United States Patent

Anderson

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[54] CARTON CLOSURE

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[52] **U.S. Cl.** **229/44,** 206/DIG. 6
[51] **Int. Cl.**.....**B65d 5/66**
[58] **Field of Search**.....229/44 V; 206/DIG. 6

[56] **References Cited**

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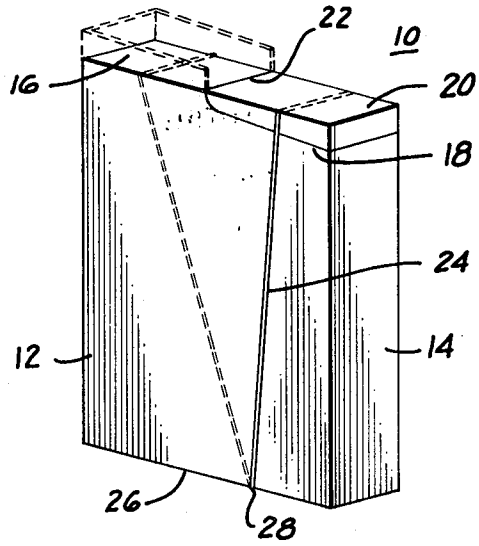
[57] **ABSTRACT**

A carton closure means is provided on a carton to allow easy, positive opening and closing of the carton.

2 Claims, 6 Drawing Figures



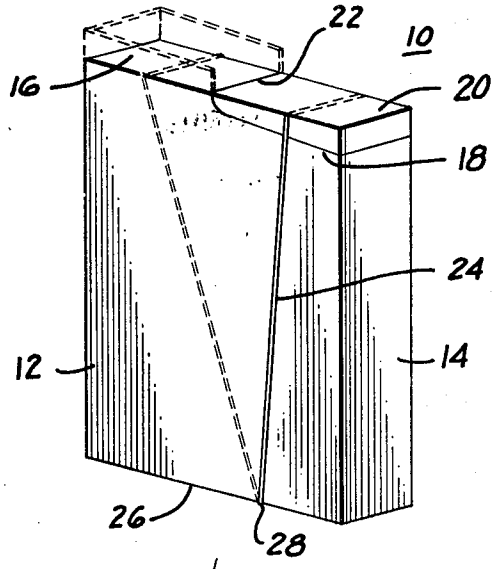


Fig. 1

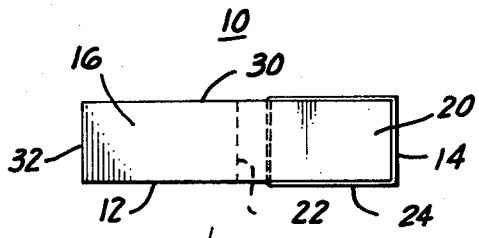


Fig. 2

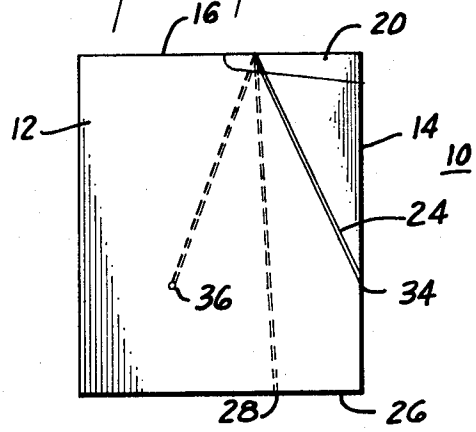


Fig. 3

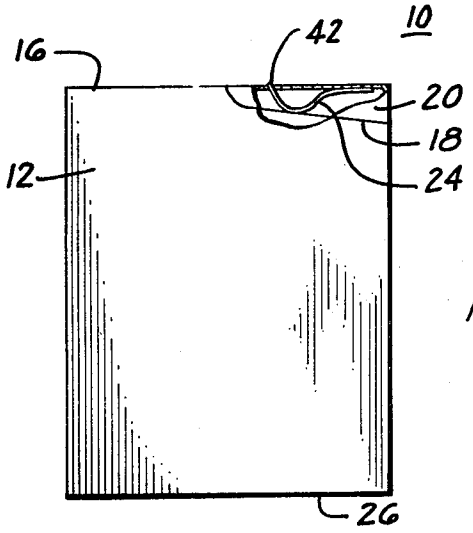


Fig. 6

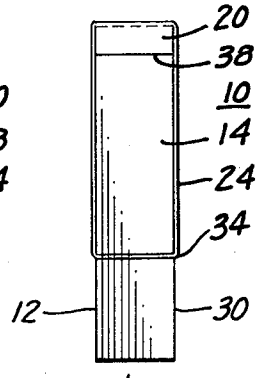


Fig. 4

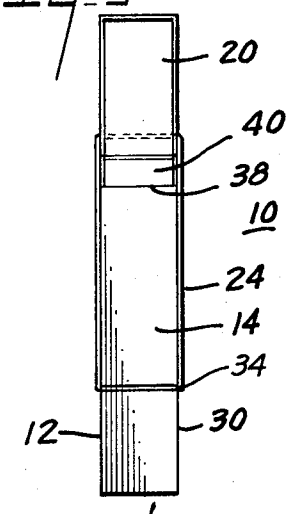


Fig. 5

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CARTON CLOSURE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention is directed generally to cartons and packaging and particularly to an improved carton characterized by resilient means coupled to a perforated portion of such carton whereby an opening is provided to allow positive and effective opening and closing of such carton.

2. Description of the Prior Art

In recent years many new products, particularly in the food field, have appeared on the market. In the packaging of such new products, wide use has been made of cartons fabricated from cardboard or similar material. Because of the inherent and established methods of manufacturing cartons, no provision has been made for providing an easy or positively operating opening to allow access to the inside of such carton where a bag or other container stores the food. The present invention is directed to improving known carton structures.

Particularly, the present invention provides means for providing a quick-opening lid on cartons with such means also holding the lid in either a closed or open position. Also the present invention provides a method of manufacture of cartons so that such cartons can be conveniently shipped in a closed condition and then may be broken open along a perforated line by the user. The present invention further provides for perforations for forming the lid of the carton in such a manner to allow known manufacturing methods to be utilized in the manufacture of cartons which incorporate the present invention.

SUMMARY OF THE INVENTION

The present invention provides a carton which has a perforated portion to which portion may be coupled resilient means so that when the carton is to be opened, the perforated portion may be broken or cut to provide a lid which may be either positively opened or positively closed by the resilient means. Existing manufacturing methods may be utilized in practicing the present invention and little modification is required to existing packaging machinery in order to incorporate the present invention.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective side view of a carton showing the lid in a closed and in an open position in the preferred positioning of the resilient means of the present invention;

FIG. 2 is a top plan view of the carton of the present invention shown in FIG. 1;

FIG. 3 is a side elevational view if the carton showing alternate positions of the resilient means of the present invention;

FIG. 4 is an end elevational view of the carton shown in FIG. 3;

FIG. 5 is an end elevational view of the carton shown in FIG. 4 with the lid in a partially opened position; and

FIG. 6 is a side elevational view of the carton of the present invention showing an alternate form of positioning the resilient means inside of the carton during shipping of the carton and prior to opening such carton.

DETAILED DESCRIPTION

Referring now to the drawing in detail, FIG. 1 is a perspective side view of a carton **10** showing a side **12** and end **14** and a top **16**. Substantially half of the top **16** may be provided with a perforated portion **18** which may be cut when the carton **10** is opened to provide a lid **20** having a pivot line **22**. During manufacture of the carton, a press or indentation line may be provided so that lid **20** may be opened and closed to provide positive hinge action along pivot line **22**.

Suitable resilient means such as a rubber band or elastic band **24** may be positioned over the bottom **26** of the carton **10** at a point such as point **28** to allow the lid **20** to be either closed, as shown in the solid portion of the drawing, or opened as shown in the broken line portion of the drawing.

It will be appreciated that the carton **10** may have a flexible bag inside the carton **10** and when lid **20** is opened, access may be had to the closed top of the bag inside of the carton **10**. The bag, after some of the contents of the bag have been removed, may be closed and the lid **20** may be closed on the carton **10** thereby preventing spillage and keeping foreign objects out of the bag because access to the bag in the carton **10** is not available.

FIG. 2 is a top plan view of the carton **10** showing lid **20** and resilient means **24**.

It will be apparent from FIG. 2 that another side **30** may be provided substantially parallel to side **12** and coupled to top **16**. End **32** is substantially parallel to end **14** whereby a substantially rectangular carton **10** well known in the art is provided.

The pivot line **22** allows lid **20** to be quickly and effectively opened and closed by the resilient means **24**.

FIG. 3 is a side elevational view of the carton **10** showing possible alternative positioning of the resilient means to allow positive and effective opening and closing of the lid **20**. The resilient means **24** may be positioned substantially one-third of the way from the bottom **26** at line **34**, although any position may be utilized so long as the objective of the invention may be achieved. The resilient means may also be coupled at point **36**, for example, on only one side **12** to allow positive and effective opening and closing of the lid **20**. As explained previously, the resilient means **24** may be positioned at point **28** to allow opening and closing of the lid **20**.

FIG. 4 is an end elevational view of the carton **10** shown in FIG. 3 with the resilient means **24** on both sides **12** and **30** of the carton **10** and along line **34** at end **14**. Lid **20** is shown positioned on end **14** along edge **38** of the carton.

FIG. 5 is an end elevational view of the carton shown in FIG. 4 with lid **20** being in a partially open position. Edge **38** of the end **14** is shown with opening **30** of the carton **10** to allow access to be gained in the carton **10** to a bag or other storage receptacle which may be provided in the carton **10**. The resilient means **14** is shown along side **30** and side **12**. It will be apparent from FIG. **5** that the lid **20** allows access to the area **40** of the carton **10**.

FIG. **6** is a side elevational view of a carton **10** showing lid **20** with perforations **18**. Perforations **18** may extend along side **12** and along the end of carton **10**, as well as the other side of carton **10**. The resilient means **24** may be positioned so that the upper portion of the resilient means extends through top **16** at point **42** by a slotted opening, for example, with the resilient means **24** being in the area immediately below top **16**. When the carton **10** is ready to be opened, the perforations **18** are cut to form the lid **20**. The resilient means **24** then may be pulled through holes which allow the portion **42** of the resilient means **24** to extend from the top of the carton and the resilient means then may be placed exteriorly of the carton **10** in a manner shown in FIG. **1** so that the resilient means are positioned on the bottom **26** of the carton **10**. The lid **20** then may be opened or closed in the manner previously described. The method of positioning the resilient means as shown in FIG. **6** may be utilized to allow rough handling of the carton during shipment. When the carton is opened, the resilient means may be positioned exteriorly of the carton **10**.

It will be appreciated that various improvements and modifications may be made to the invention as shown and described without departing from the spirit of the invention as defined by the following claims. Although such claims may be presented in indented format to facilitate reading and understanding thereof, such indented format is not to be construed as a structural or functional limitation of the elements or steps set forth in such claims.

I claim:

1. An article of manufacture comprising a carton including a plurality of planar members coupled to provide a chamber in said carton,

an upper portion coupled in a perforated manner to at least some of said plurality of planar members to form a hinged lid for said carton, and

resilient means coupled on the outside of said carton to said upper portion.

2. A carton including

a planar top having a fixed edge,

a planar bottom,

a plurality of planar members coupled to said planar top and to said planar bottom to form a chamber, said plurality of planar members being perforated so that upon cutting of the perforations said top will be coupled in a hinged manner along said fixed edge of said planar top,

a flexible container positioned in said chamber, and

resilient means coupled to said planar top and positioned outside said carton.

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