Aug. 18, 1970 K. T. BUTTERY 3,524,581

CARTON STRUCTURE

Filed Aug. 6, 1968

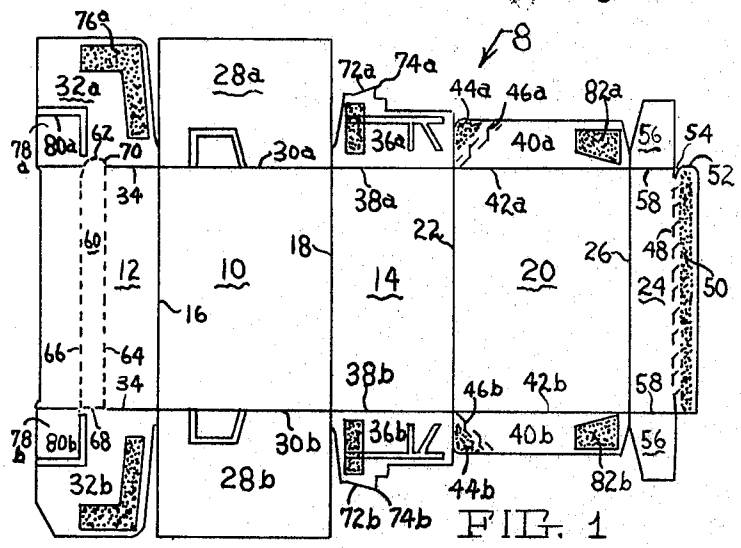


FIG. 1

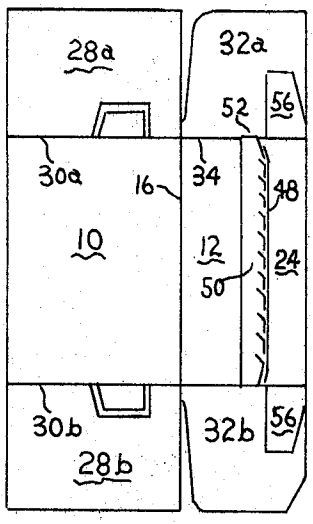


FIG. 2

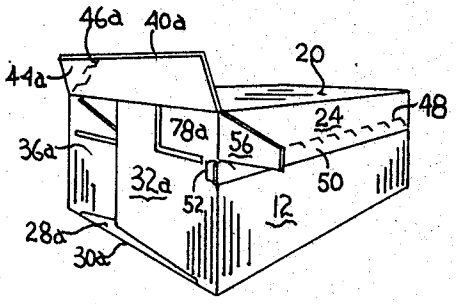


FIG. 3

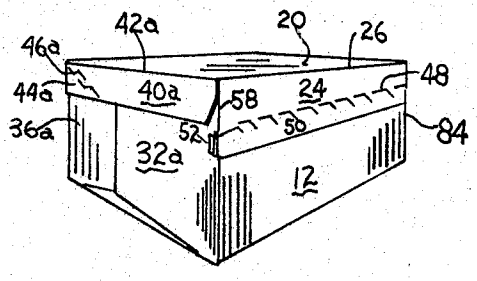


FIG. 4

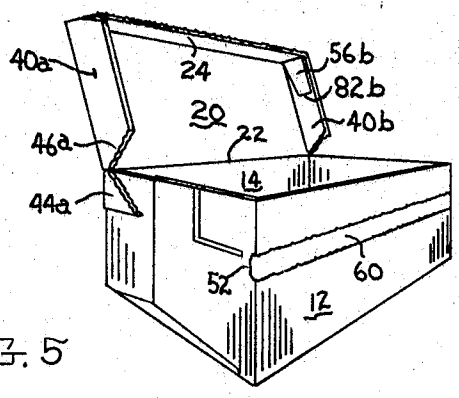


FIG. 5

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CARTON STRUCTURE

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U.S. Cl. 229—51 4 Claims

ABSTRACT OF THE DISCLOSURE

An improved carton which may readily and inexpensively be erected from an integral cut and scored blank is provided with an easy opening cover assembly including a tear strip extending across the cover hood front panel and a cut scored strip disposed upon the carton front wall panel. The tear strip is adhesively secured to the cut scored strip when the carton is in a sealed condition.

BACKGROUND OF THE DISCLOSURE

Cartons having a "flip top" cover hingedly connected to the edge of the rear panel which may be erected in a sealed condition and which may be opened by the removal of a tear strip have become increasingly popular; particularly as a container for semi-solid food items such as ice cream. Once the tear strip is removed the carton may be opened for access to some or all of the carton's contents and thereafter the carton may be reclosed for further storage.

Prior art cartons of the type described have heretofore generally utilized a tear strip defined by spaced parallel fracture lines disposed upon the front panel of the cover and adhesively secured to the front wall panel along a separate and distinct glue zone adjacent the tear strip. Such a structure is expensive, difficult to construct into a carton from an integral blank and requires a relatively large amount of paperboard, much of which is wasted. Further, cartons of this type do not readily lend themselves to use on container sealing equipment.

In U.S. Letters Pat. No. 3,281,059 issued on Oct. 25, 1966, petitioner and his coinventor disclose a tear strip structure for a carton of the type described wherein the tear strip also functions as an adhesive strip. This container, although satisfactory in many instances requires the exact placement of an adhesive resistant ink along predetermined zones of the cover assembly. The adhesive resistant ink necessitates the use of expensive equipment and the carton so produced is often disfigured as a result of the failure of the ink and the subsequent incomplete peeling of the carton.

Thus, it is the principal object of the present invention to provide a top opening reclosable carton which may be formed from an integral blank and which is sealed by means of a detachable adhesive strip affixing the cover to the front of the panel.

SUMMARY OF THE INVENTION

These and other objects and advantages are attained in accordance with the present invention by providing a carton which is formed from an integral blank having panels defining a bottom member, a front wall member hingedly connected to one edge of the bottom member, a rear wall member hingedly connected to the other edge of the bottom member, and end flaps hingedly connected to the ends of said members. A cover is provided which is hingedly connected to the upper edge of the rear wall member. The cover is provided with cover flaps comprising end wall panels and a front wall panel for the cover hood. The cover hood front wall panel is provided at its ends with

end flaps which are adhesively affixed to the cover hood end wall panels. Detachable means is provided at the free edge of the cover hood front wall panel to the front wall member comprising a detachable tear strip adhesively affixed to the front wall member. The front wall member is provided with spaced cut scored lines extending substantially the entire length thereof and the tear strip is disposed entirely within the zone defined by the cut score lines. Transverse cut score lines are provided at the terminal points of the longitudinal lines.

As a further provision of the carton of the present invention the spaced cut scored lines extend for some small distance into at least one of the front wall end flaps thus defining a tab member which will tend to peel away from the remainder of the end flap for the depth of the cut. The carton may thus be easily and conveniently opened by grasping the tab and readily and cleanly removing with a single tearing action the tear strip and the underlying front wall panel zone defined by the spaced cut score lines.

DESCRIPTION OF THE DRAWINGS

In the accompanying drawings:

FIG. 1 is a plan view of a blank cut and scored for assembling a carton according to the present invention;

FIG. 2 is a plan view of a partially erected blank with the cover hood adhesively affixed to the carton front panel;

FIG. 3 is a fragmentary perspective view of a carton with the end panels partially erected;

FIG. 4 is a perspective view of the completely erected and sealed carton; and

FIG. 5 is a perspective view of the carton of FIG. 4 after the tear strip has been removed and the cover opened.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Reference is now made to the drawings wherein the same numbers are used to refer to corresponding parts throughout and wherein areas having adhesive applied thereto are indicated by stippled shading. The inner surface of an integral blank **8** is depicted in FIG. 1 as comprising a bottom panel **10** having front and rear wall panels **12** and **14** hingedly connected thereto along score lines **16** and **18** respectively. A cover top panel **20** is hingedly connected to the rear wall panel **14** along score line **22** and a cover hood front panel **24** is hingedly connected to the cover top panel **20** along score line **26**.

The bottom panel **10** is provided at its ends with inner end wall flaps **28***a* and **28***b* hingedly connected thereto along score line **30**. The front wall member **12** is provided at its ends with front wall outer end flaps **32***a* and **32***b* hingedly connected thereto along score line **34**; and the rear wall panel **14** is provided at its ends with rear wall outer end flaps **36***a* and **36***b* hingedly connected thereto along score lines **38***a* and **38***b*.

The cover panel **20** is provided at its ends with flaps **40***a* and **40***b* which form the cover hood end wall panels and are connected thereto along score lines **42***a* and **42***b*. Adhesive panels **44***a* and **44***b* are connected to the cover hood end panels **40** along severance or fracture line **46***a* and **46***b* which in the present embodiment comprises spaced paralleled interrupted slits connected by transverse slits. A similar fracture line **48** is provided at the forward edge of the cover hood front panel **24** and connects a tear strip **50** to the cover hood front panel. One end **52** of tear strip **50** defines a tap or graspable portion and to this end the fracturing of fracture line **48** is preestablished at indent **54**. Flaps **56** extend from the sides of the cover hood front panel **24** and are connected thereto along score line **58**. A cut score **60** extends across the outer surface of the front wall panel **12**

and includes a forward portion **62** which extends for some small distance into the front wall outer end flap **32***a*.

Cut score strip **60** is defined by spaced parallel cut score lines **64** and **66** disposed along the outer surface of the front wall panel **12**, a transverse cut score **68** disposed along score line **34** and extending between cut scores **64** and **66**, and a forward portion **62** defined by transverse cut score line **70** disposed with the front outer end flap **32***a*. The cut score lines penetrate the outer surface of the wall panel and extend only partially into the thickness of the carton blank.

Reference is now made to FIG. 2 for purposes of describing the assembly of the carton of the present invention. Thus, as a first step, the carton blank **8** is folded along score line **18** with the inner surfaces of the blank facing each other. The cover hood front panel **24** is then folded over the free edge of the front wall member **12** and tear strip **50** is adhesively secured to the front wall member **12** within the confines of cut score strip **60**. In this folded condition the partially erected blank occupies very little area and may thus be conveniently shipped to packagers for filling and sealing.

To further erect the carton for filling, the partially erected folded carton is then squared up, as on a conventional squaring machine as depicted in FIG. 3. One end of the carton is then closed by first folding in the inner end wall flap **28***a* along score line **30***a*. The rear wall outer end flap **36***a* and front wall outer end flap **32** are then folded in with the front wall flap **32***a* overlapping the rear wall flap **36***a*. The contour provided by the recessed edge **72***a* permits the terminal edge **74***a* of the rear wall outer end flaps **36***a* to clear the adhesive area **76** on the inner surface of the outer flap **32***a*. Flap **56** is then folded over into the depressed area **78***a* defined by the embossed lines **80***a* of the front wall outer end flap **32***a*. As a final step in erecting the blank the cover hood end wall panel **40***a* is folded over and the adhesive area **44***a* is secured to the end wall flap **36***a* and the adhesive area **82** is secured to hood flaps **56**. The sealed carton **84** is depicted in FIG. 4.

The carton **84** may be opened by grasping tab **52** and removing the tear strip **50**. The outer layer of the cut score **60** will remain affixed to tear strip **50** and will peel away from the front panel **12**. The cover may then be lifted causing the fracturing of severance line **46**. Adhesive area **44***a* serves to secure the end flaps **32***a* and **36***a* to each other while adhesive area **82***a* secures the cover hood front and end panels one to the other.

I claim:

1. A carton formed of an integral blank cut and scored to provide a bottom member, a front wall member hingedly connected to one edge of said bottom member, a rear wall member hingedly connected to the other edge of said bottom member, and end flaps hingedly connected to the ends of said members, a cover hingedly connected to the upper edge of said rear wall member provided with cover flaps comprising cover hood end wall panels and a cover hood front wall panel, each of said hood panels having at least one free edge, and detachable means adhesively

affixing said cover hood front wall panel to said front wall member, said detachable means including a tear strip having a continuous coating of an adhesive over a substantial portion of the inner surface thereof extending longitudinally across said cover hood front panel from a fracture line extending across said panel to a free edge, said tear strip engaging the outer surface of said front wall member within the confines of an area defined by cut score lines penetrating the outer surface of said front member but extending only partially into the thickness thereof, said engaging area comprising two spaced apart parallel cut score lines longitudinally extending across the outer surface of said front wall member and extending for some distance into at least one of the end flaps hingedly connected to said member, the portion of said engaging area within said end flap defining a pull tap adapted to facilitate the grasping of said tear strip, whereby clean separation of said tear strip at said engaging area is facilitated when said tear strip is removed.

2. The invention in accordance with claim **1** wherein said tear strip is connected to said cover hood front wall panel along a severance line which comprises a plurality of spaced parallel interrupted slits connected by a second plurality of parallel transverse slits.

3. An integral blank for forming a carton cut and scored to define a bottom member, a front wall member hingedly connected to one edge of said bottom member, a rear wall member hingedly connected to the other edge of said bottom member and end flaps hingedly connected to said members, a cover hingedly connected to the upper edge of said rear wall member and provided with cover flaps comprising cover hood end wall panels and a cover hood front wall panel, and detachable means adapted to adhesively affix said cover hood front wall panel to said front wall member comprising a tear strip adapted to be affixed to a peelable area of the outer surface of said front wall member defined by two spaced apart, parallel cut score lines longitudinally extending across the outer surface of said front wall member and extending for some distance into at least one of the end flaps hingedly connected to said member, the portion of said area within said end flap defining a pull tab adapted to facilitate the grasping of said tear strip.

4. The invention in accordance with claim **3** wherein said tear strip is connected to said cover hood front panel along a severance line which comprises a plurality of spaced parallel interrupted slits connected by a second plurality of parallel transverse slits.

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