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Description

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Holder for a drinks container

The invention relates to a holder for a drinks container, having the features of the preamble of claim 1.

10 The holder is intended for installation in a motor vehicle or some other means of locomotion. A drinks container is understood to be a drinks can, a beaker, a cup or the like.

Holders of that kind are known *per se* in a multiplicity of different forms. They usually
15 have a base part or some other standing surface or bottom support, on which a drinks container being inserted into the holder can be stood, and a holding part, which provides lateral support at the periphery of a drinks container inserted into the holder.

The invention is based on the problem of proposing a holder for a drinks container,
20 which allows simple diameter matching.

The problem is solved according to the invention by the features of claim 1. The base part of the holder according to the invention has a support, which provides support at the periphery of a drinks container inserted into the holder, opposite the holding part.
25 A drinks container inserted into the holder is held at its periphery by the support and the holding part so that it is prevented from tipping. In addition, the holder according to the invention has a guide means, by which the holding part is so guided in movable manner at the base part that the size of the intermediate space (free width) between the holding part and the support can be varied. As a result, matching the holder to the
30 diameter of a drinks container being inserted can be carried out in simple manner. The invention makes possible a high degree of diameter matching.

In principle it is sufficient for the holding part to support a drinks container inserted into the holder at a location or region of the periphery which is located opposite the



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support. In an embodiment of the invention, the holding part is provided with an insertion opening, which partially or completely surrounds an inserted drinks container. By virtue of the guide means, the holding part is so guided in movable manner at the base part that, in one position of the holding part, the support is, when seen from above, located inside the insertion opening and, in another position of the holding part, the insertion opening is approximately flush with the support. The latter is understood to mean that, when seen from above, a peripheral region of the insertion opening is approximately in register with the support. In that embodiment of the invention, as a result of moving the holding part, the free width between the support and the insertion opening can be varied and, as a result, the holder can be matched to the diameter of a drinks container being inserted.

Suitable guide means for the holding part at the base part are, for example, slideways. In an embodiment of the invention, a parallelogram guide means is provided between the holding part and the base part. The parallelogram guide means is simple in its construction and functionally reliable.

In an embodiment of the invention, a spring element is provided, which biases the holding part in the direction of reducing the intermediate space between the holding part and the support. The spring element makes possible automatic matching of the holder according to the invention to the diameter of an inserted drinks container. For insertion of a drinks container of large diameter, the holding part is moved, by means of the drinks container, against the force of the spring element until the intermediate space between the holding part and the support is sufficient for insertion of the drinks container. The drinks container is inserted into the holder, and the spring element, by way of the holding part, presses the inserted drinks container against the support so that the drinks container is held in a manner preventing tipping. This embodiment of the invention has the advantage of one-handed operation. Diameter matching is performed by means of the drinks container, which is gripped in one hand.

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The invention is described below in greater detail with reference to an exemplary embodiment illustrated in the drawing. The two Figures show a holder according to the invention in two different positions, in section along a mid-plane. The drawing is to be understood as being a diagrammatic and simplified representation.

The holder 10 according to the invention shown in Figure 1 is intended for installation in a motor vehicle. It is intended for insertion of a drinks container such as, for example, a can 12 or a beaker 14. The holder 10 has a base part 16 having a base plate 18, which forms a standing surface for the drinks container 12, 14. Projecting up from the base plate 18 is a block-like part 20, which in plan view occupies about half the base plate 18. A side face of the block-like part 20 which faces a laterally projecting region of the base plate 18 is concavely shaped and forms a support 22, which provides lateral support at the periphery of a drinks container 12, 14 inserted into the holder 10.

Above the base part 16, the holder 10 has a holding part 24. The holding part 24 has, when seen from above, the shape of a rectangular frame having a circular through-hole, which forms an insertion opening 26 for the drinks container 12, 14. The holding part 24 is guided in movable manner at the base part 16 by means of a total of four pivot levers 28. On each side of the block-like part 20 there are arranged two pivot levers 28, which are pivotally connected by means of pivot pin connections 30 to the base part 16 and the holding part 24. The pivot levers 28 form a parallelogram guide means, by which the holding part 24 is guided in movable manner at the base part 16. By virtue of the parallelogram guide means having the pivot levers 28, the holding part 24 can be moved back and forth between the two positions shown in Figures 1 and 2. In the position shown in Figure 1, the support 22 is, when seen from above, located inside the insertion opening 26 of the holding part 24 and, as a result, reduces the free width d thereof. The free width d is the spacing or intermediate space between the support 22 and a peripheral region of the insertion opening 26 that is located opposite, seen when viewing the holder 10 from above. In Figure 2, the support 22 is approximately flush with the insertion opening 26; the free width d between the support 22 and the peripheral region of the insertion opening 26 that is located opposite is larger than in Figure 1 and corresponds to the diameter of the insertion opening 26. The holder 10 can, as a result, be matched to drinks containers 12, 14 of different diameters.

Acting on one of the pivot levers 28 is a leg spring 32, which rests on the base plate 18. The leg spring 32 forms a spring element, which biases the holding part 24, by way of the pivot lever 28, in the direction of reducing the free width d.

- 5 On one side of the base part 16 there is mounted a hinged lid 34, by means of which the holder 10 can be covered when not in use.

In order to hold a small drinks container such as, for example, the drinks can 12 shown in Figure 1, the latter is, with the hinged lid 34 open, inserted into the insertion opening 26 of the holding part 24 from above and stood on the base plate 18. The drinks container 12 is given lateral support, at its periphery, by the support 22 and the peripheral region of the insertion opening 26 that is located opposite, in a manner preventing tipping.

- 15 A drinks container of larger diameter such as, for example, the drinks container 14 shown in Figure 2, is, for insertion into the holder 10, as indicated by broken lines in Figure 1, lowered into the insertion opening 26 of the holding part 24. By moving the beaker 14 to the side (to the right in the drawing), the holding part 24 is moved to the side against the force of the leg spring 32 by virtue of the beaker 14 engaging in the insertion opening 26, until the beaker 14 is fully positioned adjacent to the block-like part 20, the concave side face of which forms the support 22. The beaker 14 is then lowered further until it is standing on the base plate 18 forming the standing surface. That position is shown in Figure 2. The leg spring 32 presses the holding part 24, at the peripheral region of the insertion opening 26 which is located opposite the support 22, from one side against the beaker 14 and presses the beaker 14 against the support 22. The inserted beaker 14 prevents further movement of the holding part 24 by the leg spring 32. As a result, the holder 10 matches itself automatically to the diameter of an inserted drinks container 14. Even when inserting a drinks container of larger diameter than the beaker 14, only the drinks container needs to be held, as described hereinbefore, for which one hand is sufficient. A second hand is not needed.

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Patent claims

1. Holder for a drinks container, having a base part on which a drinks container being inserted into the holder can be stood and having a holding part which provides support at a peripheral location of a drinks container inserted into the holder,
10 **characterised in that** the base part (16) has a support (22), which, with respect to a drinks container (12; 14) inserted into the holder (10), is arranged opposite the holding part (24); and the holder (10) has a guide means (28), by which the holding part (24) is so guided in movable manner with respect to the base part (16) and the support (22) that a free width (d) between the holding part (24)
15 and the support (22) can be varied.
2. Holder according to claim 1, **characterised in that** the holding part (24) has an insertion opening (26) for the drinks container (12; 14); and the holding part (24) is so guided that, in one position of the holding part (24), the support (22) is located
20 inside the insertion opening (26) and, in another position of the holding part (24), the insertion opening (26) is approximately flush with the support (22).
3. Holder according to claim 1, **characterised in that** the guide means (28) is a parallelogram guide means.
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4. Holder according to claim 1, **characterised in that** the holder (10) has a spring element (32), which biases the holding part (24) in the direction of reducing the free width (d) between the holding part (24) and the support (22).