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[45]	Patented	June 1, 1971
[73]	Assignee	Keystone Consolidated Industries, Inc. Peoria, Ill.

[56]

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Primary Examiner—Leonard Summer

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[54] BLISTER PACKAGE
6 Claims, 13 Drawing Figs.

[52] U.S. Cl. 206/78,
206/44.12.229/44

[51] Int. Cl. B65d 75/58,
B65d 37/00

[50] **Field of Search**..... 206/78 B,
44.12

ABSTRACT: A blister package formed on a display card for the dispensing of articles contained within the blister, where the blister and flange are formed integral with an upper portion of the flange bent at an angle of approximately 20° rearwardly relative to the remainder of the flange, and a cut or slot is provided at the point of bending of the flange to allow, when the flange is returned to a planar position, the upper portion of the blister to overlap the lower portion thereof and retain the contents of the blister therein. Bending the top portion of the card mounting the blister and flange rearwardly opens the blister and exposes the contents for removal.

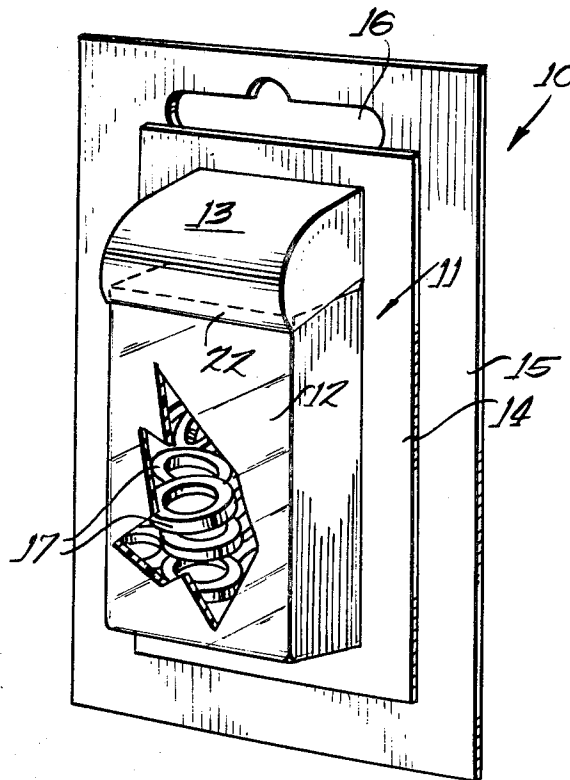


Fig. 1.

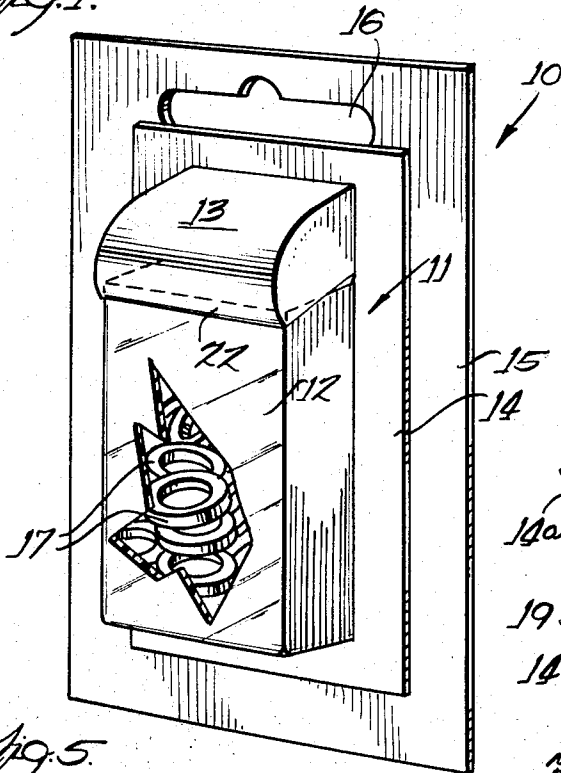


Fig. 2.

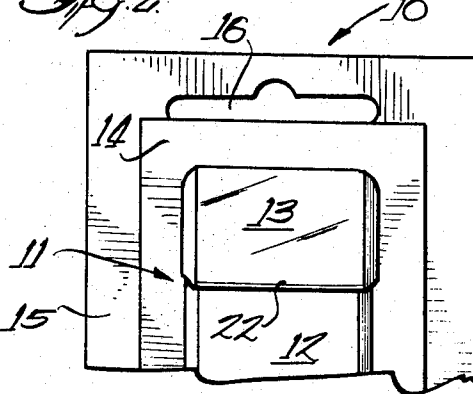


Fig. 3.

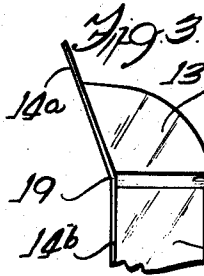


Fig. 4.

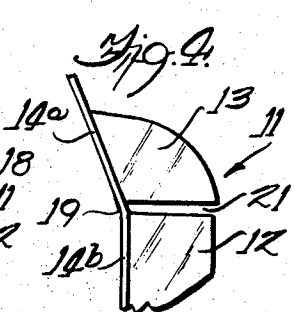


Fig. 5.

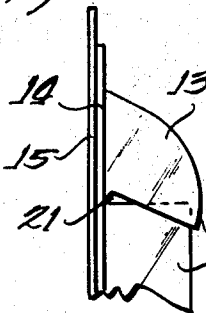


Fig. 6.

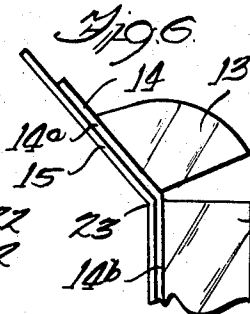


Fig. 7.

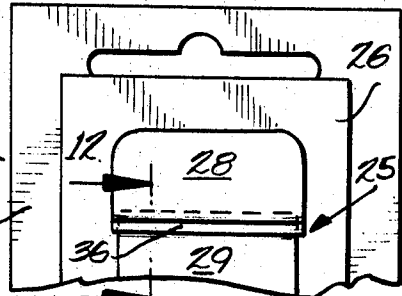


Fig. 10.

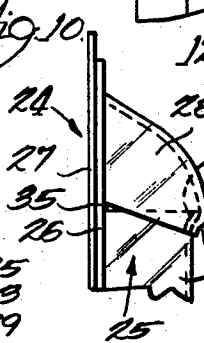


Fig. 8.

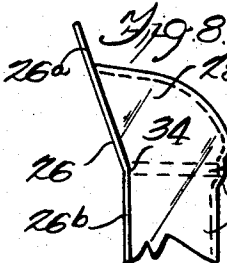


Fig. 9.

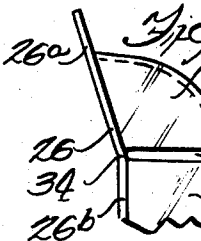


Fig. 11.

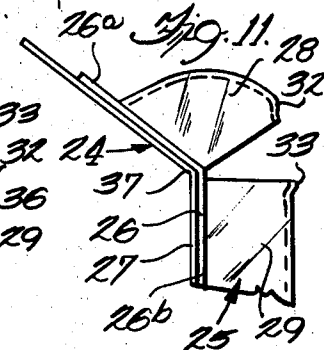


Fig. 12.

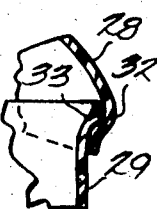


Fig. 13.



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BLISTER PACKAGE

The present invention relates to a novel blister package and more particularly to a blister package which can be opened for access to the contents thereof and reclosed to retain the contents therein.

Among the objects of the present invention is the provision of a novel blister package for a display card adapted to be hung on a display rack or similar member where the blister is formed into a top portion or lid and a lower portion or container joined by an integral flange around the edge of the blister, which flange is secured to the display card. In a normal position with the display card in a single plane, the top of the blister overlaps and closes the container of the blister. By bending the upper portion of the card rearwardly, the top is moved upwardly and rearwardly away from the container to provide access to the contents of the blister. Releasing the card allows the top to reclose the container.

Another object of the present invention is the provision of a blister package for a display card where the lower lip of the top portion of the blister and the upper lip of the container have interlocking ridges which aid in retaining the blister package closed. Rearward bending of the card will unsnap the interlocking ridges to provide access to the interior of the blister and positive reverse movement will snap the top onto the container to reclose and relock the package.

A further object of the present invention is the provision of a blister package which is easily and quickly formed by providing a blister and integral flange having an upper flange portion bent rearwardly at an angle of approximately 20°. The one-piece blister then has a cut or small portion extending across the blister removed down to the sealing flange. The cut or portion removed is located at the bend in the flange so that moving the flange to a single plane closes the blister package.

Further objects are to provide a construction of maximum simplicity, efficiency, economy and ease of assembly and operation, and such further objects, advantages and capabilities as will later more fully appear and are inherently possessed thereby.

In the drawing:

FIG. 1 is a perspective view of one form of the blister package of the present invention.

FIG. 2 is a partial front elevational view thereof.

FIG. 3 is a partial side elevational view of the blister and flange as originally formed with a unitary blister.

FIG. 4 is a view similar to FIG. 3, but with a cut or portion of the blister removed or slotted to form the container and top.

FIG. 5 is a partial side elevational view of the blister package of FIG. 2 in a closed position.

FIG. 6 is a side elevational view similar to FIG. 5, but showing the package in open position.

FIG. 7 is a partial front elevational view of a second embodiment of blister package.

FIG. 8 is a partial side elevational view of the original formation of blister and flange.

FIG. 9 is a partial side elevational view of the blister with a portion removed.

FIG. 10 is a partial side elevational view of the blister package in closed position.

FIG. 11 is a partial side elevational view of the blister package in open position.

FIG. 12 is a vertical cross-sectional view taken on the line 12-12 of FIG. 7.

FIG. 13 is a vertical cross-sectional view similar to FIG. 12 but with the package in open position.

Referring more particularly to the disclosure in the drawing wherein is shown illustrative embodiments of the present invention, FIGS. 1 and 2 disclose a blister package 10 formed of a blister 11 having a container portion 12 and a top portion 13 with a unitary integral mounting flange 14 extending around all four sides of the blister and adhesively secured to a display card 15 having an upper central elongated opening 16 so that the card may be hung on a hook or arm (not shown) projecting from a display board. The container portion 12 of the

blister package may be used to store any hardware item, such as the washers 17 shown in FIG. 1 or nuts or bolts or other item.

As seen in FIGS. 3 and 4, the blister 11 and mounting flange 14 are originally formed in one piece with the top portion 13 joined to the container portion 12 through an integral inclined intermediate portion 18 which causes the top flange portion 14^a to be bent rearwardly along a line 19 from the bottom flange portion 14^b at an angle of approximately 20° (FIG. 3). The top portion 13 is formed slightly larger than the bottom portion 12. As seen in FIG. 4, the intermediate inclined portion 18 is removed by any suitable method, such as hotwire, knifing or diecutting, to form the slot 21; the slot only being cut through the blister 11, but not through the flange 14 which remains intact.

Once slotted, the blister 11 and mounting flange 14 are secured to a flat display card 15, as seen in FIGS. 1, 2 and 5, with the flange 14 being in a planar position and adhesively joined to the surface of the card. With both the card 15 and flange 14 normally planar or flat, the wider and deeper top portion 13 overlaps the upper edge of the smaller container portion 12 as at 22 due to the stiffness of the card 15 and the weight of the contents 17. With the portions overlapped at 22, the contents 17 of the blister 11 are securely stored for display or for ready access for use. To gain access to the contents of the blister 11, the card 15 is bent rearwardly at the hinge line 23, which may be prescored on the card, so as to hinge the top portion 13 upwardly and rearwardly away from the container portion 12 (see FIG. 6) and the contents 17 or any portion thereof can be removed. To close the blister 11, the card and top portion 13 is bent or hinged back to a flat position with the top portion 13 overlapping the container portion 12.

FIGS. 7-13 disclose an alternate embodiment of a blister package 24 having a snap-lock feature. This package is generally similar to the package 10 shown in FIGS. 1-6, having a blister 25 with an integral flange 26 adhesively secured to a display card 27; the blister being formed of a top portion 28 and a container portion 29 joined by an intermediate inclined portion 31. The intermediate portion 31 is integral with the top and container portions and is joined to the top portion at a transverse ridge 32 and to the container portion at a parallel spaced ridge 33; the intermediate portion 31 being inclined from the slightly larger top portion 28 to the container portion 29. As seen in FIG. 8, the blister 25 is formed with the integral intermediate portion 31 so that the top flange portion 26^a is bent rearwardly of the bottom flange portion 26^b at a transverse bend 34 at an angle of approximately 20°.

To form the package, the intermediate portion 31 is cut out by any suitable means to provide a slot 35 extending down to but not into the flange 26. The slotted blister is then adhesively joined by the flange 26 to the display card 27. With the display card flat and the flange 26 in a single plane, the ridge 32 of the top portion 28 snaps over the ridge 33 on the container portion 29 to provide an overlap 36 and locks the top portion 28 onto the container portion 29 (see FIGS. 10 and 12).

To gain access to the contents of the package 24, the card 27 is bent rearwardly along the prescored line 37 (see FIG. 11) to unsnap the top portion 28 from the container portion 29 by sliding the ridge 32 over and away from the ridge 33 as seen in FIGS. 11 and 13. Once the contents of the blister or any portion thereof has been removed, the card can be bent back to a flat position with the ridge 32 snapping over the ridge 33 to lock the top portion 28 onto the container portion 29 for further use.

The blister 11 or 25 can be easily formed out of any suitable material, plastic or otherwise, to present either transparency with complete visibility or no visibility of the contents of the package as desired. If formed of plastic, a propionate or polyvinyl chloride has been found to be acceptable, although I do not wish to be limited to these materials. The blister and the display card can be made to any size desired and the formation of the blister, slotting or separation thereof and application to the display card is acceptable to either manual or automatic blister packing procedures.

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I claim:

- 1. A blister package comprising a blister having a top portion and a container portion joined by an integral mounting flange extending outwardly on the complete periphery of the blister and a flat display card adhesively joined to said flange, said top portion and container portion normally overlapping to provide a closed blister for storing any suitable article to be dispensed.
- 2. A blister package as set forth in claim 1, in which the display card is bendable rearwardly along a transverse line aligned with the blister overlap to hinge the blister top portion and provide access to the interior of the container portion.
- 3. A blister package as set forth in claim 1, in which said top

- portion is slightly wider and deeper than said container portion.
- 4. A blister package as set forth in claim 1, in which said top portion has a transverse ridge adjacent its edge and the container portion has a transverse parallel ridge adjacent its edge.
 - 5. A blister package as set forth in claim 4, in which said ridge on the top portion provides an inwardly offset edge, and said ridge on the container portion provides an outwardly offset edge thereon.
 - 6. A blister package as set forth in claim 5, in which said parallel ridges provide a snap lock upon the closing of the top portion and the container portion.

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