



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
13.08.2014 Bulletin 2014/33

(51) Int Cl.:
B65D 5/52 (2006.01) B65D 5/54 (2006.01)

(21) Application number: **14000182.7**

(22) Date of filing: **17.01.2014**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

(72) Inventor: **Kuhn, Wayne H.**
Palos Park, IL 60464 (US)

(74) Representative: **Schneider, Michael**
Heisse Kursawe Eversheds
Rechtsanwälte Partnerschaft
Maximiliansplatz 5
80333 München (DE)

(30) Priority: **06.02.2013 US 201313760690**

(71) Applicant: **INTERNATIONAL PAPER COMPANY**
Memphis, TN 38197 (US)

(54) **Shipping and display container foldable into display trays with anti-tip features and blank therefor**

(57) A shipping and display container (10) convertible into a display configuration comprises a plurality of primary packages (P) contained therein. The container (10) comprises a bottom wall (12) having one score line (40) formed therein. Two side walls (16, 18) wherein each of which is foldably joined from the bottom wall (12). One (16) of the side walls includes a pair of diagonal corner walls (24a, 24b) each of which foldably extend from lateral edge thereof. The diagonal corner walls (24a, 24b) are configured to prevent the plurality of primary packages (P) from tipping forward when the container (10) is

in the display position. A top wall (14) is foldably joined from one (18) of the side wall. Two opposed end walls (20, 22) each of which is formed from a plurality of flaps (28a, 28b, 36a, 36b, 38a, 38b, 42a, 42b) foldably extend from the bottom (12), side (16, 18), and top (14) walls in an overlapped relationship with one another. A perforated section is defined by two perforated lines of weakness (32a, 32b) wherein upon removal of the perforated section and folding container along the score line (40), the shipping and display container (10) is converted into two display trays (T1, T2).

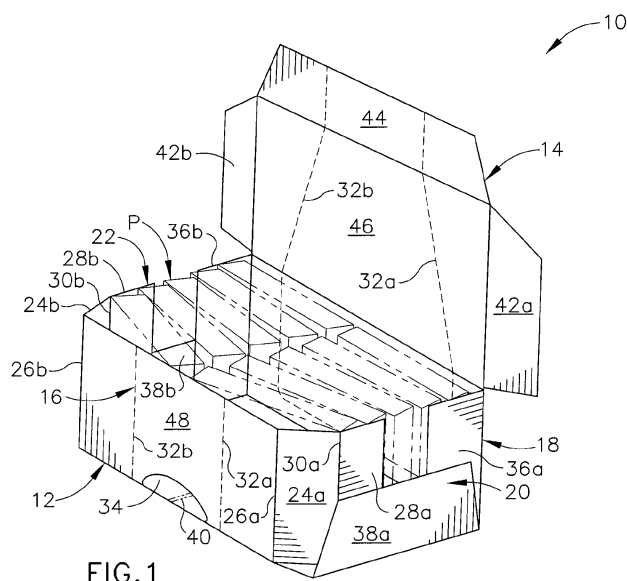


FIG. 1

Description

FIELD OF THE INVENTION

[0001] This invention relates generally to containers for shipping and display products at points of sale. More particularly, the invention is a shipping and display container foldable into side-by-side display trays with anti-tip features at the point of sale.

BACKGROUND OF THE INVENTION

[0002] It is common practice to load a quantity of individual packages of consumer products into corrugated paperboard shipping containers for bulk shipment of the packages to a point of sale. At the point of sale the individual packages are removed from the shipping container and placed on a shelf for display and sale to the consumer.

[0003] In many instances, especially in the so-called big box stores or club stores, the product packages are left in the shipping container which then also serves to support and display the packages for sale. If the shipping container is a conventional container the retailer must cut away a portion of the container in order to expose the product packages and provide access to them by the consumer. In order to provide a more attractive display and facilitate ease of use by the retailer, combination shipping and display containers have been developed which have sections that may be removed along weakened lines to expose the product packages and provide access to them.

[0004] Some conventional shipping and display containers require multiple pieces of corrugated material in their construction and/or are not easily produced on standard box plant converting equipment. Conventional designs also may not provide a container that retains its integrity during shipping and handling, and/or the retailer may be required to use a knife to open the shipping container to convert it to a display configuration. Additionally, removal of a section of conventional shipping and display containers frequently leaves a jagged edge that is unattractive.

[0005] Of additional concern with conventional shipping and display containers is their inability to ship bagged, pouched or carded products in a flat or horizontal position and then display them at the point of sale in an upright position. When displayed upright, the pouched or carded products have a small footprint and cannot stand without support, and therefore, for proper display in the retail market it is important to present the product in an upright position with minimal restrictions so that the consumers can easily see and access the product. Prior shipping and display containers do not provide a way to control the presentation of the primary packages and it is generally common for the primary packages to tip forward when the first few packages or carton are removed. Tipping forward reduces the display effect and can nega-

tively impact sales. Previous solutions to such problems have used multiple pieces or complex folding structures to ensure upright presentation of the product.

[0006] Accordingly, it would be desirable to have a shipping and display container that uses only a single piece of corrugated material in its construction, that can be easily produced on standard box plant converting equipment, that retains its integrity during shipping and handling, that does not require the use of a knife or other tool to convert it from a shipping to a display configuration, that leaves a clean smooth edge when opened, and that enables the product packages to be loaded into the container and shipped in a horizontal position and displayed in an upright position when the container is opened at the point of sale.

SUMMARY OF THE INVENTION

[0007] The present invention is directed to shipping and display container that contains therein a plurality of primary packages or cartons for sale by retailers. When the plurality of primary packages are in the display position, the shipping and display container is configured in a manner that causes the primary packages to lean back toward the back of the container for a preferred presentation position. In the present invention, each primary package is arranged on its side in two rows. For example, for a twelve primary packages or cartons, there are two rows of six cartons on their sides with the tops of one row facing the tops of the other row. This arrangement allows the primary packages or cartons to end up upright when the packages or cartons are ready for display. The shipping and display container requires a single piece blank made of corrugated material in its construction and can be produced on standard box plant converting equipment. The shipping and display container retains its integrity during shipping and handling and does not require the use of a knife or other tool to convert it from a shipping configuration to a display configuration. The unassembled blank has major and minor flaps on each end. One minor flap on each end has extra score lines which permits the minor flap to be folded to create a diagonal corner inside the container. This diagonal corner effectively reduces the available space for the primary packages and by increasing the size of the container to compensate for the reduction of the space, the two rows of primary packages are accommodated in a chevron configuration. It should be noted that this arrangement has an additional advantage of utilizing all the primary packages so as to provide stacking strength and thereby reducing the strength requirements from the shipping and display container. Moreover, the diagonal corner with its extra score lines further increases the stacking strength.

[0008] When the shipping and display container is at the retail outlet or club store, a perforated section of the container is removed. The perforated section of the container is defined by a tear out panel and a removable window panel. The container is then broken backward

on a score line in the bottom panel. This places the primary packages in an upright position in two joined display trays. The two joined trays have an open face which is determined by the shape of the perforated section. The shape of this perforated section can be altered in design to provide more or less exposure of the primary packages facing. The diagonal corners end up at the bottom rear of each tray and effectively force the bottom of the primary packages toward the front of the shipping and display container. The removal of the perforated panel reduces the height of the back panel of each tray. This causes the top of the primary packages to lean back or recline in a preferred display position.

[0009] For automatic, machine, assembly, a flat blank for making the shipping and display container comprises of four panels, and a glue flap. At each end of the blank there are major flaps which fully overlap each other when folded, and minor flaps. One minor flap on each end has an extra score and an offset score that allow the flap to form a diagonal corner protruding into the interior space of the container. The blank has a perforated section that can be removed at the point of sale to prepare the primary packages for display. There is a perforated score line in the bottom panel that is used to break the container into two display trays. When left adjoined, these trays are displayed in a side by side position. The perforated score line provides the user with the option of breaking the trays apart for a front to back single facing arrangement. This arrangement is often preferred by the retailer so they can have a front pack that is shopped while back pack is held in reserve.

[0010] One alternative embodiment would be to provide a very similar blank as a joined container. Another variation of embodiment would be to provide the same function in a container that had self locking features such as tucks or locking tabs.

[0011] Accordingly, one aspect of the present invention is directed to a shipping and display container having a plurality of primary packages contained therein. The shipping and display container is convertible into a display configuration at the point of sale and comprises a bottom wall having at least one score line formed on a midsection of the bottom wall. The bottom wall includes a width, two respective longitudinal edges, and two respective lateral edges. Two opposed side walls, are provided, each of which is foldably joined from the respective longitudinal edge of the bottom wall. One of the opposed side walls includes a pair of diagonal corner walls each of which foldably extends from respective lateral edge thereof. Each of the diagonal corner walls is configured to prevent the plurality of primary packages from tipping forward when the container is in the display configuration. A top wall is foldably joined from one of the respective longitudinal edge of the side wall. The top wall further includes a glue flap foldably extend from longitudinal edge thereof. Two opposed end walls are formed from a plurality of flaps foldably extending from the bottom wall, side walls, and top walls in an overlapped relationship

with one another. The plurality of flaps is defined by respective pair of first, second, third, and fourth flaps. The first pair of the flaps foldably extend from respective diagonal corner walls, the second pair of the flaps foldably extend from the respective lateral edge of the side wall, the third pair of the flaps foldably extend from the respective lateral edge of the bottom wall, and the fourth pair of the flaps foldably extend from the respective lateral edge of the top wall.

[0012] A perforated section is defined by two perforated lines of weakness that are formed across respective widths of the top wall and side walls. The perforated section includes a tear out panel and a tear out window panel which the tear out window panel includes an access hole used to remove the perforated section by a retailer. The tear out panel includes a tab that extends from free edge thereof. Upon removal of the perforated section and folding the shipping and display container along the at least one score line, the shipping and display container is converted into two display trays. The two display trays are separated along the at least one score line.

[0013] Another aspect of the present invention is directed to a shipping and display container convertible into two display trays at the point of sale. Each of the display trays comprises a plurality of primary packages contained therein and comprises a base, a back wall, two opposed side walls and an L-shaped front wall foldably joined to one another. A diagonal wall configured to be foldably joined between the base, back wall, and two opposed side walls wherein the diagonal wall causes bottoms of the plurality of primary packages lean toward the L-shaped front wall to thereby prevent the plurality of primary packages from tipping forward toward the L-shaped front wall.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The foregoing, as well as other objects and advantages of the invention, will become apparent from the following detailed description when taken in conjunction with the accompanying drawings, wherein like reference characters designate like parts throughout the several views, and wherein:

Fig. 1 is a front top perspective view of a shipping and display container contains therein a plurality of primary packages according to the invention, shown in its partially open shipping configuration.

Fig. 2 is a top perspective view of the shipping and display container of the invention shown in its shipping configuration.

Fig. 3 is a top perspective view of the shipping and display container showing the container of the invention in the process of being opened.

Fig. 4 is a top perspective view of the shipping and display container showing the perforated section of the container is removed to expose the primary packages contain therein.

Fig. 5 is a top perspective view of the container in Fig. 4 illustrating the manner in which the shipping container is convertible into a side-by-side display trays with an anti-tip features.

Fig. 6 is a top perspective view of the container in Fig. 5 showing the side-by-side display trays in their operative position.

Fig. 7 is a sectional view of a portion of the side-by-side display trays taken along line 7-7.

Fig. 8 is a plan view of the blank used in making the shipping and display container of the invention.

DETAILED DESCRIPTION OF THE INVENTION

[0015] While this invention is susceptible of embodiment in many different forms, there is shown in the drawings and will herein be described in detail preferred embodiments of the invention with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the broad aspect of the invention to the embodiments illustrated. In the present invention the use of prime character in the numeral references in the drawings directed to the different embodiment indicate that those elements are either the same or at least function the same. In addition, the phrase "Anti-tip feature" generally means that due to the structure of the shipping and display container, the shipping and display container when converted to tow display trays, each of the display trays is configured in a manner that causes the primary packages to lean back toward the back of the tray for a preferred presentation position.

[0016] Figs. 1 and 2 is a top perspective view of a shipping and display container 10 that contains therein a plurality of primary packages P in accordance with the preferred embodiment of the invention. The shipping and display container 10 comprises a bottom wall 12, top wall 14, opposite parallel side walls 16, 18, and opposite parallel end walls 20, 22. The respective end walls 20, 22 are formed from a plurality of flaps foldably extend from the bottom, top, and side walls. Two diagonal corner walls 24a, 24b are foldably joined from lateral side of the side wall 16 and they are defined by fold lines 26a, 26b. The side wall 16 further includes a respective first flaps 28a, 28b that foldably extend from respective diagonal corner walls 24a, 24b and are defined by respective fold lines 30a, and 30b. The side wall 18 includes a respective second flaps 36a, 36b that foldably extend from the respective lateral edge of the side wall 18. The bottom wall 12 includes a respective third flaps 38a, 38b that foldably extend from the respective lateral edge of the bottom wall 12. A pair of parallel score lines 40 are formed in the mid section of the bottom wall 12 which is used to convert the shipping and display container 10 into a side-by-side display trays (either joined trays or separated trays) as will be discussed in greater detail hereinafter. The top wall 14 includes a respective fourth flaps 42a, 42b that foldably extend from the respective lateral edges thereof

and a glue flap 44 foldably extend from the longitudinal edge of the top wall 14. It should be noted that when the respective first, second, third, and fourth flaps 28a, 28b, 36a, 36b, 38a, 38b, 42a, 42b are in overlapped relationship with one another, they form the respective end walls 20, 22. For example, the respective first, second, third and fourth flaps 28a, 36a, 38a, 42a form the end wall 20 and the respective first, second, third, and fourth flaps 28b, 36b, 38b, 42b form the end wall 22. The perforated section of the shipping and display container 10 is defined by two perforated lines of weakness 32a, 32b that are formed on the top wall 14 and side walls 16, 18 as depicted in Fig. 2. The perforated section includes a tear out panel 46 and a tear out window panel 48. The tear out panel 46 and the tear out window panel 48 are defined by the two perforated lines of weakness 32a, 32b that extend across side wall 16, the top wall 14, and side wall 18. The tear out window panel 48 includes an access hole 34 used to remove the perforated section by a retailer. After the primary packages P are loaded into the container 10, the container is then shipped in the orientation shown in Fig. 2. In the present invention, the primary packages P are arranged on its side in two rows. For example, for a ten or twelve primary packages P, there are two rows of five or six cartons on their sides with the tops of one row facing the tops of the other row. This is an important arrangement that allows the primary packages P to end up upright when the packages P are prepared for display. The respective diagonal corner 24a, 24b effectively reduces the available space for the primary packages P and by increasing the size of the shipping and display container 10 to compensate for the reduction of the space; the two rows of primary packages P are accommodated in a chevron configuration as seen best in Figs. 1, 4, and 7. It should be noted that this arrangement has an additional advantage of utilizing all the primary packages P so as to provide stacking strength and thereby reducing the strength requirements from the shipping and display container 10.

[0017] Referring to Figs. 3-7, at the point of sale, a retailer inserts a finger into the access hole 34 in the side wall 16 and pulls outwardly to break the lines of perforations 32a, 32b. This enables the perforated section that includes tear out panel 46 and the tear out window panel 48 to be removed from the container as seen best in Figs. 3 and 4. Thus, the retailer is left with the two rows of primary packages P nested in the container. It should be noted that the contour of the lines of perforations 32a, 32b are formed such that the shipping configuration of the container can be easily converted into a display configuration. For example, the tear out panel 46 includes a tab 47 that formed in proximity of the score lines 40. In the preferred embodiment, when the tear out panel 46 is removed, the tab 47 leaves a first U-shaped foot print 49 on the side wall 18 which significantly assist in converting the shipping configuration of the container into a display configuration. Similarly, when the tear out window panel 48 is removed, a second U-shaped foot print 52 is formed

which significantly assist in converting the shipping configuration of the container into a display configuration. Then, the container 10 is folded outwardly along the pair of parallel score lines 40 to convert the shipping container 10 into a side-by-side display trays T1 and T2. This places the primary packages P in an upright position in two joined display trays. The two joined display trays T1 and T2 have an open face which is determined by the shape or contour of the perforated section. As one of the ordinary skilled in the art would appreciate, the shape or contour of this perforated section can be altered to provide more or less exposure of the primary packages P facing. The perforated score line 40 provides the user with the option of breaking the display trays T1 and T2 apart for a front to back single facing arrangement. This arrangement is often preferred by the retailer so they can have a front pack that is shopped while back pack is held in reserve. Each of the display trays T1 and T2 has a respective base 20', 22' formed from the respective first, second, third, and fourth flaps 28a, 28b, 36a, 36b, 38a, 38b, 42a, 42b that in shipping configuration these flaps formed the respective end walls 20, 22. For example, flaps 28a, 36a, 38a, and 42a forms the base 20' for display tray T1 and flaps 28b, 36a, 38a, and 42a forms the base 22' for display tray T2. Similarly, the respective tapered side walls 14' of each respective trays T1 and T2 is formed from the top wall 14 when folded along the score lines 40. In addition, each of the respective display trays T1 and T2 has respective side walls 12' that are formed from the bottom wall 12 before they are folded along the score lines 40. Furthermore, each of the respective display trays T1 and T2 has respective back walls 16' that are formed from the side wall 16 after they are folded along the score lines 40. The L-shaped front wall 18' of the each display trays T1 and T2 is formed from the side wall 18 after the tear out panel 46 is removed. Each of the diagonal corner walls 24a', 24b' ends up at the bottom rear of each respective display trays T1 and T2 and effectively force the bottom of the primary packages P toward the front of the respective display trays T1 and T2 as seen best in Fig. 7. The removal of the tear out panel 46 and the tear out window panel 48 reduce the height of the back panel 16' of each display trays. This causes the top of the primary packages P to lean back or recline in a preferred display position.

[0018] A blank B for making the shipping and display container 10 is shown in Fig. 8. The blank B is substantially flat symmetrical with respect to its longitudinal axis thereof. The blank B is preferably an integral piece of a material such as continuous sheet of conventional corrugated paperboard. The blank B is cut along its outer margins to form its specific shape. The blank B is divided into bottom wall panel 12', side wall panels 16', 18' and top wall panel 14' by three transverse parallel fold lines 50, 52, and 54. The blank B is further divided by two substantially longitudinal parallel fold lines 56, 58. The pair of parallel score lines 40' are formed on the bottom wall panel 12' which are used as fold lines 40' when con-

verting the shipping container 10 into the side-by-side display trays T1 and T2. The bottom wall panel 12' includes the respective third flaps 38a', 38b' that foldably extend from the respective lateral edge of the bottom wall panel 12. The side wall panel 16' includes the tear out window panel 48' that is defined by the two perforated lines of weakness 32a, 32b. Moreover, the side wall panel 16' includes respective diagonal corner panels 24a', 24b' that are defined by respective fold lines 26a', 30a' and 26b', 30b'. The side wall panel 16' further includes a respective first flaps 28a', 28b' that foldably extend from respective diagonal corner walls 24a', 24b' and are defined by respective fold lines 30a, and 30b. The side wall panel 18' includes a respective second flaps 36a', 36b' that foldably extend from the respective lateral edge of the side wall panel 18' and are defined by respective fold lines 56a, 56b. The top wall panel 14' includes a respective fourth flaps 42a', 42b' that foldably extend from the respective lateral edges and are defined by respective fold lines 58a', 58b'. A glue flap panel 44' foldably extends from the longitudinal edge of the top wall 14 and is defined by fold line 60. The side wall 16 further includes the access hole cut out 34' on one of the longitudinal edges that forms the access hole when the blank B is fully constructed. Although the blank B is characterized as having side wall panels and end wall panels, but one of the ordinary skilled in the art would appreciate that the end wall panels can be defined as side wall panels as well and the characterization of the side wall panels and end wall panels have no effect on the function or utility of the blank 10.

[0019] Referring to Figs. 1-6, manual set-up of the shipping and display container 10 is easily accomplished. However, one of ordinary skill in the art would appreciate that generally a folding machine alternatively performs the forming operations. The blank B is laid horizontally so that the side wall panels 16' and 18' are folded upright along the respective fold lines 50 and 54. The respective side wall panels 16', 18' forms a right angle with respect to the bottom panel 12'. Next, respective second flaps 36a', 36b' are folded toward the bottom wall panel 12' at right angles along the fold lines 56a and 56b, respectively. Next, the diagonal corner panels 24a', 24b' and the respective first flaps 28a', 28b' are folded toward the bottom wall panel 12'. The respective diagonal corner panels 24a', 24b' forms an obtuse-angled with respect to the bottom wall panel 12'. Next, the respective second flaps 36a', 36b' are folded upright along the respective fold lines 56a, 56b and glued to the respective first flaps 28a', 28b' and respective second flaps 36a', 36b'. Finally, the primary packages P are loaded into the interior space of the shipping and display container 10 and then the top wall panel 14 folds over interior space and the respective fourth flaps 42a', 42b' and the glue flap 44 are glued to the side wall panels 16', and the respective end walls 20, 22. The loaded and closed shipping and display container 10 is then shipped in the orientation shown in Fig. 2. Other alternative embodiment would be to provide a very similar blank B as a joined container. Another variation

of embodiment would be to provide the same function in a container that had self locking features such as tucks or locking tabs.

[0020] In use, When the shipping and display container 10 is at the retail outlet or club store, the perforated section of the container is removed. The perforated section of the container is defined by a tear out panel 46 and a tear out window panel 48. The container 10 is then broken backward on a score line 40 in the bottom panel 12. This places the primary packages P in an upright position in two joined display trays T1, T2. The two joined display trays T1, T2 have an open face which is determined by the shape of the perforated section. As one of the ordinary skilled in the art would appreciate, the shape or contour of this perforated section can be altered to provide more or less exposure of the primary packages P to be displayed. The diagonal corners panels 24a, 24b end up at the bottom rear of each display tray T1, T2 and effectively force the bottom of the primary packages toward the front of the container. The removal of the tear out panel 46 and the tear out window panel 48 reduce the height of the back panel 18 of each display tray T1 and T2. This causes the top of the primary packages P to lean back or recline in a preferred display position.

[0021] While particular embodiments of the invention have been illustrated and described in detail herein, it should be understood that various changes and modifications may be made in the invention without departing from the spirit and intent of the invention as defined by the appended claims.

[0022] Aspects of the invention are:

1. A shipping and display container having a plurality of primary packages contained therein, the shipping and display container convertible into a display configuration at the point of sale, comprising:

a bottom wall having at least one score line formed therein, the bottom wall includes a width, two respective longitudinal edges, and two respective lateral edges;

two opposed side walls each of which being foldably joined from the respective longitudinal edge of the bottom wall, one of the opposed side walls includes a pair of diagonal corner walls each of which foldably extends from respective lateral edge thereof and wherein each of the diagonal corner walls being configured to prevent the plurality of primary packages from tipping forward when the container being in the display configuration;

a top wall being foldably joined from one of the respective longitudinal edge of the side wall;

two opposed end walls being formed from a plurality of flaps foldably extend from the bottom wall, side walls, and top walls in an overlapped relationship with one another; and

a perforated section being defined by two per-

forated lines of weakness that are formed across respective widths of the top wall and side walls wherein upon removal of the perforated section and folding the shipping and display container along the at least one score line, the shipping and display container is converted into two display trays.

2. The shipping and display container of aspect 1 wherein the at least one score line includes two substantially parallel score lines that are formed on a midsection of the bottom wall.

3. The shipping and display container of aspect 1 wherein the plurality of flaps defined by respective pair of first, second, third, and fourth flaps and wherein the first pair of the flaps foldably extend from respective diagonal corner walls, the second pair of the flaps foldably extend from the respective lateral edge of the side wall, the third pair of the flaps foldably extend from the respective lateral edge of the bottom wall, and the fourth pair of the flaps foldably extend from the respective lateral edge of the top wall.

4. The shipping and display container of aspect 1 wherein the top wall further includes a glue flap foldably extend from longitudinal edge thereof.

5. The shipping and display container of aspect 1 wherein the perforated section includes a tear out panel and a tear out window panel.

6. The shipping and display container of aspect 5 wherein the tear out window panel includes an access hole used to remove the perforated section by a retailer.

7. The shipping and display container of aspect 5 wherein the tear out panel includes a tab that extends from free edge thereof.

8. The shipping and display container of aspect 1 wherein the two display trays are separated along the at least one score line.

9. The shipping and display container of aspect 1 wherein each of the two display trays has a respective base formed from the respective opposed end walls.

10. The shipping and display container of aspect 1 wherein each of the two display trays has a tapered side wall formed from the top wall when the perforated section is removed.

11. The shipping and display container of aspect 1 wherein each of the two display trays has a back panel formed from one of the side wall when the perforated section is removed.

12. The shipping and display container of aspect 11 wherein the removal of the perforated section reduces the height of the back panel which causes the top of the primary packages to lean back or to recline for display position.

13. A shipping and display container having a plurality of primary packages contained therein, the

shipping and display container convertible into a display configuration at the point of sale, comprising:

a bottom wall having at least one score line formed on a midsection thereof, the bottom wall includes a width, two respective longitudinal edges, and two respective lateral edges; 5
two opposed side walls each of which being foldably joined from the respective longitudinal edge of the bottom wall, one of the opposed side walls includes a pair of diagonal corner walls each of which foldably extends from respective lateral edge thereof and wherein each of the diagonal corner walls being configured to prevent the plurality of primary packages from tipping forward when the container being in the display configuration; 10
a top wall being foldably joined from one of the respective longitudinal edge of the side wall; 15
two opposed end walls being formed from a plurality of flaps foldably extend from the bottom wall, side walls, and top walls in an overlapped relationship with one another wherein the plurality of flaps defined by respective pair of first, second, third, and fourth flaps and wherein the first pair of the flaps foldably extend from respective diagonal corner walls, the second pair of the flaps foldably extend from the respective lateral edge of the side wall, the third pair of the flaps foldably extend from the respective lateral edge of the bottom wall, and the fourth pair of the flaps foldably extend from the respective lateral edge of the top wall; and 20
a perforated section being defined by two perforated lines of weakness that are formed across respective widths of the top wall and side walls wherein upon removal of the perforated section and folding the shipping and display container along the at least one score line, the shipping and display container is converted into two display trays. 25 30 35 40

14. The shipping and display container of aspect 13 wherein the perforated section includes a tear out panel having a tab and a tear out window panel. 45

15. The shipping and display container of aspect 14 wherein upon removal of the tear out panel, the tab leaves a first U-shaped foot print on one of the side wall which assist in converting the shipping container into two display trays. 50

16. The shipping and display container of aspect 14 wherein upon removal of the tear out window panel, a second U-shaped foot print is formed on the other side wall which assist in converting the shipping container into two display trays. 55

17. The shipping and display container of aspect 13 wherein the two display trays are separated along the at least one score line.

18. A shipping and display container having a plurality of primary packages contained therein, the shipping and display container convertible into two display trays at the point of sale, each of the display trays having the plurality of primary packages contained therein, comprising:

a base, a back wall, two opposed side walls and a L-shaped front wall foldably joined to one another,
a diagonal wall configured to be foldably joined between the base, back wall, and two opposed side walls wherein the diagonal wall causes bottoms of the plurality of primary packages lean toward the L-shaped front wall to thereby prevent the plurality of primary packages from tipping forward toward the L-shaped front wall.

19. A blank for making a shipping and display container convertible into a display configuration at the point of sale, the blank comprising:

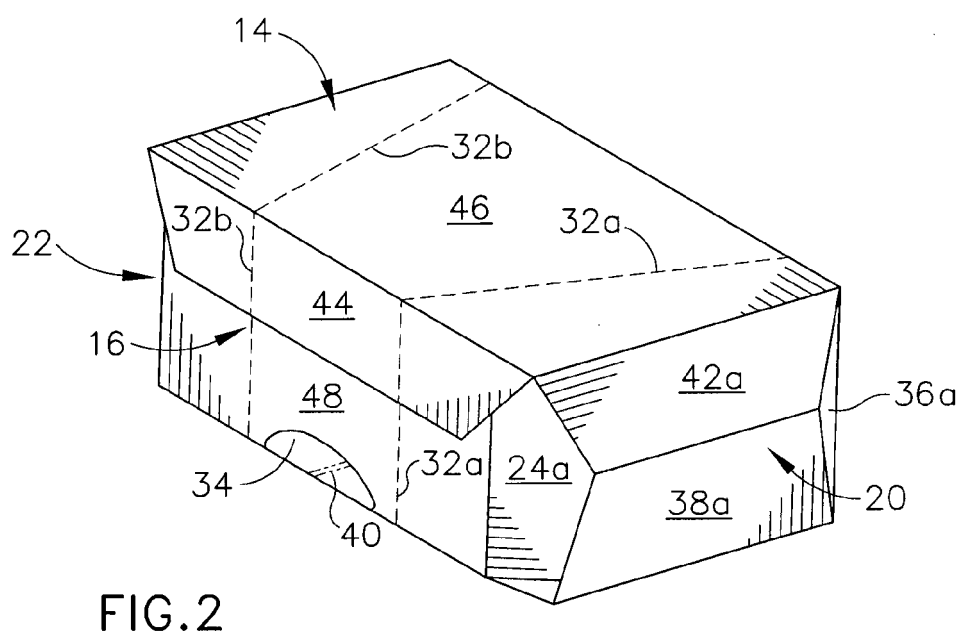
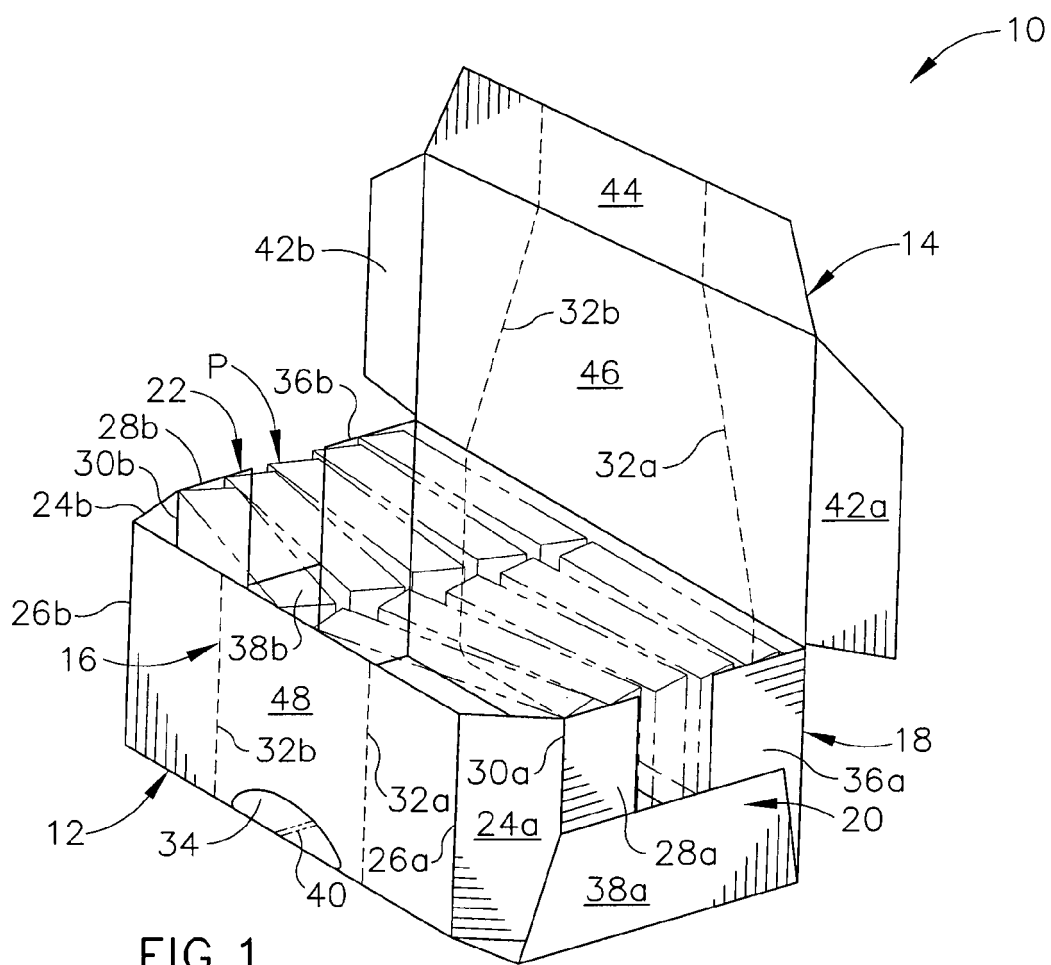
a bottom wall panel, two side wall panels and top wall panel foldably joined to one another by three transverse parallel fold lines (50, 52, 54), the bottom wall panel includes a respective third flaps that foldably extend from a respective lateral edge of the bottom wall panel;
a pair of parallel score lines being formed on the bottom wall panel which being used when converting the shipping and display container into the display configuration;
the side wall panel includes a tear out window panel that is defined by the two perforated lines of weakness,
the side wall panel includes respective diagonal corner panels being defined by respective fold lines (26a', 30a', 26b', 30b'),
the side wall panel further includes a respective first flaps that foldably extend from respective diagonal corner walls and being defined by respective fold lines (30a, 30b),
the side wall panel includes a respective second flaps that foldably extend from respective lateral edge of the side wall panel and being defined by respective fold lines 56a, 56b),
the top wall panel includes a respective fourth flaps that foldably extend from respective lateral edges and being defined by respective fold lines (58a', 58b'),
a glue flap panel foldably extends from a longitudinal edge of the top wall and being defined by fold line (60), and
the side wall further includes the access hole cut out on one longitudinal edge thereof that forms the access hole when the blank B is fully constructed.

Claims

1. A shipping and display container having a plurality of primary packages contained therein, the shipping and display container convertible into a display configuration at the point of sale, comprising:
 - a bottom wall having at least one score line formed therein, the bottom wall includes a width, two respective longitudinal edges, and two respective lateral edges;
 - two opposed side walls each of which being foldably joined from the respective longitudinal edge of the bottom wall, one of the opposed side walls includes a pair of diagonal corner walls each of which foldably extends from respective lateral edge thereof and wherein each of the diagonal corner walls being configured to prevent the plurality of primary packages from tipping forward when the container being in the display configuration;
 - a top wall being foldably joined from one of the respective longitudinal edge of the side wall;
 - two opposed end walls being formed from a plurality of flaps foldably extend from the bottom wall, side walls, and top walls in an overlapped relationship with one another; and
 - a perforated section being defined by two perforated lines of weakness that are formed across respective widths of the top wall and side walls wherein upon removal of the perforated section and folding the shipping and display container along the at least one score line, the shipping and display container is converted into two display trays.
2. The shipping and display container of claim 1 wherein the at least one score line includes two substantially parallel score lines that are formed on a midsection of the bottom wall.
3. The shipping and display container of claim 1 wherein the plurality of flaps defined by respective pair of first, second, third, and fourth flaps and wherein the first pair of the flaps foldably extend from respective diagonal corner walls, the second pair of the flaps foldably extend from the respective lateral edge of the side wall, the third pair of the flaps foldably extend from the respective lateral edge of the bottom wall, and the fourth pair of the flaps foldably extend from the respective lateral edge of the top wall.
4. The shipping and display container of claim 1 wherein the top wall further includes a glue flap foldably extend from longitudinal edge thereof.
5. The shipping and display container of claim 1 wherein the perforated section includes a tear out panel and a tear out window panel, in particular, wherein the tear out window panel includes an access hole used to remove the perforated section by a retailer, or wherein the tear out panel includes a tab that extends from free edge thereof.
6. The shipping and display container of claim 1 wherein the two display trays are separated along the at least one score line.
7. The shipping and display container of claim 1 wherein each of the two display trays has a respective base formed from the respective opposed end walls.
8. The shipping and display container of claim 1 wherein each of the two display trays has a tapered side wall formed from the top wall when the perforated section is removed.
9. The shipping and display container of claim 1 wherein each of the two display trays has a back panel formed from one of the side wall when the perforated section is removed, in particular, wherein the removal of the perforated section reduces the height of the back panel which causes the top of the primary packages to lean back or to recline for display position.
10. A shipping and display container having a plurality of primary packages contained therein, the shipping and display container convertible into a display configuration at the point of sale, comprising:
 - a bottom wall having at least one score line formed on a midsection thereof, the bottom wall includes a width, two respective longitudinal edges, and two respective lateral edges;
 - two opposed side walls each of which being foldably joined from the respective longitudinal edge of the bottom wall, one of the opposed side walls includes a pair of diagonal corner walls each of which foldably extends from respective lateral edge thereof and wherein each of the diagonal corner walls being configured to prevent the plurality of primary packages from tipping forward when the container being in the display configuration;
 - a top wall being foldably joined from one of the respective longitudinal edge of the side wall;
 - two opposed end walls being formed from a plurality of flaps foldably extend from the bottom wall, side walls, and top walls in an overlapped relationship with one another wherein the plurality of flaps defined by respective pair of first, second, third, and fourth flaps and wherein the first pair of the flaps foldably extend from respective diagonal corner walls, the second pair of the flaps foldably extend from the respective lateral edge of the side wall, the third pair of the flaps

- foldably extend from the respective lateral edge of the bottom wall, and the fourth pair of the flaps foldably extend from the respective lateral edge of the top wall; and
 a perforated section being defined by two perforated lines of weakness that are formed across respective widths of the top wall and side walls wherein upon removal of the perforated section and folding the shipping and display container along the at least one score line, the shipping and display container is converted into two display trays. 5
11. The shipping and display container of claim 10 wherein the perforated section includes a tear out panel having a tab and a tear out window panel, in particular, wherein upon removal of the tear out panel, the tab leaves a first U-shaped foot print on one of the side wall which assist in converting the shipping container into two display trays. 10 20
12. The shipping and display container of claim 11 wherein upon removal of the tear out window panel, a second U-shaped foot print is formed on the other side wall which assist in converting the shipping container into two display trays. 25
13. The shipping and display container of claim 10 wherein the two display trays are separated along the at least one score line. 30
14. A shipping and display container having a plurality of primary packages contained therein, the shipping and display container convertible into two display trays at the point of sale, each of the display trays having the plurality of primary packages contained therein, comprising: 35
- a base, a back wall, two opposed side walls and a L-shaped front wall foldably joined to one another, 40
- a diagonal wall configured to be foldably joined between the base, back wall, and two opposed side walls wherein the diagonal wall causes bottoms of the plurality of primary packages lean toward the L-shaped front wall to thereby prevent the plurality of primary packages from tipping forward toward the L-shaped front wall. 45
15. A blank for making a shipping and display container convertible into a display configuration at the point of sale, the blank comprising: 50
- a bottom wall panel, two side wall panels and top wall panel foldably joined to one another by three transverse parallel fold lines (50, 52, 54), the bottom wall panel includes a respective third flaps that foldably extend from a respective lat-

eral edge of the bottom wall panel;
 a pair of parallel score lines being formed on the bottom wall panel which being used when converting the shipping and display container into the display configuration;
 the side wall panel includes a tear out window panel that is defined by the two perforated lines of weakness,
 the side wall panel includes respective diagonal corner panels being defined by respective fold lines (26a', 30a', 26b', 30b'),
 the side wall panel further includes a respective first flaps that foldably extend from respective diagonal corner walls and being defined by respective fold lines (30a, 30b),
 the side wall panel includes a respective second flaps that foldably extend from respective lateral edge of the side wall panel and being defined by respective fold lines (56a, 56b),
 the top wall panel includes a respective fourth flaps that foldably extend from respective lateral edges and being defined by respective fold lines (58a', 58b'),
 a glue flap panel foldably extends from a longitudinal edge of the top wall and being defined by fold line (60), and
 the side wall further includes the access hole cut out on one longitudinal edge thereof that forms the access hole when the blank B is fully constructed.



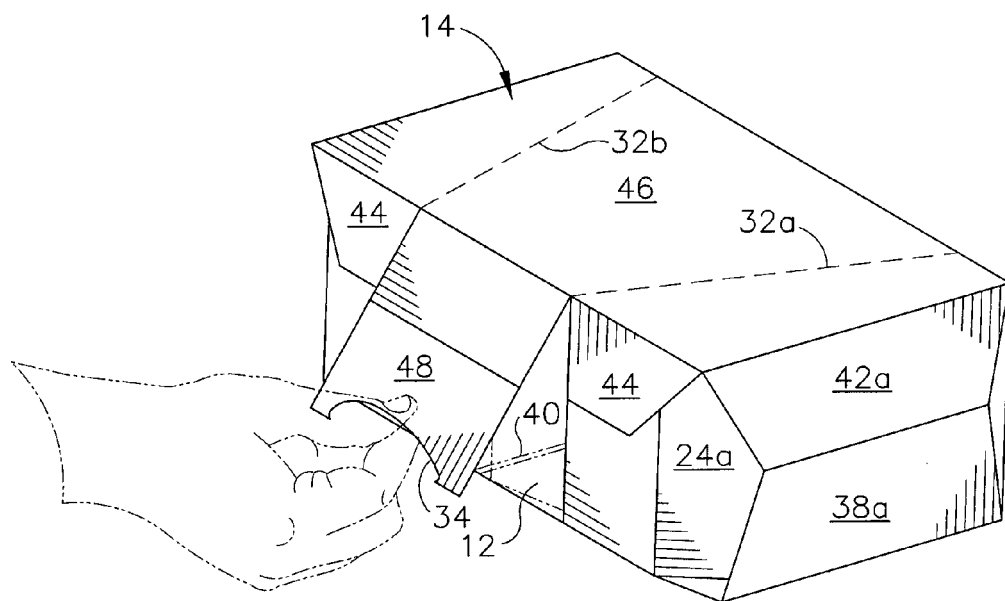


FIG.3

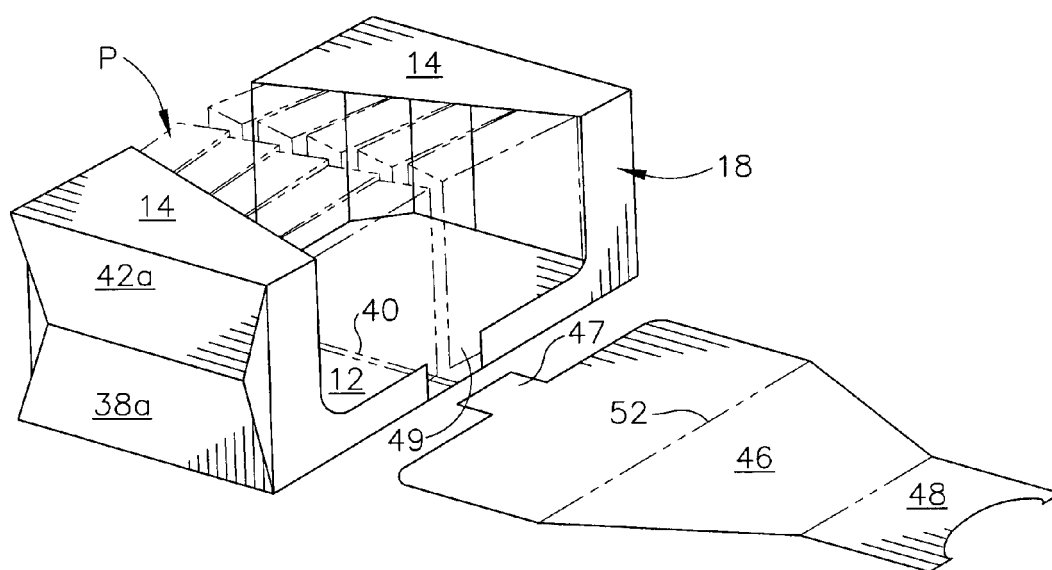


FIG.4

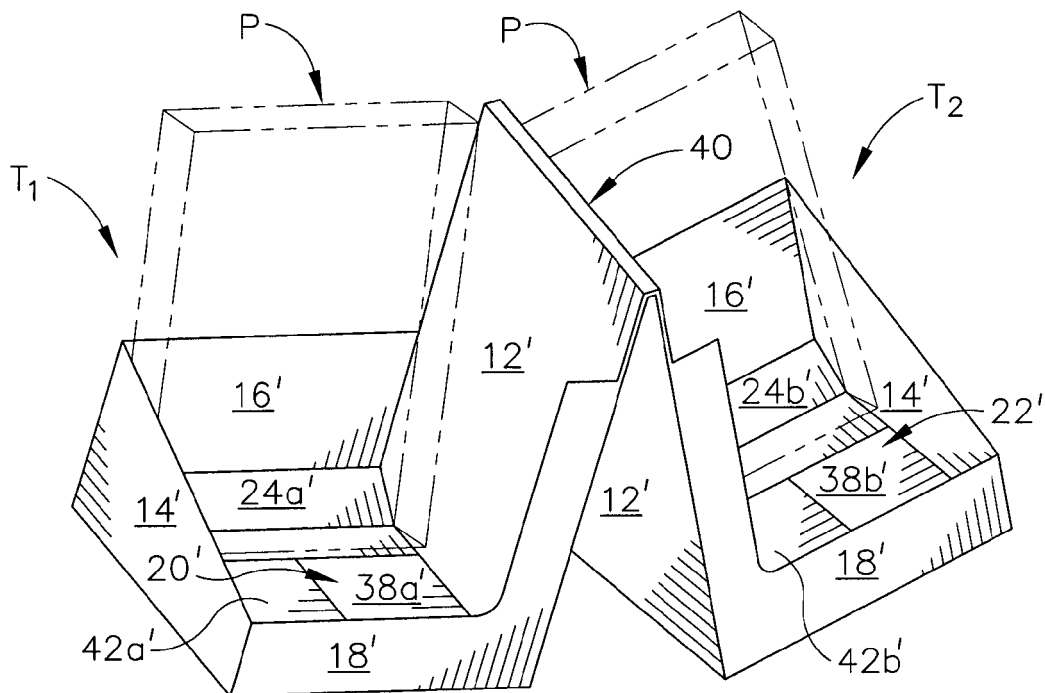


FIG. 5

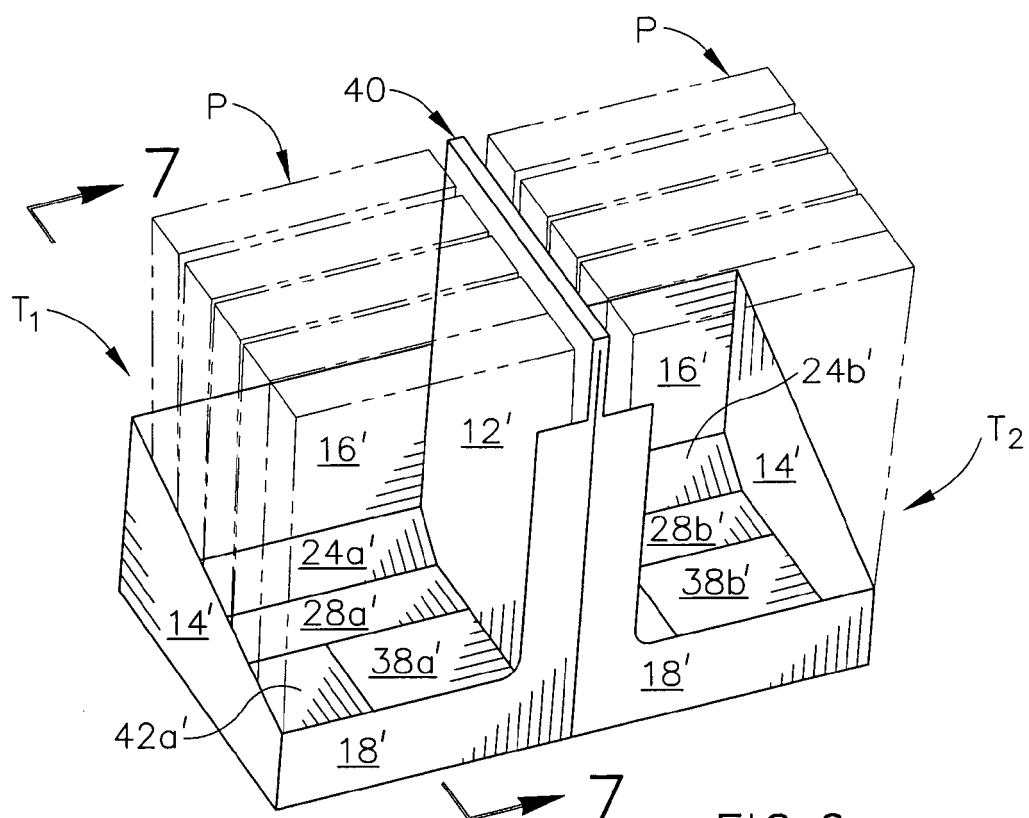


FIG. 6

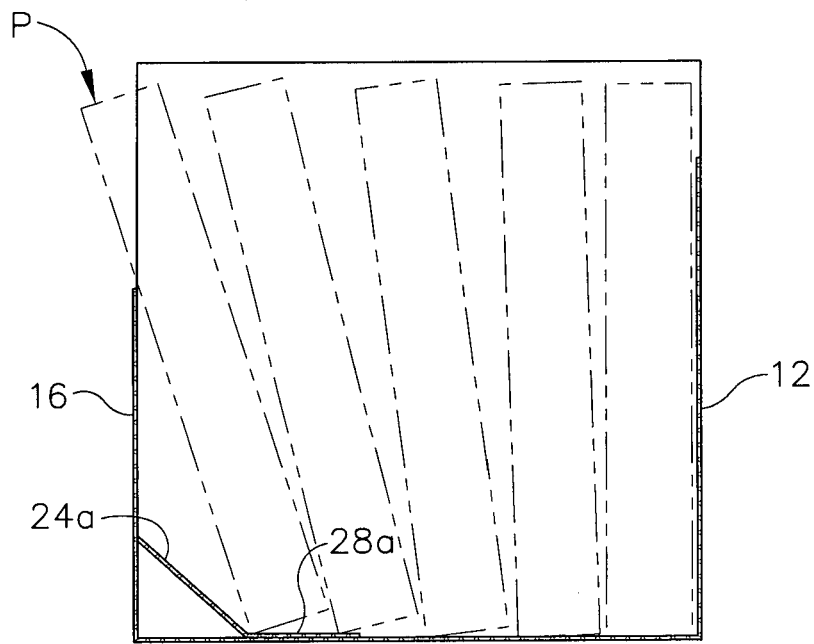


FIG. 7

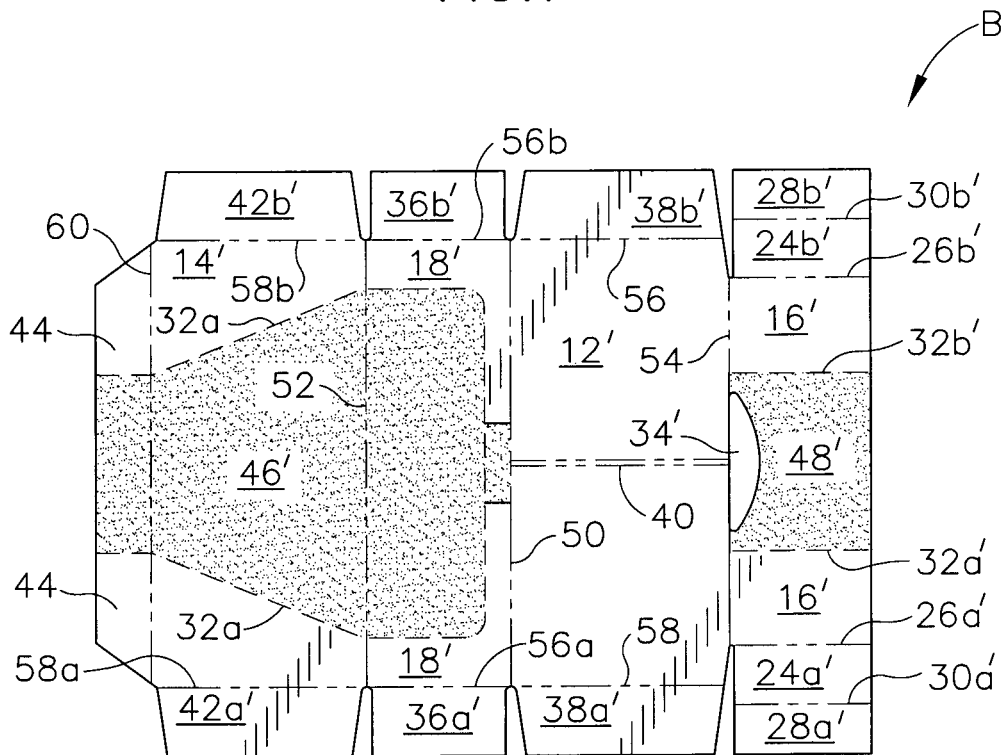


FIG. 8



EUROPEAN SEARCH REPORT

Application Number
EP 14 00 0182

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2005/092649 A1 (FORD COLIN [US] ET AL) 5 May 2005 (2005-05-05) * page 2, paragraph 18-26 * * figures 1-3 *	1-15	INV. B65D5/52 B65D5/54
X	WO 03/082686 A1 (MEADWESTVACO PACKAGING SYSTEMS [US]; CARGILE JOHN W [US]) 9 October 2003 (2003-10-09) * page 8, line 23 - page 13, line 2 * * figures 1-5 *	1-15	
X	EP 0 704 386 A1 (PHILIPS ELECTRONICS NV [NL]) 3 April 1996 (1996-04-03) * column 3, line 41 - column 5, line 44 * * figures 1-4 *	1-15	
A	US 3 002 613 A (GORDON MERKEL ET AL) 3 October 1961 (1961-10-03) * column 1, line 70 - column 3, line 9 * * figures 1-6 *	1,2,10, 14,15	
A	GB 2 407 083 A (SCA PACKAGING LTD [GB]) 20 April 2005 (2005-04-20) * page 2, line 24 - page 3, line 9 * * page 5, line 31 - page 6, line 4 * * figures 1, 5, 7 *	1,10,14, 15	TECHNICAL FIELDS SEARCHED (IPC) B65D
A	US 5 699 957 A (BLIN PATRICK [FR] ET AL) 23 December 1997 (1997-12-23) * column 2, line 54 - column 5, line 37 * * figures 1-5 *	1,10,14, 15	
A	DE 79 03 666 U1 (BIRKEL SCHWABEN NUDELN [DE]) 17 May 1979 (1979-05-17) * page 13, paragraph 1 - page 17, paragraph 2 * * figures 1-8 *	1,10,14	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 8 May 2014	Examiner Piolat, Olivier
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 14 00 0182

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-05-2014

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005092649 A1	05-05-2005	AT 494229 T	15-01-2011
		AU 2004289669 A1	26-05-2005
		BR PI0416097 A	02-01-2007
		CA 2542348 A1	26-05-2005
		CN 1874933 A	06-12-2006
		EP 1680328 A1	19-07-2006
		JP 4607894 B2	05-01-2011
		JP 2007533561 A	22-11-2007
		MX PA06005085 A	10-07-2006
		US 2005092649 A1	05-05-2005
		US 2007074997 A1	05-04-2007
		WO 2005047123 A1	26-05-2005

WO 03082686 A1	09-10-2003	AU 2003220486 A1	13-10-2003
		CA 2480149 A1	09-10-2003
		EP 1487703 A1	22-12-2004
		US 2004099570 A1	27-05-2004
		WO 03082686 A1	09-10-2003

EP 0704386 A1	03-04-1996	NONE	

US 3002613 A	03-10-1961	NONE	

GB 2407083 A	20-04-2005	GB 2378178 A	05-02-2003
		GB 2407083 A	20-04-2005

US 5699957 A	23-12-1997	NONE	

DE 7903666 U1	17-05-1979	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82