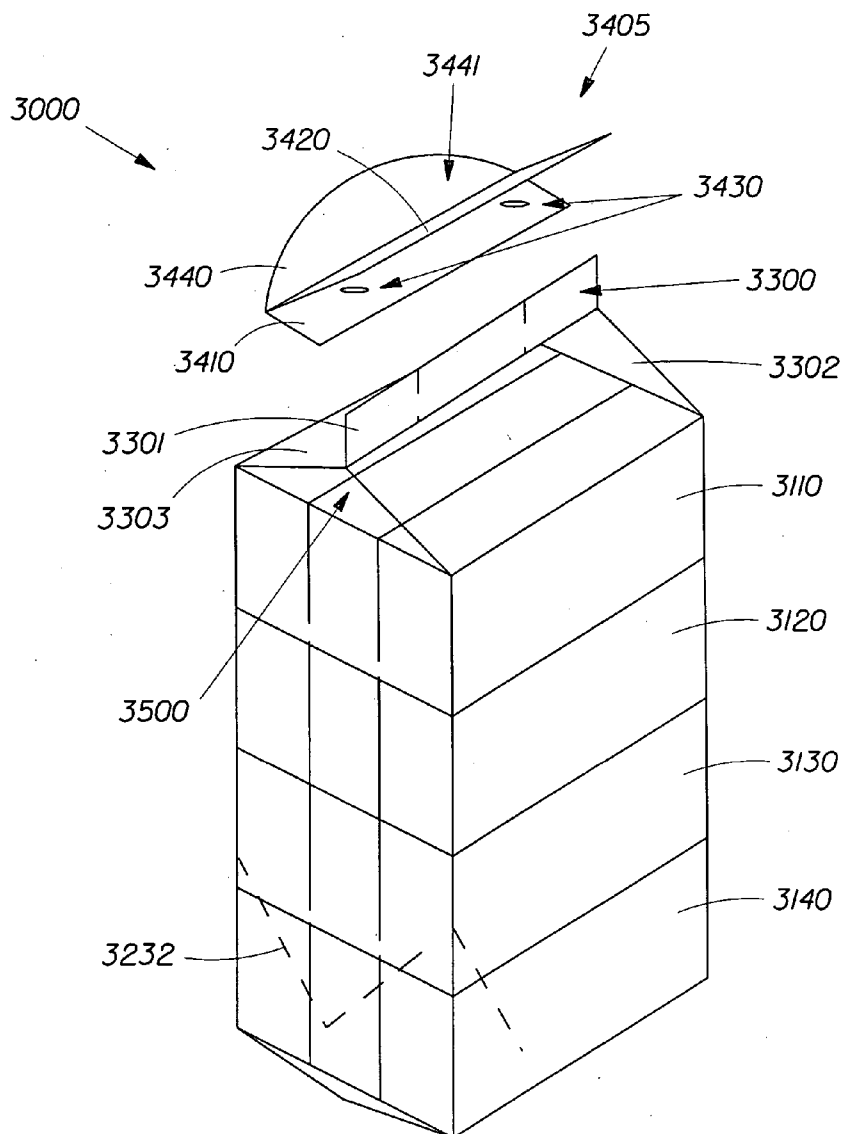
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(19) **United States**(12) **Patent Application Publication****Bautista et al.**(10) **Pub. No.: US 2007/0045153 A1**(43) **Pub. Date: Mar. 1, 2007**(54) **HANGING SECONDARY PACKAGE OF DISPOSABLE ABSORBENT ARTICLES**(22) Filed: **Aug. 30, 2005****Publication Classification**(76) Inventors: **Roque Yutanco Bautista**, Kobe (JP);
Mario DeLeon, Singapore (SG); **Levi Briones Labra**, Muntinlupa (PH);
Glenn Patrick Romero Silangan, San Isidro, Cabuyao (PH)(51) **Int. Cl.**
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CINCINNATI, OH 45224 (US)(57) **ABSTRACT**

A secondary package containing a plurality of primary packages of disposable absorbent articles. The secondary package being capable of hanging from a support member. The secondary package having a film-wrap which substantially encompasses the primary packages. The film-wrap having an opening adapted for the insertion of a support member for the hanging of said package.

(21) Appl. No.: **11/215,193**

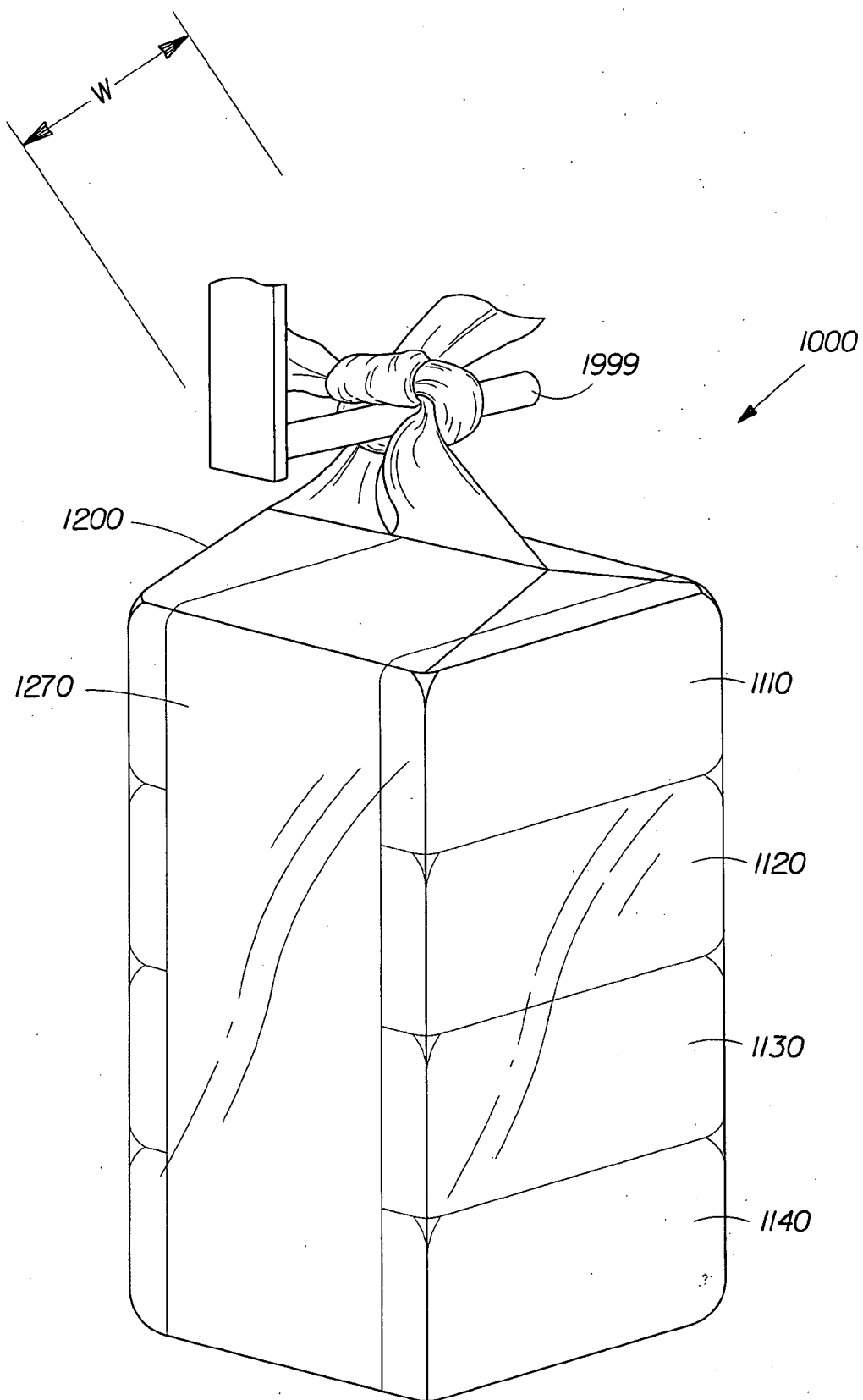


Fig. 1

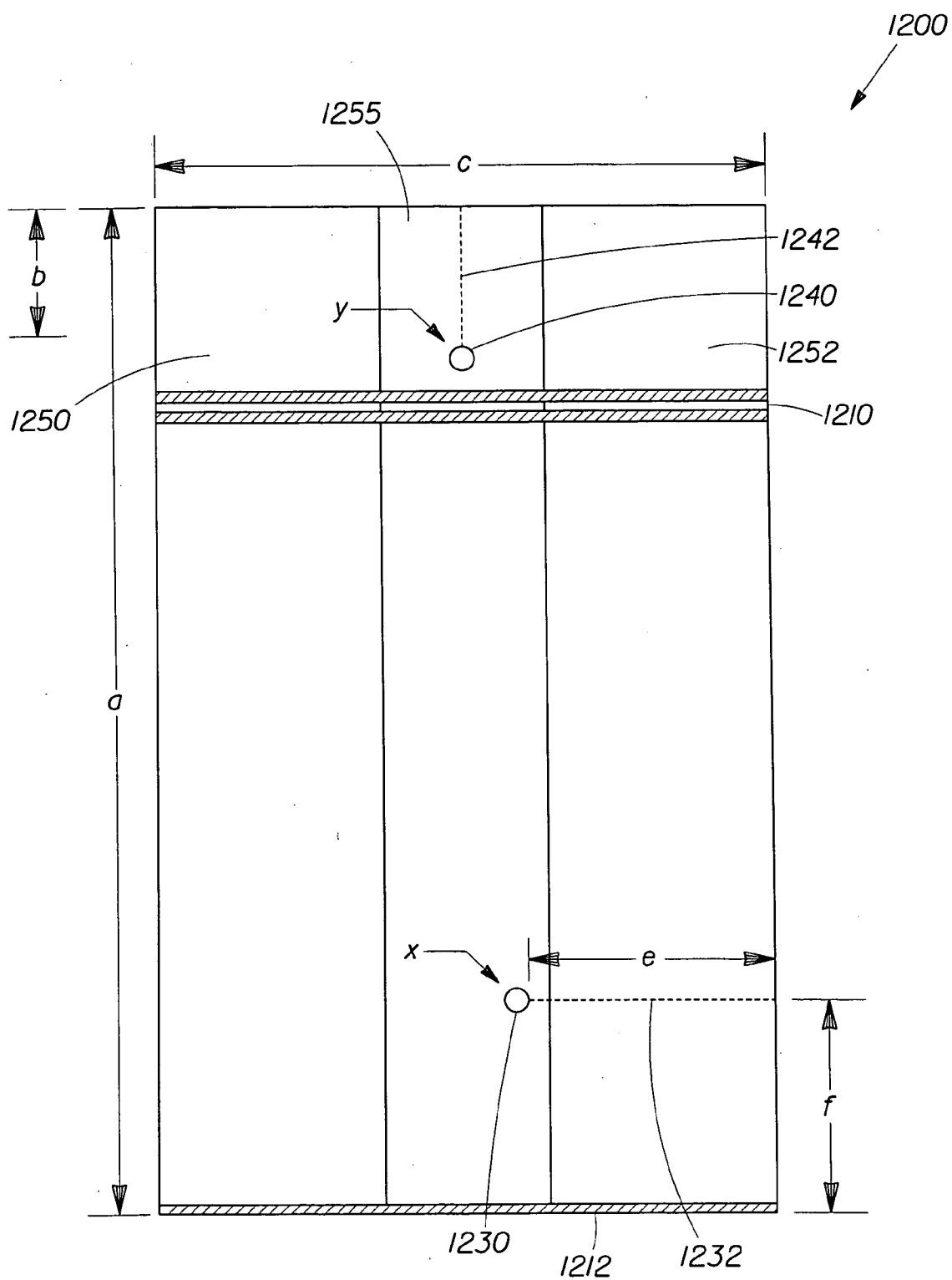


Fig. 2

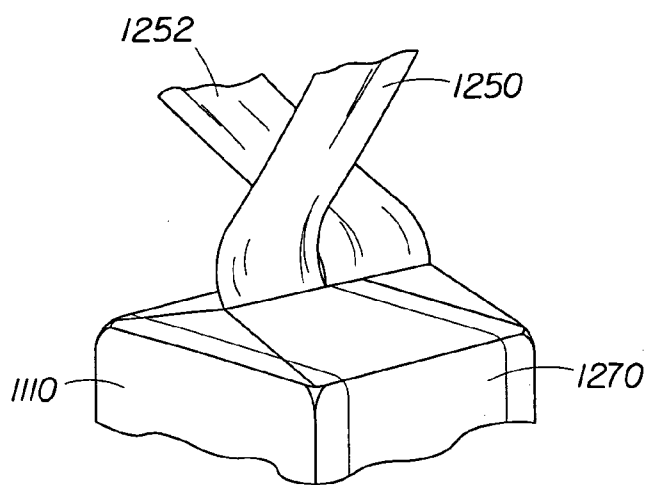


Fig. 3a

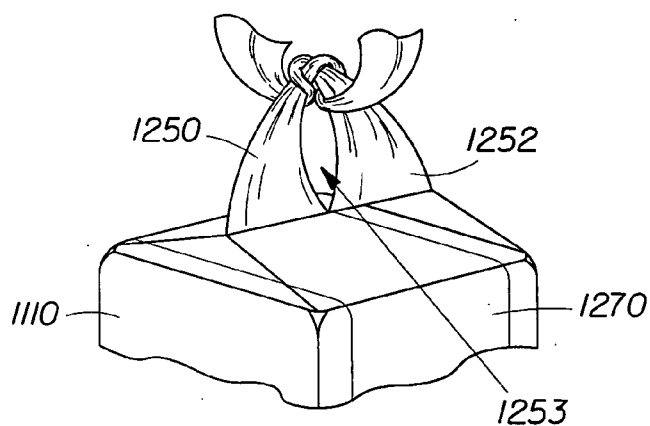


Fig. 3b

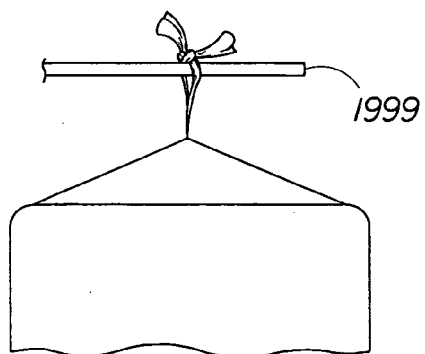


Fig. 3c

← 1000

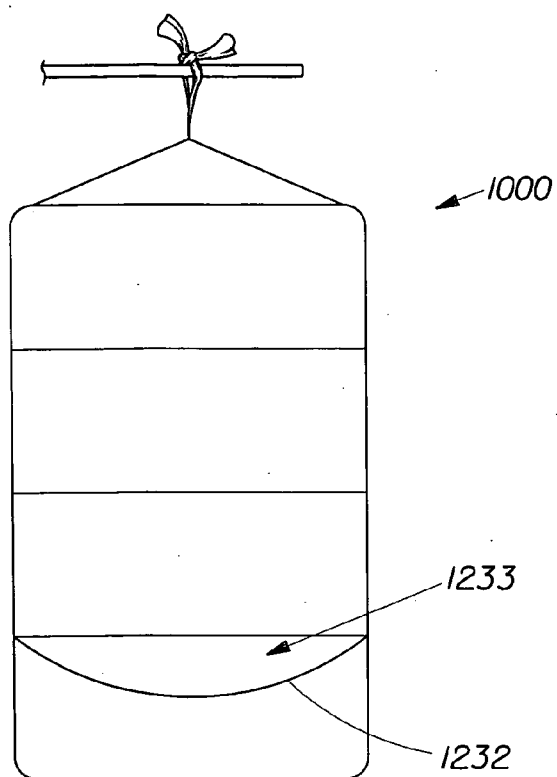


Fig. 4a

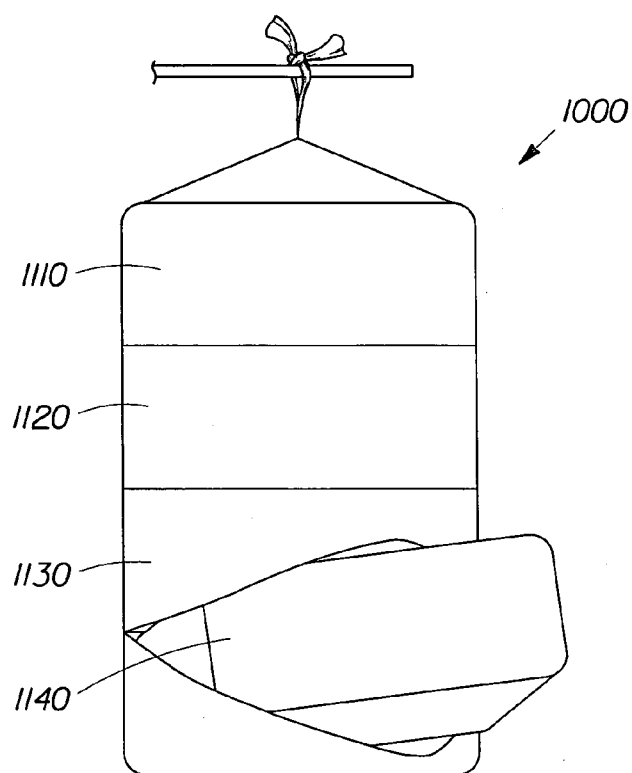


Fig. 4b

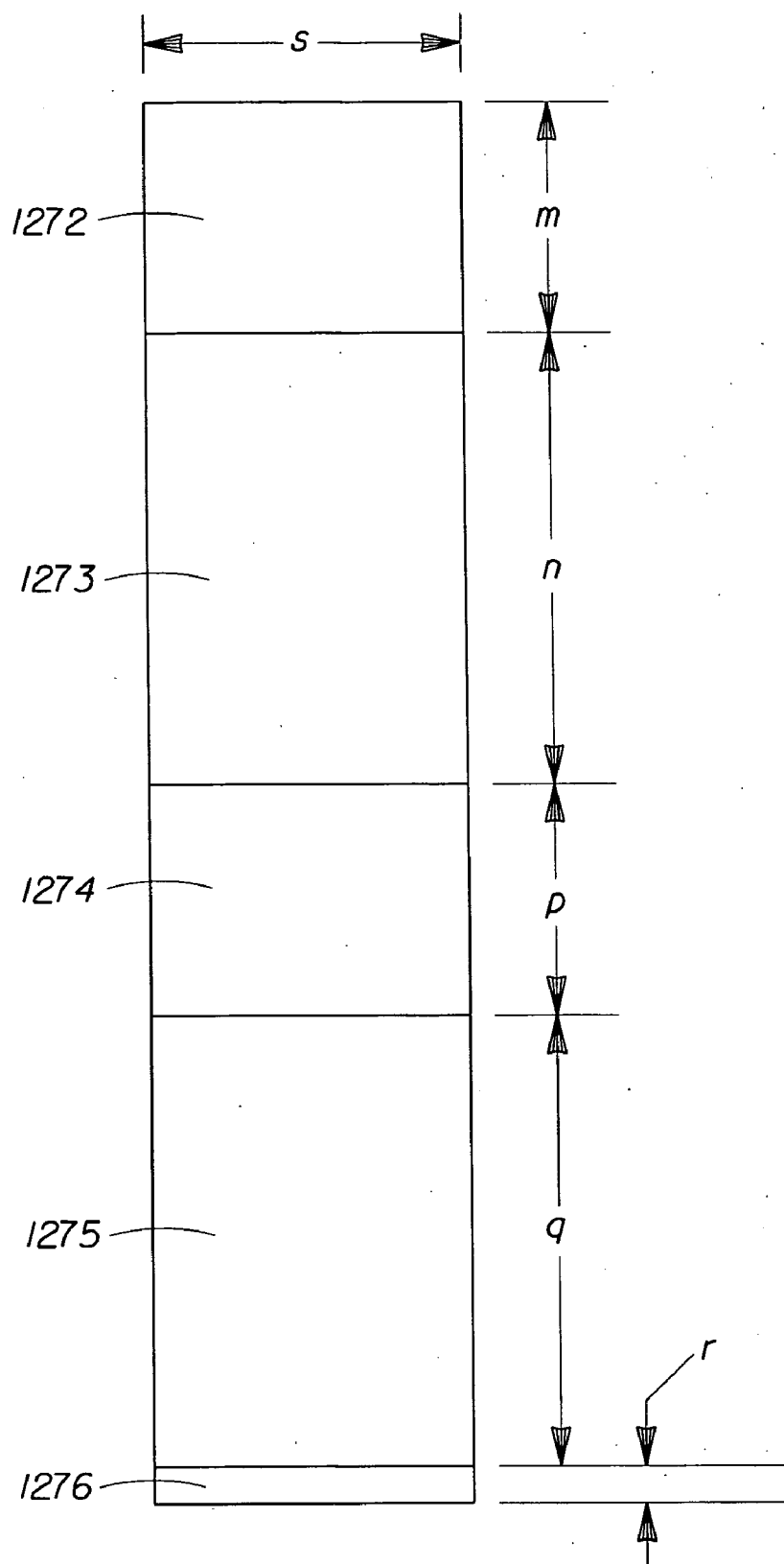


Fig. 5

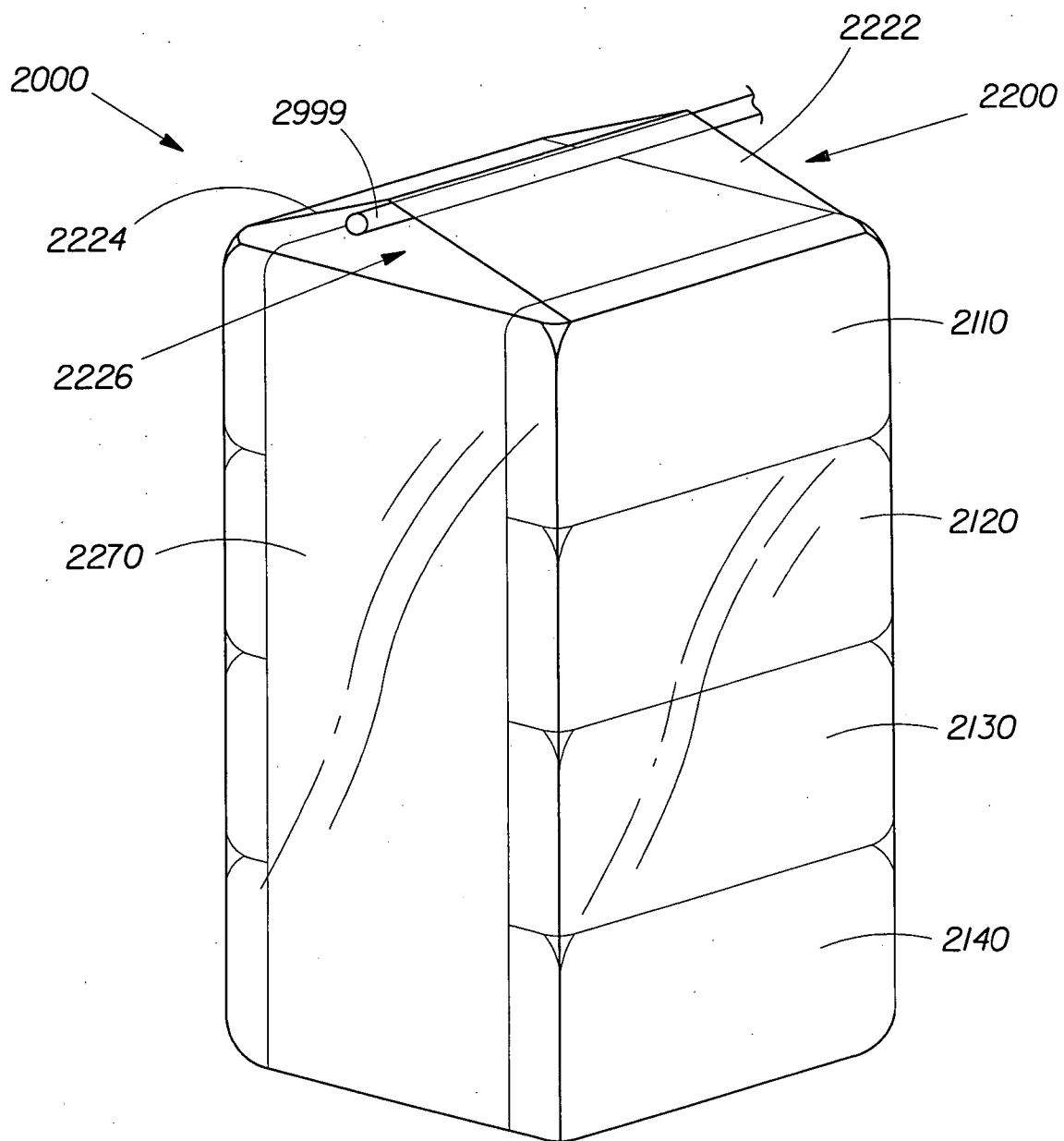


Fig. 6

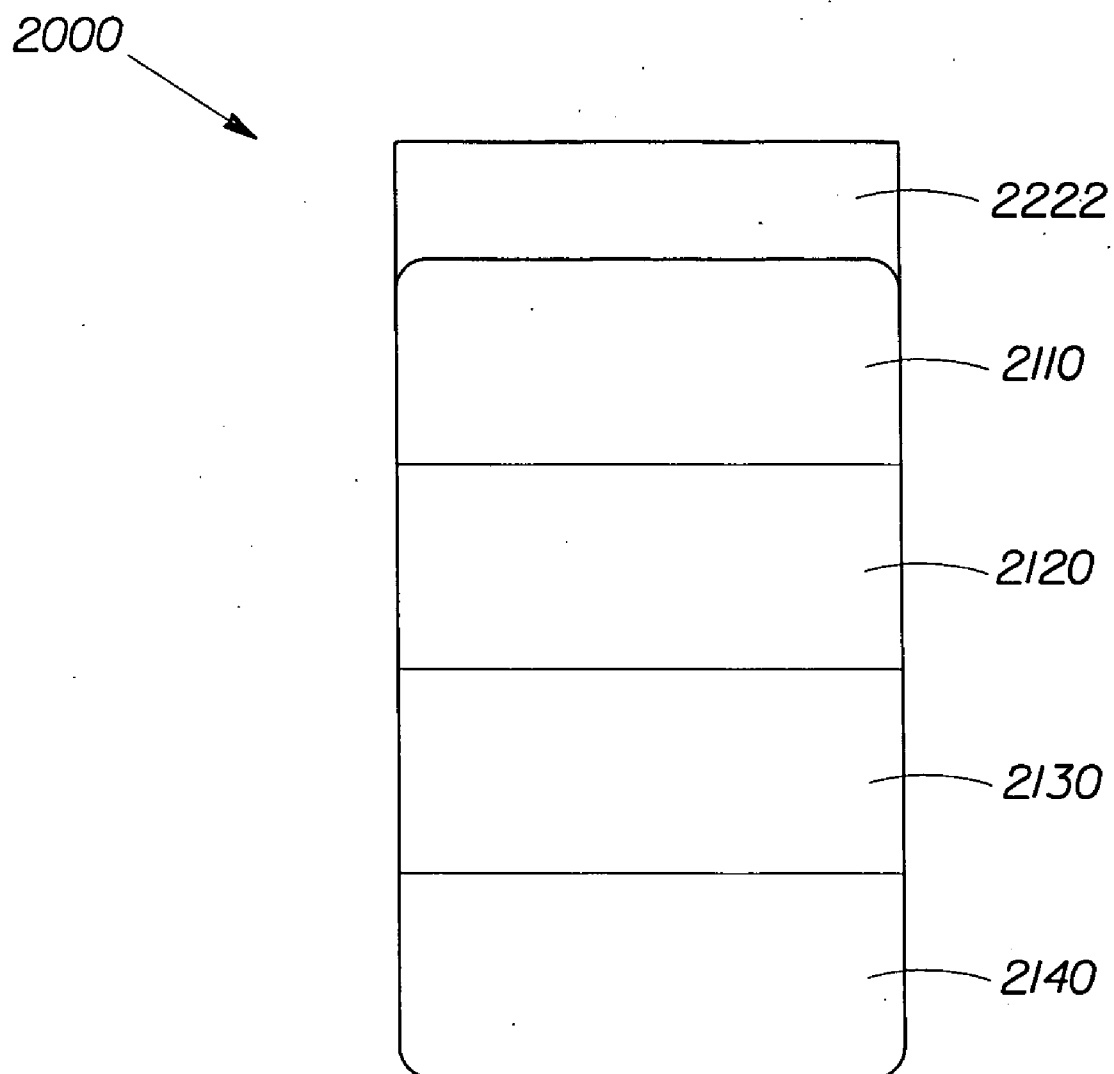


Fig. 7

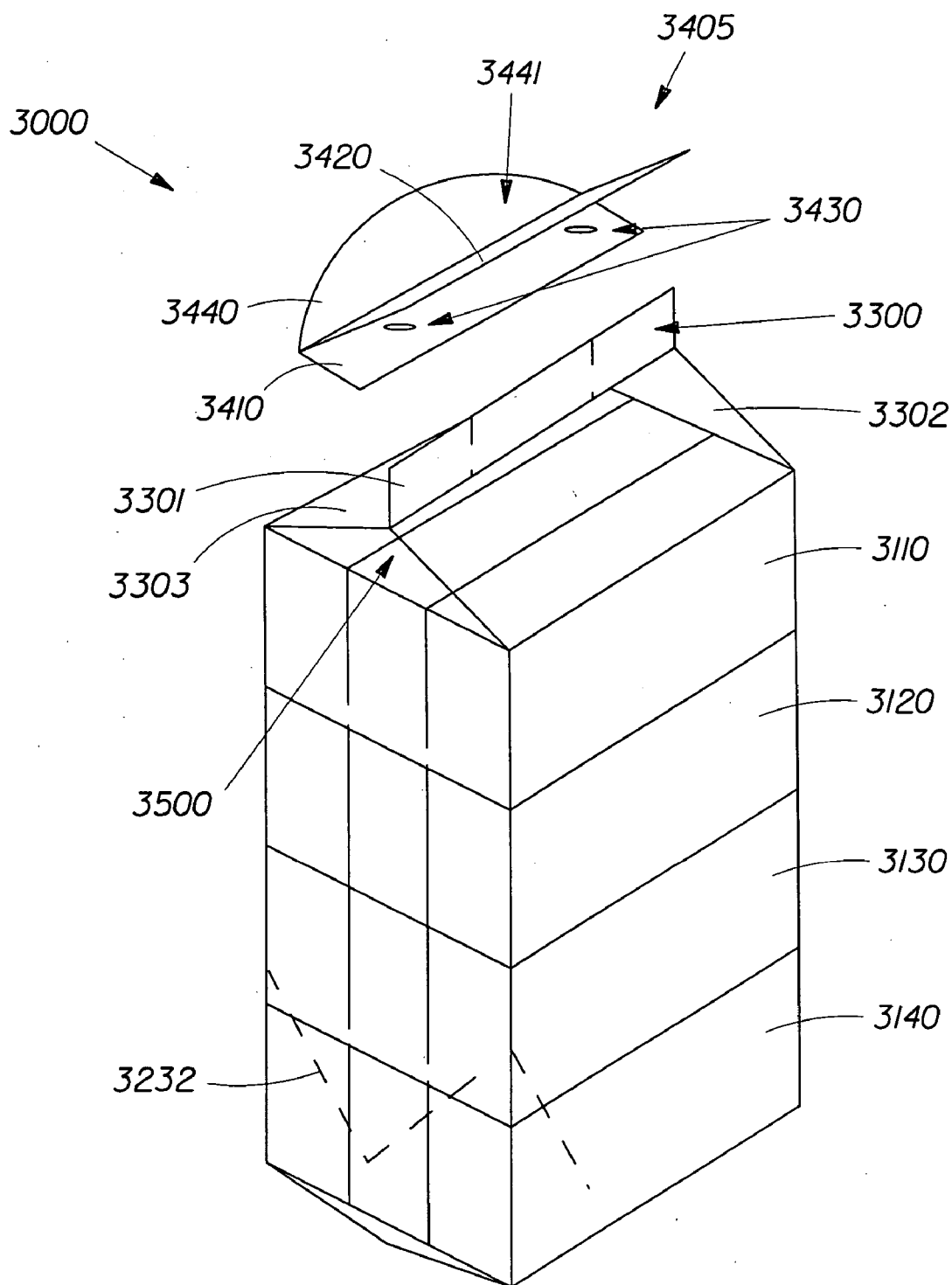


Fig. 8

HANGING SECONDARY PACKAGE OF DISPOSABLE ABSORBENT ARTICLES

FIELD OF THE INVENTION

[0001] The present invention relates to a secondary package for containing a plurality of primary packages of disposable absorbent articles. More specifically, the present invention relates to a secondary package for containing a plurality of primary packages of disposable absorbent articles which is being capable of hanging from a support member.

BACKGROUND OF THE INVENTION

[0002] Throughout many parts of the world, consumers purchase their consumer products at retail stores having relatively small retail space. Within these smaller retail stores, sometimes referred to as high frequency stores, consumers are often required to stand in front of the check-out counter and from a significant distance select their desired consumer products without actually coming into reach of said products. In order to accommodate such shopping experiences, many consumer products must be packaged substantially large in size in order for the consumer to visually identify them. Ironically, the need for substantially large sizes of products for visual identification creates a competing problem of occupying too much retail space within these already cramped high frequency stores. To further exasperate the problem, consumer products are often shipped to retailers in cardboard boxes which are later deconstructed and discarded. As such, these cardboard boxes often present additional temporary storage problems. Lastly, the actual shelf storage space within high frequency stores are obviously limited. To account for a limited amount of shelf storage space, some attempts within the prior art have been made to try to hang the consumer product from an outwardly-extending peg (much like traditional peg displays which are prevalent throughout the United States). In one known embodiment, a hole is made within the packaging of the consumer product and then said peg is inserted there-through for hanging. So long as the consumer product is not substantially heavy, said hole-peg configuration is structurally viable. However, some consumer products are in fact substantially heavy, for example, disposable absorbent articles; as such, said prior attempts of hanging disposable absorbent articles have been limited to that of hanging individual primary packages, not larger secondary packages. While the hanging of individual primary packages of disposable absorbent articles may eliminate the need for actual storage shelves, their outwardly-extending storage from a peg-wall display often results in excessively large obstructions within the store or even structural failure. Furthermore, the creating of a hole into the major surface plane of the primary packaging material often results in relatively low load-bearing capacity.

[0003] What is needed is a secondary packaging configuration for the efficient and visible storage of a plurality of primary packages of disposable absorbent articles. Furthermore, what is needed is a secondary packaging configuration for the efficient and visible storage of a plurality of primary packages of disposable absorbent articles which makes better use the existing packaging materials, which improves product identification from a distance, which improves

hanging structural integrity, and which improves overall dispensing of the individual primary packages to the consumer.

SUMMARY OF THE INVENTION

[0004] A secondary package containing a plurality of primary packages of disposable absorbent articles. The secondary package is capable of hanging from a support member. The secondary package includes a plurality of primary packages of disposable absorbent articles. The secondary package also includes a film-wrap which substantially encompasses the primary packages. The film-wrap has an opening adapted for the insertion of a support member for the hanging of the secondary package. The secondary package may also include a sleeve which provides additional structural rigidity for the hanging of the primary packages. The secondary package may also include a first perforation adapted to provide a dispensing orifice upon its tearing. The dispensing orifice being of sufficient size so as to permit a primary package of disposable absorbent articles to be removed from the secondary package. The secondary package may also include a first hole adjacent to the first perforation so as to provide an endpoint for the tearing of the perforation so as to control the resulting size of the dispensing orifice. The secondary package may also include a second perforation adapted to provide a first and second knot region capable of being tied into a knot for the subsequent formation of an opening. The opening being adapted for the insertion of the support member such that the secondary package may be hung therefrom. The secondary package may also include a second hole adjacent to the second perforation so as to provide an endpoint for the tearing of the second perforation in order to control the resulting length of the first and second knot regions.

[0005] Alternatively, the secondary package may include an opening which is preformed. Such an opening may be formed by the relative positioning of a first peak surface and a second peak surface.

[0006] Alternatively, a handle may be attached to a top portion of the film-wrap. The handle may include attachment means and a grip portion. The attachment means may be affixed to said top portion of the film-wrap. The grip portion may provide both hanging and carrying functionality.

[0007] The opening which is adapted for the insertion of a support member for the hanging of said package may have a width of at least 2.54 cm. The opening may have a width dimension preferably greater than 10% of said product width dimension, more preferably greater than 50% of said product width dimension and most preferably greater than 90% of said product width dimension.

[0008] The disposable absorbent articles may be disposable diapers. The diapers may be pant-like.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1 shows a perspective view of a first embodiment in accordance with the present invention wherein a secondary package of disposable absorbent articles is hung from a support member;

[0010] FIG. 2 shows a left side, elevational view of a schematic of the secondary package of FIG. 1;

[0011] FIG. 3a shows a perspective view of the secondary package of FIG. 2 wherein the first and second knot regions are separated along a perforation;

[0012] FIG. 3b shows a perspective view of the secondary package of FIG. 3a wherein the first and second knot regions are being tied into a knot, thus forming an opening;

[0013] FIG. 3c shows a front elevational view of the secondary package of FIG. 3b wherein a support member is inserted into said opening so as to provide hanging support of the secondary package;

[0014] FIG. 4a shows a front elevational view of the secondary package of FIG. 3b wherein a dispensing orifice is formed by the tearing along a perforation;

[0015] FIG. 4b shows a front elevational view of the secondary package of FIG. 4a wherein a primary package of disposable absorbent article is being removed through the dispensing orifice;

[0016] FIG. 5 shows an exemplary sleeve which may be used to provide structural support of the primary packages of disposable absorbent articles within the secondary package;

[0017] FIG. 6 shows a perspective view of a second embodiment in accordance with the present invention wherein the opening for the insertion of a support member is preformed;

[0018] FIG. 7 shows a front elevational view of the secondary package of FIG. 6; and

[0019] FIG. 8 show a perspective view of a schematic of a third embodiment in accordance with the present invention wherein a handle may be attached to a tab portion formed from an overlap in the film-wrap.

DETAILED DESCRIPTION OF THE INVENTION

[0020] Various definitions of terms used herein are provided as follows:

[0021] The term “absorbent article” herein refers to devices which absorb and contain body exudates and, more specifically, refers to devices which are placed against or in proximity to the body of the wearer to absorb and contain the various exudates discharged from the body, such as: incontinence briefs, incontinence undergarments, absorbent inserts, diaper holders and liners, feminine hygiene garments and the like. The absorbent article may have an absorbent core having a garment surface and a body surface; a liquid permeable topsheet positioned adjacent the body surface of the absorbent core; and a liquid impermeable backsheet positioned adjacent the garment surface of the absorbent core.

[0022] The term “disposable” is used herein to describe absorbent articles which generally are not intended to be laundered or otherwise restored or reused as absorbent articles (i.e., they are intended to be discarded after a single use and, preferably, to be recycled, composted or otherwise discarded in an environmentally compatible manner).

[0023] The term “diaper” herein refers to an absorbent article generally worn by infants and incontinent persons about the lower torso.

[0024] The term “pant”, as used herein, refers to disposable garments having a waist opening and leg openings designed for infant or adult wearers. A pant may be placed in position on the wearer by inserting the wearer’s legs into the leg openings and sliding the pant into position about the wearer’s lower torso. A pant may be preformed by any suitable technique including, but not limited to, joining together portions of the article using refastenable and/or non-refastenable bonds (e.g., seam, weld, adhesive, cohesive bond, fastener, etc.). A pant may be preformed anywhere along the circumference of the article (e.g., side fastened, front waist fastened). While the term “pant” is used herein, pants are also commonly referred to as “closed diapers”, “prefastened diapers”, “pull-on diapers”, “training pants” and “diaper-pants”. Suitable pants are disclosed in U.S. Pat. No. 5,246,433, issued to Hasse, et al. on Sep. 21, 1993; U.S. Pat. No. 5,569,234, issued to Buell et al. on Oct. 29, 1996; U.S. Pat. No. 6,120,487, issued to Ashton on Sep. 19, 2000; U.S. Pat. No. 6,120,489, issued to Johnson et al. on Sep. 19, 2000; U.S. Pat. No. 4,940,464, issued to Van Gompel et al. on Jul. 10, 1990; U.S. Pat. No. 5,092,861, issued to Nomura et al. on Mar. 3, 1992; U.S. patent application Ser. No. 10/171,249, entitled “Highly Flexible And Low Deformation Fastening Device”, filed on Jun. 13, 2002; U.S. Pat. No. 5,897,545, issued to Kline et al. on Apr. 27, 1999; U.S. Pat. No. 5,957,908, issued to Kline et al on Sep. 28, 1999.

[0025] The term “joined” encompasses configurations whereby an element is directly secured to another element by affixing the element directly to the other element, and configurations whereby an element is indirectly secured to another element by affixing the element to intermediate member(s) which in turn are affixed to the other element.

[0026] FIG. 1 shows a first exemplary, non-limiting embodiment of a secondary package made in accordance with the present invention. More specifically, secondary package 1000 is shown having a plurality of primary packages of disposable absorbent articles 1110, 1120, 1130, 1140. In addition, secondary package 1000 is also shown to include a sleeve 1270 which may be positioned around at least a portion of said primary packages to provide structural integrity. Lastly, secondary package 1000 may also include a film-wrap 1200 wherein said film-wrap is used to substantially encompass said primary packages and said sleeve. Said film-wrap 1200 may be configured in such a way so as to permit a support member 1999 to penetrate said secondary package so as to provide hanging support. Said film-wrap may be made of any suitable film including, but not limited to, a blended mono-film having a thickness of 50-60 microns.

[0027] FIG. 2 shows an exemplary, non-limiting schematic of said film-wrap 1200 from that of FIG. 1. More specifically, film-wrap 1200 may be made of any suitable film material which has sufficient strength to contain a plurality of primary packages of disposable absorbent articles in a hanging position. As shown, film-wrap 1200 may be made to contain a plurality of primary packages (not shown) by the creation of a bottom seal 1212 which serves to provide underneath vertical support for said primary packages and also a top seal 1210 to provide closure of said primary packages within said secondary package. Said seals may be formed in any suitable method including, but not limited to, a thermal seal bond or adhesive. Also shown in

this embodiment is a first hole **1230** which may be provided within said film-wrap. In one particular example, said first hole may be positioned at a distance “e” (e.g., about 100 mm) from the front face of said secondary package and at a height “f” (e.g., about 210 mm) from the bottom face of said secondary package. Further, said first hole **1230** may have a diameter of “x” (e.g., about 7 mm). A second hole **1240** may also be included. Said second hole may be positioned above said top seal **1210** as well as horizontally positioned near the midpoint of said secondary package. Second hole **1240** may be positioned a distance “b” from the top of said package (e.g., about 180 mm). Said second hole **1240** may have a diameter of “y” (e.g., about 7 mm). Adjacent said first and second holes may be a first perforation **1232** and a second perforation **1242**, respectively, which extend from said holes to an edge of said secondary package. The purpose of said perforations will be made clear in subsequent figures. Above said top seal **1210**, and on each side of said second perforation **1242**, is a first knot region **1250** and a second knot region **1252**. As will be shown in subsequent figures, these top knot regions may be used to tie a knot around a support member (not shown) so as to provide hanging support. In one particular example, the overall package may have an exemplary height “a” (e.g., about 850 mm) and an exemplary depth “c” (e.g., about 230 mm). Lastly, a gusset **1255** may be incorporated into the side panels of said secondary package so as to provide outward expansion of said film-wrap.

[0028] FIG. 3a shows the secondary package of FIG. 2 wherein a first knot region **1250** and a second knot region **1252** are split apart along said second perforation **1242**. Said perforation will continue to separate until it reaches said second hole **1240** (shown in FIG. 2). Also shown in FIG. 3a is sleeve **1270** which may substantially or partially surround the plurality of primary packages of disposable absorbent articles. FIG. 3b shows a first knot region **1250** and second knot region **1252** being tied, for example in a knot, so as to provide an opening **1253** for the subsequent insertion of a support member **1199** as shown in FIG. 3c. As may be appreciated in these series of figures, an opening **1253** may be formed without the need of an extra material or element, thus capable of providing hanging support of secondary package **1000**.

[0029] FIG. 4a depicts secondary package **1000** wherein perforation **1232** is shown to be opened so as to form a dispensing orifice **1233**. As shown in FIG. 4b, while a plurality of primary packages **1110**, **1120**, **1130** are able to remain in secondary package **1000**, the fourth primary package of disposable absorbent articles **1140** may be removed from said secondary package through dispensing orifice **1233** for its individual purchase by a consumer. In this way, the continual storage and hanging of the remaining primary packages may be achieved.

[0030] FIG. 5 shows an exemplary, non-limiting embodiment of a sleeve **1270** which is adapted to substantially or partially surround said primary packages of disposable absorbent articles. In this particular embodiment, five panels **1272**, **1273**, **1274**, **1275**, **1276** are shown having lengths M, N, P, Q, R, respectively. In one such example, length M is approximately 200 mm, length N is approximately 425 mm, length P is approximately 200 mm, length Q is approximately 425 mm and length R is approximately 50 mm. In this example, these panels may be wrapped around said

primary packages such that front face panel **1275** may be projected from the front of secondary package **1000**. Similarly, back face panel **1273** may be projected from the rear of secondary package **1000**. Similarly, top face panel **1274** may be projected from the top of secondary package **1000**. Similarly, bottom face panel **1272** may be projected from the bottom of secondary package **1000**. Lastly, attachment panel **1276** may be attached to said bottom face panel **1272** so as to provide circumferential support around the perimeter of said primary packages. In this particular example, all face panels have substantially the same width “s” (e.g., about 170 mm). Sleeve **1270** may be made of any suitable material including, but not limited to, carton board (e.g., B-fluted material).

[0031] FIG. 6 shows a second exemplary, non-limiting embodiment made in accordance with the present invention. More specifically, secondary package **2000** is shown containing a plurality of primary packages of disposable absorbent articles **1210**, **2120**, **2130**, **2140**. In addition, said secondary package **2000** may also include a sleeve **2270** which may substantially or partially surround said primary packages. Furthermore, said secondary package **2000** may also include a film-wrap **2200** which may substantially encompass said primary packages and said sleeve. Further, said film-wrap **2200** may be preformed so as to have a first peak surface **2222** and a second peak surface **2224** which are positioned relative to each other so as to form an opening **2226** which is adapted to permit the insertion of a support member **2999** for the upright storage of secondary package **2000**. The principles of providing hanging support by way of an opening within FIG. 6 are much the same as those principles utilized in FIG. 1, however, in this particular example, said opening **2226** may be preformed thus not requiring the need for tying of a knot. FIG. 7 shows a front view of the secondary package of FIG. 6. In this view, said primary packages are viewable as well as the first peak surface **2222**.

[0032] FIG. 8 shows a third exemplary, non-limiting embodiment made in accordance with the present invention. More specifically, secondary package **3000** may include a plurality of primary packages of disposable absorbent articles **3110**, **3120**, **3130**, **3140**. In addition, secondary package **3000** may also include a film-wrap **3300** which may be formed to substantially encompass said primary packages as well as form a tab portion **3301** along its top surface. Said film-wrap may also include a perforation **3232** so as to provide a dispensing orifice much like that shown in FIG. 4a. Lastly, secondary package **3000** may also include a handle **3405**. Said handle **3405** may include a first handle panel **3410** and a second handle panel **3420** which may be joined together to said tab portion **3301** by way of attachment means **3430** (e.g., adhesive). In addition, a grip portion **3440** may be included so as to provide both hanging support of said secondary package by way of a support member (not shown) being inserted into opening **3441** as well as providing ease of handling for the purchaser of said package. Alternatively, hanging support may be achieved by insert a support member into the preformed opening **3500** which may be formed by a first peak surface **3302** and a second peak surface **3303**.

[0033] All documents cited in the Detailed Description of the Invention are, in relevant part, incorporated herein by reference; the citation of any document is not to be construed

as an admission that it is prior art with respect to the present invention. To the extent that any meaning or definition of a term in this written document conflicts with any meaning or definition of the term in a document incorporated by reference, the meaning or definition assigned to the term in this written document shall govern.

[0034] While particular embodiments of the present invention have been illustrated and described, it would be obvious to those skilled in the art that various other changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of this invention.

[0035] For example, while the secondary package embodiments disclosed herein included four primary packages of disposable absorbent article packages, said secondary packages may be adapted to contain any number of a plurality of primary packages. For example, twelve to eighteen packages may be utilized since those amounts are typical packaged within current cardboard box shipments to retailers. Further, one skilled in the art would appreciate that as the number of packages increases, so will the overall weight. Likewise, a secondary package containing twelve primary packages of medium-sized disposable absorbent articles may weigh about 1.2 kg; whereas, a secondary package of twelve primary packages of large-sized disposable absorbent articles may weigh about 1.38 kg and a secondary package of twelve primary packages of extra-large-sized disposable absorbent articles may weigh about 1.59 kg. For each of the various weights, the film-wrap will need to be appropriately selected, for example, for strength and thickness.

[0036] For example, while at least three different embodiments have been disclosed herein, one skilled in the art would appreciate other configurations that maintain a minimum width "w" (see FIG. 1) necessary to provide the necessary load-bearing properties to sustain the weight of a plurality of primary packages of disposable absorbent articles. In some instances, said width "w" should measure at least 2.54 cm. In some instances, it may be preferable that said opening having a width dimension preferably greater than 10% of said product width dimension, more preferably greater than 50% of said product width dimension and most preferably greater than 90% of said product width dimension.

What is claimed is:

1. A secondary package containing a plurality of primary packages of disposable absorbent articles and being capable of hanging from a support member comprising:

a plurality of primary packages of disposable absorbent articles;

a film-wrap, said film-wrap substantially encompassing said primary packages, said film-wrap having an opening adapted for the insertion of a support member for the hanging of said package.

2. The secondary package of claim 1 further comprising a sleeve, wherein said sleeve provides additional structural rigidity for the hanging of said primary packages.

3. The secondary package of claim 1 further comprising a first perforation adapted to provide a dispensing orifice upon its tearing, said dispensing orifice being of sufficient

size so as to permit a primary package of disposable absorbent articles to be removed from said secondary package.

4. The secondary package of claim 3 further comprising a first hole adjacent to said first perforation so as to provide an endpoint for the tearing of said perforation so as to control the resulting size of said dispensing orifice.

5. The secondary package of claim 1 further comprising a second perforation adapted to provide a first and second knot region capable of being tied into a knot for the subsequent formation of an opening, said opening being adapted for the insertion of the support member such that said secondary package may be hung therefrom.

6. The secondary package of claim 5 further comprising a second hole adjacent to said second perforation so as to provide an endpoint for the tearing of said second perforation in order to control the resulting length of said first and second knot regions.

7. The secondary package of claim 1 wherein said opening is preformed.

8. The secondary package of claim 7 wherein said preformed opening is formed by the relative positioning of a first peak surface and a second peak surface.

9. The secondary package of claim 1 wherein a handle is attached to a top portion of said film-wrap, said handle having attachment means and a grip portion, said attachment means is affixed to said top portion of said film-wrap, said grip portion provides both hanging and carrying functionality.

10. The secondary package of claim 9 wherein a preformed opening is provided by the relative positioning of a first peak surface and a second peak surface.

11. A secondary package containing a plurality of primary packages of disposable absorbent articles and being capable of hanging from a support member comprising:

a plurality of primary packages of disposable absorbent articles;

a film-wrap, said film-wrap substantially encompassing said primary packages, said film-wrap having an opening adapted for the insertion of a support member for the hanging of said package, said opening having a width of at least 2.54 cm.

12. A secondary package containing a plurality of primary packages of disposable absorbent articles and being capable of hanging from a support member comprising:

a plurality of primary packages of disposable absorbent articles, said plurality of primary packages having a product width dimension;

a film-wrap, said film-wrap substantially encompassing said primary packages, said film-wrap having an opening adapted for the insertion of a support member for the hanging of said package, said opening having a width dimension preferably greater than 10% of said product width dimension, more preferably greater than 50% of said product width dimension and most preferably greater than 90% of said product width dimension.

13. The package of claim 1 wherein said disposable absorbent articles are disposable diapers.

14. The package of claim 13 wherein said diapers are pant-like.

15. The package of claim 11 wherein said disposable absorbent articles are disposable diapers.

16. The package of claim 15 wherein said diapers are pant-like.

17. The package of claim 12 wherein said disposable absorbent articles are disposable diapers.

18. The package of claim 17 wherein said diapers are pant-like.

* * * * *