

We Claim:

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1. A receptacle holding unit (1) for a device for preparing a beverage from an ingredient contained in a receptacle (2), in particular by circulating a liquid into such receptacle and centrifugally driving such receptacle, comprising:

- a first part (10);
- a second part (20) that is movable towards the first part, in particular along a longitudinal axis (1'), into a closed position for holding said receptacle in such unit and relatively apart from the first part into an open position for inserting said receptacle into such unit and/or for removal therefrom;
- a fastening device (11,21) having a fastened configuration for fastening together the first and second parts (10,20) in the closed position and an unfastened configuration such to enable movement of the first and second parts out of the closed configuration; and
- an actuator (30) movable between an open configuration and a closed configuration to drive the first part and the second part between the open and the closed positions,

characterised in that the actuator is movable along a straight axis (1') to drive the first part (10) and the second part (20) into the closed position and further movable along said axis (1') to actuate the fastening device (11,21) from the unfastened configuration to the fastened configuration.

2. The unit of claim 1, which comprises a piercing device (20C) driven by the actuator (30) for piercing said receptacle (2).

3. The unit of claim 2, wherein the actuator is movable along said straight axis (1') to drive the piercing device (20C) for piercing said receptacle (2) and then to

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drive the first part (10) and the second part (20) into the closed position.

4. The unit of claim 2 or 3, wherein the piercing device (20C) is assembled to and held by the second part (20).

5. The unit of any preceding claim, wherein the fastening device (11,21) has:

- a first engagement arrangement (11) assembled to or integral with the first part (10); and
- a second engagement arrangement (21) assembled to or integral with the second part (20),

the first and second engagement arrangements being relatively rotated about said axis (1') when driven by the actuator (30) moving along said axis for mutual engagement and disengagement of the engagement arrangements (11,21) in particular via an axial/rotational movement conversion such as a helical conversion, the first and second engagement arrangements (11,21) comprising optionally first and second engagement surfaces, respectively, said first and second engagement surfaces being rotationally engaged together about said axis when fastening device is in the fastened configuration and disengaged when the fastening device is in the unfastened configuration.

6. The unit of claim 5, wherein the first part (10) bearing the first engagement arrangement (11) comprises a first index (15), in particular a plurality of first indexes, and the second part (20) comprises an assembly of:

- a pre-positioning body (20B) that bears a second index (25), in particular a plurality of second indexes; and
- an engaging body (20A) that bears the second engagement arrangement (21) and that is pivotally mounted to the pre-positioning body,

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the first index (15) cooperating with the second index (25) for pre-orienting the second engagement arrangement (21) relative to the first engagement arrangement (11) to guide mutual engagement thereof at closure of the first and second parts (10,20), the engaging and the pre-positioning bodies (20A,20B) being optionally angularly biased into a relative angular orientation for guiding said mutual engagement, in particular biased by one or more springs (20AB) and/or by other elastically deformable elements.

7. The unit of claim 5 or 6, which comprises a piercing device (20C) assembled to and held by the second part (20), the device having at least one piercing element (29) that is off said axis (1') and that is angularly fixed relative to the first part (10), and/or when present relative to the prepositioning body (20C), about said axis (1') when the second engagement arrangement (21) is pivotally moved relative to the first engagement arrangement (11) about said axis (1') between the closed and open positions.

8. The unit of claim 6 or 7, wherein the piercing device (20C) is angularly fixed to the pre-positioning body (20B) about said axis (1') between the open and closed positions.

9. The unit of any preceding claim, which comprises a piercing device (20C) that has a plurality of off said axis (1') piercing elements (29) for piercing said receptacle (2), such piercing elements being in an annular arrangement about said axis (1') and/or in a regular angularly spaced-apart relationship relative to said axis.

10. The unit of any preceding claim, which comprises a piercing device (20C) that has a piercing element (27), such as a centrally located piercing element, extending along said axis (1'), the piercing element comprising in

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particular a channel (28) for guiding a liquid into said receptacle (2) and/or out thereof.

11. The unit of any preceding claim, which comprises a locking device (22,32) movable between a locked position for locking the fastening device (11,21) in the fastened configuration and an unlocked position for unlocking the fastening device for unfastening the first and second parts (10,20).

12. The unit of claim 11, wherein the actuator (30) is movable along said axis (1') to actuate the fastening device (11,21) into the fastened configuration and then to drive the locking device (22,32) into the locked position, the actuator being in particular assembled to or integral with part (32) of the locking device (22,32).

13. The unit of any preceding claim, wherein the actuator (30) is movable reversibly along the straight axis (1') for actuation and driving of the first and second parts (10,20) and the fastening arrangement reversely, and, optionally, when present, of the piercing device and/or of the locking device (22,32) reversely.

14. A beverage preparation device comprising a receptacle holding unit (1) as defined in any preceding claim.

15. Use of a receptacle (2) containing a beverage ingredient for a receptacle holding unit (1) as defined in any one of claims 1 to 13 or for a beverage preparation device as defined in claim 14.

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