

Feb. 13, 1968

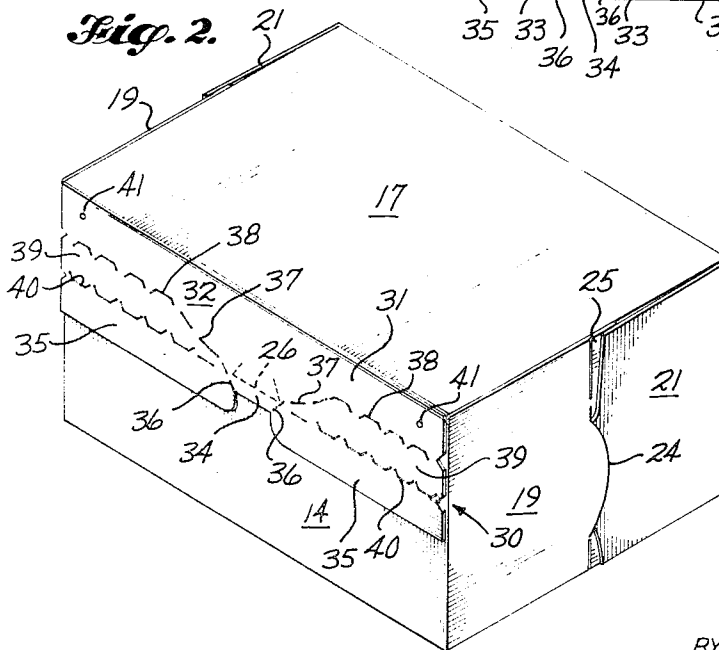
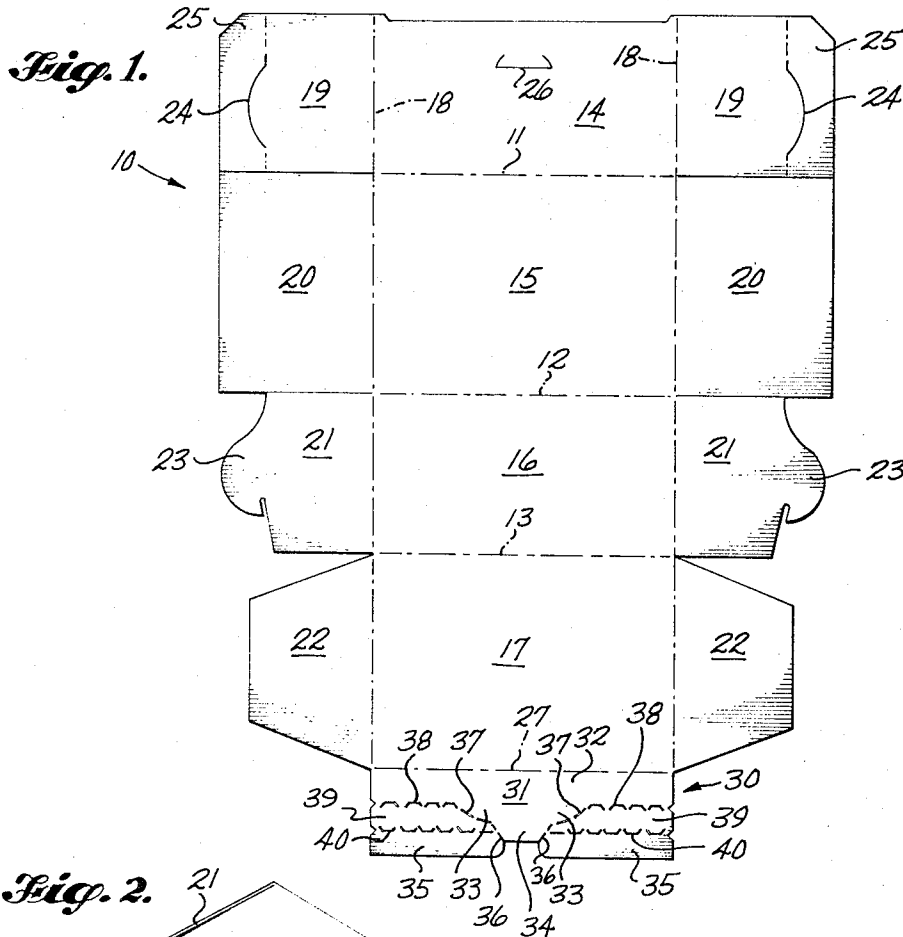
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3,368,738

RECLOSABLE CARTON WITH ZIPPER OPENING

Filed March 10, 1967

4 Sheets-Sheet 1



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Fig. 3.

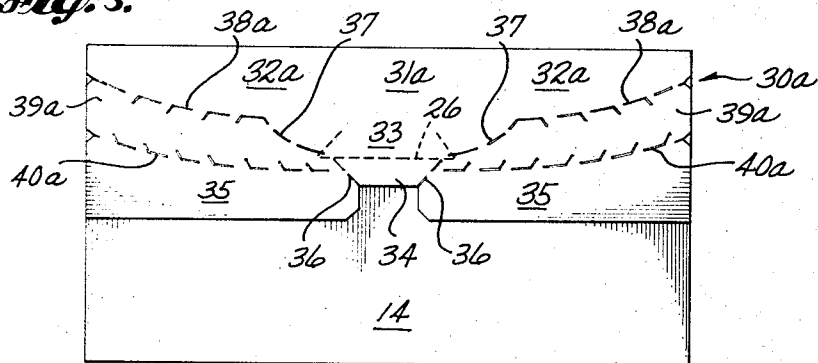
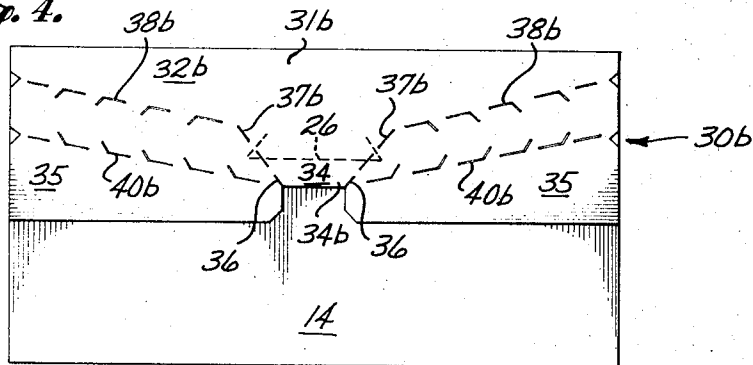


Fig. 4.



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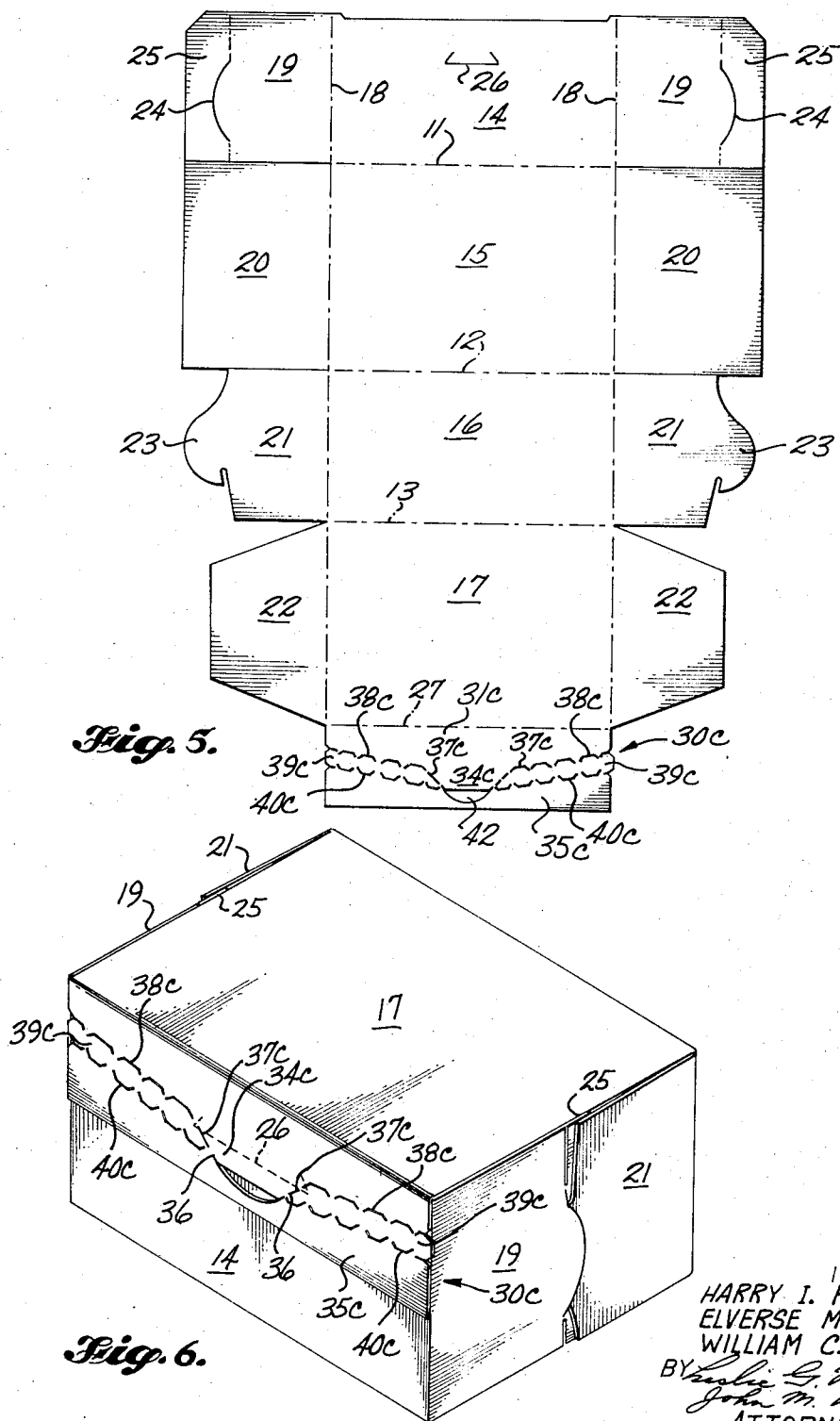
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Fig. 7.

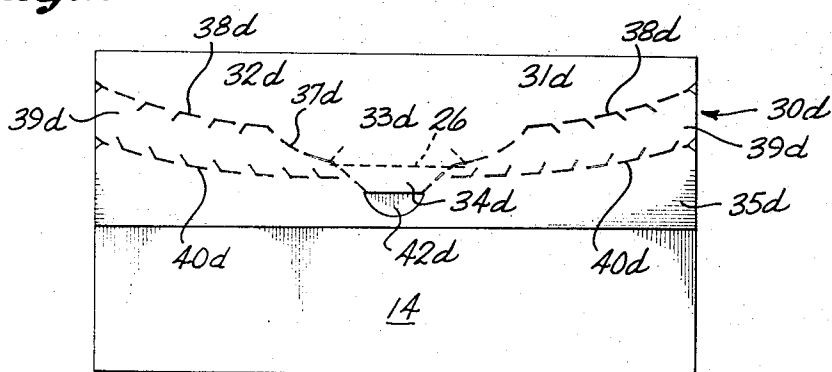
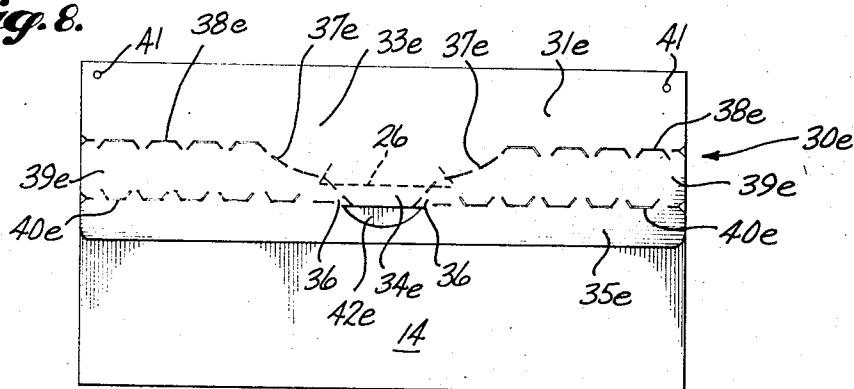


Fig. 8.



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RECLOSABLE CARTON WITH ZIPPER OPENING
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 Filed Mar. 10, 1967, Ser. No. 622,232
 1 Claim. (Cl. 229—51)

ABSTRACT OF THE DISCLOSURE

This application discloses a device for opening and reclosing a carton. The device has a tab in an overlying panel that is inserted through an aperture in an underlying panel. The outer edge of the overlying panel forms a strip that is sealed or adhered to the panel. The strip is notched or divided adjacent the lower edge of the tab. A zipper or tear strip extends outwardly from each side of the tab. The flap may be the front flap of a hinged lid.

CROSS REFERENCE TO RELATED APPLICATIONS

There are no related applications.

BACKGROUND OF THE INVENTION

(1) Field of the invention

This invention pertains to a carton having a reclosable cover. The reclosable feature requires a tab in the cover which inserts through an aperture in the underlying carton panel. The cover is sealed or adhered to the underlying carton panel and is opened by a pair of tear strips which separate the major portion of the front flap from the adhered section and by lifting the tab to separate it from the adhered section.

(2) Description of the prior art

It is known to use tear strips to open cartons and containers. It is also known to use a single tear strip to define a tab for reclosing a carton. This is shown by Jacke, U.S. Patent No. 3,243,098, Collura et al., U.S. Patent No. 3,263,899, and Design Patent No. 196,883. A common feature of each of these patents is the use of a single tear strip having the reclosable tab midway of the length of the tear strip. One edge of the tear strip defines the tab, and care is required when opening the carton so that the tear strip will rip around the tab without either ripping the tab or leaving sections of the tear strip adjacent the tab in place.

In the earlier patents, there is also the possibility that the tab must be totally cut-out so that it will be fully defined when opened. However, a fully cut-out tab may curl or otherwise be damaged during processing. If this happens, it is useless for reclosing.

SUMMARY

This invention pertains to a carton having a reclosable cover. The reclosable feature requires a tab in the cover which inserts through an aperture in the underlying carton panel. The cover is adhered to the underlying carton panel and is opened by a pair of tear strips which separate the major portion of the front flap from the adhered section and by lifting the tab to separate it from the adhered section.

This invention reduces the need for care when removing the tear strip by utilizing a pair of tear strips each of which defines only one side edge of the tab. It also reduces the need for fully defining the tab by a cut line and stops curling action by fastening the tab directly to the sealing strip so that a positive action is required to remove the tab

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from the sealing strip. Consequently, the tab is always held in place until the package is opened.

BRIEF DESCRIPTION OF THE DRAWINGS

FIGURE 1 is a top plan view of a blank for one form of the carton.

FIGURE 2 is an isometric view of the carton formed from the blank of FIGURE 1.

FIGURE 3 is a front elevational view of a carton with a modified tear strip.

FIGURE 4 is a front elevational view of a carton with another modified tear strip.

FIGURE 5 is a top plan view of a blank for a modified form of the carton.

FIGURE 6 is an isometric view of the carton formed from the blank of FIGURE 5.

FIGURE 7 is a front elevational view of a container similar to that shown in FIGURES 5 and 6 but with a modified tear strip.

FIGURE 8 is a front elevational view of a container similar to that shown in FIGURES 5 and 6 but with another modified tear strip.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The body of both the container and the cover panel, or lid, and its end flaps have the same construction throughout all of the embodiments so the same reference numerals will be used for these elements throughout the description.

In each of the embodiments a blank 10, FIGURES 1 and 5, is divided by transverse score lines 11, 12 and 13 into a front panel 14, a bottom panel 15, a back panel 16 and a cover panel 17. The side edges of each of these panels are defined by a pair of longitudinal score lines 18. The score lines 18 also separate these panels from their associated end panels or end flaps. The end locking panels 19 are connected to the front panel 14 along the score lines 18; the end panels 20 are connected to the bottom panel 15 along the score lines 18; the end locking panels 21 are connected to the front panel 16 along the score lines 18; and the end flaps 22 are connected to the cover panel 17 along the score lines 18.

The blank is formed into the container, shown in isometric view in FIGURES 2 and 6, by folding the blank around the various score lines. The container is held in shape by inserting the locking tabs 23 on the end locking panels 21 through the locking apertures or slits 24 in the locking panels 19. As shown in FIGURES 2 and 6, the locking flap 21 overlies the end section 25 of the locking flap 19 when the flaps are interlocked. The locking flaps also overlie the end panels 20 in the erected carton. In the preferred construction the end flaps 22 extend between the end panels 20 and the locking flaps.

A reclosure aperture 26 is in the upper central part of the front panel 14.

In each of the embodiments a front flap is attached to cover panel 17 along score line 27.

In FIGURES 1 and 2 the front flap 30 has an upper section 31 adjacent the score line 27. The upper section has a body 32 extending the length of the lid 19, a central base section 33 extending downwardly from the body 32, and a central reclosure tab 34 extending downwardly from the base section. The base of the tab 34 is slightly above the aperture 26 allowing the tab section to be inserted through the aperture when reclosing the carton.

Prior to opening, the front panel 30 is adhered to the front panel 14 by the sealing strips 35. The sealing strips 35 may be sealed to the front panel by an adhesive or, if a thermoplastic coating is used, by heat sealing the coating. The central tab 34 is fastened to the sealing strips 35 and 36 along the line defined by the slits 37. The slits

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37 extend upwardly and outwardly to define the tab 34 and the base 33.

Slits 38 extend outwardly from the upper edge of slits 37 to the edge of the panel 30 to define the upper edge of a pair of tear strips 39 on each side of the tab 34 and base 33. Slits 40 are below slits 38 and extend outwardly from the slits 37 to the edge of panel 30 to define the lower edge of tear strips 39. The slits 40 intersect the slits 37 at a point above the lower edge of the tab 34 to form the section 36. The slits 37 extending between the slits 38 and 40 define the inner edges of each of the tear strips 39 as well as the base 33 and a part of the tab 34.

In the version shown in FIGURES 1 and 2, the rows of slits 38 and 40 are substantially parallel to the score line 27, and the tear strip is, therefore, substantially parallel to the score line. It is then desirable to spot adhere or seal the upper section 31 to the front panel 14 as at 41. This prevents the front panel from buckling during filling.

The carton is opened by pulling each of the tear strips 39 to separate the sealing strips 35 from the upper panel 31 except at the juncture with the tab 34 at 36. The lower edge of the tab 34, which is not adhered to the front panel 14 is then grasped and pulled upwardly separating the tab from the sealing strips 35. The cover 17 is pulled upwardly around score line 13. In reclosing, the tab 34 is inserted through the aperture 26.

In the carton shown in FIGURE 3 the rows of slits 38a and 40a are curved upwardly to form a pair of curved tear strips 39a. This construction prevents buckling of the side wall so that the spot gluing of the upper panel 31 to the front panel 14 is not necessary. The other elements of the carton are the same as those shown in FIGURES 1 and 2.

In FIGURE 4 the rows of slits 38b and 40b extend upwardly and are straight to provide a chevron type construction. The slits 37b may also be straight so that the base 33 and tab 34 in the other containers become a single trapezoidal tab 34b in this modification. In this modification, the aperture 26 is situated a convenient distance above the lower edges of the tab 34b. The other elements of the container are the same as those described in the other modifications.

FIGURES 5-8 show modifications which use a single sealing strip extending the entire length of the front panel in place of the double sealing strip shown in FIGURES 1-4.

In FIGURES 5-6 the rows of slits 38c and 40c extend upwardly to define two tear strips 39c which with the tab 34c form a chevron. This portion of the construction is identical to that shown in FIGURE 4. The construction of the tab 34c is also identical to that shown in FIGURE 4. However, the lower edge of the tab is almost in alignment with the lower slits 40c. The sealing strip 35c extends the entire length of the panel 30c, and has a notch 42 beneath and contiguous with the lower edge of the tab 34c. This notch allows the tab to be grasped after

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the tear strips have been removed. This design, like that in FIGURE 4, does not require the additional spot gluing at 41 which is required in FIGURES 1 and 2.

The construction shown in FIGURE 7 is similar to that shown in FIGURE 3. The rows of slits 38d and 40d curve upwardly to define a pair of upwardly curved tear strips 39d. The lower central section of upper panel 31d has a base 33d and a tab 34d, and the slits 37d are curved to define the base and the tab. The sealing strip 35d extends the entire length of the panel 30d and has a notch 42d in alignment with and contiguous with the lower edge of the tab 34d so that the tab may be pulled upwardly after the tear strips 39d have been removed. This construction does not require the spot gluing of the upper panel 31d to the front panel 14.

In the modification shown in FIGURE 8 the rows of slits 38e and 40e are substantially parallel to the score line 27 and define a pair of tear strips 39e that are substantially parallel to the score line 27. In order to prevent buckling of the carton during filling, the upper panel 31d must be spot adhered to the front panel 14 as at 41. The sealing strip 35e extends the entire length of the front panel 30e, and is notched at 42e to allow access to the lower edge of the tab 34e.

The above embodiments are intended to be illustrative only and are not intended to limit the scope of the invention.

What is claimed is:

1. A carton closure comprising
 - a first panel having an aperture therein,
 - a second panel overlying said first panel,
 - said second panel having a reclosure tab therein, said tab being in alignment with said aperture,
 - said second panel being hinged along one edge and sealed to said first panel along an edge opposite said hinged edge, said hinged edge and said sealed edge being on opposite sides of said aperture and said reclosure tab,
 - a pair of tear strips defined in said second panel, said tear strips extending outwardly from said tab to the side edges of said second panel, each of said tear strips having an inner edge extending upwardly and outwardly defining a portion of said reclosure tab, and said tab being attached to said sealed edge along extensions of said inner edges.

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