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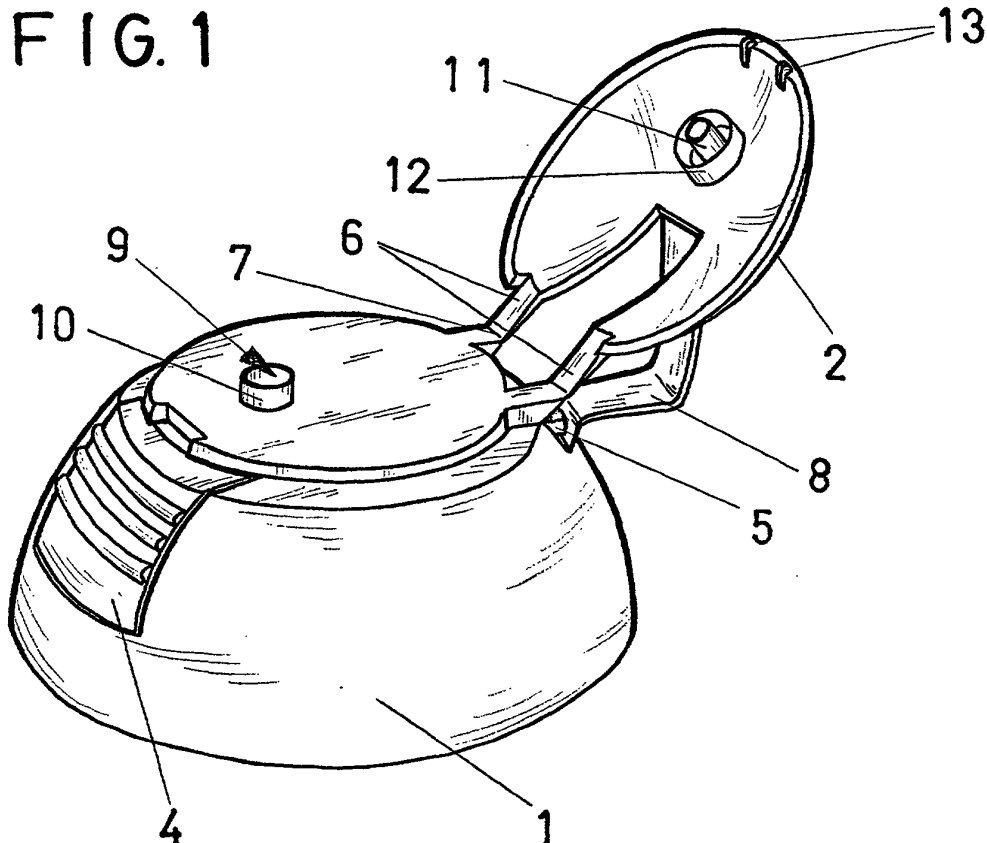
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(54) **Automatically opening cover for containers**

(57) Automatically opening cover for containers, where these containers have in their interior a product that is usually viscous or soapy, which is repeatedly applied, in portions. Its configuration allows the opening of the cover to be carried out by pressing on a push-re-

lease, it being unnecessary to carry out any other supplementary action. This cover consists of three parts, a base piece, a lid and an intermediate part that has at its end the opening push-release concerned. The lid remains joined to the base piece by two arms and a central arm.



**Description****PURPOSE OF THE INVENTION**

[0001] This invention has as its purpose an automatically opening cover for containers, where these containers internally hold a usually viscous or soapy product, which is repeatedly applied in portions.

[0002] This invention is characterized by its special configuration that allows the opening of the cover by simply pressing a push-release: it being unnecessary to carry out any supplementary action, because of which it can be operated by one hand alone.

[0003] Similarly this invention is also characterized by its water-tightness, preventing the loss of the product held within it.

[0004] Therefore this invention is included within the subject area of closing systems or covers properly speaking for dispensing bottles and more specifically within those systems that open automatically.

**BACKGROUND TO THE INVENTION**

[0005] Until the present time, most of the closing and dispensing systems that are in the market don't open automatically. The existing covers usually consist of opening a lid which then remains open, thanks to the fact that the lid has arms weakened at their joint with the base of the cover, which effects both the opening and the closing of the lid.

[0006] Other cover and dispensing systems consist of a protrusion that, after being pressed, swings about a point of rotation, making a part protrude to the outside, that is in fact the part where the dispensing opening is.

[0007] All these systems, although they achieve an acceptable degree of watertight closing, don't allow the automatic opening of the cover, thus it is necessary to use both hands, because of which the objective of this utility model is to develop a cover with automatic opening; where the opening takes place by simply pressing on a push-release type surface.

**DESCRIPTION OF THE INVENTION**

[0008] The proposed invention of an automatically opening cover consists in a classic stopper, that has a base piece and an hinged lid on one of the edges of the base piece: also having an additional part that allows the opening to be carried out automatically.

[0009] There are two openings made in the external face of the base piece, one larger, where the surface to be pressed to carry out the opening, projects: and another opening of smaller dimensions, through which a small protrusion that is charged with pushing on one of the arms that join the lid with the base piece, projects.

[0010] The other part that is charged with automatically carrying out the opening is housed inside the base piece, having a surface which is pressed lightly to start

the opening, and at the further end it has a protrusion; which is what presses on the central connecting arm with the base piece of the cover.

[0011] Starting from a closed position, when the opener or push-release is pressed, at first a twisting of the upper part of the push-release on the bevelled teeth that are in the edge of the lid takes place, with the objective of opening them: once the closing threshold has been exceeded, and due to the longitudinal movement of the additional cover part, by means of the rear protrusion of this part, a pressure on the central connecting arm of the lid with the base piece takes place at the same time; because of which the lid is released and due to the pressure of this protrusion, the lid opens automatically to its maximum opening position.

[0012] The closing between the lid and the base piece is carried out by means of a concentric ring positioned around the opening that there is on the base piece: so that this ring fits concentrically over another ring that there is around the closing cylinder.

**DESCRIPTION OF THE DRAWINGS**

[0013] To supplement this description and with the aim of leading to a better understanding of its characteristics, this report is accompanied by a set of drawings in whose figures, in an illustrative and non-limiting way, the most significant details of the invention have been represented:

Figure 1. Shows a perspective representation of the automatically opening cover for containers, where the cover is seen in its opened position.

Figure 2, shows the elevation and the plan of the auxiliary part that assists the closing of the assembly.

Figure 3, shows a lower view of the cover base piece, where the auxiliary part for the cover is housed, and the longitudinal movement that it can have, are shown.

**PREFERABLE EMBODIMENT OF THE INVENTION**

[0014] In view of the figures mentioned a method of preferable embodiment of the invention is described below, as well as an explanation of the drawings.

[0015] In figure 1 the automatically opening cover for containers is seen that consists of a base piece (1) and a lid (2) with an auxiliary part for the closing and opening of the assembly, (3) (figure 2): where this part has a surface that acts as a push-release (4) similarly having a protrusion or projection (5) placed diametrically opposite: which, once the lid (2) has been released, is what is charged with putting pressure on the intermediate connecting arm (8) between the lid (2) and the base piece (1).

**[0016]** Similarly, we observe that in the connection of the lid (2) with the base piece (1) support arms are used (6), which assist the hinging of lid (2) with respect to the base piece (1), which are weakened (7) in their central part. On the other side it has an intermediate connecting arm (8) that joins roughly the centre of the lid (2) with the base piece (1), so that it causes the swinging of the lid (2) on being pushed by the protrusion (5) of the intermediate part (3).

**[0017]** The closing, properly speaking, between the base piece (1) and the lid (2) is carried out due to the fact that a ring (10) is placed over the dispensing opening (9), which, when closed, remains within another ring (12) positioned in the lid (2). This ring (12) has a plugging cylinder (11) that penetrates fully in the opening (9) of the base.

**[0018]** In figure 2, we see the intermediate part (3) that carries out the opening after the push-release (4) has been acted on. This intermediate part (3) is housed within the base piece (1) of the cover and it is allowed to move longitudinally within the base; so that when the push-button (4) is acted on, its upper edge acts on the bevelled protrusions (13) that are in the edge of the lid (2), with the aim of releasing the lid from its retention, so that on being released, at the same time the protrusion (5) of the intermediate part (3) presses on the central arm (8), which allows the full opening of the lid (2).

**[0019]** In figure 3, it is observed how the intermediate part (3) remains positioned within the base piece interior (1), with the possibility of moving lengthwise. Also, the opening (14) is observed, through which the protrusion (5) of the intermediate part (3) pushes on the central connecting arm, (8) of the lid (2) with the base piece (1). Similarly it is observed how on one of the interior rings a series of projections (15) are set out, that effect the securing and retention of the cover with the neck of the container.

**[0020]** It is not considered necessary that this description should be made more extensive for any expert in the subject material to understand the scope of the invention and the advantages arising from it.

**[0021]** The materials, shape, size and layout of the parts will be susceptible to variation always provided that the essential nature of the invention remains unchanged.

**[0022]** The terms in which this report has been described must always be taken in the widest and non-limiting sense.

act on, as well as a protrusion (5) placed diametrically opposite to this surface (4); on the other side the lid (2) where it joins the base piece (1) has two arms (6), that are weakened (7) in their central part: besides having an intermediate connecting arm (8) that joins approximately the centre of the lid (2) with the middle of the base piece (1). In the base piece (1) an opening is made (14) through where the protrusion (5) of the intermediate part (3), projects. Similarly in the centre of the base piece (1), there is an opening (9) with a ring around it (10) that stays seated in the ring (12) that is on the lid (2), where said ring (12) has in its centre a stopper cylinder (11); on the internal part of the base piece (1), there is a ring positioned that presents a series of projections (15) with the purpose of effecting the securing of the base piece (1) to the neck of the container.

## Claims

1. Cover with automatic opening for containers, characterized because it consists of a base piece (1) of a lid (2) and of an intermediate part (3), which is housed within the base piece (1) and can move lengthwise due to an external action; this intermediate part (3) has a surface or push-release (4) to

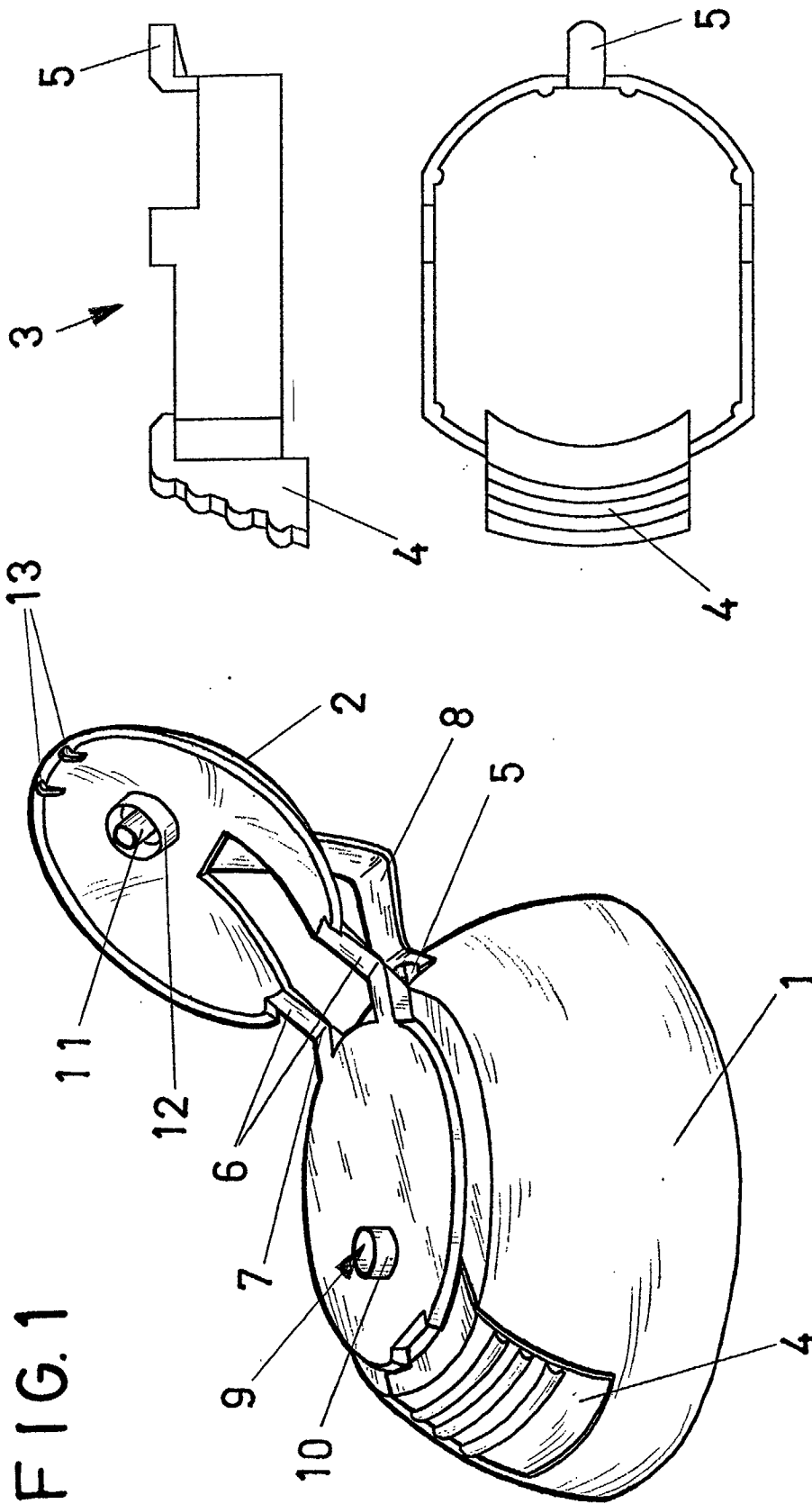


FIG. 2

FIG. 1

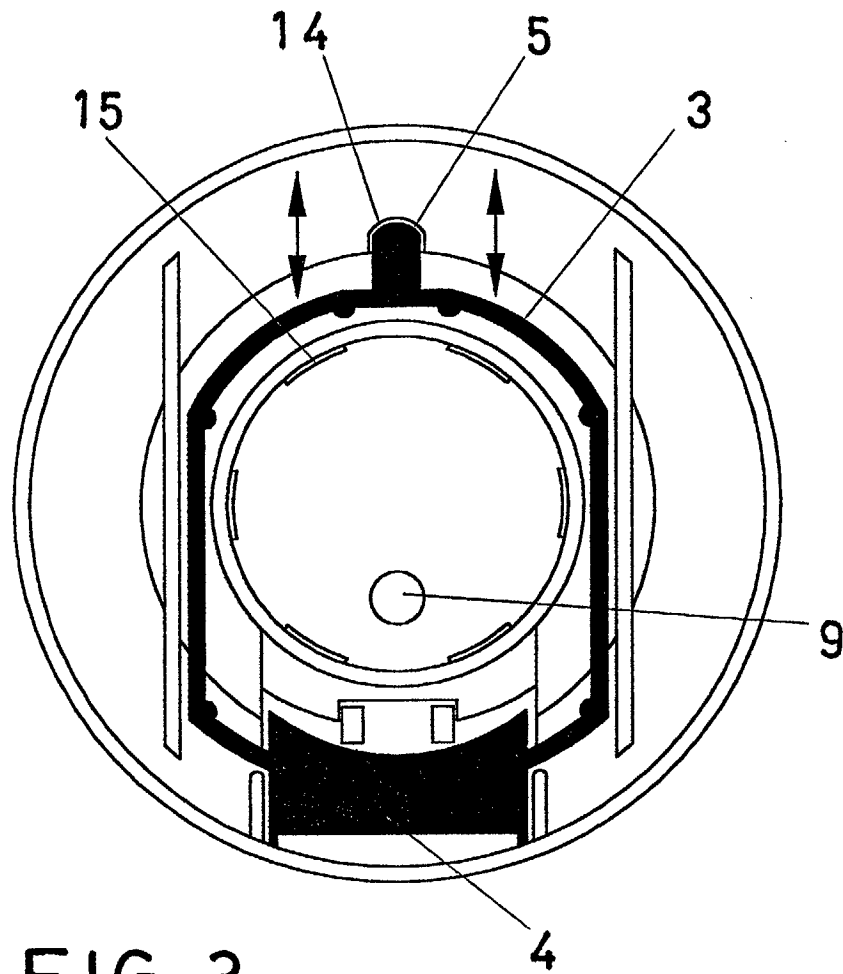


FIG. 3