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(54) Lid for cup-shaped containers

(57) A cup-shaped container (1) for ice-cream having a cover (2) fitting on the open end of the container. The container (1) and cover (2) being provided with co-operating sealing and locking devices. The sealing and locking devices of the cover (2) consist of a cylindrical

flap (9) having a ring-shaped lip (12), which, when the cover (2) is closed, the cylindrical flap (9) is inserted into the container's ring-shaped recess (7). The cover being retained in position by the lip (12) and three radial fingers (10).

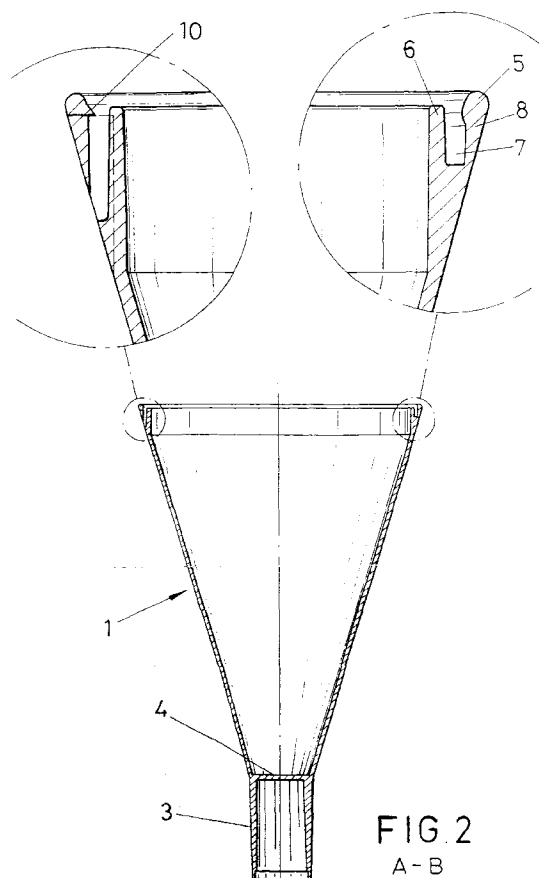


FIG. 2
A - B

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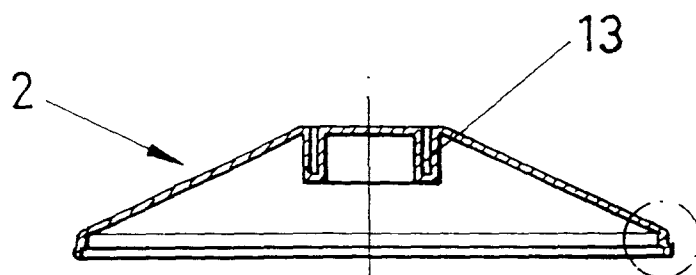
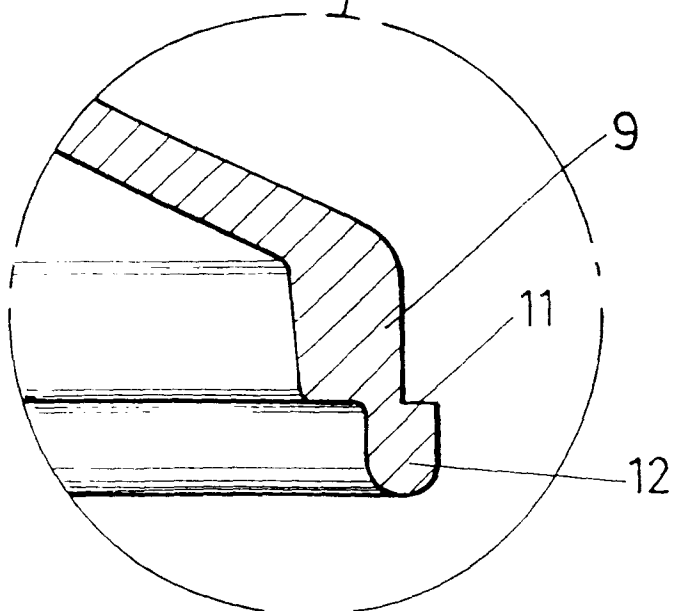


FIG. 4



Description

OBJECT OF THE INVENTION

As expressed in the title of this specification, the present invention refers to an airtight seal applicable to ice cream containers, although it could also be used for other types of industries. It has been invented for the purpose of considerably increasing the quality of conservation of ice cream, simplifying consumption thereof and notably improving hygiene.

DESCRIPTION OF THE INVENTION

In broad outline, the airtight seal applicable to ice cream containers, that constitutes the object of the invention, is formed like other ones of its type of two parts, one of which is comprised of the container of the product, while the other ones acts as the cover.

In a specific manufactured embodiment, the container has a cup shape without a base, while the cover has a truncated cone shape with a slight slope and a ring-shaped recess in axial position so that it can be situated as the base of the cup upon the mouth of the tube-shaped stem of the same inserting in said ring-shaped recess by advantageously entering under pressure.

The mouth of this container includes a cylindrical wall that originates from an inside point close to the edge, ending in a plane anterior to the same. The edge of the container is rounded and in three points that are uniformly distributed on said mouth, there is a small axial groove arranged as a continuation of the ring-shaped recess defined between the cylindrical wall and the wall itself of the container, there being in said points unaligned 120°, respective radial fingers that originate from the free edge of the outside wall of the cup, without reaching the cylindrical wall.

The above-mentioned fingers are capable of retaining the ring-shaped lip formed on the edge of the cover.

This airtight seal considerably increases the quality of preservation of the ice cream, since it inserts the cover upon exerting a slight pressure. However, opening is very easy since it suffices to exert a slight pressure on two diametrically opposite points close to the mouth. With said movement the cover springs up, or at least, lifts in a large area.

In order to provide a better understanding of the features of the invention and forming an integral part of this specification, some sheets of drawings in whose figures, the following has been represented in an illustrative and non-restrictive manner, are attached:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view of the containers and its cover, comprising the airtight seal applicable to ice cream containers, in accordance with the invention. The position of the cover that acts as a base supporting the

cup is also included in this figure with dash lines.

Figure 2 is a longitudinal section of the container, without including the cover, with two details blown up which show two sectioned points of the mouth of the same. It corresponds to a section taken on cutting line A-B of figure 3.

Figure 3 is a plan view of the container.

Figure 4 is a raised longitudinal sectioned view of the cover, including a larger scale detail.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Making reference to the numbering used in the figures, we can see a cup-shaped ice cream container with an airtight seal represented. It is comprised of the container (1) to contain the product, and the cover (2), as shown in figure 1 in an exploded view.

In figure 2 we can see the bell shape of the container (1), placed in a reverse position and that has a bottom cylindrical extension (3), separated from the previous part by the sealing wall (4).

In the blown up details that are in the top part of figure 2, which we are now referring to, one can see the extreme bulge (5) of the edge of the container (1), as well as the cylindrical partition wall (6) that is formed concentrically to the edge (5), along the inside of the same. Reference (7) designates the ring-shaped neck or recess defined between this wall (6) and the end portion (8) that forms the mouth of the container (1), together with the bulge (5).

The airtight seal of the container (1) is achieved with the cover (2), upon the small cylindrical flap (9) of the cover (2) inserting in the ring-shaped opening (7) of the mouth of the container (1). Retention is achieved by means of three retaining lips or fingers (10) (see figure 2) located in three points uniformly distributed on the periphery of the container (1), as shown in figure 3. In these retaining points separated 120°, the ring-shaped recess (7) opens to the outside to provide elasticity to the seal, as well as to facilitate the formation of the retaining lips (10) themselves.

The retaining lips (10) spring up to hermetically fasten the cover, when they go beyond the staggering (11) that forms the ring-shaped lip (12) that defines the extreme broadening of the ring-shaped flap (9) of the cover (2).

Now making special reference to figures 1 and 4, with reference number (13) we can see the ring-shaped recess or hollow that exists on the outside of the cover (2) to enable insertion of the cylindrical end (3) (or with a very small conicity) of the cup-shaped container (1), defining the support base, such as the dash lines in figure 1 represent.

As we have indicated above, opening is done by gently pressing on diametrically opposite points close to the mouth, since some of the fingers (10) come out of the retaining lip (12) of the cover (2).

Claims

1. Airtight seal applicable to ice cream containers, of the type that include a container to contain the product and a cover, characterized in that the container, advantageously cup-shaped, has on its mouth a cylindrical wall (6) that originates from an inside ring-shaped line and that ends on a plane anterior to the free edge (5) of the container, said edge (5) being rounded and also having in three points uniformly distributed on the mouth, an opening to the outside, made as a continuation of the ring-shaped recess (7) formed between the double wall (6-8) of the free edge, as well as respective radial fingers (10) that originate from the edge (5) of the outside wall (8) and that are directed towards the inside wall (6), these fingers being capable of retaining the ring-shaped lip (12) formed on the edge of the cover (2).

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2. Airtight seal applicable to ice cream containers, according to claim 1, characterized in that the cover (2), preferably truncated cone-shaped, has a small cylindrical flap (9) that inserts into the ring-shaped neck or recess (7) of the container (1), having the ring-shaped retaining lip (12) on the edge.

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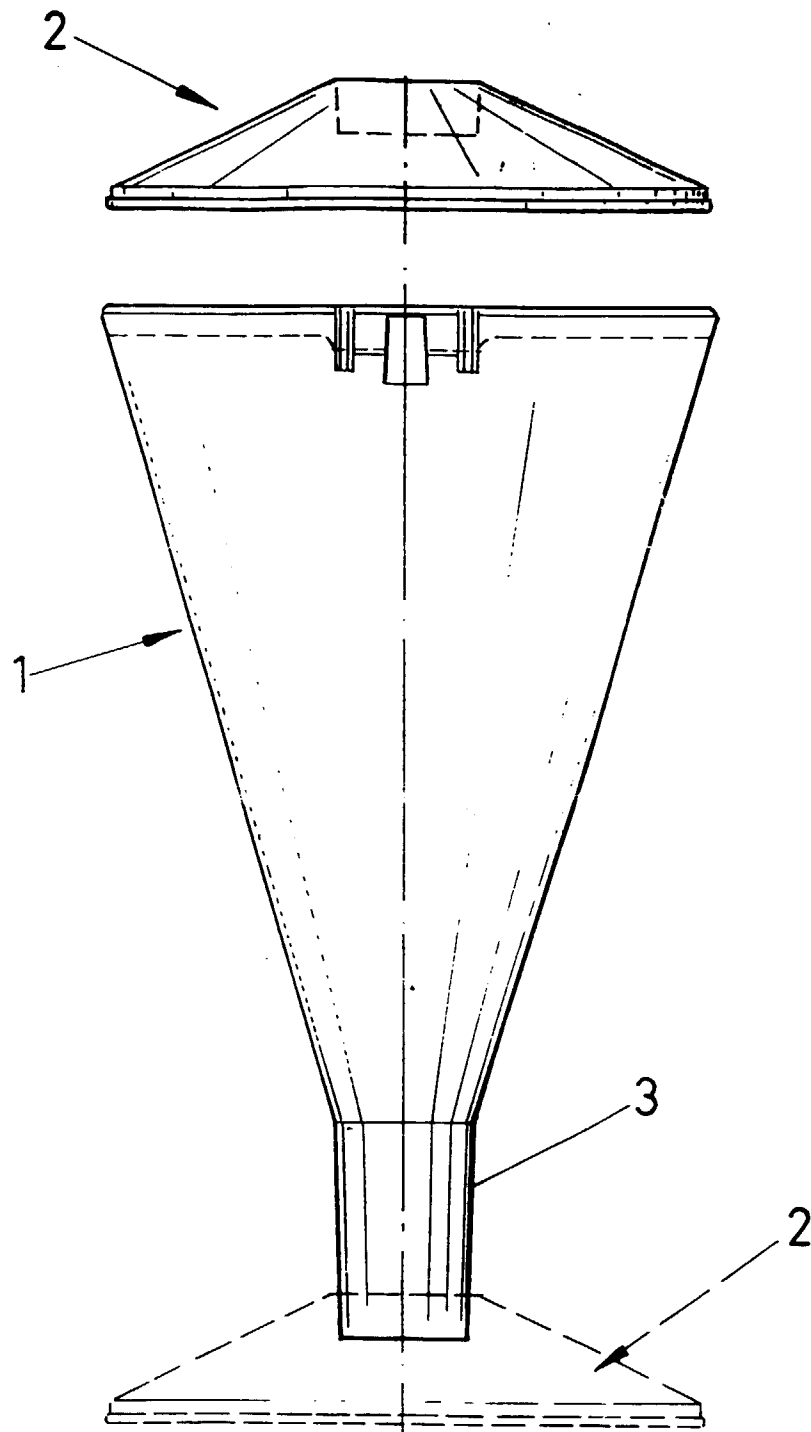
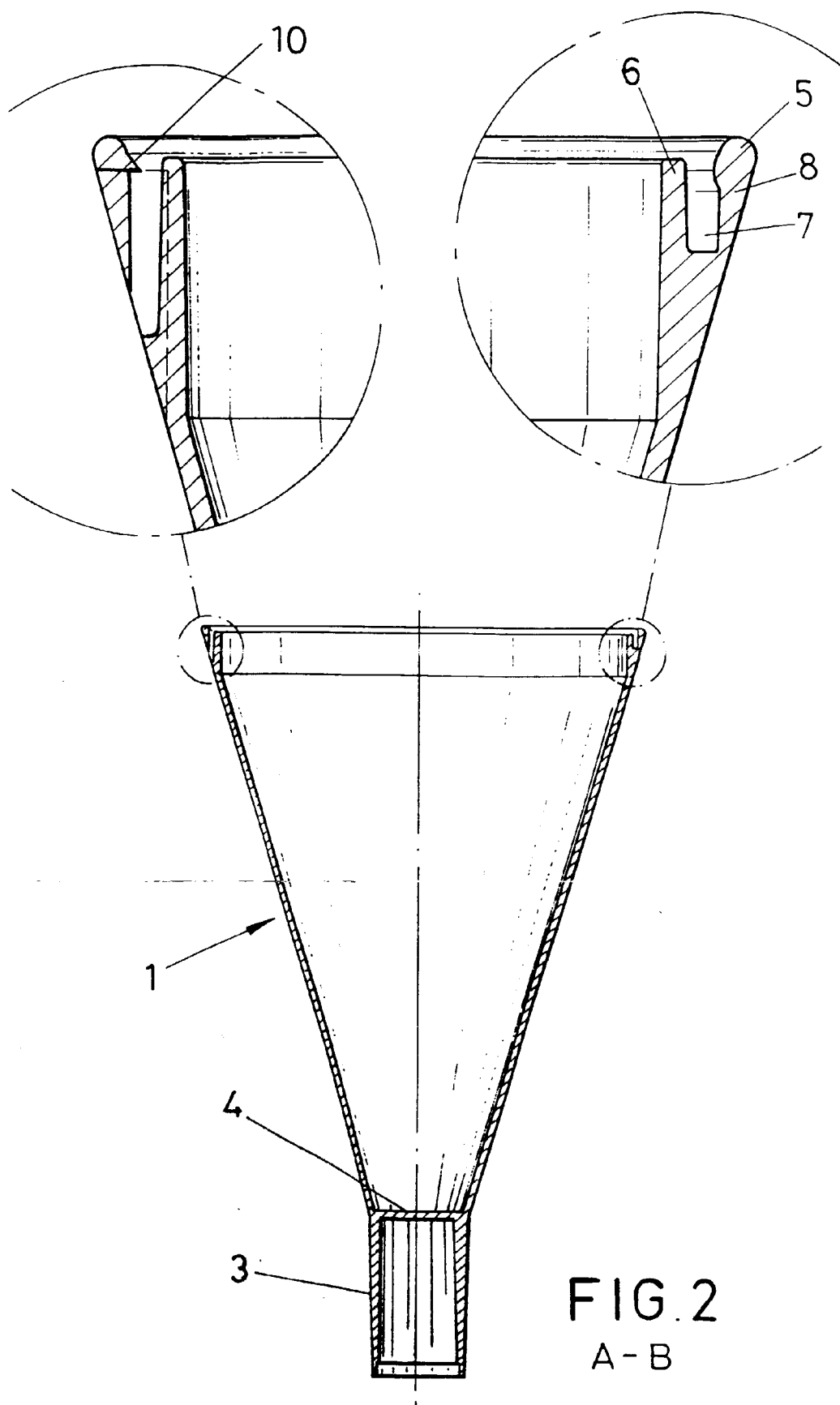


FIG. 1



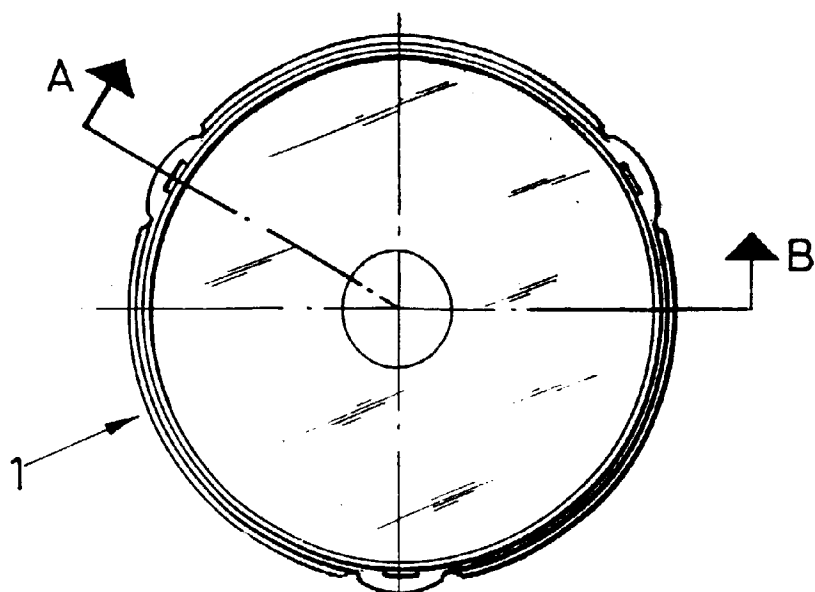


FIG. 3

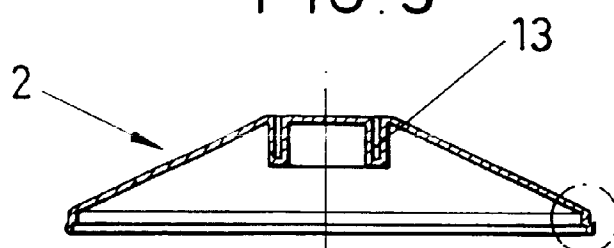
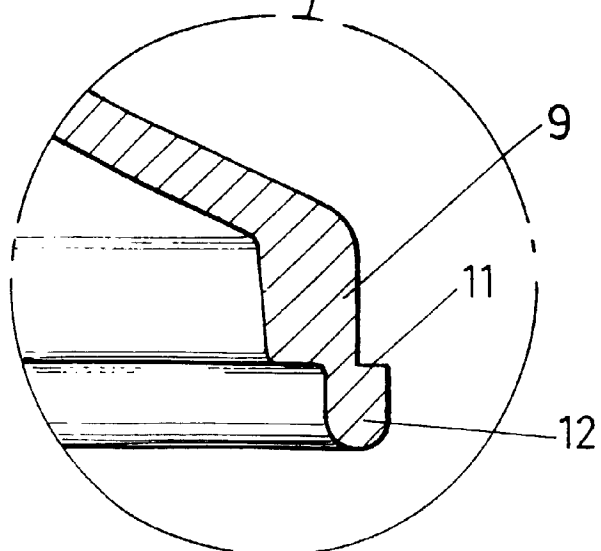


FIG. 4





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 97 20 1111

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 4 671 423 A (MURPHY) * the whole document *	1,2	B65D43/08
A	BE 1 004 249 A (STEFANIZZI) * the whole document *	1,2	
A	EP 0 253 456 A (PACKAGING & CONTAINER CO.) * the whole document *	1,2	
A	GB 1 582 416 A (THURGAR BOLLE LTD.) * the whole document *	1,2	
A	US 2 996 208 A (SCHROEDER) * the whole document *	1,2	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65D A47G
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		21 July 1997	Pernice, C
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