element, wherein the operating element can be pushed into the tubular element to such extend that the operating element at least partly removes the cap from the tubular element and/or pierces said cap, for opening a passage from the container to a tapping line connected to the operating element, wherein the operating element comprises an end portion provided with radially extending elements, for engaging the end of the tubular element when the cap is removed at least in part from the tubular element, for locking the operating element within the tubular element.

The tubular element with the cap can be made integrally, for example by multi component injection moulding, such as 2-K moulding. Alternatively the cap can be mounted to the tubular element in a different manner, for example by press fit or bonding, as long as it can be pushed at least partly away from the tubular element.

The operating element preferably is designed such that once it has been use for pushing the cap at least partly away, it locks in or behind part of the tubular element, such that it is locked in position and cannot be removed, at least not without damage, or reused, whereas it preferably extends at least partly beyond the position in which the cap was fitted, such that the cap cannot be pushed back into a position in which it closes off the tubular element.

In order to further elucidate the present invention, embodiments thereof shall be disclosed and discussed hereafter, with reference to the drawings. Therein shows:

Fig. 1A and B schematically in top and side view respectively an assembly according to the disclosure, with a container enclosed inside the tapping assembly;

Fig. 2 schematically in cross sectional view along the line II - II in fig. 1 an assembly according to the disclosure;

Fig. 3 schematically an assembly of fig. 1 and 2, with a tapping apparatus in open position and a container for insertion therein, showing an operating element with tapping line;

Fig. 4 schematically in cross sectional view a neck region of a container with a closure, prior to opening the container;

Claims

1. Beverage container, wherein a closure is provided in and/or on the neck region of the container, comprising a substantially tubular element at the neck region, having a closed peripheral wall, and an operating element fitting inside said tubular element, slidingly sealing against the said wall, wherein a cap is fitted at or near an end of the tubular element, closing off the tubular element, wherein the operating element can be pushed into the tubular element to such extend that the operating element at least partly removes the cap from the tubular element and/or pierces said cap, for opening a passage from the container to a tapping line connected to the operating element, wherein the operating element comprises an end portion provided with radially extending elements, for engaging the end of the tubular element when the cap is removed at least in part from the tubular element, for locking the operating element within the tubular element.

2. Beverage container according to claim 1, wherein the tubular element with the cap has been manufactured by multi-component moulding, such as 2-K moulding.

3. Beverage container according to claim 1 or 2, wherein the container is a BIB- or BIC-type container.

4. Beverage container according to any one of claims 1 - 3, wherein the container has an inner and an outer container, wherein the inner container is connected to the outer container at at least two spaced apart locations.

5. Beverage container according to any one of claims 1 - 4, wherein the container is a BIB or BIC type container, wherein a gas inlet opens into a pressure space within the container, preferably between an inner holder and an outer holder, wherein the inner holder is preferably connected to the outer holder at at least a position near the gas inlet.

6. Beverage container according to claim 1, wherein the container has an inner and outer container, wherein the inner container is connected to the outer container at at least two spaced apart locations, such as for example at opposite axial ends at or near the neck region and at or near an opposite end, such that a direction of compression is at least partly predefined, such as primarily in radial direction,

wherein a tapping line is connected to the container for dispensing beverage from the container.

7. Beverage container according to any one of claims 1 - 6, wherein a gas inlet is provided at a bottom end of the container, opposite a neck portion of the container wherein a dispense opening of the container is provided in or at the neck portion.

8. Beverage container according to claim 5, wherein the gas inlet is provided with a second connector situated in and/or on the container, preferably comprising a gas valve.

9. Beverage container according to any one of claims 1 - 8, wherein the operating element comprises a peripheral seal for sealing against said wall of the tubular element, spaced apart from a forward end facing the cap, wherein a longitudinal distance between said forward end and said peripheral seal is preferably smaller than the longitudinal length between said cap and an opposite end of said tubular part, such that the seal engages the wall of said tubular part in a sealing manner prior to the forward end of the operating element engaging the cap.

10. Beverage container according to anyone of claims 1 - 9, wherein radially extending elements are click fingers.

11. Beverage container according to any one of claims 1 - 10, wherein the tubular element is connected to or comprises a flange at a side opposite the end closed by the cap, which flange is connected to the container for supporting the tubular element in the neck region.

12. Beverage container according to any one of claims 1 - 11, wherein the operating element comprises or is connected to, at a side opposite a forward end facing the cap, an at least partly flexible dispense line and an outward flaring surface, surrounding a part of the dispense line, especially adjacent the operating element, wherein the flaring surface is preferably designed such that the dispense line can be bent, supported by said surface, over an angle, preferably an angle of at least 45 degrees, more preferably an angle of about 90 degrees, without collapsing.

13. Beverage container according to claim 12, wherein the dispense line can be bent over said flaring surface between a first part extending approximately parallel to and preferably approximately collinear with a longitudinal axis of the operating element, and a second part extending at about right angles to said axis.

14. Beverage container according to any one of claims 1 – 13, wherein the cap after removal maintains attachment to the tubular element, for example by a living hinge.