DISPENSING BLISTER PACKAGE WITH CLOSABLE OPENING IN THE BLISTER MEMBER

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ABSTRACT OF THE DISCLOSURE

An openable and closable blister package for display, storage and dispensing of articles, which comprises a backing board having a flat continuous surface, and a blister-shaped container open on one side and including resilient walls. Means are provided for affixing the container to the backing board covering the open one side of the container. The walls of the container define an interior chamber in cooperation with the backing board for holding articles therein. The resilient walls define a slit opening therein having two edges abutting each other in a closed unflexed position. The resilient walls form opposed bendable portions oriented laterally relative to and at opposite longitudinal ends of the slit opening and are adapted to be pressed toward one another, thereby spreading the edges of the slit opening apart in an open flexed position, thereby defining an access opening into the interior chamber, and the resilient walls return to their closed unflexed position and cause the edges to resiliently return to abutment with each other when the pressure is released from the opposed bendable portions.

The present invention relates to a dispensing blister package in general, and to a dispensing blister package suitable for packaging, display and dispensing of articles, having a closable opening in the blister member, in particular.

Transparent blister packages are used particularly for the storage and dispensing of novelty items, such as, pins, clips, hooks, eyes, tacks and other articles, which, preferably, are displayed on retail store counters, to enhance their marketability. It is generally desired that these packages can be utilized as a permanent container for the items until the latter are used, and therefore blister packages are made with a closable and openable part thereof for removing the articles, one at a time, and for closing the package to store the remainder of the articles for future use.

Several containers of this type are now on the market which provide a blister container affixed to a backing board, such as cardboard, or other means, and the interior of the blister container is accessible from the back of the board by openings or flaps formed in the board. By moving one of the rear portions or flaps in the board at the back of the package, an opening becomes exposed and one may have access to the interior of the container.

However, with such dispensing packages, the inconvenience of cardboard flaps and openings is apparent. Additionally, the flaps, foldings and openings tend to become damaged with repeated use, and when torn do not function properly to achieve the long-lasting purpose desired. Furthermore, fabrication requires formation of the blister member, in addition to requiring several steps of bending, folding and cutting the board, and the structure is rather complex.

An object of the present invention to provide an openable and closable blister package for display, storage and dispensing of articles, which incorporates a resilient blister container having therein a simple "molded in" dispensing feature which is self-closing, the blister container being affixed to a backing board itself not having flaps and openings. With such a structure the manufacturing and other drawbacks of the prior art are eliminated and long life is achieved for the container, commensurate with its desired use. With the present invention, the opening and closing feature is provided in the blister container which may be molded and formed simultaneously in one step with the formation of the blister container, thereby saving the two-step process of the prior art of fabricating not only the blister container, but also the cardboard with the access flaps and openings in the latter.

It is another object of the present invention to provide an openable and closable blister package for display, storage and dispensing of articles comprising a resilient container of blister shape affixed to a continuous flat backing board, the container adapted for a squeeze-type opening operation whereby by merely pinching the blister container at designated points, a slot therein opens and articles from the interior of the container can be picked out or shaken out. When the pressure is released, the slot closes. Also the slot can be molded or cut in as a straight line perforation which can be broken open with the thumbnail by the ultimate user.

It is still another object of the present invention to provide an openable and closable blister package for display, storage and dispensing of articles, comprising a backing board or the like having a top face and a bottom face, a transparent protuberant tray-like blister container formed of resilient plastic having a flange frame affixed to the top face of the backing board. The blister container is formed with a substantially elastic recess at its uppermost portion thereof, and along the major diameter thereof is a slit opening dividing the container into two elliptical halves, one elliptical half depending slightly upwardly, relative to the backing board, and then defining an inwardly depending lip adjacent the slit, and the other elliptical half depending slightly inwardly, so that when compressive pressure is applied to the container from the ends of the slit, the upper upwardly depending elliptical half moves upwardly and the lower elliptical half moves downwardly, thereby spreading the slit apart and providing an access opening in the blister container for access to the articles therein, and upon releasing the pressure the elliptical halves return to their unflexed or closed position, closing the opening and access to the container. The backing board is flat having no openings or flaps therein and does not provide access to the interior of the container therethrough as in the prior art.

It is yet another object of the present invention to provide an openable and closable blister package for display, storage and dispensing of articles, comprising two separate blisters which interlock to make up the complete blister container. An overlap is provided, at a given point, which can be opened by squeezing or depressing the blister.

With these and other objects in view which will become apparent in the following detailed description, the present invention will be more clearly understood in connection with the accompanying drawings in which:

FIGURE 1 is a perspective view of a dispensing closable blister package, designed in accordance with the present invention;

FIG. 2 is a top plan view of the dispensable blister package of FIG. 1 showing the package in the closed position;

FIG. 3 is a section along the lines 3—3 of FIG. 2;

FIG. 4 is a section along the lines 4—4 of FIG. 2;

FIG. 5 is a perspective view of the dispensing blister...
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4. Referring now to the drawings, and in particular to FIGS. 3 and 4, the elliptical half 11 depends slightly inwardly from the elliptical groove 8, relative to the board 1, and then drops downwardly to form a lip 13 adjacent edge 9a. Elliptical half 12 depends slightly downwardly from the elliptical groove 8 to its edge 9b. Due to this structural formation, the two edges 9a and 9b resiliently fold together against one another in the unflexed position, in the absence of any force tending to push them apart, thereby holding the contents of the container inside.

When it is desired to open the container 2 for access to the contents thereof, pressure is applied, as shown by arrows 15, by one's fingers or any other means, longitudinally from opposite ends of the slit opening 9, substantially along the major diameter of the ellipse.

Referring now again to the drawings, and in particular to FIGS. 5-7, when pressure is applied to the container 2 from opposite ends of the slit opening 9, the container 2 flexes forming an access opening 16 between and along the edges 9a and 9b of the slit 9, as shown in FIGS. 6 to 7, due to the resiliency of the container 2 and the structural formations described above.

As shown in FIG. 7, the elliptical half 11 bends upwardly when pressure is applied, due to the formed upward shape thereof including the lip 13 thereof (FIGS. 3 and 4), and elliptical half 12 bends downwardly (although not limited thereto) providing the access opening 16 between the edges 9a and 9b, providing access to the contents of the container 2, which contents may be removed either by finger or by shaking the container to remove some of the articles therein. The thumb and forefinger of one hand may press or squeeze the portion designated by arrows 15 to form the access opening 16, while the other hand may simply remove a couple of the articles from the container 2. The container 2 is formed, as described, in such a useful manner that pressure exactly along arrows 15 does not necessarily have to be applied, as long as there is substantially applied in this direction; even downward pressing on the container near the opposite ends of the slit 9 will open and spread the edges 9a and 9b apart.

The elliptical groove 8 and the other features of the present invention may also be designed with separate dispensing compartments for two or more types of articles, e.g., snap...
fasteners, hooks and eyes, pins, etc., wherein each compartment is provided with a separate slot which may be parted and opened by squeezing without inadvertently opening the other compartments.

We claim:

1. An openable and closable blister package for display, storage and dispensing of articles comprising a backing board having a flat continuous surface, a blister-shaped container open on one side and including resilient walls, means for affixing said container to said backing board covering said open one side of said container, said walls of said container defining an interior chamber in cooperation with said backing board for holding articles therein, said resilient walls defining a slit opening therein having two edges abutting each other in a closed unflexed position, said resilient walls forming opposed bendable portions oriented laterally relative to and at opposite longitudinal ends of said slit opening and adapted to be pressed toward one another, thereby spreading said edges of said slit opening apart in an open flexed position, thereby defining an access opening into said interior chamber, and said resilient walls returning to their closed unflexed position and causing said edges to resiliently return to abutment with each other when said pressure is released from said opposed bendable portions.

2. The openable and closable blister package, as set forth in claim 1, wherein said container is formed into a tray-like blister member having flat flanges defining therebetween said open one side, and said flat flanges being affixed to said backing board.

3. The openable and closable blister package, as set forth in claim 2, wherein said container includes, side walls joined at corner ends thereof extending substantially perpendicularly from said flat flanges, an uppermost portion substantially parallel to said backing board and extending from and between said side walls spaced from said flat flanges, and said slit opening being formed centrally in said uppermost portion.

4. The openable and closable blister package, as set forth in claim 3, wherein said uppermost portion is formed having a ring-shaped groove extending therearound, and said slit opening extending across a diameter of said groove.

5. The openable and closable blister package, as set forth in claim 4, wherein said groove is outwardly extending relative to said backing board.

6. The openable and closable blister package, as set forth in claim 4, wherein said uppermost portion between said groove defines two halves, each on one side of said slit opening and each including one of said two edges of said slit opening, one of said halves extending slightly upwardly away from said groove relative to said backing board, and depending downwardly adjacent its corresponding edge forming a lip, and the other of said halves extending slightly downwardly relative to said backing board away from said groove to its corresponding edge.

7. The openable and closable blister package, as set forth in claim 4, wherein said container is moulded from a transparent plastic material.

8. The openable and closable blister package, as set forth in claim 1, wherein said slit opening is formed initially with a plurality of spaced perforations defining relatively small connected portions therebetween, the latter being adapted to be broken to define said slit opening.

9. The openable and closable blister package, as set forth in claim 1, wherein said container is formed with rounded corners and constitutes an integral member.

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