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(54) Title: MATERIAL DISPENSER

(57) Abstract: A dispenser is disclosed having at least one axle member for dispensing a rolled product, such as toilet paper, in a manner substantially similar to that of a fixed dispenser. The dispenser may be used, for example, in remote locations or public locations by campers, travelers, or the like. The dispenser may be sold as a single unit, may be incorporated into a vending system, or may be sold in combination with rolls of dispensable product.



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MATERIAL DISPENSER

Richard Block

PRIORITY

This application claims priority from the disclosure of U.S. Provisional Patent Application Serial No. 60/844,785, entitled "Material Dispenser," filed September 15, 2006, which is included herein by reference in its entirety.

FIELD OF THE INVENTION

The present invention relates, in general, to a portable device for dispensing products and, in particular, to a portable device configured to retain a dispensable material therein.

BACKGROUND OF THE INVENTION

Several products commonly used in the household are purchased wound in a roll on a core. Such products include paper towels, toilet paper, disposable trash bags and other transversely perforated products, as well as some roll products which are not transversely perforated, such as wax paper and plastic wrapping film. Rolls of paper products, in particular, are frequently sold as groups of four or more rolls that are shrink-wrapped or otherwise bound together for purchase as a single unit. The consumer purchases the unit and returns the rolls to the household where each roll is placed onto a fixed dispenser as needed.

The conventional methodology of selling paper products to consumers may not be as practical when applied to campers or other travelers. The current distribution of paper products from retail stores typically relies upon a consumer having a fixed dispenser of some kind in their home. Travelers or campers often do not have access to such dispensers and frequently resort to placing rolls of paper products into resealable plastic bags that may make dispensing difficult and may make the roll prone to crushing. Slightly more sophisticated systems have been developed that provide a cylindrical container from which toilet paper may be

dispensed. Such systems, however, may dispense the product poorly due to a high coefficient of friction between the container and the paper because the product rests on the bottom surface of the container. This friction may cause the paper to grab or tear undesirably. This may be particularly true if any moisture gets into the product.

[0005] Systems have been developed for campers that provide a solid roller upon which purchased rolls of paper products may be placed for use. However, such systems are often bulky, expensive, and/or are too sophisticated for campers wishing to keep the number of creature comforts to a minimum. It would therefore be advantageous to provide a portable dispenser system for use with conventional rolls of product that may be used in any suitable environment, such as in the home or on the road for use in toilet training children, that operates in a fashion similar to that of a fixed household dispenser. It would be further advantageous to provide an unobtrusive portable dispenser system that is convenient for travelers, campers, discerning consumers, or the like, to transport. Providing a basic system for dispensing products, such as toilet paper, may meet a camper's or traveler's desire for a casual or rustic ambience. For discerning customers, it would be advantageous to provide sanitary paper, or the like, that may be carried in the purse or in a bag for use away from the home. As rolls of paper are typically sold in bulk, it would be further advantageous to provide a dispenser with bulk rolls of paper that may be purchased as a single unit.

[0006] Frequently, public restrooms subject to high foot traffic provide low cost and inferior quality toilet paper for patrons' use in order to reduce overhead costs. In particular, businesses such as gas stations and fast food restaurants may have a large number of travelers who stop to use their facilities free of charge without making purchases. These businesses may provide the very lowest quality toilet paper to insure that the use of such facilities by non-paying customers does not substantially burden their profit margins. Paying customers, however, frequently wish that the quality of the toilet paper in such facilities was greatly improved. It would therefore be advantageous to provide customers with the option of high quality toilet paper without creating an unreasonable expense for businesses. It would be further

advantageous for businesses to provide high quality toilet paper while adding to their revenue stream.

BRIEF DESCRIPTION OF THE DRAWINGS

- [0007] The accompanying drawings incorporated in and forming a part of the specification illustrate several aspects of the present invention, and together with the description serve to explain the principles of the invention; it being understood, however, that this invention is not limited to the precise arrangements shown. In the drawings, like reference numerals refer to like elements in the several views. In the drawings:
- [0008] FIG. 1 is a perspective view of one version of a portable dispenser shown with a perforated portion removed to display at least one axle element.
- [0009] FIG. 2 is a perspective view of the portable dispenser of FIG. 1 shown with the perforated portion intact.
- [0010] FIG. 3A is a perspective view of the portable dispenser of FIG. 1 shown in a folded position with a roll inserted therein.
- [0011] FIG. 3B is a right side cross-sectional view of the portable dispenser of FIG. 1 taken along line 3B-3B.
- [0012] FIG. 4 is a perspective view of the portable dispenser of FIG. 1 shown unfolded.
- [0013] FIG. 5 is a top view of the portable dispenser of FIG. 1 shown unfolded.
- [0014] FIG. 6 is a perspective view of the portable dispenser of FIG. 1 shown packaged with a plurality of paper rolls into a single unit.
- [0015] FIG. 7 is a perspective view of one version of a vending system.
- [0016] FIG. 8 is a perspective view of an alternate version of a portable dispenser.
- [0017] Reference will now be made in detail to various versions of the invention, an example of which is illustrated in the accompanying drawings.

DETAILED DESCRIPTION OF EMBODIMENTS OF THE INVENTION

[0018] Disclosed is a portable dispenser for articles, such as paper articles, that may be well suited to the needs of campers, travelers, and a mobile population. Provided is a portable dispenser that includes at least one axle element about which a roll may rotate. Versions herein may, for example, provide toilet training children, travelers, campers, or the like, with the benefits of a fixed paper dispenser that may be enjoyed, for example, in public restrooms, as an additional dispenser in the home, in the wilderness, or in remote locations. Additionally, the portable dispenser may be foldable for easy transportation. Foldable, lightweight, versions of the dispenser may be easily transported, such as in backpacks, which may be desirable to travelers or campers looking to conserve space and limit their weight load on extended trips or hikes. The foldable dispenser may also be easily carried in a diaper bag, or the like, for toilet training children.

[0019] Versions of the portable dispenser may be constructed from cardboard, heavyweight paper, plastics, or other flexible low-cost material to keep costs low. Additionally, the portable dispenser may be constructed from a single piece of material to reduce manufacturing costs and the cost is ultimately passed onto the consumer. In addition to other beneficial uses, the portable dispenser may provide travelers with the desirable basic functionality of a fixed dispenser while catering to the rustic ambience desired by many campers in a cost effective manner. The portable dispenser may provide discerning customers with a product that may be transportable in a purse, or the like, for use in public facilities. The portable dispenser may provide parents with a dispenser that is similar to a fixed household dispenser that may be more convenient for children to use, may be portable for use in public facilities, and/or may obviate parents having to switch their usual product for a more child-friendly product.

[0020] As will be disclosed in further detail herein, in addition to other features, the portable dispenser may be made reusable, water resistant, and/or configured with an adhesive to facilitate use of the dispenser in a wide variety of environments and

locations. Previous attempts to provide portable material dispensers have frequently been bulky, complex, and sophisticated, resulting in expensive devices that are at odds with the casual wants and style of most travelers, campers, parents, or active individuals. Versions herein may provide a desirable basic functionality that may appeal to campers, travelers, and other active individuals, such as parents, who may take their kids to soccer or baseball games with limited restroom facilities. Discerning consumers may carry a disposable or reusable trusted product discretely in a purse, glove compartment, or the like, for use away from the home. A single dispenser may also be used for a plurality of products, such as paper towel, toilet paper, and wax paper, which may appeal to the resourceful and efficient nature of many campers.

[0021] In addition to providing travelers, campers, parents, or the like, with a portable dispenser that resembles a household fixed dispenser, versions of the dispenser disclosed herein may also be used in combination with a vending machine. To keep overhead costs low, public facilities often provide low quality paper products for their clientele. Versions of the dispenser may be incorporated with a vending machine as single-use or reduced-size products of high-quality toilet paper, or the like, that may be purchased by previously inconvenienced or discerning customers as an alternative to the low-quality product provided. The purchasable dispensers may be made of a low cost material to keep profit margins high for retailers. The dispensers may contain an integral roller or axle member that resembles a traditional dispenser in function and design such that high-quality paper may be provided and used in a manner similar to that of a fixed dispenser. The integral roller or axle member may be configured such that a roll of paper is not in direct contact with the outer surface of the container such that the paper product is freely rotatable about the axle. Such a dispenser may provide high-traffic facilities, such as rest areas, gas stations, fast food restaurants, with an added revenue generating feature. Many patrons of such establishments would likely welcome a high-quality alternative or, in the case of portable restroom facilities, a product that has not been soiled, removed, or tampered with.

[0022] FIG. 1 illustrates one version of a dispenser 10 having a first axle member 12 and a second axle member 14 configured to hold a dispensable product. In one version, the dispenser 10 is a six-sided box constructed from a single piece of flexible material, such as cardboard or plastic, that may be used in, for example, a remote location or a public facility, to dispense a product, such as toilet paper, to a traveler. Although described in relation to toilet paper or sanitary paper by way of example, it will be appreciated that the dispenser 10 may be used in association with any other suitable dispensable product. The dispenser is not limited to use in a traveling context and may be used in any suitable setting such as, for example, to hold children's toilet paper in the home or for any other suitable purpose. The dispenser may also have any suitable configuration such as, for example, a tube shape.

[0023] In the illustrated version, the dispenser 10 includes a top portion or side 22, a bottom portion or side 24, a front portion or side 26, a back portion or side 28, a first end or side 18, and a second end or side 20. The sides 18, 20, 22, 24, 26, 28 of the dispenser 10 may be configured from a single piece of material that may be folded into the configuration depicted in FIG. 1. A dispensable product, such as a roll 16 of toilet paper shown in FIG. 3, may be placed into the dispenser 10 and substantially sealed therein by folding up both the first end 18 and the second end 20. Once retained therein, the first axle member 12 and the second axle member 14 may project into the tubular core portion of the dispensable product, which is typically constructed from cardboard, such that the dispensable product may rotate about the first axle member 12 and the second axle member 14. When placed on the axle members 12, 14, or any other suitable roller, the roll 16 may not be in contact with the outer surface of the dispenser 10 such that the roll 16 is freely rotatable about the axle members 12, 14. The freely rotatable or substantially freely rotatable nature of the roll 16 may reduce grabbing and otherwise poor dispensing associated with, for example, products where a roll of product sits on the bottom of a box. Versions of the dispenser 10, may be used with current products typically configured in such a manner, such as tinfoil or plastic wrap, to decrease the friction between the product and the outer container to improve dispensing. Holding the roll 16 adjacent, but removed from, the outer

surface of the dispenser 10 may also help maintain the rotatability of a moisture permeated roll 16 about the axle members 12, 14.

[0024] When situated as such, the dispenser may dispense the product in a fashion substantially similar to that of a fixed household dispenser. The axle members 12, 14 may functionally imitate the rollers commonly found, for example, in a household bathroom. Additionally, the incorporation of the axle members 12, 14 may reduce or eliminate friction between the dispensable product and the dispenser 10 associated with products retained within a dispensing bag. Dispensable product may be pulled out of the dispenser 10 without grabbing or tearing inconveniently and without clumping substantially in the presence of moisture.

[0025] Still referring to FIG. 1, the foldability of at least one version of the dispenser may be a highly desirable feature, for example, for campers wishing to conserve space in a backpack or for parents looking to conserve space in a diaper bag. The function of the dispenser 10, to allow product to be dispensed therefrom in a rollable fashion, may be desirable to campers; however, it may be a comfort for which few campers are willing to sacrifice significant space. Therefore, it may be advantageous that the dispenser 10 may be transported substantially flat, as illustrated in FIG. 5, and then folded into the configuration depicted in FIG. 1 to hold a rolled article, such as toilet paper. Campers may, therefore, retain some of the benefits of home without sacrificing significant packing space.

[0026] Also, the dispenser 10 may be constructed from a lightweight material, such as cardboard, that makes transportation of the dispenser convenient. The dispenser 10 may also be constructed from a flexible plastic, provided with a waxy coating, or otherwise made water resistant to prolong the useful life of the dispenser 10 in damp conditions. In one version, the dispenser 10 may be constructed from readily biodegradable materials or bio-friendly materials such that the dispenser 10 may be left in the wilderness without compromising an ecosystem. In addition to being lightweight, compact, and environmentally friendly, the construction of the dispenser

10 from inexpensive materials may make the article more cost effective for the camper.

[0027] Referring to FIG. 2, one version of the dispenser 10 is shown with a tear-away or removable portion 28. The removable portion 28 may be an attached portion or a portion of the dispenser 10 having a peripheral perforated edge that, when removed, allows a user to access the dispensable article inside the dispenser 10. When in place, the removable portion 28 may make the dispenser 10 substantially water resistant such that, for example, a paper product located therein will not become damp when exposed to the elements. In one version, the removable portion 28 is attached to the dispenser 10 with a sealable adhesive such that water is substantially unable to penetrate the dispenser 10. A user may open the dispenser 10 as needed and, in one version, replace the removable portion 28 after use. Replacing the removable portion 28, for example where the removable portion 28 is affixed with an adhesive, may make the dispenser substantially water resistant.

[0028] Still referring to FIG. 2, the removable portion 28 may be configured with any suitable size, shape, or design to allow access to the dispensable article. Additionally, as illustrated, the removable portion may be shaped such that, when removed, a cutting element 30 is formed in the remaining dispenser 10. The cutting element 30 may be, as illustrated, an arcuate projection, or may have any other suitable shape for cutting or detaching a portion of the dispensable article from the main roll. In addition to a plurality of contemplated shapes, the cutting element 30 may include an attached cutting element, such as a metallic serrated edge, or the like, to facilitate the separation of portions of the dispensable article. The cutting element 30 may include a portion or all of the edge of the opening created upon removal or retraction of the removable portion 28.

[0029] Referring to FIGS. 3A-3B, depicted is one version of the dispenser 10 with a dispensable article, such as a roll 16 of toilet paper, having a core 17 and paper 19, inserted therein. The dispenser 10 is shown with the removable portion 28 of FIG. 2 detached such that a user may access the dispensable article or roll 16 of toilet paper.

In the illustrated version, the first axle element 12 and the second axle element 14 project into the open ends of the core 17 of the roll 16. The user may reach into the dispenser 10 and rotate the roll 16 about the first axle element 12 and the second axle element 14 in a fashion substantially similar to that of a fixed household dispenser. As the roll 16 is rotated, the core 17 may continue to rotate about the axle elements 14, 18 while the paper 19 is dispensed to the user. When the user has a sufficient portion of paper 19, the paper may be drawn over the cutting element 30 to remove the portion. By providing axle elements 14, 18 that mimic traditional fixed household dispensers, the dispenser 10 may provide a traveler, camper, parent, or mobile person with a desired functionality in a convenient and portable manner.

[0030] Still referring to FIG. 3, after use, the user may, in one version, reclose the removable portion 28 shown in FIG. 2. This version may be advantageous for campers set up in a particular location for an extended period of time or, for example, for children's toilet paper in the home where parents wish to provide special paper for their children on a separate dispenser. Referring, in particular, to versions applicable to camping, resealing the dispenser 10 may restore a substantially water resistant, waterproof, or watertight condition to the dispenser 10.

[0031] In an alternate version, the dispenser 10 may be configured for single-use, where after being used the entire dispenser is disposed of by the user. In a single-use version, the roll 16 may be a fraction of the size of a traditional roll of toilet paper, such as one quarter the size, such that disposal of the unused paper is not unnecessarily wasteful. As will be discussed in further detail herein, the single-use version of the dispenser 10 may also be used in association with a vending machine in, for example, public facilities. Multiple-use or reduced-use rolls may also be provided in situations where, for example, the roll may provide enough material for four or five uses. Multiple-use or reduced-use rolls may be well suited for transport in a purse or glove compartment.

[0032] In an alternate version, one end 18, 20 of the dispenser 10 may be opened to remove the dispensable article, such as a roll of toilet paper 16, therefrom. After

removal, the dispenser 10 may be refolded for easy transportation in a backpack, or the like. This version may be particularly beneficial if toilet paper is available for purchase at intermittent points. For example, toilet paper may only be available at infrequent trail stops. The dispenser 10 may be used with paper bought at a trail stop, the roll of toilet paper disposed of after use, and the dispenser 10 refolded into a pack until toilet paper again becomes available. This may provide the benefit of a roll dispenser without having to transport a bulky roll of paper from location to location.

[0033] It will be appreciated that the roll 16 of toilet paper used in conjunction with the dispenser 10 is disclosed by way of example only and is not intended to be limiting. For example, the dispenser 10 may be used to retain and/or dispense paper products, sanitary products, cooking related products, food products, rolled products, toilet paper, paper towel, wax paper, tinfoil, edible products, trash bags, or any other suitable product. In particular, the dispenser 10 may be used to retain or dispense any product maintained on a roll.

[0034] Referring back to FIG. 1, one version of the dispenser 10 includes an attachment element 32. The attachment element 32 may be, for example, an adhesive strip or any other suitable mechanism or device for attaching the dispenser 10 to a stationary object. Providing an attachment element 32 may allow a user to, for example, affix the dispenser 10 to a convenient location for use. In public facilities, the attachment element 32 may be an adhesive for attachment to a wall or, in more remote settings, the attachment element 32 may be a hook or tack for attachment to a tree, or the like. Any suitable attachment method, mechanism, or device is contemplated including, but not limited to, adhesives, hooks, pins, clips, hook and loop connections, and magnets.

[0035] Referring to FIG. 4, one version of the dispenser 10 is shown in the unfolded position. In the illustrated version, the ends 18, 20 of the dispenser 10 are shown open such that, for example, a roll 16 (FIG. 3A) may be inserted into the dispenser 10. The first end 18 may comprise a first flap 34, a second flap 36, a third flap 38, and a fourth flap 40 operably configured to form the first axle member 12 when folded. The

second end 20 may comprise a first flap 42, a second flap 44, a third flap 46, and a fourth flap 48 operably configured to form the second axle member 14 when folded. In one version, the second flap 36 and the fourth flap 40 include slots 50 therein that, when folded, form a groove. The first flap 34 and the third flap 38 may include projections 52 that, when folded, form a tongue that nests with the groove to form the first axle member 12. Similarly, the relationship between the flaps 42, 44, 46, 48 may be such that the second axle member 14 is formed substantially identical to the first axle member 12 when the dispenser 10 is folded.

[0036] Folding the sides 18, 20 in the illustrated manner may provide stable axle members 12, 14 upon which a roll 16 (FIG. 3A), or the like, may rotate to dispense an article. Creating the axle members 12, 14 by folding the sides 18, 20 may allow the dispenser 10 to be unfolded into a substantially flat article, as shown in FIG. 5, as needed for transport, or the like. The readily transportable dispenser 10 may be highly attractive to campers, or the like, looking to conserve space while retaining the benefits of a fixed household dispenser. It will be appreciated that axle members 12, 14 may be created by folding flaps in a number of configurations. For example, the flaps may have projections that, when folded into a dispenser, form an axle member by lying adjacent to one another. Any suitable configuration that provides at least one axle member when a dispenser is in a folded configuration is contemplated. It will be appreciated that the axle members, such as axle members 12, 14, may be of any suitable size and/or configuration for holding an article therebetween. The axle members may be tailored to the configuration of a particular roll or article or have a structure more universally configured to hold a variety of articles. The axle members may be identical or different from one another depending upon the application.

[0037] It will be appreciated that a single axle member may be used with versions of the dispenser 10. For example, one side of the dispenser may be provided with an axle member that extends substantially the length of the dispenser when folded in. A second side, having traditional flaps may, upon opening, accept a roll, or the like, that may be inserted over the axle member for use. The single axle may, for example, be more rigid than the double axle members to support the roll. It will be appreciated

that the term axle is used herein to define any support member for a dispensable article about which the dispensable article may rotate, articulate, or otherwise move.

[0038] The dispenser 10 may be constructed from any suitable material including plastics, paper products, water resistant materials, materials having coatings, materials having waterproof coatings, biodegradable materials, bio-friendly materials, or any other suitable material. It will be further appreciated that portions of the dispenser 10 may be constructed from different materials, materials having different properties, or combinations thereof. For example, the axle members 12, 14 may be configured from a more rigid material than other portions of the dispenser 10 to insure that, for example, a roll 16 is adequately supported.

[0039] FIG. 5 depicts one version of the dispenser 10 shown unfolded in a substantially flat configuration. As illustrated, unfolding the sides 18, 20 may allow the dispenser 10 to lie substantially flat as two layers of material in parallel planes. In the illustrated configuration, the dispenser 10 may, for example, be easily transported in a backpack while taking up a minimum of space. Although illustrated in a flat configuration, it will be appreciated that the dispenser 10 may be configured into any suitable shape or design when not in the folded position. For example, when the dispenser 10 is not in the dispensing form depicted in FIG. 1, the dispenser may be folded or otherwise suitably shaped for easy transport, sale, storage, disposal, or the like.

[0040] Referring to FIG. 6, one version of a sales system and method is illustrated wherein a dispenser 10 is sold with one or a plurality of rolls 16 of dispensable product such as, for example, toilet paper, as a single article 62. When the dispenser 10 is in a flat or unfolded configuration it may be combined with a standard package of dispensable product and marketed as a single unit or article 62. The dispenser 10 and the rolls 16 may, for example, be bound or coupled together with a wrapping 60 or any other suitable attachment or packaging. The combination of the dispenser 10 and the rolls 60 may be marketed to, for example, travelers who may not be taking the rolls 60 to a location that has a fixed dispenser. The capability of one version of the

dispenser 10 to lie substantially flat may make the dispenser 10 well suited for placement in the packaging currently used for selling rolls 16 commercially. For example, the dispenser 10 may be inserted with a pack of toilet paper marketed to campers or kids as an insert, or bonus item, that may improve sales of the rolls 16 without a substantial cost to the manufacture or a need to alter the packaging of the rolls 16. Providing a free dispenser 10 to customers may make a particular brand of roll 16 more attractive to consumers than that of a competitor. The low manufacturing cost of versions of the dispenser 10 may allow the article 62 to be sold, for example, at the same price as a competitor's product, but offer an additional benefit at no charge. Such a benefit may help gain market share in markets targeted to campers, kids, or the like.

[0041] It will be appreciated that the dispenser 10 may be marketed with any suitable product or roll 16 to create an article 62 for sale. For example, a flattened dispenser 10, such as shown in FIG. 5, may be sold with two, four, or more rolls 16, where the sides 18, 20 of the dispenser 10 may be folded up (not shown) and into a substantially u-shaped configuration to hold the rolls 16 therein. The dispenser 10 may then be wrapped or otherwise packaged for sale. Dispensers may be sold with toilet paper for travelers, with paper towel for picnickers, or with any other dispensable product for any suitable purpose. The dispenser 10 may be sold as an independent product or in combination with any other suitable product.

[0042] FIG. 7 discloses one version of a vending system and method for selling dispensers 10 with prepackaged rolls 16 therein. A vending machine 72 may include, for example, a frame 74 configured to house a vending mechanism 76, such as is commonly known in the art, that is configured to accept money in exchange for dispensing a dispenser 10. The vending machine may be configured to store a plurality of dispensers 10 of various brands, types, sizes, and/or quality such that a user may insert money into the vending mechanism 76, push a button 78 corresponding to, for example, a brand of toilet paper, or the like, and then receive a dispenser 10 containing the selected toilet paper via a receptacle 80.

[0043] The vending machine 72 may be advantageously placed in restrooms frequented by the public, such as rest stops or fast food restaurants, to provide customers with, for example, a premium toilet paper option and the facility with a revenue generator. For example, a public facility may provide a low grade toilet paper product at no charge to customers to keep overhead low in high traffic areas. To appease customers dissatisfied with such accommodations, the vending machine 72 may be installed to give the customer an additional option that will not detract from the overhead costs of the business. Conversely, sales of the premium product may contribute to the facility's revenue. Providing a vending machine 72 with dispensers 10 may meet both the customer's and the retailer's needs.

[0044] The dispenser 10, associated with the vending machine 72, may contain a roll 16 of reduced size that is more appropriate for single-use or reduced-use applications. The dispenser 10, similarly, may be of reduced size to accommodate the smaller roll 16 and to allow more dispensers 10 to be placed within the vending machine 72. For example, the roll 16 may be of premium toilet paper and may be one quarter the width of a traditional roll. The dispensers 10 used with the vending machine 72 may contain axle members 12, 14, as illustrated in FIG. 1, about which the reduced size roll 16 may rotate to resemble a fixed dispenser. The dispensers 10 may also include an attachment member 32, as illustrated in FIG. 1, for attachment to a stall or the like in a bathroom for easy use. Such a product may be welcomed by discerning customers unsure of the cleanliness of public toilet paper, dissatisfied with the quality of public toilet paper, or if public toilet paper is unavailable. The dispensers 10 may be sterile, sealed, or otherwise hygienically packaged.

[0045] It will be appreciated that rolls 16 of toilet paper are described by way of example only in association with the vending machine 72, where any suitable roll 16 may be substituted. The vending machines 72 may be placed in any suitable location including, for example, portable toilet units, where public toilet paper is frequently soiled or absent. Such vending machines 72 may also be present at public campsites to provide single-use, reduced-use, and/or multiple use dispensers and/or paper to customers. Such a vending system and method may generally increase revenue for

companies selling rolled products, such as toilet paper, by increasing the number of places such premium paper may be marketed. Additionally, establishments such as fast food restaurants may gain revenue from individuals who may not be paying customers, yet use the facility's restrooms.

[0046] FIG. 8 illustrates an alternate version of a dispenser 110 shown with a roll 116 retained therein. The dispenser 110 illustrates one version of a partially detachable portion 128 that may be perforated along a portion such that the dispenser 110 may be opened. The detachable portion 128 may also include a fixed portion 129 that may function as a natural hinge about which the detachable portion 128 may open and close. The detachable portion 128 may have an attachment element 132 associated therewith operably configured such that when the detachable portion is opened the attachment element 132 may be affixed to a surface, or the like, for hanging the dispenser 110. The dispenser 110 further illustrates an alternate embodiment of a cutting element 130 comprising a series of teeth for separating a portion of product from the roll 116. The cutting element may further include any suitable cutting element such as, for example, a metallic and/or serrated edge.

[0047] In summary, numerous benefits have been described which result from employing concepts of the invention. The foregoing description of one or more versions of the invention has been presented for purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed. Obvious modifications or variations are possible in light of the above teachings. The one or more versions were chosen and described in order to best illustrate principles of the invention and its practical application to thereby enable one of ordinary skill in the art to utilize the invention in various versions and with various modifications as are suited to the particular use contemplated.

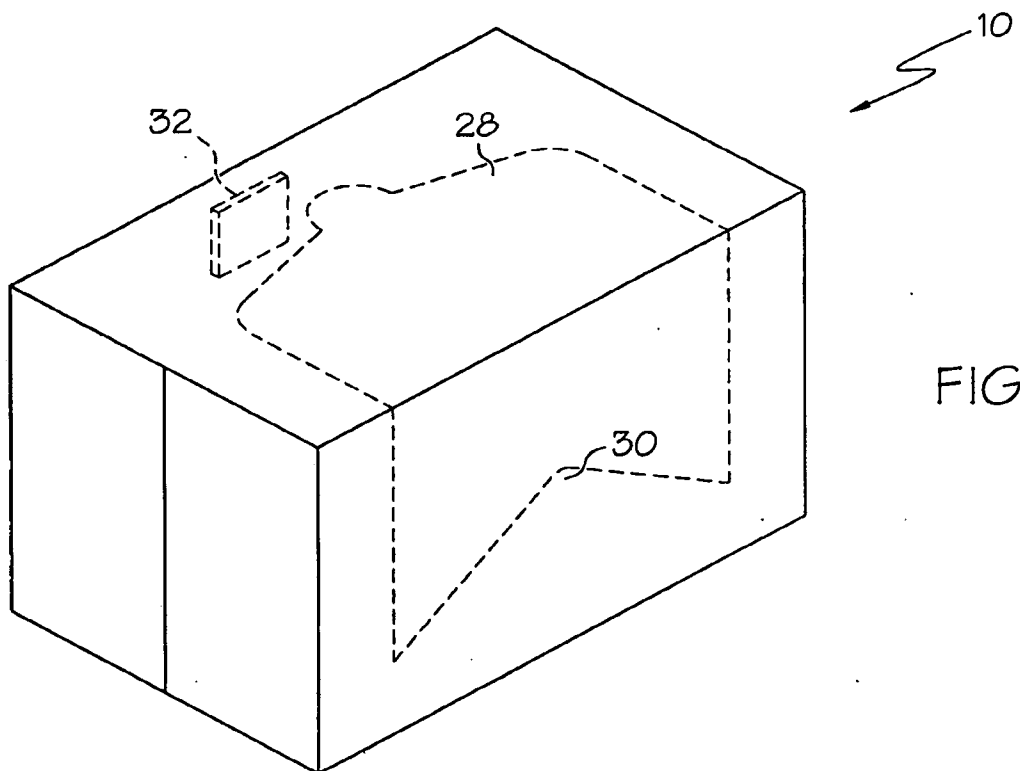
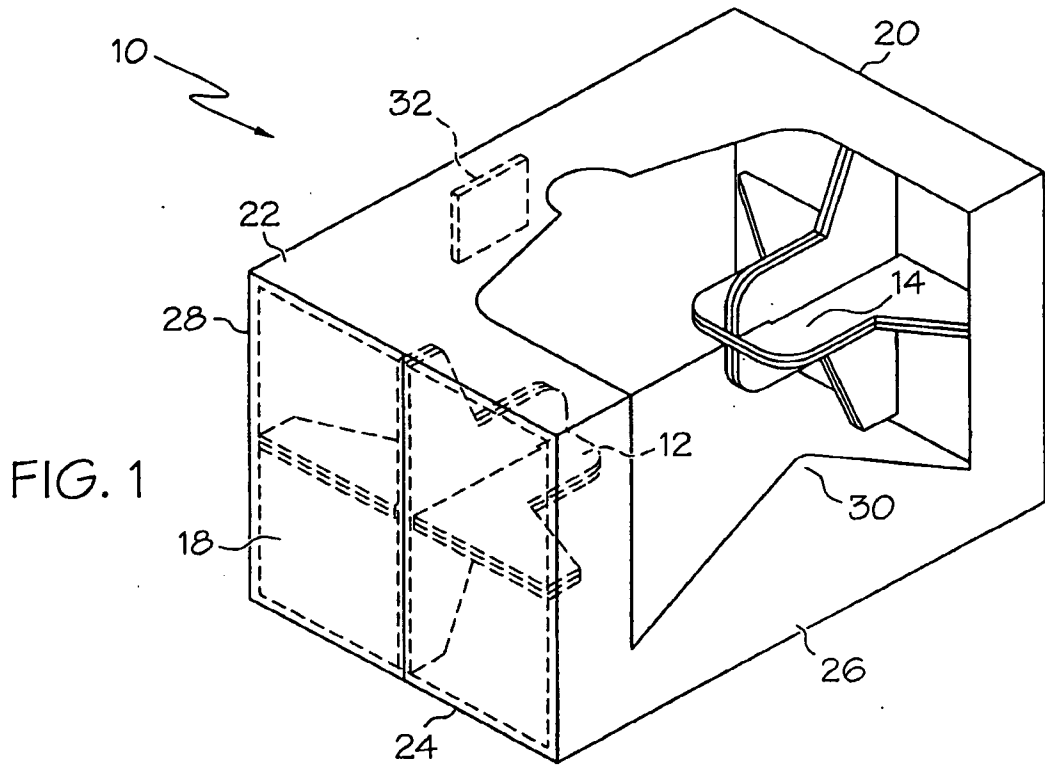
CLAIMS

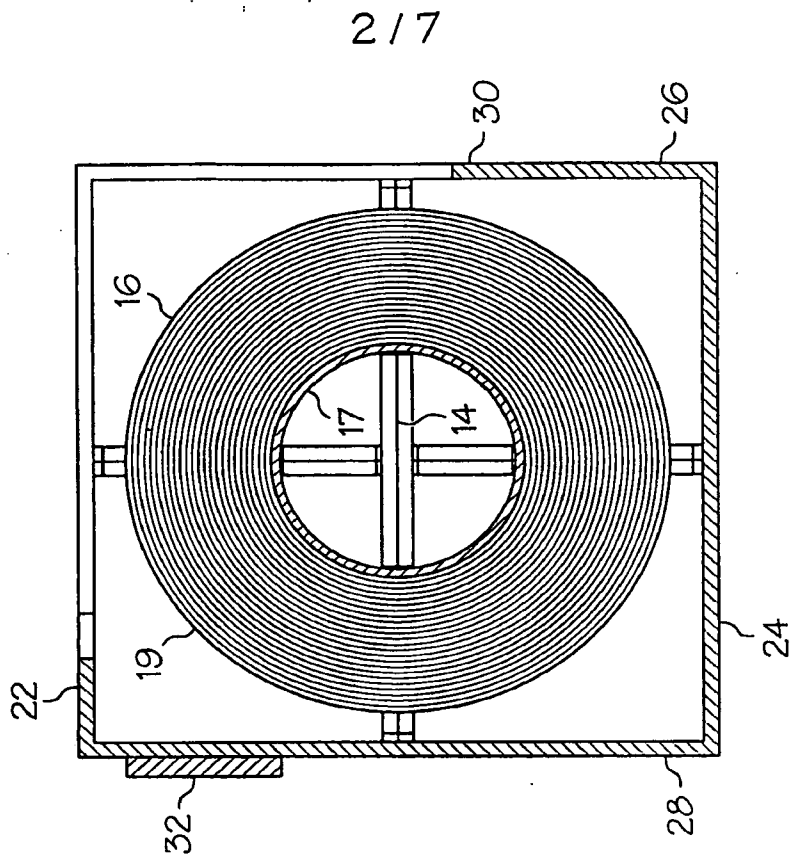
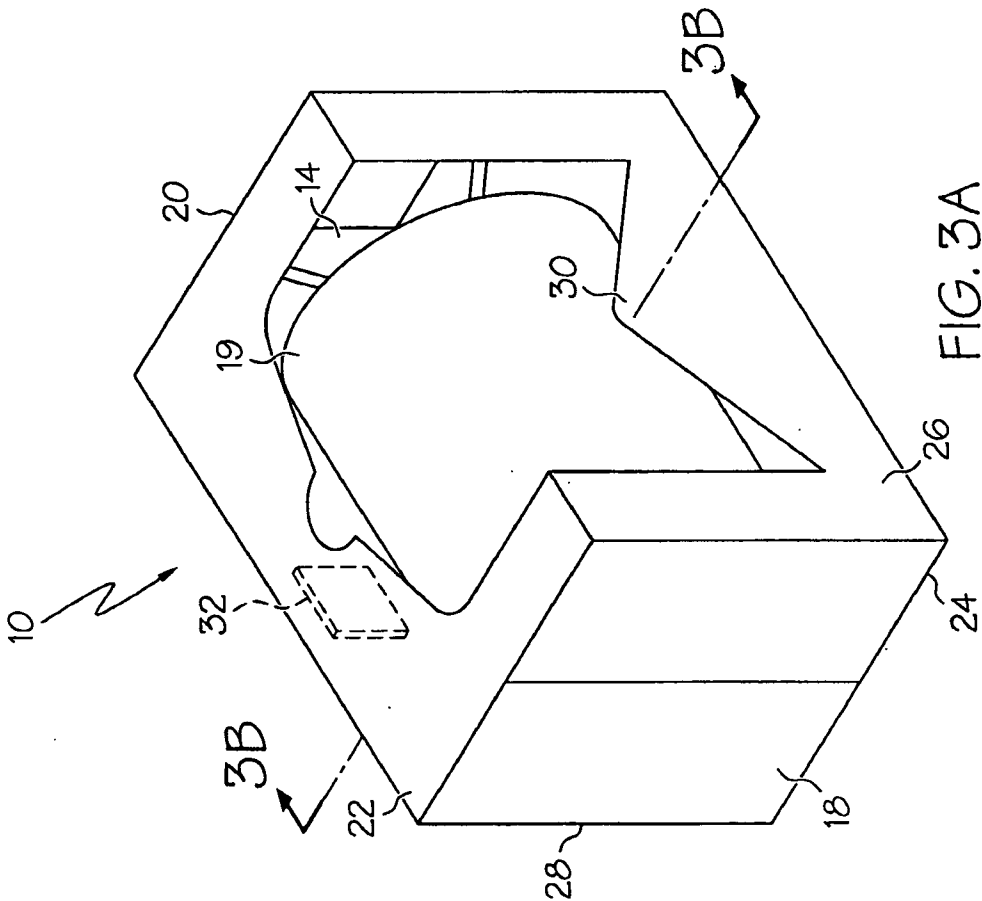
What is claimed is:

1. A material dispenser comprising:
 - (a) a bottom side;
 - (b) a back side configured to fold upwards from the bottom side and sitting perpendicular to the bottom side;
 - (c) a front side configured to fold upwards from the bottom side and sitting opposite the back side and perpendicular to the bottom side;
 - (d) a first side configured to fold upwards from the bottom side between the back side and the front side to create a first axle;
 - (e) a second side configured to fold upwards from the bottom side between the back side and the front side opposite the first side to create a second axle; and
 - (f) a top side configured to fold from the back side to create an opening.

2. A method of folding a material dispenser comprising:
 - folding a back side in a position perpendicular to a bottom side;
 - folding a first side in a position perpendicular to the bottom side and adjacent to the back side;
 - connecting the back side and the first side;
 - folding a front side in a position perpendicular to the bottom side, adjacent to the first side, and opposite the back side;
 - connecting the front side and the first side;
 - folding a second side in a position perpendicular to the bottom side, adjacent to the front side and back side, and opposite the first side;
 - connecting the second side to the front side and the back side;
 - folding a top side in a position perpendicular to the front side and back side, and opposite the bottom side; and
 - connecting the top side the back side.

3. A method of using a material dispenser with a vending machine comprising:
 - stocking a vending machine with a plurality of material dispensers; and
 - programming said vending machine to release a material dispenser upon the insertion of a predetermined amount of money by a customer into the vending machine.





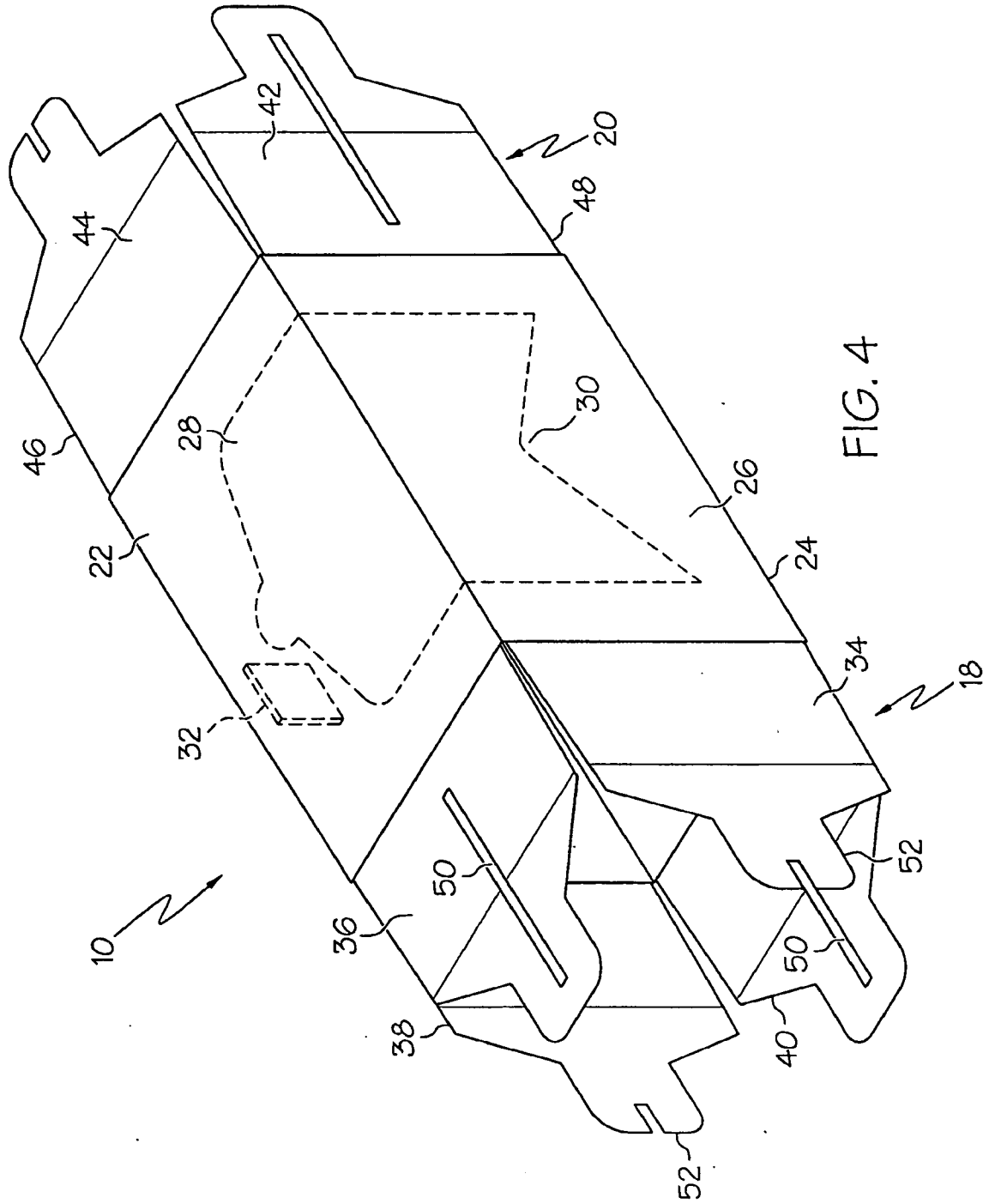


FIG. 4

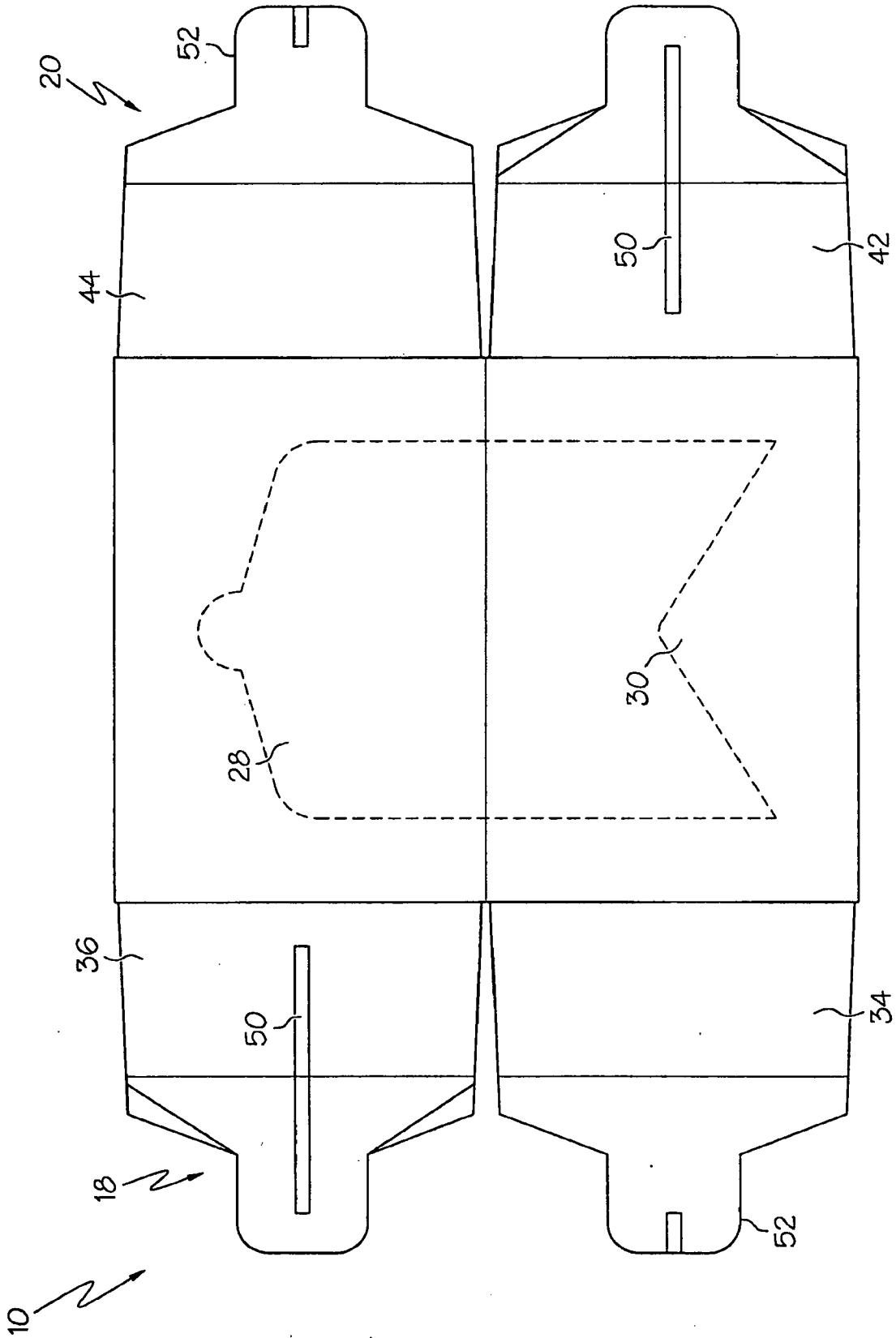


FIG. 5

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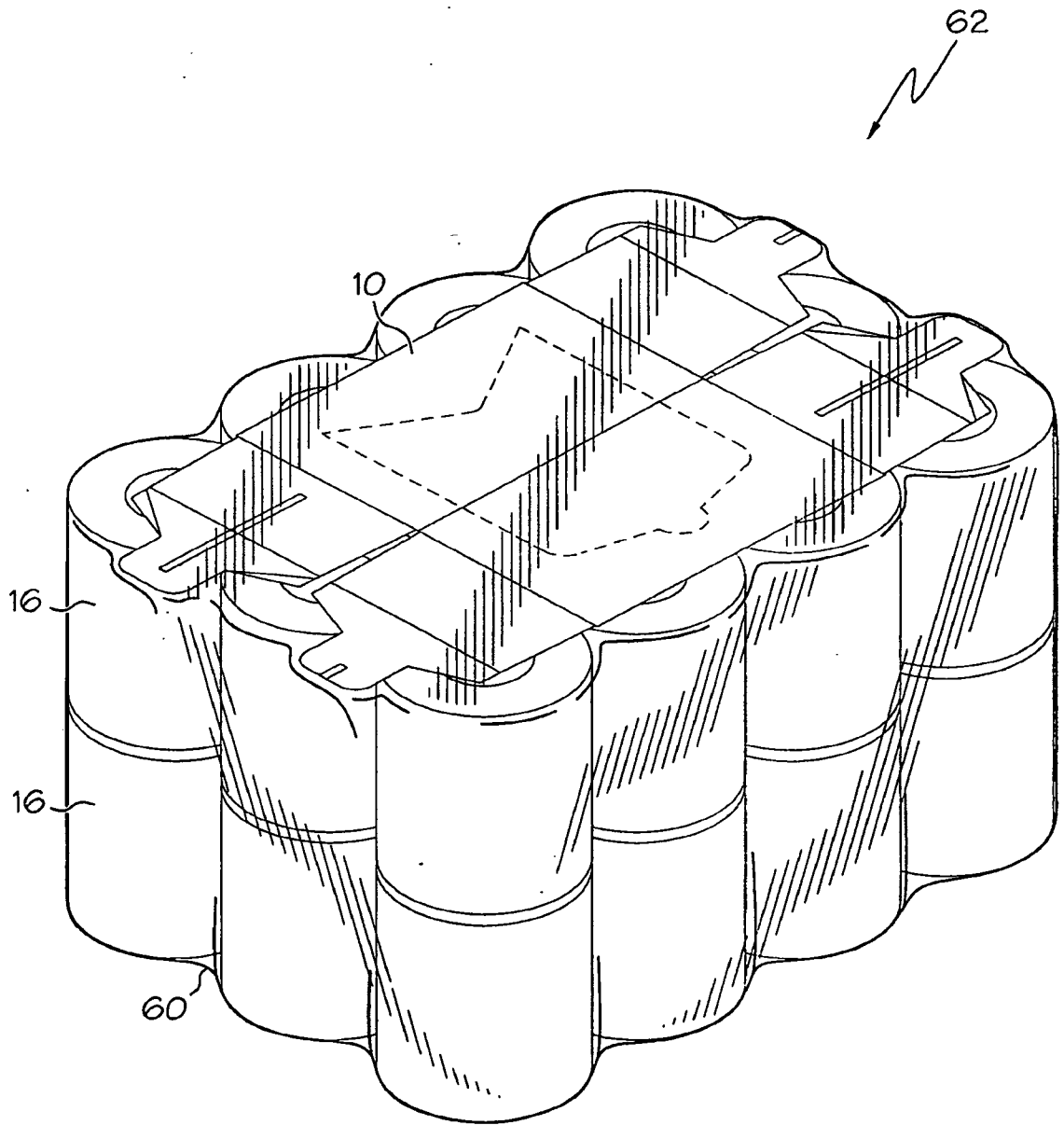


FIG. 6

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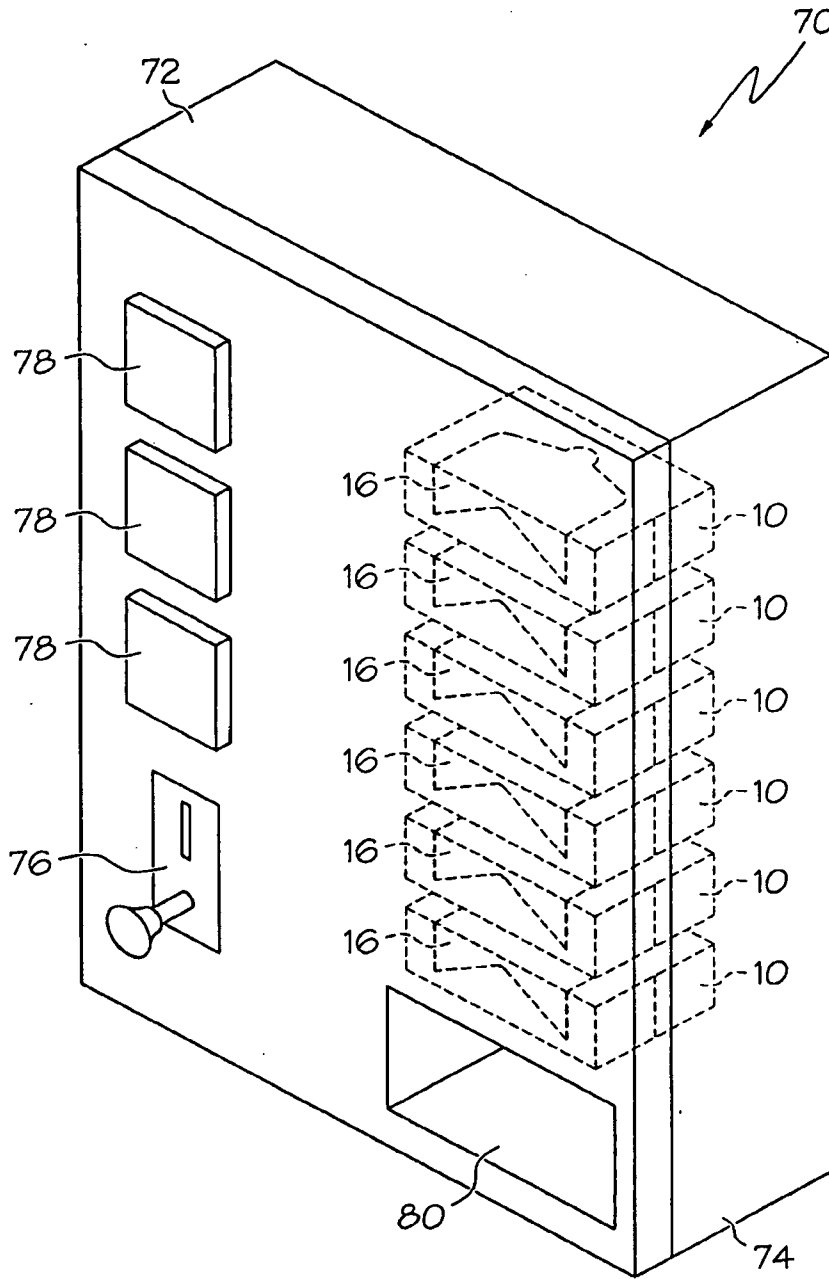


FIG. 7

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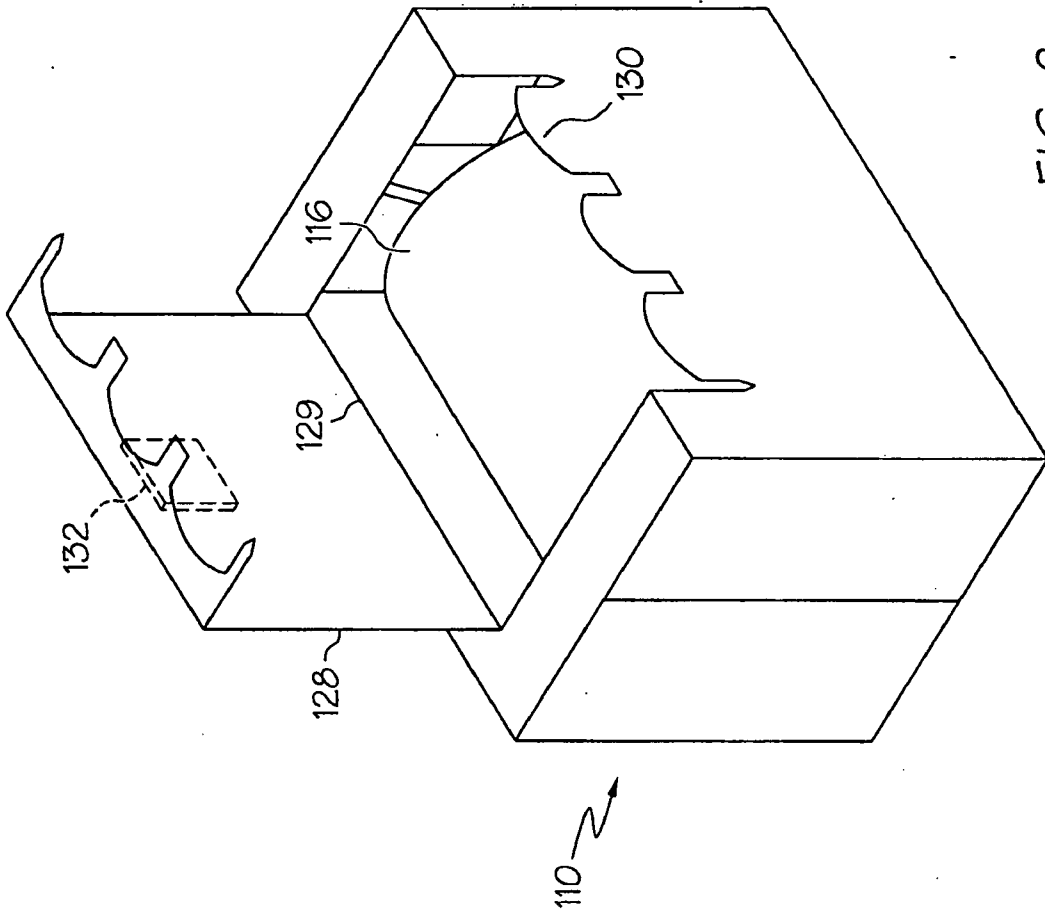


FIG. 8