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(71) Applicant *(for all designated States except US)*: **MEAD-WESTVACO CORPORATION** [US/US]; 501 South 5th Street, Richmond, Virginia 23219-0501 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **GELARDI, John, A.** [US/US]; 3019 Hedgeway Place, Midlothian, Virginia 23113 (US).

(74) Agents: **SUZUKI, Tsugihiko** et al.; MeadWestvaco Corporation, 1021 Main Campus Drive, Raleigh, North Carolina 27606 (US).

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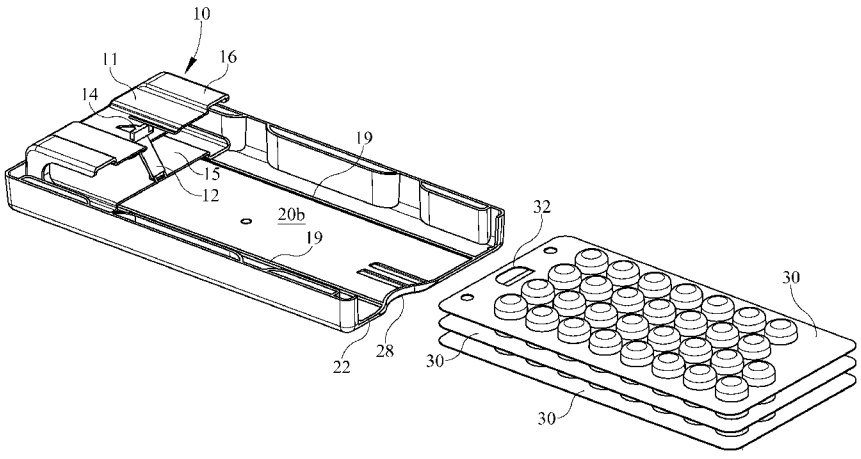



FIG. 2

(57) Abstract: A packaging apparatus is designed to accommodate one or more blister packages in a secure child-resistant manner. The one or more blister packages (30) include at least one engaging aperture (32). The apparatus includes a sleeve that receives the one or more blister packages and a traveler clip (10) that is coupled with the one or more blister packages. The traveler clip is received in the sleeve in a lockable slidable fashion. The traveler clip further includes a backwardly inclining dagger (12) that hooks onto the engaging aperture of the one or more.

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# MULTI-PACK TRAVELER COMPONENT PACKAGE INSERT

## BACKGROUND OF THE INVENTION

[0001] One form of pharmaceutical packaging is a blister pack. A blister pack is comprised of a generally flat substrate on one side and a plurality of bubble like cavities on the other side. Within each cavity is stored a unit dose of a pharmaceutical such as a pill, tablet, or capsule. The contents within the cavity need not be pharmaceutical per se, however. When a consumer wishes to access the contents of a blister, he presses down on the cavity 'bubble' causing the contents to pierce the bottom surface (usually foil or the like) of the blister pack.

[0002] Blister packages are a convenient primary form of packaging. However, blister packages generally require a secondary form of packaging. The secondary form of packaging serves to protect the primary package as well as providing a convenient form for labeling. More importantly, however, the secondary packaging can also provide a means for securing the primary package from children as a safety feature since the contents of the primary packages can often be dangerous.

[0003] One of the safety measures associated with the secondary packaging is the ability to 'lock' and 'unlock' a primary package within a secondary package. In general, a secondary package receives a primary package and can securely seat it within a chamber such that it can not be withdrawn without manipulating a locking mechanism.

[0004] Typical packaging solutions only accommodate a single primary package within a secondary package. In these solutions, the primary package itself is in a direct cooperative relationship with the secondary package. This can be inefficient if the contents of the primary package are used up rather quickly or if the primary package can only accommodate a relatively small number of discrete items.

[0005] Blister packages are not the only form of primary packaging that can be accommodated in the solutions described above. Such systems can protect primary packages that contain, for instance, medical devices such as syringes, dermal strip medications, liquid vials or ampules, etc. The primary package can be used to store and protect just about anything that can be retained by the relatively flat primary packaging medium.

[0006] What is needed is a secondary packaging solution that can accommodate multiple primary packages in a secure child resistant manner.

## SUMMARY OF THE INVENTION

[0007] In one embodiment of the disclosure there is disclosed a packaging apparatus designed to accommodate one or more blister packages in a secure child-resistant manner. The one or each blister package is designed for storing packaging contents and has at least one engaging aperture. A shell or sleeve houses the plurality of blister packages. A traveler mechanism or clip is coupled with the one or more blister packages and adapted to fit within the hard plastic sleeve in a lockable slidable fashion. The traveler clip securely retains the one or more blister packages.

[0008] The hard plastic sleeve is comprised of plastic top and bottom portions that can be snap fit (or glued or otherwise adhered) together such that when fit together, the hard plastic sleeve defines an interior chamber that is open on one end and closed on the opposite end. The hard plastic sleeve is further comprises a locking stop extending downward from the interior surface of the top portion of the hard plastic sleeve and at least one exit stop on the interior surface of at least one of the top and bottom portions of the hard plastic sleeve positioned near the open end of the interior chamber.

[0009] The hard plastic sleeve further comprises a lock release tab positioned such that depressing the lock release tab while the traveler clip is in the locked position within the hard plastic sleeve will cause the locking face of the traveler clip to clear the locking stop of the hard plastic sleeve allowing the traveler clip to unlock and be slidably withdrawn from the hard plastic sleeve.

[0010] The top and bottom portions of the hard plastic sleeve further include a thumb/finger indent at the open end front edge to assist a person when grasping a blister package contained within the hard plastic sleeve.

[0011] The traveler clip is adapted to be seated within the interior chamber of the hard plastic sleeve in a lockable and slidable fashion. The traveler clip is a generally U-shaped hard plastic apparatus that includes a flexible dagger extending upwardly and back from the bottom surface of the traveler clip. The dagger is designed to fit within a blister pack aperture. The traveler clip further comprises a locking face portion designed to engage the locking stop of the hard plastic sleeve. The traveler

clip also include at least one raised leading edge flat surface adapted to engage the at least one traveler stop on the hard plastic sleeve to prevent the traveler clip from being completely withdrawn from within the interior chamber of the hard plastic sleeve.

[0012] In another embodiment of the disclosure there is disclosed a packaging apparatus designed to accommodate one or more blister packages in a secure child-resistant manner. The one or more blister packages are designed to package contents (e.g., medicaments). The one or each package includes at least one engaging aperture. A sleeve houses the one or more blister packages. A traveler clip is coupled with the one or more blister packages and adapted to fit within the paperboard housing in a lockable slidable fashion. The traveler clip securely retains the one or more blister packages.

[0013] The paperboard housing is formed from a paperboard blank that is comprised of a series of panels that when folded define an interior chamber that is open on one end and closed on the opposite end. The assembled paperboard housing further comprises a release button that can extend downward into the interior chamber to release the traveler clip from its locked position.

[0014] The bottom panel of the paperboard housing further includes a thumb/finger indent at the open end front edge to assist a person when grasping a blister package contained within the paperboard housing.

[0015] The traveler clip is adapted to be seated within the interior chamber of the paperboard housing in a lockable and slidable fashion. The traveler clip is a

generally U-shaped hard plastic apparatus that includes a flexible dagger extending upwardly and back from the bottom surface of the traveler clip. The dagger is designed to be inserted into each blister pack engaging aperture. The traveler clip further comprises a locking face portion designed to engage a traveler guide slot. The traveler clip also include at least one raised leading edge flat surface adapted to engage stop portions that are formed in assembling the paperboard housing to prevent the traveler clip from being completely withdrawn from within the interior chamber of the paperboard housing.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0016] FIG. 1 is a perspective view of a traveler clip to be used with a packaging apparatus according to a first embodiment of the disclosure.

[0017] FIG. 2 is a perspective view of some of the components that form the packaging apparatus of the first embodiment of the disclosure.

[0018] FIG. 3 is a cross-sectional perspective view of the packaging apparatus of the first embodiment, showing the traveler clip seated within the bottom portion of the hard plastic sleeve and cooperatively engaged with one or more blister packages.

[0019] FIG. 4 is another cross-sectional perspective view of the packaging apparatus of the first embodiment, showing the traveler clip seated within the complete hard plastic sleeve and cooperatively engaged with one or more blister packages.

[0020] FIG. 5 is a perspective view of the packaging apparatus of FIG. 4, showing the complete hard plastic sleeve in which one or more blister packages are received.

[0021] FIGS. 6-9 illustrate a blank of a paperboard sleeve used with a packaging apparatus according to a second embodiment of the disclosure, showing various folded stages of the blank.

[0022] FIG. 10 is a perspective view of the paperboard sleeve in its fully erected form.

[0023] FIG. 11 is a perspective view, partially cut away, of the packaging apparatus of the second embodiment, showing a traveler clip inside the sleeve and the blister packages outside the sleeve.

[0024] FIG. 12 is an end view of the traveler clip of FIG. 11.

[0025] FIG. 13 is a front elevation of the traveler clip shown in FIG. 11.

[0026] FIG. 14 is a top-rear perspective view of the traveler clip shown in FIG. 11.

## DETAILED DESCRIPTION OF THE EMBODIMENTS

[0027] One embodiment of the disclosure describes an improved packaging apparatus comprised of a sleeve made, for example of hard plastic, adapted to receive and house at least one blister packages bound by a traveler clip. Rather than having the one or more blister packages connect directly in a cooperative relationship with the sleeve, the one or more blister packages are coupled with the traveler clip. The traveler clip is then coupled with the sleeve in a cooperative

relationship that permits the traveler to be securely housed within the sleeve yet also allows the traveler clip to be substantially withdrawn to expose the contents of the one or more blister packages.

[0028] For ease of description, the sleeve may also be referred to as a shell package throughout this disclosure. The sleeve or shell package is generally formed from two pieces of plastic (top and bottom portions) that snap fit to one another. They may also be glued or otherwise adhered. Once fitted together, one end of the sleeve remains substantially open and an interior chamber is formed that is adapted to house one or more blister packages. There are one or more locking and unlocking mechanisms on and about the sleeve and the traveler clip that operate to securely retain the one or more blister packages within the sleeve. To withdraw and expose the one or more blister packages, a consumer must know how to operate the sleeve to release the locking mechanism(s). These locking mechanisms provide the entire packaging solution with an enhanced degree of child resistant safety features.

[0029] FIG. 1 is a perspective view of a traveler clip 10 designed to use with the aforementioned packaging apparatus according to a first embodiment of the disclosure. The purpose of the traveler clip 10 is to (1) engage or bind one or more blister packages together, and (2) slidably and securely engage with a sleeve such that the one or more blister packages can be accessed by a user of the packaging apparatus.

[0030] The traveler clip 10 includes a pair of upper 11 and lower 15 panels connected together by a spine panel 13 to form a generally U-shaped frame structure. The

traveler clip 10 is preferably formed of a hard plastic. Other suitable materials can be used such that the functionality of the traveler clip 10 is preserved. To achieve its first purpose, the traveler clip 10 includes an inclined dagger 12 that extends upward and backward from the lower panel 15 so that the upper end of the dagger 12 is positioned proximate the upper panel 11 with a small space retained between the upper panel 11 and the upper end of the dagger. The rear ends of blister packages 30 are inserted into that space one by one, or all at one time, till the aperture 32 of each blister package 30 clears the dagger 12, receives the dagger 12 and becomes hooked thereon. The dagger 12 is inclined to the lower panel 15 such that it defines an acute angle with respect to the lower panel 15. Such an inclined orientation of the dagger 12 allows the blister packages 30 to be retained and securely connected to the traveler clip 10 once the blister packages 30 are engaged with the dagger 12 (see FIGS. 3 and 4).

[0031] To achieve the second purpose, the traveler clip 10 has been constructed and U-shaped to fit within the chamber defined by the assembled hard plastic sleeve 20a and 20b shown in FIG. 5. The traveler clip 10 is designed such that it allows itself and the attached blister packages 30 to be seated within the chamber and to slide back and forth within the chamber. A locking lug 14 on the upper panel 11 of the traveler clip 10 is designed to engage portions of the hard plastic sleeve 20a, 20b to prevent unintentional withdrawal of the traveler clip 10.

[0032] FIG. 2 is a perspective view of some of the components that form the first embodiment of the packaging apparatus of the disclosure. A bottom portion 20b of

the hard plastic sleeve is shown with the traveler clip 10 seated therein toward the rear end of the bottom portion 20b. The bottom portion 20b has a pair of guiding ribs 19 on its inside surface. The guiding ribs 19 extend substantially parallel to the tubular axis X-X of the sleeve 20a, 20b (FIG. 5). These ribs 19 slidingly engage feet 16 of the lower panel 15 to assist the traveler clip 10 in slidingly moving along the axis X-X of the sleeve 20a, 20b. The feet 16 project slightly downward from the lower surface of the lower panel 15 to be in direct sliding contact with the inside surface of the bottom portion 20b. The sleeve 20a, 20b further comprises a top portion 20a (not shown in Fig. 2) that generally fits atop and covers the bottom portion 20b. The top portion 20a and the bottom portion 20b are generally snap fit (or glued or adhered in some other manner) together using a plurality of reciprocating connections (not shown). The result is a sleeve 20a, 20b that is closed at one end and open at the other end as is shown in Fig. 5. The top 20a and bottom 20b portions also include a thumb/finger indent 28 at the open end front edge to assist a person when grasping a blister package 30 contained within the sleeve 20a, 20b. The top 20a and bottom 20b portions further include at least one exit stop portion 22 that act to block the path of the traveler clip 10 so that it can not be completely removed from the sleeve when blister packages 30 are withdrawn. More specifically, at least one of the feet 16 of the traveler clip 10 comes into engagement with the at least one exit stop portion 22 to prevent the clip 10 from fully withdrawn from the sleeve 20a, 20b. It is to be understood that the sleeve 20a, 20b may be made of other materials, including but not limited to paperboard.

[0033] The traveler clip 10 is adapted to fit snugly yet slidably within the chamber defined by the sleeve 20a, 20b. A plurality of blister packages 30 are also shown each containing a blister pack aperture 32 approximately positioned at the rear center edge of the blister package 30. The blister pack apertures 32 are designed to slide over and hook onto the inclined dagger 12 of the traveler clip 10.

[0034] FIG. 3 is a cross-sectional perspective view of the packaging apparatus of the first embodiment wherein the traveler clip 10 is seated within the bottom portion 20b of the sleeve and is cooperatively engaged with a plurality of blister packages 30. This illustration affords a view of the traveler clip 10 within the bottom portion 20b coupled with the blister packages 30. Each blister package 30 has been 'hooked' over the inclined dagger 12 of the traveler clip 10 using the engaging aperture 32.

[0035] FIG. 4 is another cross-sectional perspective view of the packaging mechanism of the first embodiment in which the traveler clip 10 is seated within the complete sleeve 20a and 20b and is cooperatively engaged with a plurality of blister packages 30. The traveler clip 10 further includes a locking lug 14 that can be depressed inward when an external force is applied. A pair of slots 17 are located on the opposite sides of the lug 14 to facilitate flexing of a portion of the upper panel 11 between the slots 17 (FIG. 1). The locking lug 14 is designed to engage and cooperate with a locking stop 24 that is part of the inside surface of the top portion 20a of the sleeve proximate the closed end of the sleeve 20a, 20b. As the traveler clip 10 slides into the chamber of the sleeve 20a, 20b and approaches the rearmost position next to the closed end of the sleeve, it encounters the locking stop 24 and allows its locking

lug 14 to be depressed inward as the lug 14 rides up the tapered aspect of the locking stop 24. Once clearing the locking stop 24, the locking lug 14 snaps back to its original position such that it now abuts the locking stop 24. In this 'locked' position, the traveler clip 10 can not be withdrawn (without unlocking) because the lug 14 will engage the locking stop 24 whenever the combination traveler clip 10 and blister packages 30 is attempted to be withdrawn. However, if the lock release tab 26 on the sleeve top portion 20a were to be depressed enough by the user, it would cause the locking lug 14 to clear the non-tapered straight edge of the locking stop 24 to allow the traveler clip 10 to be withdrawn.

[0036] FIG. 5 is a perspective view of the complete packaging apparatus wherein the plurality of blister packages 30 are fully received and secured within the sleeve 20a, 20b. The sleeve top portion 20a and bottom portion 20b can share a common edge seam and are generally snap fit together using a plurality of reciprocating connections (not shown). The size and depth of the hard plastic sleeve 20a and 20b and traveler clip 10 are generally a function of the number and depth of the blister packages 30. The greater the number of blister packages 30 to be included in the sleeve 20a, 20b, the deeper the sleeve 20a and 20b and traveler clip 10.

[0037] To withdraw and access a blister package 30 from the sleeve 20a and 20b, one would grasp the entire packaging apparatus with both hands. One hand would grasp the closed end of the sleeve 20a, 20b such that the thumb (or other finger) was atop the lock release tab 26 on the top portion 20a while at least one other finger is positioned somewhere on the bottom portion 20b, allowing for a pinching

movement. The user's other hand would grasp at least one of the blister packages 30 between the thumb and another finger using the indent area 28 on the open end of the top 20a and bottom 20b portions of the sleeve. The indent area 28 functions as a means of access to the blister packages 30. Next, the user depresses the lock release tab 26 until it contacts and forces downward the locking lug 14 of the traveler clip 10. Once the locking lug 14 clears the locking stop 24, the user can pull on the blister packages 30 causing the traveler clip 10 to slide outward toward the open end of the sleeve thereby exposing the blister packages 30. The traveler clip 10 can continue until its own leading edge or feet 16 encounter the exit stop portions 22 of the top 20a and/or bottom 20b portions of the sleeve . The feet 16 and stop portions 22 prevent the traveler clip 10 (and blister packages 30) from being completely separated from the sleeve.

[0038] To load a plurality of blister packages 30 into the packaging solution, the traveler clip 10 is seated at the rearmost or locked position next to the rear end of the bottom portion 20b of the sleeve. The top portion 20a of the sleeve is then attached to the bottom portion 20b such that the traveler clip 10 is locked in place (locking lug 14 abuts locking stop 24). One by one, or all at one time, blister packages 30 can be inserted through the open end of the sleeve 20a, 20b such that the rear end of each blister package having the aperture 32 leads. The aperture 32 of each blister package 30 has been positioned on the respective blister package 30 such that it aligns with the backwardly inclining dagger 12 of the traveler clip 10. The blister package 30 eventually reaches the dagger 12 and will ride up the incline until the aperture 32

clears the dagger 12 and becomes hooked thereon. The blister package 30 can not be removed from the dagger 12 due to the backward inclination of the dagger 12 causing it to behave like a barbed hook. Additional blister packages 30 can be inserted and hooked as just described. The ability to attach the blister packages 30 after the traveler clip 10 has been secured within the sleeve 20 is unique to this solution.

[0039] It should be noted that the locking mechanisms that is formed of the locking lug 14, stop 24 and release 26 may be placed on the top portion 20a of the packaging apparatus, the bottom portion 20b of the packaging apparatus or on both the top and bottom portions 20a, 20b of the packaging apparatus. More specifically, the lug 14 may be formed on the lower panel 15 to extend downward therefrom while the stopper 26 and release 26 are formed on the bottom portion 20b of the sleeve.

[0040] FIGS. 6-14 show a second embodiment of the packaging apparatus according to the disclosure. In this embodiment, a traveler clip 110 (FIGS. 11-14) can be utilized with a paperboard sleeve in place of the hard plastic sleeve 10 described above. FIGS. 6-10 illustrate a blank 60 of a paperboard sleeve in various folded stages for assembling an erected sleeve (FIG. 10) adapted to receive the traveler clip 110. The folding process shown in FIGS. 6 – 10 progress from a completely flat, unfolded form (FIG. 6) of blank to a fully assembled three-dimensional form (FIG. 10) through intermediate forms (FIGS. 7-9) in which the blank 60 is partially folded and/or glued.

[0041] FIG.6 illustrates the paperboard blank 60 in a completely flat form prior to any assembly. The paperboard blank 60 is comprised of a top panel 62 with an end panel 68 hingedly connected along a fold line 82, a first side panel 66 hingedly connected to the top panel 62 along a fold line 85, a bottom panel 64 with end stop panels 70 hingedly connected to the bottom panel 64 along a fold line 91, and a second side panel 66 hingedly connected to the bottom panel 64 along a fold line 87. The side panels 66 are included to provide a height dimension once the paperboard blank 60 is fully assembled. To accommodate the sliding action of the traveler clip 110, a traveler guide section 72 comprised of three fold-able panels 80, 81 and 83 is connected to the second side panel 66 as part of the paperboard blank 60. The first guide panel 80 is hingedly connected to the second side panel 66 along a fold line 88. The second guide panel 81 is hingedly connected to the first guide panel 80 along a fold line 89. The third guide panel 83 is hingedly connected to the second guide panel 81 along a fold line 90. Each of the first and third guide panels 80 and 83 includes a traveler guide slot 74, and a locking slot 75. Other cut out areas 76 and 92 also provided. One of the cutout areas 76 is defined at a location between the first 80 and second 81 guide panels such that it interrupts the fold line 89. The other cutout area 76 is defined at a location between the second 81 and third 83 guide panels such that it interrupts the fold line 90. The cutout area 92 is defined along the free longitudinal edge of the third guide panel 83. When the blank is set up, the guide panels 80, 81 and 83 form a layered structure (at "72" in FIG. 9) in which the traveler guide slots 74 are substantially aligned along the thickness of the layered structure to

define a lengthwise channel parallel to the tubular axis X-X of the sleeve formed from the blank 60 (see FIG. 10). The lengthwise channel can slidably receive a lug 114 of the traveler clip 110 and allows the traveler clip 110 to move in and out along the tubular axis X-X of the paperboard sleeve. As also shown in FIG. 9, the locking slots 75 are also aligned along the thickness of the layered structure (72) to define a single locking stop (in the form of a channel) for receiving and engaging the locking lug 114 (see FIGS. 11 and 14) of the traveler clip 110. The lug 114 is received in the locking stop to retain the traveler clip 110 in a locked position when it is fully inserted into the paperboard sleeve.

[0042] FIG. 7 illustrates the blank 60 after the first step of assembly in which the third guide panel 83 is folded over the second guide panel 81. The end stop panels 70 have also been folded over and glued or otherwise adhered down to the bottom panel 64 to form a tubular end barrier 70 for closing the rear end of the paperboard sleeve. FIG. 8 illustrates the next step in which the combined layers 81/83 of the second and third guide panels 81, 83 are folded onto the first guide panel 80. At this step, as discussed above, all of the guide slots 74 are aligned with each other while both the locking slots 75 are aligned with each other. FIG. 9 shows the entire traveler guide section 72 folded over to form the interior layered structure of the paperboard sleeve. Traveler guide slots 74 form the guide channel for the traveler clip 110 while locking slots 75 form the locking stop for securing the traveler clip 110 within the paperboard sleeve. A stop portion 78 is formed from the edges 69, 71, 79 (see FIG. 6) of the three guide panels 80, 81, 83 that have been aligned with each other. Another

stop portion (hidden from view) is present on the right side of the layered structure 72. Such another stop portion is formed from the edges 73, 77 of the second and third guide panels 81, 83. These stop portions provide means for engaging shoulders 116, 116 of the traveler clip 110 to prevent the clip 110 from fully withdrawn from the sleeve.

[0043] FIG. 10 illustrates the paperboard sleeve 60 fully assembled with the top panel 62 folded up and over the layered structure or traveler guide section 72. The end panel 68 is folded over the end barrier 70 and secured thereto with an adhesive. The top panel 62 is also adhered to the traveler guide section 72 by means of an adhesive. The end result is a rectangular sleeve having one open end for receiving and seating a combination traveler clip 110 and blister packages 30.

[0044] FIG. 11 shows the assembled paperboard sleeve 60 of FIG. 10 with a traveler clip 110 contained therein. The release button 67 is defined by cut 63 in the top panel 62. The release button 67 sits directly above the locking stop provided by the locking slots 75 (see FIG. 9). The traveler clip 110 locking lug 114 extends upward from the upper panel 111 of the traveler clip 110 and will contact the front edge of the locking stop defined by the locking slots 75 if the traveler clip 110 is pulled toward the open end of the sleeve 60 without pressing on the release button 67. The cut or slit 63 allows a user to depress the release button 67, i.e., an area of the top panel 62 behind the slit 63, such that the release button 67 contacts and forces downward the locking lug 114 of the traveler clip 110. When the locking lug 114 is depressed sufficiently, it will clear the locking slots 75 and can be slid along the guide channel defined by the

guide slots 74 by applying a pulling force on the blister package(s) 30 attached to the traveler clip 110. The traveler clip 110 can continue to be withdrawn along the guide channel until the shoulders 116 and the locking lug 114 of the traveler clip 110 contact the stop portions 78 and the forward end of the guide slots 74 (channel) respectively. By this means, the traveler clip 110 is prevented from being completely removed from the paperboard sleeve. However, either the shoulders 116 may be omitted along with its cooperating stopper, i.e., the stop portions 78. However, the shoulders 116 or feet such as shown in FIG. 1 may be used to function as a locking lug when cooperating stopper and stop portion are provided by the sleeve. In such an embodiment, the locking lug 114 and its cooperating stopper, i.e., the guide channel 74, may be omitted instead of the shoulders and its cooperating elements. The side panels 66, in such an embodiment, provide a guide for the traveler clip 110 by slidingly contacting the opposite ends of the traveler clip 110.

[0045] FIGS. 12-14 illustrate details of the traveler clip 110. The traveler clip 110 has a generally U-shaped frame structure formed of a pair of upper 111 and lower 115 panels integrally interconnected by a spine panel 113. The dagger 112 extends upward and backward from the lower panel 115 to the position spaced from the upper panel 111. A pair of retainer ribs 118, 118 extend downward from the upper panel 111. The retainers 118, 118 are located on the opposite sides of the dagger 112 as viewed in FIG. 13. The lower ends of the retainer ribs 118, 118 reach the elevation substantially equal to, or slightly lower than, the elevation of the upper end of the dagger 112. The reference letter "R" in FIG. 13 designates a vertical distance

between the upper end of the dagger 112 and the lower ends of the retainer ribs 118. Once the blister packages 30 are hooked on the dagger 112, the retainer ribs 118, 118 prevent the packages 30 from being disengaged from the dagger 112 since the ribs 118, 118 do not allow the packages 30 to be lifted beyond the elevation of the lower ends of the ribs 118, 118. An opening 121 is defined in the spine panel 113 to allow fingers or tools to be inserted therethrough to facilitate disengagement of the blister packages 30 from the dagger 112 after the contents of the blister packages 30 are consumed.

[0046] It is believed that the present disclosure includes many other embodiments that may not be herein described in detail, but would nonetheless be appreciated by those skilled in the art from the disclosures made. Accordingly, this disclosure should not be read as being limited only to the foregoing examples or only to the designated preferred embodiments.

CLAIMS:

1. A packaging apparatus comprising: clip

At least one blister package for storing packaging contents, the at least one blister package including an engaging aperture;

a sleeve for housing the at least one blister packages; and

a traveler clip comprising a dagger that is received in the engaging aperture to allow the at least one blister package to be joined the traveler clip, the traveler clip received in the sleeve in a lockable and slidable fashion.

2. The packaging apparatus of claim 1 wherein the sleeve has an open end and an opposite closed end.

3. The packaging apparatus of claim 2 wherein the sleeve further comprises a locking stop on the sleeve, and the traveler clip comprises a locking element for engaging with the locking stop to lock the traveler clip.

4. The packaging apparatus of claim 3 wherein the traveler clip is received in the sleeve for sliding movement between a rearmost position where the traveler clip allows the locking element to be in engagement with the locking stop of the sleeve to prevent the traveler clip from moving toward the open end of the sleeve and a forwardmost position where the traveler clip allows the locking element to be in

engagement with a locking portion of the sleeve to prevent the traveler clip to be completely withdrawn from the sleeve.

5. The packaging apparatus of claim 4 wherein the sleeve further comprises a release element disposed such that depressing the release element while the traveler clip is in the rearmost position will cause the locking element of the traveler clip to clear the locking stop of the sleeve allowing the traveler clip to be move toward the forwardmost position.

6. The packaging apparatus of claim 4 wherein the rearmost position is located proximate the closed end of the sleeve and the front most position is located proximate the open end of the sleeve.

7. The packaging apparatus of claim 4 wherein the locking element projects upward from an upper panel of the traveler clip, and the stop portion is provided adjacent to the open end of the sleeve.

8. The packaging apparatus of claim 4 wherein the locking element project downward from a lower panel of the traveler clip, and the stop portion is provided adjacent to the open end of the sleeve.

9. The packaging apparatus of claim 2 wherein the sleeve further comprises a finger indent at the open end of the sleeve to assist a person when grasping the at least one blister package.

10. The packaging apparatus of claim 1 wherein the traveler clip comprises a substantially U-shaped frame structure including a pair of upper and lower panels connected together by a spine panel.

11. A packaging apparatus comprising:

at least one blister package that contains a plurality of contents, the at least one the blister package including an engaging aperture;

a sleeve in which the at least one blister package is received; and

a traveler clip slidably received in the sleeve, the traveler clip comprising a substantially U-shaped frame structure and a dagger engaged with the at least one blister packages by the engaging aperture, the frame structure including a pair of upper and lower panels interconnected by a spine panel, the dagger extending upward from the lower panel substantially toward the spine panel.

12. The packaging apparatus of claim 11 wherein the traveler clip further comprises a locking element for releasable engagement with the sleeve.

13. The packaging apparatus of claim 12 wherein the sleeve comprising a series of foldable panels including a top panel, a bottom panel, a pair of side panels, and traveler guide section panels that can be folded to form the sleeve.

14. The packaging apparatus of claim 13 wherein the traveler guide section panels include cut out slots defining a channel for slidably engaging the locking element of the traveler clip and cut out slots defining a locking stop for receiving and securing the locking element of the traveler clip such that the locking element abuts edges of the cut out slots to prevent sliding movement of the traveler clip.

15. The packaging apparatus of claim 14 wherein the top panel further includes a slit therein, the slit at least partially defines a release button such that depressing the release button frees the locking element from the edges of the cut out slots.

16. The packaging apparatus of claim 15 wherein the sleeve further comprises at least one stop portion positioned near an open end of the sleeve, the at least one stop portion engages the locking element of the traveler clip to prevent the traveler clip from being completely withdrawn from sleeve.

17. The packaging apparatus of claim 13 wherein the bottom panel of the sleeve includes a finger indent at an open end front edge thereof to assist a person in grasping the at least one blister package.

18. The packaging apparatus of claim 11 wherein the traveler clip further comprises at least one retainer rib extending downward from the upper panel of the frame structure, a lower end of the retainer rib reaches an elevation substantially equal to, or slightly lower than, an upper end of the dagger.

19. The packaging apparatus of claim 11 wherein the traveler clip further comprises an opening that is defined in the spine panel to allow fingers or tools to be inserted therethrough to facilitate disengagement of the blister packages from the dagger.

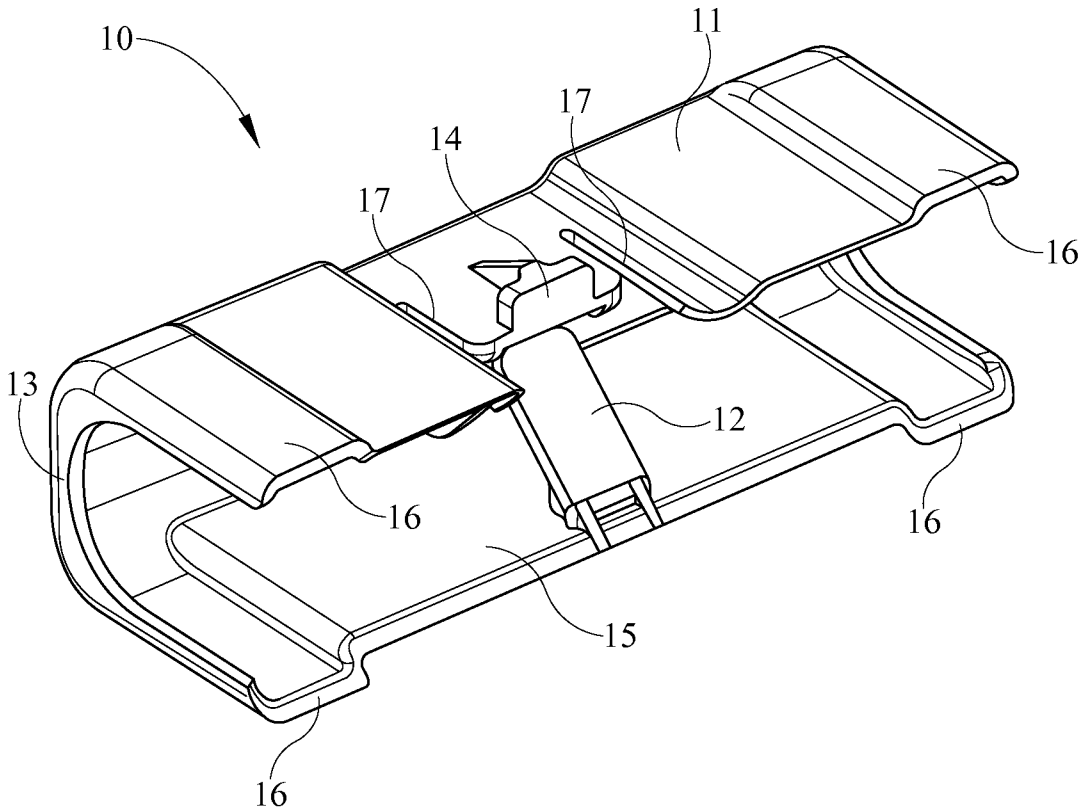



FIG. 1

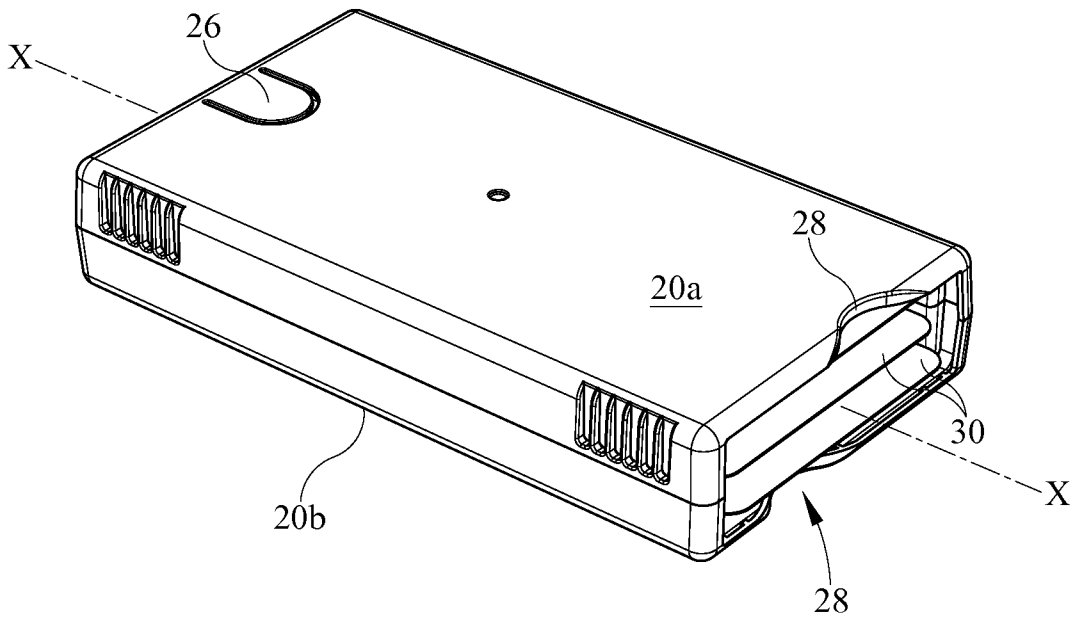



FIG. 5

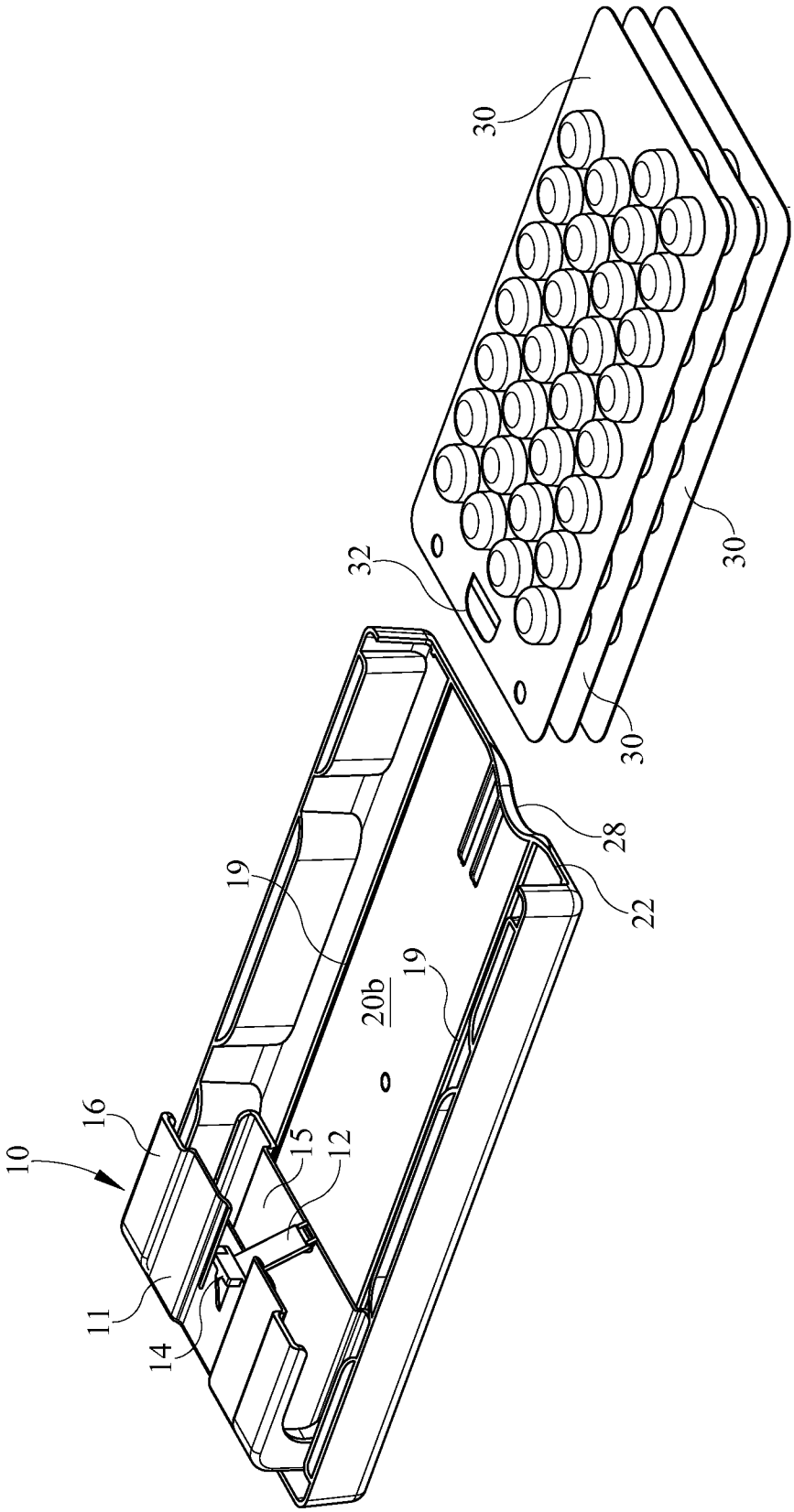



FIG. 2

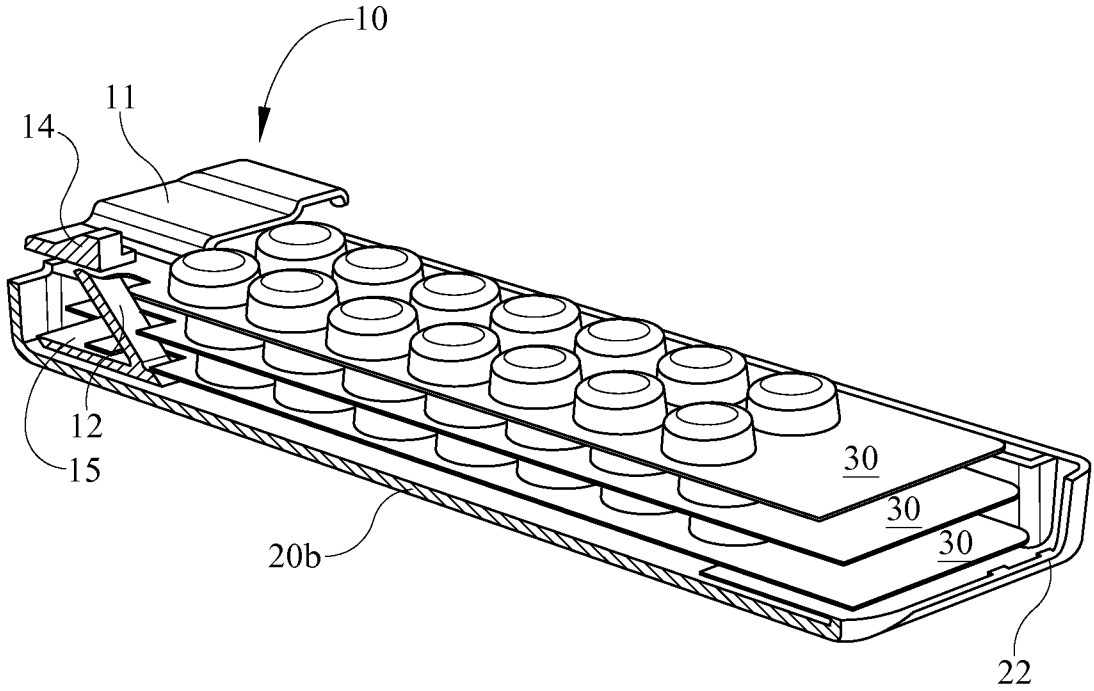



FIG. 3

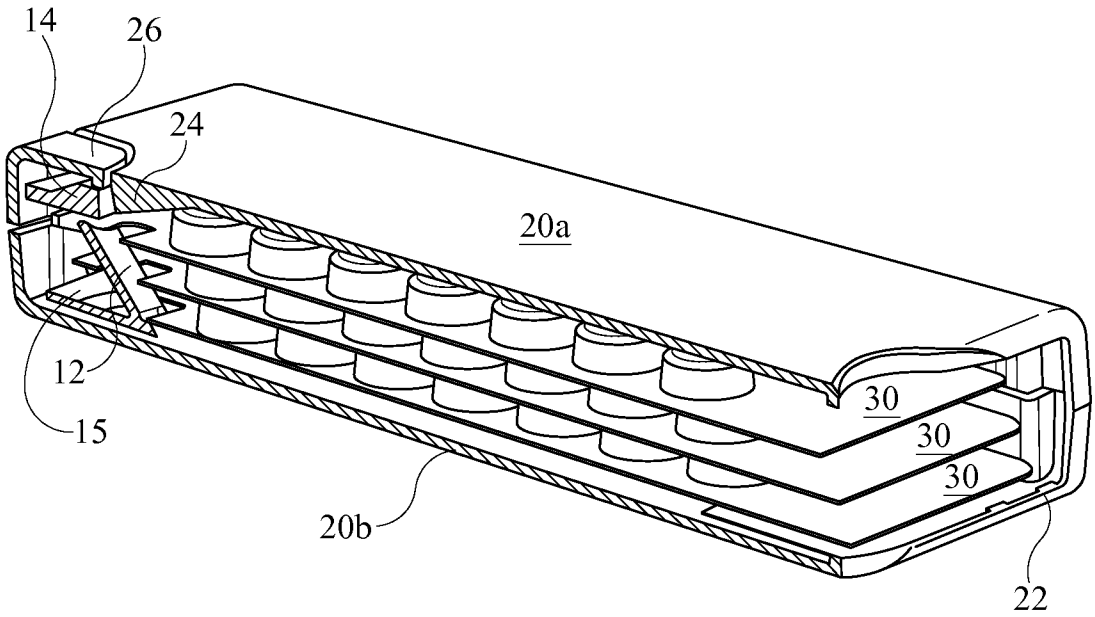



FIG. 4

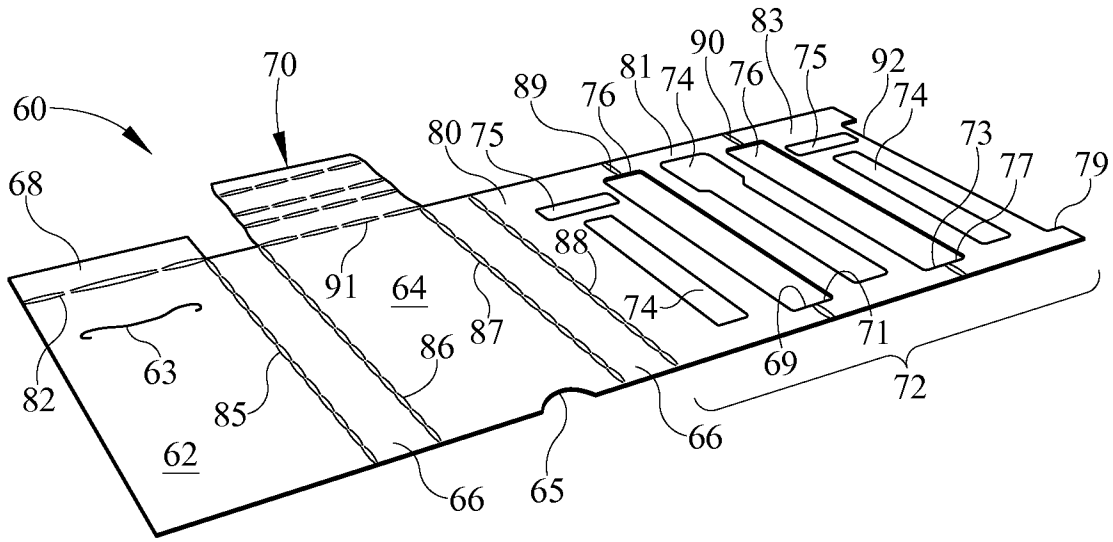

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FIG. 6

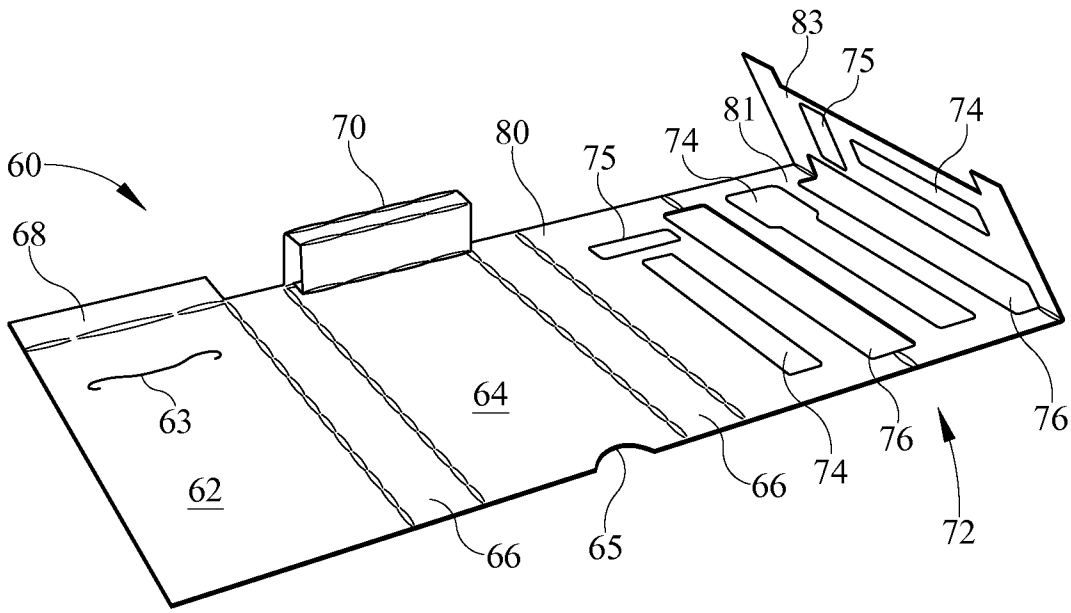

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FIG. 7

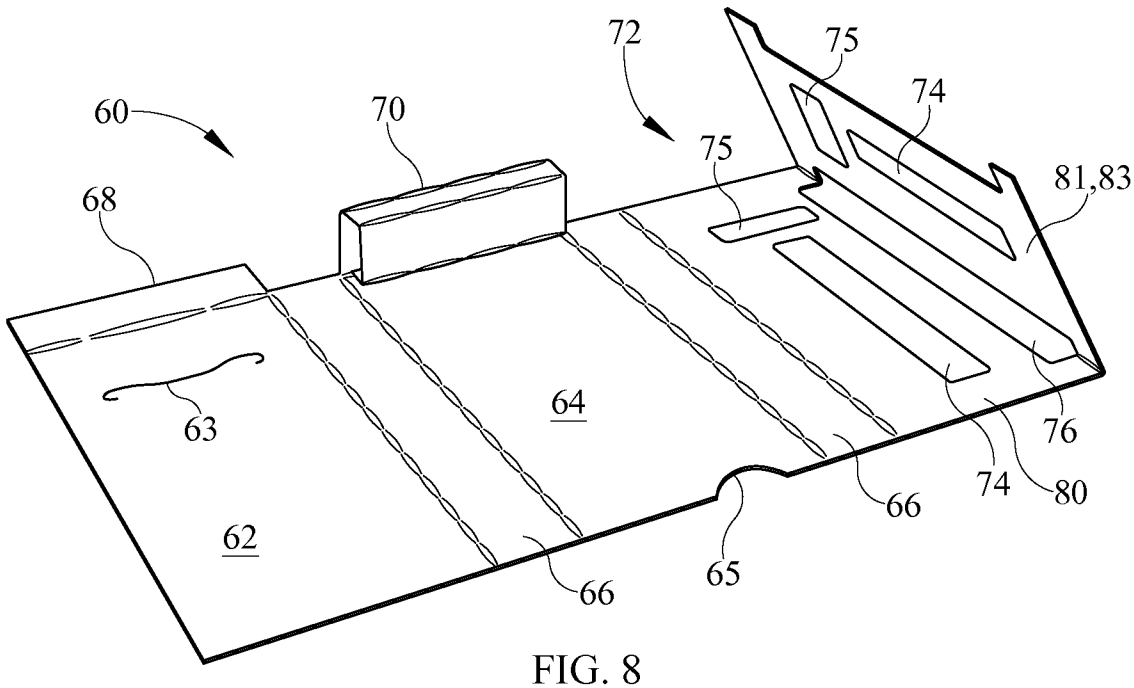

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FIG. 8

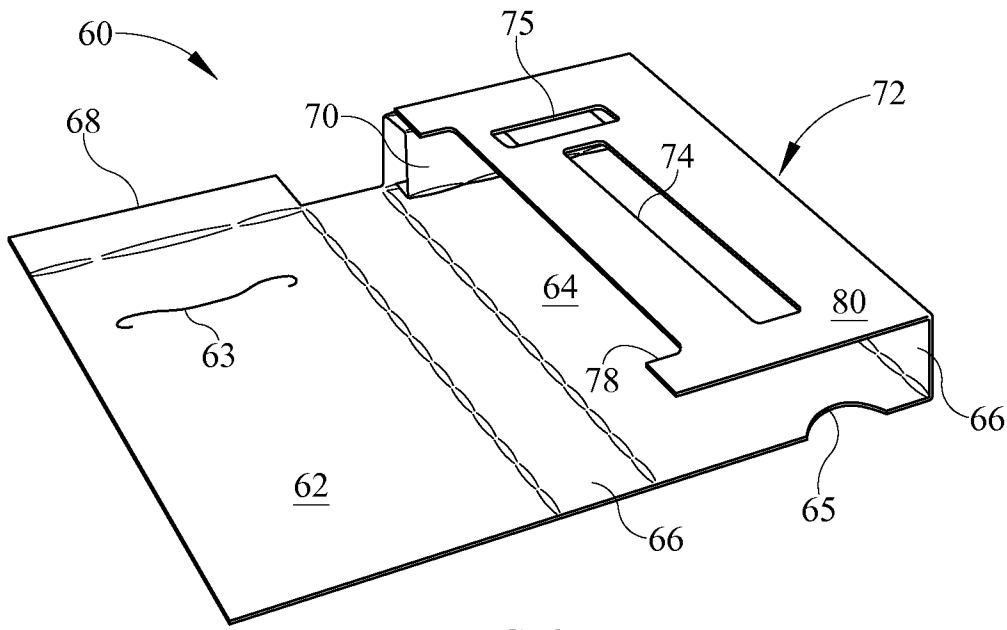

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FIG. 9

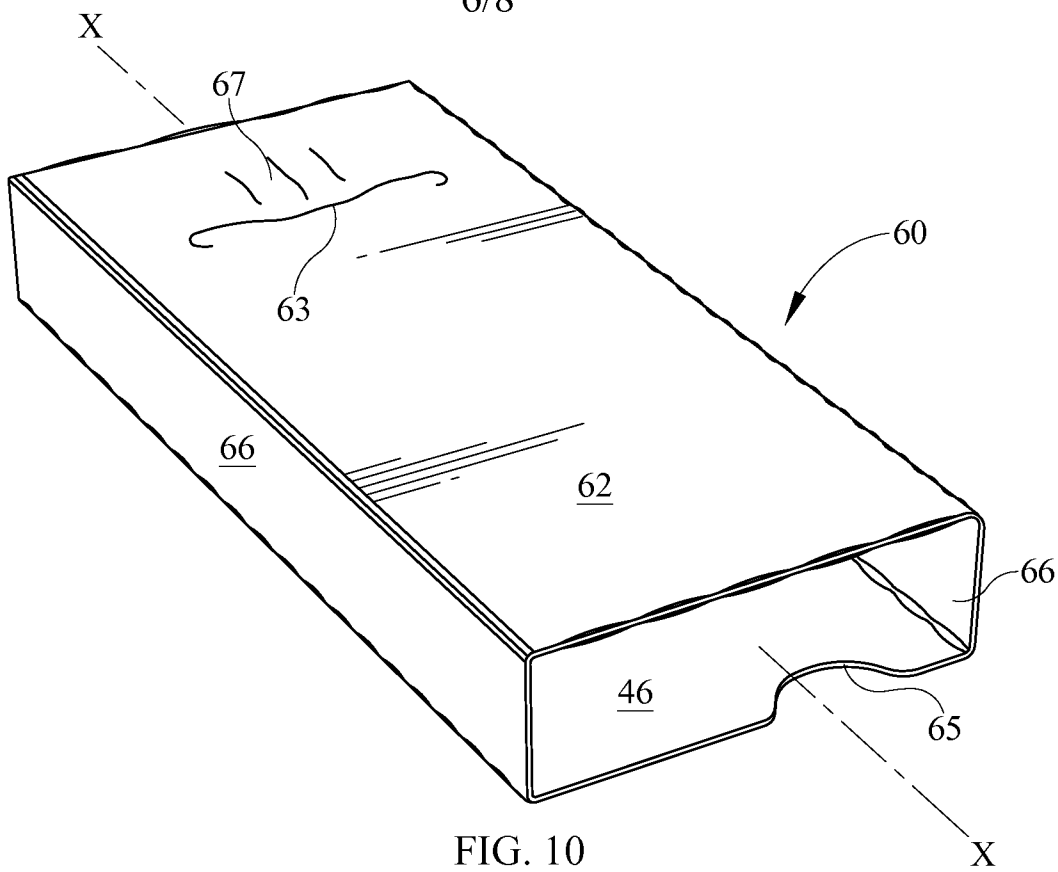



FIG. 10

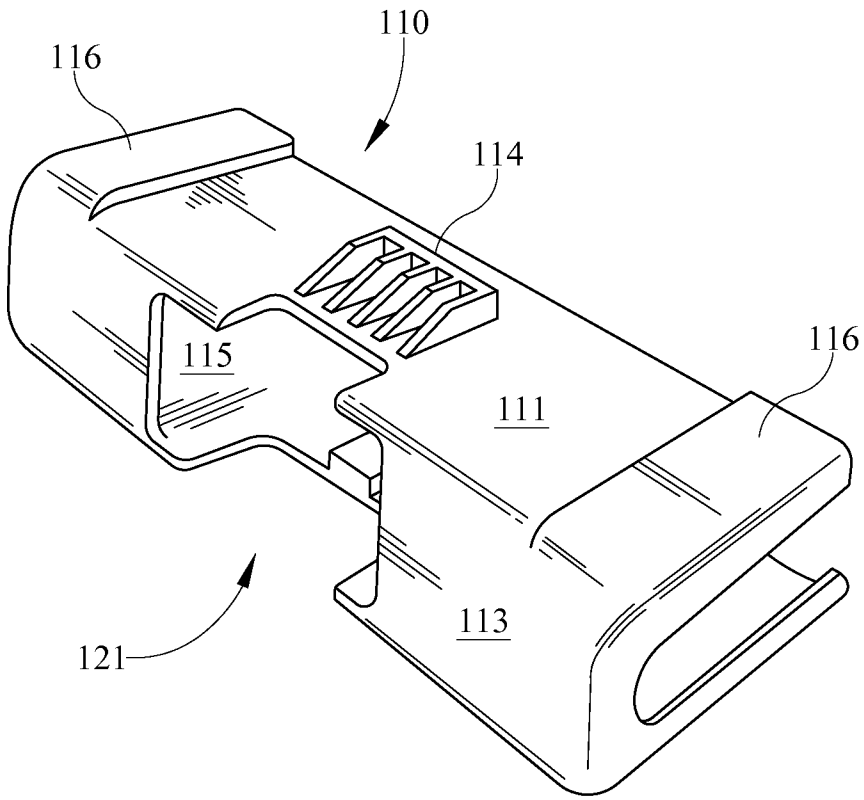



FIG. 14

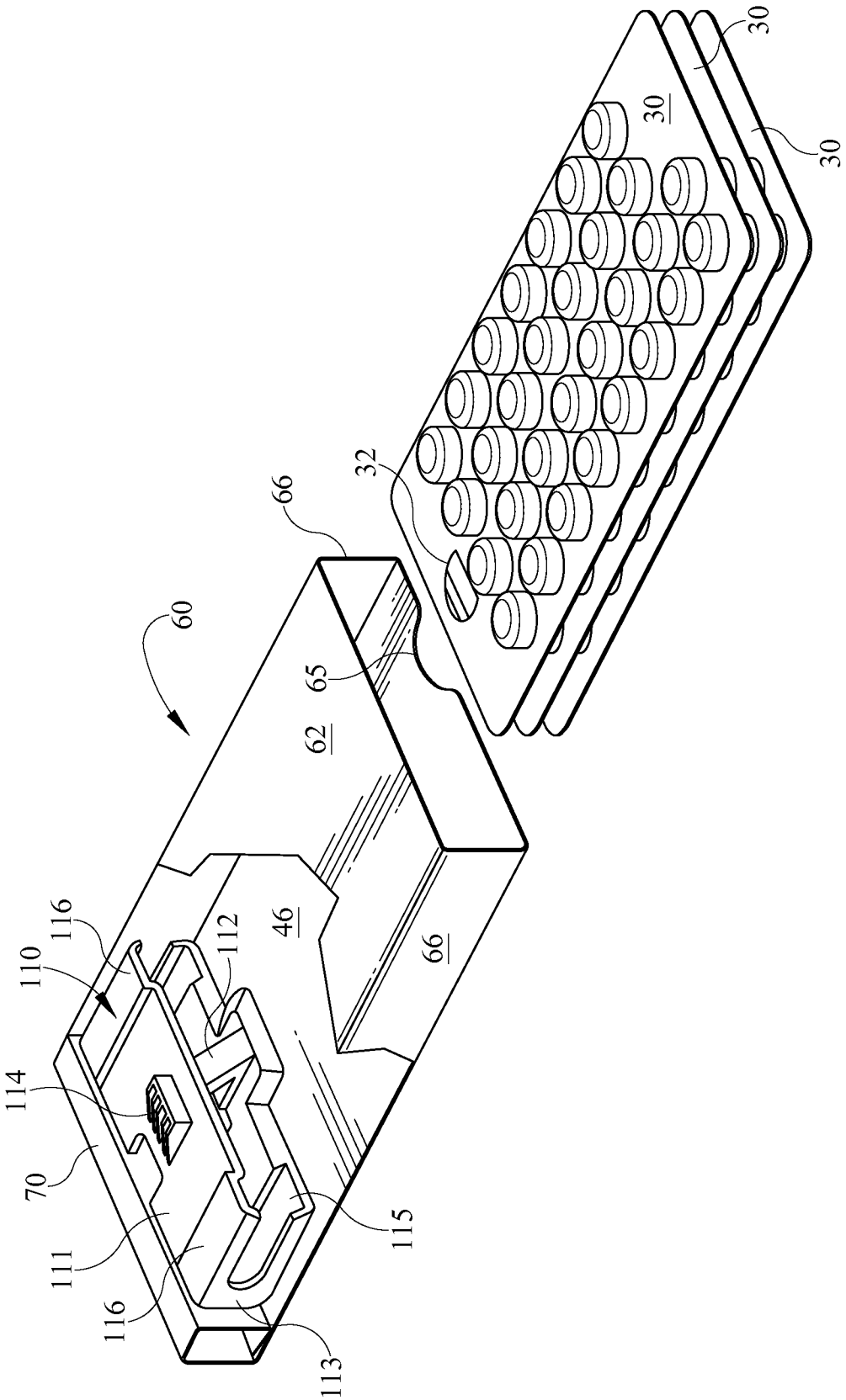



FIG. 11

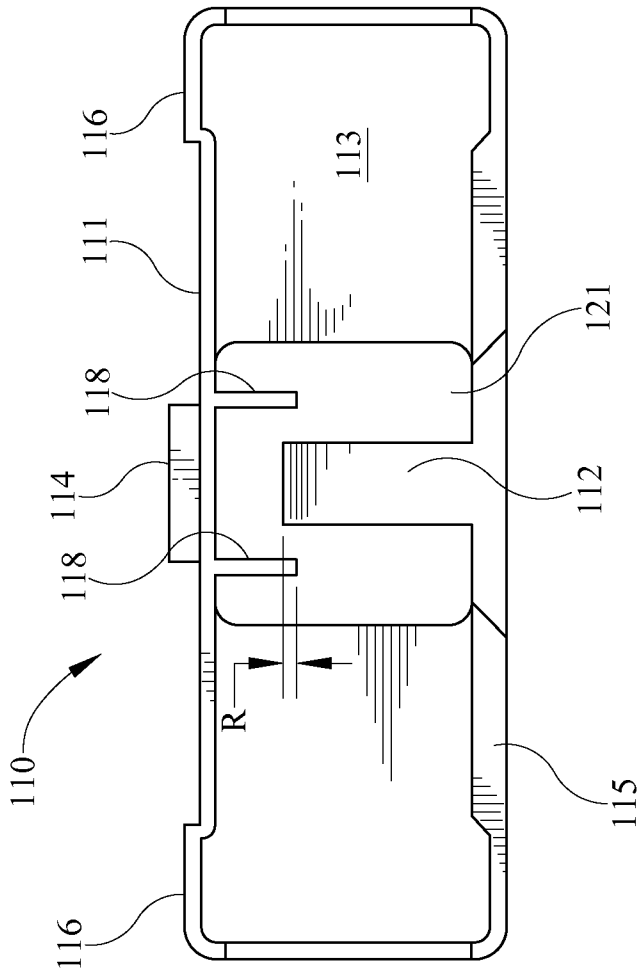

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FIG. 13

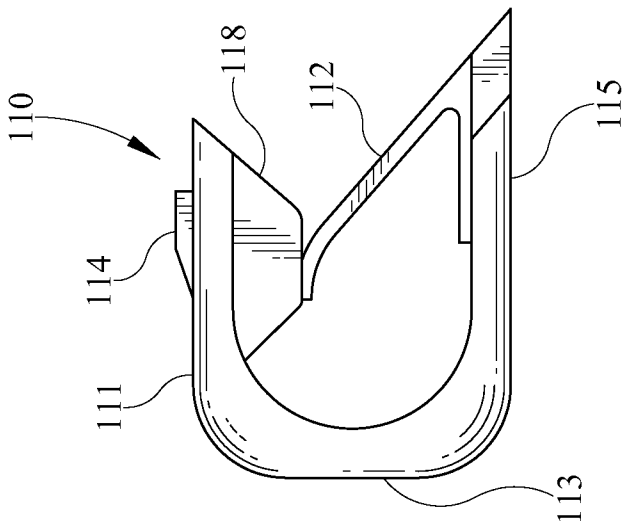

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FIG. 12

# INTERNATIONAL SEARCH REPORT

International application No
PCT/US2010/049896

**A. CLASSIFICATION OF SUBJECT MATTER**
INV. B65D83/04
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)
B65D A61J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| X | US 2009/184022 A1 (COE MATTHEW [US] ET AL)<br>23 July 2009 (2009-07-23)<br>paragraph [0036] - paragraph [0058];<br>figures 1-19 | 1-9 |
| A | WO 2009/058979 A1 (MEADWESTVACO CORP [US];<br>GELARDI JOHN A [US])<br>7 May 2009 (2009-05-07)<br>page 3, line 20 - page 8, line 15; figures<br>1-13 | 1-19 |

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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| Date of the actual completion of the international search | Date of mailing of the international search report |
|---|---|
| 29 November 2010 | 09/12/2010 |

| Name and mailing address of the ISA/ | Authorized officer |
|---|---|
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL – 2280 HV Rijswijk<br>Tel. (+31–70) 340–2040,<br>Fax: (+31–70) 340–3016 | Derrien, Yannick |

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2010/049896

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---|---|---|
| US 2009184022 A1 | 23-07-2009 | NONE | |
| WO 2009058979 A1 | 07-05-2009 | GB 2465719 A | 02-06-2010 |
| | | US 2010243509 A1 | 30-09-2010 |