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(54) **RECLOSABLE PORTABLE CONSUMABLE PRODUCT PACKAGE**

WIEDERVERSCHLIESSBARE VERBRAUCHSGÜTERVERPACKUNG

EMBALLAGE DE PRODUIT CONSOMMABLE PORTATIF REFERMABLE

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Description

[0001] The present invention relates generally to a portable consumable product package for storing and dispensing a travel or satellite packs each of which contains consumable products, particularly confectionery products such a gum and candy.

[0002] It is known to provide packs of confectionery products containing a few pieces of candy or gum. Generally, these packs contain less than about fifteen individual pieces of candy or gum. These packs are desirable because they are discreet, they do not consume room in the consumer's pocket, purse, or other carrying apparatus. A disadvantage with these known types of packs is that they contain relatively few pieces of the product so that the consumer must either buy and carry many packs at the same time or must visit the retailer to purchase another pack. US2005/0255198 relates to a package assembly enclosing a plurality of individual elongate consumable products; the products are aligned in a side-by-side array; the package has a front wall with a wall flap for frictional engagement with the array of product for removable retention of the product.

GENERAL

[0003] The presently claimed invention provides a portable package for storing and dispensing a plurality of travel packs containing a selected amount of a confectionery product comprising: a housing having a bottom, a front surface spaced from a rear surface and connected by two opposite side surfaces wherein at least one of the side surfaces has a window; the surfaces defining an open top; a cut out provided on the front surface to define an open front; and a cover monolithically formed with the rear surface, wherein the portable package stores a plurality of travel packs each of which contains an amount of confectionary product, such that the travel packs within the portable package can be viewed through the window with the cover in a closed position.

[0004] As used in the following description and claims, the term "portable" relates generally to a package that will fit within a shirt pocket. In one example, a "portable" package has dimensions no larger than about 120 mm by about 100 mm by about 40 mm. Such a portable package can contain a number of travel or satellite packs that, in general, have dimensions no larger than about 100 mm by about 50 mm by about 10 mm. Accordingly, a portable package may contain several travel or satellite packs so that the quantity of individual consumable product is less than 100 pieces, for example, less than about 90 pieces. Because the travel or satellite packs have a size that is smaller than the portable pack, the travel or satellite pack can be more discretely and conveniently carried by the consumer in their shirt or blouse pocket, pant pocket, purse or handbag, etc.

[0005] The term "travel pack" or "satellite pack" as used in the following description and claims preferably refers to a pack or quantity of consumable product less than fifteen pieces. It can encompass from one piece up to fifteen pieces. The term "tab" as used in the following description and claims generally refers to an individual piece of a consumable product, which can be wrapped, compartmentalized, or unwrapped. Other features and aspects of the present invention will become clear from the following description and drawings.

[0006] In one aspect of the present invention, the travel pack is made of a flexible plastic. In one embodiment both side surfaces of the package have a window. In another aspect of the present invention the front surface has a tamper evident panel. A package may further comprise releasable adhesive on the front surface. The front surface of the package may have a slit. The housing may be made of paperboard. The window may be transparent. The window may be open. The window may be elliptical. The package may further comprise a plurality of travel packs. The travel packs may be made of flexible plastic. The travel packs may have opposed major surfaces, an opposed top and bottom, and opposed sides, and one of the major surfaces may have a score defining a resealable flap. The package may be a flexible resealable package. In another aspect, the travel pack may be formed from paper, or a paper product.

[0007] It will be appreciated that one or more of the windows might be transparent, translucent, or open in one or more areas of the package so that a portion of the contents can be viewed. This will allow the consumer to easily and quickly view the contents.

[0008] A package might include a tamper evident panel to provide an indication to the user that the package has or has not been opened. Briefly, the portable package might include a cover in the form of a flap that overlies a top surface and a portion of the front surface of the package. A portion of the inside of the cover might be adhered to a portion of the front surface of the package, which has been scored. When the user lifts the cover away from the front surface of the package the adhered portions move together and the scored portion of the front surface tears to reveal the contents of the package. Therefore, the tamper evident panel will provide one or more of an auditory, tactile, and visual indication during the opening of the package, which will indicate that the package had not been previously opened.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Fig. 1 is a view of one side of a blank for one embodiment of a portable package for storing travel or satellite packs according to the present invention.

[0010] Fig. 2 is a view of the other side of the blank of Fig. 1.

[0011] Fig. 3 is a view of the material from which the portable package can be formed and in the form of a sheet. While only two blanks are shown it is to be understood, however, that any number of blanks may be provided on a sheet. In addition, it is to be understood that

additional blanks may be provided on each side of the blanks shown or may be provided above or below the blanks shown.

[0012] FIG. 4 shows a portable package made using the blank of Fig. 1 and shown in an unopened position.

[0013] Fig. 5 shows a portable package made using the blank of Fig. 1 and shown in an opened position.

[0014] Fig. 6 shows one embodiment of several travel or satellite packs removed from the portable package of Fig. 5 with one of the travel or satellite packs being shown in an open configuration.

[0015] Fig. 7 shows a travel or satellite pack according to one embodiment of the present invention with the resealable flap in an open position to expose the confectionery product contained within the travel or satellite pack.

[0016] Fig. 8 is a view of a portion of a first side of a first layer for one embodiment of a travel or satellite pack of the present invention showing a pattern of adhesive applied to one side of the first layer so that the first layer can be adhered to a first side of a second layer.

[0017] Fig. 9 is a view of a portion of a first side of a first layer for another embodiment of a travel or satellite pack of the present invention showing a pattern of adhesive applied to one side of the first layer so that the first layer can be adhered to a first side of a second layer.

[0018] Fig. 10 is a view of a portion of a second side of a second layer, which will form the inner surfaces of the travel or satellite pack and the other side of which is laminated onto a second side of first layer of any of the embodiments shown in Figs. 8 and 9 to form a laminate roll stock.

[0019] Fig. 11 is a view of a portion of the second side of the first layer, which will form the outer surfaces of the travel or satellite pack, the other side of which is laminated onto the first side of the second layer to form a laminate roll stock.

[0020] Fig. 12 is a partial cross sectional view of the laminate of Fig. 11 with the adhesive pattern of Fig. 8.

[0021] Fig. 13 shows the travel or satellite pack of Fig. 7 with the resealable flap in a closed position.

[0022] Figs. 14a-14e show a partial side view of the portable package with exemplary windows.

[0023] Figs. 15a-15g show exemplary ends of the smile cut or outer score line, each being discontinuous from the smile cut or outer score line.

[0024] Fig. 16A is a view of a blank for one embodiment of a travel or satellite package.

[0025] Fig. 16B is a perspective view of a travel or satellite package made from the blank of Fig. 16A and shown in an open position.

[0026] Fig. 16C is a perspective view of the travel or satellite package of Fig. 16B shown in a partially closed position.

[0027] Fig. 16D is a perspective view of the travel or satellite package of Fig. 16B shown in a closed position.

[0028] Fig. 17 is a front perspective view of a travel pack or satellite pack that can be stored in and dispensed from the package of the present invention. The travel or satellite pack is shown with a tear tape opening.

[0029] Fig. 18 is a front perspective view of a travel pack or satellite pack that can be stored in and dispensed from the package of the present invention. The travel or satellite pack is reclosable and has a perforated tear open feature.

[0030] Fig. 19A is a front perspective view of a travel pack or satellite pack that can be stored in and dispensed from the package of the present invention. The travel or satellite pack is reclosable.

[0031] Fig. 19B is a view of the package of Fig. 19A where the cover is capable of being folded over to fully expose the tabs.

[0032] Fig. 20 is a view of a blank for an embodiment of travel or satellite pack that can be stored in the package of the present invention.

[0033] Fig. 21 is a perspective view of a travel or satellite pack made from the blank of Fig. 20 and shown in an open position.

[0034] Fig. 22 is a perspective view of the travel or satellite pack of Fig. 21 shown in a partially closed position.

[0035] Fig. 23 is a perspective view of a travel or satellite pack of Fig. 21 shown in a closed position.

[0036] Fig. 24 is a view of a blank for another embodiment of a travel or satellite pack that can be stored in the package of the present invention.

[0037] Fig. 25 is a perspective view of a travel or satellite pack made from the blank of Fig. 24 and shown in an open position.

[0038] Fig. 26 is a perspective view of the travel or satellite pack of Fig. 25 shown in a partially closed position.

[0039] Fig. 27 is a perspective view of the travel or satellite pack of Fig. 25 shown in a closed position.

[0040] Fig. 28 is an exploded perspective view of an embodiment of a travel or satellite pack releaseably holding consumable products.

[0041] Fig. 29 is a perspective view wherein products are being adhered to a sheet of the travel or satellite pack.

[0042] Fig. 30 is a perspective view of an alternative embodiment of a sheet to which products are adhered.

[0043] Fig. 31 is a perspective view of a sheet having multiple rows of adhered consumable products.

DETAILED DESCRIPTION OF THE DRAWINGS

[0044] The relationship and functioning of the various elements of the packaging are better understood by the following description. Each aspect so defined may be combined with any other aspect or aspects unless clearly indicated to the contrary. The embodiments described below are by way of example only, and the invention is not limited to the embodiments illustrated in the drawings.

[0045] There is depicted to a portable package 10 that is suitable for storing and dispensing a number of travel or satellite packs 100, which themselves contain con-

sumable products, particularly confectionery products, and more particularly gum or candy 102.

[0046] Turning now to Fig. 1, one side of a blank for a portable package 10 of the present invention is shown. Fig. 2 shows the other side of the blank for the portable package 10. For ease of reference, the side of the blank shown in Fig. 1 may be referred to as the outer side (meaning the outer or visible side of the portable package after the blank has been formed into the portable package). In this regard, the outer side may have advertising or other indicia to indicate the contents and to provide an aesthetically pleasing package. Fig. 2, therefore, may be referred to as the inner side (meaning the inner or generally hidden side of the portable package after the blank has been formed into the portable package). In addition, in an attempt to avoid confusion, the identified portions of the blank will be referred to with the same reference numeral, except that when specifically referring to the outer side, the reference numeral will have a suffix of "a" and when specifically referring to the inner side, the reference numeral will have a suffix of "b".

[0047] The blank 15 shown in Fig. 1 and 2 includes, in general, a front surface 20, a cover 30, a pair of side surfaces 60, a bottom surface 70, and a rear surface 80. The front surface 20 includes a tamper evident panel 50, which will be explained in more detail below. The cover 30 includes a top 32 and a flap 34, from which a tab 36 extends. The cover 30 and, in particular, the top 32 is hinged to the rear surface 80 by a fold line 31. The top 32 includes rounded edge corners 38 so that when the blank 15 is constructed into the portable package 10, the front corners of the portable package 10 will have a rounded appearance. The flap 34 is hinged to the top 32 by a fold line 33. Therefore, when the blank 15 is constructed into the portable package 10, the cover 30 provides a monolithic covering over the top 4 and front 6 of the constructed housing 2 of the portable package 10, as will become clear.

[0048] The side surfaces 60 are connected to the rear surface 80 along fold line 61. Additionally, each side surface 60 is connected to an adhesive flap 68 by at least one fold line. The adhesive flap 68a contains a permanent adhesive provided on at least a portion of the adhesive flap 68a so that it will bond to the inner portion of the front surface 20b. As seen in Fig. 1, two fold lines 63, 65 are provided and a single partial score line 67 is provided. The combination of the fold lines 63, 65 and score line 67 will allow the side surface 60 to achieve a rounded profile at the front corner of the portable package 10 when constructed. The front rounded corners will assist in providing resilience to the portable package 10. For example, when pressure is applied to the front 20 or back 80 of the portable package 10, the fold lines (including the fold line with scoring) are capable of deforming slightly, which will hinder creasing in the side surfaces 60.

[0049] The bottom 70 is connected to the rear surface 80 by a fold line 71 and is connected to the front surface 20 by a fold line 73. Congruent with and complementary to the rounded corners 38 on the top 32 of the cover 39, the bottom 70 has rounded corners 72 to complete the front rounded corner profile of the portable package 10. The bottom 70 may also have support flaps 74 attached by a fold 75. The support flaps 74 will provide additional support to the bottom 70 and sides 60 when the blank 15 is constructed into the portable package 10.

[0050] The front surface 20 includes a slit 40 to receive a portion of the cover 30, in particular, the tab 36. Of course, the tab 36 and slit 40 may have a variety of suitable shapes so long as they are complementary and function to secure the flap 34 in a closed position when the flap 34 is inserted into the slit 40. The slit 40 may be any suitable shape. The slit 40 should be wide enough to accommodate the width of the tab 36 so that the tab 36 32 can be inserted into the slit 40 to close the cover 30 of the portable package 10. The slit 40 generally includes at least a major dimension 42 disposed along the width of the front surface 20 and having a shape complementary to that portion of the cover that is received within the slit 40. For example, as seen in Fig. 1 , the slit 40 is somewhat convex.

[0051] The front surface 20 may also have an opening 44 adjacent the slit. The opening 44 is provided adjacent the slit 40 and is generally located on the side of the slit 40 closer to the tamper evident panel 50. The opening 44 assists the insertion of the flap 34 (particularly, the tab 36) into the slit 40. In addition, the slit 40 may have ends 46 that extend somewhat perpendicular to the major dimension 42 of the slit to aid in the inward bending of the opening 44, when the tab 36 is being inserted into the slit 40. In addition, the ends 46 also assist in creating an outward bias of the front surface 20, which will tend to keep the flap 34 secured in a closed position.

[0052] As noted above, the front surface 20 includes a tamper evident panel 50. The tamper evident panel 50 includes a score line 51 defining a boundary of the tamper evident panel 50. In addition, when constructed as the portable package 10 and the tamper evident panel 50 is removed, the score line 51 defines an edge of the front opening 6 of the portable package 10. At the outside edge 52 of the tamper evident panel 50, a semicircular shaped cut-out 54 is provided, which will mate with a tab 36 of another blank 15 during the manufacture of the blanks 15. Permanent adhesive 53 is applied to all, substantially all, or at least a portion of the outer tamper evident panel 50a. The permanent adhesive 53 will contact the inner flap 34b and bond the portion of the inner flap 34b in contact with the adhesive 53 to the portion of the tamper evident panel 50a provided with the adhesive. It is to be understood, that the adhesive 53 may be applied to the flap 34b instead of the tamper evident panel 50a.

[0053] Importantly, the tamper evident panel 50 bonds to the flap 30 in an area so that the tab 36 is not bonded or secured to the tamper evident panel 50. Accordingly, the tab 36 is accessible to be grasped by the consumer to open the portable package 10. When the tab 36 is grasped and pulled upward and outward, the tamper ev-

ident panel 50, which is bonded to the inner flap 34b, tears along the score line 51 to provide a front opening 6 for the portable package 10, when the cover 30 is opened.

Advantageously, by bonding the tamper evident panel 50 to the inner flap 34b, when the tab 36 (and thus, the cover 30) is lifted, the consumer can experience one or more of a tactile, auditory, and visual sensation that will provide an indication that the portable package 10 had not been previously opened.

[0054] Optionally, the outer front surface 20a may have releasable adhesive 23 applied to one or more portions of the front surface. As seen in Fig. 1 , the releasable adhesive 23 is provided adjacent the slit 40 to assist in securing the cover 30 in a closed position, either before the portable package 10 has been first opened or after the portable package 10 has been opened. As shown in Fig. 1, the releasable adhesive 23 is applied adjacent the ends of the slit 40.

[0055] Fig. 3 shows a sheet 300 of the material from which the blanks 15 can be formed. While only two blanks 15 are shown, it is to be understood, however, that any number of blanks may be provided on a sheet. For example, additional blanks may be provided on each side of the blanks shown or additional blanks may be provided above or below the blanks shown. Advantageously, the tab 36 of one blank mates in a complementary fashion with a cut-out portion 54 of the tamper evident panel 50 of an adjacent blank 15. It is understood that each blank 15 is removed from the sheet 300 and then the portable package 10 is constructed (folded) using known machinery.

Briefly, the blank 15 is folded along the fold lines 31 , 33, 61 , 63, 65, 67, 71 , 73, 75 with the adhesive flaps 68a adhered to the front cover 20b and with the cover 30b adhered to the tamper evident panel 50.

[0056] Fig. 4 shows a portable package 10 formed from the blank of Figs. 1 and 2 in a closed position. Fig. 5 shows the portable package 10 in an open position. The portable package 10 includes a housing 2 with a substantially open top 4, a partially open front 6, and a cover 30. The housing 2 can store and contain a number of travel or satellite packs 100. The cover 30 is attached to the housing 2 and is adapted to enclose or protect the open top 4 and open front 6. The cover 30 includes a reclosable flap 34 with a tab 36, as described above. To close the portable package 10, the cover 30 is folded over the open top 2 and the open front 6 along fold lines 31 and 33. The flap 34, and in particular the tab 36 is inserted into slit 40.

[0057] The portable package 10 may be made of any suitable material and produced by any suitable method. The portable package 10 may typically be made from paper, paperboard, or cardboard. The blanks for the portable package 10 may be cut and fashioned from sheets of paper, paperboard, or cardboard by conventional methods. In addition, when the portable package is made from paper, paperboard, or cardboard, it may be further laminated to resist tearing and to further protect the contents from moisture and other environmental elements. It may also be desirable to provide either reinforced corners or edges to provide a more durable package. It may also be beneficial to provide rounded corners, which will have the effect of reducing wear and thus providing a more durable design. The portable package 10 may also be fashioned from other materials such as metal and plastic. Thus, for example, the package 10 may be formed from metal or from plastic.

[0058] In addition, while a particular closure is described above, it is contemplated that other closures can be used. For example, closures such as a button, hook-and-loop closures exemplified by VELCRO, die cut designs, reusable adhesive (such as that exemplified in Post-it® type products), or a combination can be used.

[0059] The portable package 10 can contain the travel or satellite packs 100 adjacent each other and in manner that their edges are aligned, as is apparent from Fig. 6. It is often desirable to quickly determine the remaining number of travel or satellite packs 100 within the portable package 10 without having to open the portable package 10. Accordingly, in one aspect of the present invention, one or more transparent, semi-transparent, translucent, or open windows 90 may be provided. For example, as seen in the blank in Fig. 1 , a single elliptical shaped open window 90 is provided on the side panel 12. As a result, the contents of the portable package 10 can be viewed. As noted above, one or more windows may be provided.

[0060] In this regard, Figs. 14a-14e show several non-limiting examples of windows 90 provided on a side panel 12 of the portable package 10. While it is contemplated that the window 90 can be provided anywhere on the portable package 10, desirably, the window is provided on a side panel 12 so that the consumer can quickly and easily determine how many travel or satellite packs 100 are stored within the portable package 10, without having to open the package 10.

[0061] With the above in mind, the present invention contemplates a method of making a portable package 10 and inserting one or more travel or satellite packs 100 into the package 10. Desirably, the present invention relates to a portable package 10 that can be easily carried and stored within a pocket, purse, etc. without consuming an undesirable amount of space. In that regard, it is contemplated that the portable package 10 the portable package of the present invention has dimensions no larger than about 120 mm by about 100 mm by about 40 mm. In other words, the length of the rear surface will be no more than about 120 mm and may have a size within about 90 mm to about 110 mm. The height of the rear surface will be no more than about 100 mm and may have a size within about 40 mm to about 70 mm. The width of the side surface 60 will be no more than about 40 mm and may have a size within about 10 mm to about 30 mm. In one aspect, the portable package 10 is configured or shaped as a rectangle so that it more closely conforms to the shape of a pocket.

[0062] Such a portable package 10 can contain a number of travel or satellite packs 100 that, in general, have dimensions no larger than about 100 mm by about 50 mm by about 10 mm. Accordingly, a portable package 10 will contain several travel or satellite packs 100 so that the quantity of individual consumable product is less than 100 pieces, for example, less than about 90 pieces. Because the travel or satellite packs 100 have a size that is smaller than the portable pack 10, each travel or satellite pack 100 can be more discretely and conveniently carried by the consumer in their shirt or blouse pocket, pant pocket, purse or handbag, etc.

[0063] One aspect of a suitable travel or satellite pack 100 will now be described with reference to Figs. 7-13. Turning now to Fig. 7, a travel or satellite pack 100 of the present invention is shown with a resealable flap 180 in an open position to expose the contents 102 of the travel or satellite pack 100. The travel or satellite pack 100 includes opposed major surfaces 112, 114, an opposed top 120 and bottom 122, and opposed ends or sides 124, 126. One of the major surfaces is scored to define a resealable flap 180 that can be opened to expose the contents 102 stored within the travel or satellite pack 100.

[0064] In the description provided below, the travel or satellite pack 100 of the present invention is described as containing sticks (or tabs) 102 of gum. It is to be understood, however, that the use of the travel or satellite pack 100 is not limited to gum since it is contemplated that the travel or satellite pack 100 may also contain other confectionery products such as candy. For ease of description, however, the present invention will be described in connection with sticks of gum.

[0065] Therefore, a resealable travel or satellite pack 100 having an array of gum sticks 102 is shown in FIG. 7. The travel or satellite pack 100 retains and encloses the array of gum sticks 102 as will be described below. A resealable flap 180 provides selective access to the contents 102 within the travel or satellite pack 100.

[0066] As is known, gum sticks may be elongate rectangular shaped members that are individually wrapped with a wrapper 104 in a conventional fashion. The wrapper 104 may be a rectangular shaped member typically made of paper or foil.

Typically, the longitudinal edges of the wrapper are overlapped and the ends of are turned over against the stick to enclose the stick completely.

[0067] Fig. 7 variously shows gum sticks 102 and gum sticks contained in wrappers 104, where the gum sticks 102 were individually wrapped prior to being placed in the travel or satellite pack 100. The wrapper 104 may be a single sheet or may include plural sheets or layers. It is noted that the gum sticks 102 can be placed in an array directly into the travel or satellite pack 100, without being individually wrapped.

[0068] While Fig. 7 shows the gum sticks 102 aligned in a single row, it is to be understood that the gum sticks 102 (wrapped or not) can be placed in a face-to-face manner, i.e., in two or more columns to form an array. When two or more columns are provided, each row may be encircled partially or completely by a wrapper to better contain the individual gum sticks. The array of gum sticks is placed in the travel or satellite pack 100 and is retained and enclosed. A portion of the inside of the travel or satellite pack 100 may contain an adhesive to releasably secure the gum sticks 102 until the consumer removes them from the travel or satellite pack 100.

[0069] Although it is not depicted, it is contemplated that one or more gum sticks 102 may be contained within a travel or satellite pack 100 and that one or more travel or satellite packs 100 may be provided in the portable package 10. For example, a travel or satellite pack 100 may contain seven sticks of gum 102 and several, for example, five travel or satellite packs 100, may be contained in a portable package 10.

[0070] The travel or satellite pack 100 is generally a parallelepiped shape and formed of any suitable material. Without being limited, it is contemplated that the travel or satellite pack 100 can be formed a flexible plastic material, such as polyethylene (including but not limited to low density polyethylene and linear low-density polyethylene), polypropylene, mixtures or laminates of such, and other flexible plastics. The package could also be formed from metalized plastics, paper, laminated paper material, or other laminates. While it is contemplated that the package can be formed from a variety of suitable materials, for ease of understanding and description the travel or satellite pack 100 and its construction will be described as being formed from a flexible plastic material such as polypropylene.

[0071] Accordingly, the travel or satellite pack 100 is formed from a laminate 130 that includes a polypropylene film and optionally a polyethylene film. In one aspect, the travel or satellite pack 100 is formed from a laminate 130 that includes a metal layer 222 disposed between two layers of polypropylene 142, 220.

[0072] Turning now to Fig. 8, the method of forming of one embodiment of the travel or satellite pack 100 will be explained. Briefly, the method includes creating a laminate from a first and second material, scoring each side of the laminate, cutting the laminate, filling the laminate with the desired contents, forming the package, and sealing appropriate areas to provide a closed travel or satellite pack 100.

[0073] Accordingly, a first planar layer of material 140 may be unwound from a web (not shown). The first planar layer 140 is formed of polypropylene 142 and it includes a first side 144, a second side 146, a longitudinal direction 148, and a lateral direction 150 as shown in Figs. 8 and 12. Desirably, the polypropylene 142 is an oriented polypropylene with the orientation in the lateral direction 150. As one skilled in the art will appreciate, orientation in this direction provides a higher resistance to tearing in the longitudinal direction 148 as compared to the lateral direction 150. While Fig. 8 depicts a continuous layer of material, the figure also identifies a first end 152 and a second end 154, which when cut and joined to each other

in a later operation will form the bottom 122 of the travel or satellite pack 100.

[0074] The first side 144 of the first planar layer 140 is patterned with adhesive so that another layer may be adhered to the first side 144 of the first layer 140. The second side 146 of the first layer 140 will form the outer surfaces 112, 114 of the travel or satellite pack 100, as will become clear. Typically, the first planar layer 140 is patterned with a permanent laminating adhesive 170, a releasable adhesive 172 (such as a pressure sensitive adhesive) as it is being unwound, and before it is adhered to a second planar layer 200.

[0075] Fig. 8 shows one pattern of adhesive application. As shown in Fig. 8, a fold line 160 is depicted at about the middle of the longitudinal length of the first layer 140. It is to be understood that the fold line 160 is not provided on the first planar layer 140 but instead it represents the portion of the first layer 140 where the laminate 130 will be folded in a later operation to create the top 120 of the travel or satellite pack 100. The fold line 160 defines a top section 162 and a bottom section 164 of the first planar layer 140 that will define an inner back surface 118 and an inner front surface 116 of the travel or satellite pack 100, respectively.

[0076] In the embodiment shown in Fig. 8, a permanent laminating adhesive 170 well known to those of skill in the art is applied to the entire portion of the top section 162 of the first planar layer 140 and only to a portion of the bottom section 164. In the bottom section 164, a first smile area 182 is defined. The first smile area 182 includes a releasable adhesive 172 such as a releasable pressure sensitive adhesive known to those of skill in the art. An adhesive-free area 174 may be provided adjacent to at least a portion of the releasable adhesive area 172. The adhesive-free area 174 does not contain any adhesive, the reasons for which will become apparent upon further reading of the description.

[0077] Fig. 9 shows an alternative pattern of applying the adhesive to the first side 144 of the first layer 140. This pattern is similar to that of Fig. 8 except that the adhesive-free area 174 is limited simply to a tongue tip portion 184.

[0078] A second planar layer of material 200 may be unwound from a web (not shown). The second layer 200 may be formed from any suitable material as noted above. The material desirably is formed from a composite or laminate such that one layer can be scored with a laser while the other layer resists scoring. For example, the material may be a laminate of paper and metal or foil, or a laminate of a flexible plastic material and metal or foil. In one aspect of the present invention, the second layer 200 is a formed from metalized polypropylene, i.e., a layer of polypropylene 220 and a layer of metal 222 provided on one side of the polypropylene 220.

[0079] The second planar layer 200 has a first side 202 (best seen in Fig. 12), a second side 204 (best seen in Fig. 10), a longitudinal direction 206 and a lateral direction 208. Desirably, the polypropylene is an oriented polypropylene with the orientation in the lateral direction 208.

[0080] As the second layer of material 200 is unwound, the first side 202 of the second layer 200 is joined with the first side 144 of the first layer 140. The first layer 140 and the second layer 200 are laminated in a manner such that the layer of metal or foil 222 is disposed between the layers of the polypropylene 142 and 220 and such that a laminate 130 is formed. In other words, the layer of metal 222 is in contact with the adhesive 170, 172 provided on the first side 144 of the first layer 140. Desirably, the second layer 200 is securely adhered to the first layer 140.

[0081] Optionally, a heat-sealing layer 224 such as a layer of polyethylene may be provided on the second side 204 of the second layer 200. Alternatively, other layers may be provided on the second side 204 or the second layer 200 as is known to those of skill in the art.

[0082] Fig. 10 shows the second side 204 of the second layer 200. It is to be understood that Fig. 10 also shows the laminate 130 with the second side 204 of the second layer 200 visible. While Fig. 10 depicts a continuous layer of laminate, the figure also identifies a first end 203 and a second end 205, which when cut and joined to each other by folding along fold line 210 in a later operation will form the bottom 122 of the package. It is to be understood that the fold line 210 is not provided on the second layer 200 but instead it represents the portion of the second layer 200 where the laminate 130 will be folded in a later operation to create the top 120 of the travel or satellite pack 100. The fold line 210 defines a top section 212 and a bottom section 214 of the second layer 200, which will form the rear 114 and front 112 major planar surfaces, respectively.

[0083] As seen in Fig. 10, a score line 232 is created on the bottom section 214 of the second side 204 of the second layer 200. Desirably, the scoring may be performed after the laminate 130 is formed. Alternatively, the scoring may be performed before the second layer 200 is laminated to the first layer 140. Desirably, the score line 232 is created by laser scoring and, as shown in Fig. 10, can be considered to define an inner smile cut 232. The inner smile cut or score line 232 will also define an inner smile area 230, as will become clear upon reading the following description.

[0084] The scoring is on the polypropylene layer 220 only (or the polyethylene and heat seal layers, if a heat seal layer is present) and does not score beyond the metal layer 222 (i.e., it does not score the first layer). The depth of the laser cut may be controlled in a manner known by those of skill in the art to provide such precision cutting. Specifically, the heat dissipation of the metal layer (or other laser scoring resistant material) reduces the likelihood that it is scored when the power of the laser is controlled for that purpose.

[0085] The top section 212 of the second side 204 of the second layer 200 may include a releasable adhesive 240 applied along a line or strip that runs in the lateral direction 208. The releasable adhesive 240 may be ap-

plied in a continuous or intermittent manner according to methods well known to those of skill in the art. This adhesive strip 240 may engage each of the gum sticks 102 or their wrappers 104 so that when the travel or satellite pack 100 is formed; the gum sticks 102 are removably adhesively retained in the package. As a result, the gum sticks 102 may remain positioned in the travel or satellite pack 100 even when one or more gum sticks 102 are removed. In addition, the adhesive 240 may prevent the gum sticks from becoming inadvertently dislodged from the travel or satellite pack 100.

[0086] Turning to Fig. 11, the second side 146 of the laminate 130 is shown. It will be understood that Fig. 11 also shows the laminate 130 with the second side 146 of the first layer 140 visible. As seen in Fig. 11, an outer score line 186 is created on the bottom section 164 of the second side 146 of the first layer 140. The scoring may be performed after the laminate 130 is created and can be performed before,
simultaneously with, or after the scoring is performed on the second side 204 of the second layer 200. Alternatively, the scoring may be performed before the lamination process described above. Desirably, the score line 186 is created by laser scoring and, as shown in Fig. 12, can be considered to define an outer smile cut 186. The outer smile cut or outer score line 186 defines an outer smile area 182 with a tongue 184. The scoring is on the polypropylene layer 142 only and does not score beyond the metal layer 222 (i.e., it does not score the second polypropylene layer 200). The depth of the laser cut may be controlled in a manner known by those of skill in the art to provide such precision cutting. The outer smile area 182 is larger than the inner smile area 230. Fig. 12 shows a partial side cross sectional view of the portion of the laminate 30 that has been score cut.

[0087] Adjacent the line 60, the smile cut or outer score line 186 has ends 187 that define a discontinuity of the smile cut or outer score line 186. The discontinuity in the ends 187 will hinder further tear propagation as the tongue 184 is lifted and the smile cut or outer score line 186 is torn. As seen in Fig. 11 , the discontinuity has a J-shape. It is to be understood; however, that any suitable discontinuous shape may be used so long as it provides a change in direction of the smile cut or outer score line 186, which will result in a hindering of the tear propagation. Accordingly, Figs. 15a-15g show exemplary shapes that provide a suitable discontinuity.

[0088] After the laminate 130 is formed and score cut, the laminate may be wound to form roll stock (not shown). During the travel or satellite pack 100 forming operation, the laminate 130 is unwound from the roll stock. The sticks 102 are placed adjacent the second side 204 of the second layer 200 and the laminate 130 is folded along the fold line 210. The laminate 130 is folded such that the top section 212 of the second side 204 of the second layer 200 is juxtaposed with the bottom section 214 of the second side 204 of the second layer and such that the top section 162 and the bottom section 164 will form the rear 114 and front 112 major planar surfaces, respectively, of the travel or satellite pack 100. The laminate 130 is then cut and sealed to create the bottom 122 and ends 124, 126 of the travel or satellite pack 100. Of course, it is to be understood that these operations could take place in other sequences. For example, the laminate 130 may be unwound and cut, after which the sticks are placed adjacent the second side 204 of the second layer 200. Thereafter, the laminate 130 is folded along fold line 210, cut, and then sealed to create the bottom 122 and ends 124, 126 of the travel or satellite pack 100.

[0089] Turning now to Fig. 13, the travel or satellite pack 100 is shown with the outer smile cut 186 visible on the front 112 major planar surface. With the above in mind, when it is desired to open the travel or satellite pack 100, the tongue 184 is lifted or pulled away from the front 112 major planar surface. Because of the scoring or inner smile cut 232 on the second layer 200 and because the metal layer 222 on the second layer 200 is adhered to the first layer 140, the inner smile cut 232 of the second layer 200 tears together with the outer smile cut 186 on the first layer 140. In addition, because the inner smile area 230 is smaller than the outer smile area 182 and because of the prior pattern application of releasable adhesive 172 (as well as the provision of an adhesive-free area 174), a resealable flap 180 is created and defined with releasable adhesive 172 provided adjacent the perimeter 188 of the flap. Moreover, the portion of the flap 188 that contains the releasable adhesive 172 is in contact with a portion of the metal layer 222 to provide an effective resealable seal.

[0090] While the travel or satellite pack 100 described above is in the form of a flexible pack, it is contemplated that the travel or satellite pack 100 may be formed of other materials such as paper or paper-based products, including paperboard, cardboard or the like.

[0091] Turning now to Fig. 16A, a blank for a package of the present invention is shown. Fig. 16B shows a travel pack 100 formed from the blank of Fig. 16A. The blank includes side surfaces 412, adhesive flaps 414, bottom surface 416, top surface 418, front surface 420, rear surface 426, and cover 430. The blank includes fold lines 411 , 413, 415, 417, 419, and 421 for folding the blank into the travel or satellite pack 100. The blank may be assembled into the travel or satellite pack 100 the present invention in the following manner. The adhesive flaps 414 are folded over along fold lines 415, 417 such that they are parallel to the back surface 426. The front surface 420 is folded along fold lines 411 , 413 toward the back surface 426 and attached to adhesive flaps 414. The surfaces of pack 100 may be generally planar such that the front surface 420 is opposite the rear surface 426, the top surface 418 is opposite the bottom surface 416, and the side surfaces 412 are opposite each other. The blank may also include a score line 423 along the width of the cover 430 to allow the flap 432 to be slightly folded by a user to facilitate tucking the flap 432 into the slot 440.

[0092] Fig. 16B shows the travel or satellite pack 100 formed from the blank of Fig. 16A. The travel or satellite pack 100 includes a housing 422 and a cover 430. The cover 430 is attached to the housing 422 and is adapted to cover the front surface 420 of the housing. The cover 430 includes openable flap 432. The cover 430 may be hingedly attached to the top surface 418.

[0093] The front surface 420 includes a slit 440 and an embossed surface 450. The embossed surface 450 includes a portion raised or depressed with respect to the front surface 420. The flap 432 includes an embossed surface 460. The two embossed surfaces 450, 460 are complementary such that when the travel or satellite pack 100 is closed, as shown in Fig. 16D, the first embossed surface 460 engages the second embossed surface 450 to secure the cover 430 to the front surface 420. Because the embossed surfaces 450, 460 are offset with respect to the adjacent front surface 420 and flap 432, respectively, they may engage each other by friction, interference, or other methods.

[0094] The embossed surfaces 450, 460 may be any suitable shape. In the depicted embodiment, the embossed surfaces 450, 460 are circular in shape, but other shapes are possible, such as oval, square, triangular, rectangular, star, letters, numbers, symbols, and logos. The shape of the surface can be determined by esthetic considerations. The embossed surfaces 450, 460 may be either raised or depressed with respect to the front surface 420 and flap 432, respectively. Furthermore, it is not necessary that the entire area of the embossed surfaces 450, 460 be embossed; for example, it is possible that only the periphery 452, 462 of each surface is embossed.

[0095] The slit 440 may be any suitable shape. The slit 440 generally includes at least a portion 441 disposed along the width of the front surface 420, i.e. generally parallel to the cover fold line 421. The slit 40 may also include other portions, such as a curved portion 443 and a portion 445 perpendicular to portion 441. The slit 440 should be wide enough to accommodate the width of the flap 432 so that the flap 432 may be inserted into the slit 440 to close the cover 430 of the travel pack 100. Slit curved portion 443 may be disposed along the periphery 452 of embossed surface 450. There may be one or more additional slits 445 running perpendicular to, or diagonal to, the slit portion 441.

[0096] The cover 430 includes a first end 431 attached to the housing 422 and a second end 433. The embossed surface 460 may be disposed on the second end 433 of the cover 430. In one embodiment, the width of the second end 433 is smaller than the width of the first end 431, such that the flap 432 has a generally triangular shape. Other cover and flap shapes are possible.

[0097] The flap 432 may include a pair of projections 434 on the second end 433 of the cover 430. The projections 434 define a flap portion width 436. The width 442 of the slit 440 is substantially equal to the flap portion width 436 so that the projections 434 engage the front surface 420 adjacent the ends 444 of the slit 440 to hold the cover 430 closed when the flap 432 is inserted into the slit 440. Although the projections 434 may wear down or the slit width may increase with repeated opening and closings of the travel pack 100, they should be sufficiently robust to function a sufficient number of times for all gum or other confectionery product 424 to be removed.

[0098] To close the travel pack 100, the cover 430 is folded over the front surface 420 along fold lines 419 and 421. The flap 432, and in particular embossed surface 460, is inserted into slit 440, as shown in Fig. 16C. The travel pack 100 may also include a score line 423 to allow the flap 432 to be slightly folded by a user to facilitate tucking the flap 432 into the slot 440. As the flap 432 is further inserted into the slit 440, the flap embossed surface 460 engages the housing embossed surface 450. Additionally, projections 434 engage the front surface 420 at the edge of slit 440 to provide an audible "click" when the flap is in a completely closed position. The projections also help to secure the cover 430 in a closed position. In a closed position, the cover 430 is held securely in place. The cover 430 may be opened by tugging it loose from the slit 440 and embossed surface 450.

[0099] The travel pack 100 may be made of any suitable material and produced by any suitable method. The travel pack 100 may typically be made from paper, paperboard, or cardboard. The blanks for the packages may be cut and fashioned from sheets of paper, paperboard, or cardboard by conventional methods. In addition, when the package is made from paper, paperboard, or cardboard, it may be further laminated to resist tearing and to further protect the contents from moisture and other environmental elements. It may also be desirable to provide either reinforced corners or edges to provide a more durable package. It may also be beneficial to provide rounded corners, which will have the effect of reducing wear and thus providing a more durable design.

[0100] The travel pack 100 may also be fashioned from other materials such as metal and plastic. Thus, for example, the travel pack 100 may be formed from metal or from plastic.

[0101] In addition, while a particular closure is described above in connection with Figs. 16A-16D, it is contemplated that other closures can be used. For example, closures such as a button, hook-and-loop closures exemplified by VELCRO, die cut designs, reusable adhesive (such as that exemplified in Post-it® type products), or a combination can be used.

[0102] Referring to Fig. 17, there is shown a travel pack or satellite pack 100 in a closed condition, with a tear tape 502 provided between a top cover 504 and a bottom housing 506. Alternatively, the travel pack 100 may be wrapped with plastic wrap and provided with a tear tape to secure the travel pack 100 until it is desired to gain access to the contents.

[0103] Fig. 18 shows a travel pack 100 having a top cover 504 and a bottom housing 506 with a perforation 510 to provide access to the contents of the travel pack

100. The perforation may be created in a known manner such as by providing a pre or post laser scoring. The perforation 510 allows the cover to be reclosable to secure the contents of the travel pack 100.

[0104] Fig. 19A shows a travel pack 100 having a top cover 504 and a bottom housing 506 where the travel pack contains tabs 24. Either or both of a portion of the top cover 504 and the bottom housing 506 may contain an adhesive to provide a releasably sealed opening. The adhesive could be registered or non registered. The adhesive could also be applied at the time of material converting or at the time of packing. The releasable sealing aspect could be provided by providing a sticker and complementary pressure sensitive component such that when contacted, the cover 504 can be releasably sealed with the housing 506.

[0105] Fig. 19B shows an embodiment of the pack 100 where the cover 504 can be folded over such that the contents of the pack 100 are exposed.

[0106] Turning now to Fig. 20, a blank for another embodiment of a travel pack 100 is shown. The blank includes side surfaces 612, adhesive flaps 614, bottom surface 616, top surface 618, front surface 620, rear surface 626, and cover 630. The blank includes fold lines 611, 613, 615, 617, 619, and 621 for folding the blank into a travel pack 100. The blank may be assembled into a travel pack in the following manner. The adhesive flaps 614 are folded over along fold lines 615, 617 such that they are parallel to the back surface 626. The front surface 620 is folded along fold lines 611, 613 toward the back surface 626 and attached to adhesive flaps 614. The surfaces of the travel pack 100 may be generally planar such that the front surface 620 is opposite the rear surface 626, the top surface 618 is opposite the bottom surface 616, and the side surfaces 612 are opposite each other. The blank may also include a score line 623 along the width of the cover 630 to allow the flap 632 to be slightly folded by a user to facilitate tucking the flap 632 into the slot 640.

[0107] Fig. 21 shows a travel pack 100 formed from the blank of Fig. 20. The travel pack 100 includes a housing 622 and a cover 630. A plurality of tabs 24 is disposed within the housing 622. The tabs 24 may be gum pieces. The tabs 24 are typically elongate rectangularly shaped that are individually wrapped in a conventional fashion. A cover 630 is attached to the housing 622 and is adapted to cover the front surface 620 of the housing. The cover 630 includes openable flap 632. The cover 630 may be hingedly attached to the top surface 618.

[0108] The front surface 620 includes a slit 640 and an embossed surface 650. The embossed surface 650 includes a portion raised or depressed with respect to the front surface 620. The flap 632 includes an embossed surface 660. The two embossed surfaces 650, 660 are complementary such that when the travel pack 100 is closed, as shown in Fig. 23, the first embossed surface 660 engages the second embossed surface 650 to secure the cover 630 to the front surface 620. Because the embossed surfaces 650, 660 are offset with respect to the adjacent front surface 620 and flap 632, respectively, they may engage each other by friction, interference, or other methods.

[0109] The embossed surfaces 650, 660 may be any suitable shape. In the depicted embodiment, the embossed surfaces 650, 660 are circular in shape, but other shapes are possible, such as oval, square, triangular, rectangular, star, letters, numbers, symbols, and logos. The shape of the surface can be determined by esthetic considerations. The embossed surfaces 650, 660 may be either raised or depressed with respect to the front surface 620 and the flap 632, respectively. Furthermore, it is not necessary that the entire area of the embossed surfaces 650, 660 be embossed; for example, it is possible that only the periphery 652, 662 of each surface is embossed.

[0110] The slit 640 may be any suitable shape. The slit 640 generally includes at least a portion 641 disposed along the width of the front surface 620, i.e. generally parallel to the cover fold line 621. The slit 640 may also include other portions, such as a curved portion 643 and a portion 645 perpendicular to portion 641. The slit 640 should be wide enough to accommodate the width of the flap 632 so that the flap 632 may be inserted into the slit 640 to close the cover 630 of the travel pack 100. Slit curved portion 643 may be disposed along the periphery 652 of embossed surface 650. There may be one or more additional slits 645 running perpendicular to, or diagonal to, the slit portion 641.

[0111] The cover 630 includes a first end 631 attached to the housing 622 and a second end 633. The embossed surface 660 may be disposed on the second end 633 of the cover 630. In one embodiment, the width of the second end 633 is smaller than the width of the first end 631, such that the flap 632 has a generally triangular shape. Other cover and flap shapes are possible.

[0112] The flap 632 may include a pair of projections 634 on the second end 633 of the cover 630. The projections 634 define a flap portion width 636. The width 642 of the slit 640 is substantially equal to the flap portion width 636 so that the projections 634 engage the front surface 620 adjacent the ends 644 of the slit 640 to hold the cover 630 closed when the flap 632 is inserted into the slit 640. Although the projections 634 may wear down or the slit width may increase with repeated opening and closings of the travel pack 100, they should be sufficiently robust to function a sufficient number of times for all the tabs 24 to be removed.

[0113] To close the travel pack 100, the cover 630 is folded over the front surface 620 along fold lines 619 and 621. The flap 632, and in particular the embossed surface 660, is inserted into the slit 640, as shown in Fig. 22. The travel pack 100 may also include a score line 623 to allow the flap 632 to be slightly folded by a user to facilitate tucking the flap 632 into the slot 640. As the flap 632 is further inserted into the slit 640, the flap embossed surface 660 engages the housing embossed surface 650.

Additionally, projections 634 engage the front surface 620 at the edge of the slit 640 to provide an audible "click" when the flap is in a completely closed position. The projections also help to secure the cover 630 in a closed position. In a closed position, the cover 630 is held securely in place. The cover 630 may be opened by tugging it loose from the slit 640 and embossed surface 650.

[0114] Another embodiment of the travel pack is shown in Figs. 24-27. The general layout of the housing 722 is the same as the embodiment shown in Figs. 20-23. The differences from the travel pack 100 depicted in Figs. 20-23 include the shape of covers 730, 770 and the configuration of the slits 740, 780.

[0115] The flap 772 of travel pack of this embodiment includes a generally rectangular portion 774. The width 771 of the flap 772 may be at least one third the width 773 of the front surface 720. In another embodiment, the width 771 of the flap 772 may be at least one half the width 773 of the front surface 720. In another embodiment, the width 771 of the flap 772 may be at least three quarters the width 773 of the front surface 720. The flap 772 may include an extending portion 774 that extends a distance 775 into the slit 780 when the cover 770 is in a closed position. The distance 775 may be at least about one third the distance 779 from the slit 780 to the bottom wall 716. In an embodiment, the distance 775 may be at least about one half the distance 779 from the slit 780 to the bottom wall 716. In still another embodiment, the distance 775 may be at least about three quarters of the distance 779 from the slit 780 to the bottom wall 716. As shown in Fig. 26, the cover 770 may include a score line 723 along the width of the cover 770 to allow the flap 772 to be slightly folded by the user to facilitate tucking the flap 772 into the slot 780. Because a relatively long portion of the flap 772 is inserted within the slit 780, the cover 770 is secured to the housing 722.

[0116] The housing embossed surface 750 includes a height 751 and a width 753. In various embodiments, the width 753 may be 20%, 40%, 60, or 100% of the width 771 of the flap 772 in the slit 780. The height 751 of the embossed surface 750 may be expressed in relation to the distance 775 that the extending portion 774 of flap 772 extends into the slit 780 when the cover 770 is in a closed position. In various embodiments, the height 751 may be between 10% and 100% of the distance 775.

[0117] The slit 780 may be any suitable shape. The slit 780 generally includes at least a portion 781 disposed along the width of the front surface 720, i.e. somewhat parallel to the cover fold line 721. The slit 780 may also include other portions, such as a curved portion 783 and a perpendicular portion 785. The slit 780 should be wide enough to accommodate the width of the flap 772 so that the flap 772 may be inserted into the slit 780 to close the cover 770 of the travel pack 100. Slit curved portion 783 may be disposed along the periphery of the embossed surface 750. There may be one or more additional slits 785 disposed perpendicular to, or diagonal to, the slit portion 781.

[0118] To close the travel pack, the cover 770 is folded over the front surface 720. The flap 772, and in particular embossed surface 760, is inserted into slit 780, as shown in Fig. 27. As the flap 772 is further inserted into the slit 780, the flap embossed surface 760 engages the housing embossed surface 750. In a closed position, the cover 770 is held securely in place. The cover 770 may be opened by tugging it loose from the slit 780 and embossed surface 750.

[0119] Turning now to Figs. 28-31, another embodiment of the travel pack 100 of the present invention is illustrated. The travel pack 100 in the illustrated embodiment includes a housing 1212, a sheet 1214 and a sheet 1216. The sheets 1214 and 1216 in an embodiment wrap around and enclose a plurality of products 1218.

[0120] The housing 1212 includes a front wall 1219, a rear wall 1220, a plurality of side walls 1222 and 1224 and a lid 1226. The lid 1226 includes a top 1228 and a flap 1230. The flap 1230 folds into a slit 1232 defined by the front wall 1219. The front wall 1219 also defines a cutout 1234.

[0121] The walls of the housing define an opening 1236 that allows one or more sheets 1214 and/or 1216 to be inserted into the housing 1212. The cutout 1234 aids a consumer in removing one or more of the products 1218 from one of the sheets 1214 or 1216. The top 1228 and flap 1230 of the lid 1226 cover the opening 1236 when the flap 1230 inserts into the slit 1232.

[0122] Although not illustrated, when the sheets 1214 and 1216 are originally packaged into the housing 1212, the flap 1230 is folded into the slit 1232. Also, an outer wrapping (not illustrated) wraps and seals around the housing 1212, so that the consumer must permanently remove the outer wrapping in order to remove the flap from the slit 1232. The outer wrapping in a preferred embodiment is a thin clear plastic, which enables the consumer to view any writing or indicia provided on the outside of the housing 1212.

[0123] Although Fig. 28 illustrates two product bearing sheets 1214 and 1216 insertable into the housing 1212, the travel pack 100 may include any number of such product bearing sheets, such as one sheet or multiple sheets so long as the travel pack contains less than about fifteen individual pieces of consumable product. The sheet or sheets can define, if desired, an envelope or sleeve-like structure. In the illustrated embodiment, the sheets 1214 and 1216 are shown wrapped around the products 1218. In other embodiments, the sheets can include non-folded or single strips onto which the products are attached.

[0124] The travel pack 100 in this embodiment attaches or adheres the products 1218 to the sheets 1214 and 1216. The products 1218 are removably attached to the sheets 1214 and 1216. In the embodiment illustrated, the sheet 1214 or 1216 includes a plurality of adhesive areas 1238. The adhesive areas 1238 adhere the products 1218 to a surface of the sheets 1214 or 1216. The adhesive areas 1238 may be wax areas. The adhesive areas 1238 may include any adhesive suitable for consum-

able product packaging. In the illustrated embodiment, the adhesive areas 1238 adhere the products 1218 to an inner surface of the loop or wrapping created by the sheets 1214 and 1216.

[0125] In one embodiment, a single side of each product 1218 attaches to a surface of the sheet 1214 or 1216 via the adhesive or wax area 1238. In an alternative embodiment, a plurality of sides of the product 1218 adhere to a plurality of inner surfaces of the sheets 1214 and 1216. In this alternative embodiment, it should be appreciated that the sheets 1214 and 1216 must wrap around or cover at least two sides of the products 1218.

[0126] The travel pack 100 also enables the products 1218 to be readily disattached and removed from the housing 1212. Therefore, in one embodiment, the travel pack 100 does not over-tighten or over-stuff the sheets 1214 and 1216 into the housing 1212. Consequently, it may be necessary to provide a number of adhesive areas 1240 (e.g., wax areas) in the housing 1212, which adhere the sheets 1214 and 1216 to the inside of the housing 1212. In the illustrated embodiment, the adhesive areas 1240 are applied to corner tabs 1242 that form part of the structure of the housing 1212. The corner tabs 1242 fold inwardly above a bottom wall 1244 of the housing 1212 and create an area of double thickness, which provides a suitable area for supporting and attaching the sheets 1214 and 1216. Obviously, other areas of the bottom wall 1244, front wall 1218, rear wall 1220, side wall 1222 and side wall 1224 could also or alternatively contain adhesive areas 1240 that attach the sheets 1214 and 1216 to the housing 1212. The sheets 1214 and 1216 do not need to release from each other. Therefore, the adhesive areas or wax areas 1240 connecting the sheets 1214 and 1216 can be sized to form stronger bonds than the areas connecting the products 1218 to the sheets 1214 and 1216.

[0127] Further in certain embodiments having multiple sheets 1214 and 1216, one or more of the sheets 1214 and 1216 may be adapted to have one or more adhesive areas or wax areas (not illustrated) that hold the sheets together. Connecting or attaching the sheets also aids in preventing a single one of the sheets 1214 or 1216 from inadvertently conning loose from the housing 1212 of the travel pack 100. The sheets 1214 and 1216 do not need to release from each other.

[0128] It should be appreciated that it may be possible to press-fit the sheets 1214 and 1216 into the housing 1212 without adhesive so that tension holds the sheets in place, but so that the consumer can still readily retrieve the products 1218. Even in this situation, the individual products 1218 must still be releasably adhered to the sheets 1214 and 1216.

[0129] In an alternative embodiment (not illustrated), the products 1218 directly attach or adhere to the housing 1212. That is, this alternative embodiment does not require a separate sheet such as the sheets 1214 and 1216. Here, the adhesive areas or wax areas 1238 are applied directly to the inner surface of the front wall 1218, the inner surface of the rear wall 1220. The housing 1212 may be adapted to additionally or alternatively directly place adhesive areas or wax areas on the side walls 1222 and 1224 and/or the bottom wall 1244.

[0130] Referring now to Fig. 29, an embodiment of one of the sheets 1214 or 1216 of Fig. 28 is shown not wrapped or in an alternative strip configuration so that a one method of attaching the products 1218 to the sheet 1214 or 1216 may be illustrated. In this embodiment, the adhesive or wax areas 1238 adhere to a foil layer 1246. The sheet 1214 or 1216 in the illustrated embodiment includes a wax paper layer 1248 attached to the foil layer 1246. The foil layer 1246 in an embodiment is a metal foil such as an aluminum foil or other light metal foil. The wax paper 1248 is any type of wax paper known to those of skill in the art. The wax paper layer 1248 adheres to the foil layer 1246 via a standard adhesive. Alternatively, the foil layer 1246 can be sprayed on or otherwise applied to the paper side of the wax paper layer 1248.

[0131] Regardless of whether adhesive areas (wax areas) 1238 or the wax paper layer 1248 is employed, a plurality of products 1218 resides on and attach to the wax areas 1238 or the wax side of the wax paper layer 1248. Any number of products 1218 may be applied in this manner. The products 1218 extend past the width of the sheet 1214 or 1216, so that the consumer can grasp and remove the products 1218 via the extended portion. In an embodiment, the products 1218 are closely packaged to make efficient use of the space on the sheet 1214 or 1216. The consumer, however, has sufficient room to grasp and remove one or more of the products 1218 from the sheet 1214 or 1216 and from the container 1212.

[0132] The products 1218 are illustrated in Fig. 29 having individual wrappers 1250. That is, the wrapper 1250 surrounds a single product 1218 so that the wrapper 1250 adheres to the wax areas 1238 or the wax paper layer 1248. In Fig. 28, the product 1218 adheres directly to the sheet 1214 or 1216. The present invention contemplates directly adhering the product 1218 to a sheet or wrapping the product 1218 in a wrapper 1250 and adhering the product 1218 and wrapper 1250 to the sheet 1214 or 1216. Although the wrapper 1250 preferably wraps around a single piece or product 1218, the wrapper 1215 alternatively encloses multiple products 1218.

[0133] A heat source 1252 may be applied to the foil layer 1246 side of the sheet 1214 or 1216. The heat source 1252 applies a localized heating such as a hot air jet to heat a particular area of the foil layer 1246. The foil layer 1246 in turn heats the adhesive or wax areas 1238 or the wax paper layer 1248 in a desired area so that the wax in either case melts and dries to the wrapper 1250 of the product 1218. If the product 1218 is of a suitable type, the wax may be melted and dried directly to the product 1218.

[0134] Although not illustrated, a larger heat source may be applied to melt multiple adhesive or wax areas 1238 or heat the wax paper layer 1248 so that a number of products 1218 are simultaneously adhered to the

sheets 1214 or 1216. The bond between the sheets 1214 and 1216 and the products 1218 is controlled in an embodiment by the size of the adhesive or wax area 1238. That is, if the manufacturer wishes to make the attachment more secure and thereby make the removal more difficult, the manufacturer applies larger areas 1238 and thereby heats more wax. If the manufacturer desires to make removal easier, the manufacturer applies a smaller area 1238 and heats less wax.

[0135] A suitable bond may be made without heating the entire wax paper layer 1248. The wax paper layer 1248, however, allows a degree of flexibility in the present invention, wherein the manufacturer can heat more or less of the wax paper layer 1248 to provide a more or less secure attachment.

[0136] Any type of heat source that can provide a localized area of heating may be employed to melt the wax and form the bond with the product 1218 directly or the product 1218 in combination with the wrapper 1250. The heat source 1252 can employ conductive heating, convective heating, radiated heating or any combination thereof. The level or amount of heat (i.e., temperature of heat and length of heating time) is preferably less than that which would melt or otherwise damage or distort the products 1218 or the wrappers 1250.

[0137] The adhesive or wax areas 1238 or the wax paper layer 1248 in an alternative embodiment is applied directly to any inner surface of the housing 1212 including the front wall 1218 and/or the rear wall 1220 shown in Fig. 28. By doing so, the product 1218 may be either directly adhered to the housing 1212, e.g., to the wall 1218 or 1220, or may be adhered to one or more of the walls via the wrapper 1250.

[0138] Referring now to Fig. 30, a sheet 1254 is illustrated having beaded adhesive or wax areas 1238. The sheet 1254 includes a substrate 1256 and a plurality of the areas 1238 that align with the products 1218 in a similar manner as is shown in Fig. 29. The adhesive areas 1238 may include any type of adhesive suitable for packaging consumable goods known to those of skill in the art. The adhesive areas 1238 are applied in a quantity sufficient to adhere a product 1218 directly or in combination with a wrapper 1250 to the alternative sheet 1254. As shown, more than one adhesive or wax area 1238 can be beaded or applied for a single product 1218.

[0139] The substrate 1256 can be a paper material, plastic material, metal material or any combination thereof. The substrate 1256 can be formed as a single strip as illustrated, or the substrate 1256 can be wrapped around or folded about the products 1218 as illustrated in Fig. 28. The substrate 1256 can be of a single ply or have multiple layers. If wrapped about the products 1218, the substrate 1256 in an embodiment is permanently deformable so that the wrapped substrate remains folded without any additional need for an adhesive. In an alternative embodiment, an adhesive may be employed to hold the substrate 1256 in a wrapped position about the products 1218.

[0140] The adhesive or wax areas 1238 are illustrated beaded in single portions wherein each adhesive area 1238 adheres to a single product 1218 or product in a wrapper 1250. In an alternative embodiment, the adhesive areas 1238 may be beaded or provided in a width that spans two or more products 1218. Further, alternatively, one or more elongated strips of adhesive may be applied to the substrate 256 to collectively adhere all of the products 1218 to the alternative sheet 1254. The adhesive areas 1238 in an embodiment are applied to the alternative sheet 1254, whereby the products 1218 are placed on the sheet and a heat source such as heat source 1252 heats the adhesive areas to activate the adhesive. In another embodiment, the adhesive areas 1238 do not require the addition of heat in order to adhere the products 1218 to the alternative sheet 1254.

[0141] Referring now to Fig. 31, a combination of the previously disclosed embodiments provides one possible way to adhere products 1218 to both sides of one of the sheets 1214 or 1216. The sheets 1214 and 1216 have the foil metal layer 1246 and the wax paper layer 1248 as described above. The sheets 1214 or 1216 may wrap around the upper row of products 1218 or the lower row of products 1218 in a similar manner as disclosed in connection with Fig. 28. Further, the sheets 1214 or 1216 may be constructed to be able to wrap around both the upper row of products 1218 and the lower row of products 1218.

[0142] The top row of products 1218 adhere to the adhesive areas or the wax paper side of the sheet 1214 or 1216 as described previously. Of course, the products 1218 may directly adhere to the adhesive areas 1238 or the wax paper 1248. The products 1218 can alternatively be wrapped in individual wrappers 1250 and thereby adhere to the areas 1238 or wax paper 1248. After this upper row of products is adhered to the sheet 1214 or 1216, the bottom row of products 1218 is adhered to the outside of the foil metal layer 1246 of the sheet 1214 or 1216 using the adhesive areas 1238, which do not require additional heat.

[0143] The bottom row of adhesive areas 1238 may be applied to the foil metal layer 1246 before or after the upper row of products 1218 adheres to the wax paper layer 1248. Preferably, however, the upper row of products 1218 is first adhered to the sheet 1214 or 1216 using the heat source described above in connection with Fig. 29. Then the products 1218 are adhered to adhesive areas 1238, which preferably do not require additional heat for activation.

[0144] The amount of wax that is heated to adhere product 1218 to the sheets 1214 or 1216 preferably creates roughly the same strength of bond as does the adhesive area 1238 on the bottom side of the foil sheet 1246. In such a way, the consumer does not experience a different tactile sensation when removing the product 1218 from either side of the sheet 1214 or 1216.

[0145] The foregoing detailed description has described only a few of the many forms that this invention

can take. For this reason, this detailed description is intended by way of illustration, and not by way of limitation. It is only the following claims, including all equivalents, which are intended to define the scope of this invention. For example, it is contemplated that the travel packs can be all be the same flavor of gum or each travel pack can be a flavor different from the other travel packs to provide a package containing a variety of flavors.

Claims

1. A portable package (10) for storing and dispensing a plurality of travel packs (100) containing a selected amount of a confectionery product (102) comprising:

   a housing (2) having a bottom (70), a front surface (20) spaced from a rear surface (80) and connected by two opposite side surfaces (60) wherein at least one of the side surfaces has a window (90); the surfaces defining an open top; a cut out provided on the front surface to define an open front (6); and,
   a cover (30) monolithically formed with the rear surface, wherein the portable package stores a plurality of travel packs each of which contains an amount of confectionary product, such that the travel packs within the portable package can be viewed through the window with the cover in a closed position.

2. A package of claim 1 wherein both side surfaces (60) have a window (90).

3. A package of claims 1, or 2 wherein the front surface (20) has a tamper evident panel (50).

4. A package of any preceding claims further comprising releasable adhesive on the front surface (20).

5. A package of any preceding claims wherein the front surface (20) has a slit (40).

6. A package of any preceding claims wherein the housing (2) is made of paperboard.

7. A package of any preceding claims wherein the window (90) is transparent.

8. A package of any preceding claims wherein the window (90) is open.

9. A package of any preceding claims wherein the window (90) is elliptical.

10. A package of any preceding claims further comprising a plurality of travel packs (100).

11. A package of any preceding claims wherein the travel packs (100) are made of flexible plastic.

12. A package of any preceding claims wherein the travel packs (100) have opposed major surfaces (112, 114), an opposed top (120) and bottom (122), and opposed sides (124, 126), and one of the major surfaces has a score defining a resealable flap (180).

Patentansprüche

1. Eine wiederverschließbare Verpackung (10) zur Aufbewahrung und Bereitstellung von einer Vielzahl von individuell verpackten Portionen (100), die jeweils eine bestimmte Anzahl von Süßwaren (102) enthalten, wobei die Verpackung aus Folgendem besteht:

   einem Gehäuse (2) mit einem Boden (70) und einer Vorderseite (20), die mittels zweier sich gegenüberliegenden Seitenflächen (60) mit einer Rückseite (80) verbunden ist, wobei mindestens eine der Seitenflächen ein Fenster (90) aufweist und wobei das Gehäuse oben offen ist; einem Ausschnitt auf der Vorderseite, der eine Öffnung (6) definiert; und
   einem monolithisch mit der Rückseite verbundenen Deckel (30), wobei die wiederverschließbare Verpackung eine Vielzahl von individuell verpackten Portionen mit jeweils einer bestimmten Anzahl von Süßwaren enthält, die so angeordnet sind, dass sie in der wiederverschließbaren Verpackung auch bei geschlossenem Dekkel durch das Fenster sichtbar sind.

2. Eine Verpackung nach Anspruch 1, wobei beide Seitenflächen (60) ein Fenster (90) aufweisen.

3. Eine Verpackung nach Anspruch 1 oder 2, wobei die Vorderseite (20) einen Originalitätsverschluss (50) aufweist.

4. Eine Verpackung nach einem der vorangehenden Ansprüche, weiter bestehend aus einem wiederverwendbaren Klebeverschluss an der Vorderseite (20).

5. Eine Verpackung nach einem der vorangehenden Ansprüche, wobei die Vorderseite (20) einen Schlitz (40) aufweist.

6. Eine Verpackung nach einem der vorangehenden Ansprüche, wobei das Gehäuse (2) aus Pappe besteht.

7. Eine Verpackung nach einem der vorangehenden Ansprüche, wobei das Fenster (90) transparent ist.

8. Eine Verpackung nach einem der vorangehenden Ansprüche, wobei das Fenster (90) offen ist.

9. Eine Verpackung nach einem der vorangehenden Ansprüche, wobei das Fenster (90) elliptisch ist.

10. Eine Verpackung nach einem der voranstehenden Ansprüche, weiter bestehend aus einer Vielzahl von individuell verpackten Portionen (100).

11. Eine Verpackung nach einem der vorangehenden Ansprüche, wobei die Verpackungen der individuell verpackten Portionen (100) aus flexiblem Kunststoff bestehen.

12. Eine Verpackung nach einem der vorangehenden Ansprüche, wobei die Verpackungen der individuell verpackten Portionen (100) sich gegenüberliegende Flächen aufweisen, die jeweils Vorder- und Rückseite (112, 114), Deckel (120) und Boden (122) sowie zwei Seitenflächen (124, 126) definieren, und wobei eine der Hauptflächen eine Kerbe aufweist, der eine wiederverschließbare Lasche (180) definiert.

Revendications

1. Un module d'emballage portable (10) permettant de stocker et distribuer une série de trousses de voyage (100) contenant un nombre sélectionné d'articles de confiserie (102), comprenant :

   un boîtier (2) avec fond (70), face antérieure (20) espacée d'une face postérieure (80) et reliée par deux côtés (60) dans lequel au moins un des côtés possède une fenêtre (90), les surfaces définissant un couvercle ouvert ;
   un évidemment pratiqué sur la face antérieure pour définir une face antérieure ouverte, et
   un couvercle (30) formé de façon monolithique avec la surface postérieure, dans lequel le module d'emballage contient une série de trousses de voyage, chacune desquelles contient une quantité d'articles de confiserie, de façon que l'on puisse voir les trousses de voyage dans le module d'emballage par la fenêtre lorsqu le couvercle est fermé.

2. Un module d'emballage selon la revendication 1 dans lequel les deux côtés (60) possèdent une fenêtre (90).

3. Un module d'emballage selon la revendication 1 ou 2 dans lequel la face antérieure (20) est dotée d'un panneau à témoin d'intégrité (50).

4. Un module d'emballage selon une quelconque des revendications précédentes, comprenant également un adhésif refermable sur la face antérieure (20).

5. Un module d'emballage selon une quelconque des revendications précédentes, dans lequel la face antérieure (20) possède une fente (40).

6. Un module d'emballage selon une quelconque des revendications précédentes, dans lequel le boîtier (2) est réalisé en carton.

7. Un module d'emballage selon une quelconque des revendications précédentes, dans lequel la fenêtre (90) est transparente.

8. Un module d'emballage selon une quelconque des revendications précédentes, dans lequel la fenêtre (90) est ouverte.

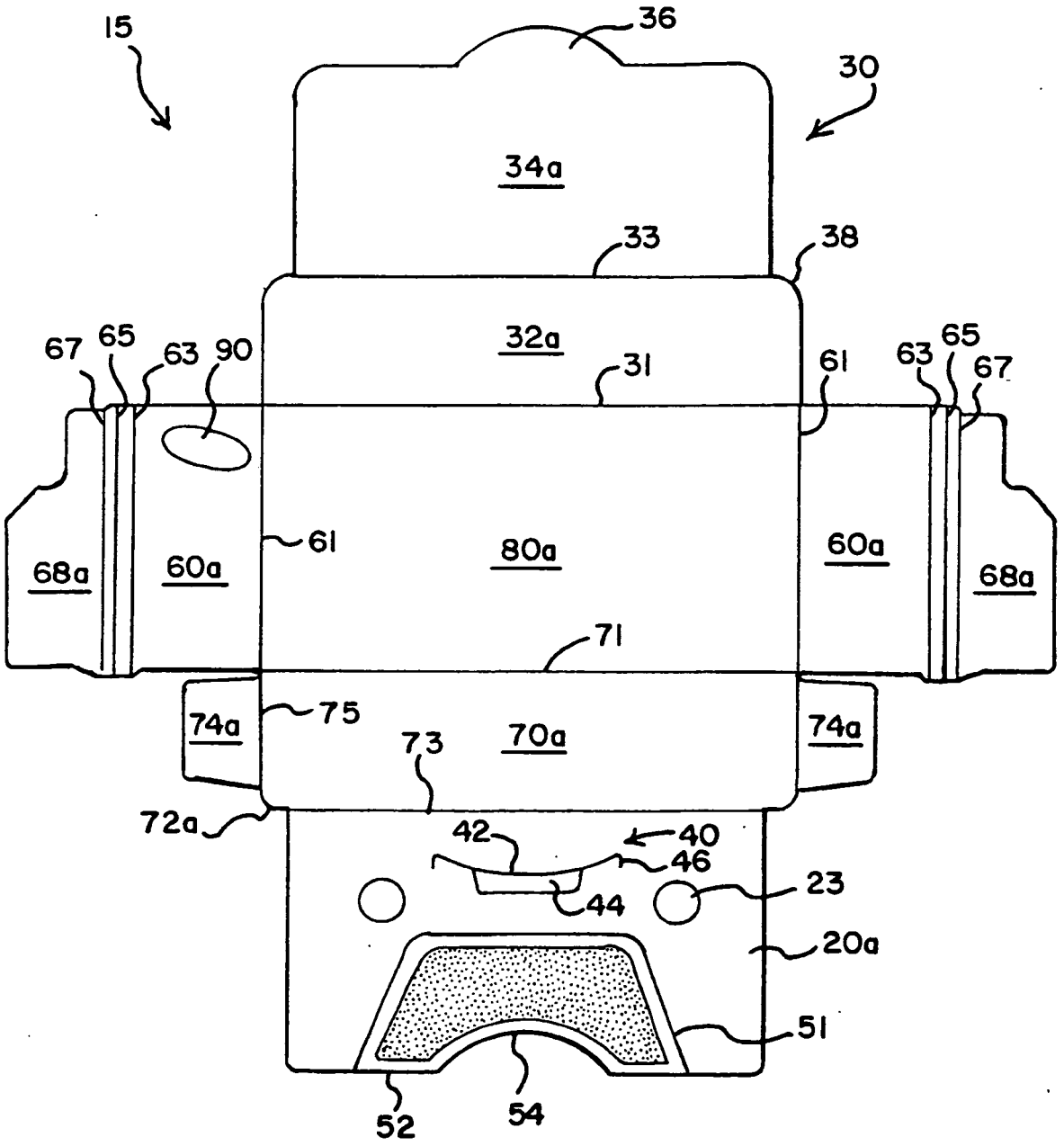
9. Un module d'emballage selon une quelconque des revendications précédentes, dans lequel la fenêtre (90) est elliptique.

10. Un module d'emballage selon une quelconque des revendications précédentes, comprenant également une série de trousses de voyage (100).

11. Un module d'emballage selon une quelconque des revendications précédentes, dans lequel les trousses de voyage (100) sont fabriquées avec une matière plastique flexible.

12. Un module d'emballage selon une quelconque des revendications précédentes, dans lequel les trousses de voyage (100) sont dotées de surfaces étendues (112, 114) opposées, d'un couvercle (120) et d'un fond (122) opposés, et de côtés (124, 126) opposés, et une des principales surfaces possède une fente définissant un volet refermable (180).

FIG.1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33
38
67
65
63
90
32a
31
61
63
65
67
68a
60a
61
80a
60a
68a
71
74a
75
73
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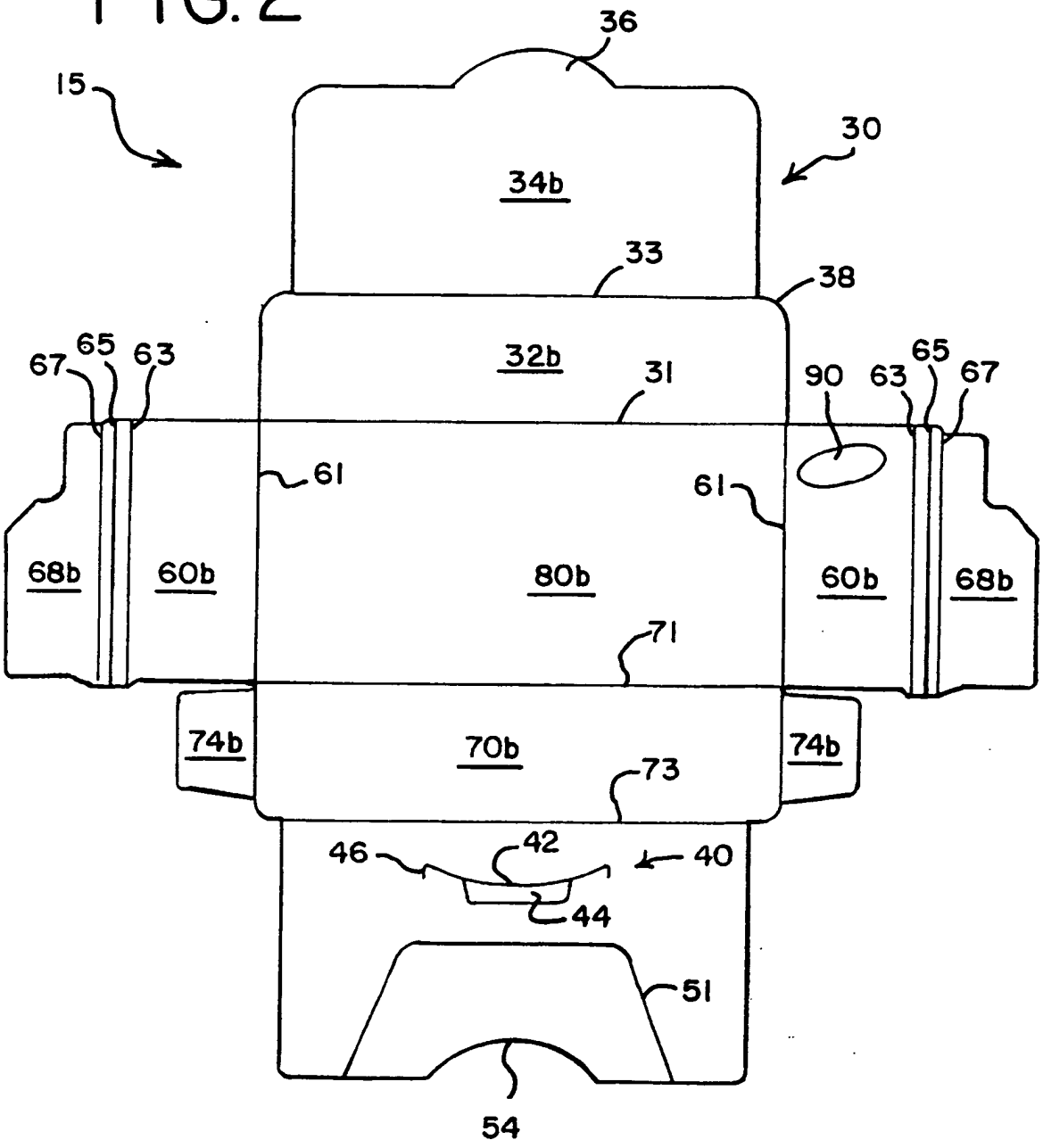
74a
72a
42
40
46
44
23
20a
51
52
54

FIG. 2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90
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74b
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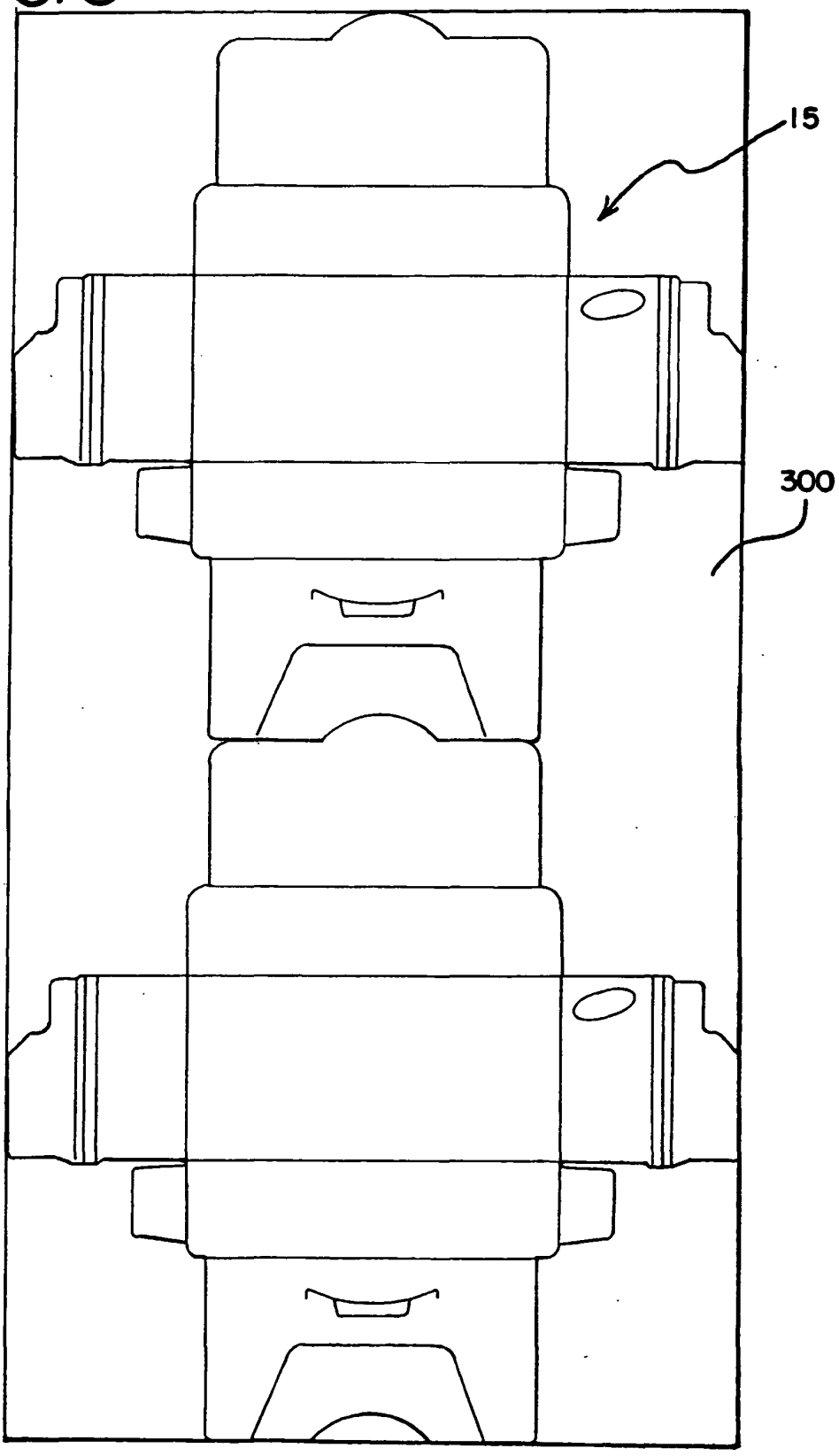
42
40
44
51
54

FIG. 3



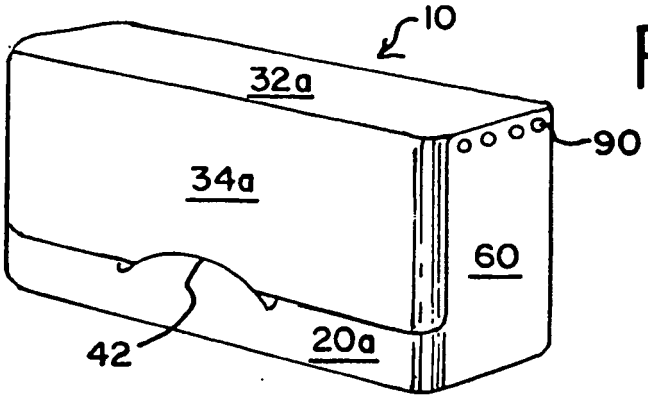


FIG. 4

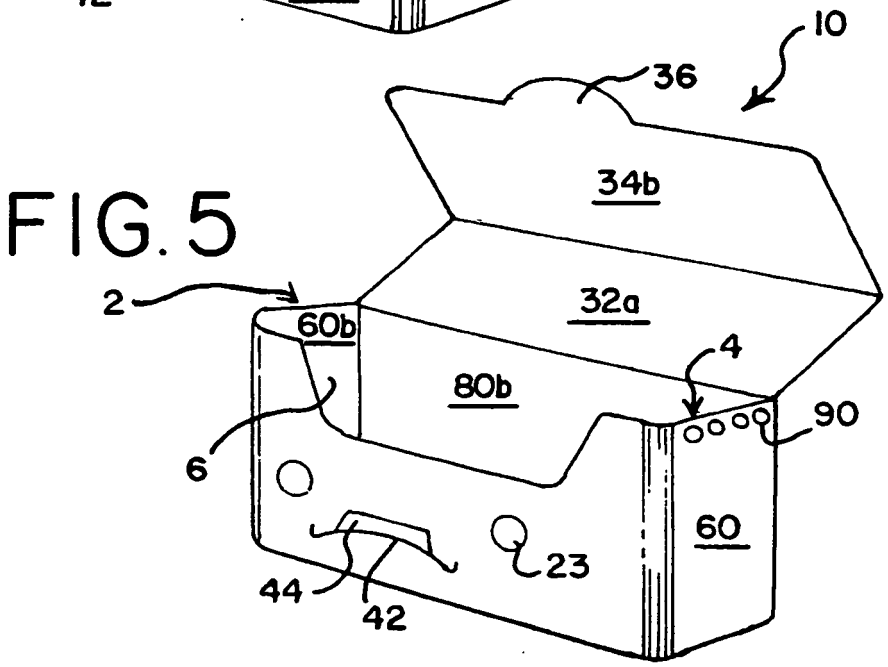


FIG. 5

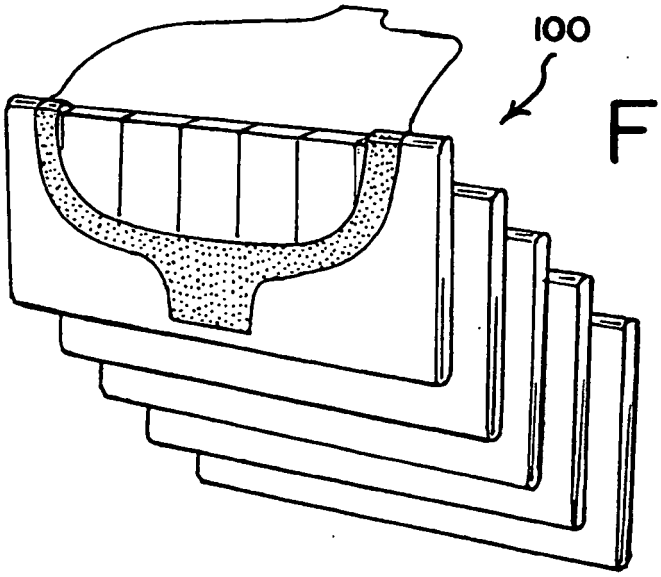
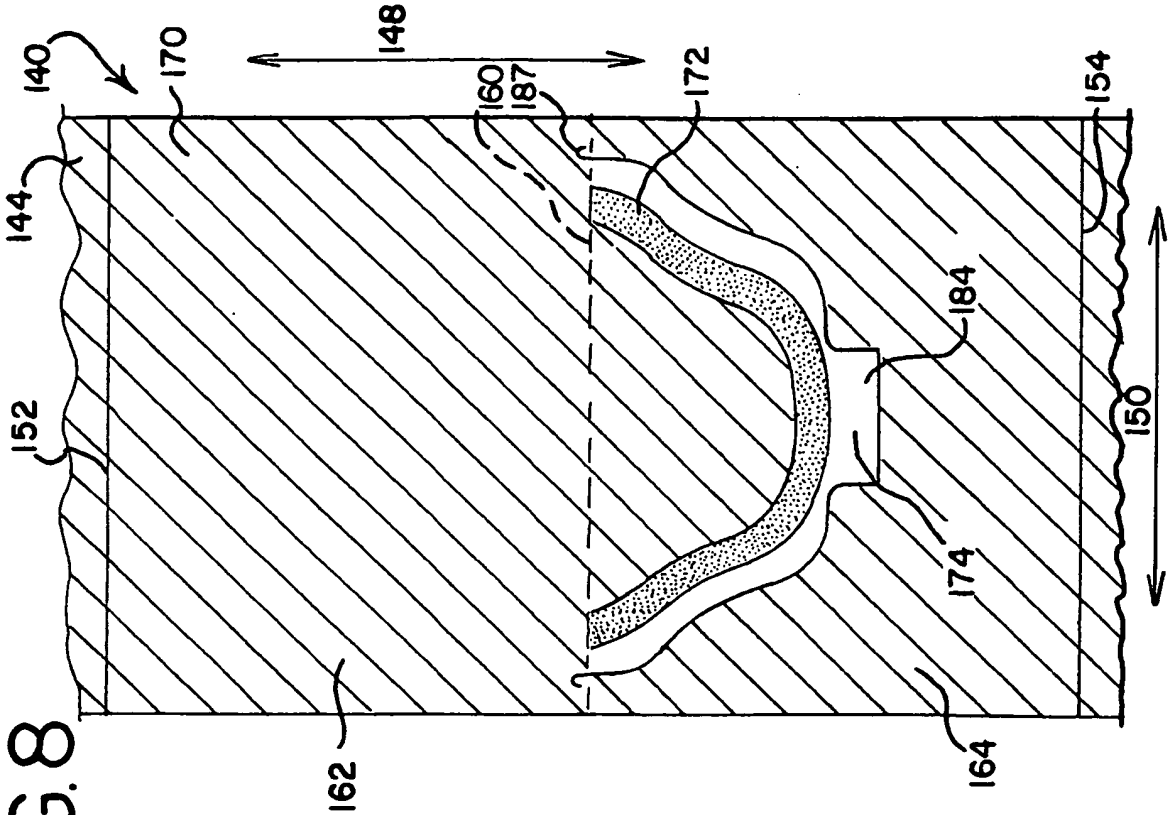


FIG. 6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170
148
160
187
172
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174
162
164

FIG.8

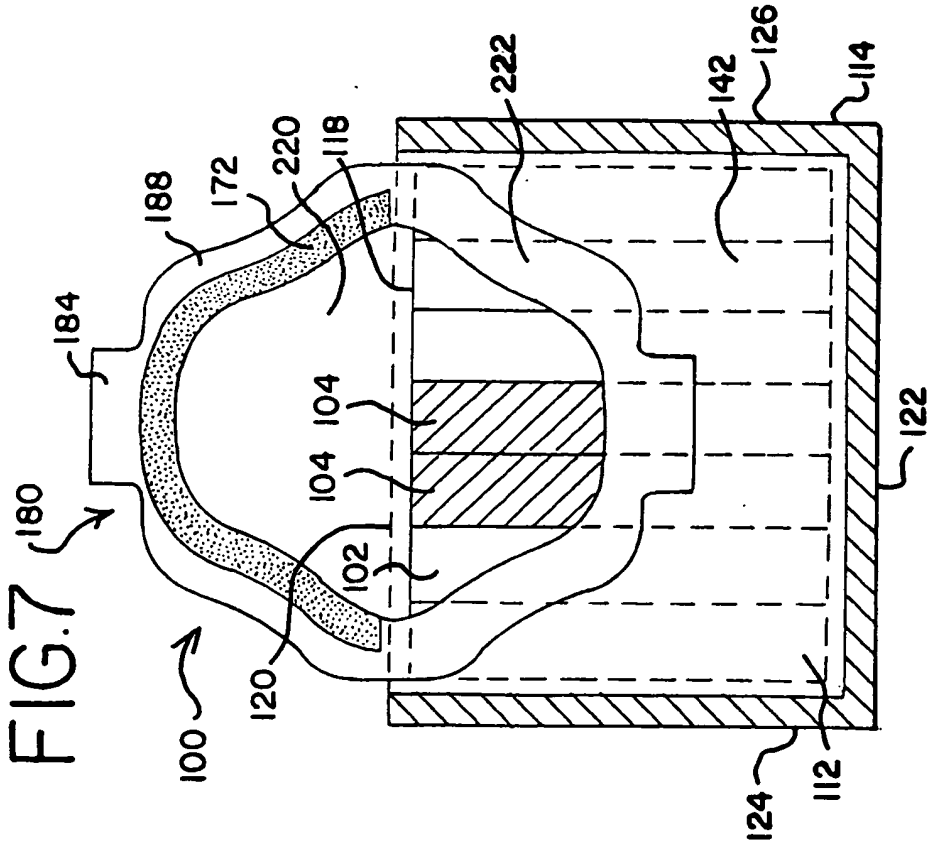
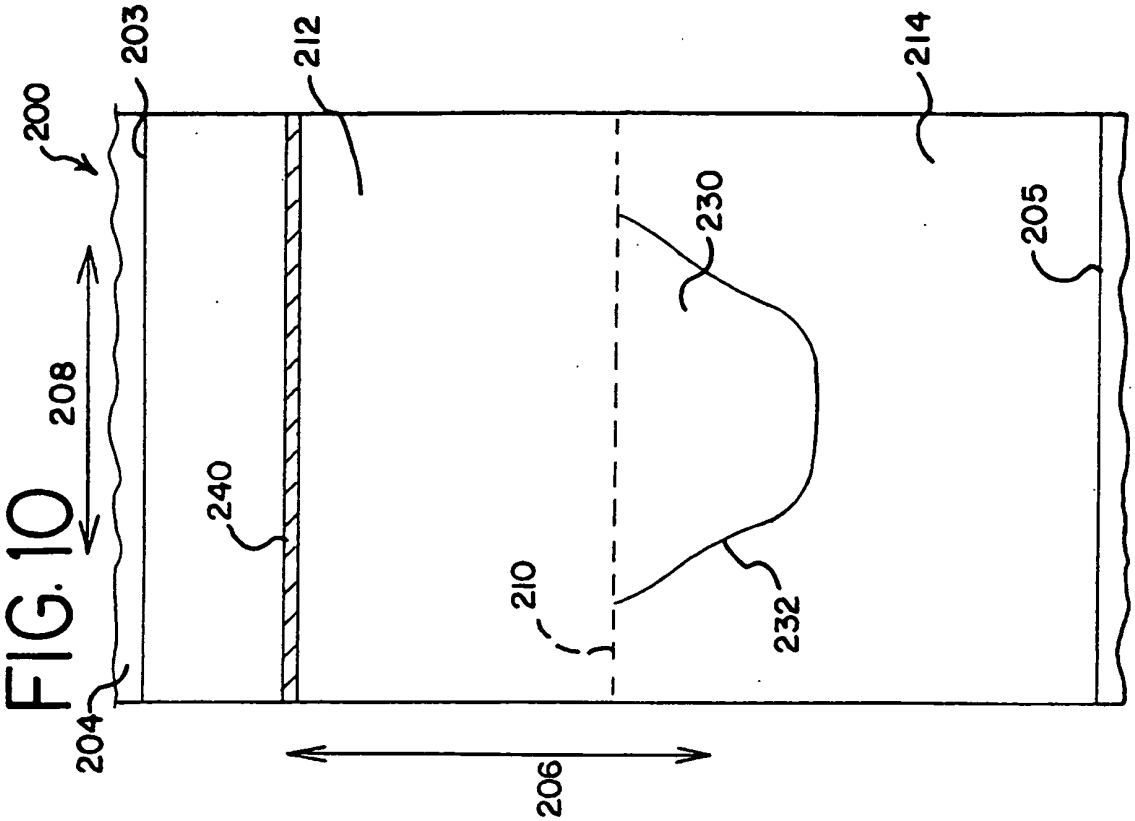

222
142
126
114
188
172
220
118
184
104
104
122
180
102
120
100
124
112

FIG.7

FIG. 10


200
203
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214
208
230
205
240
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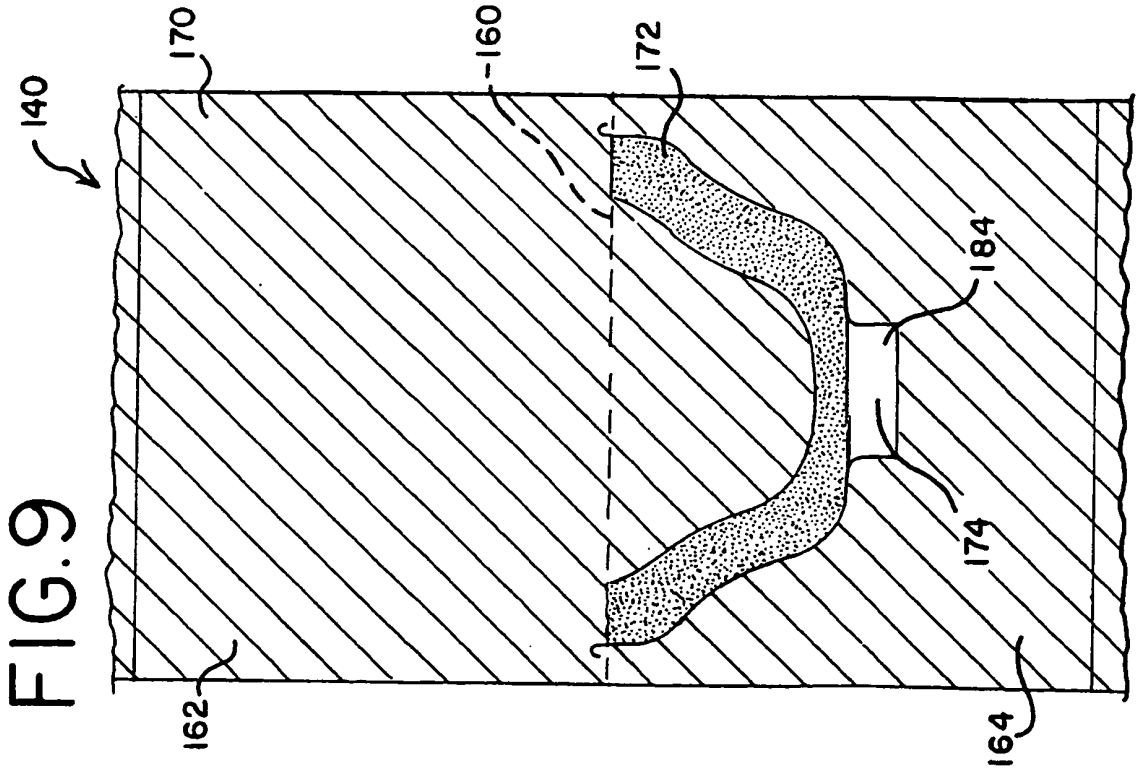
232
204
206

FIG. 9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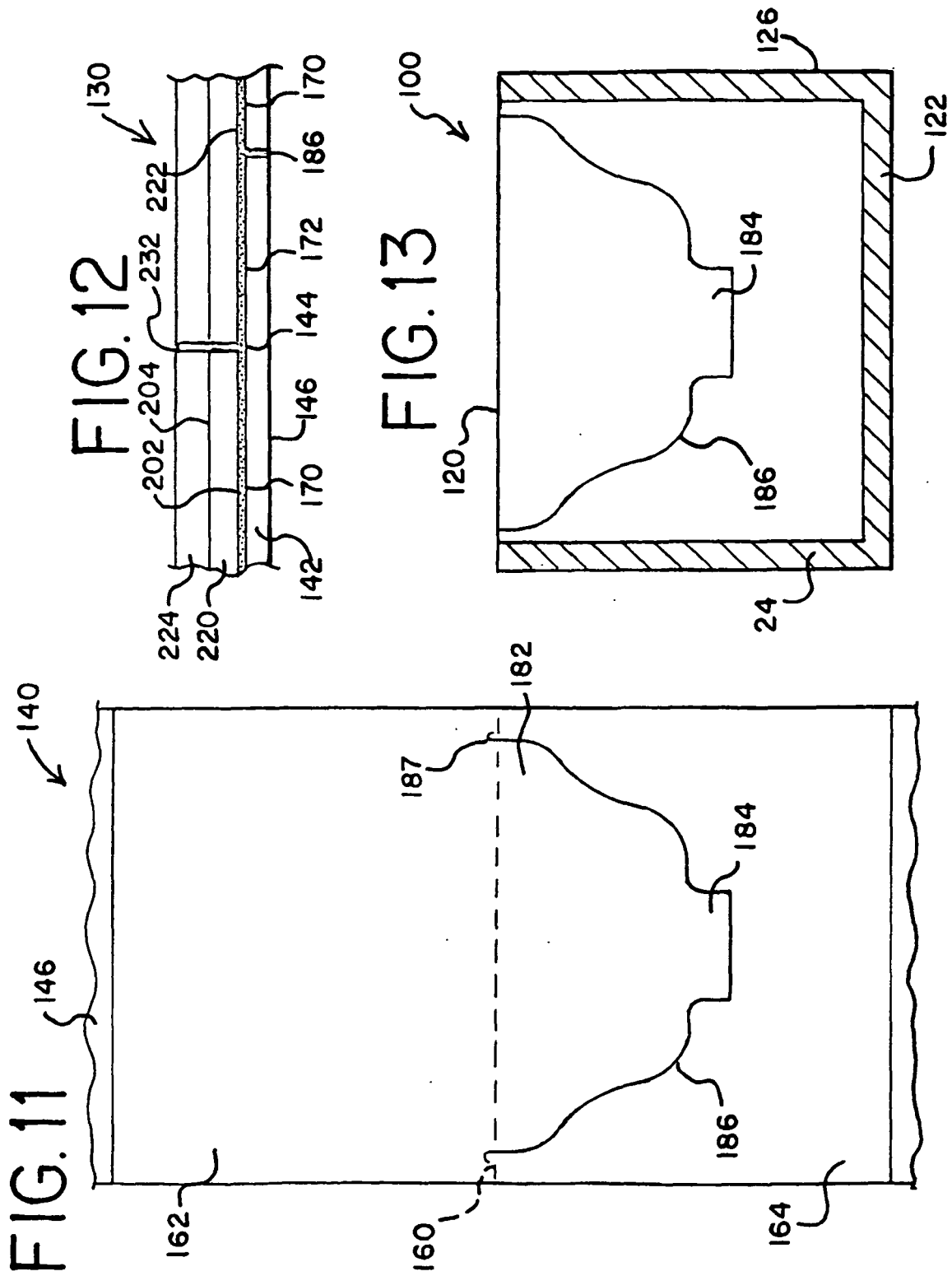
FIG. 11
140
146
162
160
164
182
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184
186
FIG. 12
130
222
232
204
202
224
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142
170
146
144
172
186
170
FIG. 13
100
126
122
120
24
184
186

FIG.14a

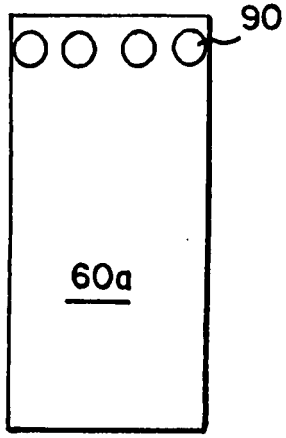


FIG.14b

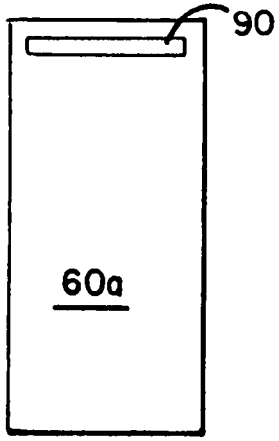


FIG.14c

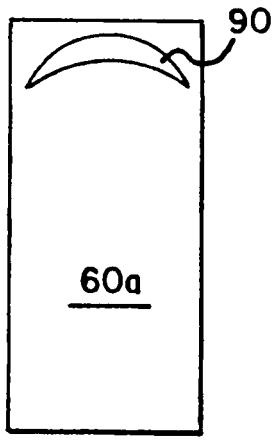


FIG.14d

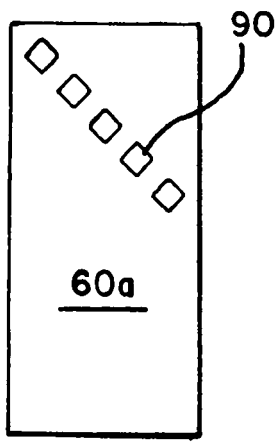


FIG.14e

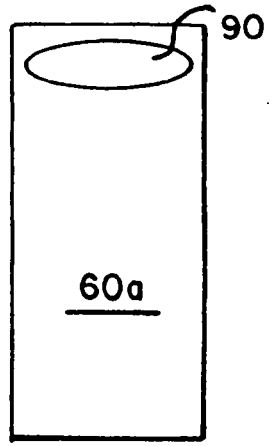


FIG.15a

FIG.15b

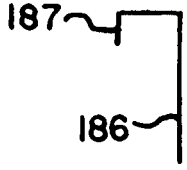


FIG.15c

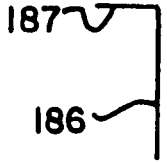


FIG.15d

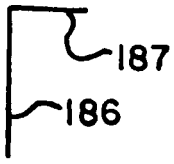


FIG.15e

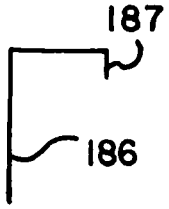


FIG.15f

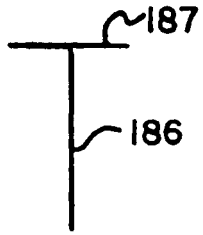


FIG.15g

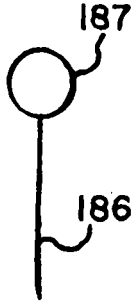


FIG. 16B

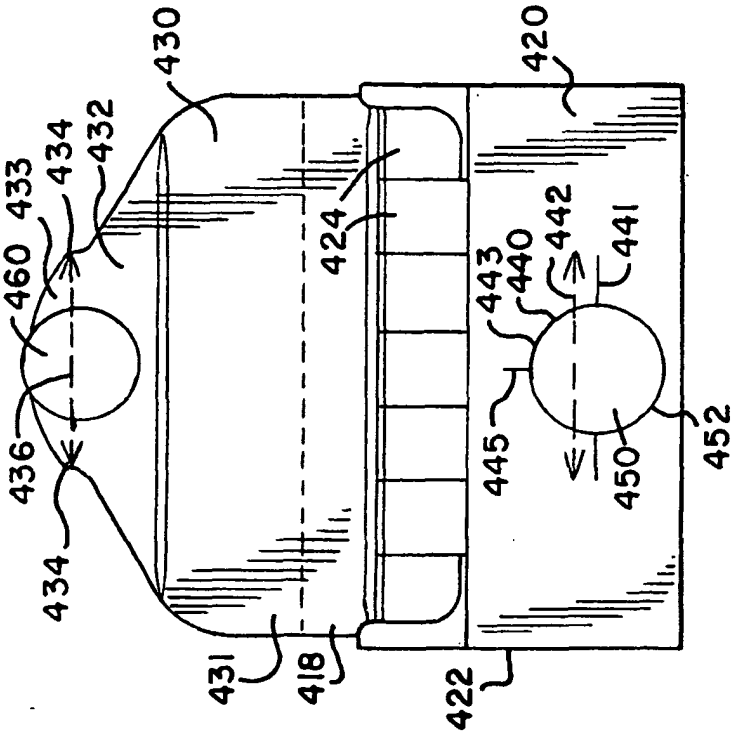


FIG. 16A

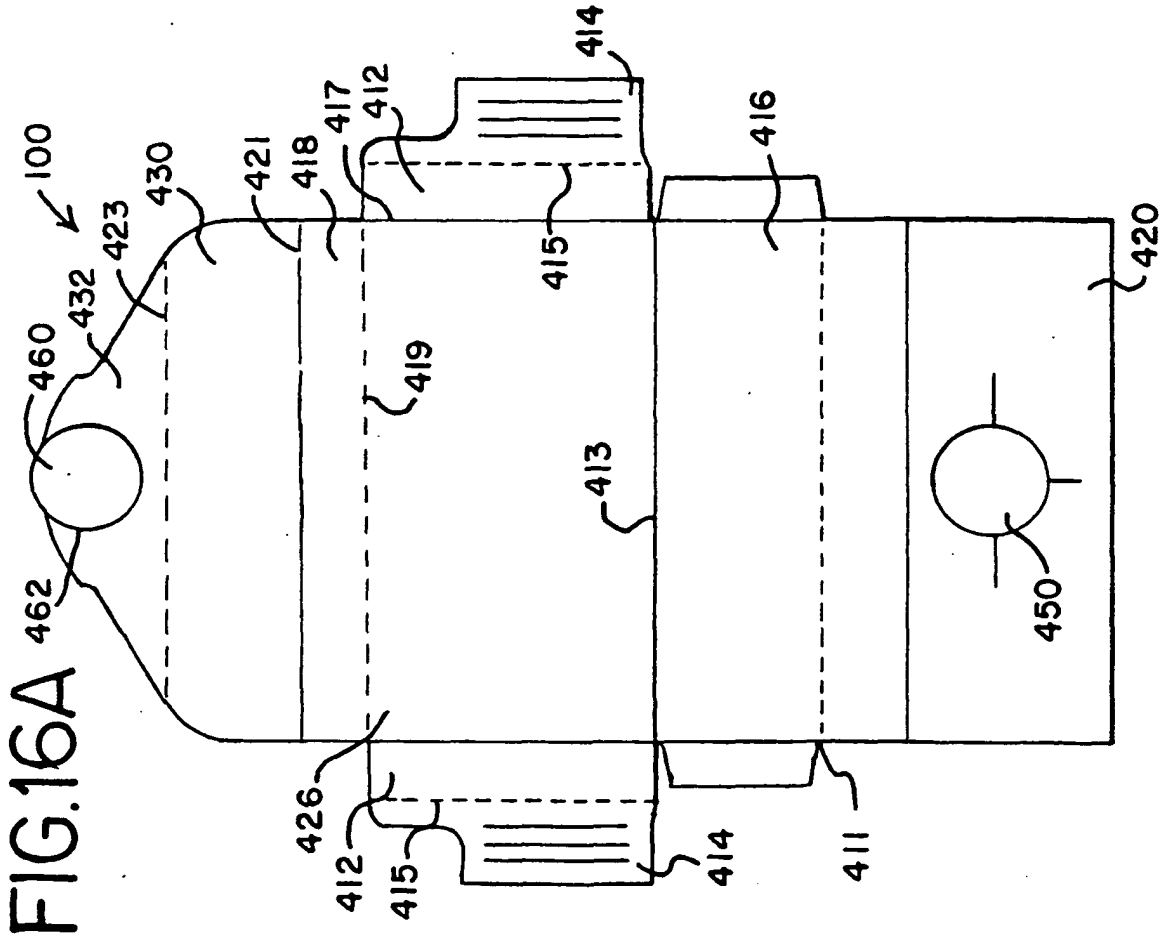


FIG. 16C

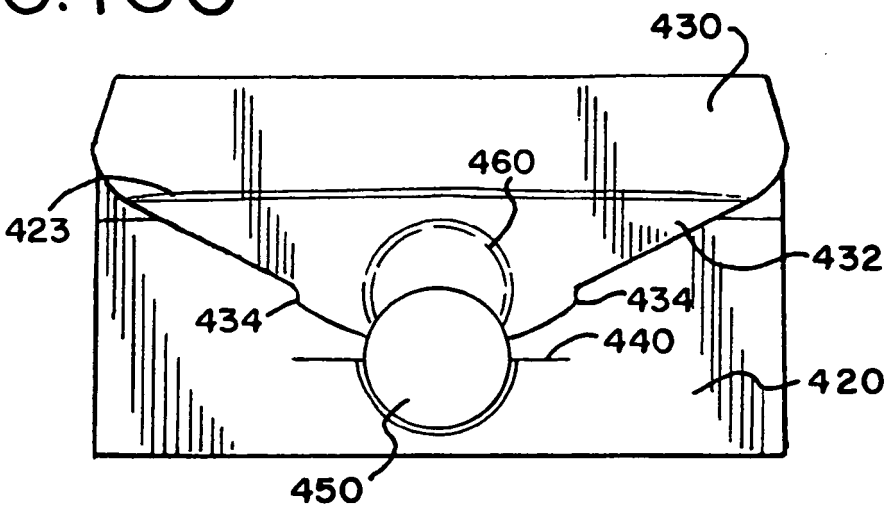


FIG. 16D

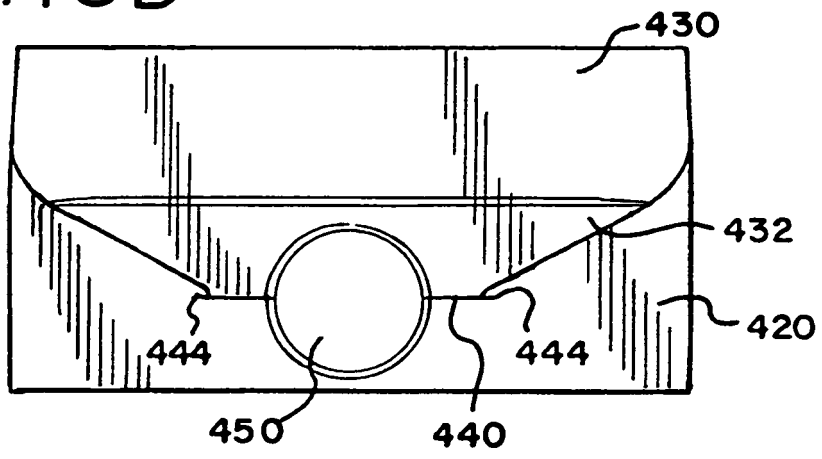


FIG. 17

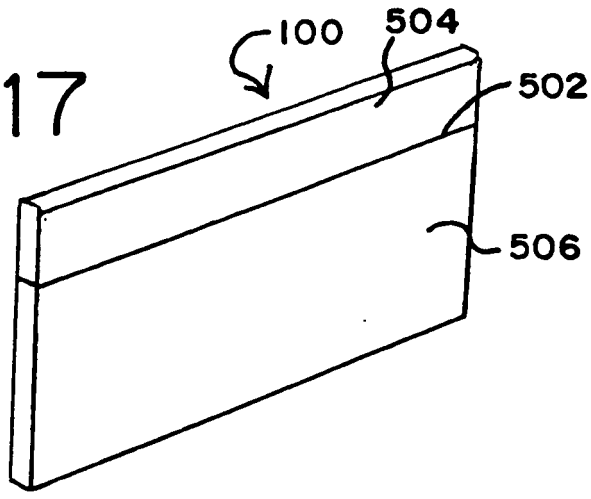


FIG. 18

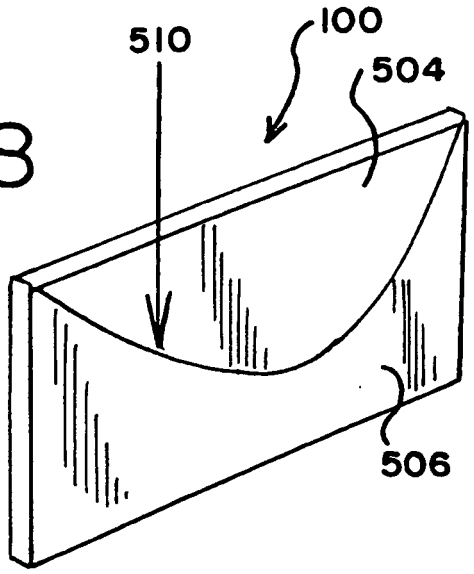


FIG. 19A

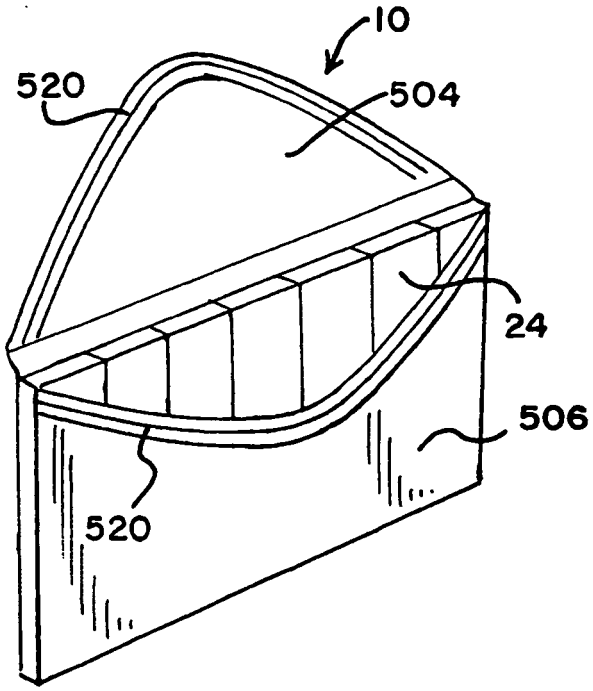


FIG. 19B

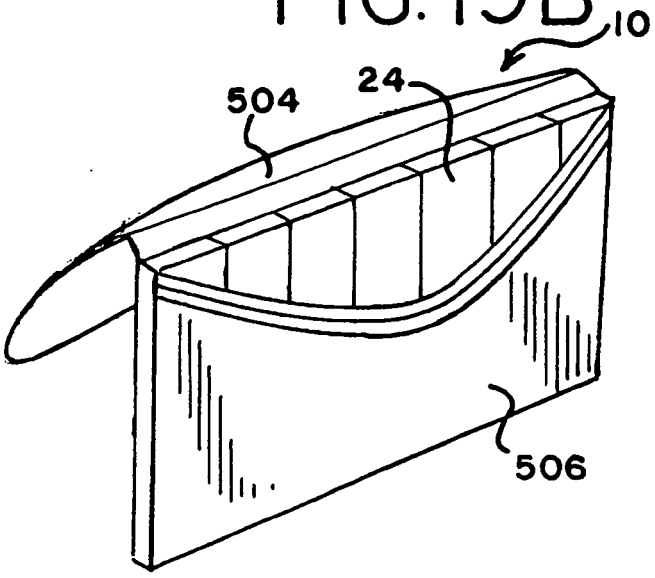
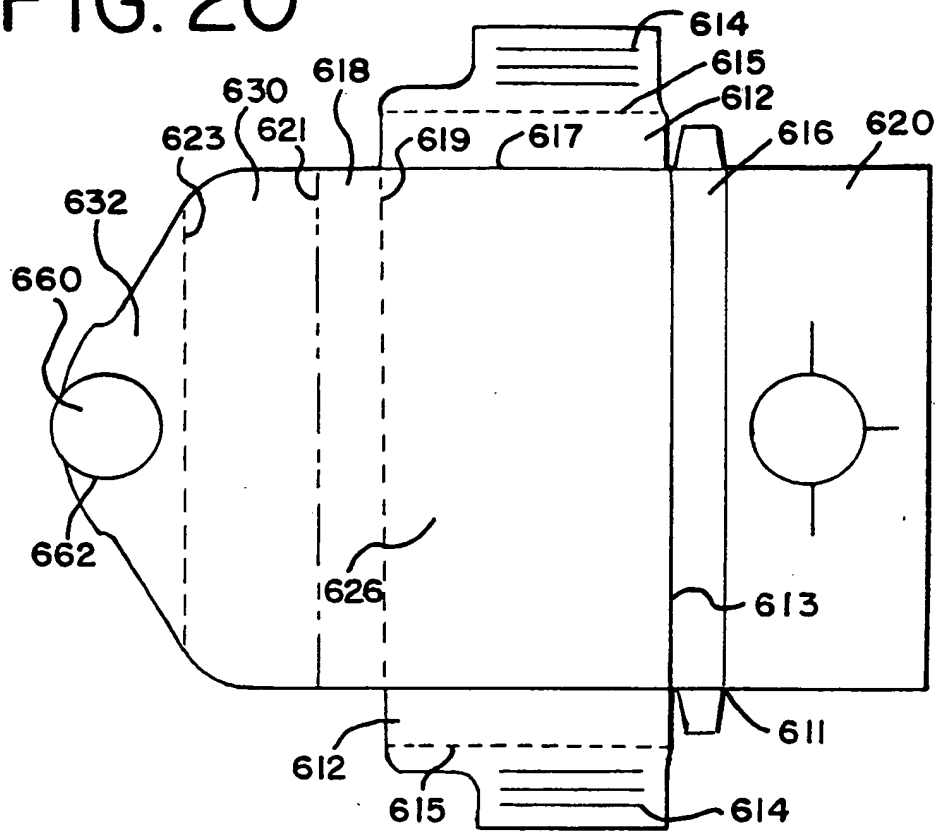


FIG. 20


614
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617
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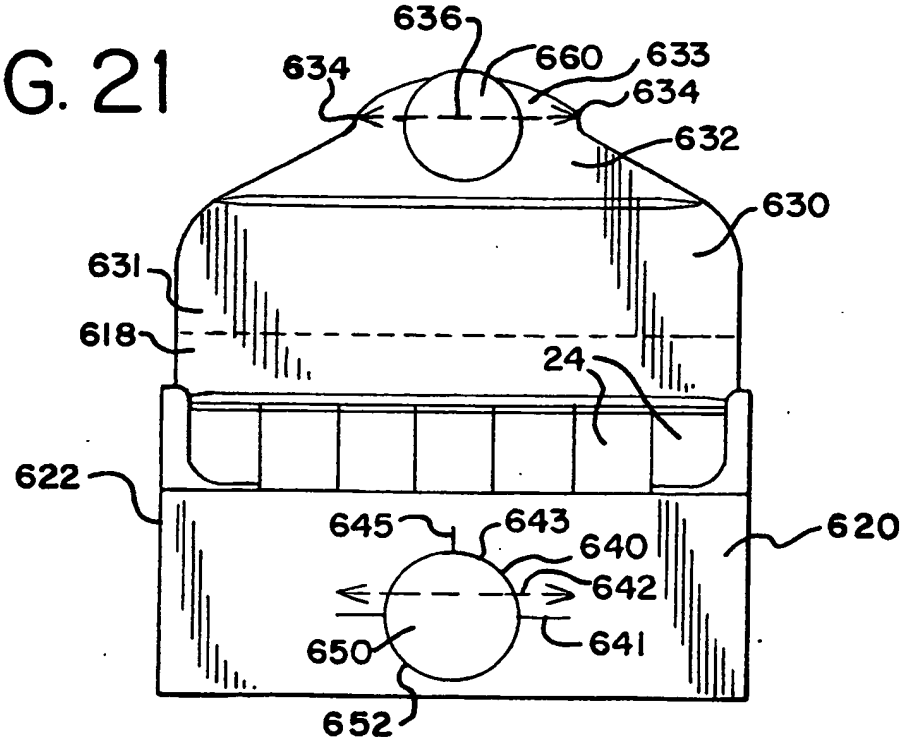
FIG. 21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620

FIG. 22

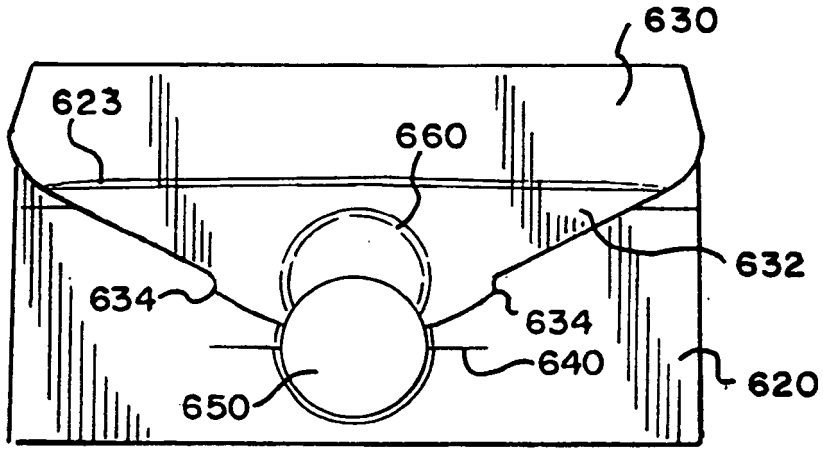


FIG. 23

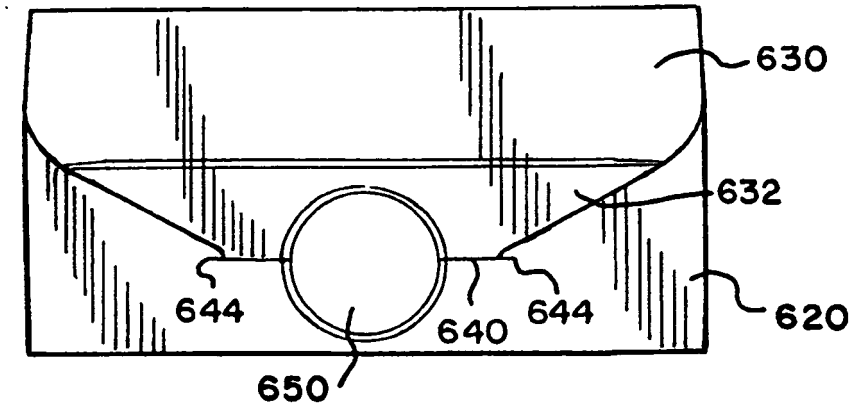
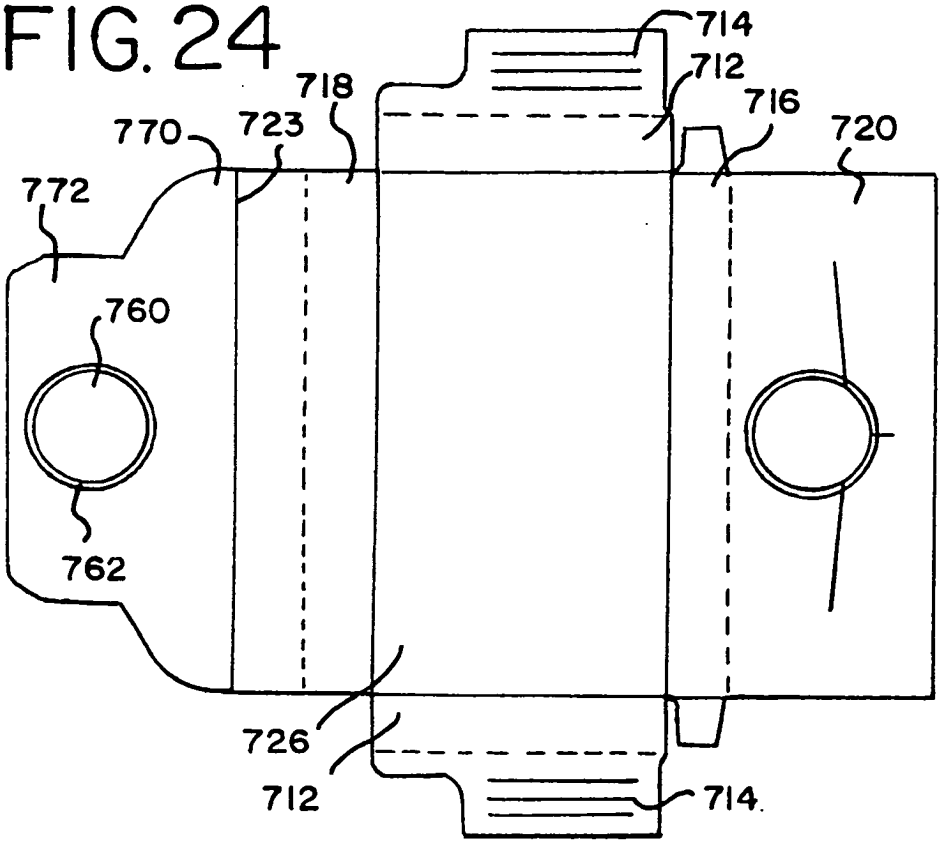


FIG. 24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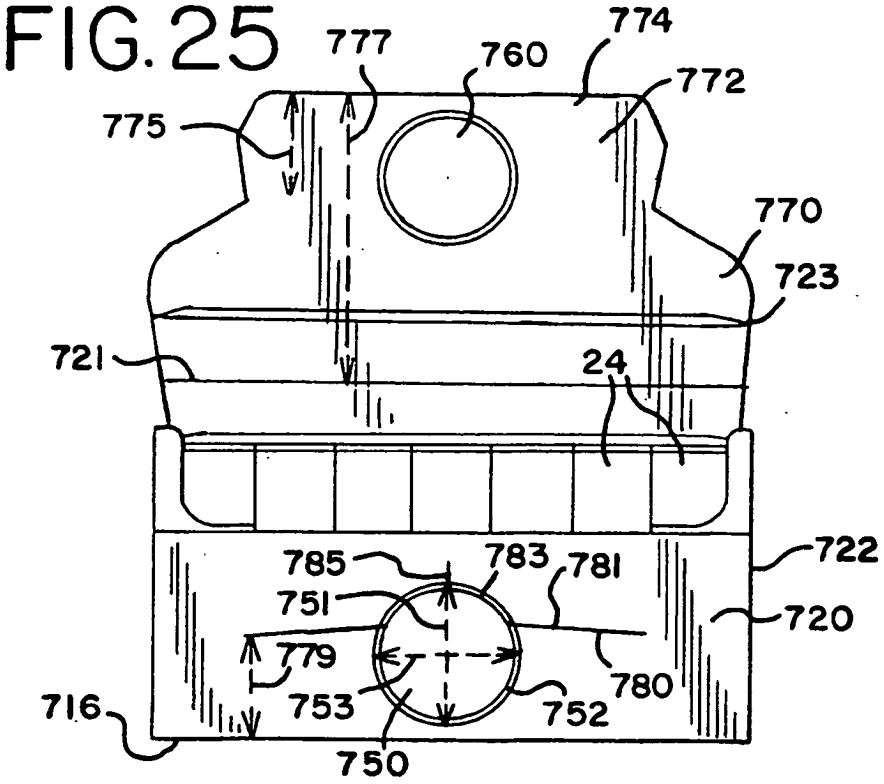
712
718
716
770
723
720
772
760
762
726
712
714

FIG. 25


774
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760
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770
723
721
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722
785
783
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750

FIG. 26

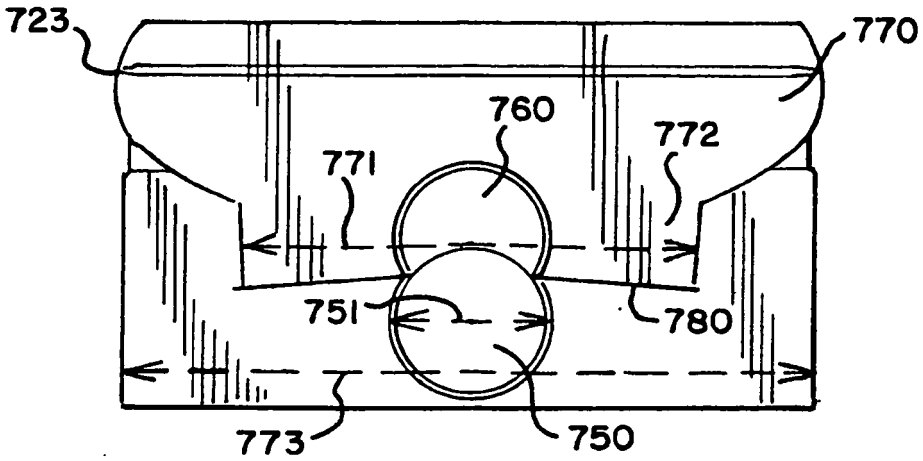

FIG. 27

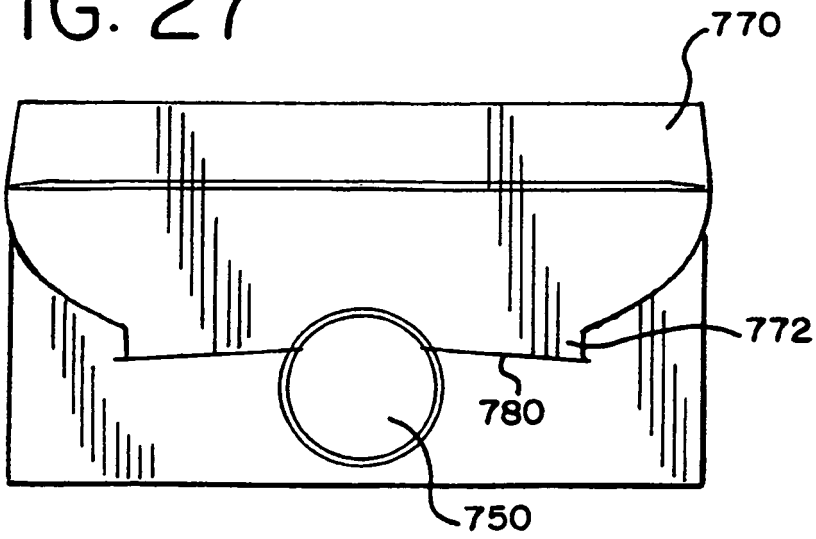

FIG. 28

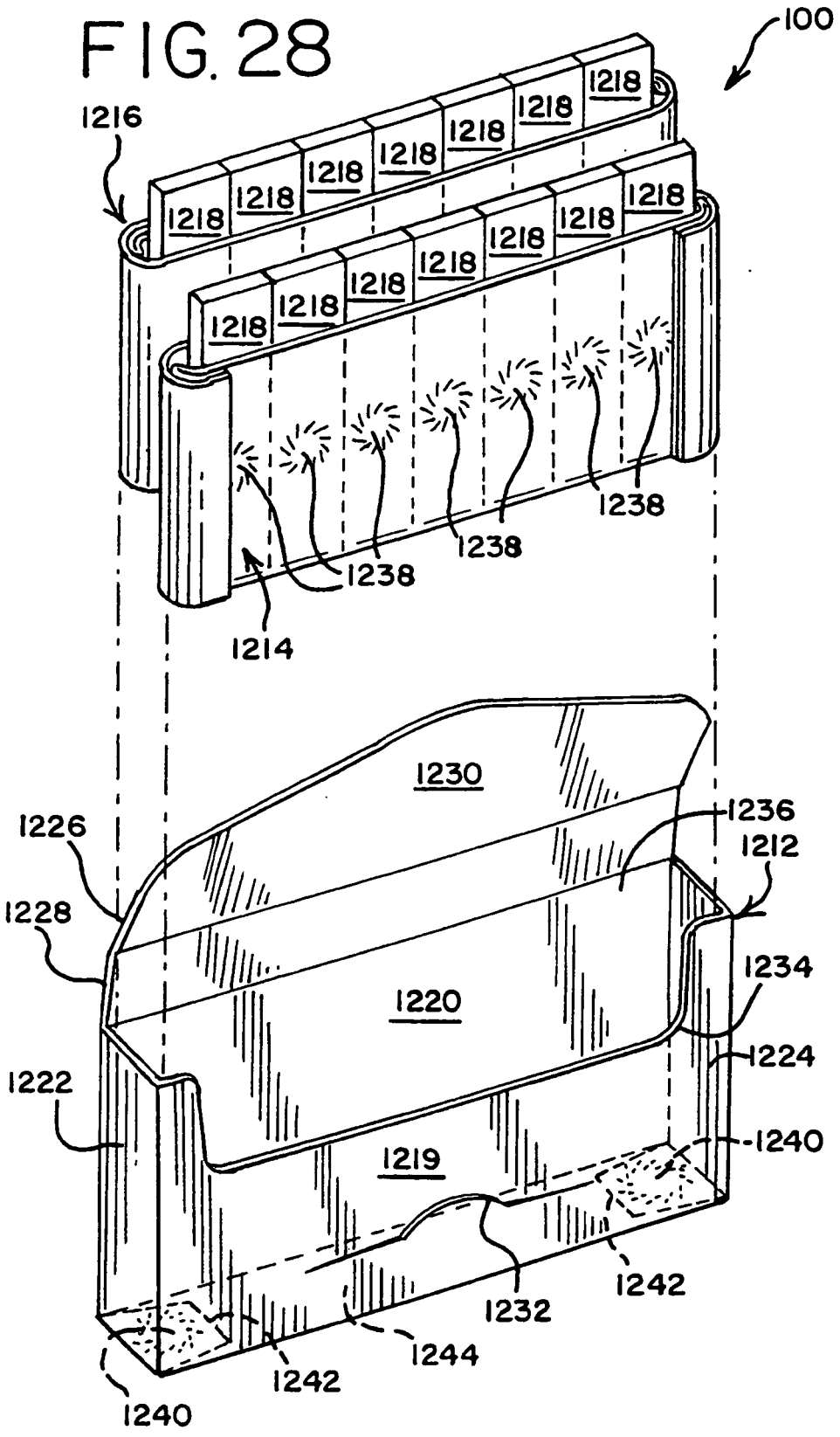
100
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FIG. 29

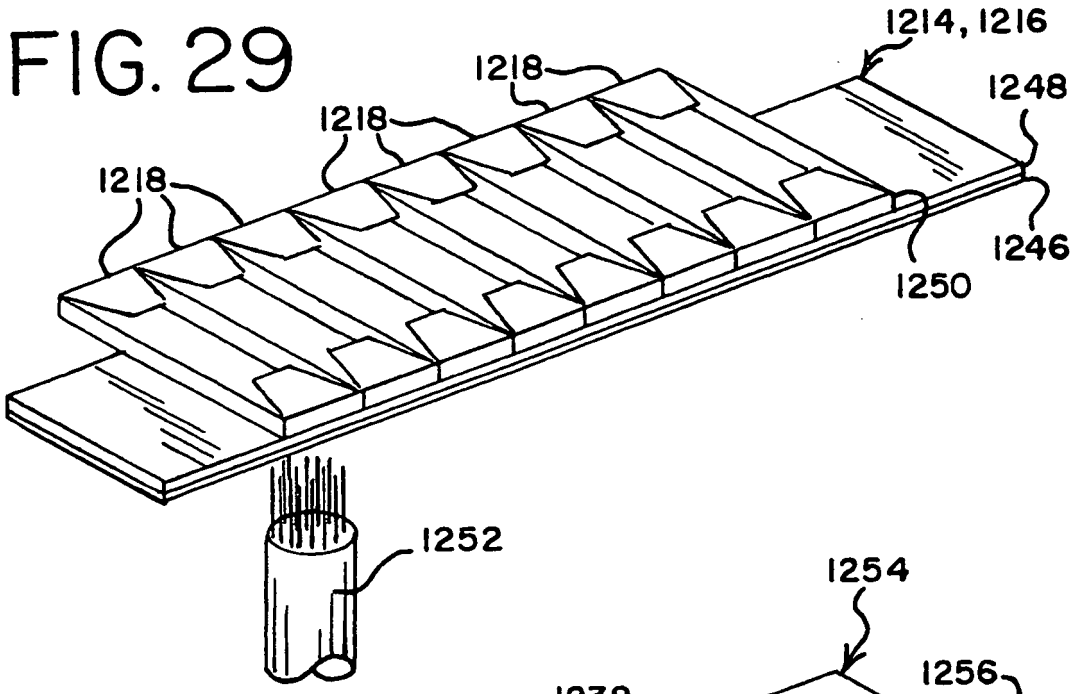


FIG. 30

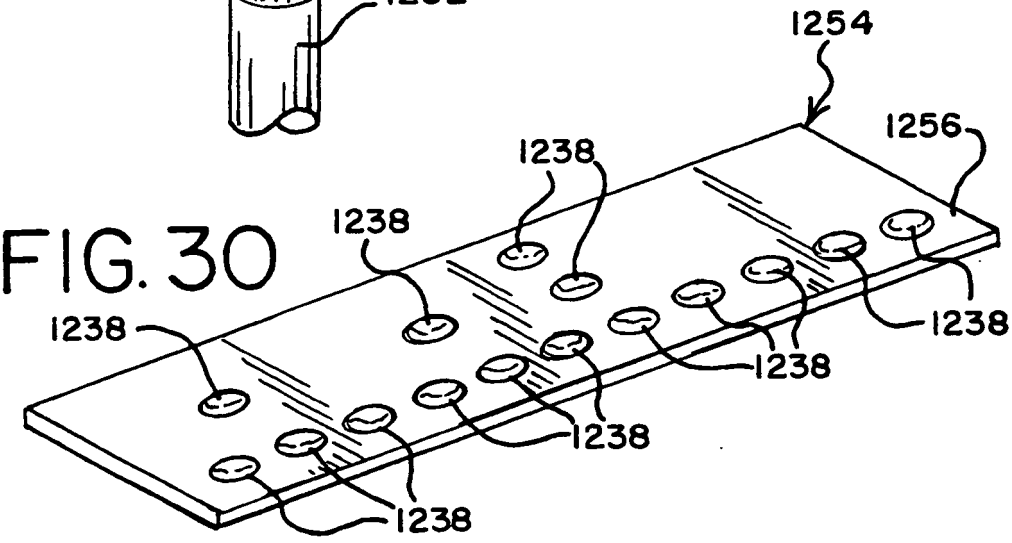
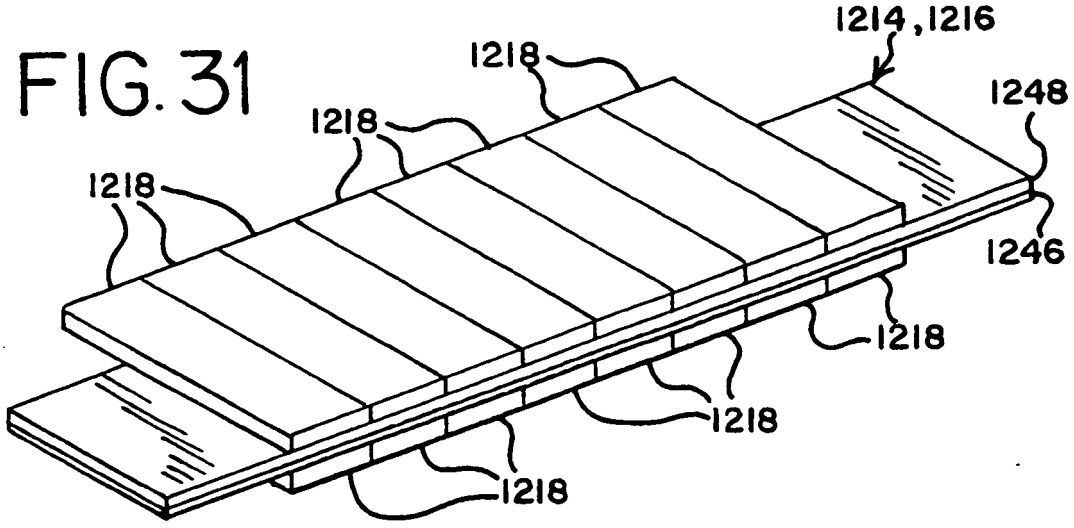


FIG. 31



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Patent documents cited in the description

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