Title: COMESTIBLE PRODUCT DISPENSER HAVING SINGLE HAND OPERATION AND METHOD OF USING SAME

Abstract: A first product dispenser is provided and includes a housing defining an opening and a cover hingedly connected to the housing, where the cover is frictionally engaged with the housing. The housing is so constructed and arranged to allow a user to apply pressure to the housing and cause the cover to disengage from the housing to enable a designated number of the comestible products to be dispensed from the housing.
SPECIFICATION

TITLE

COMESTIBLE PRODUCT DISPENSER HAVING SINGLE HAND OPERATION AND METHOD OF USING SAME

BACKGROUND

[0001] The present invention relates generally to packaging. More particularly, the present invention relates to packaging or dispensers for storing and dispensing comestible products.

[0002] The packaging for comestible products is very important to the look, marketing and storage of the product. Very often, in addition to text on the packaging, the packaging also attempts to visually convey a message about the type of product, the taste of the product or the purpose of the product. For example, packages for cinnamon or cherry tasting products are often red, grape tasting product packaging is often purple, etc. Once the consumer has identified a desired brand, the consumer can typically choose a product based solely on the color of the packaging.

[0003] In marketing the product, packaging can convey other information besides taste whereby the consumer can thereby associate the product with its effect by simply viewing the packaging.

[0004] There are also practical facets to packaging comestible products, namely, keeping the products from being damaged during shipping, keeping the products fresh, and in certain instances providing a reusable package. Some comestible products do not require that the packaging be robust, sturdy or reusable.

[0005] Other comestible products are packaged in pieces and may or may not be provided in a reusable package, as desired by the manufacturer. If it is felt that only a portion of the products may be consumed in one sitting, the manufacturer may wish to provide a container or box having a hingedly connected lid.
[0006] With certain comestible products, the consumer tears open a package and removes a product or piece of the product. One problem with this type of packaging is that the remaining product tends to fall out of the package after the consumer removes one or more pieces from the package. Another problem with these packages is that it becomes difficult, especially with a newly opened package, to remove a piece without ripping open a significant portion of the package.

[0007] Attempting to provide a package that holds the product even after the removal of one or more pieces of the product can make removing the comestible product more difficult. Tightly packing the product may aid in holding the product at the expense of gaining access to the product.

SUMMARY

[0008] The present invention provides an apparatus and method for dispensing products, such as products that are individually unpackaged. The products in one embodiment are comestible products. The teachings of the present invention, however, are not dependent upon the products being any particular type as long as the products can fit within the product dispenser described herein. The dispenser herein, regardless of what product is being dispensed, is configured to be highly functional and to have an aesthetic element.

[0009] It is believed that users of these products, and in particular younger users, find certain features desirable and undesirable in the packaging of products consumed on a daily basis, such as comestible products. Specifically, it is believed that consumers desire a compact shape for easy, everyday storage. It is an added benefit to the manufacturer if the shape is also innovative and/or sleek looking. Such a shape gains customer attention. Furthermore, it is desirable to have a dispenser that is intuitive and easy to determine how to use. Still further, consumers, especially young consumers, desire the dispenser to be quiet and to not require too much manipulation, so that the products can be dispensed in an easy and discrete manner.

[0010] Moreover, control over product dispensing is important. That is, consumers want to be able dispense only a desired amount of product. To that end,
especially in the case of individually unpackaged products, it is desirable that the products do not stick or clump together.

[0011] The present invention provides in an embodiment, a product dispenser including a housing defining an opening and a cover hingedly connected to the housing, where the cover is frictionally engaged with the housing. The housing is so constructed and arranged to allow a user to apply pressure to the housing and cause the cover to disengage from the housing to enable a designated number of the comestible products to be dispensed from the housing.

[0012] In an embodiment, the housing includes at least one fin to provide support to the housing.

[0013] In another embodiment, the product dispenser includes at least one hinge connected between the housing and the cover.

[0014] In an embodiment, the cover includes at least one tab.

[0015] In an embodiment, the cover includes at least one display area.

[0016] A second comestible product dispenser is provided where the dispenser includes a housing defining an interior to receive comestible product and a cover movably connected to the housing. A user squeezes at least a portion of the housing and compresses the air inside the housing until the pressure of the compressed air against the cover causes the cover to disengage from the housing to allow the comestible product to be dispensed from the housing.

[0017] In an embodiment, the product dispenser includes at least one hinge connected between the housing and the cover to allow the cover to pivot.

[0018] In an embodiment, the housing includes at least one fin to support the housing. In an embodiment, the cover includes at least one tab.

[0019] In an embodiment, the cover includes at least one display area.

[0020] In another embodiment, a method for dispensing comestible products is provided. The method includes at least partially squeezing a housing to compress the air within the housing, where the housing is sized to hold a plurality of comestible product, causing a cover connected to the housing to disengage from the housing when the force of the compressed air against the cover exceeds the force of the friction holding the cover onto the housing and dispensing at least one of the comestible product.
[0021] In an embodiment, the product dispensing method includes hingedly connecting the cover and the housing to allow the cover to pivot.

[0022] In an embodiment, the product dispensing method includes connecting at least one fin inside of the housing.

[0023] In an embodiment, the product dispensing method includes providing at least one display area on the cover.

[0024] It is therefore an advantage of the present invention to provide a product dispenser that allows one hand operation to dispense comestible product.

[0025] It is another advantage of the present invention to provide a product dispenser for dispensing individually unwrapped products.

[0026] It is a further advantage of the present invention to provide a product dispenser that is compact and easily stored.

[0027] Moreover, it is an advantage of the present invention to provide a product dispenser that is quiet both when being transported and when dispensing comestible product.

[0028] Still further, it is an advantage of the present invention to provide a product dispenser that is controllable to dispense only a desired amount of product.

[0029] Yet further, it is an advantage of the present invention to provide a product dispenser that dispenses products via gravity alone without agitation.

[0030] Additional features and advantages of the present invention are described in, and will be apparent from, the following Detailed Description and the figures.

**BRIEF DESCRIPTION OF THE FIGURES**

[0031] Fig. 1 illustrates a perspective view of one embodiment of the product dispenser of the present invention, where the cover is in the closed position.

[0032] Fig. 2 illustrates a perspective view of the embodiment of the product dispenser of Fig. 1, where a user manipulates the housing of the product dispenser to cause the cover to move to the open position.

[0033] Fig. 3 illustrates a side cross section view of the embodiment of the product dispenser of Fig. 1, where the cover is in the closed position.
[0034] Fig. 4 illustrates a top view of the embodiment of the product dispenser of Fig. 1, where the cover is in the open position.

DETAILED DESCRIPTION

The present invention provides a comestible product package and dispenser. In the embodiment described herein, the comestible products are illustrated as tablets of products, such as generally oval-shaped pieces of comestible product. The products to be dispensed from the dispensers discussed herein can have any suitable types of shapes, such as a block shape, a flat stick shape, a pillow-shape, a round shape, a rectangular shape, a triangular shape and any combination of same.

[0035] The embodiment described below is generally made of a plastic material. The present invention expressly includes the embodiment being made of any material such as any suitable paper, cardboard, paperboard material, foil, plastic, composite or other suitable material. Furthermore, while the package and dispenser discussed herein is sized to be transported readily by a person (for example, in a person's pocket, purse, backpack, or the like), the embodiment is expressly not limited to any particular size and shape.

[0036] Referring now to the drawings, and in particular to Figs. 1 to 4, one embodiment of a comestible product package or dispenser is illustrated as dispenser 100. In one embodiment, the dispenser 100 is a refillable dispenser. In another embodiment, the dispenser 100 is non-refillable and is discarded after dispensing one or more pieces of product. The product dispenser 100 includes a first member, body or housing 102 and a second member, lid or cover 104. The cover 104 is movably or hingedly connected to the housing 102 using a connector, hinge portion or hinge 108. The hinge 108 allows the cover 104 to move or pivot and cover or close the opening defined by the housing. As described below, the cover 104 is secured to the housing 102 in such a way that the cover can be "popped" open or moved to the open position when a user at least partially squeezes the housing 102 of the product dispenser. This allows a user to manipulate the product dispenser using one hand to dispense one or more of the products in the dispenser.
[0037] As illustrated in Figs. 1 to 4, the housing 102 defines a receptacle, interior or compartment to hold the product 106. In the illustrated embodiment, the housing 102 is integrally formed as one piece or one part. In another embodiment, the housing 102 includes one or more walls which are separately manufactured and connected together to form the housing. In the illustrated embodiment, the housing 102 has a generally oval or oblong cylindrical shape. It should be appreciated that the housing 102 may be any suitable size or shape. The housing defines an opening which enables comestible product such as product 101 to be dispensed or otherwise removed from the dispenser 100. The housing is manufactured with a pliable or flexible material which enables a user to apply pressure to the outside of the housing to compact or squeeze the housing inward.

[0038] In an embodiment, the housing 102 includes a plurality of planar surfaces or fins 110 which are integrally formed with the housing. The fins 110 add rigidity to the base of the housing and also help to prevent damage to the housing and product in the housing by enabling the housing to resist crushing or compacting of the housing. In the illustrated embodiment, the housing 102 includes four fins 110. It should be appreciated that any suitable number of fins may be formed with the housing.

[0039] The cover member or cover 104 is movably or hingedly connected to the housing 102 by hinge portion or hinge 108. The hinge 108 is integrally formed with the housing 102 and cover 104. In another embodiment, the hinge is a separate component which is connected to the housing 102 and the cover 104. It should be appreciated that any suitable hinge or hinges such as a live hinge could be used to connect the cover and housing. The hinge 108 enables the cover 104 to pivot between an open position as shown in Fig. 2 and a closed position as shown in Fig. 1.

[0040] The cover 104 is sized and shaped to fit within the opening defined by the housing 102 to frictionally engage the housing. The cover 104 includes a flange or tab 112 extending from the cover. A user grabs or holds the tab 112 to places force against the tab to hold and move the cover 104. The tab 112 may be any suitable size and shape.
[0042] The cover 104 also includes a display area 114 which is generally in the center of the top surface of the cover. The display area 114 may be any suitable size and shape. A manufacturer can print or write product information, product name, or any other suitable information on this surface. It should also be appreciated that this information may also be printed or written on the outside surface of the housing 102.

[0043] In an embodiment, at least a portion of the housing 102 includes a transparent material that enables a consumer or user to see into or through the product dispenser. It should be appreciated that the material may be substantially transparent, transparent, translucent, substantially translucent, or any combination of these materials or other suitable materials. In another embodiment, at least a portion of the housing 102 includes an opaque or substantially opaque material. It should be appreciated that the housing 102 may be made using any suitable material or combination of materials.

[0044] In operation, a user such as a consumer, holds the housing 102 of the product dispenser in one hand such as by grabbing or grasping the housing in their hand. The user then applies pressure to the exterior surface of the housing and at least partially squeezes the housing. The squeezing action causes the cover 104 to disengage with the housing and pop open to the open position. At the instant the cover 104 disengages with the housing 102, a popping noise is made to provide positive confirmation to the user that the product dispenser has been opened. The popping noise or sound is caused by the pressure of the air within the housing against the cover as the user squeezes the housing. The force or pressure of the compressed air causes the cover to move or pop to the open position. The user then dispenses one or more pieces or parts of the product 106 stored in the housing.

[0045] It should be understood that various changes and modifications to the presently preferred embodiments described herein will be apparent to those skilled in the art. Such changes and modifications can be made without departing from the spirit and scope of the present invention and without diminishing its intended advantages. It is therefore intended that such changes and modifications be covered by the appended claims.
CLAIMS

The invention is claimed as follows:

1. A comestible product dispenser comprising:
   a housing defining an opening; and
   a cover hingedly connected to the housing, said cover being frictionally
   engaged with the housing,
   wherein the housing is so constructed and arranged to allow a user to apply
   pressure to the housing and cause the cover to disengage from the housing to enable a
designated number of the comestible products to be dispensed from the housing.

2. The comestible product dispenser of claim 1, wherein the housing
   includes at least one fin to support the housing.

3. The comestible product dispenser of claim 1, which includes at least
   one hinge connected between the housing and the cover.

4. The comestible product dispenser of claim 1, wherein the cover
   includes at least one tab.

5. The comestible product dispenser of claim 1, wherein the cover
   includes at least one display area.

6. A comestible product dispenser comprising:
   a housing defining an interior to receive comestible product; and
   a cover movably connected to the housing, wherein a user squeezes at least a
   portion of the housing and compresses the air inside the housing until the pressure of
   the compressed air against the cover causes the cover to disengage from the housing to
   allow the comestible product to be dispensed from the housing.

7. The comestible product dispenser of claim 6, which includes at least
   one hinge connected between the housing and the cover to allow the cover to pivot.
8. The comestible product dispenser of claim 6, wherein the housing includes at least one fin to support the housing.

9. The comestible product dispenser of claim 6, wherein the cover includes at least one tab.

10. The comestible product dispenser of claim 6, wherein the cover includes at least one display area.

11. A method for dispensing comestible products comprising:

   at least partially squeezing a housing to compress the air within the housing, wherein said housing is sized to hold a plurality of comestible product;

   causing a cover connected to the housing to disengage from the housing when the force of the compressed air against the cover exceeds the force of the friction holding the cover to the housing; and

   dispensing at least one of the comestible products.

12. The method of claim 11, which includes hingedly connecting the cover and the housing to allow the cover to pivot.

13. The method of claim 11, which includes connecting at least one fin inside of the housing.

14. The method of claim 11, which includes providing at least one display area on the cover.
**INTERNATIONAL SEARCH REPORT**

**PCT/US2006/017945**

**A. CLASSIFICATION OF SUBJECT MATTER**

INV. B65D B3/04

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

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

B65D A61J

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

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

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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Further documents are listed in the continuation of Box C.

See patent family annex.

**Date of the actual completion of the international search**

7 September 2006

**Date of mailing of the international search report**

19/09/2006

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Appelt, Lothar
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