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2,614,727

CONTAINER AND CLOSURE THEREFOR

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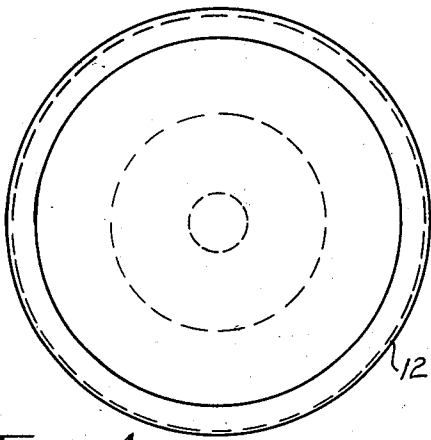


FIG 4

FIG 5

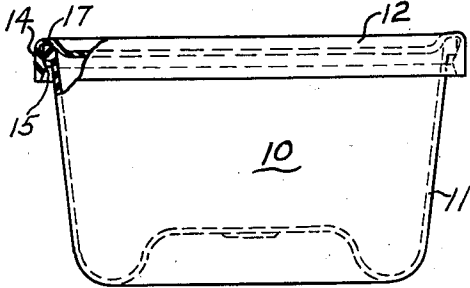
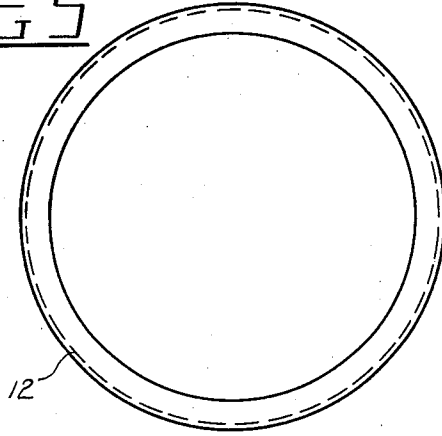


FIG 1

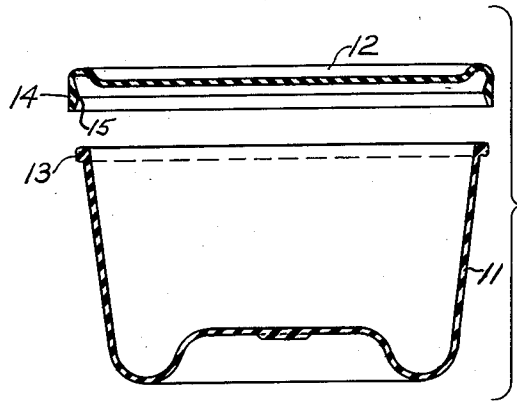


FIG 2

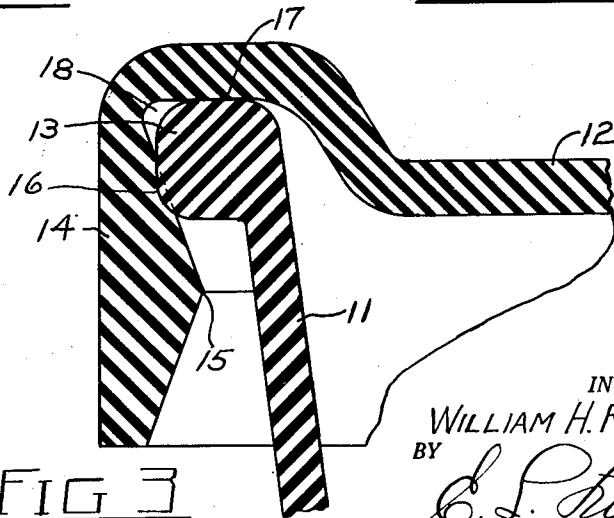


FIG 3

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# UNITED STATES PATENT OFFICE

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## CONTAINER AND CLOSURE THEREFOR

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1 Claim. (Cl. 220—60)

1

This invention deals with containers and closure therefor, and more particularly refers to a container provided with a closure which is characterized by the tightness of the seal which it effects.

According to the present invention a container is provided with a closure having a sealing lip so arranged that when the closure is placed over the mouth of the container a substantially hermetic seal is effected at two separate and distinct points with an air space therebetween.

Containers and closures according to the present invention are particularly advantageous for the packaging of food products and the like which might spoil of prolonged exposure to the atmosphere, or which might lose flavor and aroma as a result of such exposure.

In the packaging of cheese and similar dairy products, for example, it is highly desirable to permit retention of the delicate flavor and aroma which characterizes such products, and at the same time it is desirable to maintain the contents of such packages free from atmospheric contamination. For instance, cheese spreads and the like, when placed in a refrigerator or food locker in a container not hermetically sealed, will pick up food odors from its surroundings. For example, as those skilled in the art well know, cheese and other dairy products and other fatty materials such as lard, oleomargarine and the like, will absorb the odor of cabbage, asparagus and like products of the nature usually stored either cooked or raw in refrigerators and food lockers; therefore, it is desirable to provide a container and closure therefor so arranged that the cover may be replaced repeatedly on the container, so that a hermetic seal is provided at all times. This permits not only the retention of the desirable flavor and aroma of the product in the container, but also prevents any contamination resulting from contact with air carrying extraneous odors.

Those skilled in the art will readily perceive the inherent characteristics and advantages of the present invention, and the objects thereof will become evident from the reading of this disclosure in connection with the annexed drawing.

The nature of the present invention and the manner in which the invention may be practiced advantageously in a typical embodiment thereof, will be fully ascertained and comprehended from the following description taken in connection with the annexed drawing, wherein:

Fig. 1 is an elevational view, partly in cross-section, of one form of the present invention;

2

Fig. 2 is an elevational cross-sectional view of one form of the invention showing the closure or cover portion separate from the body of container portion;

Fig. 3 is an enlarged view of the portion shown in cross-section in Fig. 1;

Fig. 4 is a plan view of the showing of Fig. 1; and

Fig. 5 is a plan view of the cover itself.

Referring now to the drawing in detail, 10 is a container consisting of a body portion 11 and a cover portion 12. The body portion 11 is provided with a lip 13 in the form of an outwardly extending bead. The cover portion is provided with a downwardly extending skirt 14 having along its inner periphery a protruding ring 15 which, when the cover 12 is placed over the body 11 to form a closure, will pass over the bead 13.

As will be noted from Fig. 2, the diameter of the ring 15 is less than the diameter of the bead 13; therefore, the skirt 14 on the cover 12 must extend or expand outwardly as the cover 12 is placed over the body 11 in order to permit placement of the cover 12 over the mouth of the body 11. This requires, of course, that the cover 12, or at least the skirt 14 forming part of the cover 12, be of an elastic or resilient material, so that it may extend or stretch to the extent necessary to permit engagement.

The manner in which the engagement between the cover 12 and the body 11 is effected is best illustrated in Fig. 3. It will be noted that the skirt 14 fits tightly against the bead 13 and is slightly depressed by it at the point 16. It will be noted also that a tight engagement is effected between the top of the bead 13 and the underside of the cover at 17. Therefore, a tight seal is effected both at 16 and at 17, and an air space is left at 18 which aids in maintaining the hermetic seal which characterizes the present invention.

In a present embodiment, which is here discussed merely as a typical example and not as a limitation on this invention, the cover 12 is made of a soft plastic material such as polyethylene, while the body 11 is made of a relatively harder plastic material such as polystyrene. Of course, other materials having similar relative characteristics may be employed advantageously in the practice of the present invention, and they are intended to be comprehended within the scope thereof. For example, if so desired, the body 11 may be made of glass, or of any other suitable material such as metal or alloys, or of plastic material other than polystyrene. In like man-

ner, the cover 12 may be made of material other than polyethylene. Obviously, the materials herein disclosed as used in a present embodiment may be reversed in use; that is, polyethylene may be used for the body 11, and polystyrene for the cover 12. In such event, of course, the bead 13, being more flexible or elastic than the skirt 14, would be compressed on engagement of the cover 12 with the body 11, but the effective double seal and intermediate air space which characterizes the present invention would remain. In other words, any combination of a cover 12 and a body 11 one of which is made of a material more elastic or resilient than the other, is contemplated within the scope of this invention. Such combinations will become evident to those skilled in the art on perusal of this disclosure and the annexed drawing.

It will be understood that while there have been described herein and illustrated in the drawing certain specific embodiments of the present invention, it is not intended thereby to have this invention limited or circumscribed by the particular details of construction, arrangement of parts, materials and methods herein disclosed or illustrated in the drawing, in view of the fact that this invention is susceptible to modification according to individual preference and conditions without departing from the spirit of this disclosure and the scope of the appended claim.

I claim:

A container comprising a cover portion and a body portion, said cover portion and body portion being of materials at least one of which is relatively flexible and stretchable, said body portion being provided with a beaded edge along the mouth thereof having a top surface, an outer surface and an overhanging under surface with said surfaces being joined by rounded corners, said cover portion being spaced from the inner periphery of said beaded portion and formed integrally with a downwardly extending skirt of solid cross section provided on its inner face with

contoured generally conical surfaces tapering inwardly from both the upper and lower portions of said skirt and meeting substantially in a ring of minimum diameter less than the diameter of the bead, said ring of minimum diameter when said cover is in operative position on said container being spaced below the lower surface of the bead and from the body of the container, the upper tapering inner wall surface of said skirt forming an acute angle with the outer surface of said bead such that said tapering surface contacts a limited area at the lower outside surface of the bead in sealing engagement and produces a downward force component to draw said cover into a second sealing engagement with the top surface of the bead in spaced relation with the first said sealing engagement, whereby a dead air space is formed between said cover and said beaded edge spaced from the two points of sealing engagement.

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