

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 July 2010 (15.07.2010)

(10) International Publication Number
WO 2010/080951 A2

PCT

(51) International Patent Classification:

B65D 5/36 (2006.01) **B65D 5/54** (2006.01)
B65D 5/28 (2006.01) **B65D 5/52** (2006.01)
B65D 5/66 (2006.01)

(21) International Application Number:

PCT/US2010/020429

(22) International Filing Date:

8 January 2010 (08.01.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/204,755 9 January 2009 (09.01.2009) US

(71) Applicant (*for all designated States except US*):
GRAPHIC PACKAGING INTERNATIONAL, INC.
[US/US]; 814 Livingston Court, Marietta, GA 30067
(US).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **FITZWATER, Kelly, R.** [US/US]; 25 Kendall Street, Lakewood, CO 80226
(US).

(74) Agents: **ISAF, Louis, T.** et al.; Womble Carlyle Sandridge & Rice, PLLC, P.O. Box 7037, Atlanta, GA 30357-0037 (US).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

(54) Title: COMBINATION SHIPPING AND DISPLAY PACKAGE

(57) Abstract: A carton for containing and displaying a plurality of articles. The carton comprises a plurality of panels that extend at least partially around an interior of the carton, the plurality of panels comprising a first panel, a second panel foldably connected to the first panel, a third panel foldably connected to the second panel, and a fourth panel foldably connected to at least one of the first and third panels. The carton further comprises at least one end panel foldably connected to at least two panels of the plurality of panels to at least partially close an end of the carton. The at least one end panel comprises an oblique edge and an oblique fold line extending from the oblique edge toward a corner of the at least one end panel.



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COMBINATION SHIPPING AND DISPLAY PACKAGE

CROSS-REFERENCE TO RELATED APPLICATIONS

0001] This application claims the benefit of U.S. Provisional Patent Application No. 61/204,755, filed January 9, 2009.

INCORPORATION BY REFERENCE

0002] U.S. Provisional Application No. 61/204,755, which was filed on January 9, 2009, is hereby incorporated by reference for all purposes as if presented herein in its entirety.

BACKGROUND OF THE DISCLOSURE

0003] The present disclosure generally relates to cartons for holding and dispensing food product containers or other types of articles. More specifically, the present disclosure relates to cartons that may be converted to a display tray.

SUMMARY OF THE DISCLOSURE

0004] In general, one aspect of the disclosure is directed to a carton for containing and displaying a plurality of articles. The carton comprises a plurality of panels that extend at least partially around an interior of the carton, the plurality of panels comprising a first panel, a second panel foldably connected to the first panel, a third panel foldably connected to the second panel, and a fourth panel foldably connected to at least one of the first and third panels. The carton further comprises at least one end panel foldably connected to at least two panels of the plurality of panels to at least partially close an end of the carton. The at least one end panel comprises an oblique edge and an oblique fold line extending from the oblique edge toward a corner of the at least one end panel.

0005] In another aspect, the disclosure is generally directed to a blank for forming a carton. The blank comprises a plurality of panels comprising a first panel, a second panel foldably connected to the first panel, a third panel foldably connected to the second panel, and a fourth panel foldably connected to the first panel. The blank further comprises a plurality of end flaps

extending along a marginal area of the blank. The plurality of end flaps comprises at least one first end flap that comprises a first edge and an oblique fold line extending from the first edge toward a corner of the at least one end panel.

0006] In another aspect, the disclosure is generally directed to a method of forming a carton. The method comprises obtaining a plurality of panels comprising a first panel, a second panel foldably connected to the first panel, a third panel foldably connected to the second panel, and a fourth panel foldably connected to the first panel, and a plurality of end flaps extending along a marginal area of the blank. The plurality of end flaps comprises at least one first end flap that comprises a first edge and an oblique fold line extending from the first edge toward a corner of the at least one end panel. The method further comprises forming a tray portion of the container defined by at least the first and fourth panels and at least one of the plurality of end flaps, and forming a top portion of the container defined by at least the second and third panels.

0007] Those skilled in the art will appreciate the above stated advantages and other advantages and benefits of various additional embodiments reading the following detailed description of the embodiments with reference to the below-listed drawing figures.

0008] 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 disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

0009] Fig. 1 is a plan view of a blank used to form a carton according to a first embodiment of the disclosure.

0010] Fig. 2 is a perspective of the erected carton formed from the blank of Fig. 1 in an open configuration.

0011] Fig. 3 is a perspective view of the carton of Fig. 2 in a flattened state.

0012] Fig. 4 is a perspective view of the carton of Fig. 2 loaded with containers.

0013] Fig. 5 is a perspective view of the carton in a partially closed configuration.

- 0014] Fig. 6 is a perspective view of the carton in a closed configuration.
- 0015] Figs. 7 and 8 show the carton in various configurations converting the carton to a display configuration.
- 0016] Fig. 9 is a perspective view of the carton in the display configuration.
- 0017] Corresponding parts are designated by corresponding reference numbers throughout the drawings.

DETAILED DESCRIPTION OF THE EXEMPLARY EMBODIMENTS

- 0018] The present disclosure generally relates to cartons that contain articles such as containers. The articles can be used for packaging food and beverage products, for example. The articles can be made from materials suitable in composition for packaging the particular food or beverage item, and the materials include, but are not limited to, paperboard; cardboard; aluminum and/or other metals; glass; plastics such as PET, LDPE, LLDPE, HDPE, PP, PS, PVC, EVOH, and Nylon; and the like, or any combination thereof.
- 0019] Cartons according to the present disclosure can accommodate articles of any shape. For the purpose of illustration and not for the purpose of limiting the scope of the disclosure, the following detailed description describes food product containers (e.g., paperboard boxes) as disposed within the carton embodiments. In this specification, the terms “lower,” “bottom,” “upper” and “top” indicate orientations determined in relation to fully erected and upright cartons.
- 0020] Fig. 1 is a plan view of the exterior side 102 of a blank, generally indicated at 100, used to form a carton 200 (Fig. 6) according to the exemplary embodiment of the disclosure. The carton 200 can be used to house a plurality of articles such as containers C (Fig. 4). In one embodiment, the carton 200 is of the type commonly referred to as a “Biers” or “Biers” carton or tray. The carton 200 has an erected and open shape shown in Fig. 2 and a flattened shape 201 shown in Fig. 3. In the illustrated embodiment, the carton 200 is sized to house thirty-six parallelepiped containers C in a 3x6x2 arrangement, but the carton 200 may be sized and shaped to hold containers of a different or same quantity in one or more layers and/or in different

row/column arrangements (e.g., 1x6, 3x5, 2x6x2, 3x4x2, 2x9, 2x6, 3x4, etc.). The carton 200 may further be alternatively sized and shaped to hold containers of a different shape.

0021] The blank 100 has a longitudinal axis L1 and a lateral or transverse axis L2. In the illustrated embodiment, the blank 100 comprises a bottom panel 110 foldably connected to a first side panel 120 at a first lateral line 121, a top panel 130 foldably connected to the first side panel 120 at a second lateral fold line 131, and a second side panel 140 foldably connected to the bottom panel 110 at a third lateral fold line 141.

0022] The bottom panel 110 is foldably connected to a first bottom end flap 112 and a second bottom end flap 114. The first side panel 120 is foldably connected to a first side end flap 122 and a second side end flap 124. The top panel 130 is foldably connected to a first top end flap 132, a second top end flap 134, and an extension flap 136. The extension flap 136 is connected to the top flap 130 by a transverse tear line 133 and can include a finger aperture 138 defined by the tear line 133 and an arcuate edge 139. The second side panel 140 is foldably connected to a first side end flap 142 and a second side end flap 144. The second side panel 140 can include a recess 146 shaped to provide clearance for a finger accessing the finger aperture 138 when the carton 200 is fully assembled in the shipping state (Fig. 6).

0023] In the illustrated embodiment, the first top and bottom end flaps 132, 112 and first side end flaps 122, 142 extend along a first marginal area of the blank 100, and are foldably connected at a first longitudinal fold line 162 that extends along the length of the blank. The second top and bottom end flaps 134, 114 and second side end flaps 124, 144 extend along a second marginal area of the blank 100, and are foldably connected at a second longitudinal fold line 164 that also extends along the length of the blank. The longitudinal fold lines 162, 164 may be, for example, substantially straight, or offset at one or more locations to account for blank thickness or for other factors. When the blank 100 is erected into the carton 200, the first top and bottom end flaps 132, 112 and first side end flaps 122, 142 close a first end 151 of the carton, and the second top and bottom end flaps 134, 114 and second side end flaps 124, 144 close a second end 153 of the carton. In accordance with an alternative embodiment of the present disclosure, different flap arrangements can be used for closing the ends 151, 153 of the carton 200.

0024] In the illustrated embodiment, the first and second bottom end flaps 112, 114 each comprise an oblique edge 170, a longitudinal edge 171, and a generally transverse edge 172 that is generally aligned with the transverse fold line 141. The first and second bottom end flaps 112, 114 each further include a proximal portion 175 connected to a distal portion 177 at an oblique fold line 174 extending from the oblique edge 170 to a clearance notch 176. The clearance notch 176 reduces excess material at the corners of the carton 200 for easier folding into the flattened state 201 shown in Fig. 3. In the illustrated embodiment, the transverse edge 172 extends from an end of the longitudinal edge 171 to the clearance notch 176. The first and second bottom end flaps 112, 114 could be otherwise shaped, arranged, and/or configured.

0025] In the illustrated embodiment, the first and second side end flaps 122, 124 each comprise an oblique edge 180, a longitudinal edge 181, and a generally transverse edge 182 that is generally aligned with the transverse fold line 131. The first and second side end flaps 122, 124 each further include a proximal portion 185 connected to a distal portion 187 at an oblique fold line 184 extending from the oblique edge 180 to a clearance notch 186. The clearance notch 186 reduces excess material at the corners of the carton 200 for easier folding into the flattened state 201 shown in Fig. 3. In the illustrated embodiment, the transverse edge 182 extends from an end of the longitudinal edge 181 to the clearance notch 186. In the illustrated embodiment, the first and second end flaps 122, 124 include a lateral edge 183 extending from the longitudinal fold line 166 to the oblique edge 180. The first and second side end flaps 122, 124 could be otherwise shaped, arranged, and/or configured.

0026] In one embodiment, the first and second side end flaps 142, 144 are each defined, in part, by an oblique edge 190 and a drag edge 191. The first and second top end flaps 132, 134 are each defined, in part, by an oblique edge 192 and a drag edge 193. The side end flaps 142, 144 and/or the top end flaps 132, 134 could be otherwise shaped, arranged, and/or configured.

0027] In accordance with the exemplary embodiment, the blank 100 can be erected into the carton 200 by folding the second side panel 140 upward about fold line 141 and folding the first side end flap 142 and the first bottom end flap 112 upward about the longitudinal fold line 162. The first bottom end flap 112 is folded such that it is at least partially in face-to-face contact with the first side end flap 142 such that the transverse edge 172 is generally aligned in an overlapping relationship with the portion of the longitudinal fold line 162 joining the second side panel 140

and the first side end flap 142. In the illustrated embodiment, the oblique edge 170 is aligned with the oblique edge 190 to form a generally straight edge. A portion of the first side end flap 142 can be glued to the distal portion 177 of the first bottom end flap 112 to form the first end panel 202 (Fig. 2). It should be noted that the fold line 174 should have an angle A1 (Fig. 1), relative to the fold line 162, sufficient to allow the first bottom end flap 112 to be folded inward while attached to a portion of the first side end flap 142 when collapsing the carton 200 into the flattened state 201 (Fig. 3). For example, a sufficient angle A1 may be approximately 45° with respect to the longitudinal fold line 162.

0028] In the illustrated embodiment, the second bottom end flap 114 and the second side end flap 144 are folded about the longitudinal fold line 164 and are at least partially overlapped with a portion of the second side end flap 144 glued to the distal portion 177 of the second bottom end flap 114 to form the second end panel 204 (Fig. 2) in a similar manner as the first bottom end flap 112 and first side end flap 142. The bottom end flaps 112, 114 form respective first end flaps of the end panels 202, 204, and the side end flaps 142, 144 form respective second end flaps of the end panels 202, 204. The first side panel 140, the bottom panel 110, and the end panels 202, 204 form a tray portion 155 of the container (Fig. 2).

0029] In one embodiment, the top panel 130 is folded upward about fold line 131, and the first side end flap 122 and the first top end flap 132 are folded upward about the longitudinal fold line 162. The first side end flap 122 is folded such that it is at least partially in face-to-face contact with the first top end flap 132 such that the transverse edge 182 is generally aligned in an overlapping relationship with the portion of the longitudinal fold line 162 connecting the first top end flap 132 to the top panel 130. In the illustrated embodiment, the oblique edge 180 is aligned with the oblique edge 192 to form a generally straight edge. The distal portion 187 of the first side end flap 122 is glued to a portion of the first top end flap 132 to form a third end panel 206 (Fig. 2). It should be noted that the fold line 184 should have an angle A2 (Fig. 1), relative to the longitudinal fold line 162 sufficient to allow the first side end flap 122 to be folded inward while attached to a portion of the first top end flap 132 when collapsing the carton 200 into the flattened state 201 (Fig. 3). For example, a sufficient angle A2 may be approximately 45° with respect to the longitudinal fold line 162.

0030] In the illustrated embodiment, the second top end flap 134 and the second side end flap 124 are folded about the longitudinal fold line 164 and are at least partially overlapped with a portion of the second top end flap 134 glued to the distal portion 187 of the second side end flap 124 to form the fourth end panel 208 (Fig. 2) in a similar manner as the first top end flap 132 and first side end flap 122. The side end flaps 122, 124 form respective first end flaps of the end panels 206, 208, and the top end flaps 132, 134 form respective second end flaps of the end panels 206, 208. The second side panel 120, the top panel 130, and the end panels 206, 208 form a top portion 157 of the container (Fig. 2).

0031] The resulting carton 200 of the illustrated embodiment is erected and ready for loading as shown in Fig. 2. However, the carton 200 can be collapsed into a flattened state 201 shown in Fig. 3 by folding the first and second end panels 202, 204 inward along the respective longitudinal fold lines 162, 164 and the oblique fold lines 174, and folding the third and fourth end panels 206, 208 inward along the respective longitudinal fold lines 152, 164 and the oblique fold lines 184. Upon folding the end panels 202, 204, 206, 208 inward, the second side panel 140 pivots downwardly about the transverse fold line 141 toward the bottom panel 110, and the top panel 130 pivots downwardly about the transverse fold line 131 toward the first side panel 120. In the collapsed state 201, the second side panel 140 overlaps and is in face-to-face contact with the inwardly folded end panels 202, 204 and the bottom panel 110. In the flattened state 201, the top panel 130 overlaps and is in face-to-face contact with the inwardly folded end panels 206, 208, the first side panel 120, and the bottom panel 110. Further, for each bottom end flap 112, 114 the distal portion 177 is in face-to-face contact with the respective proximal portion 175, and for each side end flap 122, 124 the distal portion 187 is in face-to-face contact with the proximal portion 185. As shown in Fig. 3, the extension flap 136 connected to the top panel 130 overlaps and is in face-to-face contact with a marginal portion of the second side panel 140.

0032] In the illustrated embodiment, the respective drag edges 191, 193 of the first and second side end flaps 142, 144, and the first and second top end flaps 132, 134 have only slight tapers. This causes the end flaps to drag against the bottom panel 110 or the first side panel 120 and thus resist collapsing. Thereby, the carton 200 is less likely to collapse without a deliberate action by the user. The carton 200 lays generally flat in the flattened state 201, shown in Fig. 3, which

allows the carton 200 to be efficiently stored or shipped prior to loading the carton with the containers C.

0033] The carton 200 may be opened from the flat configuration 201 of Fig. 3 by pivoting the top panel 130 and the second side panel 140 upward and away from the respective first side panel 120 and the bottom panel 110, which straightens the first end panel 202, the second end panel 204, the third end panel 206, and the fourth end panel 208 to the position generally shown in Fig. 2. As shown in Fig. 4, the containers C may then be placed in the carton 200. In the illustrated embodiment, the containers C are loaded into the carton 200 such that the printed front faces of the containers are directed upward with the bottoms of the containers C contacting the second side panel 140. This allows the containers C to be properly displayed when the container 200 is converted to a display tray 300 as described below. The loaded carton 200 is closed for shipping, storage, or both by first folding about the transverse line 121 (Fig. 5) and then gluing the extension flap 136 to the marginal portion of the second side panel 140 (Fig. 6). Alternatively, the container 200 could be loaded and closed by other folding or positioning steps.

0034] With reference to Figs. 7-9, the carton 200 can be converted to a display tray 300. A user grasps the top panel 130 using finger aperture 138 and recess 146 and tears the top panel 130 away from the extension flap 136 along tear line 133 and pivots the top panel 130, the first side panel 120, and the third and fourth end panels 206, 208 about the line 121. The user then tears the first side panel 120 away from the bottom panel 110 along the line 121, which may be a tear line, as shown in Fig. 8. The remaining display tray 300 is set up with the second side panel 140 forming a bottom of the display tray that can be supported on a surface S (e.g., shelf or counter). In one embodiment, the display tray 300 has an open front that displays the front faces of the containers C in an upright position as shown in Figs. 8 and 9. The display tray has a back formed by the bottom panel 110 of the container 200 and two sides formed by the end panels 202, 204.

0035] Alternative folding and loading sequences to that described above may be used to erect carton 200 and convert it to display tray 300 without departing from the scope of the disclosure. Further, the blank 100 can be otherwise configured to have multiple top panels, multiple bottom panels, multiple side panels, or combinations thereof without departing from the scope of this disclosure. Even further, the carton 200 may be a wrap-around type carton, with the blank 100

including locking features that can include primary and secondary locking features as is known in the art.

0036] The blank according to the present disclosure can be, for example, formed from coated paperboard and similar materials. For example, the interior and/or exterior sides of the blank can be coated with a clay coating. The clay coating may then be printed over with product, advertising, price coding, 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 blank. In accordance with the above-described embodiments, the blank may be constructed of paperboard of a caliper such that it is heavier and more rigid than ordinary paper. The blank can also be constructed of other materials, such as cardboard, hard paper, or any other material having properties suitable for enabling the carton to function at least generally as described herein. The blank can also be laminated or coated with one or more sheet-like materials at selected panels or panel sections.

0037] In accordance with the above-described embodiments of the present disclosure, a fold line can be any substantially linear, although not necessarily straight, form of weakening that facilitates folding therealong. More specifically, but not for the purpose of narrowing the scope of the present disclosure, fold lines may include: a score line, such as lines formed with a blunt scoring knife, or the like, which creates a crushed portion in the material along the desired line of weakness; a cut that extends partially into a 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; and various combinations of these features.

0038] As an example, a tear line can include: a slit that extends partially into the material along the desired line of weakness, and/or a series of spaced apart slits that extend partially into and/or completely through the material along the desired line of weakness, or various combinations of these features. As a more specific example, one type tear line is in the form of a series of spaced apart slits that extend completely through the material, with adjacent slits being spaced apart slightly so that a nick (e.g., a small somewhat bridging-like piece of the material) is defined between the adjacent slits for typically temporarily connecting the material across the tear line. The nicks are broken during tearing along the tear line. The nicks typically are a relatively small percentage of the tear line, and alternatively the nicks can be omitted from or torn in a tear line

such that the tear line is a continuous cut line. That is, it is within the scope of the present disclosure for each of the tear lines to be replaced with a continuous slit, or the like. For example, a cut line can be a continuous slit or could be wider than a slit without departing from the present disclosure.

0039] The above embodiments may be described as having one or more panels adhered together by glue during erection of the carton embodiments. The term “glue” is intended to encompass all manner of adhesives commonly used to secure carton panels in place.

0040] The foregoing description of the disclosure illustrates and describes various embodiments of the present disclosure. As various changes could be made in the above construction without departing from the scope of the disclosure, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense. Furthermore, the scope of the present disclosure covers various modifications, combinations, alterations, etc., of the above-described embodiments that are within the scope of the claims. Additionally, the disclosure shows and describes only selected embodiments of the disclosure, but the disclosure is capable of use in various other combinations, modifications, and environments and is capable of changes or modifications within the scope of the inventive concept as expressed herein, commensurate with the above teachings, and/or within the skill or knowledge of the relevant art. Furthermore, certain features and characteristics of each embodiment may be selectively interchanged and applied to other illustrated and non-illustrated embodiments of the disclosure without departing from the scope of the disclosure.

What is claimed is:

1. A carton for containing and displaying a plurality of articles, the carton comprising:
a plurality of panels that extend at least partially around an interior of the carton, the plurality of panels comprising a first panel, a second panel foldably connected to the first panel, a third panel foldably connected to the second panel, and a fourth panel foldably connected to at least one of the first and third panels; and
at least one end panel foldably connected to at least two panels of the plurality of panels to at least partially close an end of the carton, the at least one end panel comprising an oblique edge and an oblique fold line extending from the oblique edge toward a corner of the at least one end panel.
2. The carton of claim 1, the at least one end panel comprising a first end flap and a second end flap, the first end flap comprising the oblique fold line with a proximal portion of the first end flap connected to a distal portion of the first end flap at the oblique fold line.
3. The carton of claim 2, the second end flap being adhered in face-to-face contact with the distal portion of the first end flap, wherein the proximal portion of the first end flap is free from connection to the second end flap so that the first end flap may collapse inward toward the plurality of panels about the oblique fold line bringing the distal portion in face-to-face contact with the proximal portion.
4. The carton of claim 3, the second end flap comprising a drag edge for contacting a panel of the plurality of panels when collapsing the at least one end panel.
5. The carton of claim 3, the distal portion of the first end flap comprising a generally longitudinal edge and a generally transverse edge, wherein the transverse edge generally lines up with a longitudinal fold line connecting the second end flap at the end of the carton.
6. The carton of claim 3, the at least one end panel comprising a first end panel foldably connected to the first panel and the fourth panel at a first end of the carton and a second end panel foldably connected to the second panel and the third panel at the first end of the carton.

7. The carton of claim 6, the first end flap of the first end panel being connected to the first panel at a longitudinal fold line, the second end flap of the first end panel being connected to the fourth panel at the longitudinal fold line, the first end flap of the second end panel being connected to the second panel at the longitudinal fold line, and the second end flap of the second end panel being connected to the third panel at the longitudinal fold line.

8. The carton of claim 7, the first end panel at least partially overlapping the second end panel proximate to the oblique fold lines of the first and second end panels.

9. The carton of claim 6, the at least one end panel further comprising a third end panel foldably connected to the first panel and the fourth panel at a second end of the carton and a fourth end panel foldably connected to the second panel and the third panel at the second end of the carton.

10. The carton of claim 6, the first panel being connected to the second panel at a tear line.

11. The carton of claim 2, the first end flap comprising a clearance notch proximate to the corner of the at least one end panel, the oblique tear line extending from the oblique edge to the clearance notch.

12. The carton of claim 2, the oblique edge of the at least one end panel comprising a first end flap oblique edge lining up with a second end flap oblique edge.

13. The carton of claim 1, the at least one end panel comprising a first end panel foldably connected to the first panel and the fourth panel at a first end of the carton and a second end panel foldably connected to the second panel and the third panel at the first end of the carton.

14. The carton of claim 13, the at least one end panel further comprising a third end panel foldably connected to the first panel and the fourth panel at a second end of the carton and a

fourth end panel foldably connected to the second panel and the third panel at the second end of the carton.

15. The carton of claim 13, the first panel being connected to the second panel at a tear line.

16. A blank for forming a carton, the blank comprising:

a plurality of panels comprising a first panel, a second panel foldably connected to the first panel, a third panel foldably connected to the second panel, and a fourth panel foldably connected to the first panel; and

a plurality of end flaps extending along a marginal area of the blank, the plurality of end flaps comprising at least one first end flap that comprises a first edge and an oblique fold line extending from the first edge toward a corner of the at least one first end flap.

17. The blank of claim 16, further comprising at least one second end flap comprising a second edge for forming a generally straight line with the first edge when the blank is formed into the carton.

18. The blank of claim 17, wherein the first and second edges extend in an oblique direction.

19. The blank of claim 17, the at least one first end flap comprising a primary first end flap connected to the first panel at a longitudinal fold line and a secondary first end flap connected to the second panel at the longitudinal fold line, the at least one second end flap comprising a primary second end flap connected to the fourth panel at the longitudinal fold line and a secondary second end flap connected to the third panel at the longitudinal fold line.

20. The blank of claim 19, wherein the plurality of end flaps comprises a first plurality of end flaps, the marginal area of the blank comprises a first marginal area of the blank, and the longitudinal fold line comprises a first longitudinal fold line, the blank further comprising a second plurality of end flaps extending along a second marginal area of the blank.

21. The blank of claim 16, the first panel being connected to the second panel at a tear line.

22. The blank of claim 16, the at least one first end flap comprising a clearance notch proximate to the corner of the at least one first end flap, the oblique tear line extending from the first edge to the clearance notch.

23. A method of forming a carton, the method comprising:

obtaining a plurality of panels comprising a first panel, a second panel foldably connected to the first panel, a third panel foldably connected to the second panel, and a fourth panel foldably connected to the first panel, and a plurality of end flaps extending along a marginal area of the blank, the plurality of end flaps comprising at least one first end flap that comprises a first edge and an oblique fold line extending from the first edge toward a corner of the at least one first end flap;

forming a tray portion of the container defined by at least the first and fourth panels and at least one of the plurality of end flaps; and

forming a top portion of the container defined by at least the second and third panels.

24. The method of claim 23, further comprising folding the fourth panel relative to the first panel and the at least one first end flap along the oblique fold line to form an at least partially flattened carton configuration.

25. The method of claim 23, further comprising:

inserting a plurality of articles into the tray portion; and

folding the top portion relative to the tray portion to at least partially close the carton.

26. The method of claim 25, further comprising forming a display tray by tearing along a tear line connecting the first and second panels to separate the top portion from the tray portion.

27. The method of claim 23, wherein the plurality of end flaps further comprises at least one second end flap and the at least one first end flap comprises a proximal portion connected to a distal portion at the oblique fold line.

28. The method of claim 27, wherein the forming a tray portion comprises adhering the distal portion of the at least first end flap to the at least one second end flap with the at least one first end flap is at least partially in face-to-face contact with the at least one second end flap.

29. The method of claim 28, the distal portion of the at least one first end flap comprising a generally longitudinal edge and a generally transverse edge, wherein the forming the tray portion comprises aligning the transverse edge with a longitudinal fold line connecting the at least one second end flap at the marginal area.

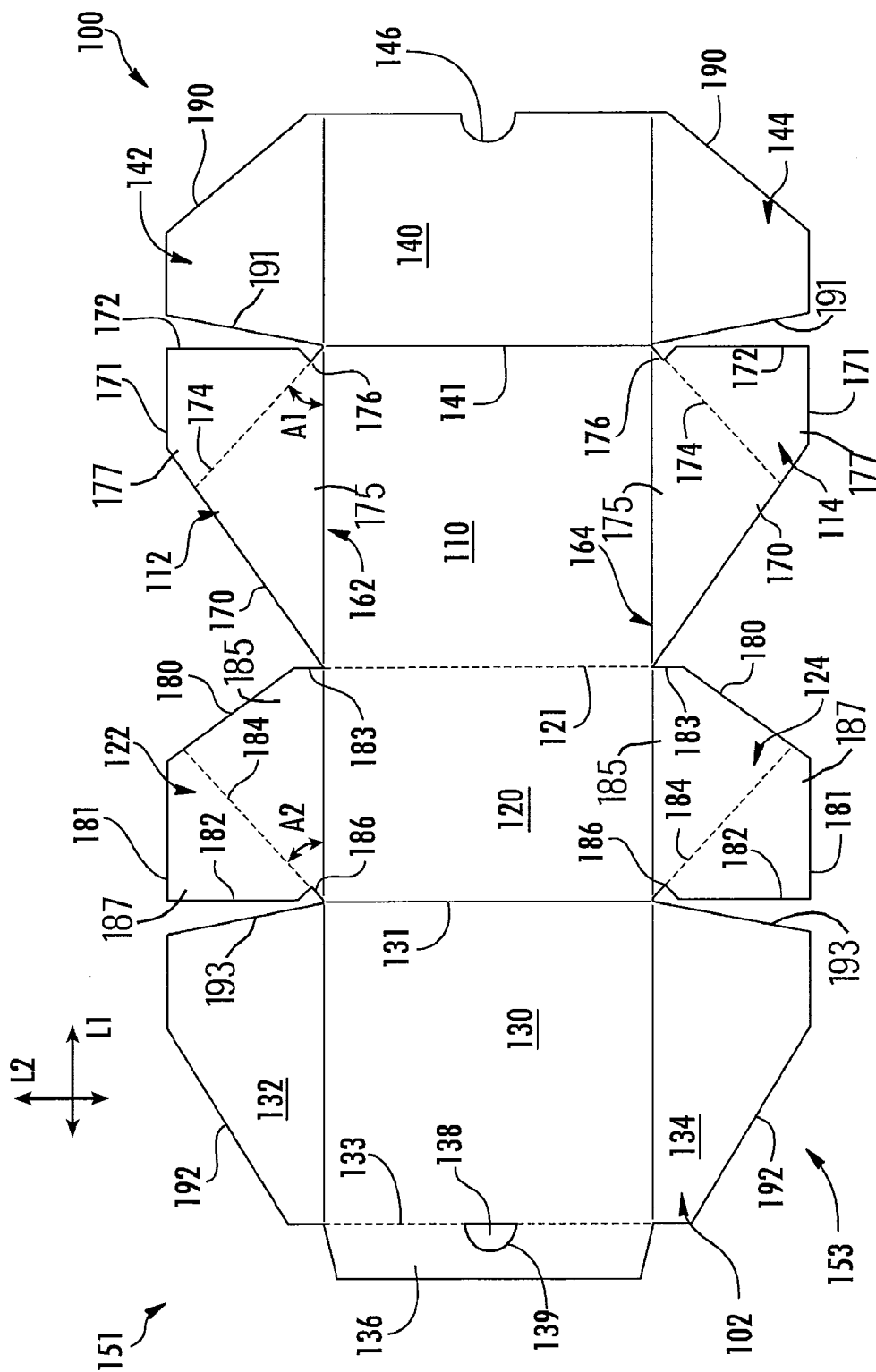
30. The method of claim 27, wherein the forming a top portion comprises adhering the distal portion of the at least first end flap to the at least one second end flap with the at least one first end flap is at least partially in face-to-face contact with the at least one second end flap.

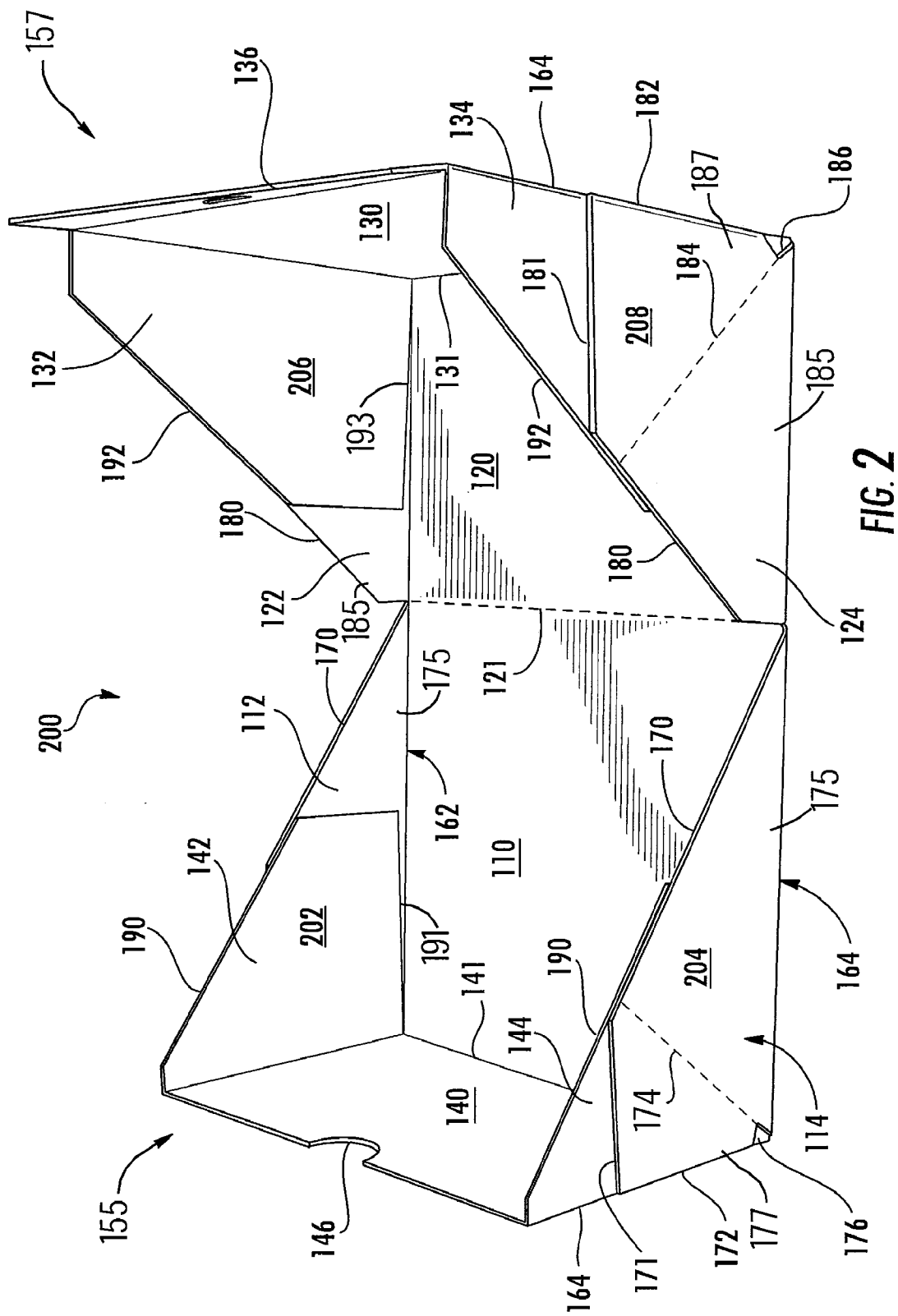
31. The method of claim 30, the distal portion of the at least one first end flap comprising a generally longitudinal edge and a generally transverse edge, wherein the forming the top portion comprises aligning the transverse edge with a longitudinal fold line connecting the at least one second end flap at the marginal area.

32. The method of claim 27, wherein the plurality of end flaps comprises a first plurality of end flaps, the marginal area of the blank comprises a first marginal area of the blank, and the longitudinal fold line comprises a first longitudinal fold line, the blank further comprising a second plurality of end flaps extending along a second marginal area of the blank.

33. The method of claim 23, wherein forming the top portion comprises forming a first end panel from the plurality of end flaps and the forming the tray portion comprises forming a second end panel from the plurality of end flaps, and the method further comprises closing the carton by folding the top portion relative to the tray portion so that the first end panel at least partially overlaps the second end panel.

34. The method of claim 33, wherein the forming the first end panel comprises aligning the first edge of the at least one first end flap with an oblique edge of at least one second end flap.





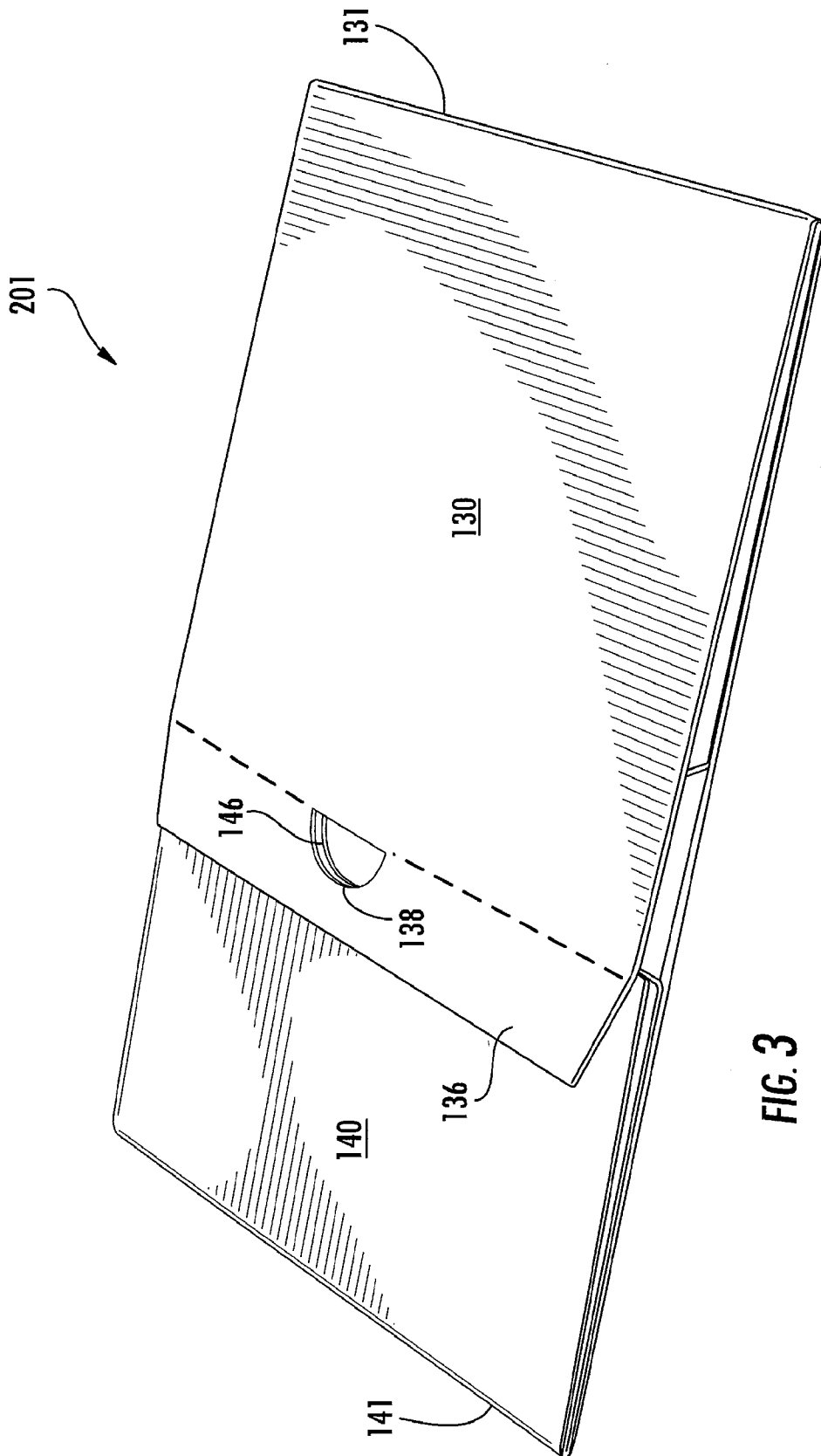
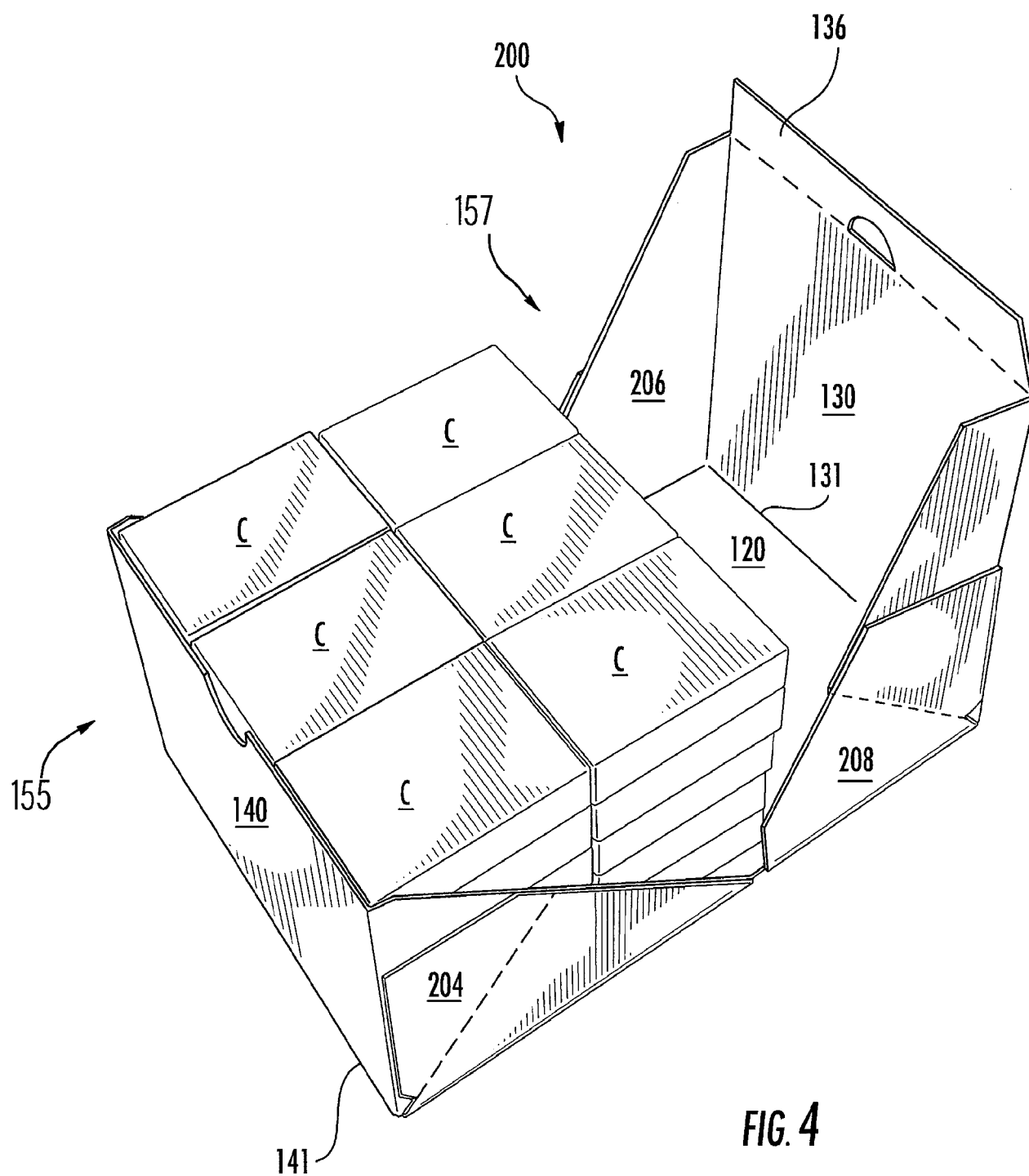


FIG. 3



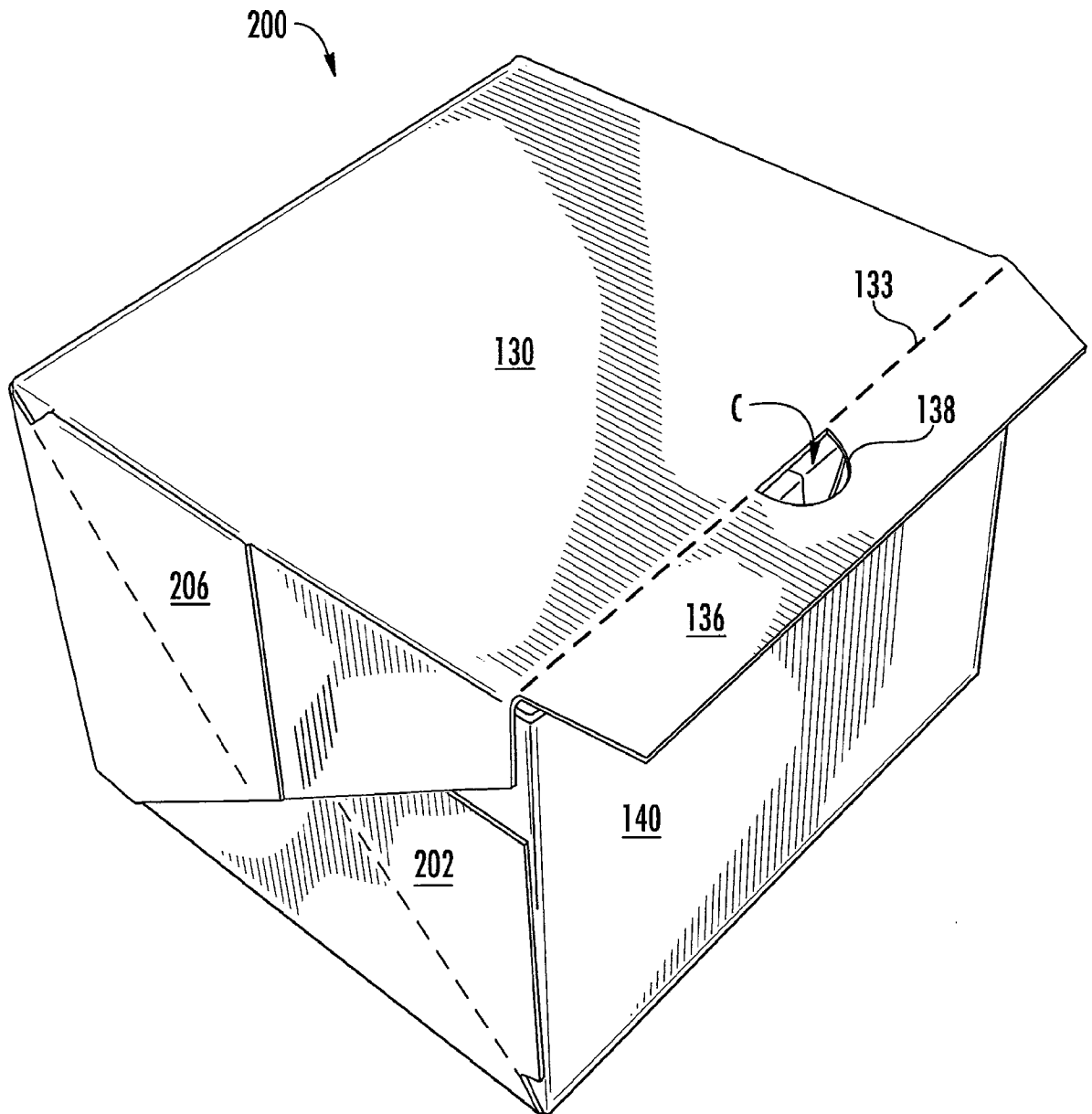


FIG. 5

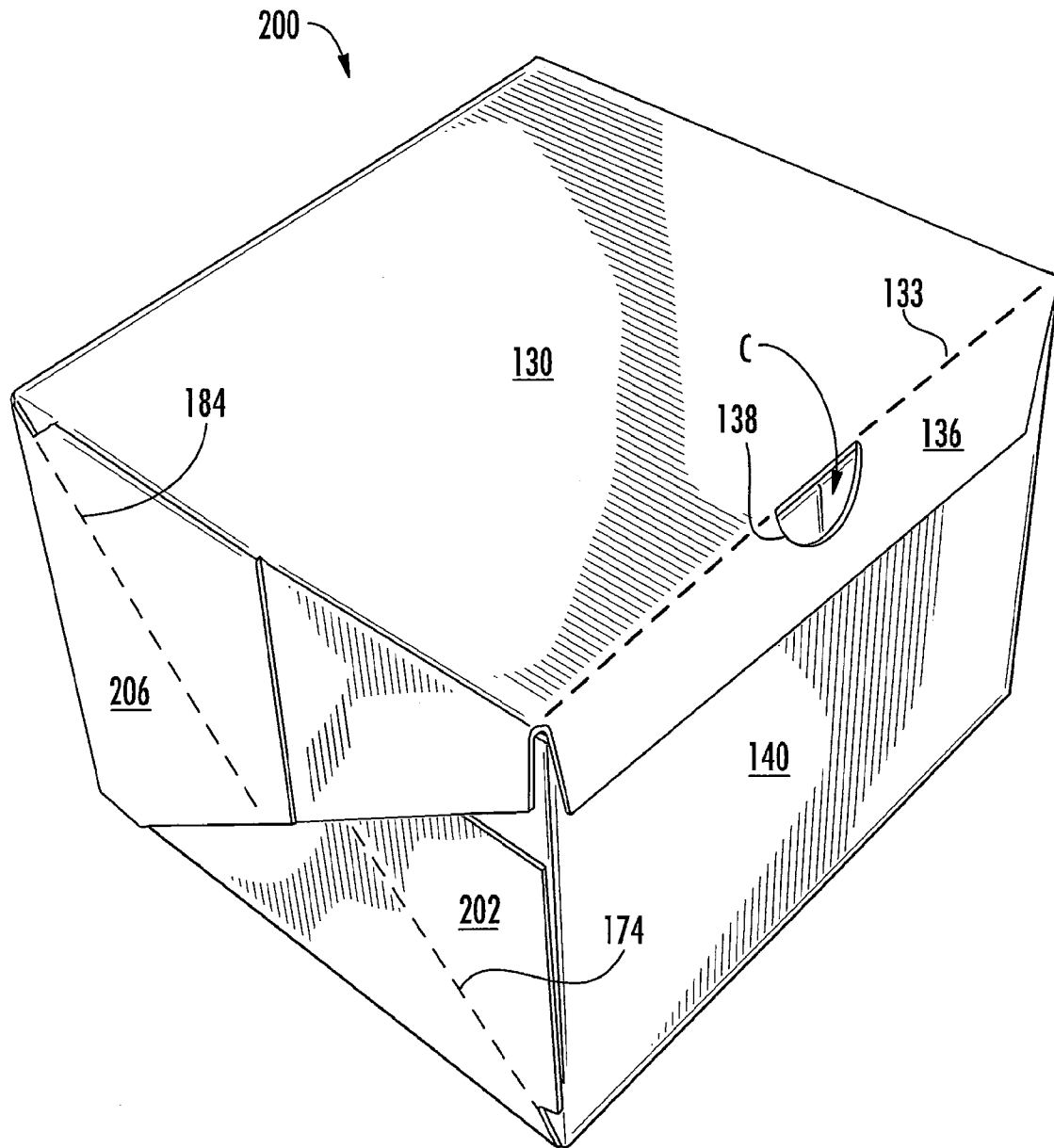
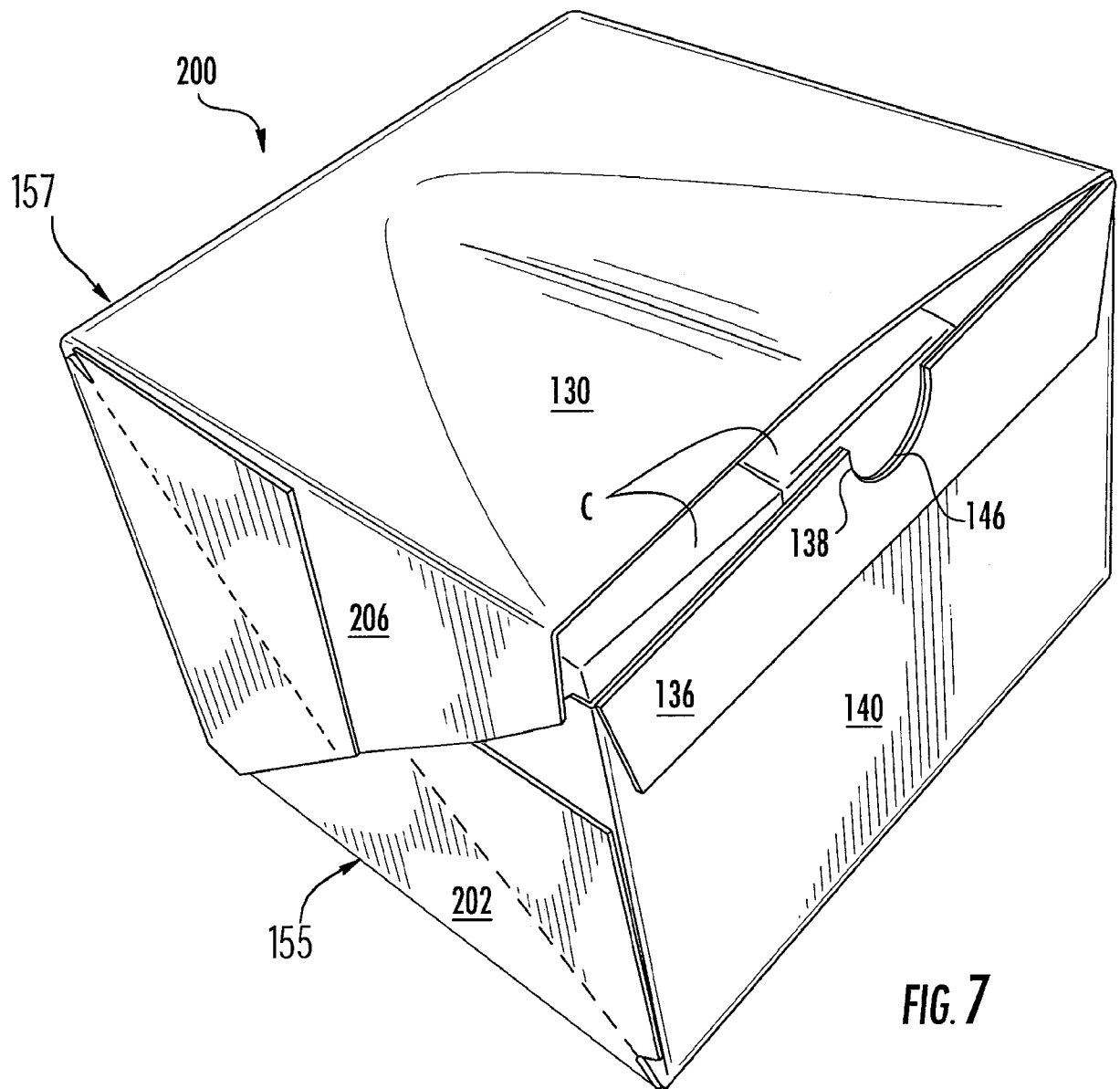


FIG. 6



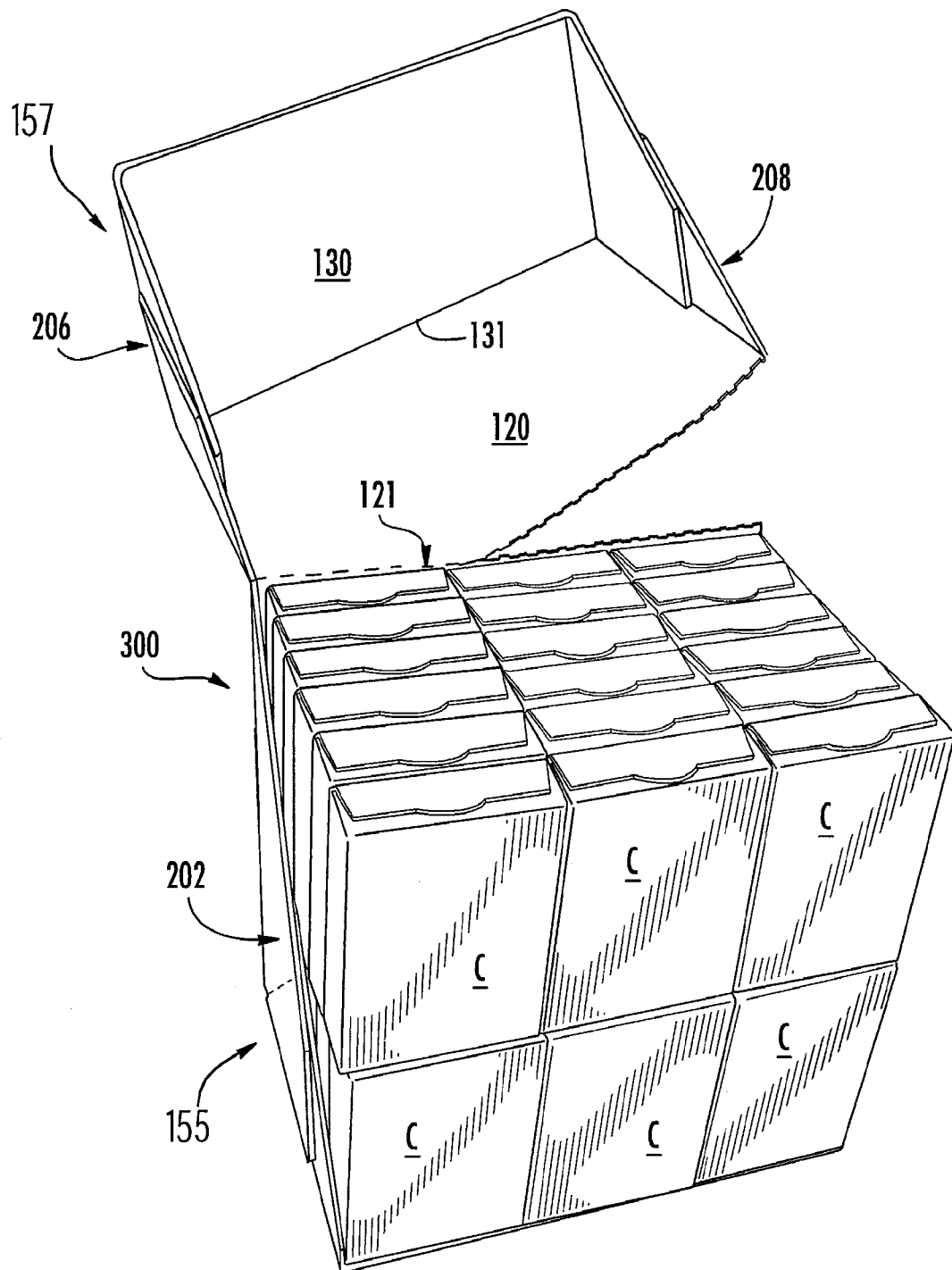


FIG. 8

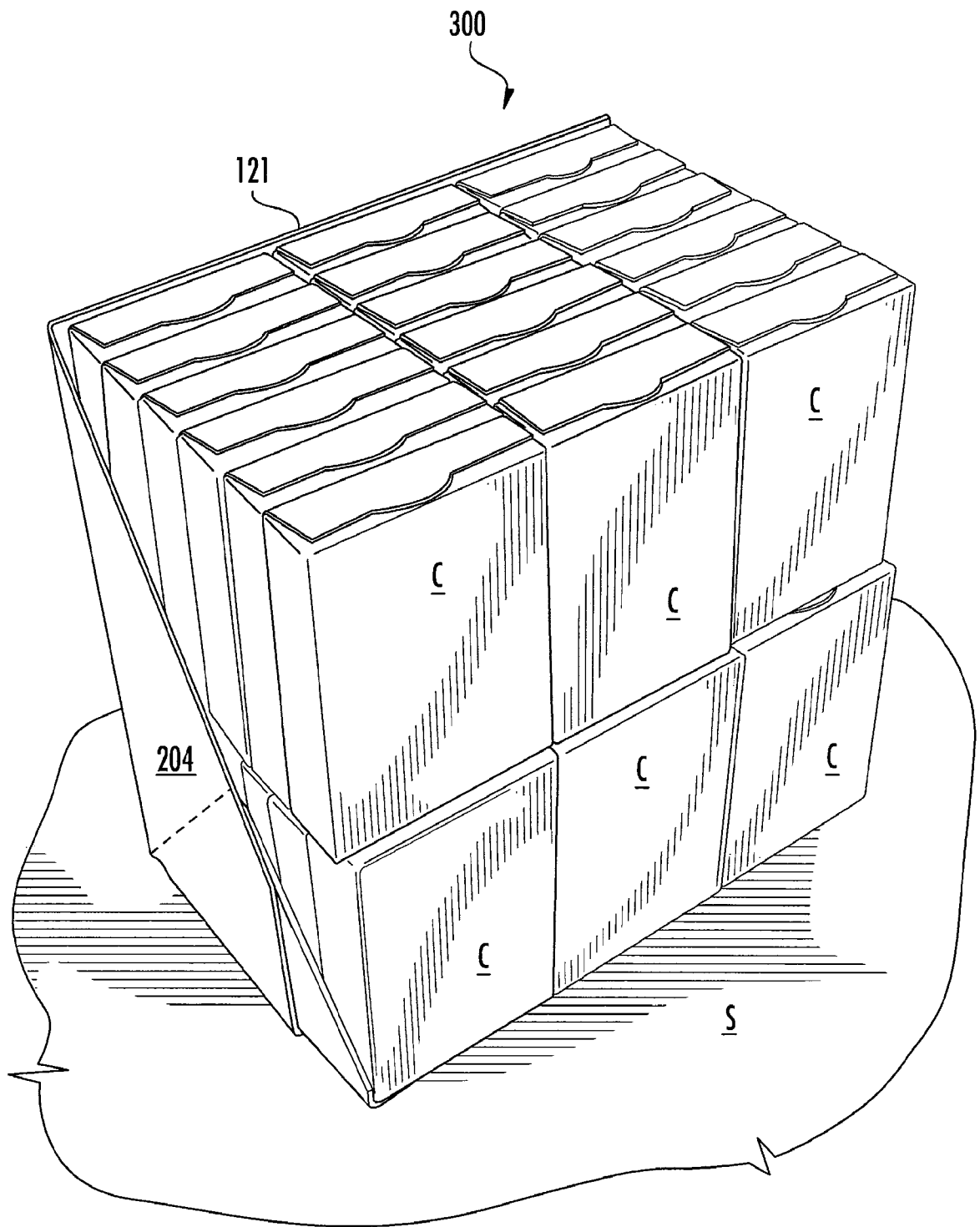


FIG. 9