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BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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(54) Title: BLISTER CARD WITH STANDING FEATURE

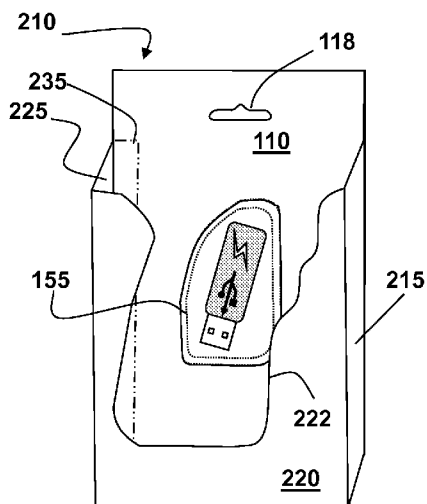


FIG. 8A

(57) Abstract: A package is disclosed which includes an inner panel (100) having a blister (150) attached thereto, and a plurality of panels wrapped around the inner panel (100) to provide a standing structure.

BLISTER CARD WITH STANDING FEATURE

REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of priority under 35 U.S.C. § 119(e) of United States provisional application serial number 61/583,969 filed on January 6, 2012 which is hereby incorporated by reference in its entirety.

BACKGROUND

[0002] This disclosure is directed to blister card packages and, more particularly, to blister packages with a standing feature in the form of a wraparound panel to support the package shape in a desired orientation.

[0003] Manufacturers and retailers of consumer goods, such as pharmaceuticals, software, electronics, health and beauty products and the like, typically package their products in tamper resistant security packages. For example, many consumer goods are packaged in blister or clamshell packages formed by positioning a consumer good in a flanged blister made from various polymeric and/or paperboard materials and sealing the flanged blister between two paperboard substrates. Consumers have voiced disapproval of such packages because of the difficulty of opening the same and the potential for being cut on a rough edge especially of plastic blisters. Packages may therefore be made based largely on paperboard, for example, NATRALOCK packages. Packaging made primarily of paperboard is more sustainable than packaging made from petroleum-based plastics. The paperboard used in such packages may be tear-resistant as described in commonly assigned US Patent No. 7,144,635.

[0004] Some packages may comprise a paperboard card and a polymeric blister. Often the paperboard card may be a planar or flat construction. Such a construction may not stand up readily, or may lack visual interest. It would be advantageous to

have a package that provides a feature to help the package stand upright, or form a more interesting, non-planar structure.

SUMMARY

[0005] In one aspect a package is disclosed which includes a blister attached to a card. An extension or wrap-around panel or panels may be attached to the card to provide support to hold the package in a desired orientation, such as a standing position.

[0006] Other aspects of the disclosed package will become apparent from the following description and the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Fig. 1 is a plan view of parts to form a blister package;

[0008] Figs. 2A and 2B are a back plan view and a cross section view respectively of the blanks aligned in a first step to assemble the package;

[0009] Figs. 3A and 3B are a back plan view and a cross section view respectively of a further step to assemble the package;

[0010] Figs. 4A and 4B are a back plan view and a cross section view respectively of a further step to assemble the package;

[0011] Figs. 5A and 5B are a back plan view and a cross section view respectively of a further step to assemble the package;

[0012] Figs. 6A and 6B are a back plan view and a cross section view respectively of a further step to assemble the package;

[0013] Figs. 7A and 7B are a back plan view and a cross section view respectively of the assembled package; and

[0014] Figs. 8A and 8B are a front plan view and a cross section view respectively of the assembled package.

DETAILED DESCRIPTION

[0015] As various embodiments of the package are described, reference will be made to Figures 1-8. Certain parts of the packages are denoted by reference numerals.

Where there is more than one of the same feature, generally only one will be denoted by a reference numeral. Typically in these Figures, where a front plan view is shown for a blank of material, solid lines usually indicate periphery or cuts, and dashed lines usually indicate crease, score, or fold lines. In perspective views, solid lines typically show edges or folds, while dashed lines typically show hidden or partially obscured features. Where assembly steps are described, these steps are exemplary and are not to be limiting as to the sequence of operations used to arrive at the final package. Also, directions such as up, down, top, bottom, front, back, etc. are used for convenience in describing the package and are not meant to be limiting. The packages described here may be made from two blanks (that is, the cut sheet parts from which the package components are made by folding and other steps) or from more than one blank or more than two blanks. The word "panel" will often be used to describe a piece of sheet material such as paperboard, particularly with respect to a blank from which the package is made. Since panels are sometimes superimposed, for example, creating a two-layer or multi-layer structure, like features or panels will sometime coincide, in which cases, descriptions may call out the number identifying the feature closer to the viewer, that is, the feature visible in a particular Figure.

[0016] Fig. 1 shows a front plan view of a first blank 100, second blank 200, and blister 150 for forming a package. The first blank 100 as illustrated in the example here may be considered an "interior" portion of the package, while the second blank 200 may be considered an "exterior" portion of the package. The use of "interior" or "exterior" is not intended to be limiting.

[0017] First blank 100 may include an inner panel 110 with a cutout 112 therein. Cutout 112 may receive a blister 150 as described below. An optional hang hole 118 may be provided in inner panel 110. First blank 100 may be formed of a tear resistant material and/or a heat sealable material.

[0018] Second blank 200 may include main or back panel 210 that may be hingedly attached to side panel 215, which in turn may be hingedly attached to front panel 220, which in turn may be hingedly attached to side panel 225, which in turn may be hingedly attached to glue flap 235. The hinged attachments may be fold or crease lines. The side panels 215, 225 may have the same width "w1." The back panel 210 and front panel 220 may have the same width "w2."

[0019] A cutout 212 may be provided in back panel 210, the cutout 212 being approximately the same size and shape as glue flap 235. A hang hole 218 may be provided in back panel 210. A cutout 222 may be provided in front panel 220. The cutout 222 may be sized and shaped to provide clearance for, or visibility of, blister 150 in the final package. In the flattened assembly configuration described herein, the cutout 222 may also be sized and shaped, and located, so as to not interfere with placement of a blister into the flattened package.

[0020] Figs. 2- 8 show exemplary steps in the assembly of the package. In each case a plan view, such as Fig. 2A, is provided along with a cross section view, such as Fig. 2B. A support (not shown) may be placed below the pieces during assembly. The support may provide clearance for a blister body to be inserted into the package. The support may be part of, or provide backing support for, a heat sealing or pressing machine.

[0021] In Fig. 2, blanks 100 and 200 are shown with certain (e.g. forward) surfaces facing downward or away from the viewer. The downward surfaces may be coated (e.g. for improved printing, which may generally face forward in the finished package). The upward surfaces (e.g., perhaps non-printed surfaces) may be treated for other desired functions, for example tear resistance or with a heat seal coating. However, not

all surfaces need to be coated for any particular function (e.g. printing, tear-resistances, heat sealing).

[0022] The first blank 100 may be placed upon second blank 200, and their lower edges may be aligned. The first blank may be shifted to the right by a distance w_3 that is equal to the side width w_1 . The cutout 222 in front panel 220 (shown in phantom behind inner panel 110) may be designed so that, in this flattened configuration, it aligns with, or at least does not interfere with the cutout 112 in inner panel 110.

[0023] In Fig. 3, blister 150 has been lowered into the cutout 112 in inner panel 110, with the body 155 of the blister extending downward through inner panel 110 (and for the moment, through the cutout 222 in front panel 220). Blister flange 156 however may remain above inner panel 110.

[0024] In Fig. 4, an item 160 has been placed into the blister body 155.

[0025] In Fig. 5, back panel 210 and side panel 215 have been folded over upon the package structure.

[0026] In Fig. 6, the glue flap 235 has been folded over onto the back panel 210, or (if cutout 212 is provided) into the plane of back panel 210. A tubular structure may thus be created with the panels of the second blank 200 forming a tube around the inner panel 110. The blister flange is now sandwiched between back panel 210 and inner panel 110. Since the package is in a flattened configuration, pressure may be used to seal the layers together, for example in a heat sealing operation. If the inner panel 110 has a heat sealable coating on the surface shown in Fig. 6B in contact with back panel 210 and glue flap 235 (this would be the 'back facing' or inward (hidden) surface in the finished package) then heat sealing may be used to adhere these panels together. This in turn may securely trap the blister flange 156 between inner panel 110 and back panel 210.

[0027] FIG. 7 shows the package folded into finished, "opened" (non-flat) configuration, as viewed from the back, to provide continuity with the corresponding

viewpoint of FIGs. 2-6. FIG. 8 shows a similar view, but from the front of the package. In the opened (non-flat) configuration, the wrap-around panels may thus provide a support structure or frame so that the package may stand upright.

[0028] It will be understood that the illustrated construction is an example and does not include all possible constructions. Although the blister constructions shown here generally are for a blister that completely encloses a product, it is also contemplated that portions of the blisters may be left open, for example to allow a customer to handle the product such as feeling the texture, observing the product directly (without looking through the blister material), testing a fit (e.g. for an electrical connection), and for other purposes.

[0029] The first blank 100 and second blank 200 (or depending on design, a single blank or additional blanks) may be formed of a sheet material such as paperboard, which may be made of or coated with materials to increase its strength. An example of such a sheet material is EASYSEAL paperboard made by MeadWestvaco Corporation. The sheet material may have a heat sealable coating, for example to allow a heat seal to be created between the first blank 100 and second blank 200. Alternately, other forms of adhesive may be used to seal these parts together. It should be noted that the use of tear resistant materials, and/or in more than one layer, help to improve the tamper- and theft-resistance of the package. The panels may be joined together by heat sealing, RF (radio frequency) sealing, ultrasonic sealing, adhesive, or other means. Such sealing may be done on most of the facing surfaces of appropriate panels or sealing may be done to less than the entire facing surfaces, for example only around the outer perimeter of the package, and along or upon part or all of flange 156. The first blank 100 and second blank 200 may be made of different materials.

[0030] Using a sheet material such as a tear resistant or heat sealable paperboard may increase the cost of the package. Therefore it may be advantageous to use tear resistant, or heat sealable, paperboard only on portions of the package, for example, only on inner panel 110.

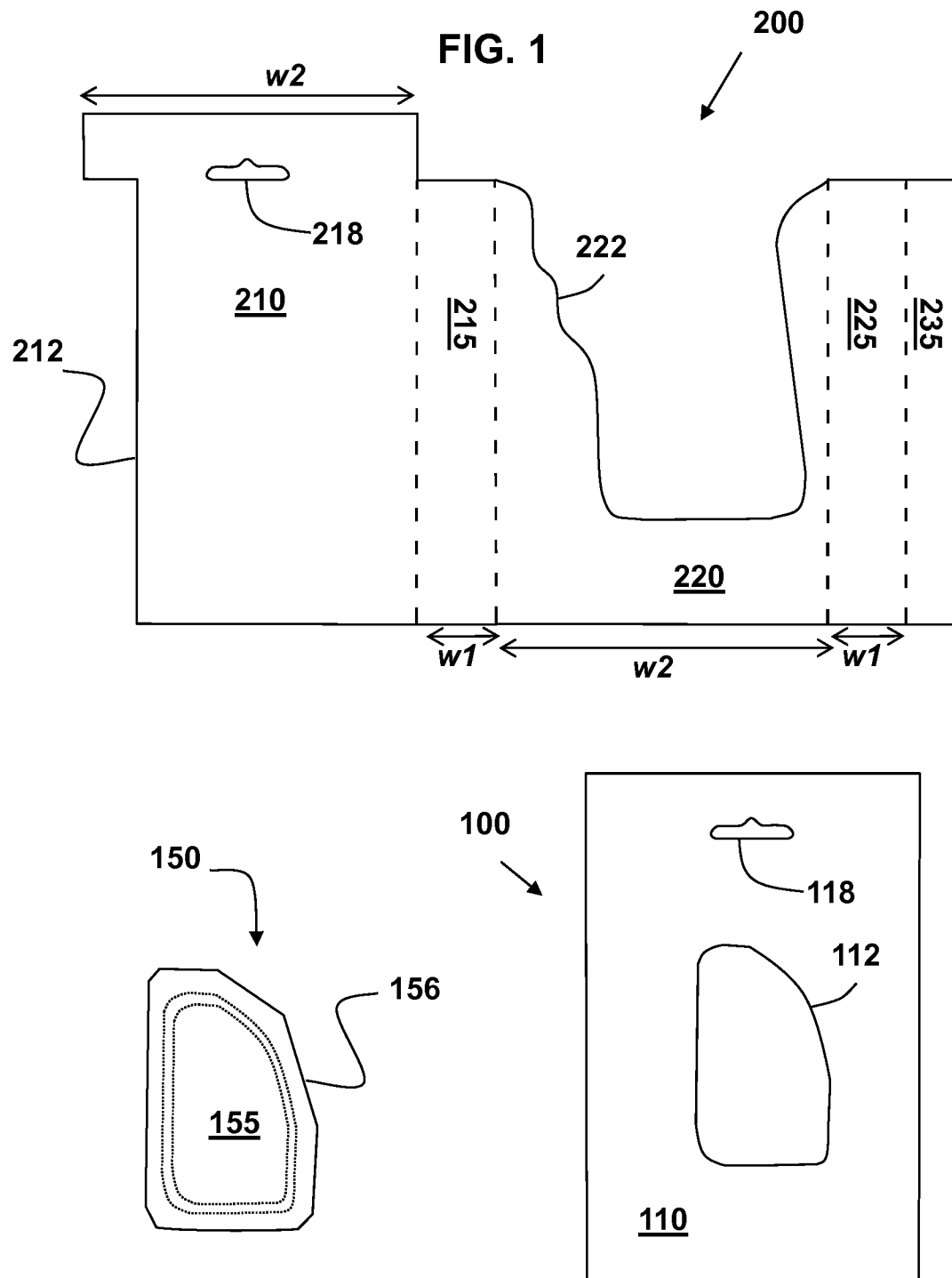
[0031] Blister 150 may be made with common thermoform plastics such as PVC or APET but may also include a recycled material such as RPET or a biodegradable material such as PLA. However other materials including other plastics or paperboard may also be used. Besides thermoforming, the case or blister may be formed by injection molding or other manufacturing methods. The blister may be formed in one or more pieces. One or more blisters may be used in the package.

[0032] It should be understood that additional panels or fold-over panels may be included in the package for further reinforcing the package, providing additional advertising space, and so on.

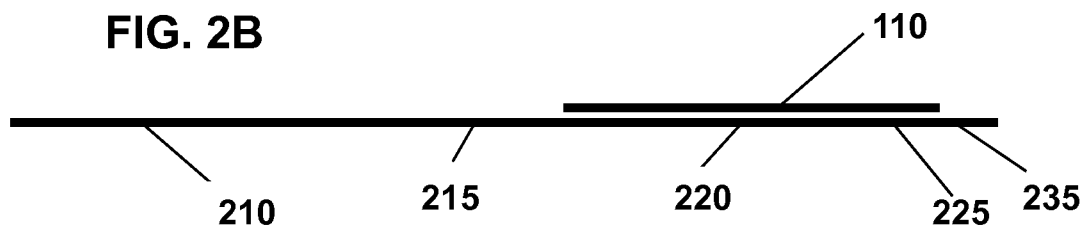
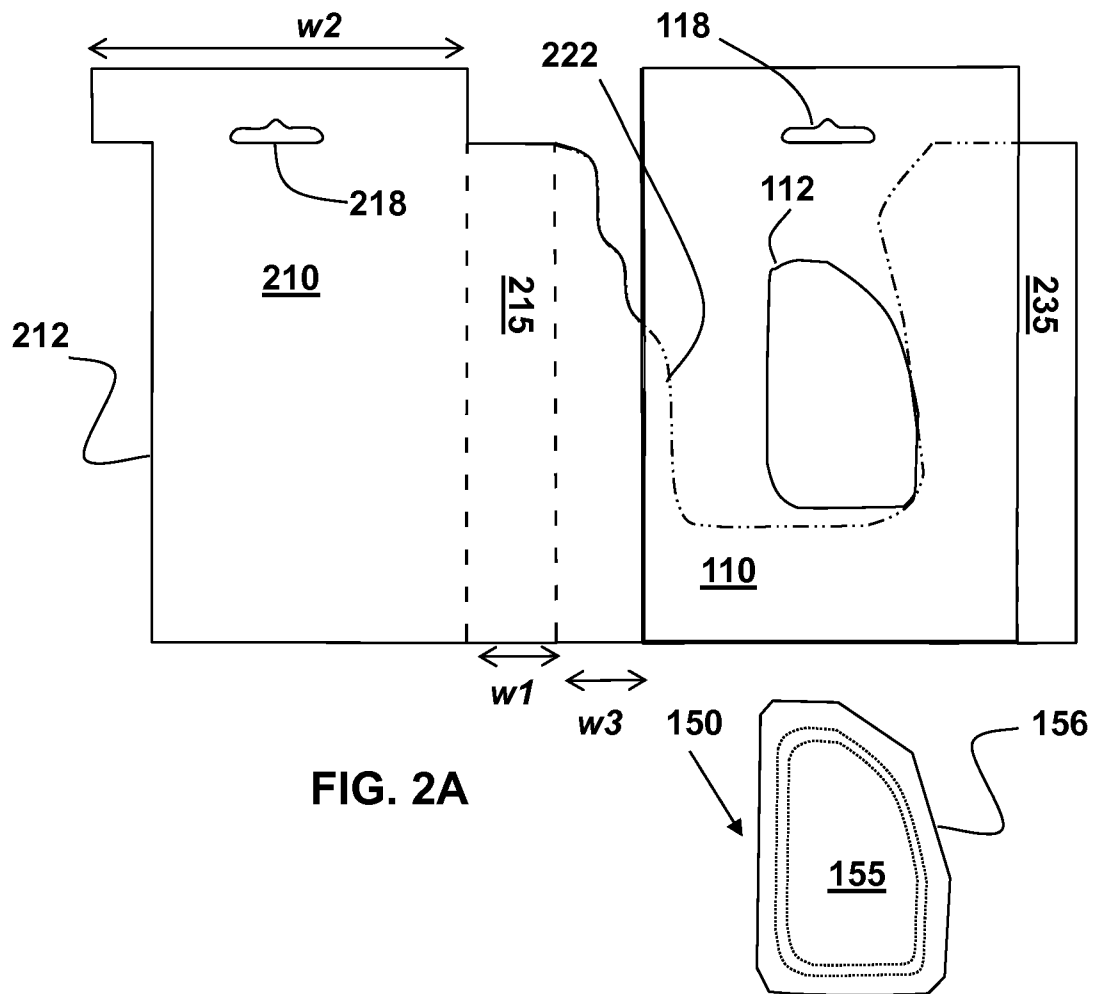
CLAIMS

1. A packaging structure comprising:
a first panel comprised of sheet material and having a first cutout;
a second portion of sheet material comprising a plurality of panels hingedly attached together,
the plurality of panels including a back panel, two side panels, and a front panel, the
front panel including a second cutout;
wherein the plurality of panels form a tubular structure wrapped around the first panel.
2. The packaging structure of claim 1, further comprising a blister attached to the first
panel, the blister having a body and a peripheral flange; and the peripheral flange
located between the first panel and the back panel.
3. The packaging structure of claim 1, collapsible to a flattened configuration wherein
the first cutout and the second cutout are aligned.
4. The packaging structure of claim 1, wherein the first panel and the plurality of panels
are made of paperboard.
5. The packaging structure of claim 1, wherein the first panel is made of tear-resistant
paperboard.
6. The packaging structure of claim 1, wherein the first panel has a heat-seal coating.

1 / 8



2 / 8



3 / 8

FIG. 3A

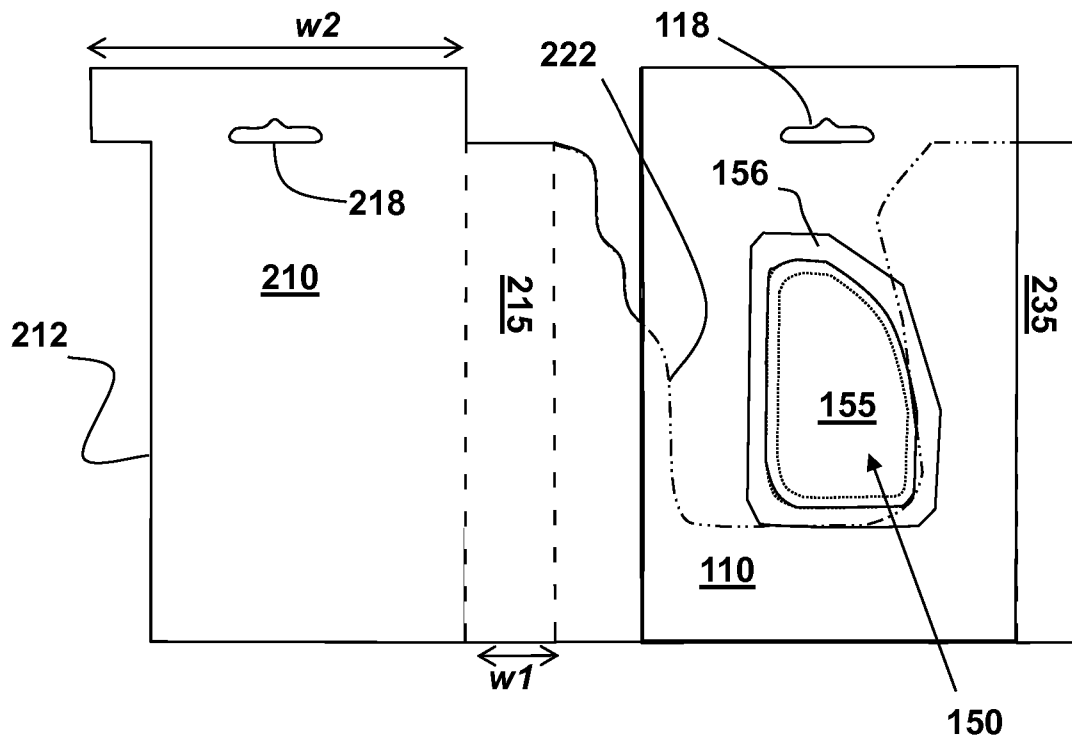
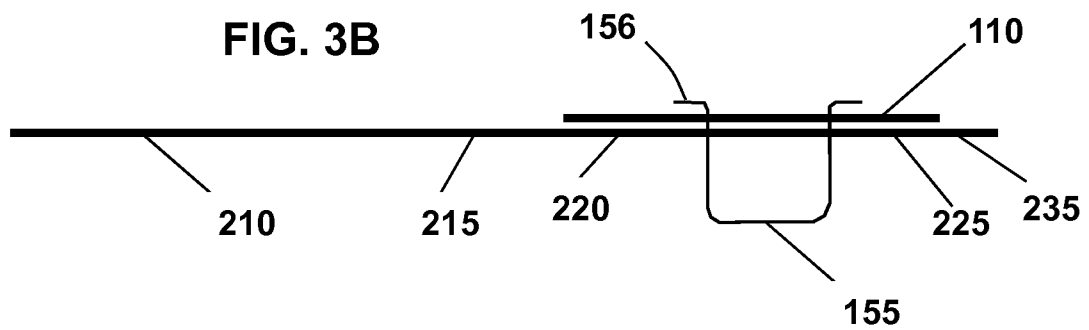


FIG. 3B



4 / 8

FIG. 4A

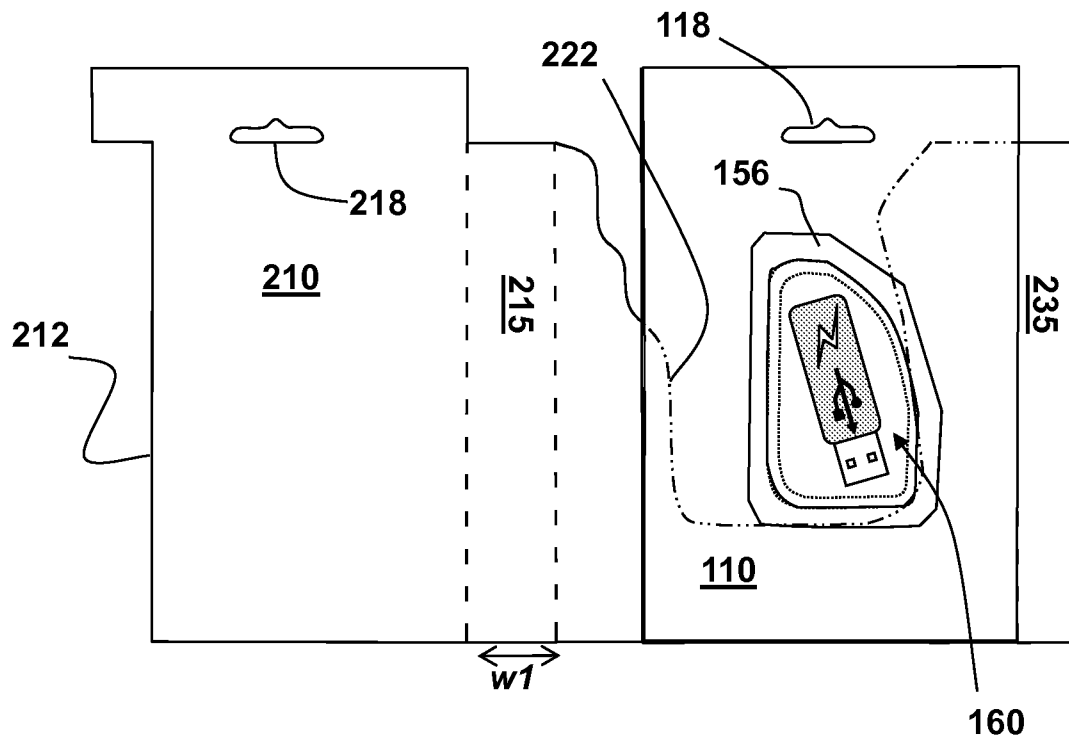


FIG. 4B

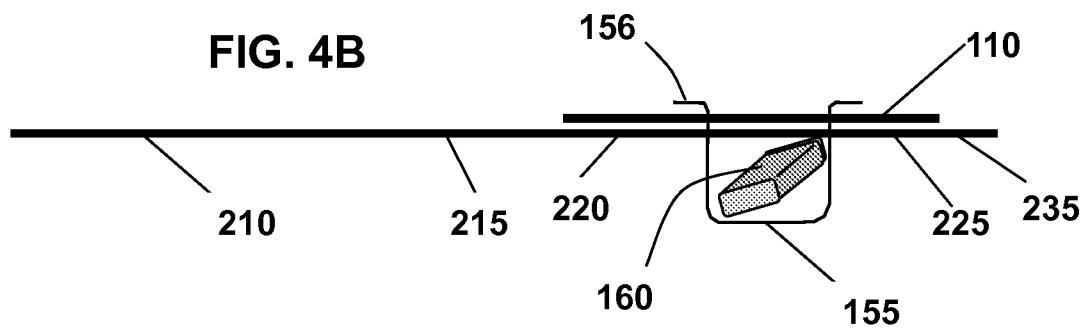


FIG. 5A

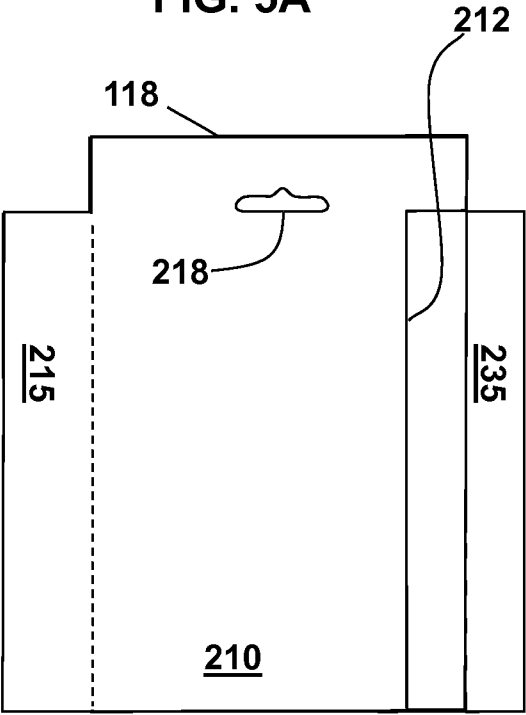


FIG. 5B

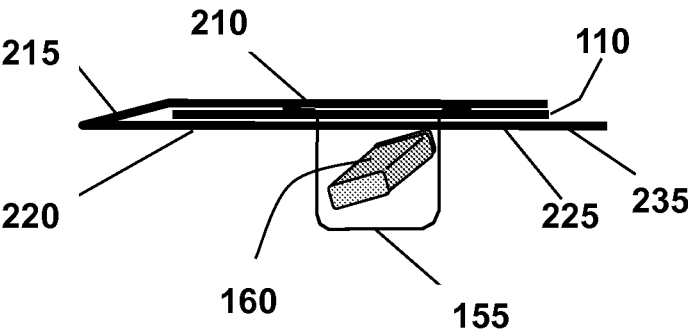


FIG. 6A

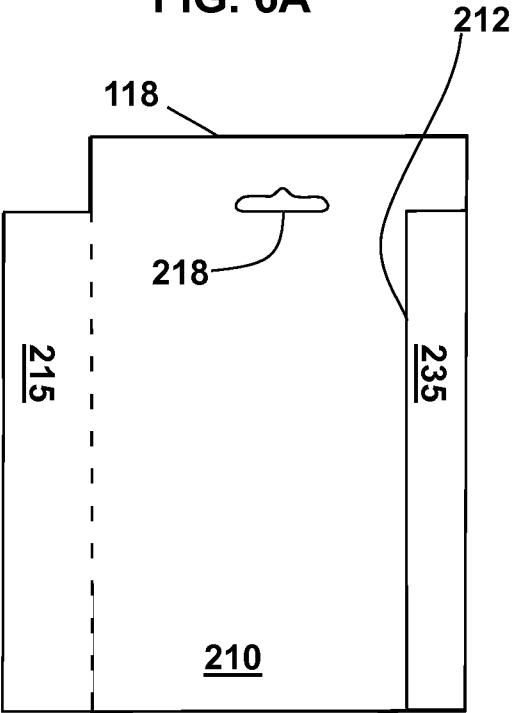
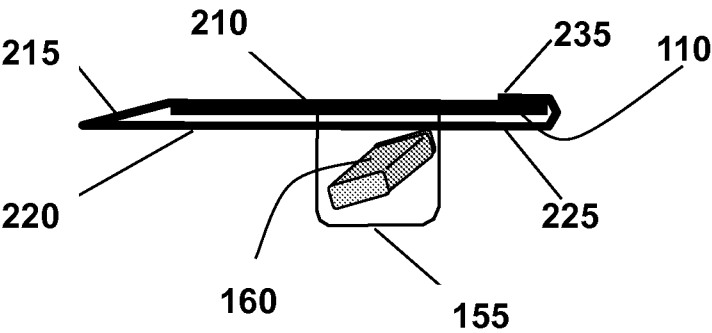


FIG. 6B



7 / 8

FIG. 7A

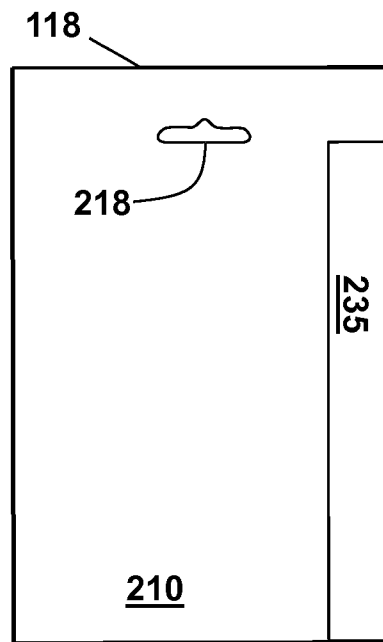


FIG. 7B

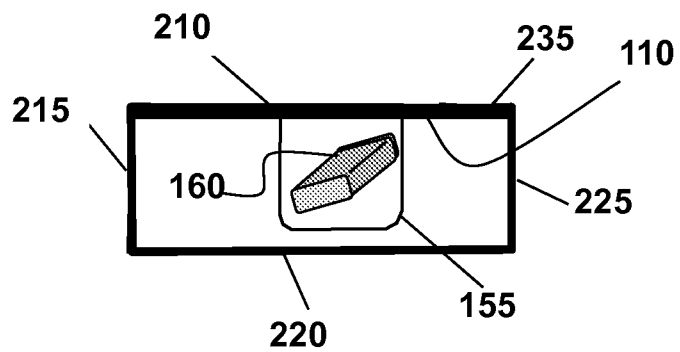


FIG. 8A

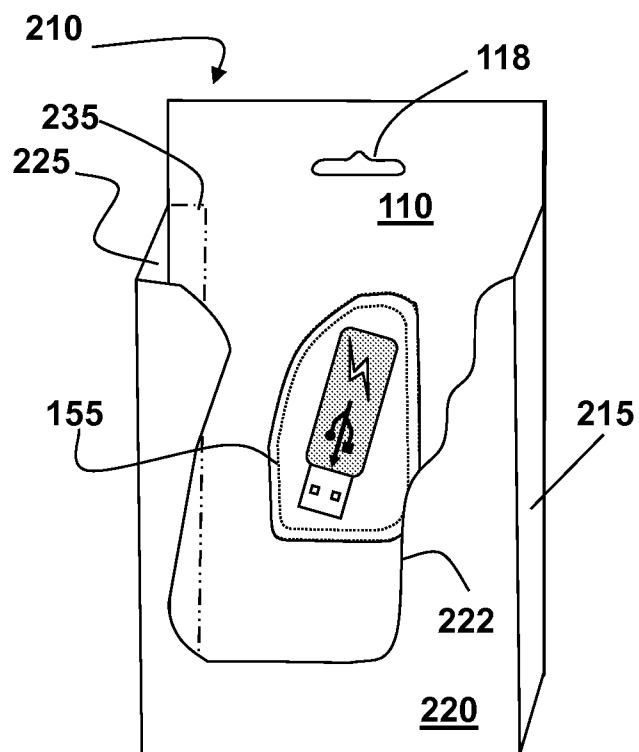
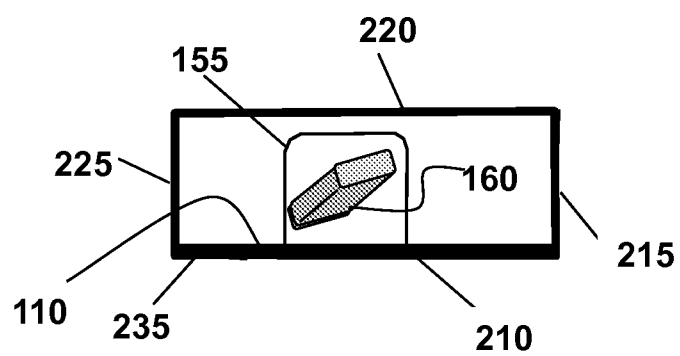


FIG. 8B



INTERNATIONAL SEARCH REPORT

International application No

PCT/US2013/020 111

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65D73/00

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

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 practicable, search terms used)

EPO- Internal , WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 487 915 A (SCOTT RAYMOND G) 6 January 1970 (1970-01 -06) column 2, line 47 - column 3, line 70; figures 1-5 -----	1- 6
Y	US 5 002 187 A (RYSNER SHELDON [US] ET AL) 26 March 1991 (1991-03 -26) abstract ; figures 1-6,8,9 column 2, line 18 - column 3, line 41 -----	1- 6
Y	WO 2008/058046 A2 (MEADWESTVAC0 CORP [US] ; HESSION CHRISTOPHER J [US] ; KAROW MEREDITH [US] 15 May 2008 (2008-05 -15) abstract ; figures 1-3,13-15 paragraph [0020] - paragraph [0026] ----- -/--	1- 6



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

13 March 2013

Date of mailing of the international search report

22/03/2013

Name and mailing address of the ISA/

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Authorized officer

Seegerer , Heiko

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2013/020111

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category"	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 7 144 635 B2 (HAWES DAVID H [US] ET AL) 5 December 2005 (2006-12-05) cited in the appl i cation abstract; figures 1,3 col umn 2, line 36 - column 3, line 35 -----	1,4-6

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/020 111

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us 7144635	B2	05 -12 -2006	NON E