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(54) **DISPLAY CARTON**

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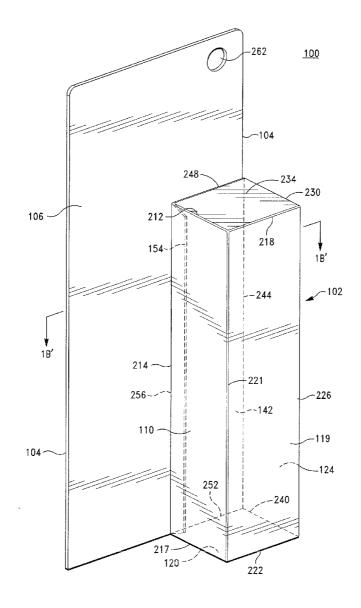
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(57) ABSTRACT

Provided is a unitary blank cut from a single sheet of paperboard stock and an improved display carton assembled from the unitary blank that efficiently utilizes the paperboard stock from which it is fabricated. The display carton includes an enclosure having an interior volume adapted to contain a product and a single-ply backer board on which the enclosure is supported. The paperboard stock from which the unitary blank is cut requires only one treated surface adapted to high-quality printing to provided high-resolution product indicia on all the display surfaces of the display carton that are presented to a consumer at a point of sale.



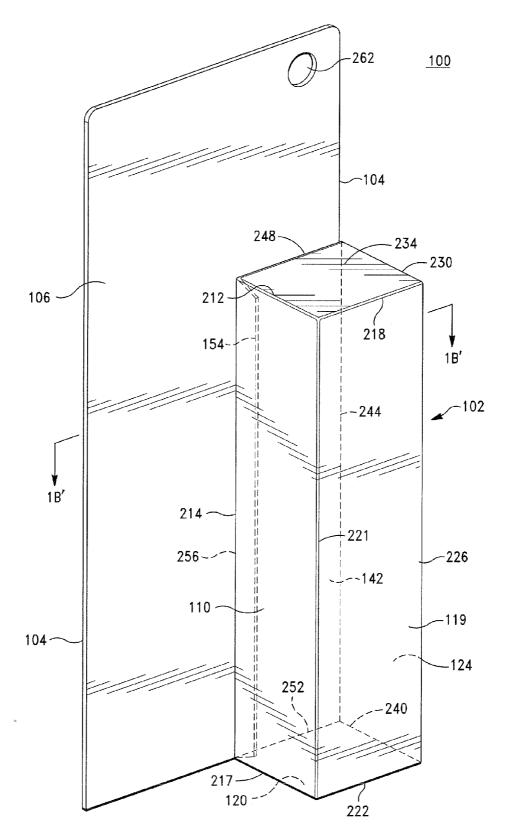


FIG.-1A

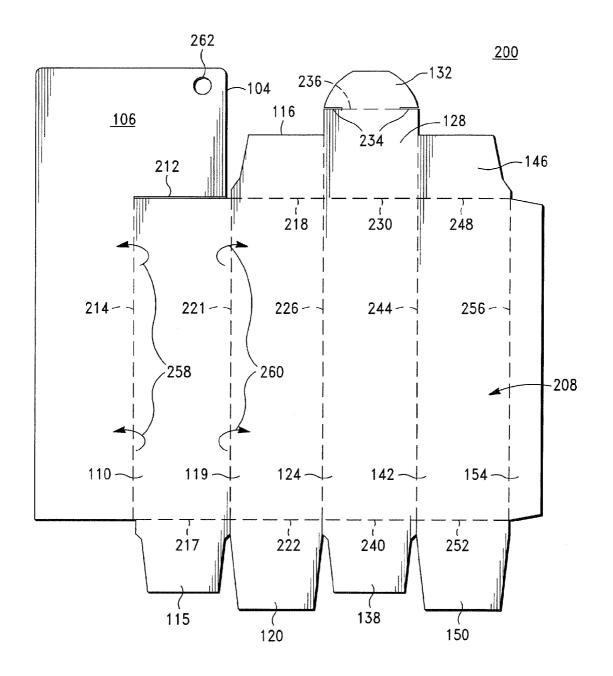
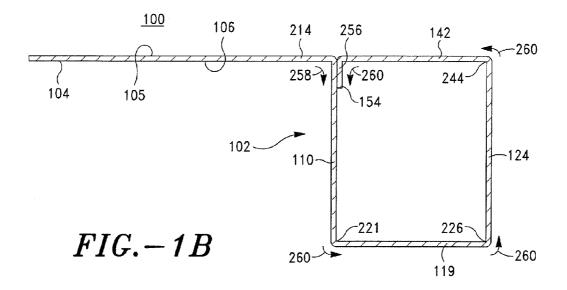
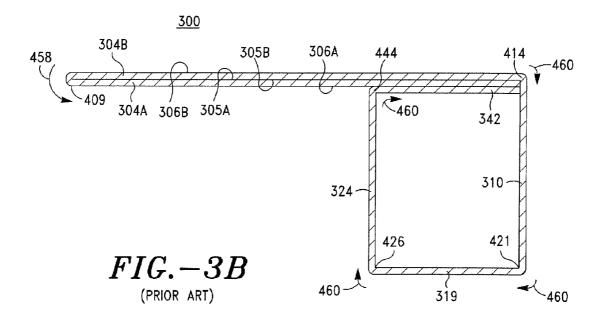


FIG.-2





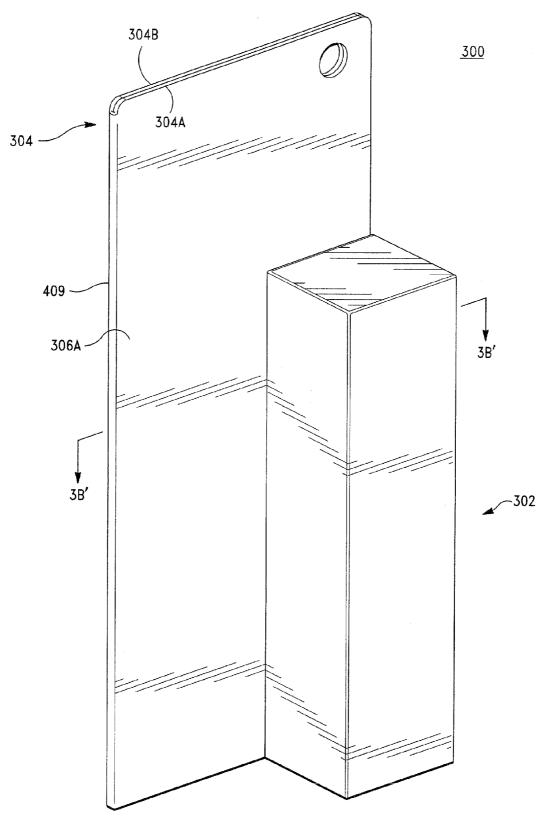
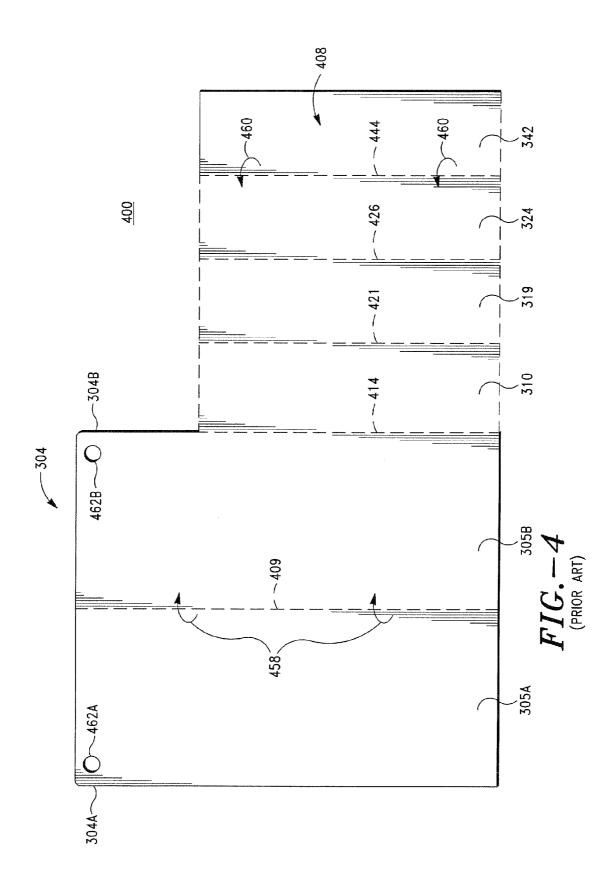


FIG.-3A



DISPLAY CARTON

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to display carton having a backer board. More particularly, the present invention relates to an improved display carton having a backer board that more efficiently utilizes the treated paperboard stock from which it is fabricated.

[0003] 2. Description of Related Art

[0004] Display cartons are used extensively to provide secondary packaging for products and primary packaging for multiple loose items. Display packaging is an effective means to present a product to a consumer at a point of sale location. [0005] An embodiment of a prior art display carton is a "blister package", in which the front of the display carton viewed by a consumer has a semi-rigid transparent plastic shell, typically shaped in some fashion to conform at least in part to the shape of the retained consumer goods coupled to a backer board of planar paper board. Blister type display cartons are relatively expensive to produce.

[0006] Another embodiment of a prior art display carton includes a backer board configured as a planar sheet of paper-board material and an paperboard enclosure configured as box adapted to contain a product such as a packed tube or vial of ointments, creams, small spray bottles, and the like. The enclosure of the display carton is supported by the backer board near an edge of the backer board. The backer board usually extends off one or more surfaces of the enclosure, extending above the top of the enclosure and/or laterally off a side of the enclosure.

[0007] These backer board extensions provide a "display surface" additional to the display surfaces provided by the outside of the enclosure where indicia relating to the product are printed. The backer board includes an aperture or hole near the top of the backer board from which the display carton may be hung on hooks or the like to face the display surfaces and indicia relating to the product toward a consumer at a point of sale.

[0008] Prior art display cartons of this type were often assembled from a "unitary blank" cut from a planar sheet of paperboard stock. If the entire display carton can be cut as one piece from a paperboard stock, the piece is referred to as a unitary blank for the display carton. One or both surfaces of paperboard stock may be finished to enhance the print resolution and print quality of the stock. For example, a clay-treated paperboard surface, well known in the art, provides a surface more amenable to printing thereon than an untreated standard paperboard surface.

[0009] It was recognized in the art that it is advantageous to design a unitary blank for a display carton such that the display surfaces of the carton after assembly are finished surfaces amenable to higher print quality. Accordingly, prior art display cartons were designed from paperboard having a finished surface and an unfinished surface but with a double-ply backer board to assure that all carton display surfaces were finished surfaces. Alternatively, single-ply backer board display cartons were assembled from a unitary blank cut from paperboard having both surfaces finished.

[0010] Either alternative to produce a display carton having all of its display surfaces as finished surface involved increased production cost over production of a display carton not having all of its display surfaces as finished surfaces. The double-ply backer board of the first alternative required addi-

tional paperboard stock for the production of the display carton. The finished-on-both-sides alternative required more expensive paperboard stock material for production of the display carton. There remains a need for a display carton having all of its display surfaces as finished surfaces that is assembled from a unitary blank cut from paperboard stock having a finished surface and an unfinished surface.

SUMMARY OF THE INVENTION

[0011] For purposes of description herein, positional and directional terms such as "top", "bottom", "left", and "right" "front" "back" "inwardly", "clockwise" and the like shall relate to the invention as oriented in the figures. Moreover, the terms used in the following discussion have been adopted for the sake of clarity when referring to the drawings and are not intended to limit the actual construction of the apparatus of the invention. However, it is to be understood that the invention may assume various alternative orientations and assembly sequences, except where expressly specified to the contrary. It is also to be understood that the specific devices and processes illustrated in the attached drawings, and described in the following specification are simply exemplary embodiments of the inventive concepts defined in the appended claims. Hence, physical characteristics relating to the embodiments disclosed herein are not to be considered as limiting, unless the claims expressly state otherwise.

[0012] The present invention provides a simple, inexpensive, cost-effective display carton assembled from a unitary blank. Advantageously, all display surfaces of the display carton presented to a consumer at a point of sale are finished surfaces.

[0013] The unitary blank use to assemble the display carton in accordance with the principles of the present invention is a single sheet of material cut from paperboard stock having a finished surface and an unfinished surface. The unitary blank includes a plurality foldably connected panels that include a backer board and a first side panel defined from the backer board by a cut-line through the backer board. The first side panel is foldably connected to the backer board. A front panel of the unitary blank is foldably connected to the first side panel and a second side panel is foldably connected to the front panel. A back panel of the unitary blank is foldably connected to the second side panel and a glue joint panel is foldably connected to the back panel.

[0014] The display carton when assembled from the unitary blank having finished surface and an unfinished surface opposite the finished surface includes a single-ply backer board having a backer board display surface and an enclosure having enclosure display surfaces. The enclosure is supported by the single-ply backer board. After assembly, the backer board display surface and the enclosure display surfaces are finished surfaces partitioned from the finished surface side of the unitary blank.

[0015] The display carton enclosure is assemble from the unitary blank by pivoting the first side panel of the unitary blank relative to the backer board of the unitary blank along a side panel fold-line. The front panel of the unitary blank is next folded in a second direction relative to the first side panel along a front panel fold-line. Next, the second side panel is folded in the second direction relative to the front panel along a second side panel fold-line. The back panel of the unitary blank is next folded in the second direction relative to the second side panel along a back panel fold-line and the glue joint panel of the unitary blank is folded in the second direction relative.

tion relative to the back panel in the second direction along a glue joint panel fold-line. Finally, the outside surface of the glue joint panel is fixedly attached to the inside surface of first side panel of the unitary blank. The enclosure of the display carton, supported by the backer board is thus assembled from the folding of the various panels of unitary blank as described. The enclosure of the display carton defines a hollow interior volume adapted to enclose and contain a product.

[0016] A display carton in accordance with the principles of the present invention avoids the limitations of and provides advantages over prior art display cartons. According to the practice of one embodiment of this invention, a corrugated fiberboard display carton is fashioned from a unitary blank, with the display carton, when assembled, being in the general form of an opened-top rectangular box having substantially open upright walls.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] Reference will now be made to the drawings wherein like numerals refer to like parts throughout. When considered in conjunction with the subsequent detailed description, a complete understanding of the present invention may be obtained by reference to the accompanying drawings, in which:

[0018] FIG. 1A is a perspective view of an assembled display carton in accordance with the principles of the present invention;

[0019] FIG. 1B is a top sectional view of the display carton taken along line 1B'-1B' of FIG. 1A;

 $\begin{tabular}{ll} [0020] & FIG. 2 is a plan view of a unitary blank used to form the display carton of FIG. 1A; \end{tabular}$

[0021] FIG. 3A is a perspective view of an assembled prior art display carton;

[0022] FIG. 3B is a top sectional view of the prior art display carton taken along line 3B'-3B' of FIG. 3A; and

[0023] FIG. 4 is a plan view of a prior art unitary blank used to form the prior art display carton of FIG. 3A.

DETAILED DESCRIPTION OF THE INVENTION

[0024] Reference will now be made to the drawings wherein like numerals refer to like parts throughout. As used herein, positional terms, such as "bottom", "left" and the like, and directional terms, such as "upward", "horizontal", "outward" and the like, are employed for ease of description in conjunction with the drawings. None of these terms is meant to indicate that the described part or assembly must have a specific orientation except when specifically set forth

[0025] In one embodiment, a display carton in accordance with the principles of the present invention the display carton is assembled from a unitary blank cut from a single planar sheet of paperboard stock. The unitary blank has a finished surface and an unfinished surface opposite the finished surface. The display carton includes a plurality of foldably connected planar panels. To form the display carton, individual panels are pivoted, i.e. folded relative to each other into a configuration that forms the boundaries of an enclosure adapted to contain products for a point of sale presentation to a consumer. The enclosure defines a hollow interior portion of the display carton that characterizes an empty volume into which products may be disposed. The various panels that define the enclosure of the display carton are supported on a backer board of the display carton having a finished surface for presentation of indicia relating to the product disposed in the enclosure of the display carton. Advantageously the display carton of the present invention has exterior surfaces of the enclosure that are partitioned from the same finished surface of the unitary blank that the finished surface of the backer board is partitioned.

[0026] More particularly, FIG. 1A shows a perspective view of an assembled display carton 100 in accordance with the principles of the present invention. FIG. 1B is a top sectional view of the display carton taken along line 1B'-1B' of FIG. 1A. Referring to FIGS. 1A and 1B together, display carton 100 includes an enclosure 102 formed from various foldably connected panels that define the boundaries and exterior surfaces of enclosure 102. Further, enclosure 102 is a portion of display carton 100 that defines a hollow interior volume adapted to enclose and contain a product (not shown) for presentation to a consumer, typically, at a point of sale location. Enclosure 102 is supported on a backer board 104 of display carton 100. In this embodiment, backer board 104 is a single-ply planar sheet having a backer board finished surface 106 adapted to present indicia relating to the product disposed within enclosure 102 to a consumer at a point of sale

[0027] FIG. 2 shows a plan view of a unitary blank 200 from which display carton 100 of FIG. 1A is assembled. In one embodiment, unitary blank 200 is fashioned from a single planer sheet of paperboard stock. Unitary blank 200 is typically die-cut from the paperboard stock along exterior cutlines defining the peripheral edges and particular shape of unitary blank 200. In the plan view of FIG. 2, a unitary blank finished surface 208 of unitary blank 200 is shown. An unfinished surface 208 is not shown in FIG. 2. The unfinished surface of unitary blank 200 is overlain by unitary blank finished surface 208 in the view depicted in FIG. 2 and, as such, is not visible in FIG. 2.

[0028] Unitary blank 200 is generally rectangular in form and is partitioned into portions. In FIG. 2, dashed lines indicate scoring on the finished surface 208 at a fold-line of unitary blank 200. Those of ordinary skill in the art recognize that score lines facilitate folding of paperboard stock. Solid lines in FIG. 2 indicate cuts entirely through the paperboard stock at cut-lines of unitary blank 200. Cut-lines define subportions of larger portion of unitary blank 200 or define the peripheral edges of unitary blank 200

[0029] In one embodiment, the treatment of unitary blank unfinished surface is different from the treatment of unitary blank finished surface 208. Unitary blank unfinished surface is a standard untreated paperboard surface. Unitary blank finished surface 208 on the other hand is a clay-treated surface, well-know to those of ordinary skill in the art. A claytreated surface includes absorptive clay particles on and impregnated into a standard paperboard surface. A claytreated surface provides a surface more amenable to printing thereon than an untreated standard surface. Ink bleeding is reduced and print resolution is improved on a clay-treated surface, such as unitary blank finished surface 208 when compared to the print resolution achievable on an untreated standard surface, such as the unfinished surface of unitary blank 200. Clay-treating of a paperboard surfaces involves additional cost over the cost of untreated standard surfaces, making paperboard stock having one or more clay-treated surfaces more expensive than paperboard having untreated surfaces.

[0030] It is advantageous for an assembled display carton, such as display carton 100 of FIG. 1A, to have a clay-treated finish on the display surfaces presented to a consumer, such as backer board finished surface 106 and the exterior surfaces of enclosure 102. Any product indicia printed on these clay-treated surfaces is of better quality. Thus, the display carton presents a more pleasing overall impression on the consumer. Other means besides clay-treating are available, at additional cost over no surface treating, to improve the print quality of paperboard or other stock suitable for forming unitary blank 200

[0031] Referring now to FIGS. 1A, 1B and 2 together, backer board 104 of display carton 100 is a portion of unitary blank 200. Backer board finished surface 106 presents a corresponding portion of unitary blank finished surface 208. Backer board 104 defines a first side, i.e., a left, panel 110 along a left panel cut-line 212 in unitary blank 200.

[0032] Left panel 110 is foldably connected to backer board 104 along a left panel fold-line 214. A left panel bottom flap 115 may be foldably connected to left panel 110 along a left panel bottom flap fold-line 217.

[0033] A front panel 119 is foldably connected to left panel 110 along a front panel fold-line 221. A front panel top flap 116 may be foldably connected to front panel 119 along a front panel top flap fold-line 218 and a front panel bottom flap 120 may be foldably connected to front panel 110 along a front panel bottom flap fold-line 222.

[0034] A second side, i.e., a right panel 124 is foldably connected to front panel 119 along a right panel fold-line 226. A right panel top flap 128 may be foldably connected to right panel 124 along a right panel top flap fold-line 230. A tab 132 may be foldably connected to right panel top flap 128 along a tab fold-line 236. In one embodiment, tab 132 may be defined by a two-segment tab cut-line 234 of right panel top flap 128 extending from each peripheral edge of right panel top flap 128. A right panel bottom flap 138 may be foldably connected to right panel 124 along a right panel bottom flap fold-line 240.

[0035] A back panel 142 is foldably connected to right panel 124 along a back panel fold-line 244. A back panel top flap 146 may be foldably connected to back panel 142 along a back panel top flap fold-line 248 and a back panel bottom flap 150 may be foldably connected to back panel 142 along a back panel bottom flap fold-line 252.

[0036] Finally, a glue joint panel 154 is foldably connected to back panel 142 along glue joint panel fold-line 256.

[0037] To assemble display carton 100 from unitary blank 100, unitary black is positioned as shown in FIG. 2 with unitary blank finished surface 208 on top and facing outwardly from the drawing toward a viewer of FIG. 2. Recall that unitary blank finished surface 208 is a clay-treated surface, well adapted to display printed indicia thereon.

[0038] First, left panel 110 is folded outwardly from the plane of FIG. 2 along left panel fold-line 214 to form a first side of enclosure 102. Recall that left panel 110 is defined by backer board 104 along cut-line 212. Thus, left panel 110 is free to fold outwardly relative to backer board 104, which is still within the plane of FIG. 2, along left panel fold-line 214. Said another way, left panel 110 is pivoted about left panel fold-line 214 in a clockwise direction, i.e. a first direction, when viewed in FIGS. 1B and 2 from the top of unitary blank 200. First direction arrows 258 indicate the clockwise pivot of left panel 110 relative to backer board 104. In this intermedi-

ate step of assembly, the outside surface of left panel 110, which is viewed by a consumer as a display surface, is a clay-treated surface.

[0039] Next, front panel 119 is folded along front panel fold-line 221 in a counter clockwise direction, i.e., a second direction, when viewed in FIGS. 1B and 2 from the top of unitary blank 100 to form a front of enclosure 102. In this intermediate step of assembly, the outside surface of front panel 119, which is also viewed by a consumer, is also a clay-treated surface. Second direction arrows 260 indicate the clockwise pivot of front panel 119 relative to left panel 110. [0040] Next, right panel 124 is folded along right panel fold-line 226 in a counter clockwise direction to form a second side of enclosure 102. Again, in this intermediate step of assembly, the outside surface of right panel 124 also presents a clay-treated surface.

[0041] Next, back panel 142 is folded along back panel fold-line 244 in a counter clockwise direction. Again, in this intermediate step of assembly, the outside surface of back panel 142 is also a clay-treated surface. However, the outside surface of back panel 142 is not a display surface viewed by a consumer, since, at the current intermediate step of assemble the outside surface of back panel faces in a direction opposite to the direction of backer board finished surface 106, having been pivoted into this orientation as described.

[0042] Finally, glue joint panel 154 is fold along glue joint panel fold-line 256 in a counter clockwise direction. When so configured, the outside surface of glue joint panel 154 is fixedly attached to the inside surface of left panel 110 as shown in FIG. 1B and in dotted line in FIG. 2. Adhesive material may be applied to the outside surface of glue joint panel 154 to effect a fixed attachment.

[0043] In this manner, the walls of enclosure 102 are assembled to define the hollow interior volume adapted to enclose and contain a product (not shown) for presentation to a consumer at a point of sale location. Further, enclosure 102 is supported by backer board 104 of display carton 100 along left panel fold-line 214. Advantageously, all of the display surfaces of display carton 100, namely backer board finished surface 106 and the exterior surfaces of left panel 110, front panel 119, and right panel 124, are clay-treated surfaces available for the printing of high-quality indicia and display to a consumer at a point of sale. A hole 262 (FIG. 2) through backer board 104 provides a means to hang display carton 100 facing a consumer such that all of the display surfaces are visible to the consumer at a point of sale.

[0044] In one embodiment, display carton 100 is assembled from a unitary blank that does not include the various top and bottom flaps described above with reference to unitary blank 200 of FIG. 2. In the embodiment, a product is removable attached to back panel 142 with enclosure 102 assembled to the point described above using, for example, twist ties, elastics or adhesive tape.

[0045] Referring now to FIG. 2, in another embodiment, to form a sealed bottom of enclosure 102 front panel bottom flap 120 is folded along a front panel bottom flap fold-line 222 toward the interior volume of enclosure 102; left panel bottom flap 115 is folded inwardly along a left panel bottom flap fold-line 217 to overlap front panel bottom flap 120; right panel bottom flap 138 is folded inwardly along right panel bottom flap fold-line 240 to over lap both front panel bottom flap 120 and left panel bottom flap 115; and back panel bottom flap 150 is fold inwardly along a back panel bottom flap fold-line 252 to overlap all of front panel bottom flap 120,

left panel bottom flap 115, and right panel bottom flap 138. Adhesive material between respective overlapping bottom flaps may be use to secure the various overlapping bottom flaps one to another. The order of inward folding of the various bottom flaps may vary.

[0046] To form a top of enclosure 102, front panel top flap 116 and back panel top flap 146 are folded toward the interior volume of enclosure 102 along respective front panel top flap fold-line 218 and back panel top flap fold-line 248. Next, tab 132 is folded along a tab fold-line 236 toward the interior volume of enclosure 102 and tucked in to enclosure 102 adjacent the inside surface of back panel 142. In other embodiments, tab 132 is eliminated and the various top flaps are secured by adhesive.

[0047] As noted, all of the display surfaces of display carton 100, namely backer board finished surface 106 and the exterior surfaces of left panel 110, front panel 119, and right panel 124, are available for the printing of high-quality indicia and display to a consumer at a point of sale. Typically, indicia is printed on the higher cost, high-quality, clay-treated finished surface 208 of unitary blank 200 prior to assembly into display carton 100.

[0048] Display cartons of the prior art do not enjoy the advantages of display carton 100. For example, FIG. 3A is a perspective view of an assembled prior art display carton 300, FIG. 3B is a top sectional view of prior art display carton 300 taken along line 3B-3B' of FIG. 3A; and FIG. 4 is a plan view of a prior art unitary blank 400 from which prior art display carton 300 is assembled. In the plan view of FIG. 4, an unfinished surfaced 408 of prior art unitary blank 400 is shown. A clay-treated finished surface opposite unitary blank untreated surface 408 is not shown in FIG. 4. The clay-treated finished surface of prior art unitary blank 400 is overlain by prior art unitary blank unfinished surface 408 in the view depicted in FIG. 4 and, as such, is not visible in FIG. 4. It is to be noted that the prior art unitary blank 400 of FIG. 4 is shown in a reverse or "flipped" planar orientation relative to the orientation of unitary blank 200 of the present invention shown in FIG. 2. Unitary blank 200 of the present invention is shown with its clay-treated unitary blank finished surface 208 pointed outwardly in FIG. 2. On the other hand, prior art unitary blank 400 is shown with its unfinished surface 408 pointed outwardly in FIG. 4 and its clay-treated finished surface pointed downwardly and not visible in FIG. 4.

[0049] Referring to FIGS. 3A, 3B, and 4 together, an assembled prior art display carton 300 (FIG. 3A) includes various foldably connected panels that define the boundaries and exterior surfaces of an enclosure 302. Enclosure 302 is a portion of prior art display carton 300 adapted to enclose and contain a product (not shown) for presentation to a consumer, typically, at a point of sale location. Enclosure 302 is supported on a double-ply backer board 304 of prior art display carton 300

[0050] As with display carton 100 (FIG. 1A) of the present invention, it is advantageous for an assembled prior art prior art display carton 300 to have a clay-treated finish on the surfaces of the prior art display carton 300 presented to a consumer. Prior art unitary blank 400 (FIG. 4), from which prior art display carton 300 is assembled, is generally rectangular in form and is partitioned into panels. In FIG. 4, various top and bottom flaps similar to those shown in FIG. 2 for the display carton 100 of the present invention are not shown for simplicity of presentation. After walls of prior art enclosure 302 of display carton 300 are formed, the various top and

bottom flaps making up, respectively, the top and bottom of prior art display carton 300 are folded and attached as described above for the display carton 100 and so are not repeated here. Further in FIG. 4, dashed lines indicate scoring on the surfaces of prior art unitary blank 400 at a fold-line of prior art unitary blank 400, and solid lines indicate cuts entirely through paperboard stock at cut-line of prior art unitary blank 400.

[0051] Referring now to FIGS. 3B and 4, for reasons described in more detail below, backer board 304 of prior art display carton 300 is divided into two contiguous foldably connected portions, namely display backer board 304A and reverse backer board 304B. As will be described in greater detail below, display backer board 304A has a display backer board unfinished surface 305A (FIGS. 3B and 4) and display backer board finished surface 306A (FIGS. 3B and 4). Reverse backer board 304B has a reverse backer board unfinished surface 305B and a reverse backer board finished surface 306B. Display backer board 304A is foldably connected to reverse backer board 304B along a display backer board fold-line 409. When assembled as in FIG. 3A display backer board 304A is folded and fixedly connected to reverse backer board 304B to form a double-ply planar structure.

[0052] In prior art unitary blank 400, a right panel 310 is foldably connected to reverse backer board 304B along a reverse backer board fold-line 414 opposite display backer board fold-line 409; a front panel 319 is foldably connected to right panel 310 along a front panel fold-line 421; a left panel 324 is foldably connected to front panel 319 along a left panel fold-line 426; and a back panel 342 is foldably connected to left panel 324 along a back panel fold-line 444.

[0053] To assemble prior art display carton 300 from prior art unitary blank 400, prior art unitary black 400 is positioned as shown in FIG. 4 with prior art unitary blank unfinished surface 408 on top and facing outwardly from the drawing toward a viewer of FIG. 4. Recall that the unitary blank finished surface, opposite prior art unitary blank unfinished surface 408, is a clay-treated surface, well adapted to display printed indicia thereon. First, display backer board 304A is folded along display backer board fold-line 409 in a first, i.e., a counter clockwise, direction, when viewed in FIGS. 3B and 4 from the top of prior art unitary blank 400, as indicated by first direction arrows 458. Display backer board 304A is folded along display backer board fold-line 409 to overlap reverse backer board 304B and form a double-ply planar structure. In this configuration display backer board, finished surface 306A of display backer board 304A is now facing outwardly from FIG. 4 having been pivoted to that forward facing orientation when folded along display backer board fold-line 409. A display backer board hole 462A through display backer board 304A and a reverse backer board hole 462B through reverse backer board 304B align to provide a means to hang prior art display carton 300.

[0054] Display backer board 304A has a display backer board unfinished surface 305A (FIG. 4) and display backer board finished surface 306A (FIGS. 3B and 4). Reverse backer board 304B has a reverse backer board unfinished surface 305B and a reverse backer board finished surface 306B. Display backer board 304A is foldably connected to reverse backer board 304B along a display backer board fold-line 409. When assembled as in FIG. 3A display backer board 304A is folded and fixedly connected to reverse backer board 304B to form a double-ply planar structure. Thus, in contrast to display carton 100 of the present invention, prior

art display carton 300 requires a two-ply backer board 304 consisting of display backer board 304A overlapping reverse backer board 304B to present a clay-treated display surface for the baker board oriented toward the view of a consumer. Additional, paperboard stock having a finished surface and an unfinished surface is required for prior art display carton 300.

[0055] Next, in prior art display carton 300, right panel 310 is folded along right panel fold-line 414 in a clockwise direction, as indicated by second direction arrows 460, when viewed in FIGS. 3B and 4 from the top of prior art unitary blank 300 to form a first side of enclosure 302. In this intermediate step of assembly, the outside surface of right panel 441 also presents a clay-treated surface

[0056] Next, in prior art display carton 300, front panel 319, left panel 324, and back panel 342 are also folded in a clockwise direction along front panel fold-line 421, left panel fold-line 426, and back panel fold-line 444 respectively to form a front, a second side, and a back of enclosure 302 respectively. In this intermediate step of assembly, the outside surfaces of, front panel 319, and left panel 324 present a clay-treated surfaces, these surfaces having been pivoted from their reverse orientation,

[0057] Next, after back panel 342 has been folded along back panel fold-line 444 in a counter clockwise direction, the outside surface of back panel 342 is fixedly attached to the display backer board finished surface 306A. Adhesive material may be applied to the outside surface of back panel 342 to effect fixed attachment to display backer board finished surface 306A. Again, in this intermediate step of assembly, the outside surface of back panel 342 also presents a clay-treated surface. However, the outside surface of back panel 342 is not a display surface since at the current intermediate step of assembly the outside surface of back panel 342 now faces in a direction opposite to the direction of display backer board finished surface 307A, having been pivoted into this orientation as described.

[0058] In this manner, the walls of enclosure 302 of prior art display carton 300 are formed and enclosure 302 is supported by display backer board 304 of prior art display carton 300. However, as noted, in prior art display carton 300 additional clay-treated paperboard stock was required to achieve the advantageous result that all display surfaces of the carton be clay treated to present high-quality printed indicia to a consumer. The double-ply backer board 304 of prior art display carton 300 contrasts with the single ply backer board 104 of display carton 100 in accordance with the principles of the present invention. While a single ply backer board 304 could be used to assemble prior art display carton 300, prior art unitary blank 300 would need to have both of its surfaces clay-treated in order to achieve the desired advantage that all display surfaces of the carton be amenable to high quality printing of product indicia.

[0059] While the invention is described herein in connection with certain exemplar embodiments, there is no intent to limit the present invention to those embodiments. On the contrary, it is recognized that various changes and modifications to the described embodiments will be apparent to those skilled in the art upon reading the foregoing description, and that such changes and modifications may be made without departing from the spirit and scope of the present invention. Skilled artisans may employ such variations as appropriate, and the invention may be practiced otherwise than as specifically described herein. Accordingly, the intent is to cover all

alternatives, modifications, and equivalents included within the spirit and scope of the invention.

- 1. A unitary blank formable into a display carton, said unitary blank comprising:
 - a single sheet of material having a finished surface and an unfinished surface opposite said finished surface, said single sheet comprising:
 - a backer board wherein a first side panel cut-line of said backer board defines a first side panel foldably connected to said backer board;
 - a front panel foldably connected to said first side panel; a second side panel foldably connected to said front panel;
 - a back panel foldably connected to said second side panel; and
 - a glue joint panel foldably connected to said back panel.
- 2. The unitary blank of claim 1 wherein said backer board is single ply.
 - 3. The unitary blank of claim 1 further comprising:
 - a first side panel bottom flap foldably connected to said first side panel;
 - a front panel bottom flap foldably connected to said front panel;
 - a second side panel bottom flap foldably connected to said second side panel; and
 - a back panel bottom flap foldably connected to said back panel.
 - 4. The unitary blank of claim 1 further comprising:
 - a front panel top flap foldably connected to said front panel;
 - a second side panel top flap foldably connected to said second side panel; and
 - a back panel top flap foldably connected to said back panel.
 - 5. The unitary blank of claim 4 further comprising:
 - a tab defined by said second side panel top flap foldably connected to said second side panel top flap.
- 6. The unitary blank of claim 1 wherein said single sheet of material comprises paperboard.
- 7. The unitary blank of claim 6 wherein said finished surface of said single sheet of material is a clay-treated surface.
- **8**. The unitary blank of claim **1** wherein said finished surface includes indicia printed thereon.
- 9. The unitary blank of claim 1 wherein said backer board has a hole therethrough.
- 10. A display carton assembled from a unitary blank having a finished surface and an unfinished surface opposite said finished surface, said display carton comprising:
 - a single-ply backer board having a backer board display surface;
 - an enclosure supported by said single-ply backer board and having enclosure display surfaces; and
 - wherein said backer board display surface and said enclosure display surfaces are partitioned from said finished surface of said unitary blank.
- 11. The display carton of claim 10 wherein said enclosure comprises:
 - a first side panel defined by a first side panel cut-line of said single-ply backer board and foldably connected to said backer board; said first side panel being folded in a first direction;
 - a front panel foldably connected to said first side panel, said front panel being folded in a second direction;
 - a second side panel foldably connected to said front panel, said second side panel being folded in said second direction;

- a back panel foldably connected to said second side panel; said back panel being folded in said second direction;
- a glue joint panel foldably connected to said back panel, said glue joint panel being folded in a second direction and fixedly attached to said first side panel; and
- wherein said enclosure defines a hollow interior volume adapted to enclose and contain a product.
- 12. The display carton of claim 10 wherein said enclosure further comprises:
 - a first side panel bottom flap foldably connected to said first side panel, said first side panel bottom flap being folded inwardly toward said hollow interior volume defined by said enclosure;
 - a front panel bottom flap foldably connected to said front panel, said front panel bottom flap being folded inwardly;
 - a second side panel bottom flap foldably connected to said second side panel, said second side panel being folded inwardly; and
 - a back panel bottom flap foldably connected to said back panel, said back panel being folded inwardly.
- 13. The display carton of claim 10 wherein said enclosure further comprises:

- a front panel top flap foldably connected to said front panel, said front panel being folded inwardly toward said hollow interior volume defined by said enclosure;
- a second side panel top flap foldably connected to said second side panel, said second side panel top flap being folded inwardly; and
- a back panel top flap foldably connected to said back panel, said back panel top flap being folded inwardly.
- 14. The display carton of claim 13 wherein said enclosure further comprises:
 - a tab defined by a tab cut-line **234** of said second side panel top flap and foldably connected to said second side panel top flap.
- 15. The display carton of claim 10 wherein said unitary blank comprises a single sheet of paperboard material having a finished surface and an unfinished surface.
- 16. The display carton of claim 15 wherein said finished surface of said single sheet of paperboard material is a clay-treated surface.
- 17. The unitary blank of claim 10 wherein said finished surface includes indicia printed thereon.
- 18. The unitary blank of claim 10 wherein said backer board has a hole therethrough.

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