



(11) **EP 2 024 254 B9**

(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

- (15) Correction information:
Corrected version no 1 (W1 B1)
Corrections, see
Claims EN 1
- (48) Corrigendum issued on:
20.06.2012 Bulletin 2012/25
- (45) Date of publication and mention of the grant of the patent:
18.05.2011 Bulletin 2011/20
- (21) Application number: **07784159.1**
- (22) Date of filing: **25.05.2007**
- (51) Int Cl.:
B65D 83/04 (2006.01) B65D 5/38 (2006.01)
B65D 75/34 (2006.01)
- (86) International application number:
PCT/US2007/069786
- (87) International publication number:
WO 2007/140328 (06.12.2007 Gazette 2007/49)

(54) **INSERT FOR SLEEVE-AND-INSERT TYPE PACKAGE**

EINSATZ FÜR EIN HÜLSEN-UND-EINSATZ-PAKET

GARNITURE POUR EMBALLAGE DE TYPE À MANCHON ET À ÉLÉMENT ENFICHABLE

- (84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR
- (30) Priority: **26.05.2006 US 803301 P**
- (43) Date of publication of application:
18.02.2009 Bulletin 2009/08
- (73) Proprietor: **MeadWestvaco Corporation**
Richmond, VA 23219-0501 (US)
- (72) Inventor: **HESSION, Christopher, J.**
Richmond, VA 23225 (US)
- (74) Representative: **Coulson, Elizabeth Eve et al**
Coulson & Associates
1st Floor Suite
5 Newbold Road
Rugby CV21 2LQ (GB)
- (56) References cited:
WO-A-2006/042181 US-A1- 2004 188 311
US-B1- 6 412 636

EP 2 024 254 B9

Description**FIELD OF THE INVENTION**

[0001] This invention relates to sleeve-and-insert type packaging. More particularly, the invention relates to a novel insert for a sleeve-and-insert type package that is suitable for use as an integral blister card or a receiving tray.

BACKGROUND OF THE INVENTION

[0002] A sleeve-and-insert type of package is a package wherein a substantially planar member is housed within an enclosure from which it may be partially or fully removed to gain access to items held on one or more surfaces of the planar member. The planar member may be identified by several alternative names including but not limited to an "insert," a "card," an "insert card," a "slide card," and a "sliding element." These terms will be used interchangeably herein.

[0003] Sleeve-and-insert type packaging is useful for a variety of purposes; including the sale and distribution of items that may be juxtaposed permanently or temporarily in some manner with respect to the insert. A sleeve-and-insert type of package is particularly useful as a so-called "unit-dose packaging system." A slide card for use with a sleeve of a unit dose packaging system is shown in WO2006/042181. In a unit-dose packaging system medicaments such as pills are removably held to the planar member in individual, or unit doses, typically within a blister. In alternative embodiments unit-doses, such as held in syringes, patches, inhalers, pouches, and the like, are mounted to a tray. Unit dose packaging systems are useful as a means for dispensing an individual, or a unit dose of a medicament. Such systems are even more useful when they have the added features of providing resistance to the package being opened by a child, while at the same time facilitating ease of opening, closing and general use by older individuals whose manual dexterity may have decreased with age. These two features are typically referred to as "child-resistant" and "senior-friendly," respectively.

[0004] Preventing or inhibiting undesired partial or full removal of the inner slide card from the sleeve/ shell is important in helping facilitate resistance to child tampering and use by seniors. In addition, preventing or inhibiting widespread access to the items held by the sliding element is important to child-resistance. Thus, it will be appreciated that it is useful to have a unit dose package with additional novel features that prevent or inhibit the undesired access of items held by the inner card.

[0005] Because decreased cost and increased ease of manufacturing are desirable, it will likewise be appreciated that it is beneficial to have a child-resistant and senior-friendly unit dose package that is efficient to operate, is durable and sturdy, and simple to construct, thereby reducing the cost and inefficiencies of manufac-

ture.

SUMMARY OF THE INVENTION

[0006] The present invention overcomes the shortcomings of the prior art by providing features that improve the ease of manufacturing, lower the cost of manufacturing, improve the ease of use, and improve the child-resistance features of an individual insert card as well as sleeve-and-insert package as a whole. These features include a monolithically formed slide card, blisters integral to the slide card, blisters integral to the slide card that are detachable, a detachable locking panel attached to the slide card, improved locking elements, features that increase the durability of the locking elements, ribs that improve the strength and durability of the slide card, ribs that improve the strength of the sleeve, and ribs that interfere with unintended access to the blisters such as by a child trying to bite their way through the sleeve and/or slide card.

[0007] According to one aspect of the invention, an improved locking panel with at least one reinforcement element to inhibit deformation hingedly extends from the base panel. In another embodiment, at least two locking panels hingedly extend from the base panel. According to a further aspect of the invention two adjacent locking panels are separated from one another, by a cut line or a slot or a similar means for separation. According to an additional aspect of the invention, the base panel has at least one reinforcement elements to inhibit deformation of the base panel. According to still an additional aspect of the invention, the base panel has an arrangement of one or more ribs.

[0008] In accordance with another aspect of the invention, the base panel includes a raised grip configured to improve access and withdrawal of the slide card from a sleeve. In accordance with still a further aspect of the invention, either the locking member or the base panel includes a fold-resisting abutment for improving lockability between the sleeve and card. In accordance with still another aspect of the invention, at least one fold-over panel is hingedly connected to the base panel, and either or both of the base panel and fold-over panel has at least one rib. In accordance with one more aspect of the invention, a fold-over panel is hingedly connected to the base panel. There the base panel and fold-over panel have complementary, cooperating ribs for nesting or interlocking the folded panels.

[0009] Also taught herein are insert cards comprising a monolithically formed base panel with at least one hingedly attached locking panel that includes at least one engaging edge. There, at least one blister is integrally formed within the base panel to define a blister opening configured to receive an item that is stored by the blister. Other features of the exemplary insert cards include a seal over the blister opening and at least one rib extending from the base panel. In some embodiments the rib is positioned proximate to the perimeter of the base panel

but the ribs may be located anywhere on the insert card.

[0010] Additional features of some insert cards include an abutment that inhibits a face-contacting relationship between the base panel and locking panel, wherein at least a portion of the perimeter of the abutment is curved. Further, the base panel can include an extended grip portion for easier access once the insert card has been released from the sleeve. In other embodiments, the blisters are detachable for ease of use. In some of those embodiments the blisters are detachable so as to define a center bar that allows the insert card to fully function within the sleeve even after blisters are removed. In still other embodiments, the locking panel is detachable from the base panel.

[0011] Further described and taught herein are insert cards that include one or more hingedly attached fold-over cards. In those embodiments the fold-over cards can include features such as ribs, blisters, abutments, posts, and combinations and the like, that interface, interlock, or otherwise cooperate with one or more similar features of the base panel to nest the folded panels, lock the folded panels, or keep the folded panels spaced apart.

[0012] In addition to the insert cards described, taught and claimed herein, a packaging system that incorporates the insert cards is described, taught and claimed. The exemplary system includes a releasably lockable sleeve, as taught in previous applications filed by the present applicant, configured to receive an insert card described, taught or claimed herein. Further, the description includes a method of using the insert cards described, taught and claimed herein. Additional embodiments include insert cards wherein the items are not held to the base panel by blisters but by other means for securing, including clips, ties, receiving inserts, tabs, locking posts, tape, hook and loop fasteners, ribs, springs, combinations thereof, and the like.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013]

FIG. 1 is a perspective view of a slide card, which is not part of the invention.

FIG. 2 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

FIG. 3 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

FIG. 4 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

FIG. 5 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

FIG. 6 is a plan view of an exemplary embodiment

of a slide card, according to the present invention.

FIG. 7 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

FIG. 8 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

FIG. 9 is a side elevation view of the exemplary slide card of FIG. 8.

FIG. 10 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

FIG. 11 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

FIG. 12 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

FIG. 12a is a cross-section elevation view of the ribs of exemplary folded cards, of FIG. 12.

FIG. 13 is a plan view of an exemplary embodiment of a slide card, according to the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0014] 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.

[0015] For the purposes of teaching and illustration, and not limitation or restriction, the illustrated embodiments of the present invention reference pharmaceutical products such as medicaments in the form of tablets, pills and the like. It is contemplated that the present invention is not limited to the pharmaceutical-related goods referenced with the illustrated embodiments, but is applicable to any small, delicate, sensitive, or portable item. Accordingly, the present invention can be used with all nature of small and portable items that the user may want to hold and store in a releasably lockable container and dispense in a regulated manner. Further, the present invention is not limited to the blister packs referenced with

the illustrated embodiments, but is applicable to any tray, card, rack, pack, pouch, and the like to which an item of any sort may be held, stored, attached, secured or otherwise associated with the item.

[0016] Referring now to **FIG. 1**, an slide card **100** is shown. The slide card **100** is primarily for use with a releaseably lockable sleeve, as taught in one or more prior applications or patents filed by the present applicant, and includes a base panel **110** and a locking panel **115**. The locking panel **115** includes an engaging edge **118**. The base panel **110** is connected to the locking panel **115** by a hinge **120**. The base panel **110** has formed cavities or blisters **125** for receiving an item. In the exemplary embodiment, the blisters **125** are integrally formed with the base panel **110** and a seal, such as a foil or paper substrate, is attached to the base panel **110** to enclose the item within each blister **125**. The items are thereby held in place within the blisters **125** until being removed by known methods.

[0017] The slide card **100** can be made of any material including paper or plastic, formed by manufacturing processes including thermo-forming or die-pressing. The hinge **120** can be formed in any configuration by forming a fold line, score line, cut line, perforation lines, or any combination thereof, and the like. The locking panel **115** is pivotable about the hinge **120** such that it can engage a locking element in the sleeve, and thereby inhibit undesired removal of the slide card **100** from the sleeve. In the embodiment shown in **FIG. 1**, the slide card **100** is a thermo-formed plastic blister card used to hold medications.

[0018] In the exemplary embodiments shown in **FIGs. 2-4**, the slide cards **200, 300, 500** include multiple locking panels **215, 315, 515**, respectively. The locking panels **215** of the slide card **200** are each defined by a hinge **220** and separated from one another by a cut line **230**. Similarly, the locking panels **315** are defined by a hinge **320** and separated from one another by a cutout **330**. The cutout may also be termed a slot. The illustrated locking panels **515** are triangular shaped and connected to the base panel **510** along respective hinges **520**. Alternative embodiments can include locking panels of alternative shape and additional number.

[0019] Each of the locking panels **215, 315, 515** on the respective slide cards **200, 300, 500** are independent from one another. Thereby, each of the locking panels independently engages a respective locking element of a related sleeve. Thus, to release the slide card from the sleeve, it is considered that one or more release mechanisms may be used to release the locking panels from their respective locking elements. For example, a single release mechanism may be used that releases each of the locking panels substantially simultaneously. Alternatively, each of the locking panels may have its own release mechanism. It is increasingly difficult to release the slide card from the sleeve as the number of release mechanisms that are required to be substantially simultaneously triggered to release the slide card from the sleeve

increases. Accordingly, increasing the number of release mechanisms that are required to release the slide card improves the child resistance of the package.

[0020] Slide cards taught by the present invention may have at least one rib **235, 335, 535**. A rib, as taught by the present invention, is a raised member extending from a plane that is the surface of a base panel or the locking panel, or both. Ribs can extend in either direction, that is, upwardly or downwardly with respect to a surface of the panel, or both. The rib or a section of a rib may serve multiple purposes including, but not limited to, providing a barrier to a portion of the base panel (for example, forming a barrier around an item placed on the base panel), providing a barrier to resist application of a perpendicularly applied force (for example, crushing or biting), serving as a gripping structure to facilitate grasping of a base panel or locking member, and serving as structural reinforcement against deformation of the base panel or the locking panel, or both.

[0021] Certain embodiments of slide cards include at least one rib. Another advantage of the rib(s) taught herein is the increased rigidity to the slide card. The rib or ribs may be thermoformed or pressed into the slide card, or may be separately attached to the slide card. Referring to **FIGs. 2 and 3**, a U-shaped rib **235, 335** extends around the perimeter of the base panel **210, 310**, respectively.

[0022] Turning now to **FIG. 4**, there is shown an alternative embodiment in the form of a T-shaped rib **535** that extends along an edge and longitudinally along the substantial center of the base panel **510**. The slide card **500** further includes elongated ribs **536** that substantially align with respective locking panels **515** and are offset from the longitudinal portion of the rib **535**. Referring to **FIG. 5**, an L-shaped rib **735** extends around a portion of the perimeter of the base panel **710**. The slide card **700** further includes a longitudinal rib **736** to provide rigidity to a portion of the base panel **710**, which is offset from the rib **735**. Alternative embodiments (not shown) provide a slide card that includes a series or pattern of ribs which increase the rigidity of areas of the base panel and the locking panel, respectively.

[0023] It should be noted that the ribs are not limited to the locations, shapes, arrangements, or patterns described herein. Rather, the locations, shapes, arrangements, or patterns of the ribs are determined in order to increase the rigidity of the slide card, to accommodate the placement of blisters and other features, and provide other beneficial features. For slide cards that are thermoformed, a certain amount of rigidity is helpful to prevent or inhibit the slide card from curling or twisting after being formed. The ribs can be arranged to accommodate a desired blister layout or configuration, such as the layouts described herein. Accordingly, the location of ribs may be adapted to provide rigidity or other features without interfering with or obstructing the other elements of the slide card.

[0024] The ribs can be strategically located to provide beneficial features. For example, the ribs can be located

to provide a child resistance feature, for example, such that the ribs prohibit biting into the card to access articles in the blisters. The location of each rib can provide additional functional benefits when the slide card is used in combination with a sleeve or outer carton. For example, disposing a rib at an end of the slide card, which corresponds with the open end of a sleeve, provides an end closure to the open end of the sleeve. Thereby, when the slide card is received in the sleeve, the rib protects the slide card and items contained therein from dust, pests, and unintended access. In the embodiments shown herein, the end of the slide card that corresponds to the open end of a sleeve is the end opposite the locking panel.

[0025] In certain embodiments, a slide card **100** is designed for being enclosed in a sleeve that includes a catch flap, as taught in previous applications filed by the present applicant. The catch flap is disposed at the open end of the sleeve such that, as the slide card **100** is pulled from the sleeve, the folded locking panel **115**, **215**, **315**, **515**, of the slide card engages the catch flap, thereby preventing the slide card from being fully removed from the sleeve. If the slide card is inserted into the sleeve such that the side of the slide card from which the blisters protrude is adjacent to the wall of the sleeve that the catch flap is hingedly connected, the blisters may inadvertently interfere with the removal of the slide card. Specifically, the catch flap may engage one or more of the blisters, thereby preventing the slide card from being removed from the sleeve. In this case, ribs **235**, **335**, **535**, **735** extend the length of the slide card to act as a bridge or as rails to prevent the blisters from engaging the catch flap as the slide card is removed from the sleeve. Here, also, but not necessarily, the rail portion of the ribs has a height that is no less than the height of blisters, allowing the catch flap to slide along the rails and not engage the blisters. The height of the rails and of the blisters is referenced relative to the base panel **210**, **310**, **510**, **710**.

[0026] As shown in **FIGs. 6** and **7**, certain embodiments of slide cards **1100**, **1300** include a raised grip **1140**, **1340** that is disposed at the end of the base panel **1110**, **1310**, respectively. The raised grip **1140**, **1340** can be formed in a manner similar to the ribs **1135**, **1335**. The size and shape of the raised grip **1140**, **1340** is an ergonomic design decision, such that the raised grip **1140**, **1340** facilitates access by the intended user. For example, the slide card **1100**, **1300** can be captured between a user's thumb and finger, wherein the user's thumb contacts the convex surface and the user's finger contacts the opposite concave surface. In the embodiments shown in **FIGs. 6** and **7**, the raised grip **1140**, **1340** is integral to the rib **1135**, **1335**. However, in alternative embodiments, the raised grip **1140**, **1340** may be detached or offset from the rib **1135**, **1335** or the rib **1135**, **1335** may be omitted.

[0027] Referring now to **FIGs. 8** and **9**, the ability of the locking panel **1515** of a slide card **1500** to be engaged by an aperture or panel that forms a part of the locking arrangement of the system's sleeve or shell (not shown),

is enhanced by biasing the locking panel **1515** away from a substantially parallel condition with respect to the base panel **1510**. Fold-resisting features serve this purpose. The hinge **1520** serves as a fold-resisting mechanism to bias the locking panel **1515**. The amount of bias in the hinge **1520** may be controlled by additional manufacturing techniques including varying the thickness of the hinge **1520** or otherwise varying the degree to which a line forming the hinge **1520** is weakened to permit bending.

[0028] The base and locking panels **1510**, **1515** of the slide card **1500** further include fold-resisting abutments **1545**, **1550** that prevent the locking panel **1515** and base panel **1510** from being placed into a substantially parallel condition or face contacting arrangement with respect to one another. Although one fold-resisting abutment on either the locking panel **1515** or the base panel **1510** is sufficient to serve as a fold-resisting mechanism or element, more than one fold-resisting abutment may be used on either one or both panels **1510**, **1515**. The use of opposing fold-resisting abutments **1545**, **1550** on respective base **1510** and locking **1515** panels, provides the advantage of being able to minimize the height of each fold-resisting abutment **1545**, **1550** while still achieving desirable fold resistance. Although each abutment may take many forms, an embossed abutment may be easily manufactured in a suitable substrate, particularly a substrate formed of plastic, paper, or a combination thereof, or other suitable materials.

[0029] The illustrated fold-resisting abutments **1545**, **1550** are proximate to the hinge **1520**. Specifically, the fold-resisting abutment **1545** is disposed on the base panel **1510** and the fold-resisting abutment **1550** is disposed on the locking panel **1515** such that, when the locking panel **1515** is folded along the hinge **1520**, the fold-resisting abutments **1545**, **1550** contact one another to provide support to the hinge **1520** or otherwise maintain the proper locking angle of the locking panel **1515**. In the exemplary embodiment, the fold-resisting abutment **1545** has a shape similar to a bubble or otherwise has a substantially semi-circular cross section. The fold-resisting abutment **1550** has a substantially rectangular cross section. It is noted that, in alternative embodiments, the fold-resisting abutments may have any size or shape that facilitates supporting the locking panel and hinge.

[0030] The fold-resisting abutment **1550** shown in **FIG. 8** includes a curved edge **E** that is proximal to the engaging edge **1518**. The edge **E** of the fold-resisting abutment **1550** is curved such that the locking panel **1515** resists buckling along the engaging edge **1525**. In addition, the fold-resisting abutment **1550** increases the rigidity of the locking panel **1515** to resist bending over the fold-resisting abutment **1545**. In other words, the locking panel **1515** may tend to fold at the edge **E** where the support of the fold-resisting abutment **1550** ends. The curvature of the curved edge **E** also resists the tendency of the locking panel **1515** to fold along a straight line and thus resists the undesired possibility of collapsing. With ref-

erence now to **FIG. 9**, a side elevation view of the slide card **1500** is shown. The locking panel **1515** is shown partially pivoted about the hinge **1520** with respect to the base panel **1510** to a position wherein it can engage one or more locking elements in a sleeve or shell to help form a locking arrangement.

[0031] Turning now to **FIG. 10**, a slide card **1700** includes a center bar **1755** defined by longitudinal and transverse lines of demarcation. Transverse lines of demarcation **1762** extend from the longitudinal lines of demarcation **1760** to define tear-away units **1765**. Each tear away unit **1765** is defined from a portion of the base panel **1710** and includes a blister **1725**. The center bar **1755** permits continued access to and use of the slide card **1700** within a sleeve as units **1765** are detached from the base panel **1710**. In the exemplary embodiment, the center bar **1755** is located in the center of the base panel **1710**. However, in alternative embodiments, the bar may be located in any suitable position. For example, the bar may be located adjacent to a longitudinal edge of the slide card **1700**.

[0032] Referring to **FIGs. 11-13**, embodiments of a slide card including a fold-over panel are shown. Beginning with **FIG. 11**, a slide card **1900** includes a fold-over panel **1970**. The fold-over panel **1970** is connected to the base panel **1910** by a hinge panel **1975**. Specifically, the hinge panel **1975** is hingedly connected to the panels **1910**, **1970** along fold lines **F**. In this embodiment, the hinge panel **1975** includes an aperture **P**. The aperture **P** reduces the stress at the hinge panel **1975**. It is contemplated that a hinge may be defined by one or more apertures **P** and that the fold lines **F** may be omitted. The apertures **P** may be any suitable size or shape that facilitates reducing stress in a portion of the slide card between the base panel and the fold-over panel. It is further contemplated that the aperture **P** may be omitted and the fold lines may extend across the slide card to define a hinge panel. In alternative embodiments, it is contemplated that formed hinges or soft creasing may be used as a hinge.

[0033] With regard to **FIGs. 12 and 12a**, a slide card **2000** includes a fold-over panel **2070** connected to the base panel **2010** by a hinge panel **2075**. Specifically, the hinge panel is connected to the panels **2010**, **2070** along fold lines **F**. The base panel **2010** and the fold-over panel **2070** include U-shaped ribs **2035a**, **2035b**, respectively. The U-shaped ribs **2035a**, **2035b** correspond to one another such that, as the fold-over panel **2070** is folded to be substantially parallel to the base panel **2010**, the ribs **2035a** on the base panel **2010** align and are in contact with the ribs **2035b** on the fold-over panel **2070**. Specifically, the ribs **2035a**, **2035b** are substantially similar in shape and are positioned substantially symmetrically about the hinge panel **2075**. As shown in **FIG. 12a**, the ribs **2035a**, **2035b** can be designed to matingly engage such that the slide card **2000** is maintained in the folded arrangement described above. The design of the ribs **2035a**, **2035b** is not limited to that shown in **FIG. 12a**,

but include any corresponding cross-sections that facilitate maintaining the folded arrangement. For example, the cross-sections may be a protrusion and recess combination or each of the cross-sections may be defined by a common diagonal plane. In yet other embodiments, either set of ribs are wider and longer in order to receive the other set. In that configuration, the ribs are nested and the folded panels achieve a thinner profile.

[0034] With reference to **FIG. 13**, a slide card **2300** includes multiple fold-over panels **2370a**, **2370b** connected to the base panel **2310** by hinge panels **2375a**, **2375b**, respectively. Specifically, the hinge panels **2375a**, **2375b** are connected to the base panel **2310** and to a respective fold-over panel **2370a**, **2370b** along the fold lines **F**. In the exemplary embodiment, the hinge panel **2375b** is wider than the hinge panel **2375a** such that the fold-over panel **2370a** can be folded onto the base panel **2310**, as described above, and the fold-over panel **2370b** can subsequently be folded onto the fold-over panel **2370a**. Thereby, the ribs **2335a** of the fold-over panel **2370a** are in contact with the ribs **2335c** of the base panel **2010**, and the ribs **2335b** of the fold-over panel **2370b** are in contact with the outside surface of the fold-over panel **2370a**.

[0035] Alternative embodiments of the present invention include a slide card having a peelable backing, not shown. The peelable backing facilitates removal of items and can include foil or a combination of foil and tissue or kraft paper, and is sealed to the back of the blister. Frangible lines, such as perforated, cut, or score lines, are added to the peelable backing to define tabs which are peelable to expose the article within a blister. In this embodiment, a peel initiation area is located along the edge or perimeter of the slide card. In alternative embodiments, wherein a more child resistant peelable backing is desired, a peel initiation area may be located toward the center of the slide card. Advantageously, the slide card includes a stationary body member that may be engaged to grip the slide card before or after the tabs have been peeled away. It should be noted that the peelable backing can be incorporated into alternative embodiments, such as shown in **FIG. 10**. In that case, the center bar **1755** is, in effect, a stationary body member and, when a tear away unit **1765** is removed a small angled cut line defines the peel initiation location of a peelable backing.

[0036] It must be emphasized that 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.

Claims

1. A packaging system comprising:

a releasably lockable sleeve including a catch flap disposed at an open end of the sleeve; and an insert card (200; 300; 500; 700; 1100; 1500) slidably received in the sleeve for movement between a first position where the insert card is fully received in the sleeve and a second position where the insert card is nearly removed from the sleeve, said insert card comprising:

a monolithically formed base panel (210; 310; 510; 710; 1110; 1510) defined by opposing edges spaced apart by opposing ends the opposing edges extending along a length of the insert card;

at least one locking panel (215; 315; 515; 1515) including at least one engaging edge (1518), hingedly attached (220; 320; 520; 1520) to said base panel along at least a portion of one of said edges and ends; such that the folded locking panel engages with the catch flap when the insert card is in the second position whereby the insert card is prevented from being fully removed from the sleeve; and

at least one blister integrally formed within said base panel to define the perimeter of a blister opening within said base panel, said blister configured to receive an item through said blister opening;

characterised in that said base panel (210; 310; 510; 710; 1110; 1510) comprises a first rib (235; 335; 535; 735; 1135) disposed such that the first rib acts as a bridge or a rail to prevent said at least one blister from engaging the catch flap when said insert card is removed from the sleeve.

2. The packaging system of claim 1, wherein said base panel includes an abutment (1545) for inhibiting a face-contacting relationship between said base panel and said locking panel, said abutment being spaced apart from said at least one blister.

3. The packaging system of claim 1, wherein said locking panel is hingedly attached to said base panel along at least a portion of one of said opposing ends of said base panel, and said first rib extends from a first end thereof adjacent to said one of said opposing ends of said base panel toward the other of said opposed ends of said base panel.

4. The packaging system of claim 3, wherein said first rib extends from said first end to a second end thereof adjacent to said other of said opposing ends of said

base panel, and said base panel further includes a second rib connected to said first rib at said second end of said first rib.

5. The packaging system of claim 4, wherein said second rib extends along said other of said opposed ends of said base panel.

6. The packaging system of claim 5, wherein said first rib extends along one of said opposing edges of said base panel.

7. The packaging system of claim 6, wherein said second rib extends from said second end of said first rib to a terminal end of said second rib adjacent to the other of said opposed edges of said base panel, and said base panel further includes a third rib connected to said second rib at said terminal end of said second rib.

8. The packaging system of claim 7, wherein said third rib extends along said other of said opposed edges of said base panel.

9. The packaging system of claim 8, wherein said third rib extends from said terminal end of said second rib toward said locking panel.

10. The packaging system of claim 8, wherein said third rib has a height that is no less than the height of said at least one blister.

11. The packaging system of claim 1, wherein said locking panel includes an abutment (1550) for inhibiting a face-contacting relationship between said base panel and said locking panel, said abutment being spaced apart from a free end edge of said locking panel, opposite a hinged connection between said locking panel and said base panel.

12. The packaging system of claim 1, wherein said base panel has first and second opposed sides, said at least one blister protrudes from said first side of said base panel, and said insert card is inserted into said lockable sleeve such that said first side of said base panel is adjacent to said wall of said lockable sleeve.

13. The packaging system of claim 1, wherein said first rib extends substantially parallel to said opposing edges of said base panel.

14. The packaging system of claim 1, wherein the first rib extends along the length of the insert card such that the first rib is in engagement with the catch flap to prevent said at least one blister from engaging the catch flap when said insert card is disposed between the first and second positions.

Patentansprüche

1. Verpackungssystem, umfassend:

eine lösbar verriegelbare Hülse, umfassend eine Befestigungslasche, die an einem offenen Ende der Hülse angeordnet ist; und eine Einführkarte (200; 300; 500; 700; 1100; 1500), die gleitbar in die Hülse aufgenommen ist, zur Bewegung zwischen einer ersten Position, bei der die Einführkarte vollständig in die Hülse aufgenommen ist, und einer zweiten Position, bei der die Einführkarte fast aus der Hülse entfernt ist, wobei die Einführkarte umfasst:

eine monolithisch ausgebildete Bodenwandfläche (210; 310; 510; 710; 1110; 1510), definiert durch gegenüberliegende Kanten, die durch gegenüberliegende Enden voneinander beabstandet sind, wobei sich die gegenüberliegenden Kanten entlang einer Länge der Einführkarte erstrecken;

mindestens eine Verriegelungswandfläche (215; 315; 515; 1515), umfassend mindestens eine Eingriffskante (1518), die gelenkig an die Bodenwandfläche angebracht ist (220; 320; 520; 1520), entlang mindestens eines Bereichs der Kanten oder der Enden, so dass die gefaltete Verriegelungswandfläche mit der Befestigungslasche in Eingriff ist, wenn die Einführkarte in der zweiten Position ist, wobei verhindert wird, dass die Einführkarte vollständig aus der Hülse entfernt wird; und

mindestens einen Blister, der integral in der Bodenwandfläche ausgebildet ist, um den Umfang einer Blisteröffnung in der Bodenwandfläche zu definieren, wobei der Blister ausgebildet ist, einen Artikel durch die Blisteröffnung aufzunehmen;

dadurch gekennzeichnet, dass die Bodenwandfläche (210; 310; 510; 710; 1110; 1510) eine erste Rippe (235; 335; 535; 735; 1135) umfasst, die derart angeordnet ist, dass die erste Rippe als eine Brücke oder eine Leiste wirkt, um zu verhindern, dass der mindestens eine Blister in die Befestigungslasche eingreift, wenn die Einführkarte von der Hülse entfernt wird.

2. Verpackungssystem nach Anspruch 1, wobei die Bodenwandfläche eine Angrenzung (1545) zum Verhindern einer flächenberührenden Beziehung zwischen der Bodenwandfläche und der Verriegelungswandfläche umfasst, wobei die Angrenzung von dem mindestens einen Blister beabstandet ist.

3. Verpackungssystem nach Anspruch 1, wobei die Verriegelungswandfläche gelenkig an der Bodenwandfläche entlang mindestens eines Bereichs von einem der gegenüberliegenden Enden der Bodenwandfläche angebracht ist, und sich die erste Rippe von einem ersten Ende erstreckt, neben dem einen der gegenüberliegenden Enden der Bodenwandfläche, hin zu dem anderen der gegenüberliegenden Enden der Bodenwandfläche.

4. Verpackungssystem nach Anspruch 3, wobei sich die erste Rippe von dem ersten Ende zu einem zweiten Ende erstreckt, neben dem anderen der gegenüberliegenden Enden der Bodenwandfläche, und die Bodenwandfläche ferner eine zweite Rippe umfasst, die mit der ersten Rippe verbunden ist, an dem zweiten Ende der ersten Rippe.

5. Verpackungssystem nach Anspruch 4, wobei sich die zweite Rippe entlang des anderen Endes der gegenüberliegenden Enden der Bodenwandfläche erstreckt.

6. Verpackungssystem nach Anspruch 5, wobei sich die erste Rippe entlang einer der gegenüberliegenden Kanten der Bodenwandfläche erstreckt.

7. Verpackungssystem nach Anspruch 6, wobei sich die zweite Rippe von dem zweiten Ende der ersten Rippe zu einem terminalen Ende der zweiten Rippe erstreckt, neben der anderen der gegenüberliegenden Kanten der Bodenwandfläche, und die Bodenwandfläche ferner eine dritte Rippe umfasst, die mit der zweiten Rippe verbunden ist, an dem terminalen Ende der zweiten Rippe.

8. Verpackungssystem nach Anspruch 7, wobei sich die dritte Rippe entlang der anderen der gegenüberliegenden Kanten der Bodenwandfläche erstreckt.

9. Verpackungssystem nach Anspruch 8, wobei sich die dritte Rippe von dem terminalen Ende der zweiten Rippe hin zu der Verriegelungswandfläche erstreckt.

10. Verpackungssystem nach Anspruch 8, wobei die dritte Rippe eine Höhe hat, die nicht geringer ist als die Höhe des mindestens einen Blisters.

11. Verpackungssystem nach Anspruch 1, wobei die Verriegelungswandfläche eine Angrenzung (1550) zum Verhindern einer flächenberührenden Beziehung zwischen der Bodenwandfläche und der Verriegelungswandfläche umfasst, wobei die Angrenzung von einer freien Endkante der Verriegelungswandfläche beabstandet ist, gegenüber einer gelenkigen Verbindung zwischen der Verriegelungswandfläche und der Bodenwandfläche.

12. Verpackungssystem nach Anspruch 1, wobei die Bodenwandfläche erste und zweite gegenüberliegende Seiten hat, wobei der mindestens eine Blister von der ersten Seite der Bodenwandfläche hervorsticht, und die Einführkarte in die verriegelbare Hülse eingeführt ist, so dass die erste Seite der Bodenwandfläche neben der Wand der verriegelbaren Hülse ist. 5
13. Verpackungssystem nach Anspruch 1, wobei sich die erste Rippe im Wesentlichen parallel zu den gegenüberliegenden Kanten der Bodenwandfläche erstreckt. 10
14. Verpackungssystem nach Anspruch 1, wobei sich die erste Rippe entlang der Länge der Einführkarte erstreckt, so dass die erste Rippe in Eingriff mit der Befestigungslasche ist, um zu verhindern, dass der mindestens eine Blister in die Befestigungslasche eingreift, wenn die Einführkarte zwischen der ersten und der zweiten Position angeordnet ist. 20

Revendications

1. Un système de l'emballage qui comprend :

une pochette de libération verrouillable qui inclut une languette d'accrochage disposé dans une extrémité ouverte de la pochette; 30
 une carte d'insertion (200; 300; 500; 700; 1100; 1500) reçue d'une manière coulissante dans la pochette pour le mouvement entre une première position où la carte d'insertion est totalement reçue dans la pochette et une deuxième position où la carte d'insertion est presque tirée de la pochette, la dite carte d'insertion comprend :

un panneau de base formé de manière monolithique (210; 310; 510; 710; 1110; 1510) défini par des bords opposés séparés par des extrémités opposées en s'étendant les bords opposés à toute la longueur de la carte d'insertion; 40

au moins un panneau de fermeture (215; 315; 515; 1515) qui inclut au moins un bord de connexion (1518), relié de façon articulée (220; 320; 520; 1520) au dit panneau de base le long d'au moins une partie de l'un des dits bords et d'extrémités; de sorte que le panneau de fermeture plié engage avec la languette d'accrochage quand la carte d'insertion est dans la deuxième position par laquelle on empêche que la carte d'insertion est totalement tirée de la pochette; et au moins un blister complètement formé à l'intérieur du dit panneau de base pour définir le périmètre d'ouverture de blister à l'in-

térieur du dit panneau de base, le dit blister configuré pour recevoir un article par l'ouverture du dit blister;

caractérisé en ce que le dit panneau de base (210; 310; 510; 710; 1110; 1510) comprend une première nervure (235; 335; 535; 735; 1135) disposée de sorte que la première nervure agit comme un pont ou une barre pour empêcher au dit au moins un blister d'engager la languette d'accrochage quand la dite carte d'insertion est tirée de la pochette.

2. Le système d'emballage selon la revendication 1, dans lequel le dit panneau de base inclut une butée (1545) pour empêcher une relation de contact de face entre le dit panneau de base et le dit panneau de fermeture, la dite butée est séparé de dit au moins un blister. 25
3. Le système d'emballage de la revendication 1, dans lequel le dit panneau de fermeture est relié de façon articulée au dit panneau de base le long d'au moins une partie de l'une des extrémités opposées du dit panneau de base, et la dite première nervure s'étend d'une première extrémité adjacent de cela à l'une des extrémités opposées du dit panneau de base vers l'autre des extrémités opposées du dit panneau de base. 30
4. Le système d'emballage de la revendication 3, dans lequel la dite première nervure s'étend à partir de dite première extrémité à une deuxième extrémité de cela adjacent à l'autre des extrémités opposées du dit panneau de base, et le dit panneau de base inclut en outre une deuxième nervure reliée à la dite première nervure à la deuxième extrémité de la dite première nervure. 35
5. Le système d'emballage de la revendication 4, dans lequel la dite deuxième nervure s'étend le long des dites autres extrémités opposées du dit panneau de base. 40
6. Le système d'emballage de la revendication 5, dans lequel la dite première nervure s'étend le long de l'un des dits bords opposés du dit panneau de base. 45
7. Le système d'emballage de la revendication 6, dans lequel la dite deuxième nervure s'étend à partir de dite deuxième extrémité de dite première nervure sur une extrémité terminale du dite deuxième nervure adjacente sur l'autre des dits bords opposés du dit panneau de base, et le dit panneau de base inclut en outre une troisième nervure relié à la deuxième dite nervure dans la dite extrémité terminale de la deuxième nervure. 50 55

8. Le système d'emballage de la revendication 7, dans lequel la dite troisième nervure s'étend le long le dit autre des dits bords opposés du dit panneau de base. 5
9. Le système d'emballage de la revendication 8, dans lequel la dite troisième nervure s'étend à partir de la dite extrémité terminale de la deuxième nervure vers le dit panneau de fermeture. 10
10. Le système d'emballage de la revendication 8, dans lequel la dite troisième nervure a une mesure qui n'est pas moindre que la mesure du dit au moins un blister. 15
11. Le système d'emballage de la revendication 1, dans lequel le dit panneau de fermeture inclut une butée (1550) pour empêcher une relation de contact de face entre le dit panneau de base et le dit panneau de fermeture, la dite butée est séparé d'un bord d'extrémité libre du dit panneau de fermeture, opposée à une connexion de façon articulée entre le dit panneau de fermeture et le dit panneau de base. 20
12. Le système d'emballage de la revendication 1, dans lequel le dit panneau de base a des premiers et deuxièmes côtés opposés, dit au moins un blister dépasse du dit premier côté du dit panneau de base, et la dite carte d'insertion est insérée dans la dite pochette verrouillable de sorte que le dit premier côté du dit panneau de base est adjacent a la dite paroi de la dite pochette verrouillable. 25
30
13. Le système d'emballage de la revendication 1, dans lequel la dite première nervure s'étend considérablement en parallèle sur les dits bords opposés du dit panneau de base. 35
14. Le système d'emballage de la revendication 1, dans lequel la première nervure s'étend toute la longueur de la carte d'insertion de sorte que la première nervure est en contact avec la languette d'accrochage pour empêcher audit au moins un blister d'engager la languette d'accrochage quand la dite carte d'insertion est disposée entre les premières et deuxièmes positions. 40
45

50

55

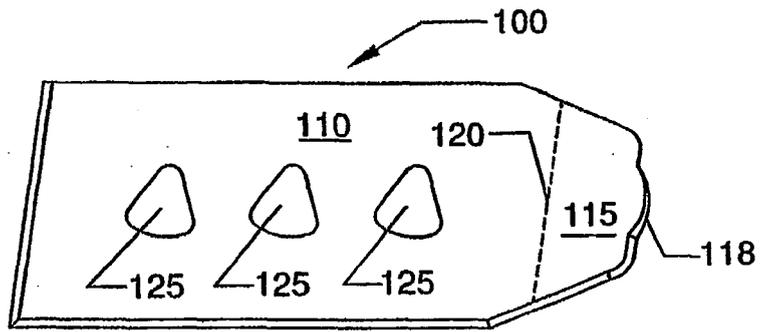


FIG. 1

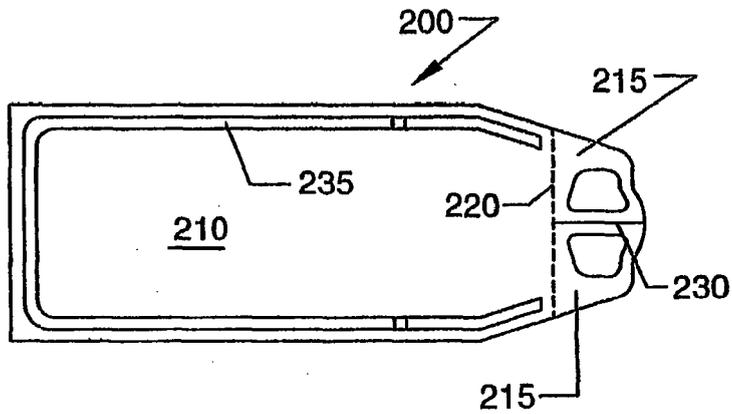


FIG. 2

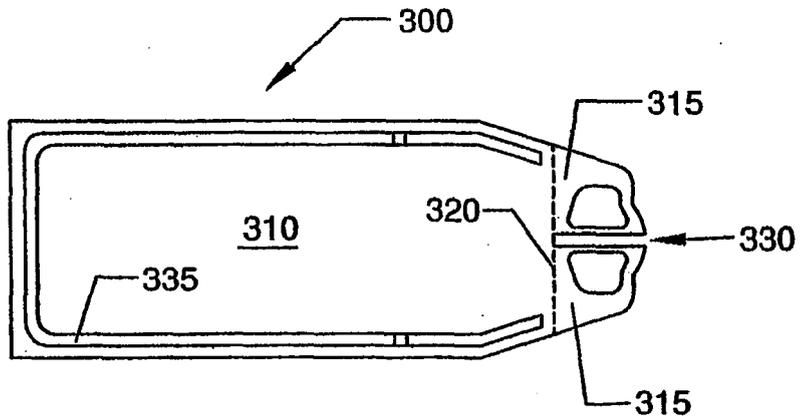


FIG. 3

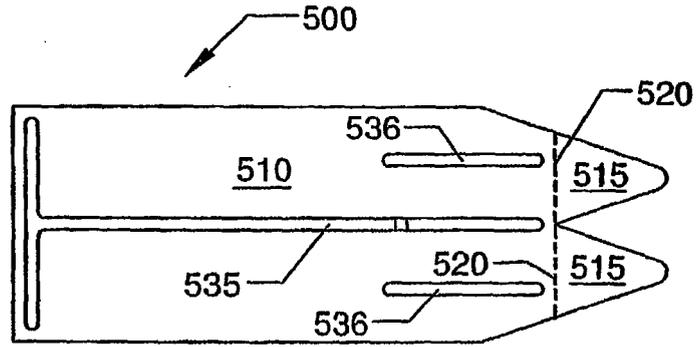


FIG. 4

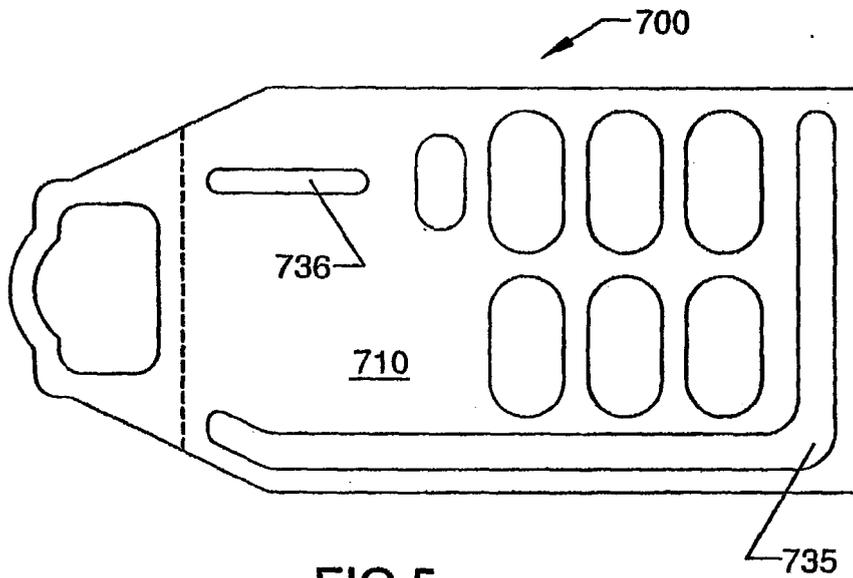


FIG. 5

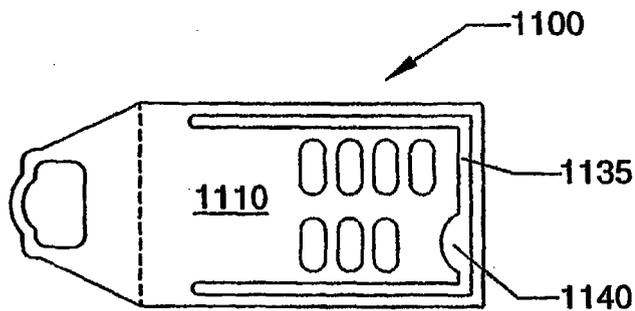


FIG. 6

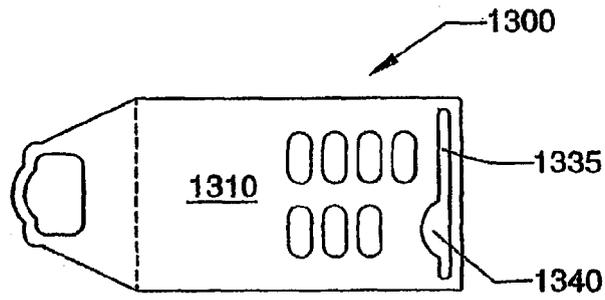


FIG. 7

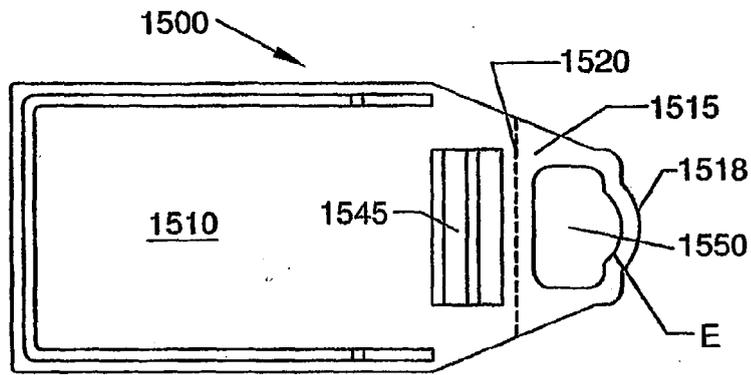


FIG. 8

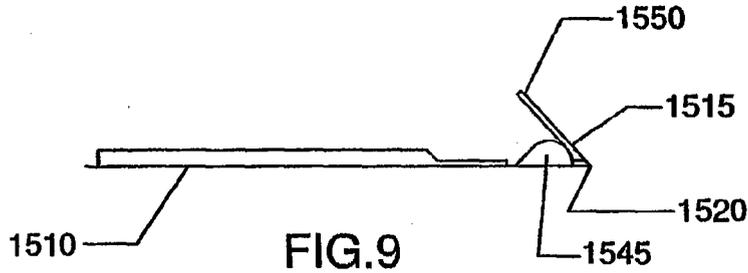


FIG. 9

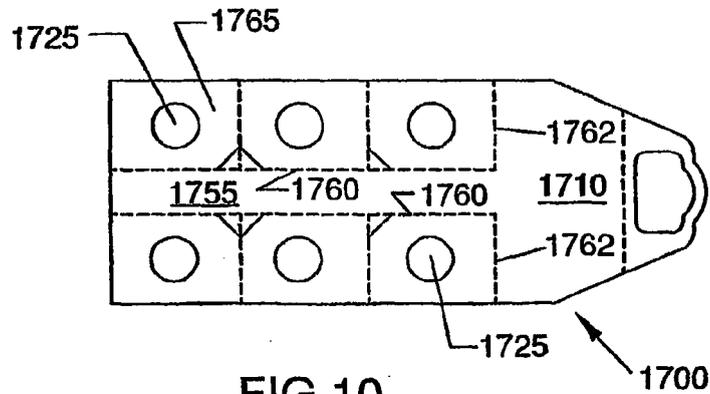


FIG. 10

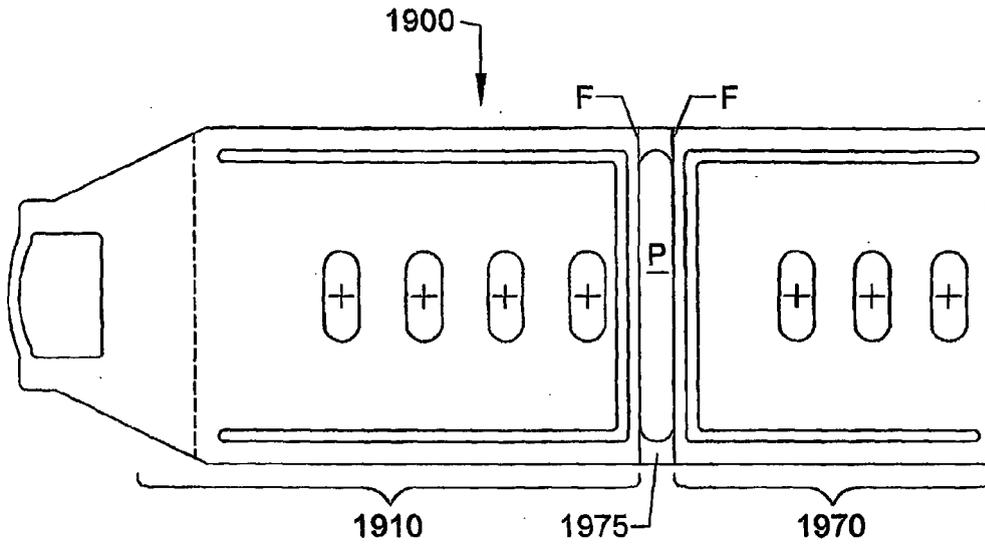


FIG. 11

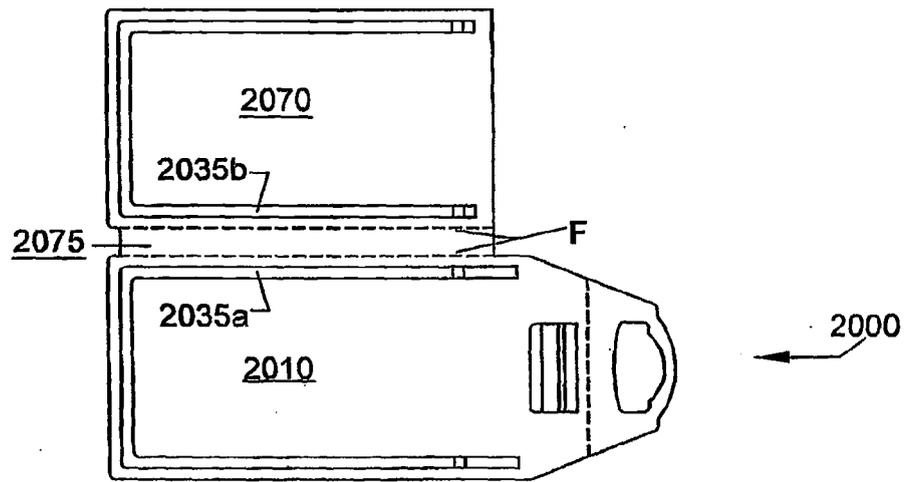
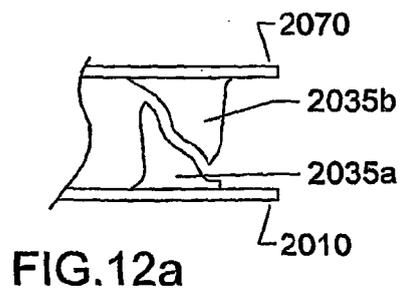


FIG. 12



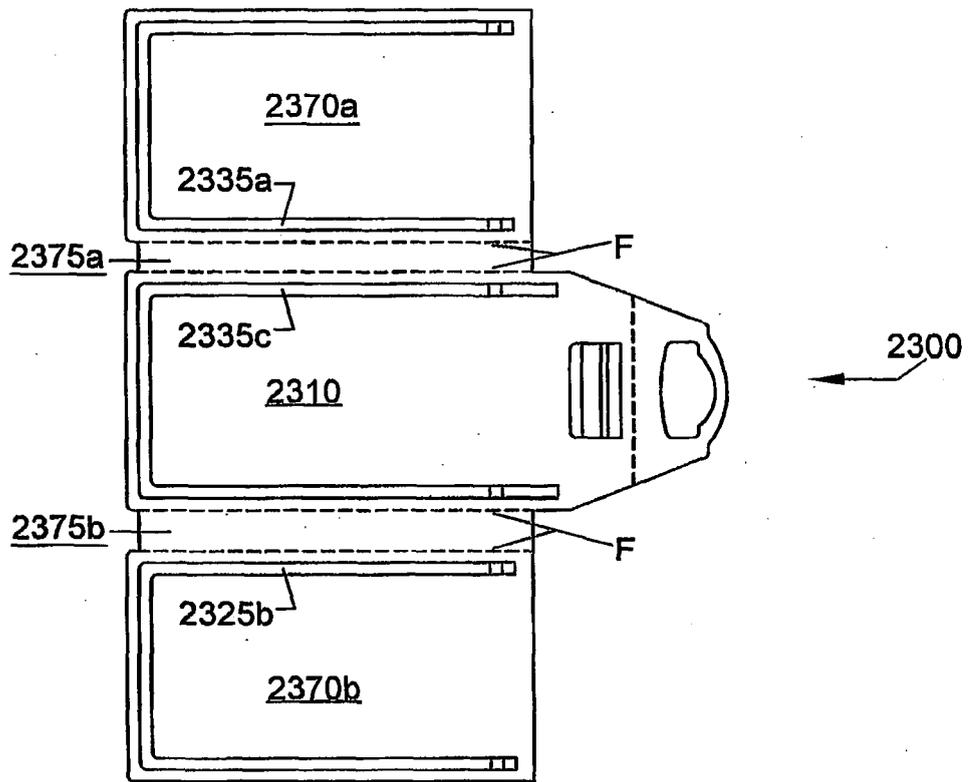


FIG.13

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- WO 2006042181 A [0003]