

[54] **SINGLE PRICE POURING SPOUT AND LID**

[76] Inventor: **Javier Sensat Marques**, Paseo Carlos 1, No. 130, Barcelona, Spain
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[56] **References Cited**

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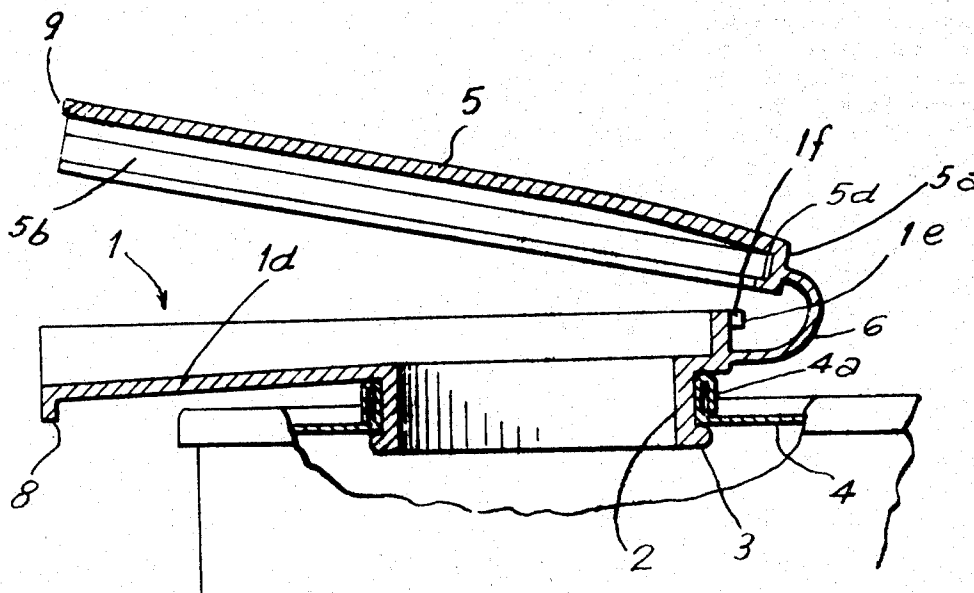
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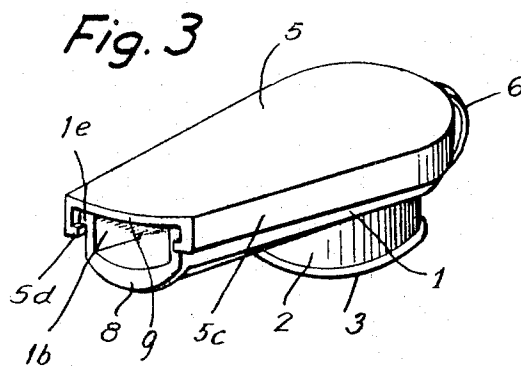
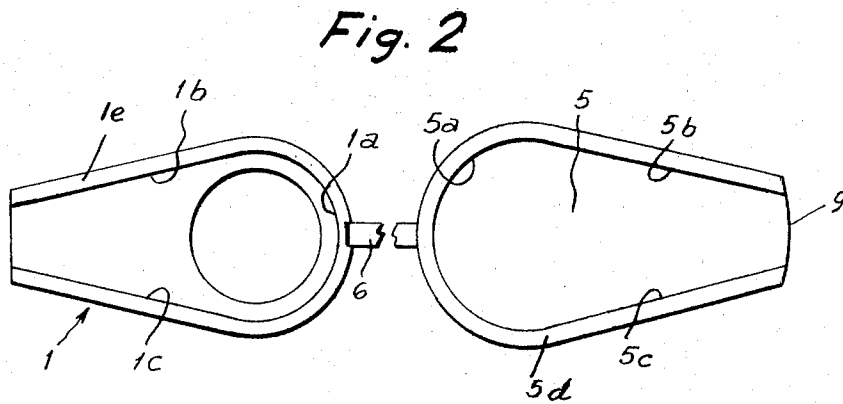
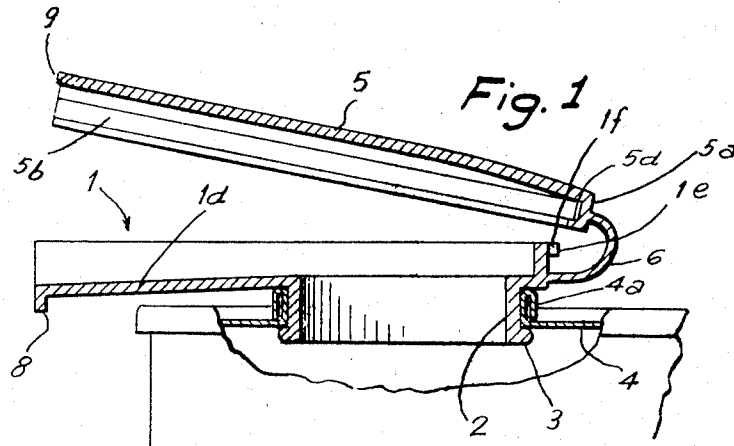
Primary Examiner—Stanley H. Tollberg
Attorney—E. F. Wenderoth et al.

[57] **ABSTRACT**

A pouring spout for containers containing liquids formed of a single part of resilient plastic material, comprising a cylindrical rotatable neck which fits the inside of the dispensing opening of the container, and possesses an outer peripheral reinforced rim exerting a grip under the edge of the opening. From this cylindrical neck extends radially a pouring spout provided with a lateral wall which runs along that portion of the cylindrical neck which is opposite the pouring spout and has an outer ledge which also runs along such wall. Furthermore, the pouring spout comprises a lid which completely covers the cylindrical neck and the pouring spout thus protecting them from dust and dirt. Along this lid runs a hanging wall provided with an inner reinforcing rim which in turn grips under the outer ledge of the wall of the pouring spout and of the cylindrical neck. This outer ledge of the cylindrical neck wall possesses a notch the purpose of which is to allow free passage of air into the interior of the container during the dispensing act.

1 Claim, 3 Drawing Figures





INVENTOR

JAVIER SENSAT MARQUES

BY *Mendensoth, Lind & Ponack*
Attorneys

SINGLE PRICE POURING SPOUT AND LID

The present invention relates to a pouring spout for containers containing liquids, and more concretely, to a pouring spout specially designed for edible oil cans for domestic use. This spout is made up of a single element formed from plastic flexible and resilient material, in the shape of a pouring spout joined to a neck which is rotatably inserted in the opening of the can, and a lid which covers the can opening without closing it, and furthermore covers the pouring channel. This lid is joined to the neck by means of a resilient ribbon.

Pouring spouts applied to containers or cans of the above described or other types are known in the prior art, where they comprise a laminar part mounted rotatably on the container's or can's opening, forming an extension in the direction of the spout in order to pour the container's or can's contents, to this pouring spout is added a plug to close the container's opening.

The Bertolli U.S. Pat. No. 3,465,925 specifies a pouring spout of this sort, made up of resilient plastics, in which the plug which closes the container's opening is hinged by means of a resilient strip which forms a solid part with that part of the pouring spout which is mounted in the container opening.

In these prior art pouring spouts it is first necessary to lift the container plug each time one wants to let the liquid out of its inside and to reset the plug afterwards in order to prevent dust from getting into the container, and on the other hand, the pouring spout is constantly left uncovered, for which reason, when the container contains oil, spout is left with an oil film, to which adhere dust and dirt.

The object of the present invention is to provide a pouring spout for edible oil cans and for other containers containing liquids, with which the cited drawbacks inherent to the prior art pouring devices are solved.

Another object of the present invention is to provide a pouring spout for containers containing liquids which enables the container contents be left protected from dust and dirt and give the liquid free passage out of the container without there being the need to plug or unplug the container.

Another object of the present invention is to provide a pouring spout for containers or cans containing liquids, by means of which the liquid may be poured without causing splashes, even if the container or can has to be greatly tilted owing to the low level of the liquid inside the container or can.

Another object of the present invention is to provide a pouring spout for containers or cans containing liquids, which has a pouring channel which is constantly protected from dust and dirt.

Another object of the present invention is to provide a pouring spout for containers or cans containing liquids which, after a pouring operation, prevents the liquid remaining in the bottom of the spout from creeping over the outside and lower surface of the pouring spout.

Other objects, advantages and salient features of the present invention will become apparent from the detailed description, which taken in conjunction with the annexed drawings, discloses a preferred embodiment thereof.

The pouring spout for containers or cans containing liquids which is the subject of the present invention, is made up of a single element moulded from relative re-

silient plastic material and contains a cylindrical neck the purpose of which is to fit frictionally into the container or can neck opening, which has at its outer end a Vandyke collar extending radially thus forming a pouring channel with a concentric shoulder running along all its periphery but on the end thereof, and is combined with a lid having an equal contour, which fits under pressure on the peripheral shoulder covering the container and can opening and the pouring spout without closing the container or can opening, the lid being hinged to the cylindrical neck by means of a resilient ribbon.

Referring now to the drawings:

FIG. 1, is a sectional view taken substantially in a longitudinal direction, of the pouring spout mounted on the opening of the container or can, and having its lid tilted upwards.

FIG. 2, is a top plan view of the pouring spout with its lid in the fully open position.

FIG. 3, is a perspective view of the dispensing device, with its lid placed in the normal position.

As it to be seen from the drawings, the pouring spout for containers or cans containing liquids, which is the subject of the present invention, is made up of a single element, preferably moulded from plastic relatively resilient material comprising a shallow and tile shaped spout 1, with its bottom wall 1d transversally concave and sloping slightly downwards towards its outer and narrower end, having at its wider end the shape of a circular arc; furthermore, it has a low peripheral side wall 1a along that circular arc end and extends in two side walls 1b and 1c. All these walls 1a, 1b and 1c have a continuous running shoulder, which is at one point interrupted to form a notch 1f at a point located in the zone which corresponds to the circular arc wall 1a, preferably on the symmetrical axis of the spout 1.

Furthermore, spout 1 has a circular opening concentric with the circular arc of the broader end of the spout. From this circular opening extends downwardly a cylindrical neck 2 the lower end of which is, in turn, provided with an outward shoulder 3. Neck 2 fits within the neck opening 4a of a container or can 4, into which it is inserted under pressure and is retained in place through the action of shoulder 3. That way, spout 1 is rotatably fastened to the container or can 4, and is allowed to be pulled out again, if so desired, in order to be inserted, e.g., into another container or can.

The above described spout is fitted with a lid 5 which is hinged to the wall 1a by means of a resilient ribbon 6 forming a single integral part with the spout and the lid, whereby the loss of the lid is prevented. The contour of the lid 5 fits with the contour of the spout 1, and the circular arc wall 5a at the wider end of the lid extends in two side walls 5b and 5c. All of these walls together 5a, 5b and 5c have a continuous running inward shoulder which grips under the outer shoulder 1e of the spout 1 when lid 5 is pressed onto the spout 1. Thus the lid 5 remains in position on the spout 1 and may be easily lifted if it is desired to cleanse both elements. As long as the lid 5 is inserted into the spout 5, the assembly formed by these two elements, as it is to be seen from FIG. 3, from a tubular conduit somewhat flattened, which suitably guides the liquid which is flowing out of the container or can, i.e., this conduit thus formed allows the pouring of the liquid out of its container or can without being neither spilt nor splashed around, even if there is need to greatly tilt the container

or can 4 in the event the liquid's level within the same should be relatively low. On the other hand, the slight downward slope of the bottom wall 1d of the spout 1 towards the outer free end thereof eases the pouring of the liquid when the level thereof within the container or can is very high.

The lid 5, in addition to improving the outflow of the liquid, also acts as an effective protective element which prevents dust and dirt from getting through the neck 2 into the inside of the container or can 4 and from settling onto the top surface of the spout 1 by adhering to the liquid's film which might have been left over in the spout. This is very important, especially, when the liquid is oil. In this way the protection of the interior of the container or can inside and of the surface of the spout is maintained even during pouring of the liquid from the container or can.

However, if with time dirt or even insects settle in the spout 1, the spout may be easily cleansed by lifting lid 5 whereby said spout 1 is left uncovered. Moreover, if the pouring spout, the subject of the present invention, is mounted on a container or can whose opening is sealed by means of a foil or membrane solidly joined with the can or container there is the possibility of lifting the lid 5 and comfortably perforating such sealing foil or membrane without having to remove the pouring spout.

Through the notch 1f formed in the outer reinforced rim 1e of the circular wall 1a of the spout 1 a slot is obtained between the circular wall 1a of the spout 1 and the reinforced border 5d of the lid 5, which gives sufficient space for the necessary air to pass so that the liquid may flow along the above cited conduit formed by spout 1 and the lid 5 in a smooth way without forming bubbles.

The notch 1f which makes the air inlet entrance into the inside of the can or container, remains totally covered by the lid 5 and the inward shoulder of the circular arc wall 5a, thus preventing dust or dirt from penetrating into the inside of the can or container through said

notch 1f.

Lastly, the outer open end of the spout 1 possesses, as an extension of the bottom wall 1d, a downward directed lip 8 the purpose of which is to collect and guide the liquid left over on bottom wall 1d after pouring of the liquid, and prevent the surplus liquid from creeping along the outer and lower surface of the spout.

Preferably, the lid 5 is made somewhat longer than the total length of the pouring spout so that its free end 9 projects somewhat beyond the free end of the spout 1, whereby lifting of the lid 5 is made easy by inserting the finger under free end 9 of the lid. This operation is still made easier and more comfortable by slightly curving in the horizontal sense and outwards free end 9 of the lid 5.

Accordingly, what is claimed is:

1. In a pouring spout formed of a single element from resilient plastic material and including a cylindrical neck suitable to frictionally and rotatably grip inside the pouring opening of a container or can, a tile-shaped spout extending radially from the border of the opening of said neck, said spout having a peripheral wall spaced from said neck opening, said peripheral wall at one end of said spout forming a circular arc concentric with said neck opening and extending in two side walls to form the open end of said spout, a lid the contour of which fits in shape and dimensions to those of said spout, said lid having a downwardly directed peripheral wall, said peripheral wall of said spout having an outer reinforced rim and said peripheral wall of said lid having an inner reinforced rim for gripping underneath said outer reinforced rim of said spout:

the improvement wherein said reinforced outer rim of said peripheral wall of said spout has a break at a point spaced from said open end of said spout where the liquid issues forth, said break having the shape of a notch, thereby forming an air inlet opening into the container interior during the dispensing of liquid from said container.

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