PACKING THAT PROVIDES IMMEDIATE ACCESS

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ABSTRACT

The present invention relates to packaging, and more specifically, to a package comprising an outer sleeve, a primary package, a severance line and means for providing access. Also disclosed is an improved secondary package comprising an outer sleeve defining a recess, at least one severance line defining a tear strip and an access aperture defined at least in part by an access window and recess. Further disclosed is a method for dispensing product from a primary container comprising acquiring a package having an outer sleeve and a primary container which includes a dispenser end, and manipulating the dispenser to allow dispensing of a limited amount of product.
PACKAGE THAT PROVIDES IMMEDIATE ACCESS

CROSS REFERENCE TO RELATED PATENT APPLICATIONS

[0001] This application claims benefit of U.S. Provisional Application No. 60/711,880, filed Aug. 26, 2005, the entirety of which is incorporated herein by reference.

FIELD OF INVENTION

[0002] The present invention relates to packaging, and more specifically, to a secondary package including a security feature for controllably accessing the contents of a primary package while still housed within the secondary package.

BACKGROUND OF THE INVENTION

[0003] There are numerous types of secondary packages used to store and display a variety of products housed within a primary package. Some conventional secondary packages include clam shells, cardboard boxes, paperboards, containers, shrink wraps, combinations thereof, and the like. Generally, the secondary packages, containing both the primary package and the product, are stored and displayed on a shelf or a rack of a store.

[0004] Often consumers wish to have immediate, even if limited, access to the product they just purchased. For example, a consumer that stops at a pharmacy to purchase a topical ointment for immediate use wants instant access to the product, even if just for one or two doses. One problem associated with conventional secondary packages, particularly plastic secondary packaging with a high child resistance of theft resistance value, such as a clam shell package, is that the plastic packages do not allow a user to gain immediate access to the contents or product housed within the package. Hence, a tool such as a knife or scissors must be located and used to puncture, sever, or otherwise cut open the secondary package to completely remove the primary package before being able to access and dispense the product.

[0005] Without a tool, consumers have been sighted in store parking lots or in their cars biting and gnawing at newly purchased packages, attempting to burn the secondary package open, and cutting their hands trying to tear open difficult secondary packaging such as clam shells. In other words, most secondary packages are either extremely difficult for anyone to open without a tool or extremely easy. Secondary packages that offer child resistance and/or theft resistance are typically difficult for everyone to access; secondary packages without child resistance and/or theft resistance features are extremely easy to open, such as foldable paperback boxes.

[0006] Accordingly, there remains in the art a need for a secure secondary package that is easy to open by the purchaser and that provides immediate access to at least a portion of the product within a primary package, without requiring a complete removal of the primary package from the secondary package. There is also a need for a secure secondary package that includes one or more security features for controllably restricting access to the primary package or to the product itself.

SUMMARY OF THE INVENTION

[0007] The present invention overcomes the deficiencies of the known art by providing a secondary package that allows the purchaser to have immediate, if limited, access to the contents of the primary package. In an exemplary embodiment, the secondary package comprises an outer sleeve for housing one or more primary packages, such as a squeeze tube, pump container, squirt bottle, and the like. One or more primary packages are housed within the outer sleeve, or one or more primary packages are disposed onto a tray and the tray is inserted within the outer sleeve. The outer sleeve includes an access window and access aperture adjacent to the access window. The one or more primary packages are positioned within the outer sleeve so that a tip, spout, or dispenser end of at least one primary package protrudes through a corresponding access aperture.

[0008] A severance line or tear line is formed within the substrate of the outer sleeve to form a means to open the outer sleeve, such as a tear strip or a removable section of the secondary package including a removable top or bottom. The tear strip covers or overlies the access window to restrict access to the dispenser end of the primary package. To dispense the contents from the primary package, a user peels the tear strip along the severance line to expose the dispenser end that can then be opened. In some embodiments, pressure is applied to the sides of the secondary and/or primary packages and the content is forced through the end of a tube. Alternatively, in other embodiments, a dispenser end in the form of a pump handle is exposed and the contents released via the pump handle. In still other alternative embodiments, the package is inverted and an amount of product is dispensed. Other alternative embodiments provide a sample apart from the primary package, accessible through the access aperture.

[0009] In some embodiments, the primary package is held within the recess of the secondary package by features associated with the secondary package, such as ribs, tabs, straps, wings, panels, and the like. In other embodiments, the primary package is welded to the secondary package. The level of security, attachment, or connection between the primary package and secondary package, by which the difficulty of removing the primary package from the secondary package may be controlled, is merely a design choice.

[0010] An embodiment that provides a packaging system comprises: an outer sleeve having a recess configured to hold a primary package; a primary package, having a dispensing end and configured to hold product, positioned at least partially within said recess; a severance line, positioned on said outer sleeve; access to a dispenser end defined at least in part by said severance line; and, means for providing immediate access. An embodiment that provides a secondary package comprises: an outer sleeve defining a recess; at least one severance line located on the outer sleeve; a means for opening defined by the at least one severance line; an access window created by tearing the severance line; and an access aperture defined at least in part by the access window and the recess. An embodiment that provides a method for dispensing product from a primary container comprises: acquiring a package having an outer sleeve and a primary container wherein the primary container includes a dispenser end and holds product; separating a severance line, located
on the outer sleeve, to permit access to the dispenser end; manipulating the dispenser end to allow dispensing of said product; and, dispensing a limited amount of the product from the package.

0011] Regarding the embodiments illustrated herein, as well as those described, taught, and covered by the claims, the secondary package may comprise any shape or size, and may comprise plastic, cardboard, cardboard, tear-resistant laminates, or any combination thereof, and the like. Further, the secondary package may or may not be transparent and may or may not include information printed on any surface. The secondary package may or may not include indicators, such as lines, arrows, dots, or the like, to indicate where severance lines are positioned or where to cut to gain access to one or more products therein, or where to apply pressure for dispensing the contents of the product housed within the primary package. The secondary package may be configured to include more than one access window and access aperture. The access window and access aperture may comprise any dimension, size or shape, and may be oriented within the outer sleeve or package in any configuration.

BRIEF DESCRIPTION OF THE DRAWINGS

0012] FIG. 1 is a perspective view of a group of secondary packages, according to one embodiment of the present invention.

0013] FIG. 2 is a perspective view of a package of FIG. 1, showing the peeling of a tear strip.

0014] FIG. 3. shows dispensing the contents of the primary package.

0015] FIG. 4. shows the package of FIG. 3 severed to releasably expose the primary package.

0016] FIG. 5 is a perspective view of a secondary package with a tear strip removed, according to an alternative embodiment of the present invention.

0017] FIG. 6. is a perspective view of a secondary package with a tear strip removed, secondary to an alternative embodiment of the present invention.

0018] FIG. 7. shows the package of FIG. 6 severed to releasably expose the primary package.

0019] FIG. 8 is a perspective view of a secondary package, according to a further alternative embodiment of the present invention.

0020] FIG. 9 is a perspective view of the package of FIG. 8. showing the peeling of a tear strip.

0021] FIG. 10. shows dispensing the contents of the primary package of FIG. 8.

0022] FIG. 11. shows the package of FIG. 8 severed to releasably expose the primary package.

DETAILED DESCRIPTION OF THE INVENTION

0023] As required, detailed embodiments of the present invention are disclosed herein. It must be understood that the disclosed embodiments are merely exemplary of the invention that may be embodied in various and alternative forms, and combinations thereof. As used herein, the word "exemplary" is used expansively to refer to embodiments that serve as an illustration, specimen, model or pattern. The figures are not necessarily to scale and some features may be exaggerated or minimized to show details of particular components. In other instances, well-known components, systems, materials or methods have not been described in detail in order to avoid obscuring the present invention. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representative basis for teaching one skilled in the art to variously employ the present invention.

0024] Referring now to the drawings, FIGS. 1 through 4. illustrate an exemplary secondary package 10 for housing one or more primary packages 12 that contain product, according to one embodiment of the present invention. The package 10 comprises an outer sleeve 14 including a panel 16 having a hang tab 18 for storing or displaying the package 10 on a rack.

0025] The package 10 further includes an access window 22 formed within the outer sleeve 14. The access window 22 extends laterally from one or more sides of the outer sleeve 14, and in this illustrated embodiment runs partially parallel with the base 31. The outer sleeve 14 includes an access aperture 24 that extends within the body of the outer sleeve 14, and is defined at least in part by the access window 22. The access aperture 24 is dimensioned to receive the dispenser end 26 of the primary package 12, illustrated here as a tube with a removable cap and best shown in FIG. 4.

0026] The outer sleeve 14 includes a recess 28 configured to house one or more products 12. Here, the recess 28 correspondingly aligns with the access window 22 and the access aperture 24 so that the cap 26 of tube 12 extends partially within the access aperture 24. In another exemplary embodiment, one or more tubes 12 may be disposed onto a tray, and the tray is inserted or encapsulated within the outer sleeve 14 so that the cap 26 of at least one tube 12 protrudes through a corresponding access aperture 24.

0027] The illustrated outer sleeve 14 includes a front panel 30 and back panel 32. The front panel 30 and the back panel 32 are each attached to a top panel 34 and a distal bottom panel 36. The optional panel 16 is foldably attached to or integrally formed with any of the other panels 30, 32, 34, 36. The front panel 30 and the back panel 32 are attached together to form the recess 28 and encapsulate one or more tubes 12 within the package 10. The top panels 34 and the bottom panel 36 are folded to form a top wall and a bottom wall of the package 10. A severance line 38 is formed within the substrate of the outer sleeve 14 to form a tear strip 40 that overlays the access window 22 and restricts access to the tip 26 of the tube 12.

0028] In practice a user can have immediate, limited access to the contents of the primary package, as best illustrated in FIG. 3. First, the user initiates a separation of the severance line 38 to remove the tear strip 40 from the outer sleeve 14. In alternative embodiments a tear strip 40 per se is not provided, rather the tearing of severance lines allow creation of the access window 22 or removes a section of the secondary package. In these embodiments, separating the severance line 38 exposes the cap 26 of the tube 12, which allows the user to remove the cap 26. Thereafter, the user squeezes or otherwise applies an initial pressure to the outer sleeve 14 so that the panels 30, 32 partially compress.
The amount by which any of the panels 30, 32, 34, 36 deform or partially compress in response to an initial pressure is merely a design feature controlled by elements such as the substrate selection and internal support elements.

This compression of the panels 30, 32 regulates the amount of subsequent pressure that is applied to the primary package 12 by having the panels 30, 32 yield shortly after the panels 30, 32 contact the exterior of the primary package 12. The subsequent pressure applied to the primary package 12 is sufficient only to release a single dose or limited amount of content from the primary package 12. In this regard, the user gains immediate relief of his or her needs by gaining immediate, albeit limited, access to the contents of the primary package 12.

Thereafter, when the consumer has access to a tool such as a knife or scissors, he or she can gain complete access to the primary package 12 by cutting or severing the outer sleeve 14. In this manner, the primary package 12 is removed from the outer sleeve 14, as best shown in FIG. 4. In alternative embodiments, additional severance lines are located on the outer sleeve to allow complete access to the primary package 12 without the use of a tool.

Advantages of the embodiment illustrated in FIGS. 1-4 include tamper evidence such as when a severance line 38 is ruptured or a tear strip 40 is removed, and a child resistant feature in that only a limited amount of the product is accessible without removing the secondary package 14.

Exemplary alternative embodiments of the present invention are also shown in FIGS. 5 through 7. FIG. 5 shows a package 100 comprising an outer sleeve 114 including an optional panel 116 having a hangtab or aperture 118 for storing or displaying the package 100 on a rack. At least one access window 122 is formed within the outer sleeve 114. The illustrated access window 122 extends completely through the outer sleeve 114, and may comprise any size, shape or dimension. The outer sleeve 114 includes an access aperture 124 that is formed within the inner surface of the access window 122, and extends at least partially within the body of the outer sleeve 114. As explained below, in some embodiments the size or configuration of the access aperture can control or further limit the user’s access to the product.

Not shown here is a tear strip, similar to the one described above, that defines the access window 122 and covers the access aperture 124.

At least one primary package or product 112 with a dispenser tip 126, such as a tube, squat bottle, pump bottle, and the like is disposed or housed within the outer sleeve 114. The product 112 is orientated such that the dispenser tip 126 protrudes into the access aperture 124. To access the dispenser tip 126, the user removes the tear strip to expose the access aperture 124 and then removes, opens, or otherwise manipulates the dispenser tip 126 to allow dispensing of the contents of the product 112.

With regard to primary packages 112 that require external pressure to dispense the contents, such as a tube or squat bottle, the user squeezes the outer sleeve 126 and a limited amount of content is dispensed as described above. Some alternative embodiments can be designed so that the user inverts the package 100 in order to dispense a limited amount of content.

With regard to primary packages 112 that provide integral mechanical means for dispensing, such as the illustrated pump handle, the size and position of the access aperture 124 can help control the user’s access to the product. For example, an access aperture with a high floor (very close to the external pump arm) and high roof (allows a user’s finger on the pump arm), best shown in FIG. 5, permits the user to only press the pump slightly to dispense a small amount of product. Alternatively, an access aperture with a low floor and low roof, best shown in FIG. 6, permits the user to exert initial pressure on the top of panel 134 to partially depress the extended pump handle 126 with a subsequent pressure to dispense some amount of content.

In some embodiments, the top panel 134 and/or top portion of the package 100 is permanently deformed and does not allow release or further compression of the pump arm 126. Similarly, other outer sleeves 114 can be configured to permanently deform and not permit further subsequent pressure to be transferred to the primary package 112.

Thereafter, when the consumer has access to a tool such as a knife or scissors, he or she can gain access to the primary package 112 by cutting or severing the outer sleeve 114. In this manner the primary package 112 is removed from the outer sleeve 114 as best shown in FIG. 7. In other exemplary embodiments, a severance line is provided that allows the consumer to separate or otherwise dismantle the outer sleeve 114, such as by completely removing a top portion or a bottom portion to gain partial or complete access to the primary package 112.

A further embodiment of the present invention is shown in FIGS. 8 through 11. FIG. 8 shows a package 200 comprising an outer sleeve 210 for housing one or more primary packages 218. An access window 214 is formed within the outer sleeve 210. In this illustrated embodiment, the access window 214 begins at the base of the outer sleeve 210, and extends partially upwards in a longitudinal direction forming a first side “a”, a second side “b”, and a third side “c”, as best shown in FIG. 11.

At least one primary package 218, here illustrated as a squat bottle 218 is housed within the package 200. The squat bottle 218 is oriented within the package 200 so that the dispenser end 220 of the tube 218 protrudes into the aperture 216, as best shown in FIG. 10.

A sequence line 222 is formed within the substrate of the outer sleeve 210 to form a tear strip 224. The tear strip 224 overlays or completely covers the access window 214, thereby selectively restricting access to the dispenser 220 of the squat bottle 218. As shown in FIG. 9, a user peels the tear strip 224 from the outer sleeve 210, along the sequence line 222, to expose the tip 220 of the bottle 218. As demonstrated in FIG. 10, a user dispenses a limited amount of content by properly orienting the package 200, and applying pressure or squeezing the sides of the package 200 in the manner described above. In alternative embodiments the sequence line 222 is substantially parallel to the bottom 31, best shown in FIG. 1, and circumvents the outer sleeve 210 to permit the removal of the entire end of the package 200.

In alternative exemplary embodiments a tear strip 40, 224 is provided which, when removed, exposes an access aperture 22, 122, 224 or removes an end of the package 10, 100, 200. However, rather than allowing a partial dispensing of the contents, as described above, a
sample of the product in a separate container is accessible through the access aperture or open end. For example, ointments and gels stored in the primary package can be provided in a small bladder (such as is typically provided for individual servings of condiments), liquids to be taken orally can be provided instead in the form of film strips that dissolve when taken orally, and tablets such as the one provided in a twist up bottle may be provided in a blister pack. Means for providing immediate access include all the various configurations illustrated and described herein by which a user gains access to a sample or a limited amount of dispensed content, including a prepackaged sample accessible through an access aperture, and a dispenser means accessible through an access aperture.

[0042] The present invention is applicable to the packaging, storing, and dispensing of various products. For the purposes of teaching and not as a limitation, the illustrated embodiments are directed to packages for dispensing pharmaceutical products. Accordingly, the terms “unit”, “dose”, “article”, “item” or “product” as used herein include pharmaceutical preparations, tablets, pills, capsules, lozenges, chews, vitamins, supplements, non-medications, as well as all manner of small and portable items or products that a manufacturer or distributor may wish to keep secure and dispense. Further, the terms, “top”, “bottom”, “face”, “back”, “first” and “second” as used herein, are merely directional in order to distinguish one surface from another, and are not limitations. In addition, terms used to refer to a severed line of any kind, terms such as “cut”, “notch”, “tear notch”, “frangible line”, “severance line”, “tear line”, whether in the singular or plural and combinations thereof, includes but is not limited to perforations, a line of perforations, a line of short slits, a line of half cuts, a single half cut, a single slit, any combination of perforations, slits, and half cuts, short score lines, and the like or the equivalent.

[0043] In the illustrated embodiments the outer sleeve is constructed of various materials including, but not limited to, plastics of any kind and DuraSeal® or EasySeal Plus® brand paperboard products, available through the Applicant. In an alternative embodiment, at least a portion of the outer sleeve is laminated with a tear resistant material, such as a polymer film. In this manner, the exterior of the package is made more resistant to tearing. Suitable laminating materials include biaxially oriented or cross-laminated polymeric films such as high density polyethylene (HDPE), polyolefins, polyesters or combinations thereof.

[0044] The law does not require and it is economically prohibitive to illustrate and teach every possible embodiment of the present claims. Hence, the above-described embodiments are merely exemplary illustrations of implementations set forth for a clear understanding of the principles of the invention. Variations, modifications, and combinations may be made to the above-described embodiments without departing from the scope of the claims. All such variations, modifications, and combinations are included herein by the scope of this disclosure and the following claims.

What is claimed is:

1. A packaging system, comprising:

an outer sleeve having a recess configured to hold a primary package;

a primary package, having a dispensing end and configured to hold product, positioned at least partially within said recess;

a severance line, positioned on said outer sleeve;

access to a dispenser end defined at least in part by said severance line; and,

means for providing immediate access.

2. The packaging system of claim 1, wherein said outer sleeve is configured to receive an initial force and transfer to said primary package a related lesser force.

3. The packaging system of claim 1, wherein said severance line defines a tear strip.

4. The packaging system of claim 3, wherein said tear strip defines an access aperture.

5. The packaging system of claim 4, wherein said access aperture is configured to receive said dispensing end.

6. The packaging system of claim 1, wherein said severance line defines a removable section.

7. A secondary package, comprising:

an outer sleeve defining a recess;

at least one severance line located on said outer sleeve;

a means for opening defined by said at least one severance line;

an access window created by the tearing of said severance line; and,

an access aperture defined at least in part by said access window and said recess.

8. The secondary package of claim 7, wherein said recess is configured to hold a primary package.

9. The secondary package of claim 8, wherein said access aperture is configured to receive a dispenser of said primary package.

10. The secondary package of claim 7, wherein said aperture is configured to provide a means for immediate access.

11. The secondary package of claim 8, further comprising means for securing said primary package within said recess.

12. A method for dispensing product from a primary container, comprising:

acquiring a package having an outer sleeve and a primary container wherein said primary container includes a dispenser end and holds product;

separating a severance line, located on said outer sleeve, sufficiently to permit access to said dispenser end;

manipulating said dispenser end to allow dispensing of said product; and,

dispensing a limited amount of said product from said package.

13. The method of claim 12, further comprising the step of at least partially deforming said outer sleeve.

14. The method of claim 13, further comprising the step of at least partially severing said outer sleeve.

15. The method of claim 14, further comprising the step of removing said primary container from said severed outer sleeve.