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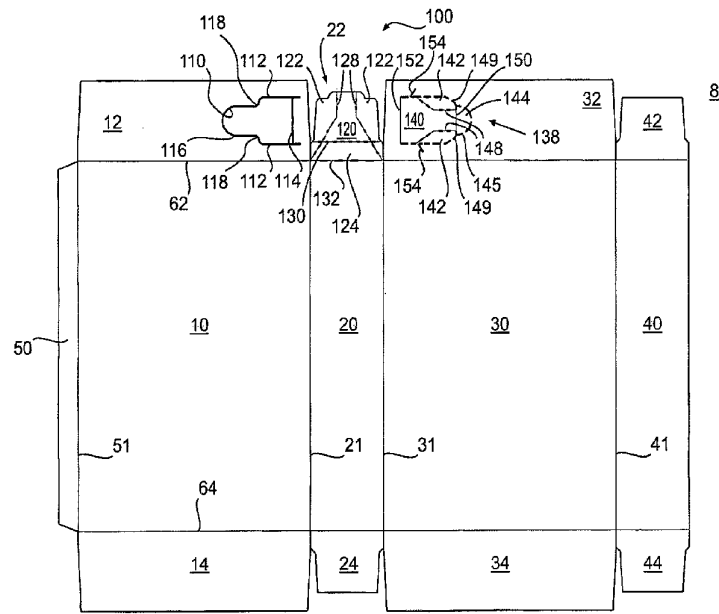
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(57) Abstract: A carton (140) includes a spout dispenser (160) formed in a top panel (170) of the carton. The spout dispenser is formed from a spout section of a side top flap adhered to an end top flap. Pivoting the spout section away from the top panel (170) causes part of the end top flap to be pulled through an aperture (110) through which product can be dispensed.

## **CARTON HAVING A PIVOTABLE DISPENSER**

### **BACKGROUND**

[0001] Dispensing cartons are known. Such cartons typically have a top panel formed from flaps that are separable to open the top of the carton. The contents of the carton can then be dispensed from the open carton top. Such cartons, however, typically are not easily closed once opened, and may not provide for easy dispensing of the carton contents. One solution to this problem is to include a pivotable dispenser that can be opened for dispensing the carton contents and then closed for storage. Conventional pivotable dispensers, however, may be difficult to open and/or to place in a dispensing configuration. Many conventional dispensers also require a metal or plastic insert spout piece to form the dispensing portion of the carton, which may increase costs and/or complexity of manufacture.

[0001a] The discussion of documents, acts, materials, devices, articles and the like is included in this specification solely for the purpose of providing a context for the present invention. It is not suggested or represented that any or all of these matters formed part of the prior art base or were common general knowledge in the field relevant to the present invention as it existed before the priority date of each claim of this application.

### **SUMMARY**

[0002] According to a first aspect of the invention, there is provided a carton comprising a first side panel, a first end panel, a second side panel, a second end

panel, a bottom panel and a top panel. The top panel comprises a first end top flap, a first side top flap overlying the first end top flap and having an aperture formed therein, and a second side top flap overlying the first side top flap. The first end top flap is adhered to the underside of the second side top flap through the aperture in the first side top flap. A plurality of lines of disruption in the second side top flap define in part a pivotable dispenser in the top panel.

[0003] The pivotable dispenser may be placed in a dispensing configuration by breaching the plurality of lines of disruption in the second side top flap and pulling the dispenser open. An access flap can be defined in the dispenser to allow a user to insert a finger into the top panel and thereby access the dispenser. Accessing and opening the dispenser can be performed using a relatively simple motion.

[0004] According to one embodiment of the invention, the first end top flap can include a spout section having wing portions. The wing portions can engage inside edges of the aperture in the first side top flap to secure the dispenser in the dispensing configuration. Locking cuts may be formed in the top panel in which the wing portions can be removably engaged to further secure the dispenser in the dispensing configuration. The dispenser can be closed by pressing the dispenser back into the top panel.

[0005] According to a further embodiment of the invention, the spout dispenser can be formed from the top flaps of the carton such that no additional inserts or pieces etc. are required.

[0005a] An embodiment of the first aspect includes a carton comprising: a first side panel; a first end panel; a second side panel; a second end panel; a bottom panel; and a top panel comprising: a first end top flap; a first side top flap overlying the first end top flap, the first side top flap having an aperture, wherein the aperture defines a first shoulder and a second shoulder; and a second side top flap overlying the first side top flap, the first end top flap, the first top flap and the second side top flap forming a pivotable dispenser in the top panel, wherein a plurality of lines of disruption in the second side top flap define a spout section of the pivotable dispenser, the spout section being at least partially separable from

the second side top panel to enable pivoting of the pivotable dispenser, wherein the spout section comprises a central spout portion, a first wing portion extending from and foldably connected to a first side of the central spout portion, and a second wing portion extending from and foldably connected to a second side of the central spout portion; and wherein a central portion of the first end top flap is adhered to the central spout portion of an underside of the second side top flap through the aperture and the first wing portion and second wing portion of the spout section abut and overlay the first shoulder and second shoulder, respectively, when the pivotable dispenser is in a closed position.

[0005b] According to a second aspect of the invention there is provided a blank, comprising: a first side panel; a first end panel; a second side panel; a second end panel; a first side top flap foldably connected to the first side panel and having an aperture formed therein; a first end top flap foldably connected to the first end panel and having a first plurality of lines of disruption formed therein; a second side top flap foldably connected to the second side panel and having a second plurality of lines of disruption formed therein; and at least one bottom flap extending along a bottom marginal area of the blank, wherein the second plurality of lines of disruption in the second side top flap defines a central spout portion.

[0005c] An embodiment of the second aspect includes a blank comprising: a first side panel; a first end panel; a second side panel; a second end panel; a first side top flap foldably connected to the first side panel and having an aperture formed therein, wherein the aperture defines a first shoulder and a second shoulder; a first end top flap foldably connected to the first end panel and having a first plurality of lines of disruption formed therein, the first end top flap including a central portion; a second side top flap foldably connected to the second side panel and having a second plurality of lines of disruption formed therein, the second plurality of lines of disruption defining a spout section including a central spout portion, a first wing portion foldably connected to a first side of a central spout portion, and a second wing portion foldably connected to a second side of the central spout portion; and at least one bottom flap extending along a bottom marginal area of the blank, wherein the first side top flap, the first end top flap and the second side top flap are foldable to form a top panel of the carton comprising a

pivotable dispenser, the first end top flap is configured to be attached to an inner surface of the second side top flap in the carton, and in the carton formed from the blank, the central portion of the first end top flap is for being adhered to the central spout portion through the aperture, and the first wing portion and second wing portion are configured to abut the first shoulder and second shoulder, respectively, when the pivotable dispenser of the carton formed from the blank is in a closed position.

[0005d] According to a third aspect of the invention there is provided a method of dispensing product from a carton, comprising: providing a carton with dispensable product contained therein, the carton comprising: a first side panel; a first end panel; a second side panel; a second end panel; a bottom panel; and a top panel comprising: a first end top flap having a first plurality of lines of disruption formed therein; a first side top flap overlying the first end top flap, the first side top flap having an aperture formed therein; and a second side top flap overlying the first side top flap and having a second plurality of lines of disruption formed therein, the second plurality of lines of disruption defining a spout section in the second side top flap; breaching the second plurality of lines of disruption; pivoting the spout section away from a remainder of the top panel, wherein pivoting the spout section pulls at least a portion of the first end top flap through the aperture in the first side top flap; and dispensing product through the aperture in the first side top flap.

[0005e] An embodiment of the third aspect includes a method of dispensing product from a carton, comprising: providing a carton with dispensable product contained therein, the carton comprising: a first side panel; a first end panel; a second side panel; a second end panel; a bottom panel; and a top panel comprising: a first end top flap having a first plurality of lines of disruption formed therein, the first end top flap including a central portion; a first side top flap overlying the first end top flap, the first side top flap having an aperture formed therein, wherein the aperture defines a first shoulder and a second shoulder; and a second side top flap overlying the first side top flap and having a second plurality of lines of disruption formed therein, the second plurality of lines of disruption defining a spout section including a central spout portion, a first

wing portion extending from a first side of a central spout portion, a second wing portion extending from a second side of the central spout portion, and an access flap foldably connected to the central spout portion, wherein the central portion of the first end top flap is adhered to the central spout portion of the second side top flap through the aperture, and the first wing portion and the second wing portion abut the first shoulder and the second shoulder, respectively, when the spout section is in a closed position; breaching the second plurality of lines of disruption; pivoting the spout section away from a remainder of the top panel, wherein pivoting the spout section pulls at least a portion of the first end top flap through the aperture in the first side top flap; dispensing product through the aperture in the first side top flap; and pivoting the spout section toward the aperture so the first wing portion abuts the first shoulder and the second wing portion abuts the second shoulder.

[0005f] Throughout the description and claims of this specification, the word “comprise” and variations of the word, such as “comprising” and “comprises”, is not intended to exclude other additives, components, integers or steps.

[0006] Other aspects, features, and details of the present invention can be more completely understood by reference to the following detailed description, taken in conjunction with the drawings and from the appended claims.

#### **BRIEF DESCRIPTION OF THE DRAWING FIGURES**

[0007] According to common practice, the various features of the drawings discussed below are not necessarily drawn to scale. Dimensions of various features and elements in the drawings may be expanded or reduced to more clearly illustrate the embodiments of the invention.

[0008] FIG. 1 is a plan view of a first side of a blank used to form a carton having a pivotable spout dispenser according to a first embodiment of the invention.

[0009] FIG. 2 is a perspective view of a partially erected carton.

[0010] FIGS. 3A and 3B are perspective views of the erected carton.

- [0011] FIG. 4 is a partial top plan view of the spout dispenser.
- [0012] FIG. 5 illustrates the spout dispenser being opened.
- [0013] FIG. 6 illustrates the spout dispenser being opened.
- [0014] FIG. 7 is an end view of the carton with the spout dispenser opened and in a dispensing configuration.

### DETAILED DESCRIPTION

- [0015] The present invention generally relates to dispensing or pour features for cartons. The present invention can be used, for example, in cartons that contain articles or other products such as, for example, food and beverages. The articles can also include particulate products such as, for example, rice, beans, sugar, and other pourable dry products. In this specification, the relative terms "bottom," "side,"



“end,” and “top” may indicate orientations determined in relation to fully erected and upright cartons.

[0016] FIG. 1 is a plan view of a blank 8 used to form a carton 190 having a pivotable spout dispenser 160 (illustrated in FIGS. 3A and 3B) according to a first embodiment of the invention. The blank 8 comprises a first side panel 10, a first end panel 20 connected to the first side panel 10 at a first transverse fold line 21, a second side panel 30 foldably connected to the first end panel 20 at a second transverse fold line 31, and a second end panel 40 foldably connected to the second side panel 30 at a third transverse fold line 41. An adhesive panel 50 may be foldably connected to the first side panel 10 at a fourth transverse fold line 51.

[0017] The first side panel 10 is foldably connected to a first side top flap 12 and a first side bottom flap 14. The first end panel 20 is foldably connected to a first end top flap 22 and a first end bottom flap 24. The second side panel 30 is foldably connected to a second side top flap 32 and a second side bottom flap 34. The second end panel 40 is foldably connected to a second end top flap 42 and a second end bottom flap 44. The top flaps 12, 22, 32, 42 extend along a first or top marginal portion of the blank 8, and may be foldably connected along a first longitudinal fold line 62. The bottom flaps 14, 24, 34, 44 extend along a second or bottom marginal portion of the blank 8, and may be foldably connected along a second longitudinal fold line 64. The longitudinal fold lines 62, 64 may be straight fold lines, or may be offset at one or more locations to account for, for example, blank thickness. When the carton 190 is erected, the top flaps 12, 22, 32, 42 close a first or top opening of the carton 190, and the bottom flaps 14, 24, 34, 44 close a second or bottom opening of the carton 190.

[0018] A spout dispenser pattern 100 is formed in the blank 8. According to an aspect of the invention, the spout dispenser pattern 100 includes lines of disruption formed in the first side top flap 12, the first end top flap 22, and the second side top flap 32. The spout dispenser pattern 100 defines the pivotable spout dispenser 160 in the erected carton 190 (FIGS. 3A and 3B).

[0019] Referring to FIG. 1, the spout dispenser pattern 100 includes an aperture 110 formed from a plurality of lines of disruption in the first side top flap 12. The aperture 100 is defined by spaced side cut lines 112, an end cut line 114, and an

arcuate end cut line 116. The cut lines 112 define shoulders 118 on either side of the aperture 110. The cut lines 112, 114, 116 of the exemplary embodiment define the opening or aperture 110 in the first side top flap 12. Alternatively, the lines 112, 114, 116 could be breachable lines of disruption (e.g. tear lines) in the flap 12 defining a knockout panel (not illustrated). The knockout panel could be removed during erection of the blank 8 or during use of the carton 190.

[0020] In the first top end flap 22, a pair of dogleg-shaped cut-crease lines 128 (e.g., fold lines) extend from a distal end of the flap 22 to the first longitudinal fold line 62. A longitudinally extending cut-crease fold line 130 extends through a medial portion of the first top end flap 22 and across the cut-crease lines 128. The lines 128, 130 define a central portion 120, first and second wing portions 122, and a base 124 in the first end top flap 22. The central portion 120 is foldably connected to the base 124 at the fold line 130. At the first end top flap 22, the longitudinal fold line 62 can include a cut-crease section 132.

[0021] In the second side top flap 32, a spout section 138 is defined by a plurality of lines of disruption. The spout section 138 includes a central spout portion 140 and first and second wing portions 142 defined by dogleg-shaped interior side cut-crease lines 148 (e.g., fold lines), spaced exterior side cut-space lines 149 (e.g., tear lines), and a laterally extending end fold line 152. An access flap 144 is defined by an arcuate cut-space line 145 (e.g., tear line) connecting the side cut-space lines 149 and a lateral fold line 150. Oblique locking cuts 154 extend outwardly from the exterior side cut-space lines 149.

[0022] The lines 128, 130, 148 may be formed from, for example, cut-crease lines having 100% cuts (i.e., cuts that extend through the entire blank) in FIG. 1, or partial cuts may also be used. Cut-space lines, for example, may also be used to form the lines 128, 130, 148. The lines 145, 149 are breachable lines of disruption that may be, for example, cut-space lines having 100% cuts or partial cuts. Cut-crease lines, for example, may also be used to form the lines 145, 149.

[0023] An exemplary process of erecting the carton 190 will be discussed with reference to FIGS. 1 and 2. Referring to FIG. 1, adhesive may be applied to the exterior side of the adhesive panel 50 and/or to the interior side of the second end flap 40. The blank 8 is folded about the transverse fold lines 21 and 41 to bring the

exterior side of the adhesive flap 50 into contact with the interior or underside of the second end panel 40. The panels 40, 50 are thereby adhered together. The resulting article is then "opened" to have a generally closed tubular structure.

[0024] In order to close the top of the carton, adhesive is applied to the exterior side of the first end top flap 22 between the dogleg shaped cut-crease lines 128 and/or to the interior or underside of the spout section 138 of the second side top flap 32, between the dogleg shaped interior side cut-crease lines 148. Adhesive may also be applied to the underside of part of or the entirety of the exterior side of the first side top flap 12 except in the area of the shoulders 118. Alternatively or in addition to adhesive applied to the first side top flap 12, adhesive may be applied to the entirety of or part of the underside of the second side top flap 32 outside of the area defined by the lines 145, 149, 152, and so that the shoulders 118 are not adhered to the second side top flap 32. Adhesive may be applied to the entirety of or part of the upper surface of the second end top flap 42.

[0025] The top flaps 12, 22, 32, 42 may be closed by folding the first and second end top flaps 22, 42 down as shown in FIG. 2. The first side top flap 12 is then folded over onto the end top flaps 22, 42 so that the side flap 12 overlies the end flaps 22, 42. The first side top flap 12 may be adhered to the second end top flap 42 at any desired location or locations. The underside of the first side top flap 12 may be adhered to the upper side of the first end top flap 22 in the area of the base 124.

[0026] The second side top flap 32 is folded over the first side top flap 12 so that the flap 32 overlies the flap 12. The underside of the second side top flap 32 may be adhered to the exterior or upper side of the first side top flap 12 in areas outside of the spout section 138. The upper or exterior side of the central portion 120 may be adhered to the underside of the central spout portion 140 of the second side top flap 32 through the aperture 110.

[0027] The bottom flaps 14, 24, 34, 44 may then be folded and adhered together to close the bottom of the carton. The resultant carton 190 is illustrated in FIGS. 3A and 3B. Dispensable product may be loaded into the carton 190 before closing both ends of the carton. If the contents of the carton 190 are to be held within a bag or other vessel, the bag (not shown) may be inserted into the partially closed carton before closing both ends of the carton.

[0028] Referring to FIGS. 3A and 3B, the top flaps 12, 22, 32, 42 are adhered together to form a top panel 170, and the bottom flaps 14, 24, 34, 44 are adhered together to form a bottom panel 180. The dispenser pattern 100 (illustrated in FIG. 1) in the top flaps 12, 22, 32 defines a pivotably (e.g., hingedly or foldably) attached spout dispenser 160 in the top panel 170. FIG. 4 is a top plan view of a portion of the top panel 170 illustrating the pivotable dispenser 160 in detail. As shown in FIG. 4, the dispenser 160 can be formed entirely from the top flaps 12, 22, 32 comprising the top panel 170.

[0029] Referring to FIGS. 1-4, the shape of the central portion 120 in the first end top flap 22 generally corresponds to the shape of the central spout portion 140 of the spout section 138, and the upper surface of the central portion 120 is adhered to the underside of the central spout portion 140 through the aperture 110 in the first end top flap 12. The wings 122 of the first end top flap 22 may remain unadhered to any other part of the carton 190.

[0030] FIGS. 5-7 illustrate an exemplary process of opening of the dispenser 160. Referring to FIG. 5, a user inserts a finger, tool or other object into the top panel 170 at the access flap 144. The top panel 170 tears along the arcuate breachable line 145 as the access flap 144 is pressed inwardly.

[0031] Referring to FIG. 6, the top panel 170 is further torn along the breachable lines 149 as the central spout portion 140 and wing portions 142 in the second side top panel 32 are pivoted outwardly about the fold line 152. The central portion 120 in the first end top flap 22 is adhered to the central spout portion 140 and the portion of the first end top flap 22 beyond the fold line 130 also pivots outwardly. This movement pulls the central portion 120 of the first end top flap 22 through the aperture 110 in the first side top panel 12. At the same time, contact with the sides of the aperture 110 causes the wings 122 in the first end top flap 22 to be folded inwardly at the lines 128 with respect to the central portion 120.

[0032] FIG. 7 illustrates the pivotable spout dispenser 160 opened and in its dispensing configuration, thereby forming a dispenser opening 165. Friction between the wings 122 and the interior edges of the aperture 110 serves to maintain the dispenser 160 in its dispensing configuration. If desired, the spout dispenser 160 can be pivoted open further so that the wings 122 engage the locking cuts 154. The

pivotable dispenser 160 can be reclosed by simply pushing the dispenser 160 back towards the top panel 170. The shoulders 118 at each side of the aperture 110 project inwardly to partially occlude the aperture 110, and abut the wing portions 142 to prevent the dispenser 160 from being pressed too far in through the aperture 110.

[0033] According to the above-described embodiments, cartons can be provided with dispensers that are simple in construction, and that are easily opened and reclosed. The carton provides a relatively simple, one-step action for opening and dispensing product from the carton. The spout dispenser is formed from the top flaps of the carton and no additional inserts or pieces are required.

[0034] In the exemplary embodiment discussed above, the blank is formed from clay coated newsprint (CCN). In general, the blank may be constructed of paperboard, having a caliper of at least about 14, so that it is heavier and more rigid than ordinary paper. The blank, and thus the carton, can also be constructed of other materials, such as cardboard, or any other material having properties suitable for enabling the carton to function at least generally as described above.

[0035] The first and second sides of the blank can be coated with, for example, a clay coating. The clay coating may then be printed over with product, advertising, and other information or images. The blank may then be coated with a varnish to protect any information printed on the blank. The blank may also be coated with, for example, a moisture barrier layer, on either or both sides of the blanks. The blank can also be laminated to or coated with one or more sheet-like materials at selected panels or panel sections.

[0036] In accordance with the exemplary embodiments, a fold line can be any substantially linear, although not necessarily straight, form of weakening or disruption in a blank that facilitates folding therealong. More specifically, but not for the purpose of narrowing the scope of the present invention, fold lines include: score lines, creases, cuts that extend partially into a material along a desired line of weakness, and/or a series of cuts that extend partially into and/or completely through the material along the desired line of weakness, and various combinations of these features.

[0037] For purposes of the description presented herein, the term “line of disruption” can be used to generally refer to either a cut line, a crease line, a tear line, or a fold line formed in the material (or a combination of at least one cut line, tear line, fold line, etc.). A breachable line of disruption is a line of disruption that is intended to be breached during ordinary use of the carton. An example of a breachable line of disruption is a tear line.

[0038] A tear line can be any form of weakening that facilitates tearing therealong. Specifically, but not for the purpose of narrowing the scope of the present invention, tear lines include: a cut that extends partially into the material along the desired line of weakness, and/or a series of cuts that extend partially into and/or completely through the material along the desired line of weakness, or various combinations of these features.

[0039] The term “line” as used herein includes not only straight lines, but also other types of lines such as curved, curvilinear or angularly displaced lines.

[0040] The above embodiments may be described as having one or more panels adhered together by glue. The term “glue” is intended to encompass all manner of adhesives commonly used to secure paperboard carton panels in place.

[0041] In the present specification, a “panel” or “flap” need not be flat or otherwise planar. A “panel” or “flap” can, for example, comprise a plurality of interconnected generally flat or planar sections.

[0042] It will be understood by those skilled in the art that while the present invention has been discussed above with reference to preferred embodiments, various additions, modifications, and variations can be made thereto without departing from the spirit and scope of the present invention as set forth in the following claims.

**THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:**

1. A carton, comprising:  
a first side panel;  
5 a first end panel;  
a second side panel;  
a second end panel;  
a bottom panel; and  
a top panel comprising:  
10 a first end top flap;  
a first side top flap overlying the first end top flap; and  
a second side top flap overlying the first side top flap, wherein  
a plurality of lines of disruption in the second side top flap define in part a  
pivotable dispenser in the top panel, wherein  
15 the first end top flap is adhered to an underside of the second side top flap  
through an aperture in the first side top flap.
2. The carton of claim 1, wherein a plurality of lines of disruption in the first end  
top flap define in part the pivotable dispenser and wherein the plurality of lines of  
20 disruption in the second side top flap define a spout section having a central spout  
portion.
3. The carton of claim 2, wherein the plurality of lines of disruption in the second  
side top flap further define a first wing portion extending from a first side of the central  
25 spout portion and a second wing portion extending from a second side of the central  
spout portion.
4. The carton of claim 2, wherein the plurality of lines of disruption in the first end  
top flap define a central portion in the first end top flap, the central portion of the first  
30 end top flap being adhered to an underside of the central spout portion.
5. The carton of claim 4, wherein the plurality of lines of disruption in the first end  
top flap further define a base portion, the base portion being pivotably connected to the

central portion, and the plurality of lines of disruption in the first end top flap define a first wing portion extending from a first side of the central portion and a second wing portion extending from a second side of the central portion.

- 5 6. The carton of claim 5, wherein the aperture in the first side top flap defines a first shoulder and a second shoulder, the first shoulder overlying the first wing portion in the first end top flap, and the second shoulder overlying the second wing portion in the first end top flap.
- 10 7. The carton of claim 2, wherein the plurality of lines of disruption in the second side top flap comprises breachable lines of disruption that in part define a perimeter of the spout section so that the dispenser is pivotable away from the top panel.
- 15 8. The carton of any one of claims 1 to 7, wherein the carton is substantially parallelepipedal and wherein the bottom panel comprises a plurality of bottom flaps.
9. A blank, comprising:  
a first side panel;  
a first end panel;  
20 a second side panel;  
a second end panel;  
a first side top flap foldably connected to the first side panel and having an aperture formed therein;  
a first end top flap foldably connected to the first end panel and having a first  
25 plurality of lines of disruption formed therein;  
a second side top flap foldably connected to the second side panel and having a second plurality of lines of disruption formed therein; and  
at least one bottom flap extending along a bottom marginal area of the blank,  
wherein  
30 the second plurality of lines of disruption in the second side top flap defines a central spout portion.



10. The blank of claim 9, wherein the second plurality of lines of disruption in the second side top flap further defines a first wing portion extending from a first side of the central spout portion and a second wing portion extending from a second side of the central spout portion.

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11. The blank of claim 10, wherein the first plurality of lines of disruption defines a central portion and a base portion, the base portion being pivotably connected to the central portion, the first plurality of lines of disruption further defines a first wing portion extending from a first side of the central portion and a second wing portion extending from a second side of the central portion, and the aperture in the first side top flap defines a first shoulder and a second shoulder.

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12. The blank of claim 10, wherein the second plurality of lines of disruption comprises a transverse fold line at a first end of the central spout portion, and defines an access flap at a second end of the central spout portion.

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13. A method of dispensing product from a carton, comprising:  
providing a carton with dispensable product contained therein, the carton comprising:

20

a first side panel;

a first end panel;

a second side panel;

a second end panel;

a bottom panel; and

25

a top panel comprising:

a first end top flap having a first plurality of lines of disruption formed therein;

a first side top flap overlying the first end top flap, the first side top flap having an aperture formed therein; and

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a second side top flap overlying the first side top flap and having a second plurality of lines of disruption formed therein, the second plurality of lines of disruption defining a spout section in the second side top flap;

breaching the second plurality of lines of disruption;  
 pivoting the spout section away from a remainder of the top panel, wherein  
 pivoting the spout section pulls at least a portion of the first end top flap through the  
 aperture in the first side top flap; and  
 5           dispensing product through the aperture in the first side top flap.

14.    The method of claim 13, wherein sides of the first end top flap engage interior  
 edges of the aperture as the spout section is pivoted.

10   15.   The method of claim 13 or claim 14, wherein the first end top flap is adhered to  
 the spout section through the aperture in the first side top flap.

16.    A carton, comprising:  
           a first side panel;  
 15           a first end panel;  
           a second side panel;  
           a second end panel;  
           a bottom panel; and  
           a top panel comprising:  
 20                 a first end top flap;  
                       a first side top flap overlying the first end top flap, the first side top flap  
                       having an aperture, wherein the aperture defines a first shoulder and a second  
                       shoulder; and  
                       a second side top flap overlying the first side top flap, the first end top  
 25                 flap, the first top flap and the second side top flap forming a pivotable dispenser  
                       in the top panel,  
                       wherein a plurality of lines of disruption in the second side top flap define a  
                       spout section of the pivotable dispenser, the spout section being at least partially  
                       separable from the second side top panel to enable pivoting of the pivotable dispenser,  
 30                 wherein the spout section comprises a central spout portion, a first wing portion  
                       extending from and foldably connected to a first side of the central spout portion, and a  
                       second wing portion extending from and foldably connected to a second side of the  
                       central spout portion; and

wherein a central portion of the first end top flap is adhered to the central spout portion of an underside of the second side top flap through the aperture and the first wing portion and second wing portion of the spout section abut and overlay the first shoulder and second shoulder, respectively, when the pivotable dispenser is in a closed position.

17. The carton of claim 16, wherein a plurality of lines of disruption in the first end top flap define in part the pivotable dispenser.

18. The carton of claim 17, wherein the plurality of lines of disruption in the second side top flap further define the first wing portion and the second wing portion.

19. The carton of claim 17, wherein the plurality of lines of disruption in the first end top flap define the central portion of the first end top flap.

20. The carton of claim 19, wherein the plurality of lines of disruption in the first end top flap further define a base portion, the base portion being pivotably connected to the central portion, and the plurality of lines of disruption in the first end top flap define a first wing extending from a first side of the central spout portion and a second wing extending from a second side of the central spout portion.

21. The carton of claim 20, wherein the first shoulder overlies the first wing in the first end top flap, and the second shoulder overlies the second wing in the first end top flap when the pivotal dispenser is in the closed position.

22. The carton of claim 19, wherein the plurality of lines of disruption in the second side top flap comprises breachable lines of disruption that in part define a perimeter of the spout section so that the dispenser is pivotable away from the top panel.

23. The carton of any one of claims 16 to 22, wherein the carton is substantially parallelepipedal and wherein the bottom panel comprises a plurality of bottom flaps.

24. A blank, comprising:

a first side panel;  
a first end panel;  
a second side panel;  
a second end panel;

5 a first side top flap foldably connected to the first side panel and having an aperture formed therein, wherein the aperture defines a first shoulder and a second shoulder;

10 a first end top flap foldably connected to the first end panel and having a first plurality of lines of disruption formed therein, the first end top flap including a central portion;

a second side top flap foldably connected to the second side panel and having a second plurality of lines of disruption formed therein, the second plurality of lines of disruption defining a spout section including a central spout portion, a first wing portion foldably connected to a first side of a central spout portion, and a second wing portion  
15 foldably connected to a second side of the central spout portion; and

at least one bottom flap extending along a bottom marginal area of the blank, wherein

the first side top flap, the first end top flap and the second side top flap are foldable to form a top panel of the carton comprising a pivotable dispenser,

20 the first end top flap is configured to be attached to an inner surface of the second side top flap in the carton, and

in the carton formed from the blank, the central portion of the first end top flap is for being adhered to the central spout portion through the aperture, and the first wing portion and second wing portion are configured to abut the  
25 first shoulder and second shoulder, respectively, when the pivotable dispenser of the carton formed from the blank is in a closed position.

25. The blank of claim 24, wherein the first plurality of lines of disruption defines a central portion and a base portion, the base portion being pivotably connected to the  
30 central portion, the first plurality of lines of disruption further defines a first wing extending from a first side of the central portion and a second wing extending from a second side of the central portion.

26. The blank of claim 24, wherein the second plurality of lines of disruption comprises a transverse fold line at a first end of the central spout portion, and defines an access flap at a second end of the central spout portion.

5 27. A method of dispensing product from a carton, comprising:  
providing a carton with dispensable product contained therein, the carton comprising:

- a first side panel;
- a first end panel;
- 10 a second side panel;
- a second end panel;
- a bottom panel; and
- a top panel comprising:

15 a first end top flap having a first plurality of lines of disruption formed therein, the first end top flap including a central portion;

a first side top flap overlying the first end top flap, the first side top flap having an aperture formed therein, wherein the aperture defines a first shoulder and a second shoulder; and

20 a second side top flap overlying the first side top flap and having a second plurality of lines of disruption formed therein, the second plurality of lines of disruption defining a spout section including a central spout portion, a first wing portion extending from a first side of a central spout portion, a second wing portion extending from a second side of the central spout portion, and an access flap foldably connected to the central spout portion,

25 wherein the central portion of the first end top flap is adhered to the central spout portion of the second side top flap through the aperture, and the first wing portion and the second wing portion abut the first shoulder and the second shoulder, respectively, when the spout section is in a closed position;

30 breaching the second plurality of lines of disruption;

pivoting the spout section away from a remainder of the top panel, wherein pivoting the spout section pulls at least a portion of the first end top flap through the aperture in the first side top flap;

dispensing product through the aperture in the first side top flap; and

5 pivoting the spout section toward the aperture so the first wing portion abuts the first shoulder and the second wing portion abuts the second shoulder.

10 28. The method of claim 27, wherein sides of the first end top flap engage interior edges of the aperture as the spout section is pivoted.

29. The method of claim 27 or claim 28, wherein the first end top flap is adhered to the spout section through the aperture in the first side top flap.

15 30. A carton substantially as hereinbefore described with reference to the accompanying drawings.

31. A blank substantially as hereinbefore described with reference to the accompanying drawings.

20 32. A method of dispensing product from a carton substantially as hereinbefore described with reference to the accompanying drawings.

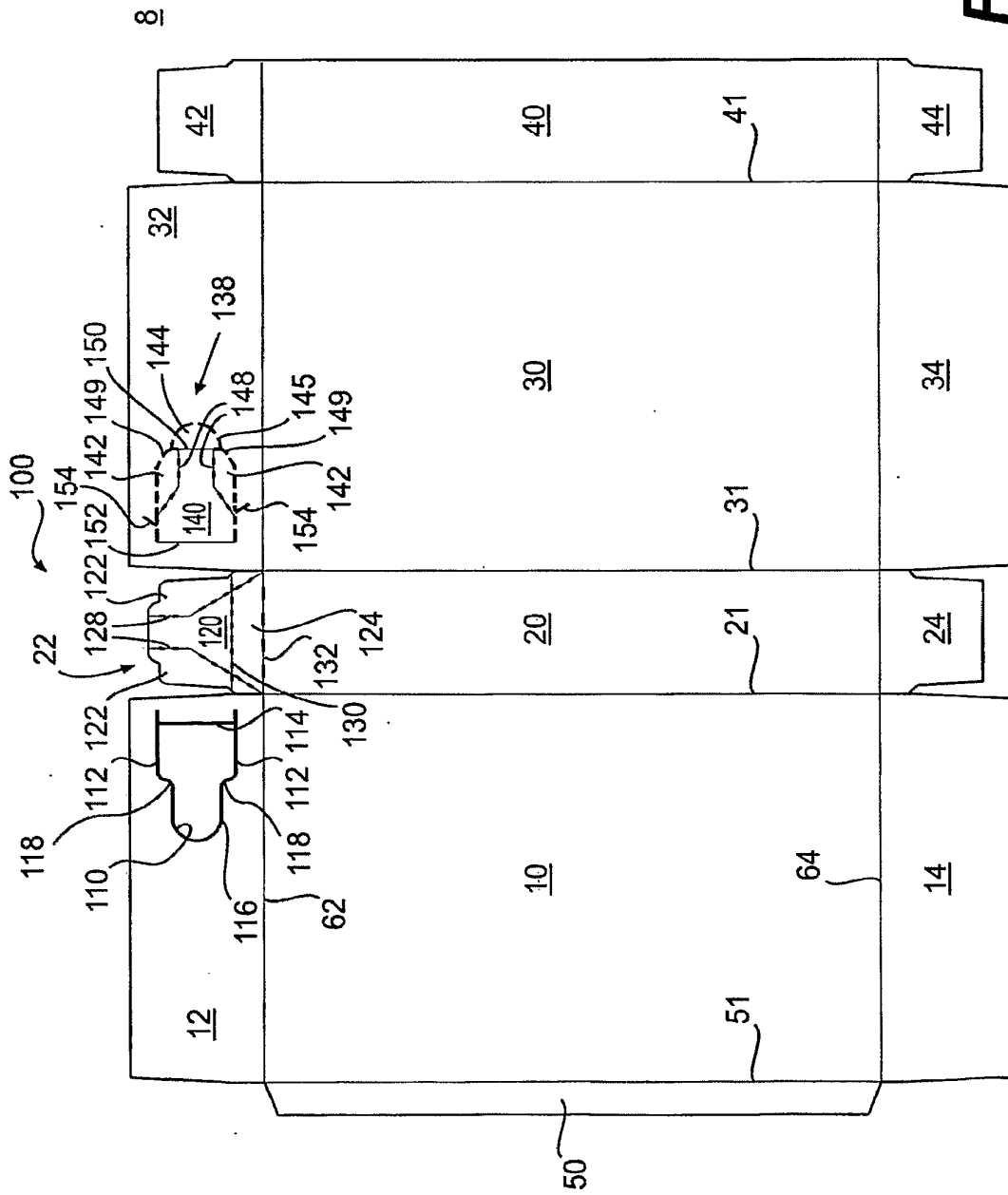
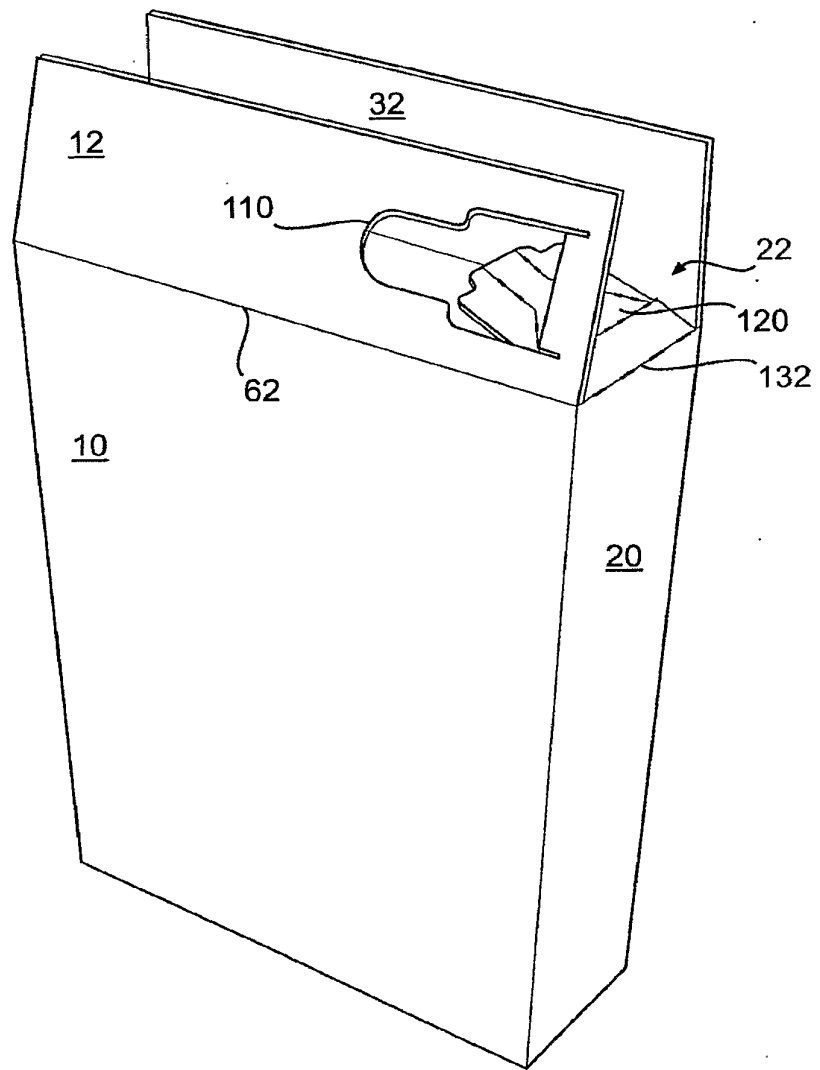


FIG. 1



**FIG. 2**



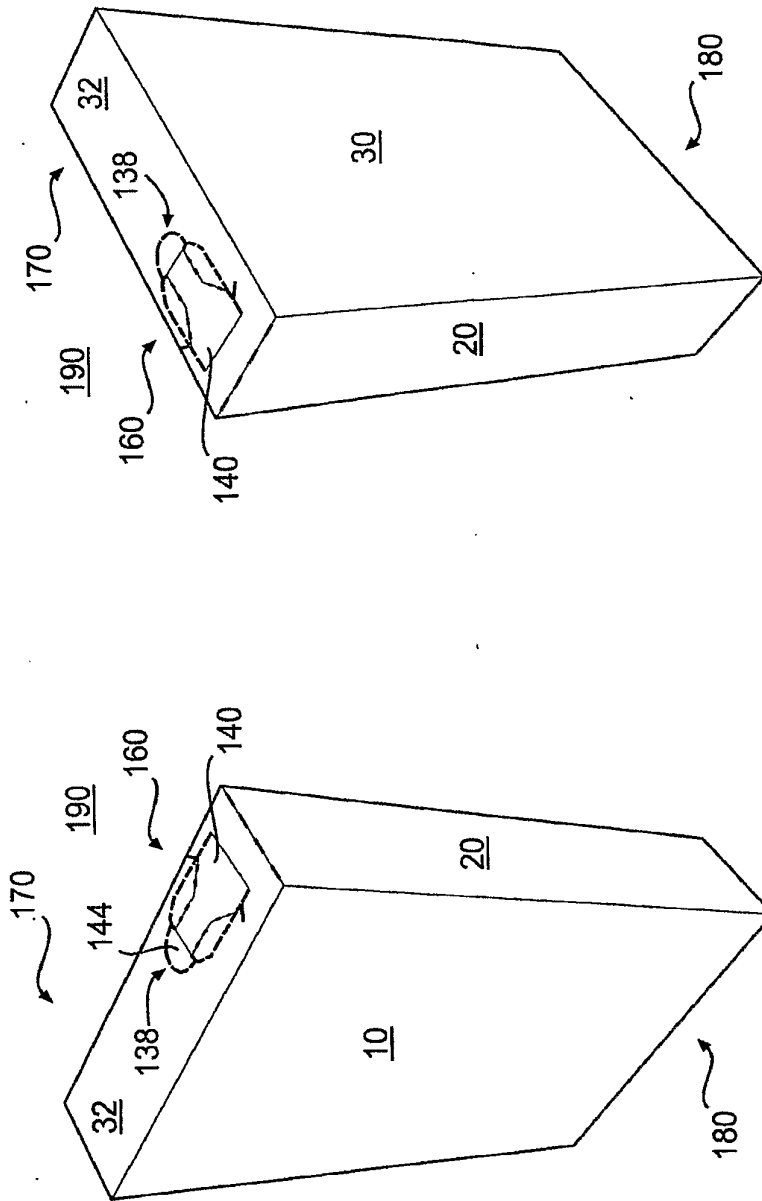
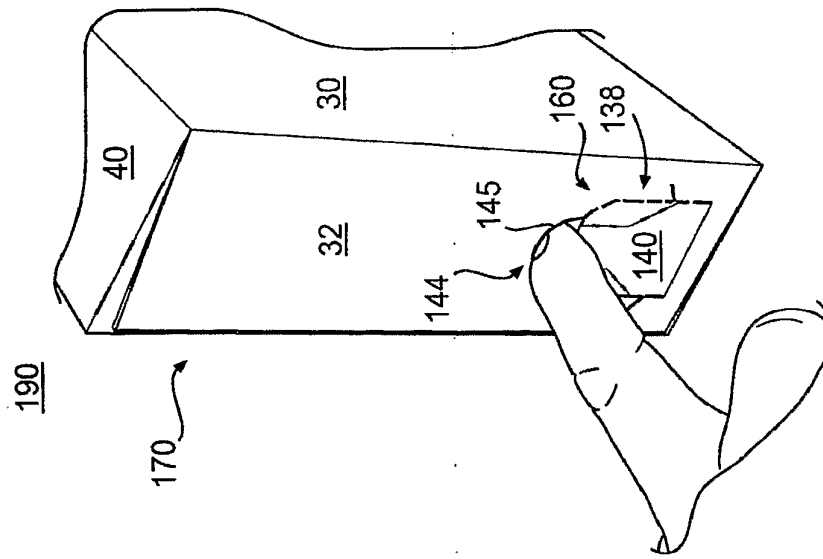
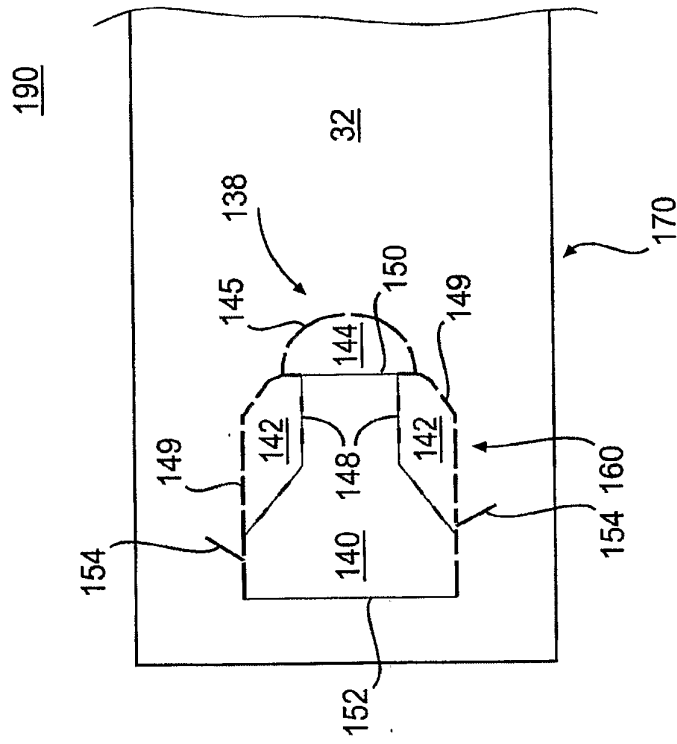


FIG. 3B

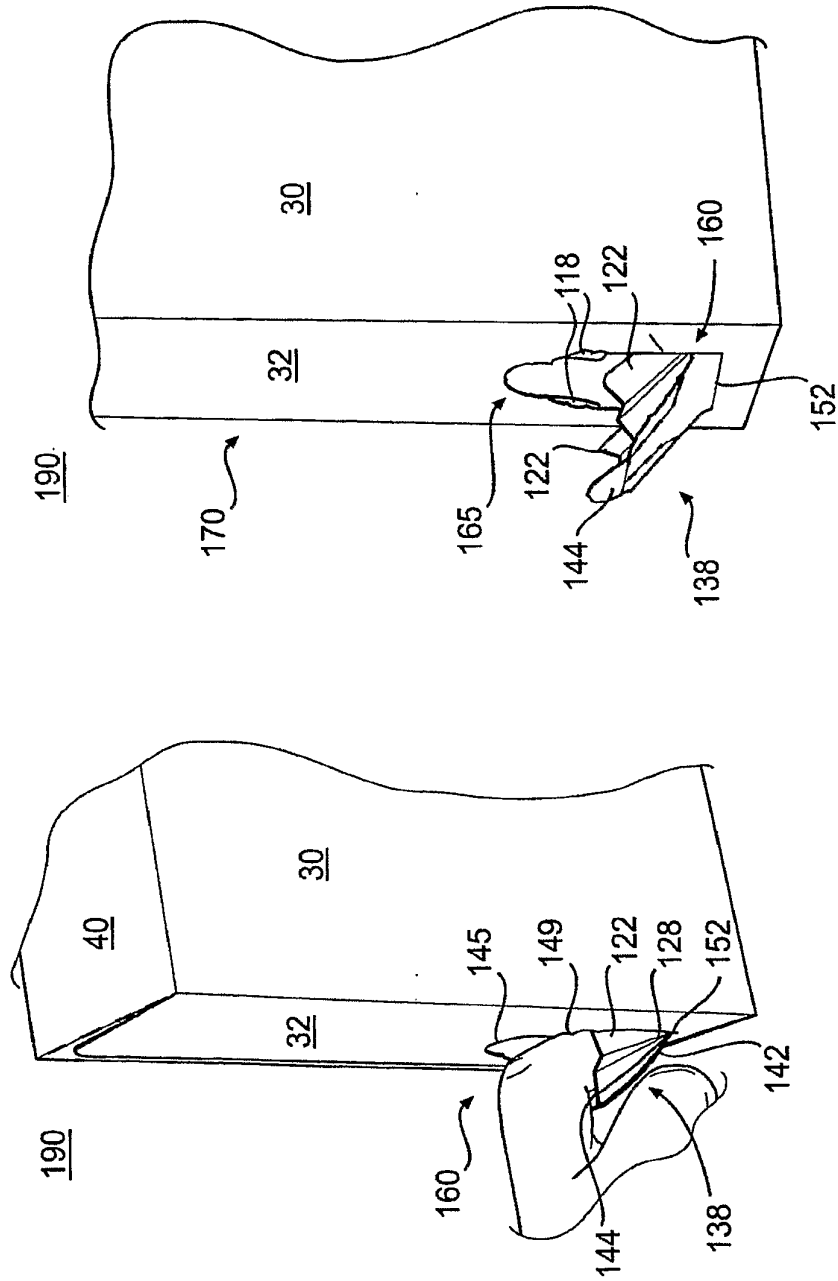
FIG. 3A



**FIG. 5**



**FIG. 4**



**FIG. 7**

**FIG. 6**