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(54) **REMOVABLE LID TO CLOSE THE OPENING OF A CONTAINER**

ABNEHMBARER DECKEL ZUM VERSCHLIESSEN DER ÖFFNUNG EINES BEHÄLTERS

COUVERCLE AMOVIBLE POUR FERMER L'OUVERTURE D'UN CONTENANT

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Description

5 [0001] The subject of the invention is a removable lid to close the opening of a container, especially for re-close after opening of beverage storage metal cans, which has a lid base with pour opening, a cap to cover the pour opening, as well as an adapter that connects the lid base to the container, one of the fastening element of the lid base located near to pour opening, while the cap has another fastening element cooperating with one fastening element, and the cap is reversible and removably pinched to the pour opening of the lid base by the other fastening element.

10 [0002] Many solutions have become known for the packaging and storage of liquids, solids, lump and bulk materials. One group includes containers into which liquids are filled and offered for sale. Such liquid storage units are also formed by various glass, plastic and metal beverage containers. There are also a number of solutions for closing the opening of beverage bottles. Screw caps are also widely used for soft drinks and, more recently, for non-concentrated alcohols and beers.

[0003] Such a screw cap can be cognizable in, inter alia, industrial property document CN 2249724.

15 [0004] The advantage of these is that they can be wound back on the neck of the bottle after the warranty closure has been removed and, due to the internal design of the cap, precludes the possibility of leakage at the pour opening of the bottle.

[0005] There are also "bottles" that can be filled with liquid for storage, and the top of the container can be closed with a specially designed lid. Such a beverage container is described in CN 2442 569. While the utility model description number HU U 4735 can be screwed onto a bottle and describes a cap assembly with a straw.

20 [0006] However, there are also thin metal beverage cans, such as cola, beer and energy drink cans, which cannot be resealed after opening, as it cannot be re-placed after the closure plate at the pour opening of the can has been broken.

[0007] Also known a patent with registration No. US 5,984,127, which relates to an accessory that can be attached to the top of a metal can which containing beverages. It comprises a one piece lid base attached to a flippable lid and clamped to a container. In order to access the contents of the container, the whole lid has to be pivoted with respects to the base. The disadvantage of this solution is the due to its design, because it is easily can be damaged, and drink could leaves the metal can not only through the specified mouth opening, so it is not suitable for storing and moving beverages, when the can is already opened.

25 [0008] Consequently, the disadvantage of such beverage storage units is that the entire contents of the can must be consumed in a short time, otherwise its enjoyment value deteriorates rapidly. Another disadvantage of such cans is that the stored beverage can easily spill out of the storage space, which can cause contamination on the consumer's clothing or its surroundings.

[0009] The purpose of invention is to overcome the shortcomings of the known bottle closure solutions and to create a version which, on the one hand, is suitable to allow the can to be resealed without leakage after opening the can, even in the case of beverages with metal cans, as well as to allow the contents of cans to be consumed more hygienically.

30 [0010] It was also intended that the sample lid unit be reusable and can be used for containers that have a cap or lid but its repeated use does not meet the requirement for a leak-proof seal. For example, in case of pickles and mason jars, which available in stores.

[0011] The basic idea of the invention was that the circumferential surface of the metal cans can be gripped without displacement with a rim-like structural element stretched from the side, and thus the opening of the metal can could be closed with a lid placed on it.

35 [0012] Relying on this basic idea, the design according to the invention was led by the realization that if an adapter can be assembled from two specially shaped clamping members and connected to each other, the pieces can be clamped to the new surface the lid base tensioning the two clamping members is connected, the combination of the two clamping members and the lid base is able to seal the opening can be kept leak-free, and thus the task can be solved.

40 [0013] The removable lid according to the invention comprises the features of claim 1.

[0014] In one possible design of the removable lid, the seal is partially pressed against the surface of the container in the closed position of the lid base.

[0015] In another variant of the invention, the locking piece has a pin, one join piece and the other join piece has the shape of a bent arm with a receiving socket, and the pin of locking profile is rotatably inserted into the receiving socket.

45 [0016] In yet another embodiment of the invention, one connecting member of one clamping member has a receiving socket, while the other connecting member of the other fastening element has a shape of a bent arm that fits into the receiving socket of one connecting member is inserted into its slit, and one clamping member and the other clamping member are thus connected to each other.

[0017] Again, in various embodiments of the invention, one of the clamping members has anti-slip profiles on the support side facing the container and the other side of the support member towards the container.

50 [0018] It may be advantageous for the removable lid if the lid base is provided with a closing projection and the closing projection has one locking member, while one of the gripping members and the other clamping member is one of the locking members connected to another locking member cooperating with one locking member of the closing projection

is fixed to the adapter without displacement.

[0019] In another variant of the utility model, the lid base is provided with a pressure reducing valve.

[0020] The removable lid according to the invention has a number of advantageous features. The most important of these is that with an adapter made of specially shaped clamping members, as a pliers, the mantle surface of the container can be gripped so that the lid base connected to the connection body can be properly pressed onto the open surface of the container, and so that the container, especially the beverage cans made of metal, can be closed after opening.

[0021] A further advantage is that the removable lid can be used countless times due to the design of the adapter and its novel connection with the lid base. Easy to assemble and disassemble and easy to clean.

[0022] Another advantage is that with a suitable lid base design, it is possible to remove content from the container through a small opening, or to introduce it into the container. And so it does not have to open the entire lid base.

[0023] It is also an advantage that the design and closure of the connection body and the lid base prevent leakage, so that the liquid placed in the container can be easily and safely stored and transported even after the original closing plate of the pour opening has been removed.

[0024] It is also an important advantage, in case of carbonated beverages, the carbonic acid quickly escape from the beverage after the opening of the traditional metal can storage units, and thus its enjoyment value decrease rapidly and greatly, using the sample solution to close the can, the carbon dioxide in the container cannot escape from the interior. Thus, the drink retains its original enjoyment value for a much longer period of time. And this is an important aspect for the consumer. Thus, the use of a sample removable lid may also increase the demand for canned beverages in metal cans.

[0025] An advantage also, that the structural elements of the movable lid unit can be easily manufactured and sold without assembly, and thus sold in large quantities, which can keep entry costs at a favorable level.

[0026] Another advantage is that in the event of damage to individual components, its replacement can be easily solved, it does not require special expertise, so the lifetime of the product can be long.

[0027] It can also be considered an advantage that the removable lid can be used for promotional purposes in addition to its functional use, and thus can also be used as a marketing tool, e.g. to increase for sales of beverages in metal cans.

[0028] The movable lid unit according to the invention will be described in more detail below with reference to an exemplary embodiment and on the basis of a drawing. In the drawing is:

Figure 1. a side view of a possible variant of the removable lid according to the use pattern, partly in section,

Figure 2. bottom view of removable lid according to usage pattern, partly in section, with the lid base in the open position,

Figure 3. the other end is a perspective view of a possible design of the clamping members forming the adapter,

Figure 4. a detail perspective view of the removable lid of Figure 1, with the lid base in the close position,

Figure 5. a side view detail of the removable lid according to the usage pattern, with the lid base in the closed position fixed to the container.

[0029] Figures 1 and 2 show a possible variant of the removable lid 2 according to the invention, which can be retrofitted to the beverage cans made of metal used as a container 1 and removably. It can be seen that the removable lid 2 consists of two main pieces, It can be seen that the removable lid 2 consists of two main parts, the lid base 10 and the adapter 30. The lid base 10 is basically formed by a pour opening 11 which is surrounded by one of the fastening elements 12. This pour opening 11 serves to secure the removable lid 2 after it has been fixed the liquid can be poured from the container 1 through it, if appropriate, introduced into the container 1 through the pour opening 11. The pour opening 11 of the lid base 10 is closed by the cap 20. To this end, the cap 20 has a second fastening element 21 cooperating with one of the fastening element 12, by means of which the cap 20 can be fastened to one of the fastening element 12 surrounding the pour opening 11 in a liquid-tight manner.

[0030] Preferably, one of the fastening elements 12 to the other fastening element 21 forms a pair of threads, which is common with screw caps.

[0031] The lid base 10 also includes a pressure reducing valve 50, which is optional but may be advantageous in order to reduce the pressure of the carbonated beverage in the container 1 by means of this pressure reducing valve 50 before the cap 20 is opened.

[0032] It can be clearly seen in Figure 2 that the adapter 30 is composed of a first clamping member 31 and a second clamping member 32. The first clamping member 31 is provided at one end 31a with a join piece 31b and at the other end 31c with a connector 32d. The second clamping member 32 is provided at one end 32a with a second join piece 32b and at the other end 32c with another connector 32d.

[0033] The connector 31d of the end 31c of clamping member 31 is releasably connected to the another connector 32d of the other end 32c of the other clamping member 32. Join piece 31b of the endpiece 31a of clamping member 31 and the other join piece 32b of another endpiece 32a of the other clamping member 32 are connected to the locking profile 13 forming part of the lid base 10 in the position of use of the removable lid 2.

[0034] The locking profile 13 of the lid base 10 - in this embodiment - is the pin 13a, join piece 31b of one clamping

member 31 and the other join piece 32b of the other clamping member 32 have a fork-like shape with jointing slot 34 which can be connected to the pin 13a. The pin 13a and join piece 31b and the other join piece 32b are connected to each other so that, on the one hand, the lid base 10 can pivot about the pin 13a in the jointing slot 34 join piece 31b and in the jointing slot 34 of the other join piece 32b. On the other hand, create a closure with a shape that excludes one of the clamping members 31 from opening randomly from endpiece 31a and the other clamping member 32 from another endpiece 32a.

[0035] Turning to Figure 3, it can be clearly seen that in a given embodiment, one connector 31d of the end 31c of one clamping member 31 consists of two curved forks spaced apart and having receiving sockets 31f. The another connector 32d of the other end 32c of the other clamping member 32 is the two-piece profiled anchor 32f which fits into the receiving sockets 31f.

[0036] In one of the clamping members 31 and the other clamping member 32 of the adapter 30, the profiled anchors 32f of the another connector 32d abut into the receiving sockets 31f of one of the connector 31d, thus engage with the end 31c and the other end 32c in a closing manner into a structural unit.

[0037] Returning to Figure 2, it can also be seen that one of the clamping members 31 of the adapter 30 runs on the side support 31e facing the mantle 1b of the container 1, and on another side support 32e of the other clamping member 32 facing the mantle 1b of the container 1 running all the way. The hook extensions 33, as shown in Figure 1, are ribs projecting from the side support 31e and another side support 32e.

[0038] Also shown in Figure 1, the side support 31e and another side support 32e can be provided with the anti-slip profiles 35 in addition to the hook extension 33. The purpose of the anti-slip profiles 35 is to prevent the adapter 30 from rotating around the mantle 1b of the container 1 in the fixed position of the adapter 30.

[0039] Figure 1 also shows that the seal 40 is located on the side of the lid base 10 facing the adapter 30. As shown in Fig. 5, the seal 40 rests on the front side 1c of the container 1 on the one hand in the closed position of the lid base 10. Alternatively, on the surface of one of the clamping members 31 and the other clamping member 32 of the adapter 30 facing the lid base 10. As a result, in the closed position of the lid base 10, the seal 40 prevents liquid from leaking out of the container 1 between the adapter 30 and the contact surfaces of the container 1 or the adapter 30 and the lid base 10.

[0040] Figure 1 also shows that the closing projection 14, which has locking member 14a, is located in the part of the lid base 10 opposite the locking profile 13. The closing projection 14 of the lid base 10 cooperates with another locking member 36 formed on the adapter 30 and is intended to prevent the lid base 10 from opening accidentally when the lid base 10 is closed and to tension the lid body seal 40 onto the adapter 30 and the container 1. on the front.

[0041] A particular embodiment of the other locking member 36 is shown in Figure 4. In this case, the other locking member 36, as shown in Figures 1 and 2, a shape formed at the end 31c of one of the clamping members 31 of the adapter 30 in the vicinity of one of the connector 31d, projecting from the end 31c of one clamping member 31 in a direction opposite to the side support 31e of one clamping member 31.

[0042] The shape of this shape is adapted to the closing projection 14, which has one locking member, i.e. an opening, formed according to the shape of the other locking member 36.

[0043] Figure 5 shows the closed position of the movable lid unit 2 according to the usage pattern mounted on the container 1. Locking member 14a of the closing projection 14 of the lid base 10 surrounds another locking member 36 projecting from one of the clamping members 31 of the adapter 30, thereby closing and tensioning the seal 40 on the front side 1c of the container 1 by means of the lid base 10. In this position, the hook extensions 33 of the adapter 30 engage under the rim 1a of the container 1, thus preventing the adapter 30 from detaching upwards from the container 1 in the position shown in Figure 5. While the anti-slip profiles 35 "clings" to the mantle 1b of the container 1 and thus do not allow the adapter 30 to rotate around the mantle 1b of the container 1. To this end, the anti-slip profiles 35 may be spikes, surface roughness or other friction-increasing surfaces projecting from the side support 31e of one of the clamping members 31 of the adapter 30 and another side support 32e of the other clamping member 32.

[0044] It should be noted here, that one of the clamping members 31, the other clamping member 32 and the lid base 10 forming the adapter 30 of the movable lid unit 2 according to the pattern can be formed of plastic, preferably by injection molding. The seal 40 is made of a flexible material, e.g. rubber plate with an annular shape. It is also important to note that, in a particular embodiment, the closing projection 14 protruding from the lid base 10 must also be capable of sufficient resilient deformation in order to open first during the closing of the lid base 10 so that another locking member 36 protruding from the adapter 30 can pass. body. Then, after leaving it, return to its original position - and, as shown in Figure 5 - receives the other locking member 36 into the locking member 14a of the closing projection 14.

[0045] The removable lid 2 according to the invention is used as follows. First, one clamping member 31 and the other clamping member 32 of the adapter 30 of the removable lid 2 are to be assembled. For this, one connector 31d at the end 31c of one clamping member 31 and another connector 32d formed at the other end 32c of the other clamping member 32 must be connected to each other. Then, the curved one clamping member 31 and the other clamping member 32 can be placed near the rim 1a of the mantle 1b of the container 1, and then endpiece 31a of one clamping member 31 and another endpiece 32a of the another clamping member 32 are brought closer to each other one clamping member

31 and other clamping member 32 of the body, like two jaws of a plier, enclose the container 1.

[0046] The hook extensions 33 projecting from the side support 31e of one clamping member 31 and another side support 32e of the other clamping member 32 engage in a groove formed by the transition between the rim 1a and the mantle 1b of the container 1. While the anti-slip profiles 35 of the side support 31e of one clamping member 31 and another side support 32e of the other clamping member 32 rest on the mantle 1b of the container 1.

[0047] When the hook extensions 33 of one clamping member 31 and the other clamping member 32 are fixed to the container 1, the pin 13a of the locking profile 13 of the lid base 10 can be inserted into the jointing slot 34 of the joint piece 31b formed at endpiece 31a other joint piece 32b into jointing slot 34. Thereby, one of the clamping members 31 and the other clamping member 32 of the adapter 30 is fastened to each other, and the adapter 30 is secured to the container 1 in one step.

[0048] It should be noted here that in the fully assembled position of the adapter 30, the end 31c and the other end 32c of the adapter 30 are positioned relative to each other such that in the present embodiment one of the clamping member 31 is formed at the end 31c the locking member is in a suitable position to receive the closing projection 14 of the lid base 10.

[0049] The lid base 10 connected to the adapter 30 can be rotated about the pin 13a of the locking profile 13, so that it can be folded onto the front side 1c of the container 1 and it can be inverted from there. When the lid base 10 is rotated, the seal 40 attached to the lid base 10 seals the surface of one of the clamping member 31 and the other clamping member 32 of the adapter 30 and the part of the front side 1c of the container 1 around the rim 1a.

[0050] When, as the lid base 10 is folded in, the closing projection 14 projecting from the lid base 10 reaches the second locking member 36 projecting laterally from the adapter 30, the resilient closing projection 14 slides slightly on the outer surface of the other locking member 36. During further folding of the lid base 10, the closing projection 14 slides on the second locking member 36 until the locking member 14a of the closing projection 14, i.e. the opening formed in the closing projection 14 and conforms to the shape of the other locking member 36, in front of a locking body. When the elastic deformation of the closing projection 14 ceases and the closing projection 14 recedes towards the mantle 1b of the container 1.

[0051] Locking member 14a of the backwardly moving closing projection 14 receives the other locking member 36, and the lid base 10 is locked in the closed position.

[0052] In the closed condition of the lid base 10, by rotating the cap 20, the other fastening element 21 twists around one of the fastening elements 12 surrounding the pour opening 11 of the lid base 10, the cap 20 becomes removable and the contents of the container 1 can be extracted from the container 1.

[0053] If the material in the container 1 is under pressure and in the meantime the gas absorbed therein can be released, the pressure in the container 1 can be reduced by means of the pressure reducing valve 50 before unscrewing the cap 20. It should be noted here; that the pressure reducing valve 50 can be any commercially available component, so it is unnecessary to describe it.

[0054] When the container 1 is emptied, by removing the closing projection 14 of the lid base 10 from the mantle 1b of the container 1, locking member 14a also moves and protrudes from the other locking member 36 and allows the lid base 10 to be rotated around the pin 13a. The lid base 10 can then be rotated over the front side 1c of the container 1, which also allows the locking profile 13 to be pushed out of the jointing slot 34 forming joint piece 31b of the endpiece 31a of one clamping member 31 and the other joint piece 32b of another endpiece 32a of the other clamping member 32 consisting of jointing slot 34. After separating the lid base 10 and the adapter 30, one clamping member 31 and the other clamping member 32 of the adapter 30 can be removed from each other and the adapter 30 can be removed from the emptied container 1.

[0055] It should be noted here that the joint piece of one clamping member 31 and the other clamping member 32 of the adapter 30 can be realized not only by joint piece 31b and another joint piece 32b as described in the illustrated embodiment, but also by one connector 31d and another connector 32d a form-fitting bond may also be suitable. In each case, however, an important requirement is that the adapter 30 consist of two structural elements which can be releasably connectable to one another, the shape of which adapts to the external shape of the container 1.

[0056] It is also understood that the seal 40 can be connected not only to the lid base 10 but also to one of the clamping members 31 and/or the other clamping member 32 of the adapter 30, but the variant described in the embodiment is more advantageous in terms of manufacturability and handling.

[0057] The removable lid according to the invention can be used in all cases where it is not possible to close the container after opening it, or it is expedient to use a gas-tight seal, especially in case of canned beverages containing carbonated drinks.

List of reference marks

[0058]

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		1 container		1a rim
				1b mantle
5		2 removable lid		1c front side
		10 lid base		
				11 pour opening
				12 fastening elements
				13 locking piece
10				13a pin
				14 closing projection
		20 cap		14a locking member
		30 adapter		21 another fastening elements
		clamping member		31 first
15				31a first end
				31b join piece
		end		31c second
				31d connector
20				31e side support
		clamping member		31f receiving socket
				32 second
				32a first end
25		end		32b another join piece
				32c second
				32d another connector
				32e another side support
				32f profiled anchor
30				33 hook extension
				34 jointing slot
				35 anti-slip profile
		40 seal		36 another locking member
		50 pressure reducing valve		
35		T distance		

Claims

- 40 1. A removable lid to close the opening of a container, in particular to reclose metal cans used for beverage after opening, which features a lid base (10) complete with a pour opening (11), a cap (20) to cover the pour opening (11), as well as connecting body (30), to connect the lid base (10) to the container (1); the lid base (10) has a first fastening element (12) located near the pour opening (11) while the cap (20) has a second fastening element (21) working in combination with the first fastening element (12), and the cap (20) is removably fastened to the pour opening (11) of the lid base (10) in a removable and replaceable manner by means of the second fastening element (21), wherein the connecting body (30) comprises a first clamping member (31) with a join piece (31b) on a first end (31a) and a connector (31d) on the second end (31c), and to a second clamping member (32) with a join piece (32b) on a first end (32a) and a connector (32d) on the second end (32c), wherein the connector (31d) of the first clamping member (31) is connected to the connector (32d) of the second clamping member (32) in a separable manner, and wherein the lid base (10) comprises a locking piece (13) rotatably coupled with the join piece (31b) of the first clamping member (31) and the join piece (32b) of the second clamping member (32), the first end (31a) of the clamping member (31) and the first end (32a) of the second clamping member (32) being interconnected through the locking piece (13) of the lid base (10), the side of each clamping member (31/32) facing the container (1) being a side support (31e/32e) wherein one or more hook extensions (33) are installed on each side support, and wherein the lid base (10) carries a seal (40) for closing on the connecting body (30) and/or container (1).
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2. Removable lid as described in claim 1, **characterized in that** the seal (40) is affixed to the lid base (10).

3. Removable lid as described in claim 1 or 2, **characterized in that** the seal (40) is pressed against the surface of the container (1) when the lid base (10) is in closed position.
- 5 4. Removable lid as described in any of claims 1 - 3, **characterized in that** the locking profile (13) has a pin (13a), wherein the first join piece (31b) and the second join piece (32b) have the shape of a bent arm including a jointing slot (34), wherein the pin (13a) of the locking profile (13) is inserted into the jointing slot (34) with the option of being rotated.
- 10 5. Removable lid as described in any of claims 1 - 4, **characterized in that** the connector (31d) of the first clamping member (31) has a receiving socket (31f), whereas the connector (32d) of the second clamping member (32) has a profiled anchor (32f) seated in the receiving socket (31f) of the first clamping member (31), and when the adapter (30) is in service position the profiled anchor (32f) of the second clamping member (32) is inserted in the receiving socket (31f) of the first clamping member (31), resulting in the interconnected arrangement of the first clamping member (31) to the second clamping member (32).
- 15 6. Removable lid as described in any of claims 1 - 5, **characterized in that** there are anti-slip profiles (35) on the side support (31e/32e) of each clamping member (31/32).
- 20 7. Removable lid as described in any of claims 1-6, **characterized in that** the lid base (10) is completed with a closing projection (14) and the closing projection (14) features a first locking member (14a), whereas either the first clamping member (31) or the second clamping member (32) is complete with a second locking member (36) which works in combination with the first locking member (14a) of the closing projection (14), and in the closed position of the lid base (10), the lid base (10) is affixed to the adapter (30) for the prevention of displacement with the use of the first locking member (14a) of the closing projection (14) connected to the second locking member (36).
- 25 8. Removable lid as described in any of claims 1 - 7, **characterized in that** the lid base (10) has a pressure reducing valve (50).

30 **Patentansprüche**

- 35 1. Abnehmbarer Deckel zum Verschließen der Öffnung eines Behälters, insbesondere zum Wiederverschließen von Getränkedosen aus Metall nach dem Öffnen, der einen Deckelboden (10) mit einer Ausgussöffnung (11), eine Kappe (20) zum Abdecken der Ausgussöffnung (11) sowie einen Adapter (30) aufweist, um den Deckelboden (10) mit dem Behälter (1) zu verbinden; die Deckelbasis (10) ein erstes Befestigungselement (12) aufweist, das in der Nähe der Ausgussöffnung (11) angeordnet ist, während die Kappe (20) ein zweites Befestigungselement (21) aufweist, das mit dem Befestigungselement (12) zusammenwirkt, und die Kappe (20) mit dem zweiten Befestigungselement (21) abnehmbar auf die Ausgussöffnung (11) der Deckelbasis (10) aufgesetzt wird, wobei, der Adapter (30) ein erstes Klemmelement (31) mit einem Verbindungsstück (31b) an einem ersten Ende (31a) und dem Verbinder (31d) am Ende (31c) sowie ein zweites Klemmelement (32) mit einem weiteren Verbindungsstück (32b) am zweiten Ende (32a) und dem Verbinder (32d) am zweiten Ende (32c) aufweist, indem der Verbinder (31d) des Klemmelementes (31) mit dem Verbinder (32d) des zweiten Klemmelementes (32) lösbar verbunden ist, und der Deckelboden (10) mit dem Verriegelungsprofil (13) vervollständigt ist, und das Verriegelungsprofil (13) mit einem Verbindungsstück (31b) des ersten Klemmelementes (31) und dem Verbindungsstück (32b) des zweiten Klemmelementes (32) drehbar zueinander verbunden ist, und somit das erste Ende (31a) des ersten Klemmelementes (31) und das zweite Ende (32a) des zweiten Klemmelementes (32) ebenfalls über das Verriegelungsstück (13) des Deckelbodens (10) miteinander verbunden sind, während an der seitlichen Abstützung (31e / 32e) ein oder mehrere Hakenfortsätze (33) angebracht sind, und wobei der Deckelboden (10) eine Dichtung (40) zum Verschließen am Adapter (30) und/oder Behälter (1) trägt.
- 40 2. Abnehmbarer Deckel nach Anspruch 1, **dadurch gekennzeichnet, dass** die Dichtung (40) auf dem Deckelboden (10) befestigt ist.
- 45 3. Abnehmbarer Deckel nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** die Dichtung (40) gegen die Oberfläche des Behälters (1) gepresst wird, wenn sich der Verschlussboden (10) in geschlossener Position befindet.
- 50 4. Abnehmbarer Deckel nach einem der Ansprüche 1 bis 3, **dadurch gekennzeichnet, dass** das Verschlussprofil (13) einen Zapfen (13a) aufweist, wobei das erste Verbindungsstück (31b) und das zweite Verbindungsstück (32b)
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die Form eines gebogenen Arms mit einem Verbindungsschlitz (34) aufweisen, wobei der Zapfen (13a) des Verschlussprofils (13) drehbar in den Verbindungsschlitz (34) eingesetzt ist.

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5. Abnehmbarer Deckel nach einem der Ansprüche 1 bis 4, **dadurch gekennzeichnet, dass** ein Verbinder (31d) des ersten Spannelements (31) eine Aufnahmebuchse (31f) aufweist, während der Verbinder (32d) des zweiten Spannelements (32) einen Profilkanker (32f) aufweist, der in der Aufnahmebuchse (31f) des ersten Spannelements (31) sitzt, und in der Gebrauchsstellung des Adapters (30) der Profilkanker (32f) des zweiten Klemmelements (32) in die Aufnahmebuchse (31f) des ersten Klemmelements (31) eingesetzt ist, wodurch das erste Klemmelement (31) mit dem zweiten Klemmelement (32) verbunden ist.
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6. Abnehmbarer Deckel nach einem der Ansprüche 1 bis 5, **dadurch gekennzeichnet, dass** an der seitlichen Abstützung (31e / 32e) jedes Spannelementes (31 / 32) Antirutschprofile (35) vorhanden sind.
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7. Abnehmbarer Deckel nach einem der Ansprüche 1 bis 6, **dadurch gekennzeichnet, dass** der Deckelboden (10) mit einem Verschlussvorsprung (14) versehen ist und der Verschlussvorsprung (14) ein erstes Verriegelungselement (14a) aufweist, während entweder das erste Klemmelement (31) oder das zweite Klemmelement (32) mit einem zweiten Verriegelungselement (36) versehen ist, das mit dem Verriegelungselement (14a) des Verschlussvorsprungs (14) zusammenwirkt, und in der geschlossenen Position des Deckelbodens (10) der Deckelboden (10) an dem Adapter (30) befestigt ist, um eine Verschiebung unter Verwendung des ersten Verriegelungselements (14a) des Schließvorsprungs (14), das mit dem zweiten Verriegelungselement (36) verbunden ist, zu verhindern.
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8. Abnehmbarer Verschluss nach einem der Ansprüche 1 bis 7, **dadurch gekennzeichnet, dass** der Deckelboden (10) ein Druckminderventil (50) aufweist.
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Revendications

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1. Un couvercle amovible pour fermer l'ouverture d'un récipient, en particulier pour refermer les boîtes métalliques utilisées pour les boissons après ouverture, qui comprend une base de couvercle (10) dotée d'une ouverture de versement (11), un capuchon (20) pour couvrir l'ouverture de versement (11), ainsi qu'un adaptateur (30), pour connecter la base de couvercle (10) au récipient (1) ; la base du couvercle (10) comporte un premier élément de fixation (12) situé près de l'ouverture de versement (11) tandis que le capuchon (20) comporte un second élément de fixation (21) fonctionnant en combinaison avec l'élément de fixation (12), et le capuchon (20) est monté de manière amovible sur l'ouverture de versement (11) de la base du couvercle (10) avec le second élément de fixation (21), dans lequel, l'adaptateur (30) comprend un premier élément de serrage (31) avec une pièce de jonction (31b) sur une première extrémité (31a) et le connecteur (31d) sur l'extrémité (31c), ainsi qu'un deuxième élément de serrage (32) avec une autre pièce de jonction (32b) sur la deuxième extrémité (32a) et le connecteur (32d) sur la deuxième extrémité (32c) en ayant le connecteur (31d) de l'élément de serrage (31) relié au connecteur (32d) du second élément de serrage (32) de manière séparable, et la base du couvercle (10) est complétée par le profil de verrouillage (13), et le profil de verrouillage (13) est couplé à une pièce de jonction (31b) du premier élément de serrage (31) et la pièce de jonction (32b) du deuxième élément de serrage (32) avec la possibilité de tourner par rapport à eux, et donc la première extrémité (31a) du premier élément de serrage (31) et la deuxième extrémité (32a) du deuxième élément de serrage (32) sont également reliées par la pièce de verrouillage (13) de la base du couvercle (10), tandis qu'une ou plusieurs extensions de crochet (33) sont installées sur le support latéral (31e / 32e), et dans lequel la base du couvercle (10) porte un joint (40) pour la fermeture de l'adaptateur (30) et/ou du récipient (1).
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2. Couvercle amovible tel que décrit dans la revendication 1, **caractérisé par le fait que** le joint (40) est fixé à la base du couvercle (10).
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3. Couvercle amovible tel que décrit dans la revendication 1 ou 2, **caractérisé par le fait que** le joint (40) est pressé contre la surface du récipient (1) lorsque la base du couvercle (10) est en position fermée.
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4. Couvercle amovible tel que décrit dans l'une des revendications 1 à 3, **caractérisé par le fait que** le profil de verrouillage (13) comporte une goupille (13a), la première pièce de jonction (31b) et la seconde pièce de jonction (32b) ayant la forme d'un bras coudé, y compris une fente de jonction (34), dans laquelle la goupille (13a) du profil de verrouillage (13) est insérée dans la fente de jonction (34) avec la possibilité d'être tournée.

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6. Couvercle amovible tel que décrit dans l'une des revendications 1 à 4, **caractérisé par le fait qu'un** connecteur (31d) du premier élément de serrage (31) possède une douille de réception (31f), tandis que le connecteur (32d) du second élément de serrage (32) possède une ancre profilée (32f) logée dans la douille de réception (31f) du premier élément de serrage (31), et lorsque l'adaptateur (30) est en position de service, l'ancrage profilé (32f) du second élément de serrage (32) est inséré dans le logement de réception (31f) du premier élément de serrage (31), ce qui permet d'interconnecter le premier élément de serrage (31) au second élément de serrage (32).
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6. Couvercle amovible tel que décrit dans l'une quelconque des revendications 1 à 5, **caractérisé par** la présence de profils antidérapants (35) sur le support latéral (31e / 32e) de chaque élément de serrage (31 / 32).
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7. Couvercle amovible tel que décrit dans l'une des revendications 1 à 6, **caractérisé en ce que** la base du couvercle (10) est complétée par une saillie de fermeture (14) et la saillie de fermeture (14) comporte un premier élément de verrouillage (14a), tandis que le premier élément de serrage (31) ou le second élément de serrage (32) est complété par un second élément de verrouillage (36) qui fonctionne en combinaison avec l'élément de verrouillage (14a) de la saillie de fermeture (14), et dans la position fermée de la base du couvercle (10), la base du couvercle (10) est fixée à l'adaptateur (30) pour empêcher le déplacement à l'aide du premier élément de verrouillage (14a) de la saillie de fermeture (14) relié au deuxième élément de verrouillage (36).
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8. Couvercle amovible tel que décrit dans l'une des revendications 1 à 7, **caractérisé par le fait que** la base du couvercle (10) comporte une soupape de réduction de la pression (50).

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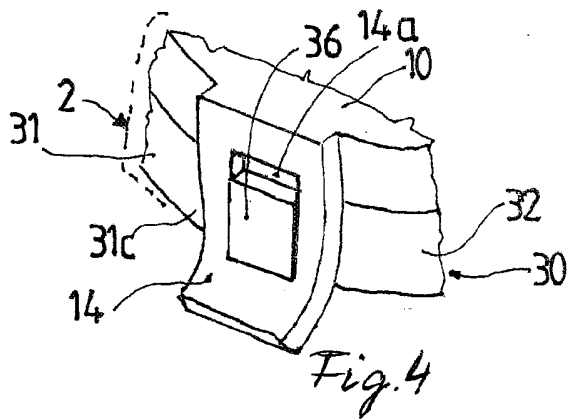
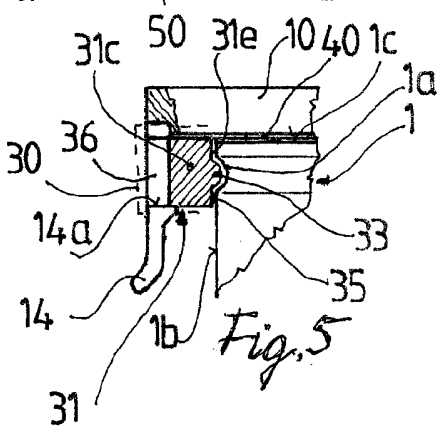
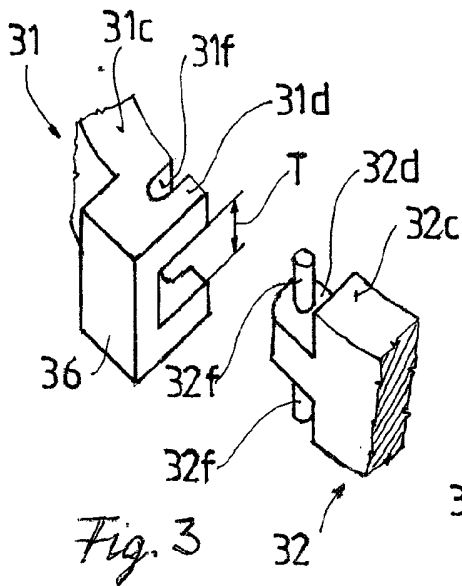
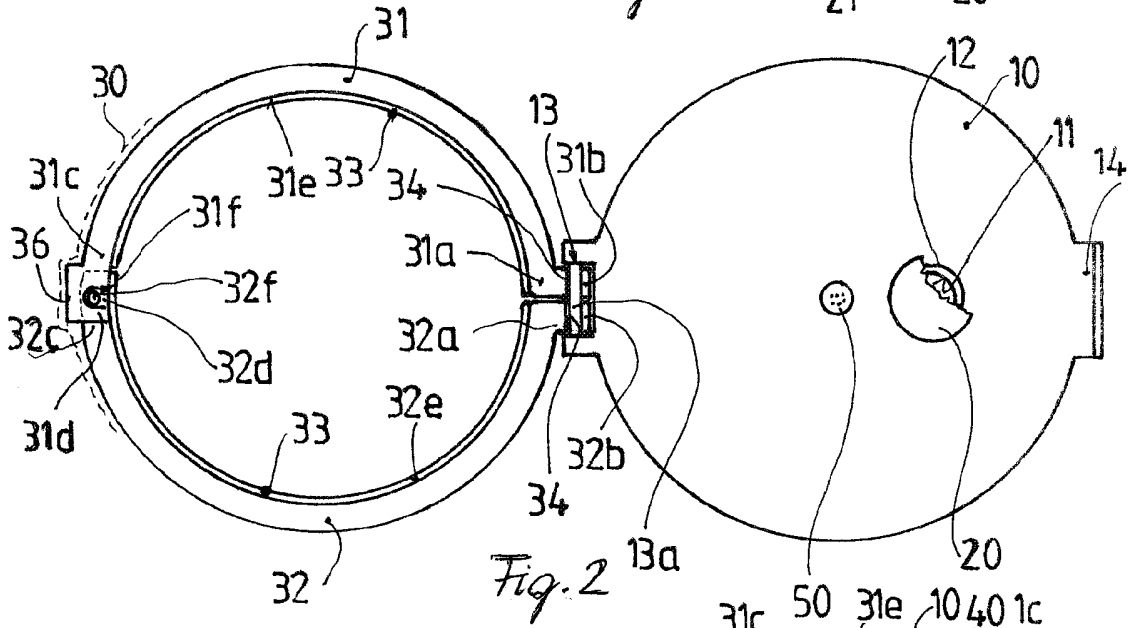
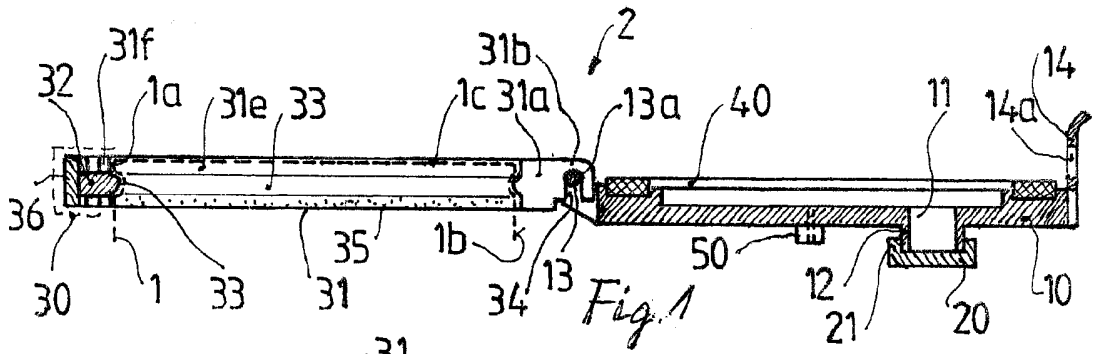
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REFERENCES CITED IN THE DESCRIPTION

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