

United States Patent

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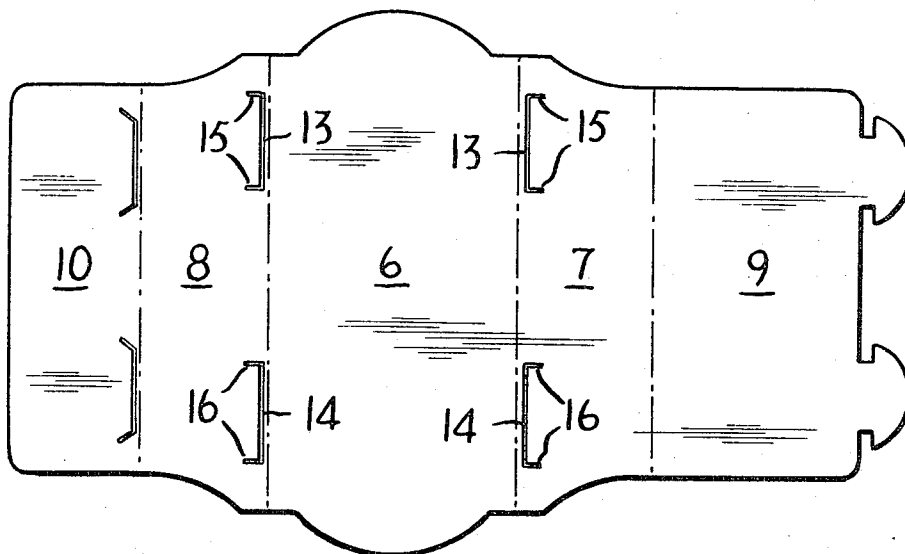
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[54] **SLEEVE BLANK**
7 Claims, 6 Drawing Figs.

[52] **U.S. Cl.**..... **229/40,**
206/65 C
 [51] **Int. Cl.**..... **B65d 5/02**
 [50] **Field of Search**..... **206/45.32,**
46, 47, 65, 65 C, 65 E; 229/40; 294/87.2

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ABSTRACT: A sleeve blank for holding at least one container of the type having a closure portion which protrudes outwardly beyond the external surface of the body thereof. The sleeve blank includes a top panel, two opposing downwardly foldable side panels extending from the top panel, a bottom panel extending from one of the side panels and an inwardly foldable locking panel extending from the other side panel for locking engagement with the bottom panel. According to the present invention, the two side panels are each provided with at least one first die cut arranged adjacent and extending parallel to at least one of the folded edges thereof. The side panels also have at least one second die cut arranged to terminate at and extending perpendicular to the first die cut. The die cuts on the two side panels are arranged in opposing relationship on the sleeve blank so as to permit the panels to expand at the points surrounding the closure portion of a container.



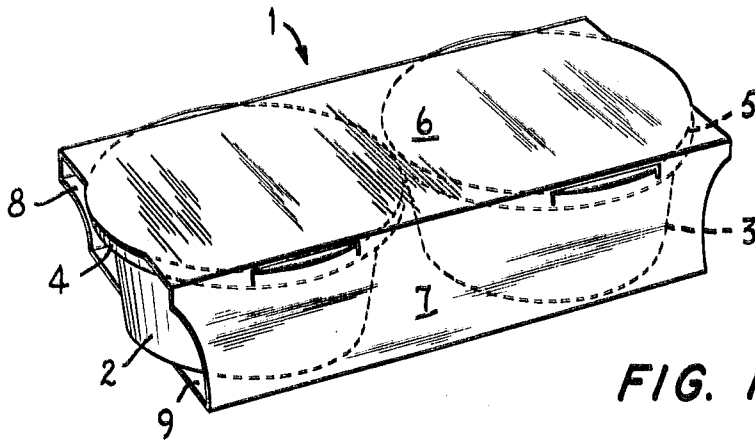


FIG. 1

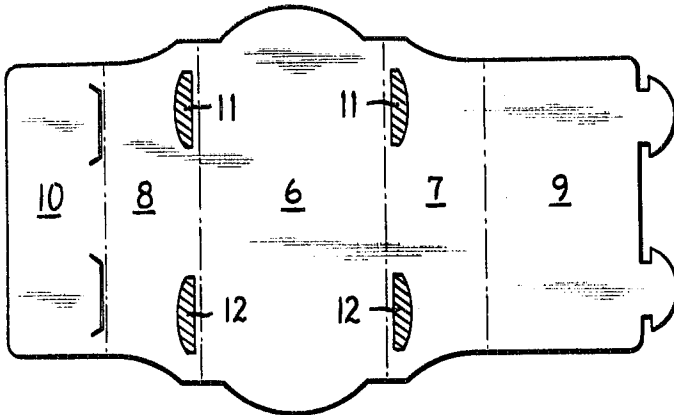


FIG. 2
(PRIOR ART)

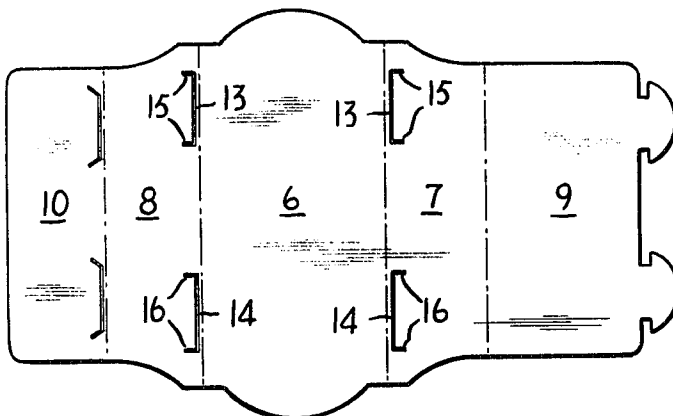


FIG. 3

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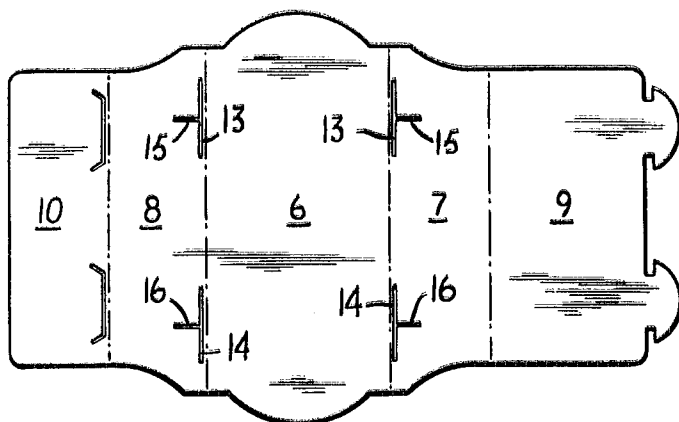


FIG. 4

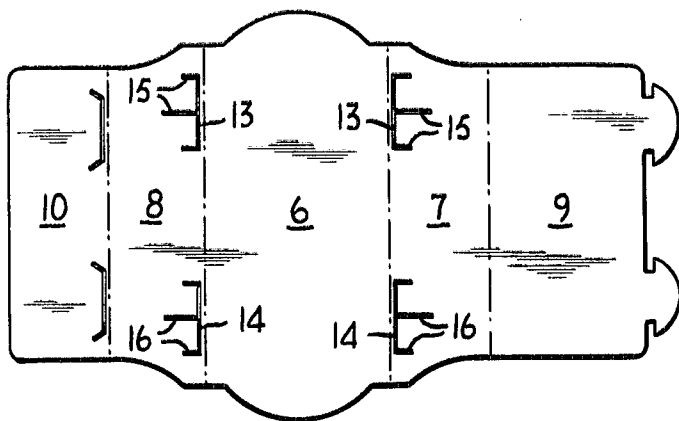


FIG. 5

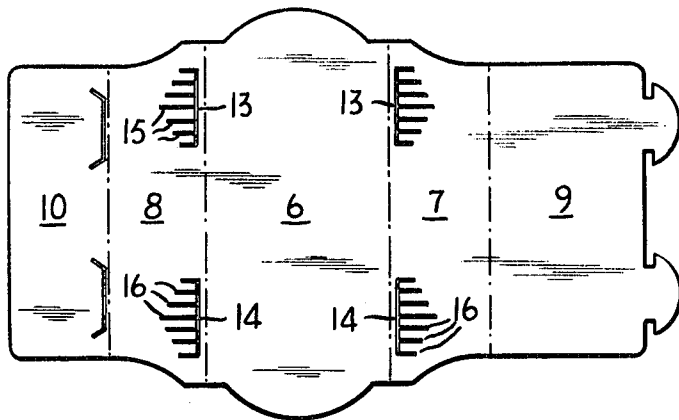


FIG. 6

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SLEEVE BLANK

BACKGROUND OF THE INVENTION

The present invention relates to a sleeve blank for holding one or more containers therein.

It is often necessary, in the packaging art, to pack two or more containers, vessels, or tubs of food or other consumer products in an easily carried sleeve or jacket. Such a "plural pack" is necessary since containers of consumer products must be made sufficient small to permit convenient use of the product in the household. Some of the consumer product containers presently on the market, such as those employed, for example to contain whipped oleomargarine, ice cream or the like, are circular in shape and are provided with an easily replaceable lid or closure which seals the container when closed. This type of container is often preferred by the purchasing public since, after the product which it originally carries is consumed, it may be used to conveniently store other products in the household.

When wrapped in a sleeve or jacket, containers of the type just described have been locked in position by cutting notches or openings in the sleeve blank to permit the closure portion of each container — that is, the portion with the greatest diameter — to project through the sleeve on either side. The width of the sleeve is accordingly made somewhat smaller than the closure portions of the containers so that the containers are held snugly in place.

The above-described arrangement, with the openings along the sides of a plural pack sleeve, causes difficulties when a number of such sleeves holding their respective containers are stored or packaged together side by side. Because the closure portions of the containers project through the openings in the sleeve, they have a tendency to overlap and catch the closure portions of the adjacent sleeved containers. This overlapping, which is known in the packaging art as "shingling", can, at best, create an inconvenience when packing or unpacking the sleeved containers and, at worst, result in an unwanted removal of the lids of the containers and/or damage to the sleeve.

SUMMARY OF THE INVENTION

An object of the present invention, therefore, is to provide a sleeve blank which is suitable for holding containers of the type having a closure portion on at least one end thereof which protrudes outwardly beyond the external surface of the body of the container, and which will engage the containers to prevent them from falling out without causing shingling or overlapping when a number of sleeved containers are arranged side by side.

This object, as well as other objects which will become apparent in the discussion that follows, is achieved, according to the present invention, by providing the sleeve blank with a plurality of die cuts in place of the previously used openings.

More particularly, the sleeve blank according to the present invention comprises a top panel, two opposing downwardly foldable side panels extending from the top panel, a bottom panel extending from one of the side panels and inwardly foldable beneath the held containers, and an inwardly foldable locking panel, extending from the other side panel, to permit a locking engagement with the bottom panel. The two side panels of this sleeve blank are provided with at least one first die cut arranged adjacent and extending parallel to at least one of the folded edges thereof and at least one second die cut arranged to terminate at and extending perpendicular to the first die cut. The first and second die cuts of one side panel are located directly opposite the first and second die cuts of the other side panel at the positions at which the side panels are to come in contact with the closure or lid portions of the containers. These die cuts thus permit the two side panels to expand at the points in contact with the closure portions so that the containers will be held in place.

Shingling or overlapping of the closure portions of the containers is prevented since the closure portions cannot project beyond the sleeve. In particular, although the sleeve is permitted to bend outward to expand at the places surrounding the widest points of each container, each sleeve will present a smooth surface to an adjacent pack of sleeved containers when such sleeved containers are arranged side by side.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a sleeve, formed from one preferred embodiment of a sleeve blank according to the present invention. This sleeve is arranged to hold two containers of the type used to pack soft oleomargarine ice cream or the like.

FIG. 2 is a plan view of a prior art sleeve blank suitable for holding two containers of the type shown in FIG. 1. This sleeve blank is provided with openings to engage the lids of the containers.

FIG. 3 is a plan view of the sleeve blank which is shown in folded form in FIG. 1. This sleeve blank is provided with die cuts according to one preferred embodiment of the present invention.

FIG. 4 is a plan view of a sleeve blank having die cuts according to a second preferred embodiment of the present invention.

FIG. 5 is a plan view of a sleeve blank having die cuts according to a third preferred embodiment of the present invention.

FIG. 6 is a plan view of a sleeve blank having die cuts according to a fourth preferred embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The preferred embodiments of the present invention will now be described, and distinguished from the prior art, in connection with FIGS. 1-6 of the drawings.

The sleeve blank to which the present invention relates may be made of cardboard or other foldable packaging material. As shown in FIG. 1 the sleeve blank is intended to be folded in such a way as to surround one or more containers. To permit a view of the containers by the purchasing public and to minimize the amount of packaging material included in the sleeve blank, the ends of the sleeve are left open to expose the containers. FIG. 1 shows a sleeve blank arranged to surround two containers 2 and 3 of the type used to hold soft oleomargarine, ice cream or the like. The containers 2 and 3 are closed by means of lids 4 and 5, respectively, which project radially outward beyond the bodies of the containers. These projecting lids thus form convenient means by which the containers can be held in place, to prevent their slipping out the open ends of the sleeve.

FIG. 2 illustrates an unfolded sleeve blank which has been used in the prior art to package containers of the type shown in FIG. 1. This sleeve blank has a top panel 6, two side panels 7 and 8, and a bottom panel 9 having suitable tabs to effect locking engagement with opposing slots in a locking panel 10. Alternatively, the locking and bottom panels can be sealed together in the folded sleeve with a suitable adhesive. Openings 11 and 12 have been provided in opposing relationship on the side panels 7 and 8 to receive the projecting lids 5 and 4 of the containers 3 and 2, respectively.

Although the openings 11 and 12 adequately serve their intended function of fixing the containers in place within the sleeve, they also permit the container lids to come in contact with and engage the lids of other similarly sleeved containers when such plural packs are arranged side by side.

The above-mentioned "shingling" can be completely avoided if, in place of the openings 11 and 12, the sleeve blank is provided with die cuts in the side panels according to the present invention. FIG. 3 shows a sleeve blank having one preferred embodiment of such die cuts in the side panels comprising first opposing die cuts 13 and 14 arranged adjacent and

extending parallel to the foldable edges of the side panels 7 and 8. Second die cuts 15 and 16 extending transverse to the first die cuts meet the ends of the first die cuts 13 and 14, respectively. The combination of the first and second die cuts in the sleeve blank 1 permits the side panels 7 and 8 to expand at the positions in contact with the lids 4 and 5 of the containers 2 and 3, respectively, as shown in FIG. 1. Because the side panels 7 and 8 will still present a smooth surface, even though expanded by the container lids, the die cuts according to the present invention effectively prevent shingling when the sleeve packs are arranged side by side.

FIGS. 4, 5 and 6 illustrate, respectively, three other embodiments of the additional blank die cuts according to the present invention. In the embodiment of FIG. 4 only one second die cut 15 and 16 is provided for each first die cut 13 and 14. The second die cut meets the corresponding first die cut perpendicularly at the center thereof where the greater expansion of the side panels 7 and 8 is anticipated.

To prevent possible tearing of the sleeve blank by the container lid it may be necessary under certain circumstances to additional ones of the second die cuts to each first die cut as shown in FIGS. 5 and 6. The embodiments of FIGS. 5 and 6 are especially suitable in cases wherein the sleeve blank is made of relatively rigid material. In FIG. 5, there are three second die cuts 15 and 16 for each first die cut 13 and 14, while in FIG. 6 there are a large number of second die cuts equally spaced along the respective first die cuts.

It will be appreciated that various modifications and changes can be made in the sleeve blank die cuts of the present invention, in addition to those noted above, without departing from the essence of the present invention.

What is claimed:

1. In a sleeve blank for forming a sleeve pack, suitable for holding at least one container that has a body portion and a closure portion on at least one end thereof, which closure portion protrudes outwardly beyond the external surface of said body portion, said sleeve blank comprising a top panel; two opposing downwardly foldable side panels extending from said

top panel through respective continuous folded edges; a bottom panel extending from one of the side panels and inwardly foldable beneath said container; and an inwardly foldable locking panel extending from the other side panel for locking engagement with the bottom panel, the improvement wherein said two side panels have first and second die cuts only at least one opposing first die cut in each side panel arranged adjacent, and extending parallel to, at least one of the continuous folded edges of said side panels and at least one opposing second die cut arranged to terminate at, and extending in the direction away from said adjacent continuous folded edge and perpendicular to, said first die cut, whereby said first and second die cuts permit said two side panels to expand at the points surrounding said closure portion of said container thereby to engage said container and whereby the sleeve pack presents smooth side surfaces to an adjacent sleeve pack.

2. The improvement defined by claim 1, wherein said two side panels each have two sets of said first and second die cuts for engagement with said closure portions on the upper ends of two separate containers.

3. The improvement defined by claim 1, wherein there are a plurality of said second die cuts for each of said first die cuts and said second die cuts are arranged to terminate at different points along said first die cuts.

4. The improvement defined by claim 1, wherein there are two of second die cuts arranged to terminate at the ends of each of said first die cuts.

5. The improvement defined by claim 1, wherein there is a single second die cut arranged to terminate at the center of each of said first die cuts.

6. The improvement defined by claim 1, wherein there are three of said second die cuts arranged to terminate at the ends and at the center of each of said first die cuts.

7. The improvement defined by claim 1, wherein there are at least four of said second die cuts arranged to terminate at the ends and at points intermediate between the ends of each of said first die cuts.

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