

desired orientation of the cap relative to the body of the bottle.

It will now be immediately apparent that the abutment face 6a need not be provided on an upstanding thickening of the flange but could be provided by the end-face of a recess formed axially downwardly (i.e. towards the body) within the flange.

Vapour-tightness of the closing can be assured by various conventional means, e.g. a cork seal plus flexible plastic stopper or self-sealing lips with possible addition of an insert of the dropping tube type.

At all events, it is necessary that the vapour-tightness is produced during the screwing of the fluted capsule 21.

FIGS. 3 and 4 are sections respectively along the line B—B of FIG. 4 and along the line A—A of FIG. 3, showing the cap in position and sealing the neck of the bottle. It can be seen in these figures that the face 7a of the stop part 7 abuts against the face 6a of the thickening 6. The seal 12 ensures the liquid-tightness in cooperation with the teat or insert 13.

Although in the example shown the rotary movement of the cap is stopped by a single abutment, it is obvious that on the flange 3 or on the shoulder proper several thickenings (or recesses) can be provided, cooperating during closing with respective stop faces formed inside the cap. Of course, the form of the bottle and of the cap does not limit the present invention. It is particularly applicable to polygonal caps and bottles, especially rectangular or square ones (when the stop and abutment faces will preferably extend diagonally) but can be put into operation for example with a cap generally cylindrical in shape and having a flat which one wants to be certain will be placed exactly as an extension of the label on a face of the bottle, with the aim of ensuring repetition of the original presentation of the whole.

The capsule 21 which is the inner part of the cap and which ensures vapour-tightness is made in a more flexible material than the outer part of the cap 2. In fact, it should react to the different forces which act on it and the insert 13 should penetrate inside the neck of the bottle and bear on the internal cylindrical face thereof to ensure vapour- and liquid-tightness.

The initial stoppering of the bottle in the factory is done after filling the latter in two stages, namely

1. putting in place the fluted capsule 21 by rotating it about the neck until a suitable sealing contact is obtained between an element of its internal surface (for example a resilient seal part) and the neck of the bottle;

2. putting in place the external cap around the capsule by an axial movement over the latter until it snaps into place by a retaining ring 24 coming into a channel 25; the orientation being the desired one in such a way that the face or faces of the outside of the cap are aligned with the desired face or faces of the bottle.

The abutment face and the stop element are formed such that the orientation is also one in which they abut.

If necessary, during this initial filling the outer part of the cap can undergo a slight rotation relative to the capsule 21 to ensure that the stop part comes into contact with the abutment, which is possible in spite of the flutings or groovings on the capsule 21 on account of the flexibility of the material of the latter. Thus, the position of the outer part cap in relation to the internal skirt in its sealing position is defined exactly.

For the user of the product contained in the bottle, everything goes on as if the cap were unitary since, during rotation in the unscrewing direction, the internal

skirt is driven through its flutings or groovings by the external cap.

During reclosing, the internal skirt recovers its liquid-tight position during the last turn of the screw and the rotary movement is automatically blocked in the desired orientation by the abutment.

It will be noted, and this is shown very clearly in FIG. 1, that the skirt of the cap 2 completely masks the device of the invention when the bottle is sealed by the cap.

It goes without saying that modifications can be brought to the method of embodiment which has just been described, notably by substituting equivalent techniques without going outside the spirit or scope of the present invention in order to do it.

I claim:

1. In a container having a non-circular container body and a non-circular cap and guide means for ensuring repeatable helical movement of the cap about an axis of rotation and relative to the container body during sealing of an outlet of the container by the cap, the improvement comprising abutment means on the container and stop means on the cap, the abutment means and stop means comprising respective faces repeatably cooperating to define a predetermined orientation of the cap relative to the body of the container at the termination of the said helical sealing movement and said cap being a two-part cap having an inner and an outer part, the inner part engaging with the container by said guide means and the outer part being separate from the inner part, driving means for interengaging the inner and outer parts and for permitting relative slippage between the same, said driving means comprising a first portion on said outer part and a second portion on said inner part, said outer part bearing said stop means and said inner part including sealing means for sealing the outlet.

2. The improvement as claimed in claim 1 wherein the inner part is made of deformable material and seals the outlet by deformation.

3. The improvement as claimed in claim 1 wherein the inner part includes a deformable seal element.

4. The improvement as claimed in claim 2 or claim 3 wherein the inner part includes an insert for passing into the outlet of the container to seal the said outlet.

5. The improvement as claimed in claim 1 wherein the face of the abutment means is defined by an end face of an upstanding thickening, extending axially of the said axis, of a shoulder of the container.

6. A container comprising a container body, a hollow cylindrical neck extending from the body, screw-threading externally of the neck, a cap engaged on the neck by said screw-threading, an outlet from the container at the end of the neck remote from the body, the cap having an inner part and a separate outer part, the cap inner part being internally screw-threaded to cooperate with the said screw-threading of the neck to induce movement of said cap along a helical path about said neck when the cap is rotated and the cap inner part also comprising yieldable means for sealing the outlet, the cap outer part comprising means for drivingly engaging the cap inner part for rotation of the two cap parts together in their helical path and also comprising a stop face projecting radially toward the neck and at an end portion of the cap outer part adjacent the body of the container, and an abutment face projecting radially outwardly from the neck of the container into the helical path of the stop face in a final revolution only of the latter, whereby to block revolution of the cap in a re-