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(54) Beverage container provided with improved cap

(57) Beverage container of plastic material, comprised of a body (11) and a cap (12), which enables the beverage to be sucked without any need for the container to be opened.

The cap (12) comprises a conduit (15) that enables a first tubing (18), which extends into the container, to communicate with a second flexible tubing (19) that is connected to a beverage sucking spout (20). The spout (20) is brought into its beverage sucking position by means of a snap-acting device (13) comprising an elastic tab (14) that is integral with the cap (12).

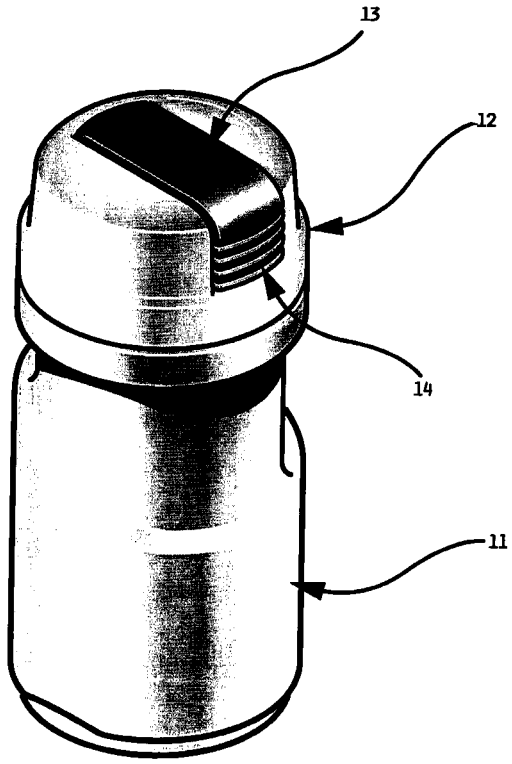

FIG. 1

EP 1 095 599 A2

Description

[0001] The present invention refers to a beverage container made of plastic material and provided with an improved cap enabling the beverage to be sucked from the container through the same cap.

[0002] Beverage containers made of plastics are largely known in the art since a quite long time now. They generally consist of a cylindrical body that is provided with a mouth for both filling in and delivering or dispensing the beverage, in which said mouth is plugged by a cap that is screwed on thereto.

[0003] More recently, use has started to be made of containers whose cap is provided with a closing or plugging device that is actuatable in a snap-like manner so as to offer the user a spout for sucking the beverage contained inside the container. To this purpose, the cap is crossed through by a rigid conduit that establishes a communication between a first tubing, which extends into the container down to the bottom thereof, and a second flexible tubing, which connects to the beverage sucking spout. Such a beverage sucking spout is hinged on in said snap-acting device, which in turn is hinged on in the cap. The opening of said plugging device is operated by means of a spring-loaded push-button that slides in an appropriate accommodating recess provided in the cap of the container.

[0004] The above-described prior-art solution, however, has a number of drawbacks. First of all, the cap itself is formed by a considerable number of single elements that must be manufactured separately and then be assembled in a quite complex operation. The opening and closing push-button and the related spring can quite easily slip out of their accommodating seat. In particular, such a drawback becomes dangerous in the case that the container is used by children, ie. the typical users of articles of such a kind, who may in fact run the risk of swallowing the piece that has so come off. In any case, the possible loss of the push-button or the spring causes the container to become fully useless, since it cannot be closed any longer.

[0005] It therefore is a main purpose of the present invention to provide a beverage container that is provided with an improved cap, ie. a cap that is made up by a minimum number of pieces, in which these pieces are in turn attached in a safe and reliable manner to the cap itself.

[0006] This aim is reached in a container according to the present invention, whose innovatory feature is as defined in the appended claim and is described below by way of non-limiting example with reference to the accompanying drawings, in which:

- Figure 1 is a side view of a beverage container according to the present invention;
- Figure 2 is a cross-sectional view of the cap of the container illustrated in Figure 1, in the closed position thereof; and
- Figure 3 is a cross-sectional view of the cap of the container illustrated in Figure 2, in the opened position thereof.

[0007] The beverage container according to the present invention is constituted by a substantially cylindrical body 11 (Fig. 1) and a cap 12, which is normally screwed on to the mouth opening of the body 11. The cap 12 is provided with a snap-acting closing device 13, which is adapted to be actuated by means of an elastic tab 14, as this will be described in greater detail further on.

[0008] The cap 12 is provided with a profiled inner section that defines (Figs. 2 and 3) a rigid vertical conduit 15, a receptacle with a sunken bottom 16, arid an abutment projection 17.

[0009] The conduit 15 enables the interior of the container 11 to communicate with the interior of the cap 12. To the lower end portion of the conduit 15 there is connected a first tubing 18, that extends into the container down to the bottom thereof, whereas to the upper end portion of the conduit 15 there is connected a second tubing 19, which is flexible and carries at its free end, duly attached thereto, a spout 20 for sucking the beverage contained in the container.

[0010] The receptacle 16, which is provided inside the cap 12, is closed by a cover 21, whose upper portion is hinged on to the same cap and which is provided with an appendix 22 directed towards the interior of the receptacle 16. To the lower end portion of the appendix 22 there is hinged on the beverage sucking spout 20, in such a manner as to cause the flexible tubing 19 to be bent into the receptacle 16 and the spout 20 to come to rest against the abutment projection 17 when the cover 21 is in its closed position (Figure 2). Liquid is in this way effectively prevented from leaking when handling the container.

[0011] According to the present invention, the closing device 13 of the cap 12 comprises a snap-fitting arrangement, which is implemented between a tooth 25 provided on the free edge of the cover 21 and a tooth 26 provided at an end portion of the profiled tab 14. The tab 14 is elastic and firmly joined to, ie, integral with the cap 12, so that a pressure exerted on the tab will cause the same to flex, thereby automatically releasing the teeth 25 and 26. The elasticity of the tubing 19 causes the cover 21 to open, in such a manner as to enable the spout 20 to be presented to the user in a convenient position for the beverage to be sucked (Figure 3).

[0012] Similarly, by pressing the cover 21 against the tab 14 the teeth 25 and 26 are caused to get engaged, by making use of the elasticity of the tab 14, in such a manner as to cause the device to snap back into its closed position.

[0013] Conclusively, the arrangement according to the present invention enables the closure of the con-

tainer to be implemented and performed in a safe and reliable manner, while eliminating two separate parts (push-button and spring) that are replaced by a single part (tab 14) integrated in the cap 12. With this solution the risk for the container to become useless and the potential danger for the user are done away with, said situations of risk and danger arising from parts of the closing device coming possibly off accidentally.

Claims

1. Beverage container, made of plastic material and provided with an improved cap that enables the beverage to be sucked, in which said cap (12) comprises a conduit (15) that enables a first tubing (18), which extends into the container, to communicate with a second flexible tubing (19), which connects to a beverage sucking spout (20), in which said beverage sucking spout is hinged on in a snap-acting closing device (13) that is in turn hinged on in the cap, wherein said container is **characterized in that** the snap-acting closing device (13) comprises an elastic tab (14) which is integral with said cap (12) and adapted to flex so as to actuate said closing device and release said beverage sucking spout.

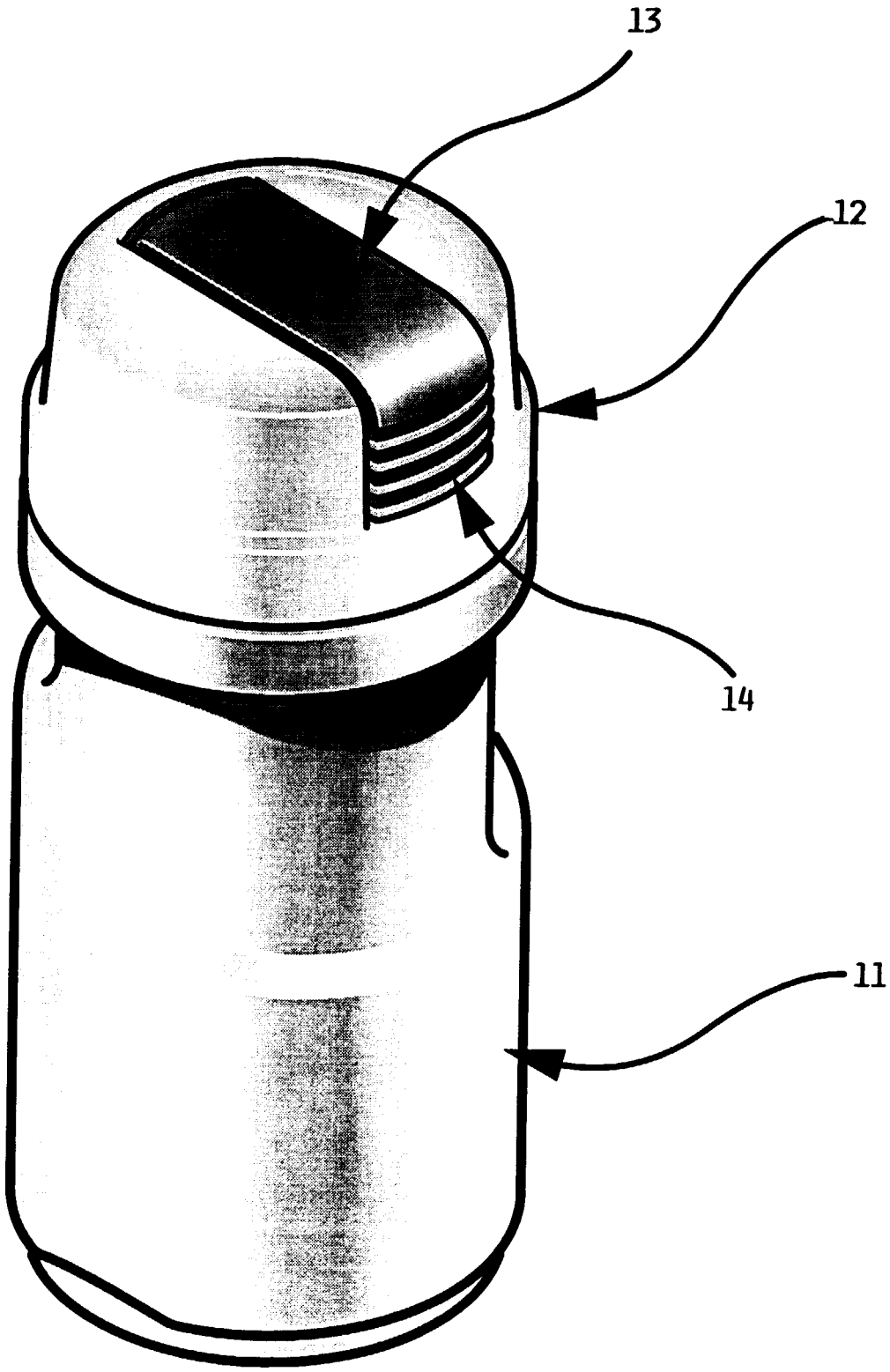

FIG. 1

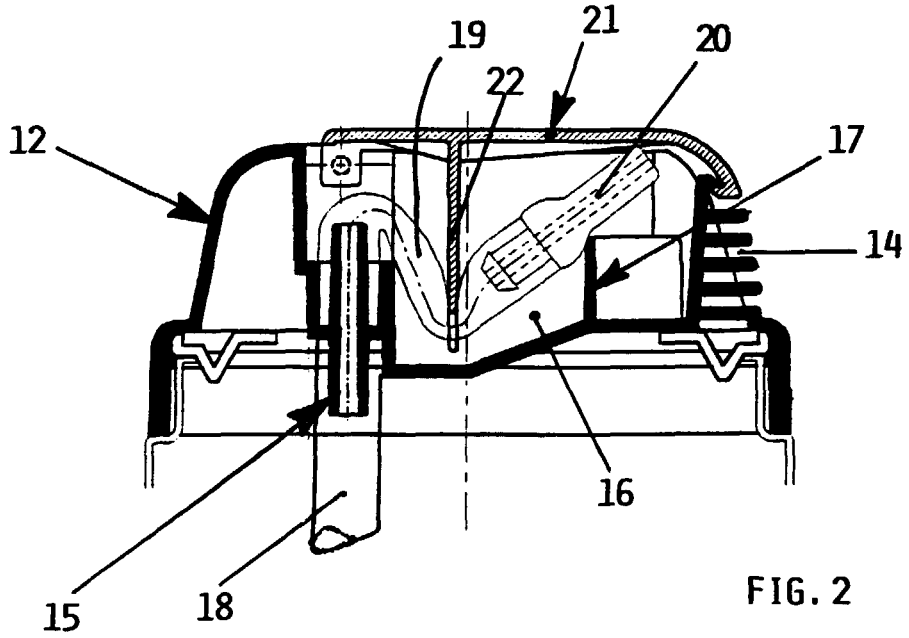

FIG. 2

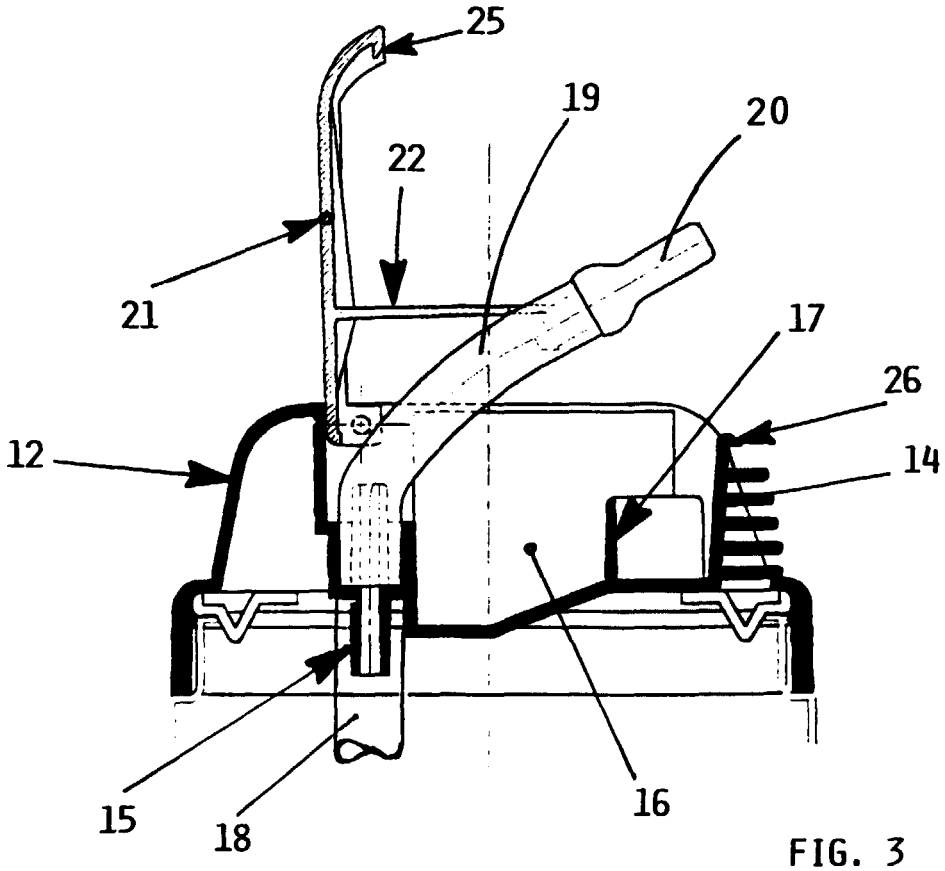

FIG. 3