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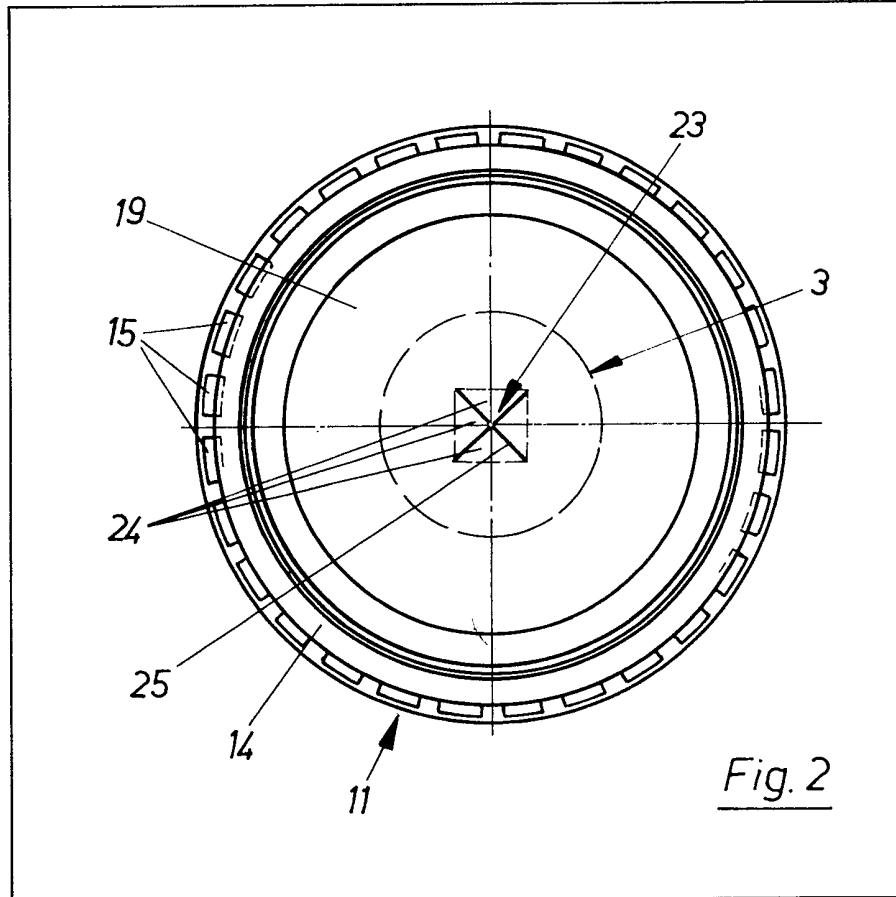
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## (54) Drinking vessel

(57) Drinking vessel, the top of which is open to form a drinking aperture and is surrounded by an aperture rim which is intended to be applied to the lips, characterised by a drinking vessel lid 11 intended to be located on the lipped rim and which contains in its lid wall which in use covers the open top of the drinking vessel a push-in aperture 23 to receive a drinking straw or the like, and on the peripheral edge of which there is disposed at least one resilient closure flap 24 which masks the push-in aperture. The flaps may be separated by slits or in perforate lines of weakness. The lids are shaped to facilitate stacking of the lids (Figure 5) and stacking of lidded containers (Figure 6).



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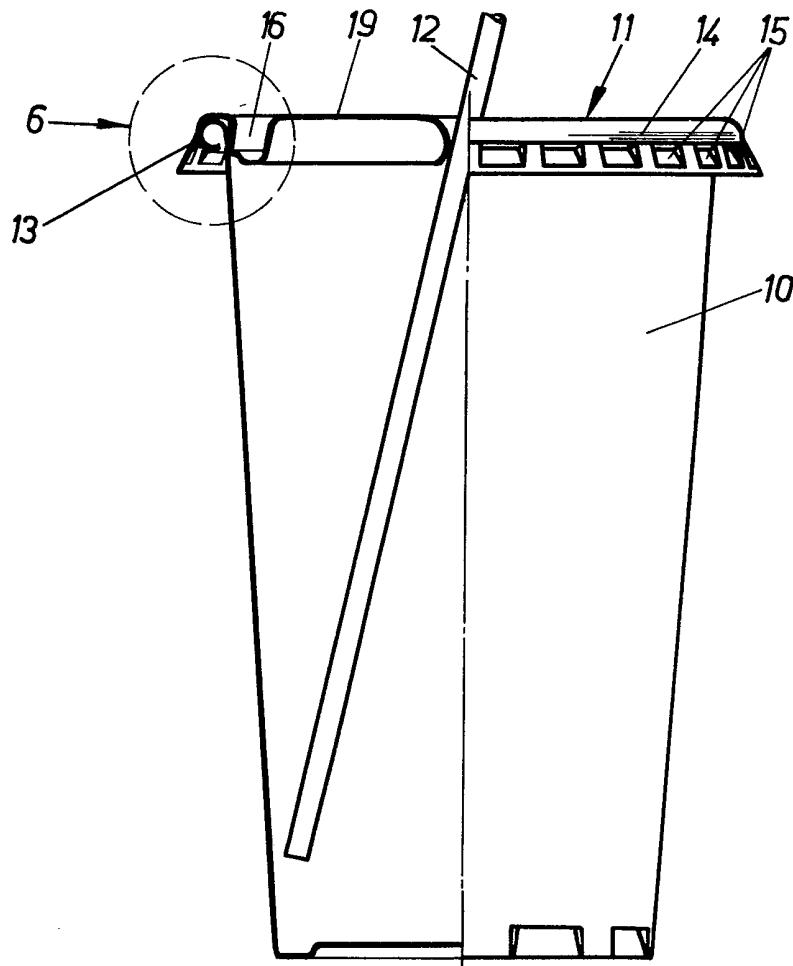


Fig. 1

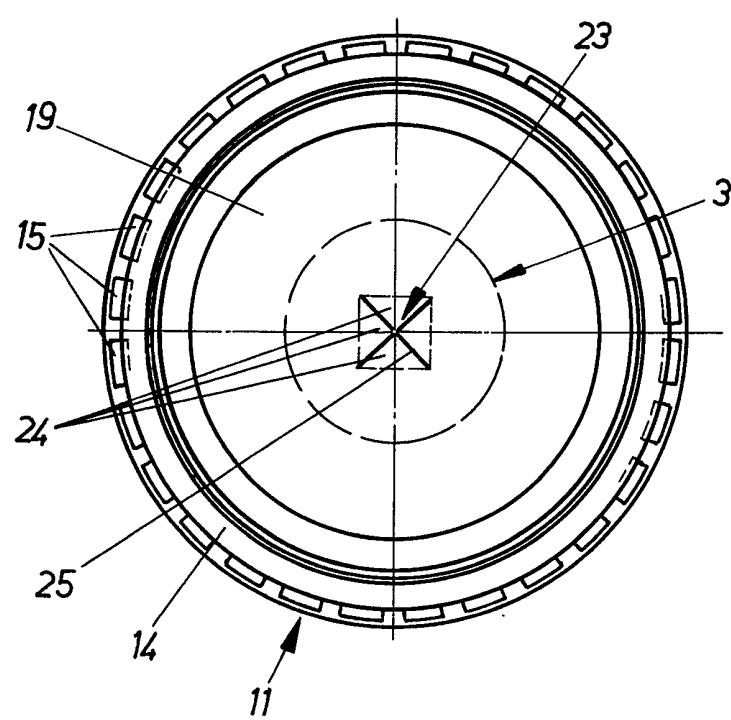
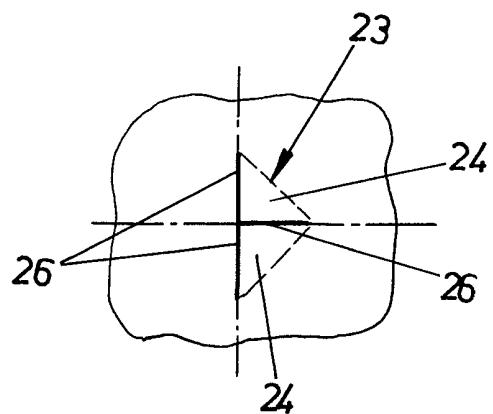
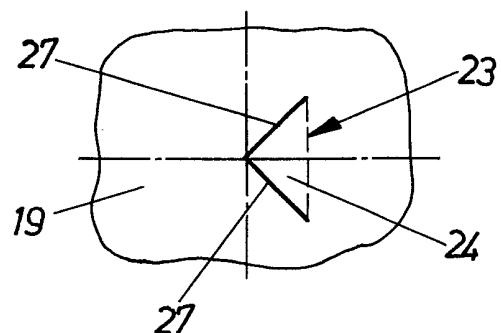
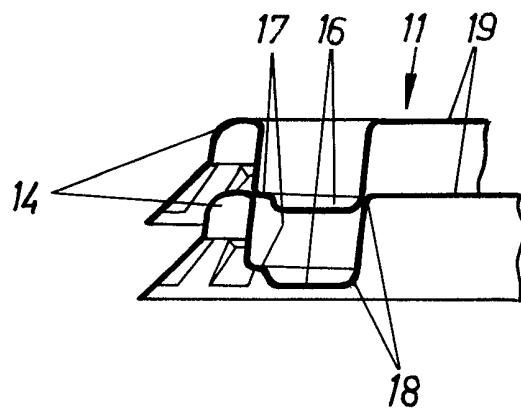
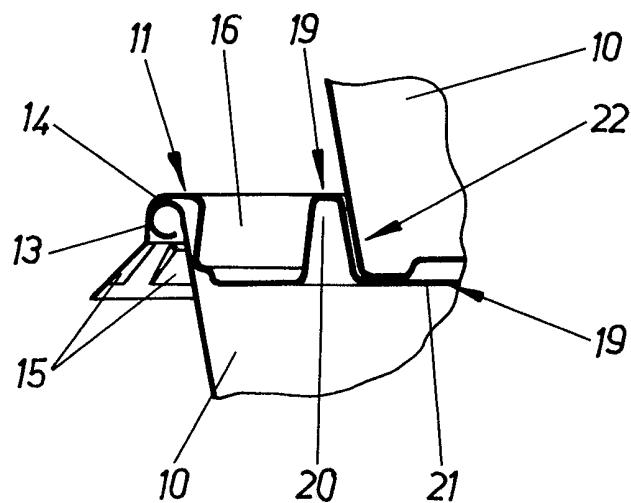


Fig. 2

Fig. 3Fig. 4Fig. 5Fig. 6

## SPECIFICATION

## Drinking vessel

5 The invention relates to drinking vessels, in particular beaker-like drinking vessels, the top of which is open to form a drinking aperture and is encircled by an aperture rim designed to be applied to the lips.

It is known for such drinking vessels, particularly 10 drinking beakers, to be used in self-service establishments, the customer or user taking the drink-filled vessel from a bar or other delivery point and carrying it to his seat. In order thereby to avoid drink spilling over the edge of the drinking vessel, it has 15 often been the practice to use over-sized drinking vessels. Apart from the fact that such over-sized drinking vessels, particularly those which are disposable, become unnecessarily expensive, it is with such over-sized drinking vessels impossible or substantially 20 difficult to ensure the correct degree of filling of each drinking vessel in the prescribed manner by using a filling mark.

The object of the invention, therefore, is to provide a drinking vessel which in its size can be fully utilised 25 for holding a beverage and which can nevertheless offer a safeguard against the drink spilling over the edge while the filled vessel is being carried. At the same time, it is intended that the drinking vessel should be particularly suitable for use with a drinking straw.

According to the invention, this problem is resolved in that a drinking vessel lid is provided which can be fitted over the lipped rim and which comprises in its lid wall which covers the open top of the 35 actual drinking vessel an aperture through which a drinking straw or the like can be inserted and at the rim of which there is at least one resilient closure flap which masks the push-in aperture.

It is true that the drinking vessel lid which can be 40 fitted onto the lipped rim of the drinking vessel is an additional element. It can, however, be produced with substantially reduced material and substantially less expensively than the additional cost which would be required for an over-sized drinking vessel. 45 For the rest, it remains the option of the user whether he wishes to close the filled drinking vessel with a drinking vessel lid. Furthermore, the drinking vessel lid offers an opportunity to use a drinking straw without the need to remove from the drinking 50 vessel the lid which has been placed thereon. At the same time, the drinking vessel lid can fully close the filled drinking vessel, at least as long as no drinking straw is inserted. But even after the drinking straw has been inserted, it is possible to guarantee a 55 closure of the filled drinking vessel which is sufficiently reliable for practical purposes. The user can, therefore, as he desires, insert the drinking straw into the drinking vessel lid which has been placed on the filled drinking vessel in order to carry the latter 60 away.

The closure flap or flaps for the drinking straw push-in aperture can be preformed by cuts in the lid wall which meet in the interior of the push-in aperture, preferably in the centre thereof. In spite of 65 these cuts, the lid wall is sufficiently fluidtight for

practical purposes. However, if it is desired to maintain the lid wall completely fluidtight, then these cuts may also be notches which pass only partially through the lid wall and which allow an 70 easy and complete piercing of the lid wall by means of the drinking straw.

In a preferred embodiment, four closure flaps for a drinking straw push-in aperture are preformed by two cuts which intersect in the centre of the push-in 75 aperture. In another embodiment of the invention, only one closure flap is provided for the drinking straw push-in aperture and is preformed by two cuts which meet V-wise in one corner of the triangular push-in aperture.

80 A particularly reliable closure of the drinking vessel is made possible with the drinking vessel lid if the actual drinking vessel is flanged over around its rim to provide a convex lipped rim and if the drinking vessel lid is constructed as a slip-on lid which carries 85 on its periphery a snap-on rim which fits over the lipped rim. Thus, the drinking vessel lid can be snap-fitted onto the rim of the filled drinking vessel. This secure seating of the drinking vessel lid on the rim of the drinking vessel is easily separable if 90 desired, particularly if the user wishes to remove the drinking vessel lid prior to drinking.

In order to guarantee hygienic keeping of the drinking vessel lids prior to use and while they are being held ready for use, the drinking vessel lid may 95 have within its peripheral edge an annular stacking means which is constructed for isolation of the drinking vessel lid by lateral withdrawal of one lid from a stack. The drinking vessel lids can then be held ready in a covered stack or as a stack in a 100 dispenser. The user then will touch only the particular lid which he is withdrawing from the stack.

For applications of the invention in which filled drinking vessels are closed by lids and are intended to be held ready for sale, the drinking vessel lid may 105 have in the lid wall a central trough-shaped depression into which the bottom edge of the drinking vessel can be fitted. It is then possible for filled drinking vessels which are closed by means of such drinking vessel lids to be stacked one upon another. 110 Examples of embodiments of the invention will be explained in greater detail hereinafter with reference to the accompanying drawings, in which:

*Figure 1* shows a filled drinking vessel closed by a drinking vessel lid and having an inserted drinking straw, the drawing being partially in side elevation and partially in cross-section;

*Figure 2* is a plan view of a drinking vessel lid intended to be fitted onto a drinking vessel according to *Figure 1*;

*Figure 3* is the detail 3 in *Figure 2* for a modified embodiment of drinking vessel lid;

*Figure 4* is the detail 3 in *Figure 3* for a third embodiment of drinking vessel lid;

*Figure 5* shows one area of the rim of two drinking vessel lids stacked one above the other, and

*Figure 6* shows the marginal zone 6 according to *Figure 1* but of a further embodiment of a drinking vessel lid fitted onto a filled drinking vessel and with a further drinking vessel stacked upon it.

*Figure 7* shows the detail 7 in *Figure 1* for a beaker-like

drinking vessel.

filled drinking vessel 10 is closed by means of a drinking vessel lid 11 into which a drinking straw 12 is inserted. The drinking vessel 10 is constructed on its aperture rim with a convex encircling lipped rim

5 13 over which is fitted a snap-on rim 14 which is formed on the periphery of the drinking vessel lid which is constructed as a snap-on lid. By means of this snap-on rim 14, in particular by means of the inwardly directed snap-on lugs 15 formed on it, the 10 drinking vessel lid 11 is held reliably on the rim of the aperture of the drinking vessel 10.

Within its periphery or its snap-on rim 14, the drinking vessel lid comprises an annular stacking means 16 which serves for stacking of the drinking 15 vessel lids 11, as indicated in Figure 5. This annular stacking means 16 has a rounded stacking ring 17 and rounded edges 18. By reason of this construction, whichever is the bottom drinking vessel lid 11 can be withdrawn laterally from a stack.

20 Within the stacking means 16 is located the actual lid wall 19, which is substantially flat and which in the examples according to Figures 1 to 5 lies in the plane of the top of the snap-on rim 14.

In the example shown in Figure 6, there is formed 25 within the stacking device 16 an annular rib 20 in the lid wall 19, said rib extending upwardly as far as the plane of the upper rim of the snap-on rim 14, while the middle part of the lid wall 19 is constructed as a central trough-shaped depression 21. The bottom 30 marginal zone 22 of the drinking vessel 10 fits into this trough-shaped depression 21 so that drinking vessels 10 closed by means of drinking vessel lids 11 can be stacked one upon another in the manner shown in Figure 6.

35 In the middle part of the lid wall 19 - as Figures 2 to 4 show - there is formed a push-in aperture 23 (shown by broken lines) to receive a drinking straw 12. This push-in aperture 23 is normally closed by one or a plurality of closure flaps 24.

40 In the example in Figure 2, four closure flaps 24 are formed by a pair of cuts 25 which intersect in the middle of the push-in aperture 23. In the example shown in Figure 3, two closure flaps 24 are formed by cuts 26 which meet in a T-shape. Finally, Figure 4 45 shows the possibility of providing the triangular push-in aperture 23 with a single closure flap 24 which is formed by two cuts 27 which meet V-wise in one corner of the push-in aperture 23.

The cuts 25, 26 and 27 can completely pierce the 50 lid wall 19. It is however also possible (even though not illustrated) for these cuts 25, 26, 27 to be constructed as notches which pass only partially through the lid wall 19.

The push-in aperture 23 with the closure flap 24 or 55 the cuts 25, 26, 27 which form these two elements can equally well also be provided in the example shown in Figure 6, in which case they are then in the bottom of the trough-shaped depression 21.

Also in the embodiment shown in Figures 1 to 5, 60 filled drinking vessels 10 closed by covers 11 can be stacked one upon another, but the stacking of filled drinking vessels 10 closed by lids 11, as envisaged according to Figure 6, offers the advantage that lateral displacement of the superposed drinking 65 vessels is prevented.

## CLAIMS

1. Drinking vessel, the top of which is open to form a drinking aperture and is surrounded by an aperture rim which is intended to be applied to the lips, characterised by a drinking vessel lid intended to be located on the lipped rim and which contains in its lid wall which in use covers the open top of the drinking vessel a push-in aperture to receive a drinking straw or the like, and on the peripheral edge of which there is disposed at least one resilient closure flap which masks the push-in aperture.
2. Drinking vessel according to Claim 1, characterised in that the closure flap or flaps is or are preformed by lines of weakening in the lid wall which meet in the interior of the push-in aperture, preferably in the centre thereof.
3. Drinking vessel according to Claim 2, characterised in that the lines of weakening are notches which pass only partially through the lid wall.
4. Drinking vessel according to Claim 2 or 3, characterised in that four closure flaps are preformed by two lines of weakening which intersect in the centre of the push-in aperture.
5. Drinking vessel according to Claim 2 or 3, characterised in that a closure flap is preformed by two lines of weakening which form a V at one corner of the triangular push-in aperture.
6. Drinking vessel according to any one of Claims 1 to 5, characterised in that the drinking vessel is flanged so as to have a beaded lipped rim and in that the lid is constructed as a slip-on lid which has a snap-on peripheral rim which fits over the lipped rim of the vessel.
7. Drinking vessel according to any one of Claims 1 to 6, characterised in that within its peripheral rim the lid has an annular stacking means which is constructed to allow lateral withdrawal of a selected lid from a stack of lids.
8. Drinking vessel according to any one of Claims 1 to 7, characterised in that the drinking vessel lid has in the lid wall a central depression into which the bottom edge of a superimposed drinking vessel can be fitted.