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(54) DEVICE FOR HOLDING LIQUID

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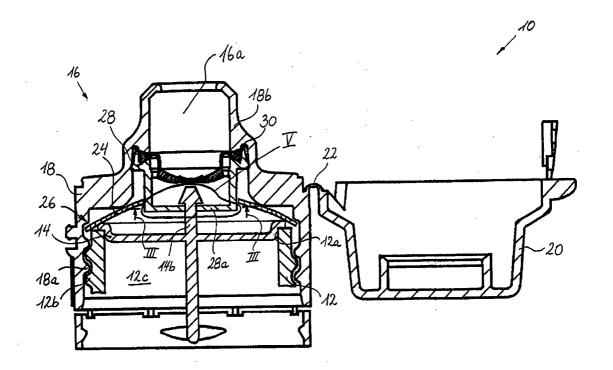
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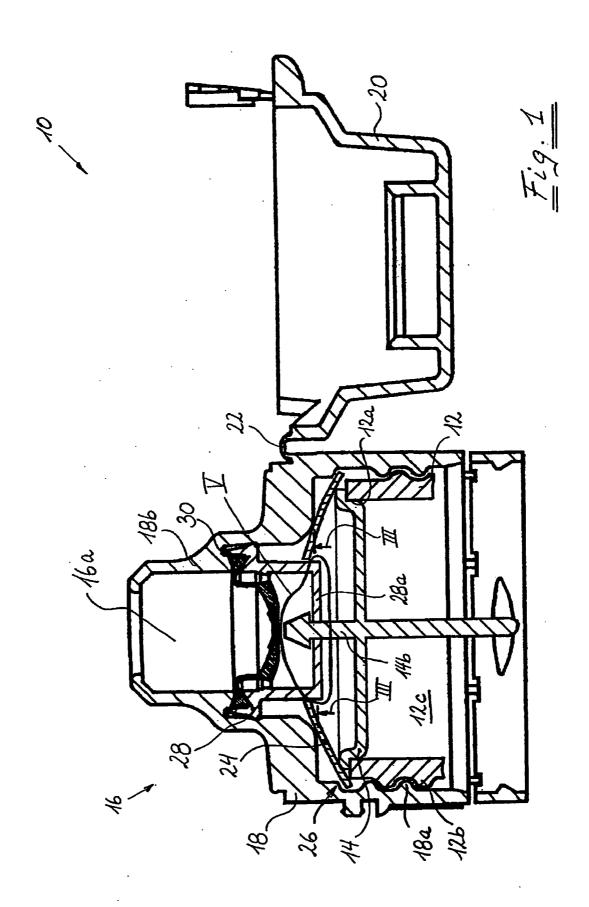
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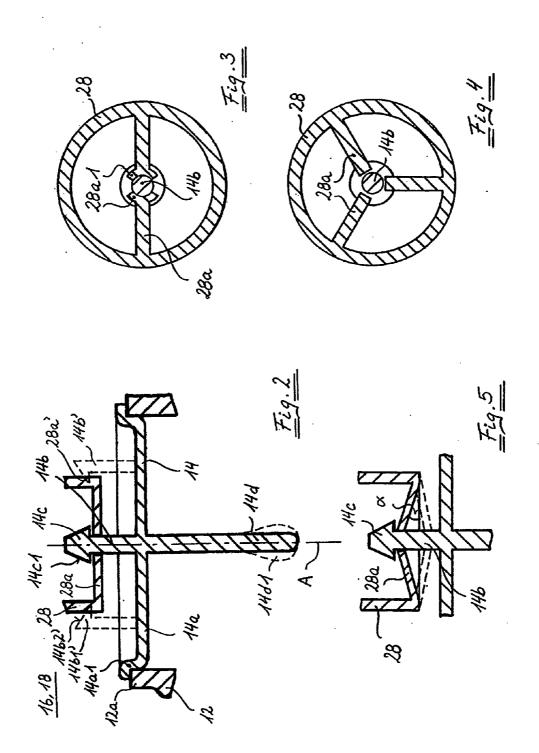
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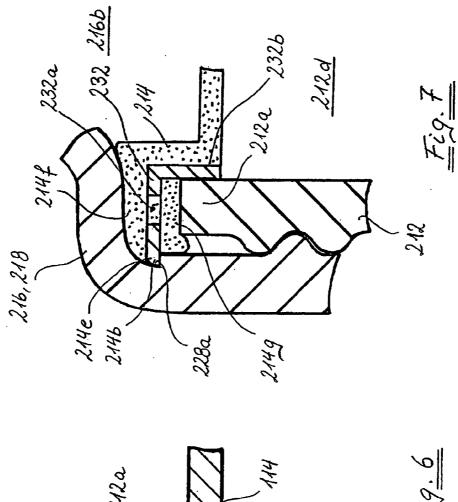
ABSTRACT (57)

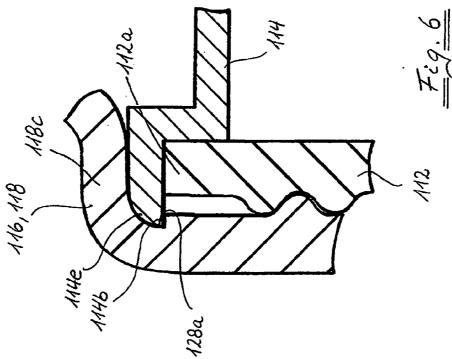
A device for holding liquid includes a container with an outlet opening. A closure for closing the outlet opening of the container, wherein a sealing body structured for sealing engagement with the outlet opening when the closure is arranged in a position closing the outlet opening. At least one capture attachment coupled to the sealing body. Further, at least one engagement element coupled to the closure element being detachably attachable to the at least one capture attachment. The instant abstract is neither intended to define the invention disclosed in this specification nor intended to limit the scope of the invention in any way.

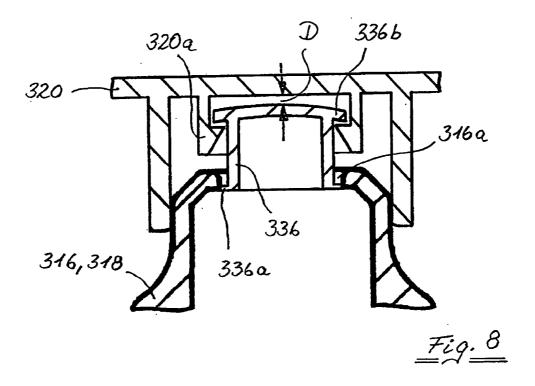


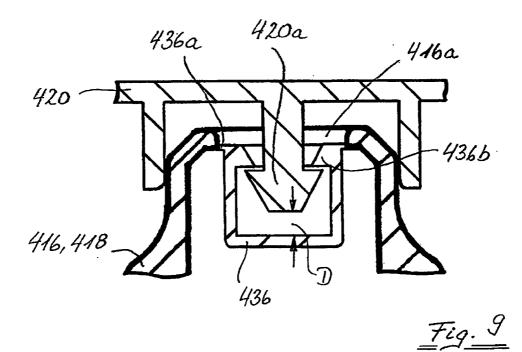












DEVICE FOR HOLDING LIQUID

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application claims priority under 35 U.S.C. §119 of German Patent Application No. 10 2005 034 178.0, filed on Jul. 21, 2005, the disclosure of which is expressly incorporated by reference herein in its entirety.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The invention relates to a device for holding a liquid. The device includes a container with an outlet opening, a closure for closing the outlet opening of the container, and a sealing body. The sealing body can be placed on the outlet opening and brought into sealing engagement with the edge of the outlet opening by the closure, closing the outlet opening.

[0004] 2. Discussion of Background Information

[0005] Holding liquid devices or containers can be used for holding liquids, such as beverages enriched with gases, e.g., carbon dioxide gas and/or oxygen gas. According to DE 195 12 971 A1, a sealing body embodied in a disk-shaped manner can ensure the gas-tightness of a holding device in a storage state between the production and the consumption of the liquid. In particular, for consumers to drink the liquid or beverage from the container, they must first remove the closure, i.e., physically taking off the sealing body, before consuming the beverage (by placing the liquid holding device to his/her mouth) from the outlet opening of the container. It is possible for gaps to develop in the sealing body, which may result in beverage leaks. For example, if the consumer fails to remove the sealing body before attempting to consume the beverage, the beverage may spill over on the clothes of the consumer through the leaks in the gap, or by the beverage forcing the seal off of the container which it in an inverted position. Obviously, this situation would be an unpleasant experience for the consumer. The present invention looks to overcome the above-mentioned disadvantages of the containers, so that the consumer is not faced with the above-noted potential unpleasant experiences.

SUMMARY OF THE INVENTION

[0006] The present invention provides a device to reliably avoid unpleasant experiences to the consumer from the consumer unintentionally leaving a sealing body on a outlet opening of a container after removing a closure.

[0007] According to the invention, the device can be used with conventional cup-shaped closures as well as with modem two-part closures. The modern two-part closures may include an intermediate unit mounted on an outlet opening having a passage opening, e.g., a drinking spout and/or cap, which closes the passage opening and/or can be removed therefrom. Further, the invention can be utilized in drinking closures associated with the "Active O₂" beverage series of the assignee of the instant invention.

[0008] According to the invention, the device may be adapted to conventional cup-shaped closures using sealing bodies having a solid disk, which separates a head room of

the container from a closure chamber formed in the closure above the sealing body. Further, the present invention can be adapted to sealing bodies which provide a connection between the head room and the closure chamber, e.g., ring-shaped sealing bodies. It is also possible in the latter case that when a sealing ring which, unnoticed by the consumer, is still located on the outlet opening, is suddenly detached from the outlet opening, the consumer is surprised and spills liquid on his clothing as a result of an unmindful movement by the consumer.

[0009] According to another feature of the invention, the device may include a sealing body having at least one capture attachment in which the closure has at least one engagement element that can be brought into capture engagement with the at least one capture attachment, wherein the capture engagement is detachable again. Due to this capture engagement, when the closure is removed from the outlet opening, the sealing body can also be simultaneously removed from the outlet opening, so that it cannot be left on the outlet opening unintentionally by the consumer. For example, the at least one engagement element can be interlockable with the capture attachment of the sealing body.

[0010] According to another feature of the invention, when the device is used with a solid-disk sealing body with a drink closure, the capture engagement between the sealing body and the closure can be cancelled or detached again by the consumer by removing the sealing body from the closure. Detaching the sealing body from the closure can be facilitated, e.g., in that on its side facing away from the closure the sealing body has a grip attachment, which the consumer can grasp in order to remove the sealing body from the closure. The grip attachment can be embodied in different ways. For example, it can be made of a pin-like element, which is provided on its free end preferably with a thickening or ribs, which prevent the consumer's fingers from slipping. However, the grip attachment can also be formed by a finger loop.

[0011] According to another feature of the invention, the at least one capture attachment can be provided on the side of the sealing body facing the closure. For example, an interlocking may occur via the free end of the capture attachment embodied with a thickening which can be engaged from behind by the at least one engagement element. It is also possible for at least one capture attachment to be formed by the outer circumferential edge of the sealing body. In both of the above cases, the capture attachment can be embodied to facilitate the interlocking with at least one directing slope for the at least one engagement element.

[0012] According to another feature of the invention, at least one engagement element can be integrally formed on the closure, e.g., on its intermediate unit, in one piece. However, it is possible for at least one engagement element to be embodied on an element that can be connected to the closure, e.g., its intermediate unit. In the latter case, the element that can be connected to the closure may be a circular cylindrical part, that is, interlockable with the closure or its intermediate unit. Furthermore, the element that can be connected may be made as an injection-molded part, e.g., of PP (polypropylene).

[0013] According to another feature of the invention, there are several embodiments of the at least one engagement element.

[0014] A first variant may include, but is not limited to, at least one engagement element having at least one indentation extending in the circumferential direction of the closure, e.g., of its intermediate unit. The opening of the indentation can point both radially inwards as well as radially outwards with respect to one axis of the container.

[0015] Additionally or alternatively, a second variant may include, but is not limited to, at least one engagement element extending on the capture attachment. The extension direction of the element can run essentially radially with respect to one axis of the container. If the at least one engagement element is enlarged on its end facing towards the capture attachment, it wraps around the capture attachment at a relatively large angle at the circumference, but still practically does not impede the liquid flowing past through the intermediate unit.

[0016] Further, if that the capture engagement between the at least one capture attachment and the at least one engagement element is ensured during the removal of the closure from the container, at least one engagement element for facilitating the production of this capture engagement deviating from the essentially radial extension can extend in the direction of the capture. attachment and of the outlet opening.

[0017] However, it is possible to further stabilize the capture engagement between the capture attachment and the engagement element by using a barb. For example, at least one engagement element extends toward the capture attachment and away from the outlet opening creating the barb, which results in preventing a simple release through the form closure of the at least one engagement element with the shaft of the capture attachment. Although a possible destruction of the capture attachment and/or the at least one engagement element may occur during the removal of the sealing body from the closure, such negative effects will not effect the function of the closure from the removal of liquid from the container.

[0018] According to another feature of the invention, a plurality of engagement elements can be evenly distributed over the circumference of the capture attachment of the sealing body. For example, two engagement elements arranged diametrically opposite one another can be sufficient, since practically no radial relative movements between the sealing body resting on the interior circumference of the outlet opening and the engagement elements of the closure occur, when attaching the closure to the container. Further, the above arrangement of the two engagement elements would work equally as well when the closure is a conventional screw top. However, it is also possible to provide more than two engagement elements, e.g., three engagement elements arranged essentially like the Mercedes star.

[0019] It is possible to produce the capture engagement between the at least one capture attachment and the at least one engagement element while mounting the closure on the outlet opening, which may already be provided with the sealing body. However, to simplify the closing of the outlet opening of the container, the closure can be equipped with the sealing body and the closure assembly, providing a single unit to be installed on the outlet opening.

[0020] Furthermore, when a two-part closure is used, a valve unit can be provided preventing the liquid from

slopping out of the container in an uncontrolled manner after the cap is opened and allows the liquid to escape from the container via suctioning or by compressing the container at the intermediate unit. The above valve unit may be for example, from the "Active O₂" beverage series of the instant assignee, but is not limited to only this example. The valve unit can be assigned to the intermediate unit of the closure. Furthermore, it is possible to embody the valve unit as a separate element, e.g., of silicone, which can be attached to the intermediate unit of the closure. Alternatively, however, the valve unit can also be integrated into the intermediate unit.

[0021] According to another feature of the invention, the device is able to provide a holding chamber or drinking closure for liquid that may be gas-tight, liquid-tight, as well as sealable against outside influences, e.g., against penetration by germs and the like. When using the above holding chamber or drinking closure in combination with the abovemention ring seal, a passage opening of the intermediate unit of the closure can be closed via a removable closure element, which is connected to the intermediate unit via a predetermined breaking point. Since this concept is also advantageous irrespective of the solubility of the capture engagement between capture attachment and engagement element, independent protection is can also be included.

[0022] The closure element can be embodied in one piece with the intermediate unit, e.g., by an injection molding method. The predetermined breaking point can be provided on the inside of the passage opening.

[0023] In order to be able to easily remove the closure element from the passage opening during the first removal of the liquid from the container, it is possible for at least one barb to be provided at one of the parts, cap or closure element, and at least one barb receptacle to be provided on the respectively other part, closure element or cap. The barb and barb receptacle can, e.g., already be connected to one another during production, so that the closure element is already removed during the first opening of the cap.

[0024] Furthermore, in order to be able to further improve the gas-tightness of the device for holding liquid according to the invention, a thrust washer can be provided which can be pressed on the engagement area between the outlet opening of the container and the sealing body during the mounting of the closure on the container. The thrust washer can be firmly interlocked with the closure. Furthermore, the thrust washer can be produced as an injection-molded part, e.g., of EVA (ethylene vinyl acetate).

[0025] According to another feature of the invention, the sealing body can be produced as an injection-molded part, e.g., of HDPE (highly dense polyethylene).

[0026] According to another feature of the invention, the two-part closures may have the cap connected to the intermediate unit in a hinged manner. Further, the cap and the intermediate unit can be produced in one piece as an injection-molded part, e.g., of PPC (polypropylene copolymer), such that a film hinge can form the hinged connection.

[0027] The present invention is directed to a device for holding liquid that includes a container with an outlet opening. Further, the device may include a closure for closing the outlet opening of the container, and a sealing body structured for sealing engagement with the outlet

opening when the closure is arranged in a position closing the outlet opening. Further still, at least one capture attachment can be coupled to the sealing body, and at least one engagement element may be coupled to the closure element so as to be detachably attachable to the at least one capture attachment.

[0028] According to another feature of the invention, the sealing body is structured and arranged for sealing engagement with an edge of the outlet opening when the closure is arranged in the position closing the outlet opening. Further, the at least one capture attachment may be part of the sealing body. Further still, the at least one engagement element can be interlockable with the at least one capture attachment.

[0029] According to another feature of the invention, the device may include the closure having an intermediate unit, a passage opening and a removable cap. The intermediate unit can be mounted on the outlet opening. Further, the sealing body may have a grip attachment arranged on a side facing away from the closure.

[0030] The at least one capture attachment can be arranged on a side of the sealing body facing towards the closure. Further, the at least one capture attachment can be formed by an outer circumferential edge of the sealing body. Further still, the at least one engagement element can be arranged in at least one piece on the closure. The at least one engagement element can be arranged on at least a portion of the intermediate unit. Another feature of the invention provides for the at least one engagement element being arranged on an element connected to the closure. Further, the at least one engagement element may include at least one indentation extending in the circumferential direction of the closure. Further still, the at least one indentation may extend in the circumferential direction of the intermediate unit. The at least one engagement element can have an element to extend on the capture attachment. Further, the at least one engagement element can be enlarged on an end facing towards the capture attachment.

[0031] According to another feature of the invention, the device may include a plurality of the engagement elements that may be uniformly arranged on a circumference of the capture attachment of the sealing body. Further, the capture attachment can be arranged on a free end with directing slopes for the at least one engagement element. Further still, a valve unit may be arranged to the intermediate unit of the closure. The passage opening can be closed by a removable closure element connected to the intermediate unit via a predetermined breaking point. Wherein at least one barb and at least one barb receptacle may be arranged on one of the cap, the closure element, and/or the capture attachment.

[0032] According to another feature of the invention, the device may include a plug that may be integrally formed by a predetermined breaking point arranged either in or out of a passage opening of the closure. Further, the engagement element may include at least one fork shape extension.

[0033] According to another feature of the invention, the device is for holding liquid including a container with an outlet opening. The device may include a closure for closing the outlet opening of the container. Further, a sealing body in sealing engagement with the outlet opening when the closure can be arranged in a position closing the outlet opening. Further still, at least one engagement element coupled to the closure that is detachably attachable with a free end of the sealing body.

[0034] Other exemplary embodiments and advantages of the present invention may be ascertained by reviewing the present disclosure and the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

[0035] The present invention is further described in the detailed description which follows, in reference to the noted plurality of drawings by way of non-limiting examples of exemplary embodiments of the present invention, in which like reference numerals represent similar parts throughout the several views of the drawings, and wherein:

[0036] FIG. 1 A section side view of a holding device according to the invention;

[0037] FIG. 2 An enlarged representation of the sealing body and the elements of the holding device according to FIG. 1 adjacent thereto;

[0038] FIG. 3 A section view along the line III-III in FIG. 1;

[0039] FIG. 4 A view similar to FIG. 3 of another embodiment:

[0040] FIG. 5 A view similar to the detail V in FIG. 1 of another embodiment;

[0041] FIGS. 6 and 7 Enlarged representations of an area surrounding the outer circumferential edge of the sealing body according to further embodiments; and

[0042] FIGS. 8 and 9 Enlarged representations of an area surrounding the passage opening of the intermediate unit of the closure according to further embodiments.

DETAILED DESCRIPTION OF THE PRESENT INVENTION

[0043] The particulars shown herein are by way of example and for purposes of illustrative discussion of the embodiments of the present invention only and are presented in the cause of providing what is believed to be the most useful and readily understood description of the principles and conceptual aspects of the present invention. In this regard, no attempt is made to show structural details of the present invention in more detail than is necessary for the fundamental understanding of the present invention, the description taken with the drawings making apparent to those skilled in the art how the several forms of the present invention may be embodied in practice.

[0044] FIG. 1 shows a device 10 for holding liquid according to the invention. The device 10 includes a container 12 (partially shown in FIG. 1) with an outlet opening 12a, a sealing body 14 positioned on the outlet opening. 12a and a closure 16.

[0045] The closure 16 includes an intermediate unit 18 which can be screwed onto an external thread 12b of the container 12 via an internal thread 18a. A cap 20 may be embodied in one piece with the intermediate unit 18 and connected via a film hinge 22. Further, a thrust washer 24 can be accommodated in the intermediate unit 18, so that the thrust washer presses on the engagement area 26 between the outlet opening 12a and the sealing body 14. When the intermediate unit 18 is screwed onto the container 12, the resulting effect may be to ensure a gas-tight sealing of the internal space 12c of the container 12 in which a liquid or a

beverage (e.g., a beverage mixed with gas, for example, carbon dioxide gas and/or oxygen gas), can be held.

[0046] Furthermore, a carrier body 28, may be embodied in a circular cylindrical manner arranged in the area of a spout attachment 18b of the intermediate unit 18 on the inside of the intermediate unit 18. The carrier body 28 can serve as a carrier for a valve unit 30, which is clamped between the intermediate unit 18 and the carrier body 28. Further, the carrier body 28 may be interlocked with the intermediate unit 18. The embodiment of the intermediate unit 18 with the carrier body 28 and valve unit 30 is known from the drink closures can be considered part of the "Active O_2 " beverage series of the instant assignee.

[0047] FIG. 2 shows the sealing body 14 having an essentially disk-shaped base part 14a, which has a collar-shaped edge area 14a1. When the sealing body 14 is mounted on the outlet opening 12a of the container 12, the sealing body 14 clings with the collar-shaped edge 14a1 to the container, thus sealing it.

[0048] On the side facing the closure 16, the sealing body 14 can be embodied with a capture attachment 14b which can be arranged in an area of the center axis A of the base part 14a. At its free end, the capture attachment 14b has an expanded head section 14c, which can be engaged in an interlocking manner from behind by engagement elements 28a of the carrier body 28 of the intermediate unit 18 of the closure 16 in the course of closing the container 12.

[0049] During the closing of the container 12, after the liquid has been filled into its internal space 12c, the sealing body 14 is first placed on the outlet opening 12a of the container 12, whereby it clings to the inner edge of the outlet opening 12a with its collar-shaped edge 14a1. Subsequently, the closure 16, or more precisely its intermediate unit 18, can be screwed onto the thread 12b of the container 12. Due to the centering effect of intermediate unit 18 and container 12, the engagement elements 28a thereby come into contact with the expanded head part 14c of the capture attachment 14b of the sealing body 14 (FIG. 5). While the closure 16 is further screwed onto the container 12, the engagement elements 28a are deformed until they engage the expanded head part 14c from behind and thus come into capture engagement with the sealing body 14 as a whole. Sloping surfaces 14c1 provided on the expanded head part 14c hereby serve as directing slopes and facilitate interlocking.

[0050] If the closure 16 is unscrewed, e.g., for the purpose of removing liquid from the container 12, due to the capture engagement of the engagement elements 28a with the capture attachment 14b and its expanded head part 14c, the sealing body 14 remains on the closure 16 and is thus assuredly removed from the outlet opening 12a of the container 12. The consumer now only need grasp the sealing body 14 by a grip attachment 14d, which is arranged on the side of the base part 14a of the sealing body 14 facing away from the closure 16, and pull it until the interlocking engagement between the engagement elements 28a and the capture attachment 14b or its expanded head section 14c is released. Subsequently, the closure 16 can then be screwed onto the container 12 again. The closure 16 may now be ready for use as a drink closure, through the passage opening 16a of beverage can be dispensed from the container.

[0051] FIG. 3 shows the carrier body 28 having two engagement elements 28a arranged diametrically opposite

one another. However, it is also possible to provide more than two engagement elements, e.g., three engagement elements 28a arranged essentially in the manner of the Mercedes star, as shown in FIG. 4.

[0052] FIG. 3 shows another feature of the engagement elements 28a including fork-shaped extensions 28a1 on their free ends facing towards the capture attachment 14b. Through these extensions 28a1, the capture attachment 14b can also be held safely by only two engagement elements 28a. However, the fork-shaped extensions 28a1 can also improve holding or stabilizing the capture attachment 14b by using more than two engagement elements, e.g., the embodiment according to FIG. 4.

[0053] FIG. 5 shows another feature of the engagement elements 28a of the carrier body 28 that can be adjusted at an angle α in the direction of the expanded head section 14c. From the resulting barb effect of the above feature, the engagement between the capture attachment 14b and the engagement elements 28a is further stabilized. However, it is indicated by broken lines in FIG. 5 that the engagement elements. 28a of the carrier body 28 can also be adjusted at an angle α in the direction away from the expanded head section 14c.

[0054] As shown and explained above the sealing body 14 respectively had only a single capture attachment 14b, however other embodiments are possible so as to provide a plurality of capture attachments. Further, the capture attachment or attachments do not necessarily need to be arranged in the center of the sealing body 14, but could be structured in a different manner, e.g., embodied as a ring-shaped attachment.

[0055] According to another feature of the invention, FIG. 2 shows a plurality of capture attachments 14b' shown by broken lines, and arranged at a predetermined spacing from axis A. In this case, the engagement elements are formed by indentations 28a' in the carrier body 28 extending in the circumferential direction opening radially outwards, in which indentations hook attachments 14b1' embodied with directing slopes 14b2' of the capture attachments 14b' can be interlocked.

[0056] Furthermore, it is indicated with a broken line in FIG. 2 that the grip attachment 14d can be provided on its free end with at least one element facilitating the consumer's grip, e.g., a thickening 14d1 or ribs.

[0057] FIGS. 6 and 7 show at least one capture attachment 114b, 214b which may be arranged on the surface of the sealing body facing towards the closure, but can also be provided on the circumferential edge 114e, 214e of the sealing body 114, 214. In addition, in both cases the engagement elements are formed by indentations 128a, 228a in the intermediate unit 118, 218 of the closure 116, 216 extending in the circumferential direction and opening radially inwards, into which indentations the circumferential edge of the sealing body 114, 214 can be interlocked.

[0058] FIG. 6 shows the circumferential edge 114e of the sealing body 114, in contrast to the embodiment shown in FIG. 1, projecting radially over the outlet opening 112a of the container 112 in order to be able to engage in the indentation 128a. Further, the sealing body 114 can be is pressed onto the outlet opening 112a directly by a section 118c of the intermediate unit 118 running essentially hori-

zontally. An adequate clinging of the sealing body 114 to the outlet opening 112a of the container 112 and the intermediate unit 118 is for the gas-tight sealing.

[0059] In order to be able to ensure a sufficient clinging, FIG. 7 shows the surfaces 214f, 214g of the sealing body 214 coming into contact with the outlet opening 212a of the container 212 and the intermediate unit 218. Further the sealing body can be made of an elastically compressible material, e.g., silicone. Since elastically compressible materials usually do not have the necessary stiffness to withstand the forces occurring during twisting of the closure 216 onto the outlet opening 212a of the container 212, the elastically compressible material can be connected to a carrier element 232. The carrier element 232 can be made of a stiffer material, e.g., HDPE, via injection molding. As shown in FIG. 7, the elastically compressible material penetrates openings 232a of the carrier element 232 which are embodied in the elastically compressible material adjacent to its circumferential edge. The circumferential edge of the carrier element 232 forms the circumferential edge 214e of the sealing body 214, which interlocks into the indentation 228a of the intermediate unit 218.

[0060] According to another feature of the invention, a first variant portrays the carrier element embodied as a carrier disk which completely covers and closes the outlet opening of the container as shown in FIG. 1.

[0061] According to another feature of the invention, a second variant portrays the carrier element as a carrier ring, such that the ring opening is spanned by the elastically compressible material in order to fully cover and close the outlet opening of the container.

[0062] According to another feature of the invention, a third variant portrays the sealing body as a whole in a ring-shaped manner, wherein a carrier ring is connected to a likewise ring-shaped body of elastically compressible material.

[0063] FIGS. 8 and 9 show two different embodiments, in which the passage opening of the intermediate unit also can be sealed gas-tight and liquid-tight, in order to close off the liquid held in the interior of the container before the first use. FIGS. 8 and 9 show an example of a plug 336, 436 provided in one piece with the intermediate unit 318, 418 of the closure 316, 416, e.g., by injection molding, and is connected to the intermediate unit 318, 418 via an integrally formed predetermined breaking point 336a, 436a. Note, form of the plug is understood not to be limited to a one piece structure, but can include one or more pieces. In both cases, the predetermined breaking point 336a, 436a is arranged on the inside of the passage opening 316a, 416a, in order to be able to provide the consumer a smooth outer surface of the intermediate unit 318, 418 even after opening the container, e.g., during drinking.

[0064] In addition, in both solutions the predetermined breaking point 336a, 436a is broken during the first opening of the cap 320, 420 via elements gripping in tandem, of which 336b, 436b are integrally formed on the plug 336, 436 and the others 320a, 420a are integrally formed on the cap 320, 420. The embodiment according to FIG. 8 could thereby be called the "external" solution and the embodiment according to FIG. 9 could be called the "internal" solution. Namely, in the embodiment according to FIG. 8,

the plug 336 projects out of the passage opening 316a and the barb elements 320a integrally formed on the cap 320 wrap around the 336b of the plug 336 from outside, whereas with the embodiment according to FIG. 9, the plug 436 is housed inside the passage opening 416a and the barb element 420a of the cap 420 projects into the plug 436.

[0065] Furthermore, both solutions are presented with an unopened state of the container, and a predetermined spacing D is provided between the cap 320, 420 and the plug 336, 436 seen in the direction of the axis of the container. Spacing D ensures that when a force is unintentionally applied to the cap 320, 420 towards the container, e.g., when several such containers are stacked one on top of the other, the cap 320, cannot engage with the plug 336, 436, such that the predetermined breaking point 336a, 436a is destroyed. The predetermined breaking point 336a, 436a is not destroyed until the cap 320, 420 is opened, i.e., when it is moved away from the container.

[0066] Further, the term "liquid" is to be interpreted broadly in connection with the present invention. In particular, this does not mean only beverages or other "real" liquids, but also more viscous, such as paste-like media, which are nevertheless flowable, e.g., ketchup, mustard or the like. Moreover, the invention is not restricted to a device for holding foodstuffs.

[0067] It is noted that the foregoing examples have been provided merely for the purpose of explanation and are in no way to be construed as limiting of the present invention. While the present invention has been described with reference to an exemplary embodiment, it is understood that the words, which have been used herein are words of description and illustration, rather than words of limitation. Changes may be made, within the purview of the appended claims, as presently stated and as amended, without departing from the scope and spirit of the present invention in its aspects. Although the present invention has been described herein with reference to particular means, materials and embodiments, the present invention is not intended to be limited to the particulars disclosed herein; rather, the present invention extends to all functionally equivalent structures, methods and uses, such as are within the scope of the appended

- 1. A device for holding liquid, comprising:
- a container with an outlet opening;
- a closure for closing the outlet opening of the container;
- a sealing body structured for sealing engagement with the outlet opening when the closure is arranged in a position closing the outlet opening;
- at least one capture attachment coupled to the sealing body;
- at least one engagement element coupled to the closure element being detachably attachable to the at least one capture attachment.
- 2. The device in accordance with claim 1.
- wherein the sealing body is structured and arranged for sealing engagement with an edge of the outlet opening when the closure is arranged in the position closing the outlet opening.

- 3. The device in accordance with claim 1,
- wherein the at least one capture attachment is part of the sealing body.
- 4. The device in accordance with claim 1,
- wherein the at least one engagement element is interlockable with the at least one capture attachment.
- 5. The device in accordance with claim 1,
- wherein the closure includes an intermediate unit, a passage opening and a removable cap.
- **6**. The device in accordance with claim 1,
- wherein the intermediate unit is mounted on the outlet opening.
- 7. The device in accordance with claim 1,
- wherein the sealing body has a grip attachment arranged on a side facing away from the closure.
- **8**. The device in accordance with claim 1,
- wherein the at least one capture attachment is arranged on a side of the sealing body facing towards the closure.
- **9**. The device in accordance with claim 1,
- wherein the at least one capture attachment is formed by an outer circumferential edge of the sealing body.
- 10. The device in accordance with claim 1,
- wherein the at least one engagement element is arranged in at least one piece on the closure.
- 11. The device in accordance with claim 1,
- wherein the at least one engagement element is arranged on at least a portion of the intermediate unit.
- 12. The device in accordance with claim 1,
- wherein the at least one engagement element is arranged on an element connected to the closure.
- 13. The device in accordance with claim 1,
- wherein the at least one engagement element includes at least one indentation extending in the circumferential direction of the closure.
- 14. The device in accordance with claim 13,
- wherein the at least one indentation extends in the circumferential direction of the intermediate unit.
- 15. The device in accordance with claim 1,
- wherein the at least one engagement element is an element to extend on the capture attachment.

- 16. The device in accordance with claim 1,
- wherein the at least one engagement element is enlarged on an end facing towards the capture attachment.
- 17. The device in accordance with claim 1,
- wherein a plurality of the engagement elements are uniformly arranged on a circumference of the capture attachment of the sealing body.
- 18. The device in accordance with claim 1,
- wherein the capture attachment is arranged on a free end with directing slopes for the at least one engagement element.
- 19. The device in accordance with claim 1,
- wherein a valve unit is arranged to the intermediate unit of the closure.
- 20. The device in accordance with claim 7,
- wherein the passage opening is closed by a removable closure element connected to the intermediate unit via a predetermined breaking point.
- 21. The device in accordance with claim 1,
- wherein at least one barb and at least one barb receptacle is arranged on one of the cap, the closure element, the capture attachment.
- 22. The device in accordance with claim 1,
- wherein a plug is integrally formed by a predetermined breaking point arranged either in or out of a passage opening of the closure.
- 23. The device in accordance with claim 1,
- wherein the engagement element includes at least one fork shape extension.
- 24. A device for holding liquid, the device comprising:
- a container with an outlet opening;
- a closure for closing the outlet opening of the container;
- a sealing body in sealing engagement with the outlet opening when the closure is arranged in a position closing the outlet opening; and
- at least one engagement element coupled to the closure that is detachably attachable with a free end of the sealing body.

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