COHESIVE CLOSURE PATTERN

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Filed: Aug. 31, 1971

Appl. No.: 176,632

U.S. Cl. 229/62, 229/485 B, 229/51 WB
Int. Cl. B65d 33/16
Field of Search 229/62, 485 B, 80, 229/77

COHESIVE CLOSURE PATTERN

At which said flap is folded, said cohesive bands will intersect and seal the container.

3 Claims, 10 Drawing Figures

Abstract

A container having a fillable body provided with a flap. A series of bands of cohesive material are coated on said body and said flap so that independent of the location at which said flap is folded, said cohesive bands will intersect and seal the container.

5 Claims, 10 Drawing Figures
COHESIVE CLOSURE PATTERN

This invention relates to cohesive sealing arrangements for thin plastic film containers.

The use of cohesives to provide sealability of envelopes, bags and like containers has the advantage that the cohesives only stick to themselves and therefore envelopes, bags and like containers when so treated may be stacked or put on rolls without fear of sticking together as long as the cohesive does not touch until sealing is intended.

In the past, when cohesives have been used on containers, the registration of the cohesive has been such as to limit closure to one, or a very small, limiting number of prescribed fold and seal settings and has required relatively wide bands, and hence more cohesive to achieve closure with any degree of latitude in sealing position. It is therefore the object of the present invention to provide, by means of novel patterns of cohesive bands or strips, a wide latitude of sealing positions yet use a minimum amount of cohesive applied in a simple, high speed production manner.

Certain plastic film containers are desirable for the purpose of packaging goods for ready visibility of the contents thereof. In packaging foodstuffs, for the advantage that is desirable to achieve as small a package as possible both to save space and preserve the foodstuffs by minimizing unused volume. The present invention provides for practically unlimited sealing positions thus enabling a housewife or other user to package material in a rapid and carefree manner, yet will assure an effective closure and a compact package.

Various types of cohesives may be pigmented and colored. By coloring the bands or stripes an internal decorative effect may be obtained which also has the advantage when using plastic film bags of pointing out the location of the closure for facilitating opening of the package. The colored cohesives in the completed package are covered by a layer of plastic film which gives rise to a specially attractive appearance.

Another object of the invention is to provide a novel decorative display capable of selective use as a closure arrangement.

Still further objects and features of this invention reside in the provision of cohesive closure arrangements which employ parallel strips or bands or cohesives which provide for numerous spaced contact points at any position of closure, which can be manufactured by mass production methods and stacked in piles or pack, aged on rolls, and which is inexpensive to make thereby permitting wide use and distribution.

These, together with the various ancillary objects and features of the present invention, which will become apparent as the following description proceeds, are attained by these cohesive closure patterns, preferred embodiments of which are disclosed in the accompanying drawings, by way of example only, wherein:

FIG. 1 is a plan view of a container employing a cohesive closure pattern in accordance with the concepts of the present invention;
FIG. 2 is a plan view of a container shown in a selected closed position;
FIG. 3 is a side elevational view looking along the direction of line 3–3 in FIG. 2;
FIG. 4 is a plan view of a container shown in a selected closed position different from that of FIG. 2;
FIG. 5 is a schematic side elevational view looking in the direction of line 5–5 in FIG. 4;
FIG. 6 is a plan view in a reduced scale of a modified cohesive closure pattern on a container;
FIG. 7 is a plan view of another embodiment of cohesive closure pattern on a container;
FIG. 8 is a plan view of a container in a closed position encompassing a relatively large volume;
FIG. 9 is a plan view similar to FIG. 8, but showing the container in a closed position encompassing a lesser volume; and
FIG. 10 is a plan view similar to FIGS. 8 and 9, but showing the container in a closed position encompassing a yet smaller volume.

With continuing reference to the accompanying drawings wherein like reference numerals designate similar parts throughout the various views, reference numeral 20 generally designates a container in the form of a thin plastic film bag. This bag 20 includes a front panel 22 and a rear panel 24. A flap 26 lies in the same plane as the rear panel and forms an integral extension of the rear panel 24. The front panel 22 and rear panel 24 are sealed to each other along the continuity of the side edges 28 and 30 and the bottom edge 32 of the bag 20.

In accordance with the concepts of the present invention a series of narrow spaced parallel bands of a cohesive closure material are printed or otherwise coated on the upper portion of the front panel 22 and continue onto the flap 26. These cohesive bands may be printed on the bag 22 by rolls or other suitable means while the bags are being formed on a continuous basis. The pattern of the bands is an arrangement wherein the bands 34, 36, 38, 40, 42, 44, and 46 each extend at an angle of forty-five degrees relatively to the side edge 28 and the top edge 48 of the front panel 22 which defines the mouth of the bag 20.

When the flap 26 is folded, as shown in FIGS. 2 and 3 along the top edge 48, the bands of cohesive material on the flap 26 will overlap, intersect, and cohesively bond with the bands on the front panel 22 to form contact points such as indicated at 50. By using more or fewer bands, more or fewer contacts are generated when the flap 26 is folded to seal the bag 22.

As shown in FIGS. 4 and 5, when lesser contents are disposed in the bag 20, the flap 26 and even a portion of the front panel 22 and rear panel 24 may be folded, as for example along the phantom line 52 shown in FIG. 1. When such is accomplished, other contact points 54 are assured with the user folding the parts of the bag 20 in a carefree manner with assurance that a sufficient number of contact points will be achieved to effect a very good closure without necessitating any special care in the folding.

When the bag is filled with a greater amount of material, it may be closed in another position, as for example, along the phantom line 56 with sufficient contact points assured for a good closure.

The selection of the forty-five degree pattern is desirable from both providing for convenience in manufacturing, efficiency in use, and a pleasant ornamental appearance should the cohesive material of the bands be colored and the plastic film be transparent. The pattern may be varied to provide for diagonal stripes and angles other than that of 45° and, as shown in FIG. 6, wherein the bag 70 has its front panel 72 and flap 74 provided with a series of spaced parallel horizontal bands 76 and...
vertical bands 78 which will intersect when the flap 74 is folded to overlie the front panel 72.

Referring now to the embodiment shown in FIGS. 7 through 10, herein the bag 20 is similar to that shown in FIG. 1 with certain additions. Fold lines 80 and 82 are printed on the bag 20. Further, the contact points are augmented by the printing of special figures of cohesive material in alignment with the bands. When the bag is folded along the fold line 80, as shown in FIG. 8, the enlarged figures in the form of circles 84 will mesh and cohesively bond at contact points 86.

When the bag is folded along its mouth defined by the top edge 52, as shown in FIG. 9, the enlarged figures in the form of rectangles 88 will mesh and cohesively bond at contact points 88.

When the bag is folded along fold line 82, as shown in FIG. 10, the enlarged figures in the form of triangles 92 will mesh and cohesively bond at contact points 94.

Each of the enlarged figures of circles, rectangles, or triangles, or other selected figures may be printed in the same or different colors from the bands and may overlie or coincide with other figures or parts thereof, thereby producing a fascinating decorative effect while providing for a better closure without requiring too much more cohesive material. Obviously in this form of the invention it would effect the best closures to fold along the predetermined fold lines, but it is to be remembered that the bag 20 may be sealed by folding along any of the infinite choice of not predetermined fold lines possible.

It is to be understood that the selected figures may be in the shape of decorative or pictorial displays which cooperate to produce unusual effects. For example, the cooperating figures could be in the shape of an animal's head on the flap while an animal's body can be printed on the front panel.

A latitude of modification, substitution and change is intended in the foregoing disclosure, and in some instances some features of the invention may be employed without a corresponding use of other features.

What is claimed is:

1. A container comprising a plastic film bag having a integral fillable body provided with a front panel and a rear panel, a flap integral with and initially being a continuation of said rear panel and lying in the same plane as said rear panel and being foldable into overlying position abutting said front panel, and a plurality of spaced narrow bands of cohesive material on said front panel and extending continuously on said flap so that when said flap is folded into overlying position onto said front panel, portions of said bands will cross perpendicular to and overlie other portions of said bands to cohesively seal said container.

2. A container according to claim 1, wherein said front panel is rectangular and has a side edge, said bands extending at an angle of 45° to said side edge.

3. A container according to claim 2, including a plurality of pre-fold lines on said container, and a plurality of enlargements of said bands on said flap and said front panel for providing enlarged areas of cohesion when said flap is folded along one of said pre-fold lines.

4. A container according to claim 3, wherein there are three different spaced pre-fold lines, said enlargements being of three different shaped sets of figures.

5. A container according to claim 2, wherein said bands are colored, said container being transparent so that said bands provide an internal decoration for said container.

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