(1) Publication number:

0 136 239

12

EUROPEAN PATENT APPLICATION

(21) Application number: 84401932.3

(a) Int. Cl.4: **B 65 D** 77/06, B 65 D 33/02

22) Date of filing: 27.09.84

30 Priority: 29.09.83 US 537148

(7) Applicant: NABISCO BRANDS INC., Nabisco Brands Plaza, Parsippany New Jersey 07054 (US)

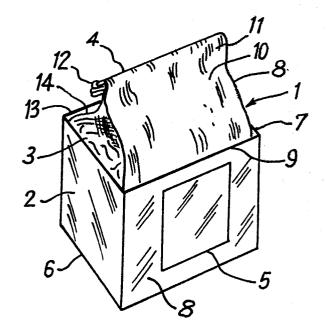
Date of publication of application: 03.04.85
 Bulletin 85/14

(2) Inventor: Addlego, Joseph, 5 Buckingham Circle, Monteville New Jersey 07058 (US)

Designated Contracting States: AT BE CH DE FR GB IT LI LU NL SE Representative: Bonnetat, Christian et al, Cabinet PROPI Conseils 23 rue de Léningrad, F-75008 Paris (FR)

(54) Soft top stackable package.

A stackable package for protecting edible food product contents is formed by a flexible bag attached inside a relatively rigid box. The box is open on only side, through which extends a reclosable end of the flexible bag. The reclosable end begins to taper just above the open box edge, so that the box does not impede opening. The package, when placed on its side, is stackable in that it can support other boxes on a side opposing that side upon which the box rests. The flexible bag may be foil-lined to act as a moisture barrier to protect freshness.



SOFT TOP STACKABLE PACKAGE

This invention relates to packages for carrying, displaying, and storing bakery or food products.

This invention relates to containers which may be made and shipped in flat collapsed form, and which may be readily opened 5 up and employed for the storage, shipment, and dispensing of bakery products, cookies, crackers, laminated food products, or any other frangible, or fragile goods.

In the conventional bag-like package, the weight of the commodity within the package causes bulging of the sides and bottom of the filled package so that such prior art packages are not self-supporting in an upright position and must usually be stacked on their sides on a grocer's shelf, thus concealing portions of the package and the advertising thereon. Furthermore, such packages cannot be stacked on the grocer's shelves since the weight of the overlying packages would tend to crush and break frangible contents therein such as baked products including cookies, crackers, and the like.

Attempts have been made in the prior art to overcome the disadvantages associated with flexible bag-like containers.

20 Typical of the prior art attempts to solve the above problems associated with bag-like packages is the type disclosed by Vergobii in U.S. Patent No. 2,678,768 and Kozlowski et al in U.S. Patent No. 3,896,991.

Vergobii discloses a flexible bag having a rigid smaller base portion joined interiorly of the bag so as to provide support for the bag. The base is adhesively attached to the

bag. However, the flexible bag is not shown attached inside a relatively rigid container.

5

10

15

20

25

The Kozlowski et al patent discloses a composite package having a ply of flexible sheet material laminated inside and another flexible ply outside a relatively rigid material layer. A neck is formed by the two plies as they extend beyond the relatively rigid sheet edges. A bottom is formed at the package end opposite the neck, also of the flexible material plies. There is no disclosure, however, of an inner bag attached only at the upper container interior walls, nor is there disclosure of a container having a relatively rigid bottom.

It is accordingly one object of the present invention to provide an improved package which is inexpensive to fabricate, requires no extraordinary equipment in the fabrication thereof, and that is formed of readily available materials that can be manufactured by persons skilled in the package art.

Another object of the invention is to provide an improved package which can be easily stacked on a supermarket shelf so as to conserve valuable grocer shelf space.

Another object of the present invention is to provide an improved package which can be shipped in flat or folded condition, and which can be filled with bakery products, cookies, crackers or the like.

A further object of the present invention is to provide an improved package which includes a fastening means located between an inner flexible bag and an outer, relatively rigid, casing which is economical to apply and which is so located as

1 to be inconspicuous during normal usage by the ultimate consumer.

A still further object of the present invention is to provide an improved package having a relatively flexible bag
like member retained within and supported by a relatively rigid outer box member so as to permit stacking of the container in vertical columns on a grocer's shelf, within larger shipping containers, or within a purchaser's cupboard.

Another further object of the present invention is to provide an improved container formed of a flexible bag member attached by only a single attaching point within a relatively
rigid outer container so that ease of assembly results as well
as economy of production.

A still further object of the present invention is to provide an improved package having a box-like, relatively rigid
member which can be folded from a blank and which can receive
and be attached to a flexible bag-like member for the support
of frangible, fragile food products such as crackers, laminated
cookies, and the like.

The improved container of the present invention comprises a light-weight, flexible bag-like member which is reclosable and which can be supported for stacking by a box-like member which is formed from a flat blank. The box-like member has four upright walls and a bottom, with the top being open so as to receive a bag-like flexible member. The bag-like flexible member, once positioned within the box-like member, is secured thereto by a single spot of adhesive or glue located at an

20

inner upright wall of the box-like member and attached to an upright outer portion of the bag-like member. The bag-like member is of the type comprising a laminated paper-like material, which includes an inner foil-like barrier and an outer paper-like barrier which preserves freshness of food products contained within. The bag-like member may be folded in the conventional manner and secured by laminated, wire reinforced, fastener elements fixedly attached near the open end of the bag-like member. The box-like member has two narrower sides opposite one another and two longer sides of 10 equal width located opposite one another. The bag-like member tapers just above the box-like member, so that opening of the bag-like member is not impeded by the box-like member. In use, the assembled container filled with the food products desired is placed upon either of the narrower sides and other 15 like containers may be supported vertically atop the opposing vertical side of the container. This results in efficient use of supermarket shelf space which is not possible with flexible bag-like containers alone.

20 Figure 1 shows a perspective view of the stackable, soft-top package of the present invention:

Figure 2 shows a front elevational view of the package of the present invention;

Figure 3 shows a side elevational view of the package of the present invention:

Figure 4 shows a rear elevational view of the package of the present invention showing attachment 16;

Figure 5 is a partial, sectional view along line 5-5 of figure 4, showing the attachment 16:

Figure 6 is a cut-away perspective view showing bottom flap arrangements with the thicknesses of the package being 5 exaggerated for clarity;

Figure 7 is a bottom elevational view with bottom flaps open and parallel to the line of sight of the viewer;

Figure 8 is a plan view of the lower part of the package prior to assembly showing the fold lines used.

10 A stackable, soft-top package is shown in perspective in figure 1. As can be seen, a flexible bag having a front side 10 is retained within a relatively rigid container having upstanding side walls. A label 5 is shown attached to the front wall 8 of the box member. The lower box member is formed of 15 sheet material which may comprise any of the usual or preferred container-forming materials, but preferably may comprise a sheet of cardboard, stiff paper, plastic, or other relatively strong sheet materials and the inner bag structure may be constructed of relatively flexible materials used in the food 20 product packaging art, such as a laminated foil-paper structure for preserving freshness. However, any materials may be used having the required relative stiffness or flexibility. For example, the bags may be formed of cellophane, flexible plastic, brown paper, paper, wire mesh, foil, cloth, or any other flex-25 ible material.

The box member may be constructed of cardboard in a preferred embodiment; however, any other packaging material may be
used that is sufficiently strong to permit stacking of the containers in a vertical column. For example, the following materials may advantageously be used for the box member materials: stiff cardboard, plastic, sheet plastic having living
hinges to serve to connect the sides, sheet metal, wood, foamed
plastic, and the like. The bag-like member tapers just above
the box-like member, so that opening of the bag-like member is

The box member is formed by left-hand side wall 2, front wall 8, right-hand side wall 7, rear wall 13, and bottom 6. The box member may be formed by folding from a blank, molding operations, or the like. A label 5 may be attached to any surface, or plural labels may be applied to a plurality of surfaces of the box member. If the box member has been formed from a blank, the bottom 6 will be composed of glued or otherwise sealed flap members as shown in figure 8. The box member need not have the upstanding walls arranged in a rectangular cross-section, but may be formed into any configuration of walls having at least two parallel space opposing walls such as a hexagon, octagon, or the like. In any case, the bag-like member tapers just above the box-like member, so that opening 25 of the bag-like member is not impeded by the box-like member.

Figure 2 shows a front view of the container of the present invention. The front wall of the bag member is shown with only the top portion visible above opening 9 of the box member.

Forming a closure for the bag member is neck 11 which is connected to reclosable end portion 4 of the bag member.

5

15

20

25

Figure 3 is a side view of the container of the present invention, and shows side wall 3 of the bag member which is substantially deformed and tucked between bag member side 10 and bag member side 14 so as to form a neat appearance. Figure 3 shows the top of the bag member above top edge 9 and the lower portion of the bag member in dotted outline. Fold 15 is attached to reclosable end portion 4 of the bag member and serves to substantially prevent passage of gas, air, or vapor through the opening of the bag member and is conventional in the bag package art. Adhesive 16 is shown in dotted outline, and secures side 14 of the bag member to rear wall 13 of the box member.

Figure 4 shows the rear of the container of the present invention, and clearly shows deformable bag fastener elements 12 at each side of the reclosable end portion 4 of the bag mem-The deformable bag fastener elements 12 are well-known in the art, and may be formed of laminated plastic or paper having two reinforcing wires within for closing and opening the bag member and retaining the folded over portion 4,5 in closed position. The adhesive, which may be animal glue, hot melt cement, pressure-sensitive adhesive, wood glue. rubber adhesive, or any adhesive or bonding material or element suitable for the materials used, is shown in dotted outline as adhesive 16 in figure 4. The shape of the adhesive 16 forming a bond or connection between the rear side 14 of the bag member and the rear wall 13 of the box member need not be of circular

1 or oval shape, but may be of any shape or cluster of smaller bonds that is economical to apply and yet retains the bag member wall against the adjacent box member wall. Here also, the bag member is shown both in upper solid outline and lower dotted outline for clarity.

Figure 5 is an enlarged, partial sectional view of the adhesive joint formed between the bag member and the box member. Box wall 13 is shown in cross-section fixedly attached by adhesive 16 shown in cross-section to bag wall 14, also shown 10 in cross-section. The thickness of adhesive 16 is exaggerated in Figure 5 for clarity. The interior wall of the bag member is seen in this figure, as well as the interior portion of right side wall 7 of the box member.

Figure 6 is a cut-away perspective view showing the arrangement of bottom flaps that form bottom 6 in the preferred embodiment of the present invention. Short, side flaps 2,7 overlie wider bottom flap 8, which in turn overlies wide bottom flap 6. Preferably, flap 6 and flap 8 are bonded to one another by glue, hot melt adhesive, pressure-sensitive adhesive, ultasonic welding in the case of plastic or metal, or any other 20 known bonding or fastening method. Flap 4 and flap 7 may be similarly adhered to flap 8 or flap 13 although this is not necessary and may be omitted. The flaps may be of any desired cross-sectional shape or configuration, and may advantageously be varied in the case of a container having side walls in a hexagonal, octagonal, or the like configuration. The wall thicknesses have been exaggerated for clarity.

25

1 Figure 7 is a view from the bottom of the container showing the flaps in open position parallel to the line of sight of
the viewer. The wall thicknesses have been exaggerated for
clarity. The bottom of the bag member, designated as bottom
portion 10 in figure 7 is shown. A sealed bag end portion 18
is also shown in figure 7, in the preferred embodiment. Nonetheless, any bag-sealing means may be used, or in the case of a
molded bag having an open top and integral bottom, no
bag-sealing means at all need be used.

Pigure 8 is a plan view of the lower part of the package which can be folded to form the box member. The fold lines are designated "F", and small flap 17 is shown which may advantageously be used to connect front wall 8 to right-hand side wall 7 of the box member to form the enclosure shown in the preferred embodiment of figure 6. Flap 17 is preferably integral with front wall 8 and is preferably adhered to right-hand side wall 7 by animal glue, hot melt adhesive, pressure-sensitive adhesive, or the like. The solid lines separating flap 7 from flap 13, flap 13 from flap 2, flap 2 from flap 8, are cut lines. Additionally, flap 17 is connected to front wall 8 along a fold line which is shown in figure 8 as a solid line.

While not specifically shown in the drawings, it is contemplated that the container of the present invention may incorporate advertising locations, such as decalcomania, labels, pockets, or any other accounterments which are conventional in the package art.

The improved container of the present invention is capable of achieving the above enumerated objects and while preferred embodiments of the present invention have been disclosed, it will be understood that it is not limited thereto but may be otherwise embodied within the scope of the following claims.

I CLAIM:

- 1. A stackable container for protecting food products, comprising:
 - a bag-like member adapted for storage of food products having at least one openable end;
- a box member having at least four upstanding vertical walls and a bottom;

said box member being formed of material that is sufficiently stiff to permit stacking of a plurality of box members along facing side walls;

- the box member being adapted to receive and retain the bag member for protection thereof;
 - a means for connecting a wall of said bag member with a wall of said box member whereby association of the bag member and box member is maintained;
- said means for attaching being generally small relative to the area of a side wall of the box member.
 - 2. A container as claimed in claim 1 above, wherein the bag member is formed of flexible material and further comprising a reclosable top.
- 20 3. A container as claimed in claim 2, wherein said bag member further comprises a metallized flexible inner lining.
 - 4. A container as claimed in claim 2, wherein said means for attaching comprises animal glue.
- 5. A container as claimed in claim 2, wherein said means
 25 for attaching comprises pressure-sensitive adhesive.

- 6. A container as claimed in claim 2, wherein said means for attaching comprises rubber cement.
- 7. A container as claimed in claim 2, wherein said box member has four generally planar sides and a generally planar 5 bottom;

said sides forming the shape of a square;
a first side being parallel to a third side;
a second side being parallel to a fourth side;
the bottom being mutually perpendicular to all of the sides.

- 8. A container as claimed in claim 2, wherein said means for attaching comprises hot melt adhesive.
- 9. A container as claimed in claim 2, wherein said means for attaching comprises resin glue.
- 15 10. A stackable container for containing food products, comprising in combination:

a bag-like member adapted for storage of food products having at least one openable end;

a box member having at least four upstanding vertical walls and a bottom;

said box member being formed of material that is sufficiently stiff to permit stacking of a plurality of box members along facing side walls;

the box member being adapted to receive and retain the bag member for protection thereof;

a means for connecting a wall of said bag member with a wall of said box member whereby association of the bag member and box member is maintained;

25

20

10

- said means for attaching being generally small relative to the area of side wall of the box member; said openable end of said bag-like member further comprising at least two converging side walls;
- said converging side walls being located above an open edge of said box member whereby opening of said bag-like member at said openable end is not impeded by the upstanding walls of said box member.
- 11. A stackable container as claimed in claim 10 above, 10 wherein said openable end of said bag-like member is adapted to be reclosable.
- 12. A stackable container as claimed in claim 11 above, wherein said at least two converging side walls face one another, whereby upon opening of said openable end said two converging side walls are separated so as to form generally parallel side walls.
- 13. A stackable container as claimed in claim 12 above, wherein said openable end of said bag-like member has a tintie at both ends of said two converging side walls, whereby the 20 tin-ties may be used to selectively retain a portion of said two converging side walls in a generally folded condition.
 - 14. A container as claimed in claim 13, wherein said means for attaching comprises hot melt adhesive.
- 15. A container as claimed in claim 13, wherein said 25 means for attaching comprises animal glue.
 - 16. A container as claimed in claim 13, wherein said means for attaching comprises pressure sensitive adhesive.

- 17. A container as claimed in claim 13, wherein said means for attaching comprises rubber cement.
 - 18. A container as claimed in claim 13, wherein said bag member further comprises a metallized flexible inner lining.

