United States Patent [19]

Rosenburgh, Jr.

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[54] EASY OPEN CARTON WITH RECLOSURE FEATURE

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[73] Assignee: **F. N. Burt Company, Inc.**, Buffalo, N.Y.

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[21] Appl. No.: **187,097**

[52] **U.S. Cl.** ..... **229/51 TC, 229/17**

[51] **Int. Cl.** **B65d 5/72**

[58] **Field of Search**....229/51 TC, 51 SC, 51 D, 17 R

[56] **References Cited**

UNITED STATES PATENTS

723,012	3/1903	Nederland	229/17 R
2,743,492	6/1949	Shina	229/17 R
2,648,480	8/1953	Belsinger	229/17 R
2,757,850	8/1956	Kleiber	229/51 D X
3,167,238	1/1965	Smith	229/51 TC
3,187,977	6/1965	Graybill	229/17 R
3,301,391	1/1967	Guyer	229/51 TC X
3,361,327	1/1968	Waldrop	229/51 TC X
3,372,853	3/1968	Rumberger	229/51 TC
3,580,482	5/1971	Witte	229/51 TC

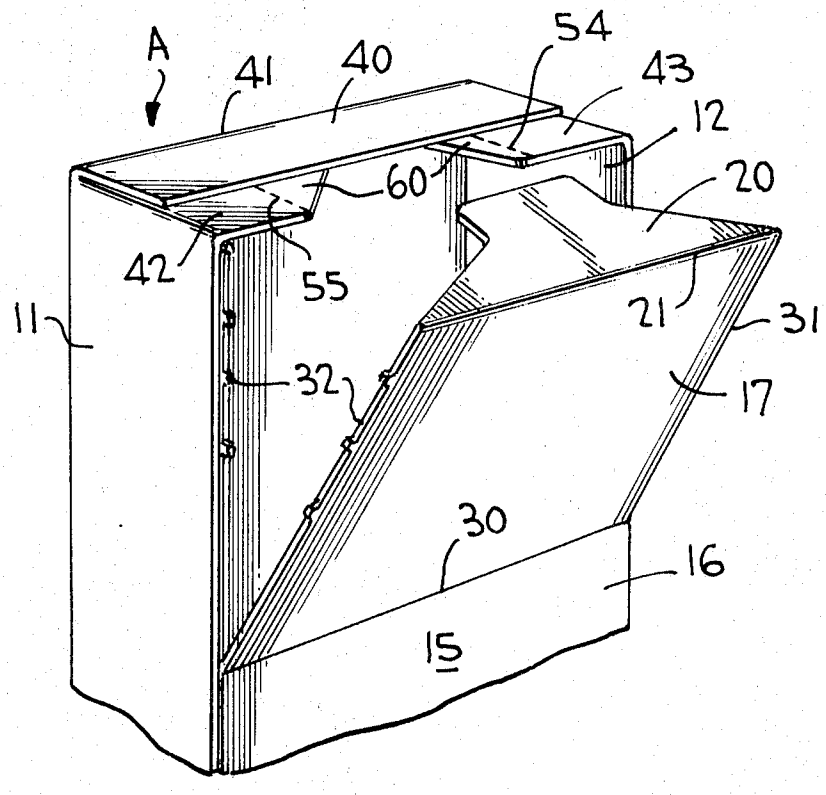
Primary Examiner—Davis T. Moorhead

Attorney—Watson, Cole, Grindle & Watson

[57] **ABSTRACT**

The upper closure and reclosure structure of the carton comprises a closure panel comprising the upper portion of the back panel of the carton hinged to the remaining fixed portion of that panel and secured along its side edges to the side panels of the carton by means of a break-away tear line. Hinged to the upper edge of the closure panel is a closure flap in the form of a truncated tongue. The opposite or front panel has a hinged top flap and the side panels have hinged dust flaps. Upon initial closure of the carton, the tongue is at the bottom, then the side flaps, and then the outer or top flap. The side flaps are glued to the underside of the top flap along a portion nearer the hinge of the top flap, and the portions of the side flaps nearer the closure panel are partially slit in a direction parallel to the hinge of the closure panel and creased in the direction at right angles to the slits to provide bendable ears or tabs between which the tongue of the closure panel may be frictionally held upon reclosure of the carton. The front panel flap extends only part way toward the rear, and the sidewall flaps are bevelled off adjacent the rear center of the top of the carton to expose the closure panel flap for finger pressure to open it.

6 Claims, 8 Drawing Figures



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SHEET 1 OF 2

FIG. 1

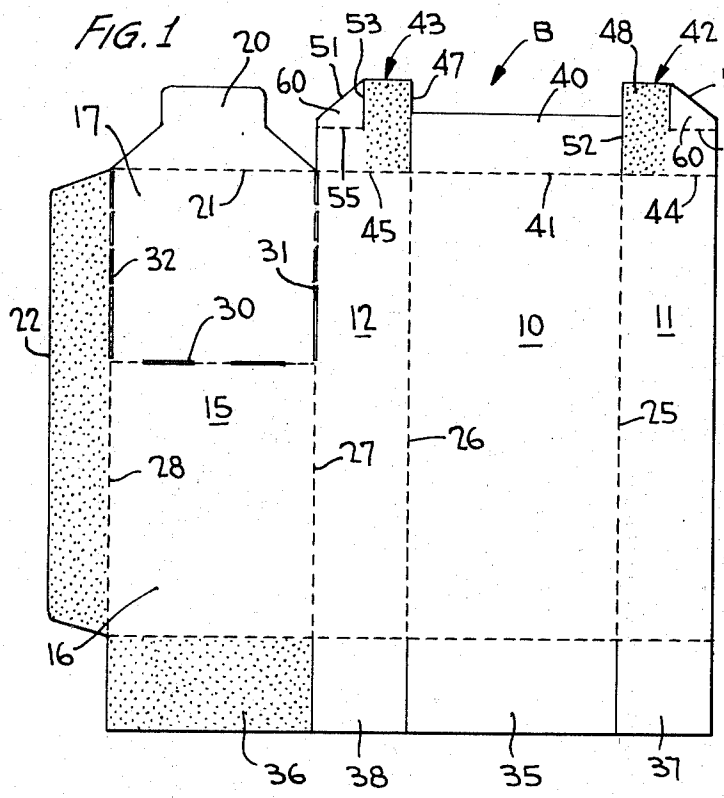


FIG. 2

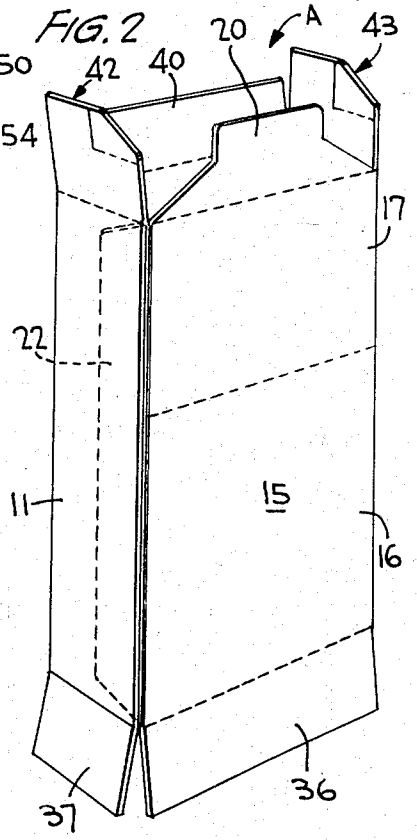


FIG. 3

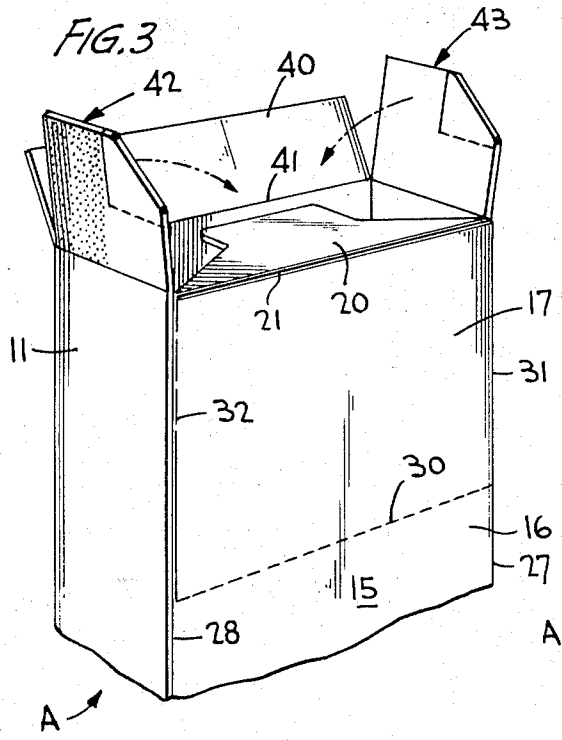
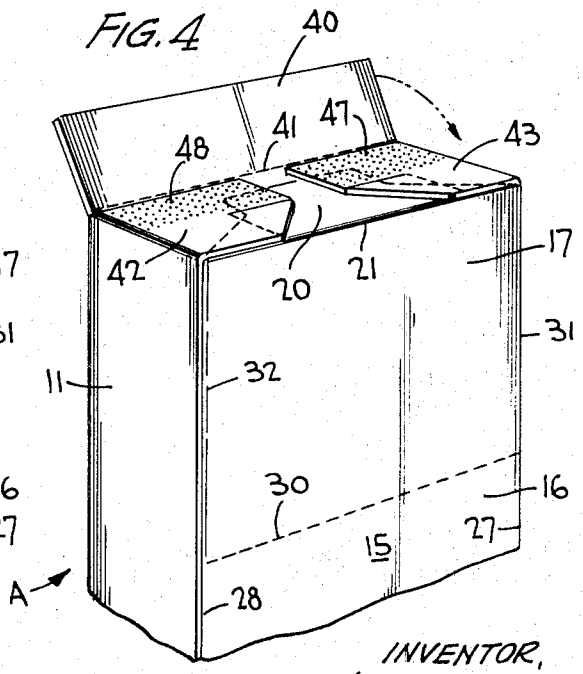


FIG. 4



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FIG. 5

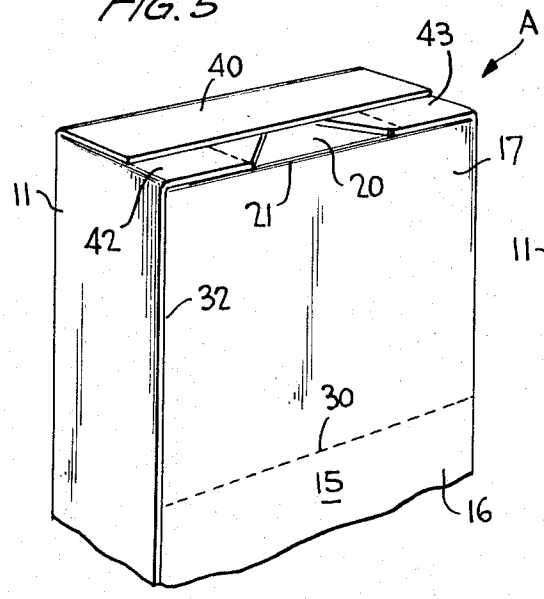


FIG. 6

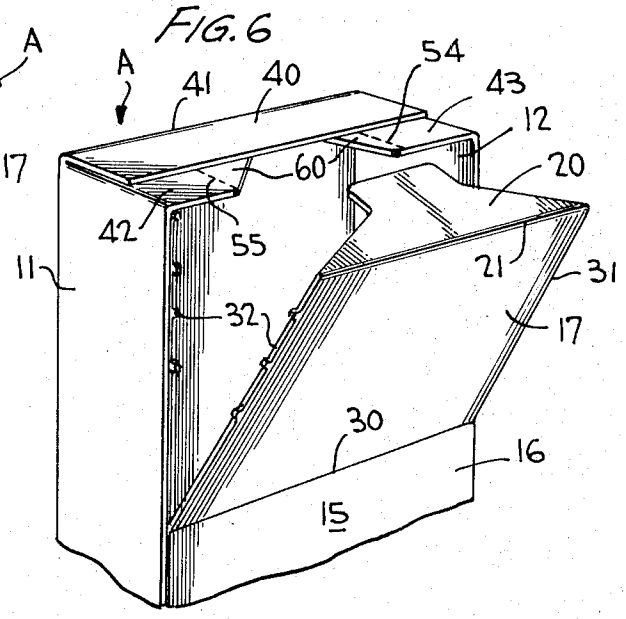


FIG. 7

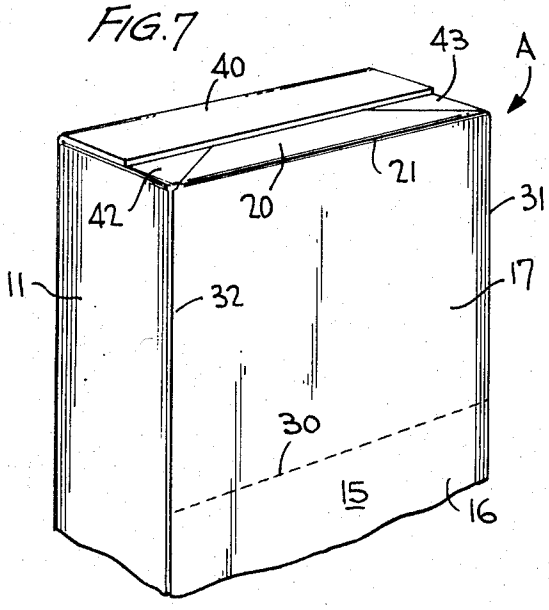
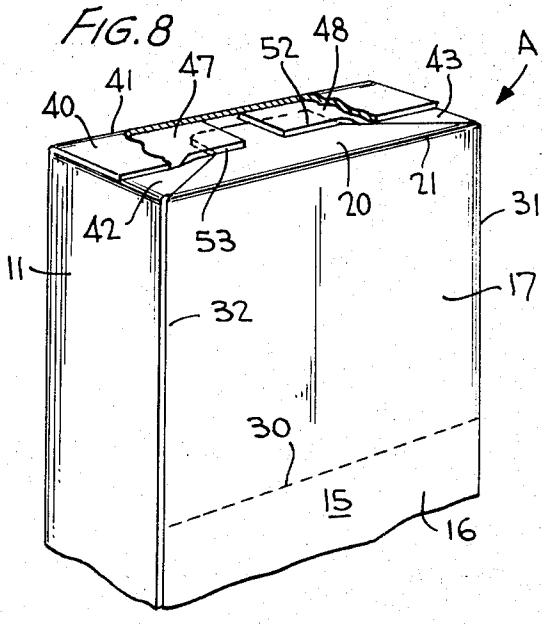


FIG. 8



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EASY OPEN CARTON WITH RECLOSURE FEATURE

This invention relates to cartons and more particularly, to small easy-opening cartons similar in use and general construction to the familiar flip-top cartons for small cigars or the like.

In its preferred embodiments, the invention contemplates the provision of an upper closure structure comprising a hinged portion of one of the main wall panels which is provided with an upper closure flap which may be brought into engagement with certain portions of the sidewall closure flaps for retention upon reclosing of the carton.

This novel provision includes the slitting of said sidewall flaps so that one portion of each flap may be glued in place beneath the top closure flap of the other and opposite the main wall panel, and the other portion of each side flap provides an underlying support for the first-named closure flap.

Other objects and features of novelty will be apparent from the following specification when read in connection with the accompanying drawings in which one embodiment of the invention is illustrated by way of example.

IN THE DRAWINGS

FIG. 1 is a plan view of a blank from which a carton, embodying the principles of the invention, is formed;

FIG. 2 is a view in perspective of the carton at an early stage in its erection;

FIGS. 3, 4 and 5 are similar views illustrating succeeding stages, the completed and filled carton being as indicated in FIG. 5;

FIG. 6 is a perspective view of the carton with a hinged portion of the back panel torn open for access to the commodity contained in the carton;

FIG. 7 is a view in perspective of the carton reclosed after certain of the contents are removed; and

FIG. 8 is a similar view with certain portions of the top reclosure structure shown in section for clearness of showing of certain details.

IN THE SPECIFICATION

In the blank B of FIG. 1, the front panel of the projected carton A is shown at 10, and it is flanked by the side panels 11 and 12. The rear panel 15 which embodies the main closure feature comprises the fixed area 16 and the closure area 17, as well as the truncated closure tongue portion 20, hinged at 21.

A glue flap 22 terminates the blank at the left-hand end, and is adapted to be adhered to a portion of the inner surface of the side panel 11 in erecting the carton.

The panels and areas just mentioned, are joined by the crease or fold lines 25 through 28 to permit the folding of the blank to the parallelopiped form shown in FIG. 2.

The closure member 17 is connected to the fixed portion 16 of the back panel 15 by means of the slit-perforated hinge line 30, and its side margins are frangibly secured to the side panel 12 and the glue flap 22 by the sparse perforated tear lines 31 and 32 respectively.

The bottom closure of the carton comprises the front flap 35, the rear flap 36, and the dust flaps 37 and 38, which are secured in conventional manner.

The remaining upper closure and reclosure structure includes the outer flap 40 hinged as at 41 to the front panel 10, and the peculiarly-shaped dust flaps 42 and 43 hinged to their respective side panels 11 and 12, as at 44 and 45.

Certain areas 47 and 48 of these dust flaps 42 and 43, nearer the top flap 40 and constituting about one-half of the total area of these flaps, are glue-coated. The other half areas of these flaps are bevelled off at 50 and 51 and are slit as at 52 and 53 and creased as at 54 and 55, resulting in the formation of the tabs or ears 60.

Once the glue flap 22 is adhered to the side panel 11, as in FIG. 2, and the bottom closure sealed in the usual way, the carton is filled and the upper initial or original package closure effected according to the showings in FIGS. 3 and 4. The closure tongue 20 is first folded down on its hinge 21 to a horizontal position as in FIG. 3, and then the side flaps 42 and 43 are folded down onto the tongue as in FIG. 4. Finally, the outer or upper flap 40 is folded down onto the side flaps as in FIG. 5.

As previously noted, the half areas 47 and 48 are glue-coated and will adhere to the under areas of the top flap 40 and effectively seal the initial closure. The package as offered for sale is shown in FIG. 5.

Now, to obtain access to the contents, the thumbnail is pressed downwardly upon the exposed portion of the closure tongue 20, and the closure panel 17 and tongue 20 pulled outwardly away from the back panel 15 pivoting on the hinge line 30, the weak tear lines 31 and 32 breaking away, all as clearly shown in FIG. 6.

Then, when it is desired to reclose the carton, the closure panel 17 is swung toward closed position, making sure that the tongue 20 is slid over the tabs or ears 60 of the flaps 42 and 43, but beneath the glued portions 47 and 48 of these flaps. The slits 52 and 53, and the creases 54 and 55, not only permit such insertion but also serve to frictionally retain the tongue in this closed position. This is most clearly shown in FIGS. 7 and 8 of the drawings.

Thus, it will be seen that the closure structure itself is confined to the top and back areas of the carton and the front panel 10 is clear and uninterrupted for printing and illustration.

I claim:

1. A carton of parallelopiped configuration having front, back and sidewall panels, and flaps extending from the upper and lower ends of said panels to form top and bottom closure structures; the upper portion of said back panel connected with the lower fixed portion of the back panel by a creased transverse hinge line to provide a swinging closure panel and a top closure flap hinged to the upper edge of said hinged closure panel; the top closure flap of the front wall panel extending toward the rear at the top of the carton and the top closure flaps of the sidewall panels extending inwardly toward each other and beneath said front wall flap, and each sidewall flap having a portion of its upper surface area glued to the underside of said front panel flap; other portions of said sidewall flaps being free of adhesive and adapted to frictionally inter-engage the top flap of the closure panel upon reclosure.

2. The carton, as set forth in claim 1, in which the side edges of the upper closure portion of the back panel are connected with the adjoining edges of the sidewall panels by tear lines for easy frangibility upon initial opening of the carton.

3. The carton, as set forth in claim 1, in which the top closure flaps of the sidewall panels are slit along lines transversely of the carton, to define the boundary separating the glued and the uncoated portions; the uncoated portions thus appearing as bendable ears, the top flap of the closure panel adapted to be inserted beneath the portion glued to the front wall flap and above the uncoated ear portion and frictionally held in such position upon reclosure.

4. The carton, as set forth in claim 3, in which the slits in the side flaps do not extend all the way to the sidewalls, and the flap of the closure panel is substantially in the form of a truncated triangle, whereby to frictionally engage the side flaps approximately to the depth of said slits.

5. The carton, as set forth in claim 1, in which the top closure flap of the front wall panel extends only part way across the top of the carton and the sidewall flaps are bevelled off near the rear center of the top of the carton to provide sufficient exposure of the shank portion of the top flap of the closure panel for the application of finger pressure to move the closure panel to open position.

6. A carton of parallelopiped configuration having front, back and sidewall panels, and flaps extending from the upper and lower ends of said panels to form top and bottom closure structures; the upper portion of said back panel connected with the lower fixed portion of the back panel by a creased transverse hinge line to provide a swinging closure panel, and a top closure flap hinged to the upper edge of said hinged closure panel; the top closure flap of the front wall panel extending toward the rear at the top of the carton and the top closure flaps of the sidewall panels extending inwardly toward each other and beneath said front wall flap, and each sidewall flap having a portion of its upper surface area glued to the underside of said front panel flap; and the closure panel flap extending beneath at least a portion of each of said sidewall flaps; the side edges of the upper closure portion of the back panel connected with the adjoining edges of the sidewall panels by tear lines for easy frangibility upon initial opening of the carton; the front wall flap extending only part way rearwardly at the top of the carton, and the sidewall flaps being bevelled off near the rear center of the top of the carton to provide sufficient exposure of the shank portion of the top flap of the closure panel for the application of finger pressure to move the closure panel to open position and break the marginal tear lines.

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