1) Publication number:

0 117 673 A2

12

EUROPEAN PATENT APPLICATION

2 Application number: 84300865.7

(f) Int. Cl.3: **B 65 D 43/10**, B 65 D 25/22

22) Date of filing: 10.02.84

30 Priority: 14.02.83 US 466241

(1) Applicant: OSCAR MAYER FOODS CORPORATION, 910, Mayer Avenue, Madison Wisconsin 53707 (US)

43 Date of publication of application: 05.09.84 Bulletin 84/36

inventor: Goller, Robert Louis, 5602, Tolman Terrace, Madison Wisconsin 53711 (US)

Ø Designated Contracting States: AT BE CH DE FR GB IT LI LU NL SE Representative: Baillie, Iain Cameron et al, c/o Ladas & Parry Isartorplatz 5, D-8000 München 2 (DE)

A food package with reclosable snap lock.

(5) This invention pertains to a food package having a base and a transparent cover cooperating with the base to form a cavity. Separating the base from the cover provides an opening for inserting and removing foodstuff from the cavity. A sealing means is provided for hermetically sealing the cavity and a reclosable means encompassing the hermetical sealing is provided for snap locking at least 35% of the opening between the base and the transparent cover.

lase 3052

05

10

15

20

25

DESCRIPTION A FOOD PACKAGE WITH RECLOSABLE SNAP LOCK

Field of the Invention

This invention pertains to a food package having a base and a transparent cover. The food package has a sealing means for hermetically sealing the base to the transparent cover and a reclosable means encompassing the sealing means for snap locking at least 35% of the opening between the base and the transparent cover.

Prior Art

Food packages are employed for packing a variety of foodstuffs such as cheese, meat and the like. The food package in order to be desirable must serve a multitude of functions. One function is to have a transparent package so that the foodstuff is readily apparent and visible to the consumer who can select the most desirable and pleasing foodstuff to them. The package must also protect the foodstuff contained therein. This protection encompasses a suitably durable package to withstand the minor jostling of food products as they are distributed and the food package must be hermetically sealed so that contamination of the food product is decreased and air and water are prevented from contacting the foodstuff while it is stored thus preserving the foodstuff.

It is also desirable once the food package has been opened by breaking the hermetic seal that the package has the capability of being reclosed in the event the consumer desires to only use a portion of the foodstuff contained therein and desires to store the remaining foodstuff.

Summary of the Invention

This invention pertains to a food package 10 having a base and a transparent cover cooperating with the base to form a cavity. Separating the base from the cover provides an opening for inserting and removing foodstuff from the cavity. A sealing means is provided for hermetically sealing the cavity and 15 a reclosable means encompassing the hermetical sealing is provided for snap locking at least 35% of the opening between the base and the transparent It has been found that when the above described food package is used the consumer not only has a 20 safe sealed product which is visible to the consumer at purchase but also has a package which is capable of reclosing in the event that portions of the foodstuff are used at various times.

25 Brief Descriptions of the Drawings

Figure 1 is a perspective view of a food package. Figure 2 is a perspective view of a food package. Figure 3 is a perspective view of a food package. Figures 4 and 5 are schematic illustrations of reclosable means illustrating a cover engaging means

Figure 6 is a perspective view of a food package. Figure 7 is a top view of a food package. Figure 8 is a side view of a food package.

35

30

and

05

Detailed Description of the Invention

Referring to Figures 1-3 a food package 10 is shown. Food package 10 comprises a base 12. '12 is comprised of a semi-rigid material and may be 05 transparent, semi-transparent or opaque. contains a cavity 16. Separating base 12 from 14 provides an opening 18 for inserting and removing foodstuff from cavity 16. Base 12 and cover 14 may be formed in any known manner from semi-rigid material 10 such as plastics or aluminum and suitable papers (if not transparent). Examples of suitable plastic materials are a polyvinylchloride, cellulose acetate, nylon, polycarbonate, high impact polystyrene, high impact polypropylene, high impact polyethylene, 15 polyester, acrylonitrile copolymers, coextruded plastics, etc. These plastic materials may be coated with saran or other coating if desired. Copolymers of these various plastics may be used in order to obtain desired properties. The semi-rigid 20 plastics are formed prior to receiving product. foodstuff packaged in cavity 16 may be small pieces or bits of foodstuff such as bacon bits which suitably would be enclosed in the package or may be slices or chunks of cheese or other meat foodstuff. Base 12 25 may contain a header 20 which may be employed for imprinting of messages, trade names, distinctive colors and the like. Header 20 may also contain a hanging means such as hole 22.

A sealing means for hermetically sealing foodstuff within the package is employed. As shown in Figure 1, a thin transparent polymeric material film 24 is hermetically sealed to base 12 at pedestal rim 26. The sealing is by conventional means such as adhesives, heat, or radio frequency generation of heat. In another emodiment shown in Figure 2 transparent film

30

35

24 is hermetically sealed to a top surface 28 of base without employing a pedestal. In an additional embodiment as shown in Figure 3 cover 14 is hermetically sealed directly to base 12 at pedestal 26 without using a thin transparent film. In all of these sealing means the hermetical seal is readily seen and a broken seal is easily determined. While a broken seal is easily detected the seal can easily be removed by peeling the thin transparent film or lifting the cover as the case may be. Once the cover is lifted and the seal broken the contents are easily removed without contacting residual adhesive if used.

Figure 6 illustrates the food package of Figure 1 in the closed position. Figure 7 is a top view of the closed food package shown in Figure 6 and Figure 8 is a side view of the closed food package also shown in Figure 6.

According to this invention a reclosable means 20 for snap locking at least 35% and preferably 45% of opening between base 12 and cover 14 is employed. The reclosable means encompasses the sealing means. Referring to Figures 4 and 5 the reclosable means further comprises a cover engaging means 40 and a 25 base engaging means 42. Cover engaging means 40 and base engaging means 42 are constructed so that the two fit in locking relationship to one another when base 12 is closed over cover 14. Furthermore, as cover 14 is separated from base 12 to open the 30 package the engaging means are constructed so that one will expand the other as the cover separated providing an unlocking effect of the engaging means permitting the opening of the cover. The cover, as it closes, also causes the engaging means to separate 35 thus allowing the engaging means to re-engage and

relock. An emboidment of this is shown in Figure 4 where each engaging means has a slanted wall 46. Suitably the slanted wall is slanted at an angle of about 86°. In addition, at least one of the slanted 05 walls has a slant surface 48 to engage the other slanted wall upon closing and thus causes the expansion of the engaging means permitting locking and unlocking. Preferably slant surface 48 is part of the base engaging means. Further engaging means can be the 10 use of U-shaped indentations referred to as lugs or beads in cover 14 and base 12 as shown in Figure 5. At least 35% and preferably 45% of the opeing 18 between cover 14 and 12 must contain a reclosable means. Suitably at least one engaging means completely 15 encompasses the opening and the other one either completely or partially encompasses the opening. If one engaging means only partially encompasses the opening, preferably it is divided into at least 3 and preferably 9 sections. This provides uniform 20 distribution of a reclosable means.

The package illustrated in the figures is of rectangular shape but other package shapes are contemplated within the scope of this invention such as round, oval, square and fanciful package shapes.

25

30

CLAIMS :

5

20

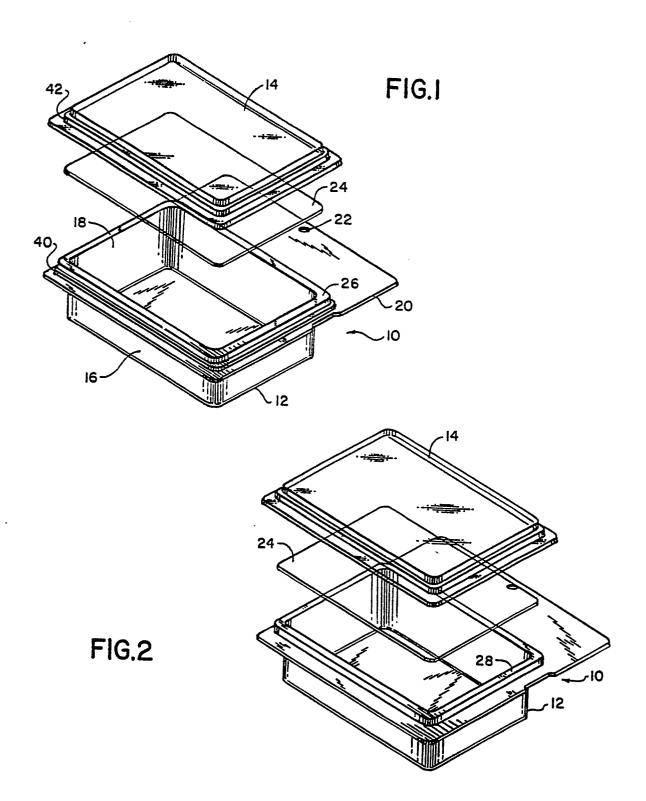
30

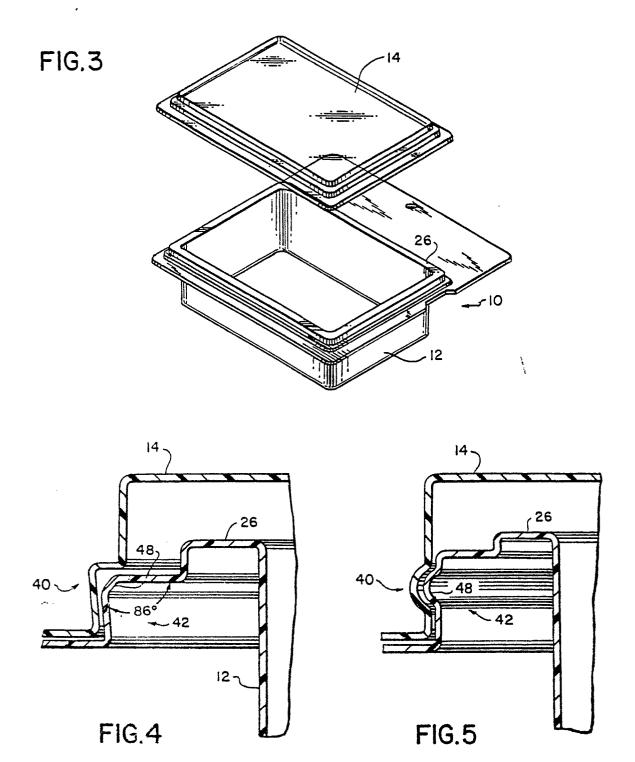
- A food package comprising:
 - (a) a base 12 having a cavity 16 suitable for holding foodstuff;
 - (b) a transparent cover 14 cooperating with the base to form a cavity closure so that separating the base from the transparent cover provides an opening 18 for installing and removing foodstuff from the cavity;
 - (c) a sealing means 24 for hermetically sealing the base to the transparent cover; and
- 10 (d) a reclosable means 40, 42 encompassing the sealing means and snap locking at least 35% of the opening between the base and the transparent cover.
- A food package according to claim 1 wherein the sealing
 means for this further comprises a thin polymeric film 24 sealed to a pedestal positioned on the base.
 - 3. A food package according to claim 2 wherein the polymeric film is heat sealed to the pedestal.

4. A food package according to claim 2 wherein the polymeric film 24 is adhesive sealed to the pedestal.

- 5. A food package according to any one of claims 1 to 4 wherein 25 the reclosable means 40, 42 snap locks at least 45% of the opening between the base and the transparent cover.
 - 6. A food package according to any one of claims 1 to 5 wherein the reclosable means comprises cover engaging means 40 and base engaging means 42 comprise slanted walls 46 and at least one engaging means 48 further comprises an expansion means.
 - 7. A food package according to claim 6 wherein the walls are slanted at an angle of about 86°.

- 8. A food package according to claim 7 wherein the expansion means 48 comprises a slant surface.
- 9. A food packaging according to claim 8 wherein the slant surface is part of the base engaging means.
- A food package according to any one of claims 1 to 9
 wherein the base material and cover material are each respectively
 selected from aluminum, polyvinylchloride, cellulose acetate,
 nylon, polycarbonate, high impact polystyrene, high impact polypropylene, high impact polyethylene, polyester, acrylonitrile
 copolymers and coextruded plastics.
- 11. A food package according to claim 10 wherein the base material or cover material is each coated with saran.
 - 12. A food package according to any one of claims 1 to 11 wherein the base further comprises a header 20.
- 20 13. A food package according to claim 12 wherein the header further comprises a hanging means 22.





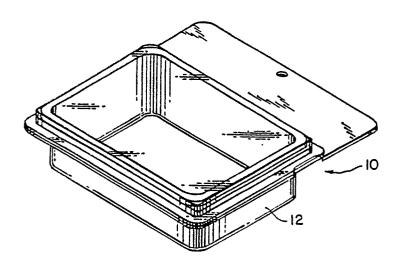


FIG.6

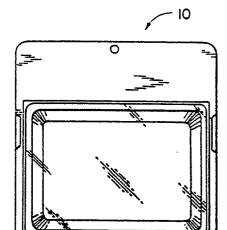


FIG.7

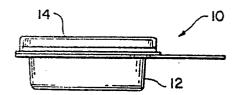


FIG.8