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Titre : Lid for a pressure cooker, and pressure cooker comprising a lid.

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Abrégé :

The invention relates to a lid for a pressure cooking pot. in which an upper lid module, consisting of a closure unit with a button and a middle plate, is fixed removably on a centrally arranged valve housing of an edged lid with sealing of a lower lid module and can be removed from the lower lid module together with a latching mechanism.

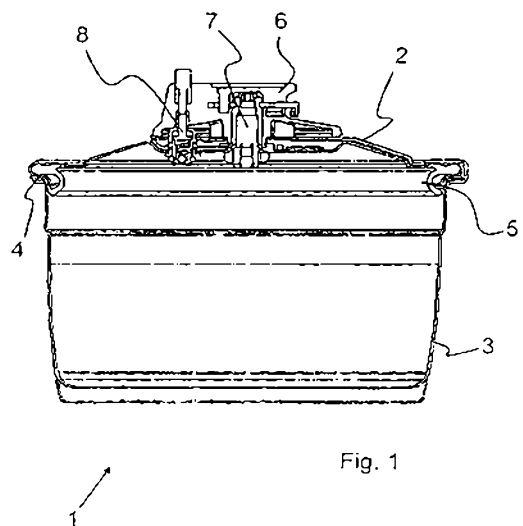


Fig. 1

Lid for a pressure cooker, and pressure cooker comprising a lid

Description

Field of the invention

5 The invention relates to a lid for a pressure cooking pot. In particular, the invention relates to a lid for pressure cooking pots having a pouring edge, these pots also being usable as conventional pots.

Background of the invention

Pressure cooking pots are cooking devices which operate by the principle of increasing the boiling point. Such pressure cooking pots are provided with a lid having a pressure relief valve, via which the desired
10 working pressure of the pot is determined. Food can thus be cooked at temperatures of generally approximately 120 °C in a much shorter time.

Pressure cooking pots are formed as pressure containers and must meet high safety requirements. Conventional pressure cooking pots generally comprise a pot, which is provided with peripheral grooves or the like, in which an adapted lid can be latched. Pressure cooking pots are generally unsuitable for use as
15 a normal cooking pot for depressurised cooking owing to the latching means provided on the pot.

European patent EP 1 416 837 therefore proposes a lid for a pressure cooking pot, which lid comprises claws curved in a U-shaped manner by means of which the lid can be latched on the pouring edge of a pot shaped "normally". This pot provided with a pouring edge is much more suitable for use as a normal cooking pot. One drawback is that the entire lid of the pot has to be changed for normal, depressurised
20 use. According to the teaching of the above-mentioned document, the latching claws can be removed for cleaning. This is relatively complex, however, since a nut on the underside of the lid has to be detached for this purpose. To this end, a tool generally has to be used. The lid provided with the claws is also hardly suitable for use as a normal cooking pot lid in the unlatched state. It is therefore necessary to have a second lid available for depressurised operation of the cooking pot. Furthermore, the design of the lid is
25 relatively involved and complicated.

German utility model DE 20 2009 015 975 presents a cooking vessel and a cooking vessel system kit – in particular a cooking vessel for all energy types and feeds/oven types and different cooking temperatures and pressures, depressurised and pressurised, inherently or externally heated, preferably a steam pressure cooking vessel – having a container for receiving food to be cooked and having a function lid which can be
30 placed on said container and latched thereto in a pressure-tight manner in a number of different ways, as well as a pressure relief valve system corresponding to the relevant regulations and further comfort functions, wherein the cooking vessel consists of a lid module and a pot module, the lid module consisting

of the function lid with a seal and pot edge with cold handles, and a system bond to the pot module via a mechanical, fixed and tight interface.

The design of the cooking vessel consists of the lid module with the function lid, which is connected releasably to the pot lid via a fastening nut or release screw, and this combination is connected sealingly to the pot edge, which forms the interface to the pot module, by means of a lid lock.

According to European patent EP 1 342 440, a steam pressure cooking device having a lid module is presented, consisting of a container and a lid which is intended to be placed and latched on the container so as to form a tight cooking seal, one or more jaws for latching the lid on the container, and a means for driving the at least one jaw between a latching and unlatching position, wherein there is at least one module which is intended to be placed and fixed, removably, on the lid, wherein the module comprises at least one control device for the latching/unlatching of the lid from the container, and also at least one of the following elements for example: a minute counter, a pressure control valve, a pressure sensor, a temperature sensor, a pressure relief valve, a means for securing the closing/opening or a bistable steering means.

In this application the mechanical-electromechanical interface is arranged between the gripping module and the closure device/lid; the gripping module contains the mechanical and sensory control of the pot and therefore most of the contacts to the closure device and to the lid. The gripping module is sensitive to water.

Object of the invention

The object of the invention is to provide a lid for a pressure cooking pot, the manageability of which is improved.

In particular, one object of the invention is to convert the lid, in a simple manner, to a normal lid without latching. Assembly and cleaning of the lid are also to be simplified.

Summary of the invention

The object of the invention is solved by a lid for a pressure cooking pot according to any one of the independent claims. Preferred embodiments and developments of the invention are to be inferred from the respective dependent claims.

The invention relates to a lid for a pressure cooking pot, in particular a lid which can be latched on conventional pots with a pouring edge. The lid comprises an upper and lower lid module; the upper lid module consists of a closure unit and a latching device and is closed from the lower lid module by a middle plate. The lower lid module comprises an edged lid with a seal and a valve arrangement. An edged lid is understood to mean a lower lid with a peripheral web or edge which comprises a seal and can be inserted

into the pot. The lid further comprises a closure unit which is normally formed with a button and by means of which the lid can be lifted off from the pot. In order to create a pressure-tight container, the lid can be latched on the cooking pot.

According to the invention, the closure unit comprises means in order to be lifted off from the edged lid 5 together with at least part of a latching device. The lid thus comprises two modules, namely a lower lid module with an edged lid and a valve arrangement, and an upper lid module with a closure unit, a latching device and a middle plate. Since means are provided on the closure unit itself for separating said unit from the edged lid together with the latching device, the upper lid module can be separated from the lower lid module in a very simple manner, for example without nuts or screws having to be detached from the lower 10 lid module.

The edged lid comprises means to which the closure unit can be fixed. Once the closure unit together with the latching device and the middle plate, that is to say the upper lid module, has been removed, this module part can be replaced by a conventional grip arrangement without a latching mechanism. A normal lid is thus produced from the edged lid together with this further grip, which lid is well-suited for 15 conventional depressurised or low-pressure cooking. Owing to this simple exchangeability, the user does not need to have two different lids available, namely a lid for pressure cooking and a lid for depressurised or low-pressure cooking.

The cleaning of the lid is also facilitated since the mechanism for removing the closure unit and the latching device is arranged in the upper lid module on the upper face of the lid. An actuation of a screw for example 20 on the underside of the lid generally hinders the cleaning process, since the underside may be dirtied by food residues after the cooking process.

In a development of the invention the closure unit can be fixed to a valve attached preferably centrally on the edged lid. In this advantageous embodiment of the invention, the valve housing, which is hollow cylindrical for example, can be used to fix a closure unit thereon. The closure unit does not therefore have 25 to be fixed by a special threaded bolt or the like, and the valve fixed on the edged lid does not interfere when the edged lid is used as a normal lid for depressurised or low-pressure cooking, but is formed as a seat for the further grip arrangement.

As provided in a preferred embodiment of the invention, at least one valve is thus arranged in the edged lid, of which the valve hollow cylinder is used to fix the closure unit or a grip arrangement. This valve is used in 30 one embodiment of the invention to fix the working pressure of the pot. This means that the valve arranged in the edged lid opens at the desired working pressure and thus regulates the temperature, prevailing inside the pot, above the boiling point of water.

In an alternative embodiment of the invention however, a safety valve may also or additionally be integrated in the edged lid instead of the valve for fixing the working pressure, which safety valve is provided as a second valve which opens at a higher pressure in case the other valve fails and/or which locks the latching device of the lid at pressure so that it cannot be opened manually.

5 In an advantageous development of the invention the valve is adjustable. For example, this is possible in a simple manner since the bias of a valve spring can be adjusted by means of a set screw. Different pressure stages for cooking at different temperatures can be set by the user by such an adjustable valve.

In a preferred embodiment of the invention the upper lid module is to be separated from the lower lid module via a slider mechanism. Such a slider mechanism comprises a slider which is positively connected
10 in one position to the collar of a fixing bolt of a hollow cylindrical valve housing for example. The slider is displaced into a position by a shifting thereof, in which position the positive connection is released. The upper lid module can thus be removed and separated from the lower lid module in a very simple manner by pressing on the grip of the slider.

In a preferred embodiment of the invention the latching device is actuatable by means of a button of the
15 closure unit in order to separate the lid and the pressure pot. In particular, fixing claws with U-shaped ends are used as a latching device and engage in the pouring edge of a pot and carry out a radial movement directed at least inwardly, that is to say in the direction of the central axis of the pot, when the button of the closure unit is turned. The direction of movement of the claws preferably extends upwardly at the same time in the direction of the button of the closure unit. In the latched state an inwardly directed force is thus
20 exerted onto the claws in the event of pressure build-up. An unlatching is therefore only possible with a high expenditure of force, or is impossible, in particular at a relatively high pressure.

This may also further improve the safety of the pot in combination with a safety valve which locks the latching device. The pot preferably comprises two valves, namely a valve for fixing the working pressure and a safety valve, which for example latches the latching device under pressure so that the pot cannot be
25 opened. The safety valve may also be designed in such a way that it is actuated at a higher pressure than the other valve, should this other valve fail.

In a preferred embodiment of the invention the latching device of the lid is locked in the pressurised state by at least one of the valves. To this end for example, the pin of a safety valve engages in a corresponding recess in the closure unit and, when the pot is pressurised, thus blocks a rotation of the button of the
30 closure unit, with which the latching device of the lid is actuated.

At least one of the valves may also actuate a pin which is attached on the removable part of the lid – in particular on the closure unit. For example, this pin may be used to visually signal the pressure provide in the pot to the user.

In one embodiment of the invention the lid comprises a middle plate which is arranged, as part of the upper lid module, between the closure unit and the edged lid and which, at the edge, has recesses in a peripheral web which constitute first mounting and guiding points for the connecting webs to the fixing claws for latching of the lid. The removable upper lid module is formed with the latching device and the closure unit 5 above the middle plate. In particular, the middle plate is used for attachment of the latching device. The middle plate is preferably connected to the edged lid so as not to be axially rotatable when the upper lid module is fitted on, whereas the closure unit is fixed rotatably on the middle plate so that fixing claws for latching the lid are actuated by the button of the closure unit in such a way that drivers on the ends of the connecting webs opposite the claws engage in circular sector-shaped grooves in the middle plate and, 10 connected mechanically to the rotatable closure unit, exert a longitudinal movement of the connecting webs in the radial direction from a rotational movement of the closure unit.

In a development of the invention the middle plate can be removed from the lower lid module together with the closure unit and the latching device. A duct is arranged between the middle plate of the upper lid module and the edged lid of the lower lid module, through which duct steam or vapours which discharge via 15 at least one valve can escape. This duct can be cleaned particularly easily in the separated state of the upper and lower lid modules. It is also particularly advantageous if the steam only escapes through the duct between the middle plate and the edged lid, and is not diverted along the mechanical elements of the latching device. Food residues which are transported together with the steam or vapours can therefore only come into contact with the wall of the duct, which is formed so as to be easily cleanable and with no 20 covered surfaces.

The lid preferably consists of two separable lid modules, wherein the upper lid module comprises a closure unit with an actuating button and the latching device for latching the lid on the pouring edge of a pot as well as the covering middle plate, and the lower lid module comprises an edged lid for covering the pot and a valve arrangement.

25 The invention further relates to a lid for a pressure cooking pot - in particular having one or more of the above-described features - which comprises an edged lid with a seal and at least one valve.

According to the invention a latching device is arranged on a middle plate which is in turn arranged between the edged lid and closure unit and is part of the upper lid module. The middle plate can be removed from the edged lid together with the closure unit and the latching device, wherein a duct is formed 30 between the middle plate and the edged lid, through which duct steam, which discharges from at least one valve, can be released into the open. Owing to the use of a duct arranged between a middle plate and an edged lid, it is possible to largely prevent steam or vapours from coming into contact with the mechanics of the latching device and to prevent particles present in the steam and vapours from contaminating the latching mechanism, which is relatively difficult to clean.

The invention further relates to a lid for a pressure cooking pot which comprises an edged lid with a seal and at least one valve for fixing the working pressure. Furthermore, a safety valve belongs to the edged lid. According to the invention at least the hollow cylindrical valve housing of one of the valves – in particular if it is attached to the edged lid - is revised to serve as a seat to which the closure unit of the upper lid module 5 of the lid is releasably fixed with a positive fit.

Brief description of the drawings

The invention will be explained hereinafter in greater detail with reference to the drawings, in which,

Fig. 1 is a schematic sectional view of a pressure cooking pot with the lid fitted

Fig. 2 shows a detail of the sectional view illustrated in **Fig. 1**

10 **Fig. 3** is a perspective view of a lid for a pressure cooking pot

Fig. 4 is a perspective view of an upper lid module

Fig. 5 is a perspective view of a lower lid module

Fig. 6 and **Fig. 7** show the details of a closure unit of the upper lid module

Fig. 8 is a perspective view of a lid which is cut along a plane lying on the centre axis of the lid

15 **Fig. 9** is a further sectional view of a lid

Fig. 10 shows the details of a middle plate of the upper lid module

Fig. 11 and **Fig. 12** show the latching mechanism of the upper lid module.

Detailed description of the drawings

Fig. 1 shows a schematic sectional view of a pressure cooking pot 1 according to one embodiment of the 20 invention. The pressure cooking pot comprises a pot 3 with a pouring edge 4 and a lid 2. The pressure cooking pot is formed as a pressure container. A latching mechanism can be actuated via the closure unit 6, with which latching mechanism the lid is latched on the pouring edge of the pot. The pot is sealed by the lip seal 5. The lid comprises a valve 7 for fixing the working pressure and a safety valve 8.

Fig. 2 shows a detailed view of the lid illustrated in **Fig. 1**, in which the details – in particular the valve 25 arrangement – can be better seen. The lid 2 comprises an edged lid 9 which is fitted on the pot and which is provided with a seal (5 in **Fig. 1**). A first valve 7 is attached to the edged lid, via which valve the working pressure of the pressure cooking pot is fixed. The valve (in this case only the valve housing is illustrated) is fixed centrally on the edged lid 9 by a nut 10. The edged lid and valve arrangement are part of a lower lid module.

Furthermore, a closure unit **6** belongs to the lid and is attached rotatably on the housing of the valve. For this purpose, the housing of the valve comprises a peripheral groove **12**, in which the closure unit can be fixed by means of the slider **11**. For this purpose, a duct **26** for a spring (not illustrated) is preferably provided, with which the slider is pressed outwardly. By pressing on the slider, said slider can be displaced against the force of the spring into a position in which the positive connection in the groove in the housing of the valve is released. The closure unit is further connected rotatably to a middle plate **15**. By rotating the closure unit, the lid can be latched via claws, as will be illustrated in greater detail hereinafter with reference to further drawings. The closure unit and middle plate are part of an upper lid module.

The edged lid **9** also comprises a further valve which is arranged excentrically and which is formed in this embodiment as a safety valve **8**. The safety valve is also fixed on the edged lid. The safety valve is formed as a spherical valve with a ball **18**, which is pressed against a sealing face by means of a spring. A sealing ring **17** acts as the seal of the valve housing. It is understood that further sealing means may also be provided in relation to the valve **7**. The upper part of the safety valve comprises an upper part **13**, by means of which a cooking pin **14** arranged in the closure unit **6** can be actuated. Using the cooking pin, it is possible to determine whether the pot is pressurised. The upper part, which engages in a recess in the closure unit **6** at pressure, prevents the closure unit from being turned when the pot is pressurised, and thus prevents the latching mechanism from being actuated. Furthermore, the pressure can be released from the pressure cooking pot by pressing down on the cooking pin so as to then open the pressure cooking pot.

Both the valve housing of the valve **7** and the valve housing of the valve **8** have lateral ducts **19**, via which steam can escape into a duct **16** formed between the edged lid **9** and the middle plate **15**. Since the middle plate can be removed together with the closure unit **6**, the duct is particularly easy to clean. In particular, steam and vapours do not leak out at the claws of the latching mechanism as a result of this arrangement.

Fig. 3 shows a perspective view of a lid. The edged lid **9**, which is enclosed by three U-shaped fixing claws **20** can be seen. The fixing claws are coupled to the closure unit **6** via connecting webs **22**. The closure unit has a button **21**, via which the entire lid can be removed. To actuate the latching mechanism, the closure unit can be rotated via the button. The fixing claws move inwardly when latching the pot and grip beneath the pouring edge of the pot. To remove the upper lid module comprising the closure unit and the latching mechanism, the slider **11** can be pressed and an upper part module, which comprises the latching mechanism, can be removed.

The components of the upper lid module are illustrated in perspective view according to **Fig. 4**. The three fixing claws **20**, which are coupled to the closure unit **6** via connecting webs **22** can be seen. The closure unit is closed downwardly in the illustration by the middle plate **15**.

Once the upper lid module has been removed, the lower lid module remains with the edged lid **9**, as illustrated in the perspective view according to **Fig. 5**, which comprises a peripheral seal **5**. Furthermore, the valve **7** is attached to the edged lid, the valve housing of which valve comprises a groove **12** in the upper edge to fix the closure unit **6**. In this view, ducts **19** arranged on the housing of the valve and via **5** which the steam can escape can be seen clearly. The safety valve **8** is also arranged on the edged lid and also comprises ducts **32**, via which the pressure can escape; both ducts open out in the duct **16**, which is formed between the middle plate **15** and edged lid. This lower lid module can now be provided with a new cover without a latching mechanism (not illustrated) and can thus be used as a lid for depressurised or low-pressure cooking. This cover preferably covers both the valve and the safety valve. Owing to the use of the upper valve cylinder as a mount for the closure unit and owing to the fact that the safety valve is arranged in the direct vicinity, it is possible to cover both valves with one cover. The lid **2** thus does not differ visually from a conventional lid for depressurised or low-pressure cooking; a second or further lid does not have to be kept available for depressurised cooking.

Fig. 6 shows a perspective view of the closure unit **6** of the upper lid module, which comprises a slider **11** for removing the closure unit – together with the latching mechanism (not illustrated). The slider is mounted displaceably with a pin **23** in the button **21** of the closure unit. Furthermore, the button contains a bore for receiving the upper part **13** of the safety valve **8** as well as the extension thereof outwardly as a cooking pin **14**.

Fig. 7 illustrates a perspective view of the slider **11**. The slider comprises a recess **1 24** of greater diameter **20** and a further recess **2 25** of smaller diameter intersecting this recess **1**. In the basic state, that is to say if the slider is not pressed laterally via its grip, the recess **2** sits beneath a collar arranged on the valve housing of the valve **7** and thus ensures a positive, releasable connection. When the slider is pressed laterally, it is moved from its idle position into a position in which the recess **1** of greater diameter coincides axially with the collar of the corresponding valve cylinder. The positive connection is thus released and the closure unit **6** can be removed. The pin **23** prevents the slider from being pushed out of its housing, which is formed by the button **21** of the closure unit, by the provided spring (not illustrated) in the duct **26**.

Fig. 8 shows a perspective view of a lid **2** comprising the lid modules, said view being cut along a plane extending axially. The U-shaped fixing claws **20**, which can grip beneath the pouring edge **4** of a pot **3** (not illustrated) can be seen clearly. The pot is sealed to the lid via the lip seal **5**.

Fig. 9 shows a sectional view of the upper lid module, which basically comprises the closure unit **6**, the middle plate **15** and the fixing claws **20**. The middle plate is provided to fix the closure unit and the claws and, in the assembled state, forms the mechanical interface between the upper cover module and the edged lid **9** of the lower lid module.

Further details will be explained with reference to **Fig. 10**, which shows a perspective view of the middle plate **15** from below, as part of the upper lid module, with the corresponding surface towards the edged lid **9**. The middle plate comprises a central recess **3 27**, which in the assembled state is slid over the valve (**7** in **Fig. 5**) arranged centrally on the edged lid. Furthermore, the middle plate comprises a further recess **4 28**, which in the assembled state is slid over the safety valve (**8** in **Fig. 5**). Since the hollow cylindrical housing of the safety valve is located in the recess **4** arranged excentrically, the middle plate is not axially rotatable in relation to the edged lid in the assembled state. The middle plate **15** further comprises the duct **16**, through which steam and vapours escape between the middle plate and the edged lid in the assembled state. It is understood that the duct **16** may comprise edge seals which are not illustrated in greater detail in this embodiment. For example, a sealing groove **36** may be formed at the edge for attachment of a seal.

Fig. 11 shows further details of the middle plate **15** and of the latching mechanism as part of the upper lid module. The middle plate comprises an edge web **31**, which is recessed in the region of the connecting webs **22** to the claws **20**. As already described, the middle plate is fixed axially in the assembled state owing to the recess **4 28** and via the valve cylinder of the safety valve **8**. The connecting webs comprise recesses **5 33**, which cooperate with the closure unit **6**, as illustrated hereinafter. The middle plate comprises circular segment-shaped grooves **29** for guiding the connecting webs with the claws.

Fig. 12 shows a perspective view of the underside of the closure unit **6** of the upper lid module. According to the number of connecting webs **22**, pins **30** belong to the closure unit and, in the assembled state, engage in the recesses **5 33** in the connecting webs illustrated in **Fig. 11**. If the button **21** of the closure unit is now turned relative to the middle plate **15**, the pins **30** extend as drivers into the grooves **29** and the claws **20** can thus be moved radially outwardly or inwardly. The drivers or pins are preferably mushroom-shaped and may be used to fix the middle plate, connecting webs and closure unit, since these have a greater diameter beneath the grooves. The recess **27** and a hollow cylindrical portion **34** arranged on the closure unit may also form a hinge which holds together the middle plate and the closure unit. The closure unit further comprises the recess **6 35**, in which the upper part **13** of the safety valve (**8** in **Fig. 5**) can engage with the cooking pin **14**, and thus prevents a turning of the button of the closure unit when the pot is pressurised.

A pressure cooking pot with simplified handling is advantageously provided by this invention.

List of reference numerals

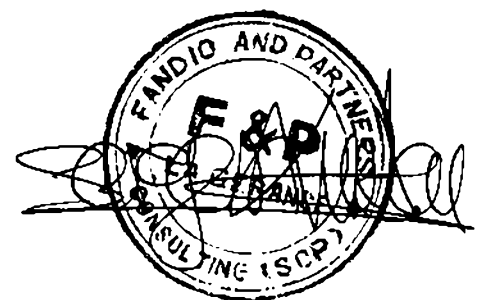
1	pressure cooking pot
2	lid
3	pot
5 4	pouring edge
5	seal
6	closure unit
7	valve
8	safety valve
10 9	edged lid
10	nut
11	slider
12	groove
13	upper part, safety valve
15 14	cooking pin
15	middle plate
16	duct
17	sealing ring
18	ball
20 19	duct, central valve
20	fixing claw
21	button
22	connecting web
23	pin
25 24	recess 1
25	recess 2
26	duct

27	recess 3
28	recess 4
29	groove
30	driver, pin
5 31	web
32	duct
33	recess 5
34	section, hollow cylinder
35	recess 6
10 36	sealing gap

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Claims

1. A lid for a pressure cooking pot (1) and a pressure cooking pot comprising a lid, consisting, in addition to a pot (3) with a pouring edge (4), of a lip-sealed (5) lid (2) which can be latched in relation to the pouring edge and which has an upper lid module basically consisting of a closure unit (6), a middle plate (15) and fixing claws (20), and a lower lid module basically consisting of an edged lid (9) with a seal (5) and valves (7, 8), **characterised in that** the closure unit comprises means for enabling an easily manageable separation of the upper module from the lower module.
2. The lid for a pressure cooking pot and the pressure cooking pot comprising a lid according to claim 1, **characterised in that** the closure unit (6) can be fixed by fixing claws (20) to a cylindrical valve support (7) attached preferably centrally in the edged lid (9).
3. The lid for a pressure cooking pot and the pressure cooking pot comprising a lid according to either claim 1 or claim 2, **characterised in that** the closure unit (6) comprising fixing claws (20) has a slider (11) guided resiliently by means of a fixed guide pin (23) and mounted in a horizontally displaceable manner with recesses engaging in one another, wherein a recess (24) performs the guiding function together with the valve support (7), and a recess (25) performs the latching function in conjunction with the groove (12).
4. The lid for a pressure cooking pot and the pressure cooking pot comprising a lid according to at least one of claims 1 to 3, **characterised in that** the horizontally movable slider (11) integrated in the closure unit (6) has means guided outwardly from the closure unit which enable its functional manageability.
5. The lid for a pressure cooking pot and the pressure cooking pot comprising a lid according to at least one of claims 1 to 4, **characterised in that** the upper lid module is closed towards the edged lid (9) by an axially fixed middle plate (15) basically guiding connecting webs (22) and claws (20), connects, on the side of the middle plate remote from the edged lid, to the centrally rotatably mounted (34) closure unit (6), which effects a radial movement of the claws from the axial movement of the closure unit via vertically oriented drivers (30) guided in circular segment-shaped grooves (29) in the middle plate and engaging rotatably in the connecting webs, and the closure unit has, on the side remote from edged lid, a button-like cavity formed as a grip (21) for receiving the movable slider (11) and the fixed guide pin (23) as well as a cooking pin (14) showing the pressurised state.
6. The lid for a pressure cooking pot and the pressure cooking pot comprising a lid according to at least one of claims 1 to 5, **characterised in that** the edged lid (9), as part of the lower lid module, receives the working pressure valve (7) and pressure relief or safety valve (8) characteristic of

pressurised pressure cooking pots via its duct-like discharge openings (16) for working pressure (19) and overpressure (32) formed in the base and towards the middle plate (15).

7. The lid for a pressure cooking pot and the pressure cooking pot comprising a lid according to at least one of claims 1 to 6, **characterised in that** the middle plate (15) fixed in position by the cylindrical valve connecting piece (8) contains recesses or bores (27, 28) for receiving or passing through the cylindrical valve connecting piece (7, 8) and the discharge openings (19, 32) thereof, the steams exiting here open on their side of the middle plate remote from the edged lid (9) in a sealed duct (16) defined by a doubly formed boundary – a gap (36) for receiving a seal –, wherein the duct lid is formed by the base of the rotatable closure unit (6) facing the edged lid, and via the lateral discharge opening thereof enter the atmosphere without contacting the closure device of the upper lid module.
8. The lid for a pressure cooking pot and the pressure cooking pot comprising a lid according to at least one of claims 1 to 7, **characterised in that** the relative movement in the axial direction between the closure unit (6) and the middle plate (15) is given by the longitudinal extension of the grooves (29) in the middle plate extending in a circular segment-shaped manner and of the drivers (30) of the closure unit moving therein, and the extended cooking pin (14) of a pressurised cooking pot (3) prevents a relative movement between the closure unit and the middle plate owing to the fixing in the bore (35) of the closure unit.
9. The lid for a pressure cooking pot and the pressure cooking pot comprising a lid according to at least one of claims 1 to 8, **characterised in that** the surface of the edged lid (9) remote from the cooking pot (3) forms a mechanical interface, when the upper lid module is removed, for receiving other functional parts – such as a standard middle button or a special vapour button – so as to form, with the edged lid, a conventional cooking pot lid for a depressurised cooking pot or a low-pressure cooking pot.
10. The lid for a pressure cooking pot and the pressure cooking pot comprising a lid according to at least one of claims 1 to 9, **characterised in that** the middle connecting pieces (7, 19) formed for example as a hollow cylinder and of which the end – formed as a fixing groove (12) – remote from the edged lid (9) forms part of the closure device between the upper and lower lid module by the slider (11), to be actuated manually, of the closure unit (6) and – beyond this function – is also a carrier of working pressure, pressure relief or safety valves formed on the pressure cooking pot.



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FIGURE EN APPUI DE L'ABREGE

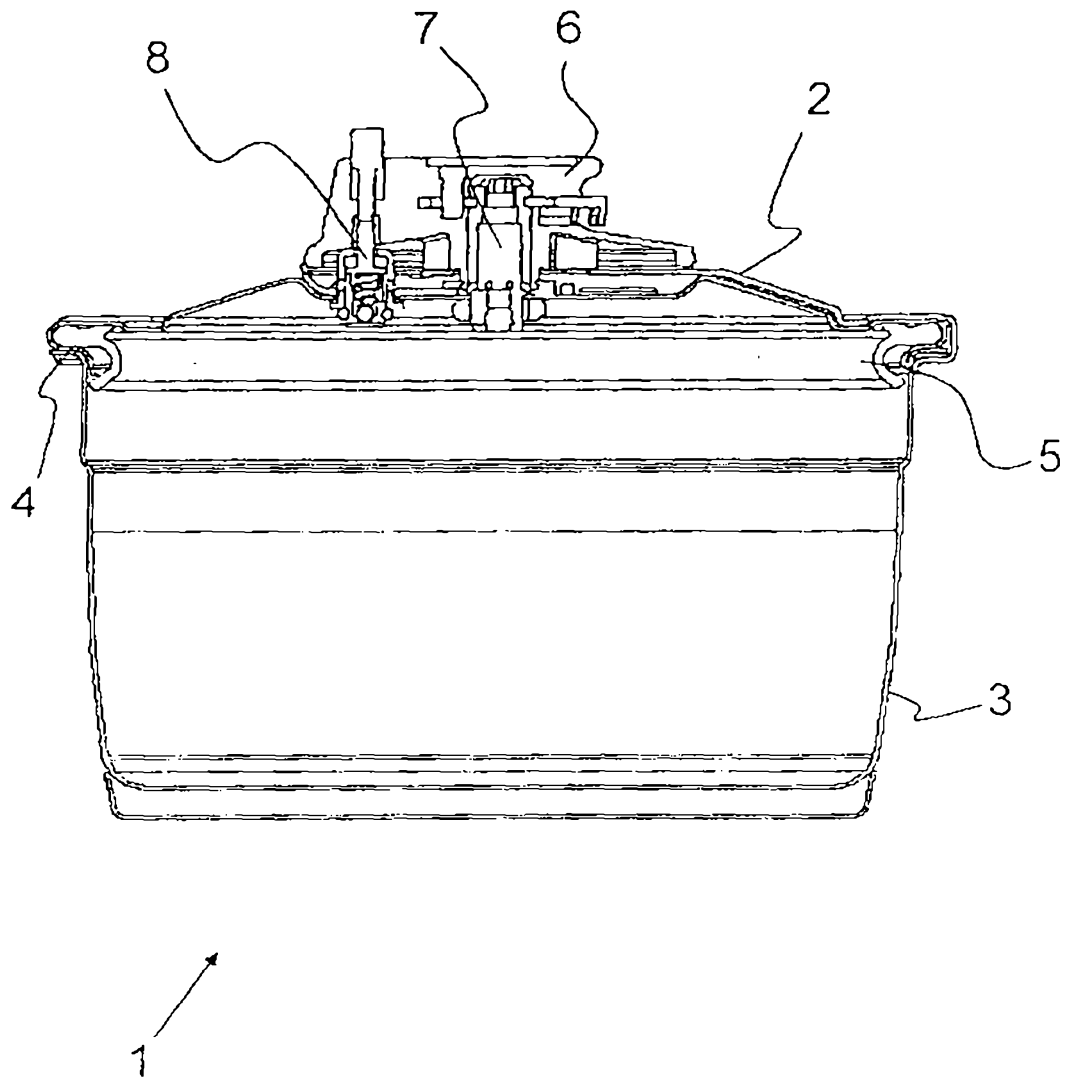


Fig. 1

I-VI

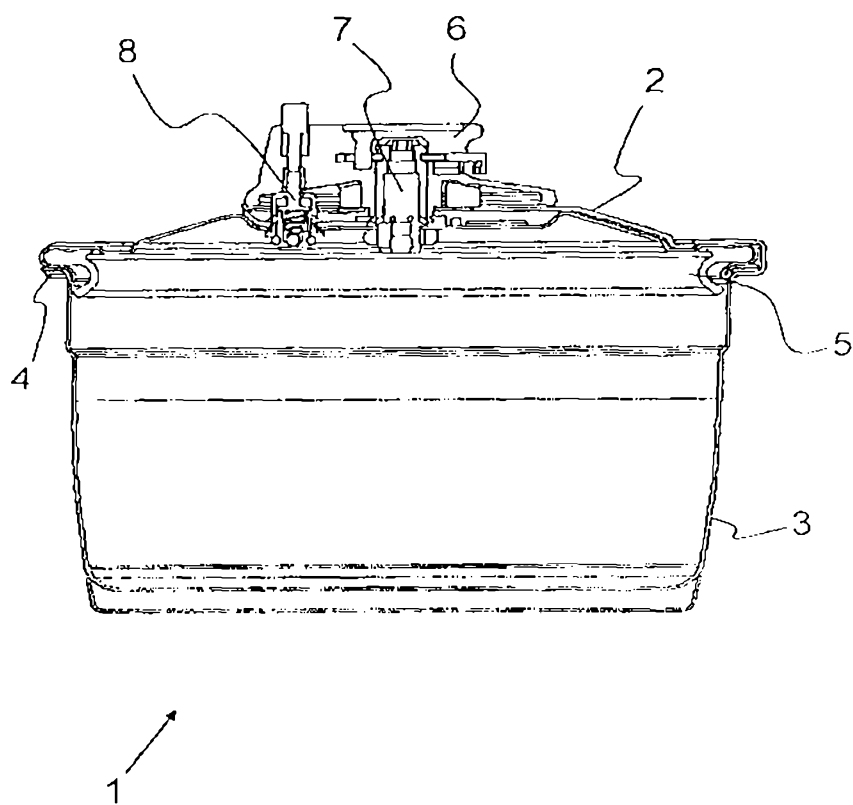


Fig. 1

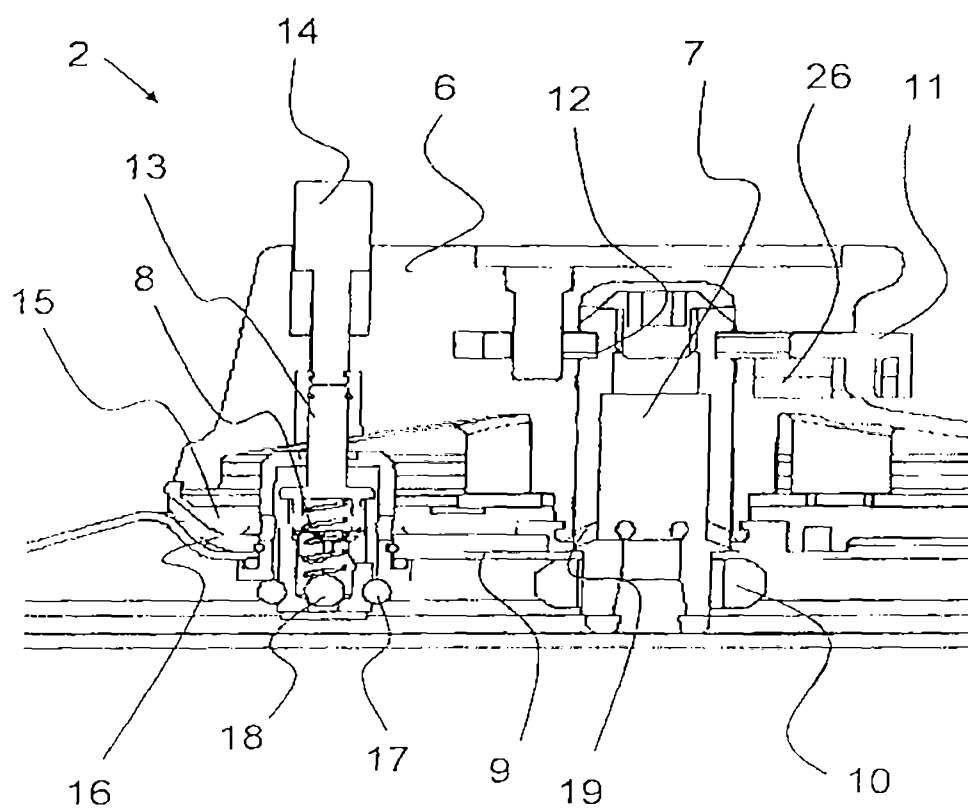


Fig. 2

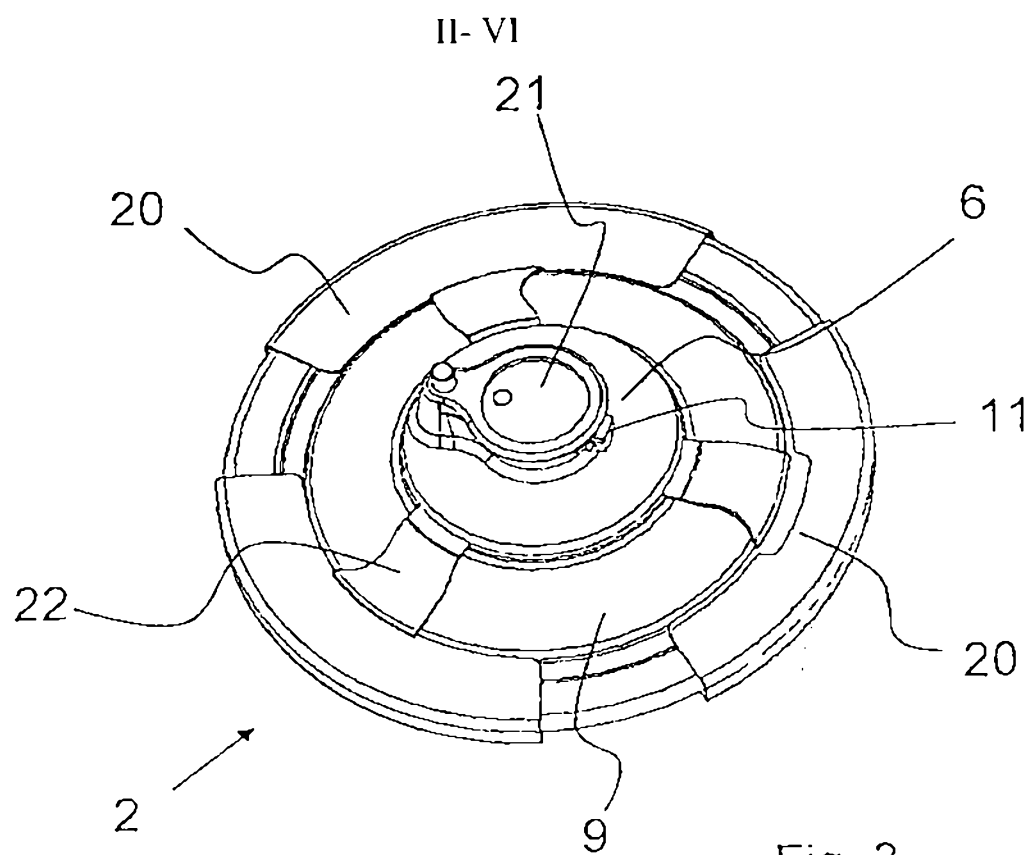


Fig. 3

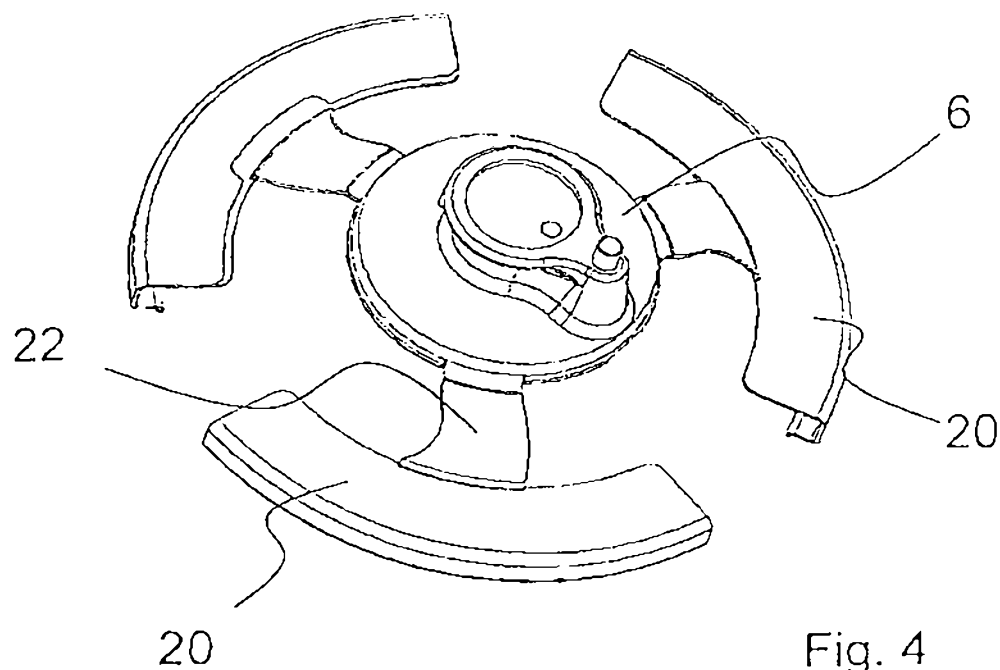


Fig. 4

III-VI

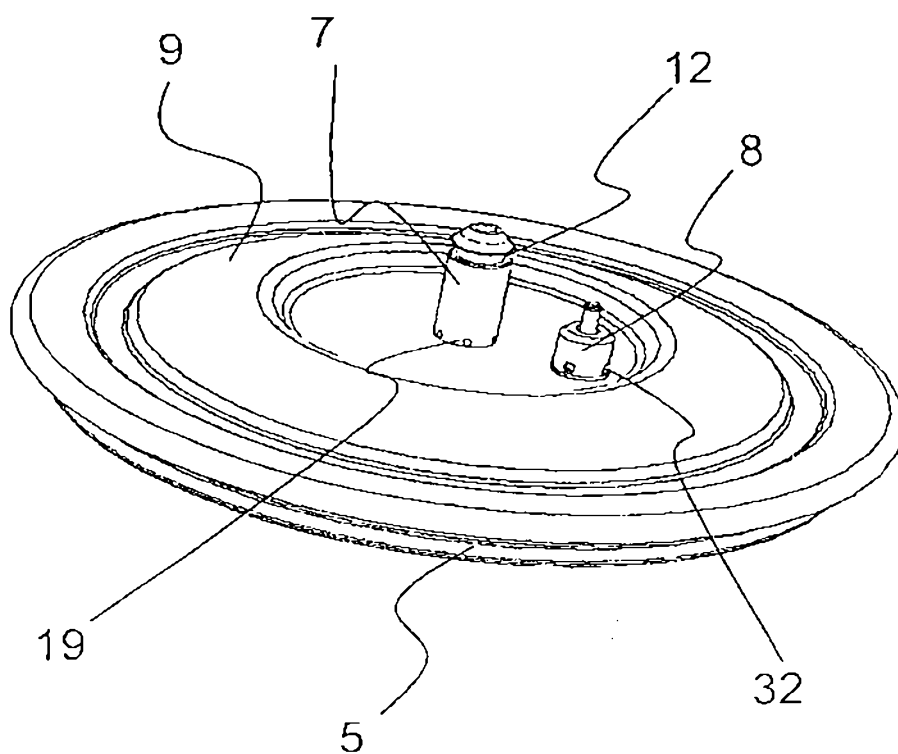
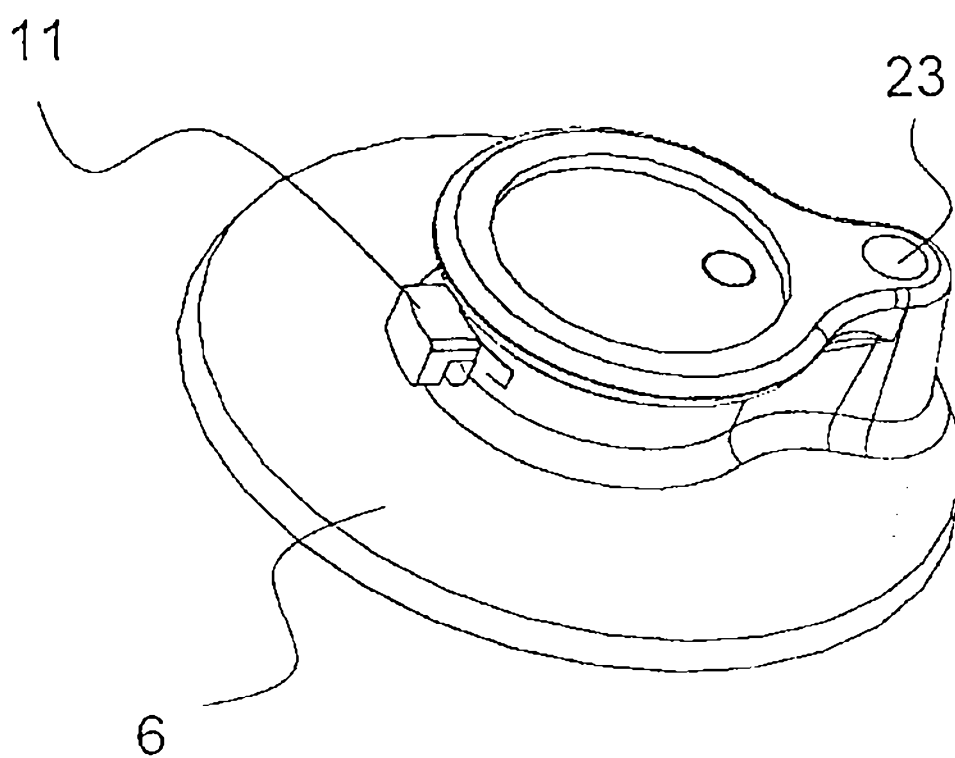


Fig.5



Fig

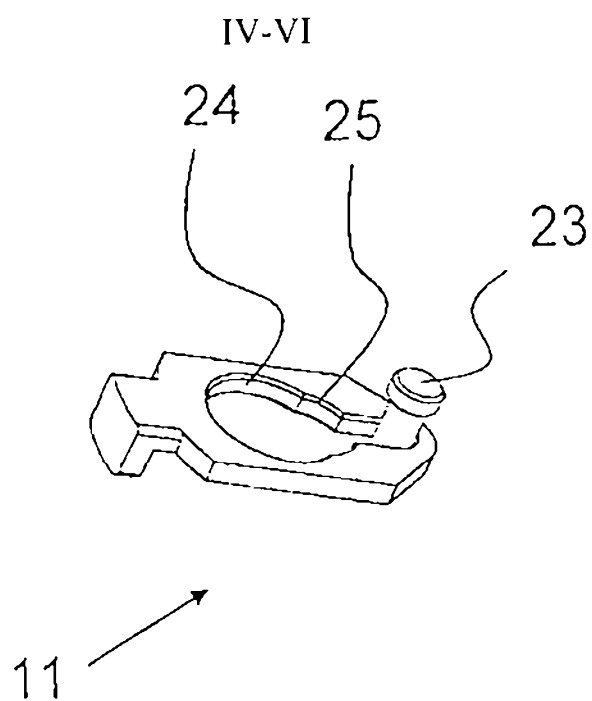


Fig. 7

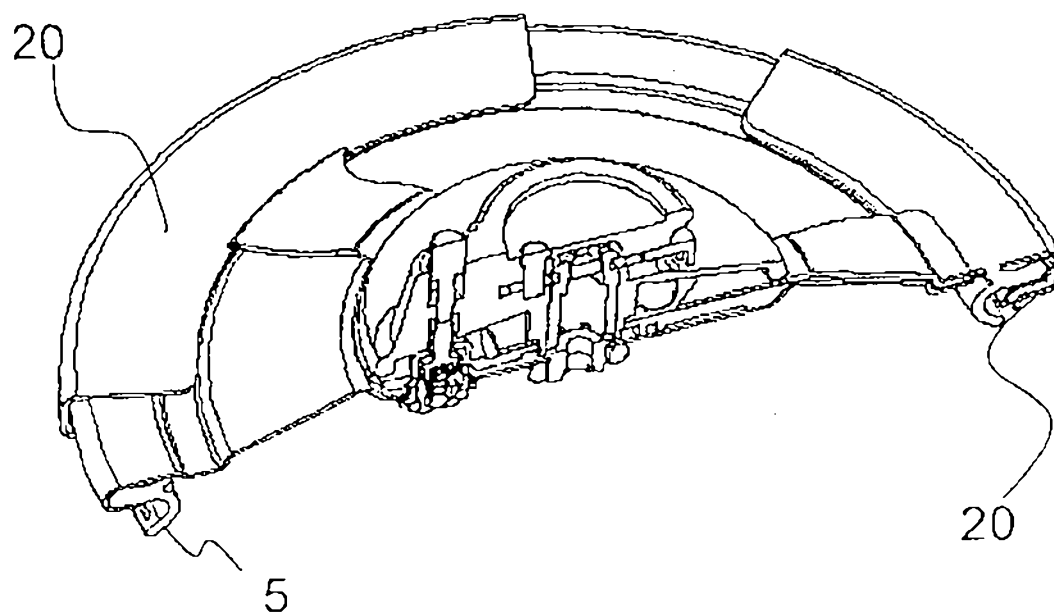
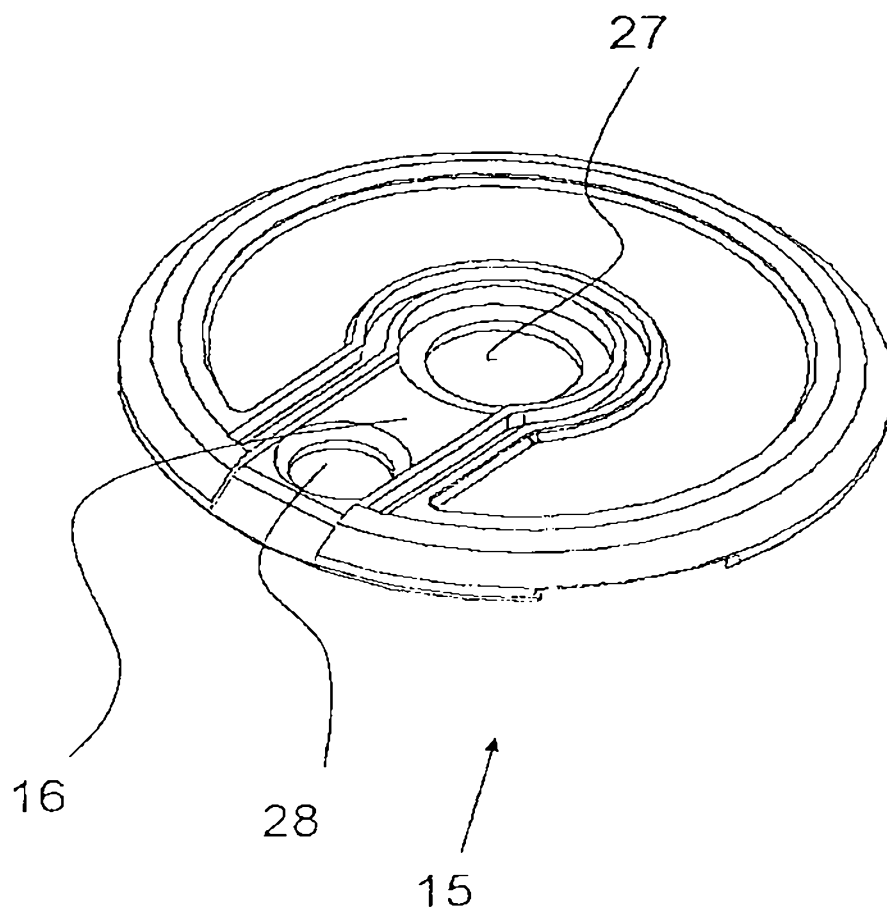
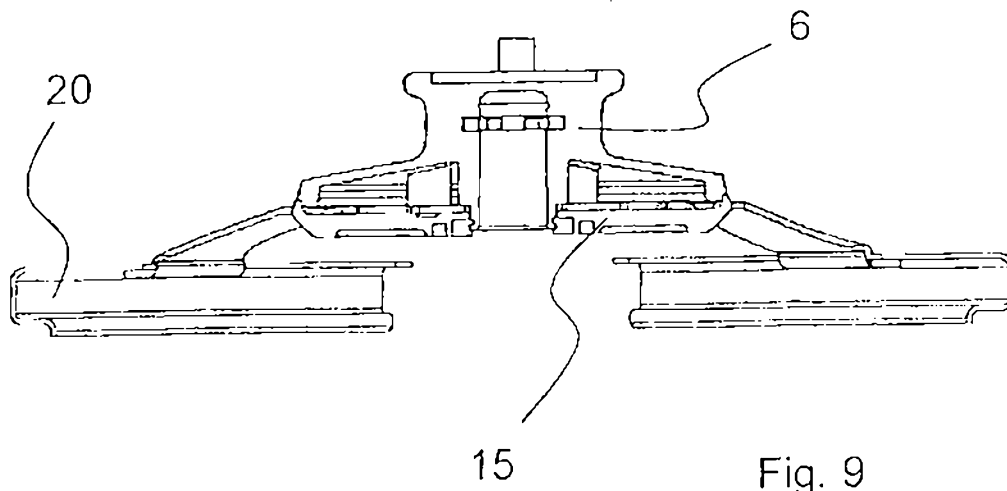


Fig. 8

V-VI



VI-VI

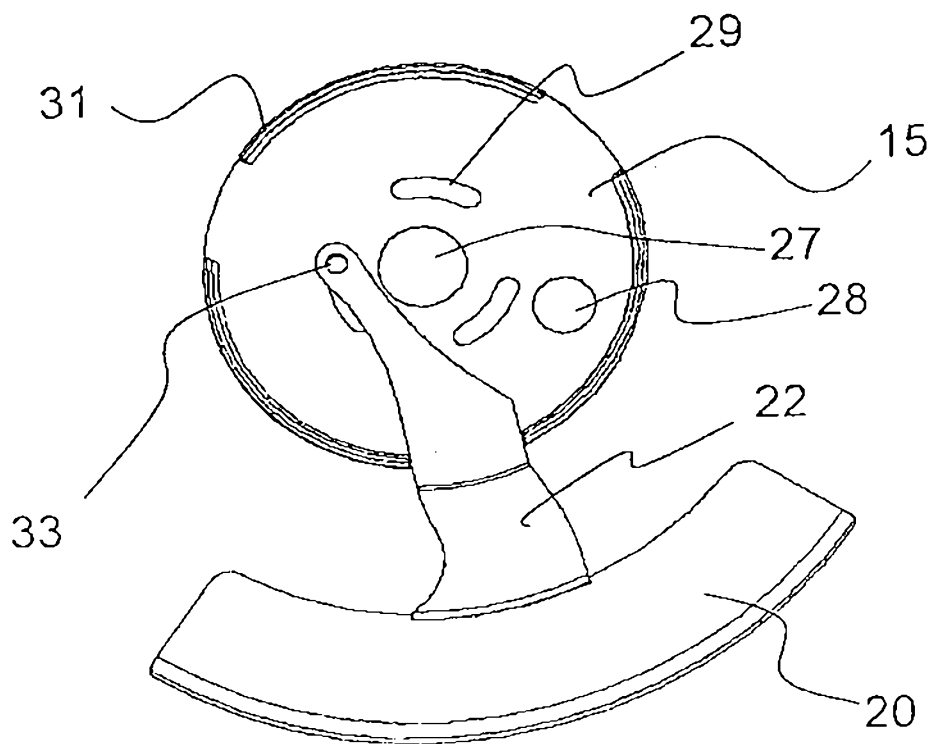


Fig. 11

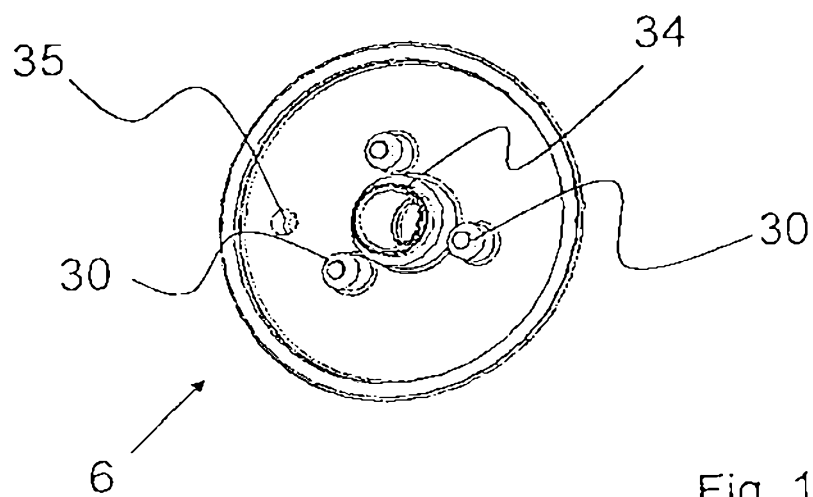


Fig. 12