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(54) **DEVICE FOR CONTROLLING THE DISPENSING OF A BEVERAGE FROM A SO-CALLED BAG-IN-BOX CONTAINER**

(57) Device (10) for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container provided with a projecting tap (R) configured as a cup-shaped body (T), with a through dispensing hole (F) in the bottom, and comprising, at said hole, a movable shutter, in antagonism with an elastic means, according to a vertical axis and carrying a pair of integral rigid fins (A), opposite to each other and projecting outside the tap (R) in a horizontal plane, provided for gripping with a forefinger and middle finger of a hand of a user, wherein said tap (R) has a fixed upper platform (P) for supporting the thumb of the same hand of the user, characterized in that said beverage dispensing control device comprises:

- a rigid casing (11), made of plastic material, superposed, in a disassemblable manner, with respect to said tap (R) enclosing it, at least in part, at the front and at the side and which has:
- two opposite lateral horizontal notches (12), having respective open ends towards said tap (R) and wherein said two fins (A) projecting outside the tap (R) are arranged, at least in part, and retained,
- an upper portion (11.1), elevated in use with respect to said platform (P) of said tap (R), and

- a rigid lever (13), made of plastic material, having at one end a manual handle (13.1), pivoted with respect to said upper portion (11.1) of said casing (11) and oscillating about a horizontal axis (13.2) between an oscillated rest position, in which said lever (13) does not rest against said platform (P) of the tap (R), and an oscillated working position, in which said lever (13) rests with another end thereof (13.3) against said platform (P) of the tap (R) and maintains said casing (11), integrally with said fins (A),

raised with respect to said tap (R), with reference to said rest position, determining the hydraulic opening of said tap (R).

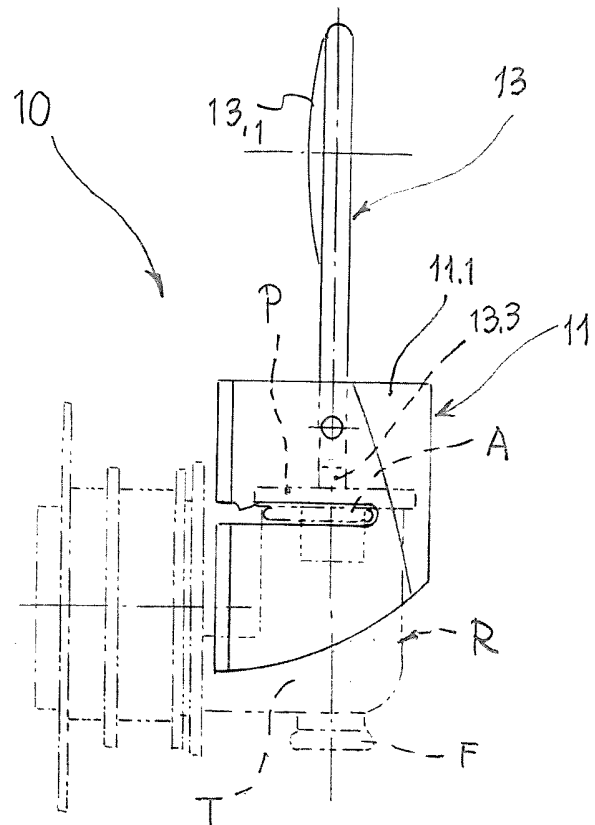


FIG. 10

Description

[0001] The present invention relates to a device for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container.

[0002] A beverage container known as a "Bag-in-Box" is known, which comprises a plastic film bag in a cardboard box. The bag, which contains the beverage, sealingly communicates with a so-called dispenser cap. In particular, the dispenser cap comprises a beverage dispensing tap, arranged at one end of a conduit hydraulically branched with respect to the bag.

[0003] The tap is configured as a cup body, having a through dispensing hole in the bottom, and comprises, at said hole, a movable shutter, in antagonism with an elastic means, according to a vertical axis and integral with respect to a pair of rigid fins, opposite to each other and projecting outside the tap in a horizontal plane. Above, the tap has a small fixed horizontal platform, intended for the support of the thumb finger of a user's hand, who, also using the forefinger and the middle finger of the same hand, arranged respectively under the fins, and raising the latter towards the thumb resting on the platform, also raises the shutter, in antagonism with the elastic means, and causes the dispensing of the beverage through the tap hole.

[0004] This operation, however, is not easy. In fact, the operation of dispensing the beverage from the "Bag-in-Box" engages a user's hand, until the desired quantity of beverage is dispensed. In particular, if the user wishes, for example, to transfer at least part of the contents of the "Bag-in-Box" into a traditional bottle, he/she must keep, for example, with his/her left hand the neck of the bottle below and aligned with the tap, while with his/her right hand keeps the tap shutter raised. When the shutter is released from the manual grip, the elastic means automatically stop the flow of the beverage leaving the tap.

[0005] The filling of a bottle can take a few minutes and is therefore difficult, as well as demanding.

[0006] Furthermore, to dispense the beverage, it is necessary to grasp the fins integral with the tap shutter from the front. A slight hand twist is therefore necessary, which - as well as inconvenient - partially hides the container in which the beverage is dispensed from the user's sight.

[0007] The present invention aims to overcome the above-mentioned drawback.

[0008] An object of the present invention is to provide a device for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container, which allows the user to transfer at least part of the content of the "Bag-in-Box" to another container, without keeping the tap shutter raised with one hand for the whole time of filling the other container.

[0009] Another object of the present invention is to provide a device for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container, which is stably secured, during use, with respect to the tap of the con-

tainer.

[0010] In view of such objects, the present invention provides a device for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container, the essential features of which are the subject of claim 1.

[0011] Further advantageous features of the invention are described in the dependent claims.

[0012] Features and advantages of the invention will become apparent from the following detailed description of two embodiments, with reference to the drawing, which shows important details for the invention, as well as from the claims.

[0013] The features illustrated herein should not necessarily be understood to be in scale and they are represented so that the peculiarities according to the invention are clearly highlighted.

[0014] The different features can be obtained individually or in any combination with each other, as variants of the invention.

[0015] In the drawing:

- figures 1 to 4 show a first embodiment of the device for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container, according to the invention, in a non-operating state and in front, side, rear elevation and top plan, respectively;
- figures 5 to 8 show the control device according to figures 1 to 4 in operating state and in a front, side, rear elevation and top plan, respectively;
- figures 9 and 10 show the device according to figures 1 to 8 in application to a tap of a so-called "Bag-in-Box" container, in non-operating and operating state, respectively;
- figures 11 to 14 show a second embodiment of the device for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container, according to the invention, in a non-operating state and respectively in front, side, rear elevation and top plan;
- figures 15 to 18 show the control device according to figures 11 to 14 in operating state and in a front, side, rear elevation and top plan, respectively;
- figures 19 and 20 show the device according to figures 11 to 18 in application to a tap of a so-called "Bag-in-Box" container, in non-operating and operating state, respectively.

First exemplary embodiment (figures 1 to 10)

[0016] The device for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container according to the first embodiment is indicated as a whole with reference numeral 10, while R indicates as an example a tap of a "Bag-in-Box" container (figures 9, 10). In particular, said tap R protrudes with respect to the so-called "Bag-in-Box" container (not shown in the drawing), is configured as a cup-shaped body T, having in the bottom a through hole F for dispensing, and comprises, at said hole, a movable shutter (not shown in the drawing),

in antagonism with an elastic means (not shown in the drawing), along a vertical axis. Furthermore, said shutter carries a pair of rigid fins A (only one is visible in figures 9 and 10), opposite to each other and projecting outside the tap R in a horizontal plane. Said fins A are provided for gripping with the forefinger and middle finger of a user's hand, while said tap R has a fixed upper platform P, for the support of the thumb finger of the same user's hand.

[0017] According to the invention, said device 10 for controlling the dispensing of the beverage comprises a rigid casing 11, made of plastic material, which can be superposed, in a disassemblable manner, with respect to said tap R (figures 9, 10), enclosing it partly at the front and at the side. It will be noted that said casing 11 is configured as a three-dimensional template partially enclosing said tap R at the front and at the sides, while it does not cover the bottom or the top of said tap R.

[0018] Furthermore, said casing 11 has:

- two opposite lateral horizontal notches 12, having respective open ends towards said tap R. In said notches 12, said two fins A projecting outside the tap R are arranged, at least in part, and retained,
- an upper portion 11.1, elevated in use with respect to said platform P of said tap R.

[0019] Moreover, said device 10 comprises a rigid lever 13, made of plastic material, having at one end a manual handle 13.1, pivoted with respect to said upper portion 11.1 of said casing 11 and oscillating about a horizontal axis 13.2 between an oscillated rest position (figures 1 to 4 and 9), in which said lever 13 does not rest against said platform P of the tap R, and an oscillated working position (figures 5 to 8 and 10), in which in use, said lever 13 rests with another end thereof 13.3 against said platform P of the tap R and maintains said casing 11, integrally with said fins A, raised with respect to said tap 11, with reference to said rest position, determining the hydraulic opening of said tap 11.

Second exemplary embodiment (figures 11 to 20)

[0020] The device for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container according to the second embodiment is indicated as a whole with reference numeral 20 and is similar to the above described control device 10. Therefore, for description simplification, the similar parts of the two control devices 10 and 20 are indicated with the same reference numerals.

[0021] As a variant with respect to the above described first embodiment, the control device 20 comprises a casing 21, similar to the casing 11, but having, at the respective open end of the lateral notches 22, respective integral stop teeth 23, which partially close said respective open end of said notches 22 and provide corresponding stops, which allow the exit of said lateral fins A, integral with the

shutter of the tap R, from said notches 22 only in the case of application of a predetermined manual extraction force of the casing 21 with respect to the tap R.

[0022] Said stop teeth 23 each have a portion projecting with respect to the corresponding lateral notch 22 and configured as a slide 23.1 (figures 12 and 16) with decreasing pattern towards the respective open end of the notch itself.

[0023] The operation of the control device 10 or 20, according to the present invention, is apparent from the description given above and, therefore, the further description thereof is omitted. It is only noted that:

- the arrangement of the lever 13 oscillated in the operating position, i.e. in a substantially vertical position, is stable and causes the hydraulic opening of the tap R, an opening which is maintained until the user oscillates the lever itself in an inoperative position, that is, in a substantially horizontal position;
- the presence of the stop teeth 23, which partially close the open end of the notches 22 and provide the corresponding stops, does not allow the lateral fins A to come out of said notches 22, except when the user applies a predetermined manual force of extraction of the casing 21 with respect to the tap R.

[0024] As can be seen from the foregoing, the present invention allows the objects set out in the introductory part of the present description to be achieved simply and effectively.

Claims

1. Device (10, 20) for controlling the dispensing of a beverage from a so-called "Bag-in-Box" container provided with a projecting tap (R) configured as a cup-shaped body (T), with a through dispensing hole (F) in the bottom, and comprising, at said hole, a movable shutter, in antagonism with an elastic means, according to a vertical axis and carrying a pair of integral rigid fins (A), opposite to each other and projecting outside the tap (R) in a horizontal plane, provided for gripping with a forefinger and middle finger of a hand of a user, wherein said tap (R) has a fixed upper platform (P) for supporting the thumb of the same hand of the user, **characterized in that** said beverage dispensing control device comprises:

- a rigid casing (11, 21), made of plastic material, superposed, in a disassemblable manner, with respect to said tap (R) enclosing it, at least in part, at the front and at the side and which has:

- two opposite lateral horizontal notches (12, 22), having respective open ends towards said tap (R) and wherein said two fins

(A) projecting outside the tap (R) are arranged, at least in part, and retained,
 - an upper portion (11.1), elevated in use with respect to said platform (P) of said tap (R), and

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- a rigid lever (13), made of plastic material, having at one end a manual handle (13.1), pivoted with respect to said upper portion (11.1) of said casing (11, 21) and oscillating about a horizontal axis (13.2) between an oscillated rest position, in which said lever (13) does not rest against said platform (P) of the tap (R), and an oscillated working position, in which said lever (13) rests with another end thereof (13.3) against said platform (P) of the tap (R) and maintains said casing (11, 21), integrally with said fins (A), raised with respect to said tap (R), with reference to said rest position, determining the hydraulic opening of said tap (R).

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2. Control device (20) according to claim 1, **characterized in that** said casing (21) comprises, at the respective open end of said side lateral notches (22), respective integral stop teeth (23), which partially close said respective open end of said notches (22) and provide corresponding stops, which allow the exit of said lateral fins (A) from said notches (22) only in the case of application of a predetermined manual extraction force of the casing (21) with respect to the tap (R).

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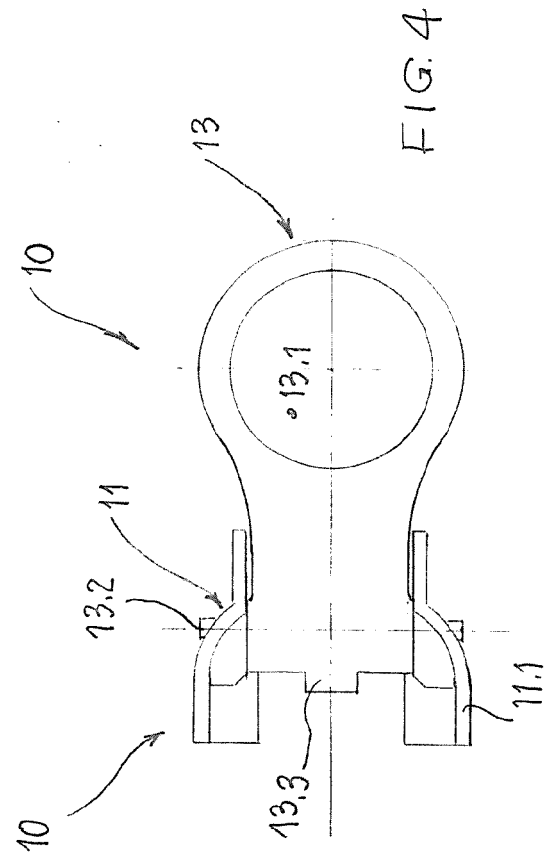
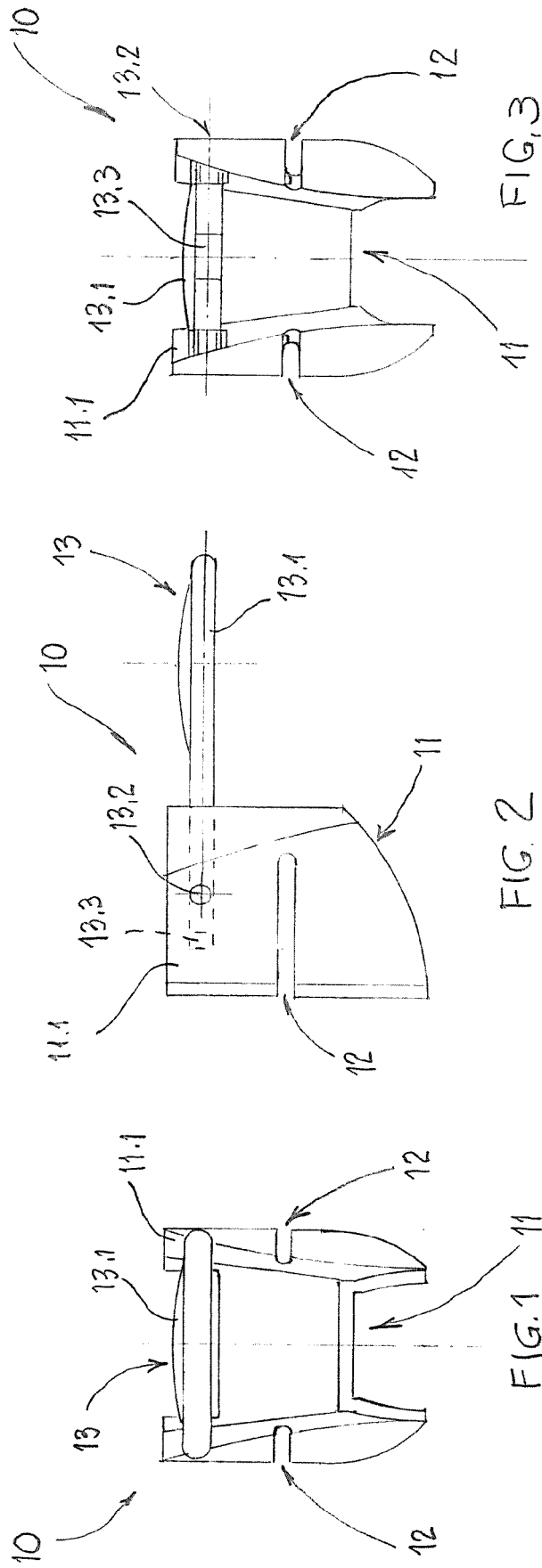
3. Control device (20) according to claim 2, **characterized in that** said stop teeth (23) each have a projecting portion with respect to the corresponding lateral notch (22) configured as a slide with decreasing pattern towards the respective open end of the notch itself.

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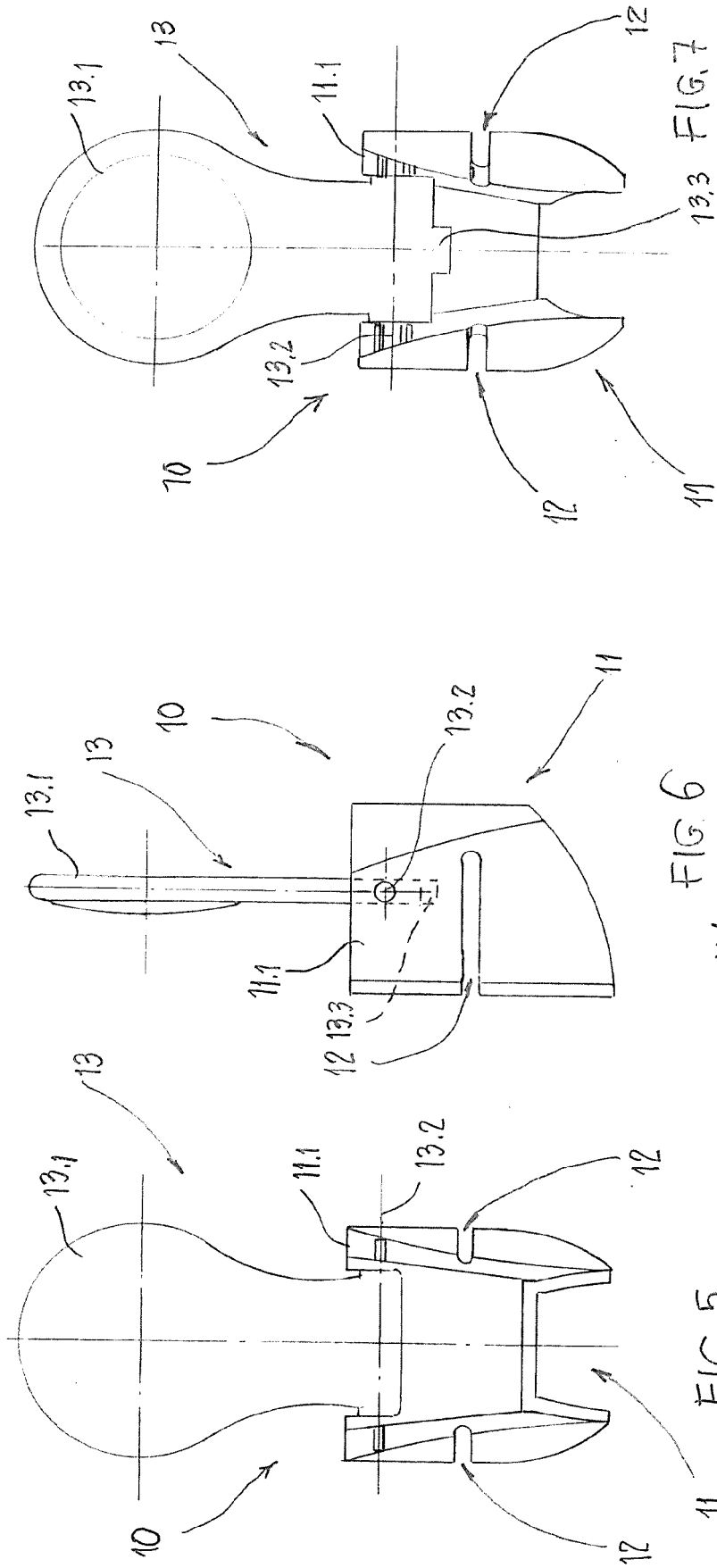


FIG. 5

FIG. 6

FIG. 7

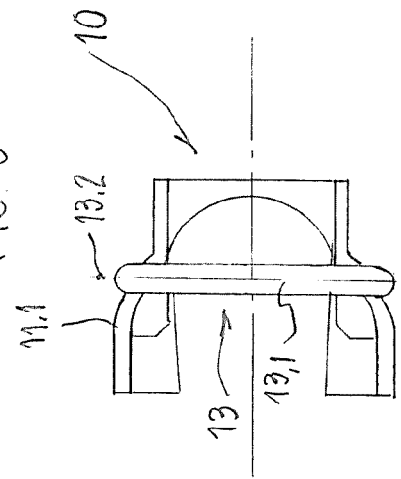


FIG. 8

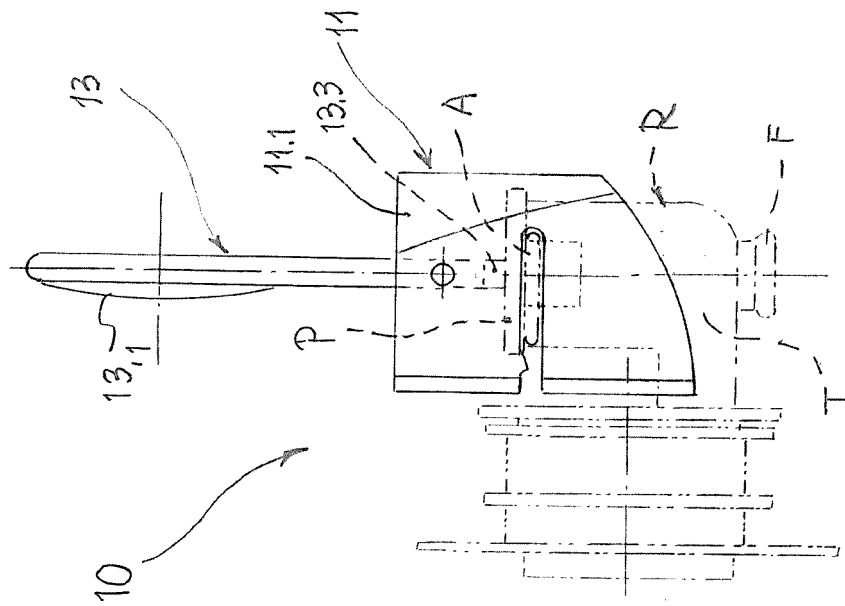


FIG. 9

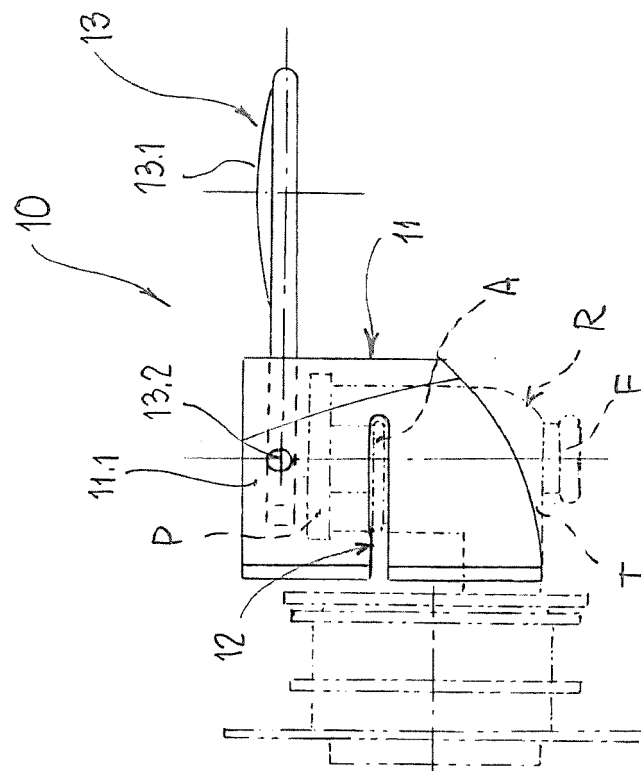


FIG. 10

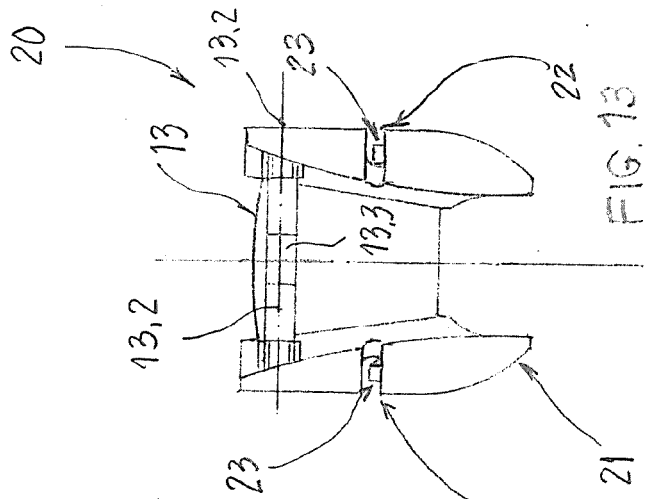


FIG. 11

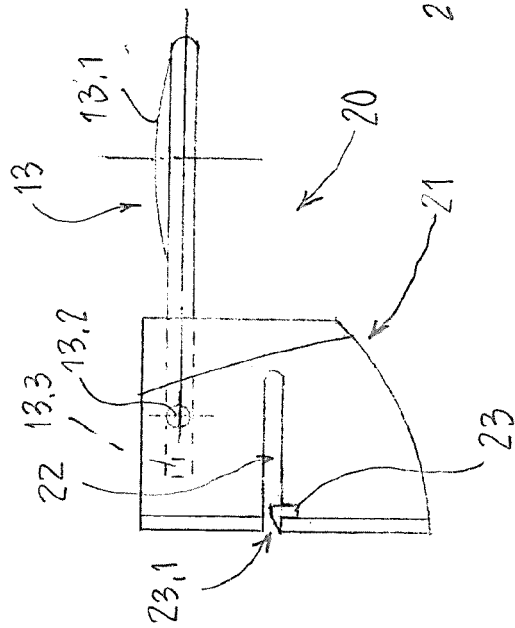


FIG. 12

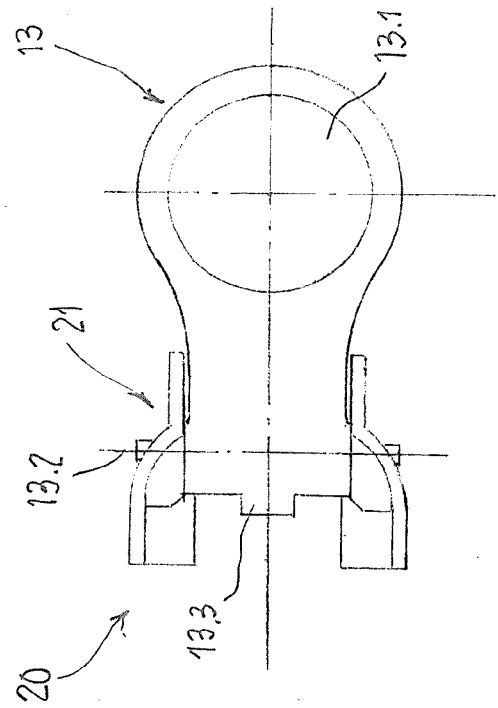
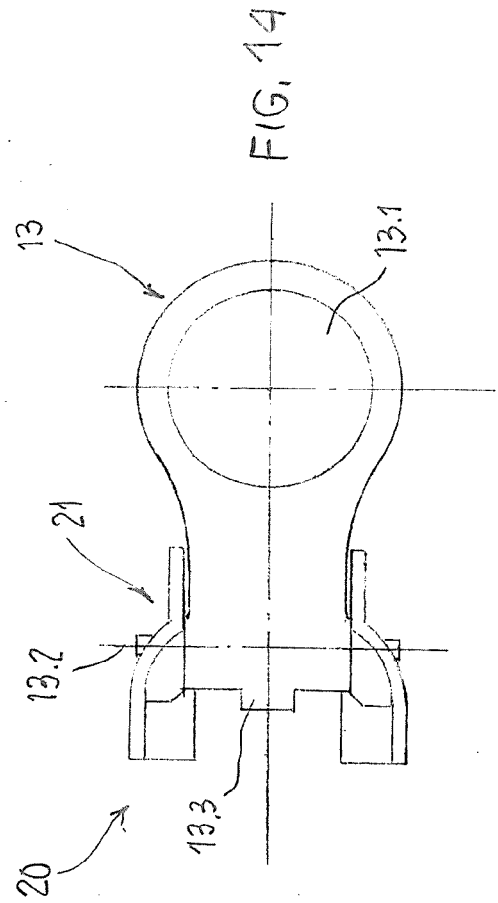
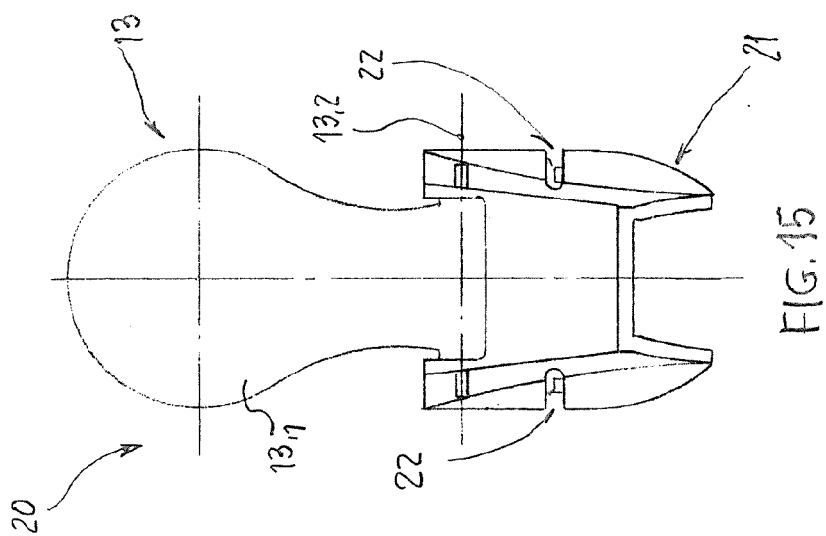
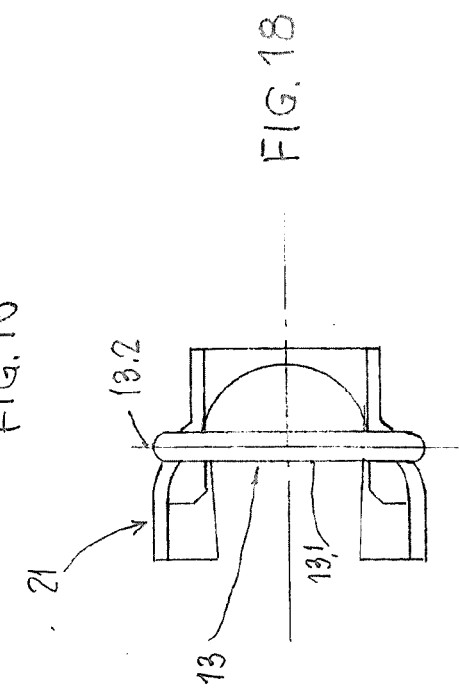
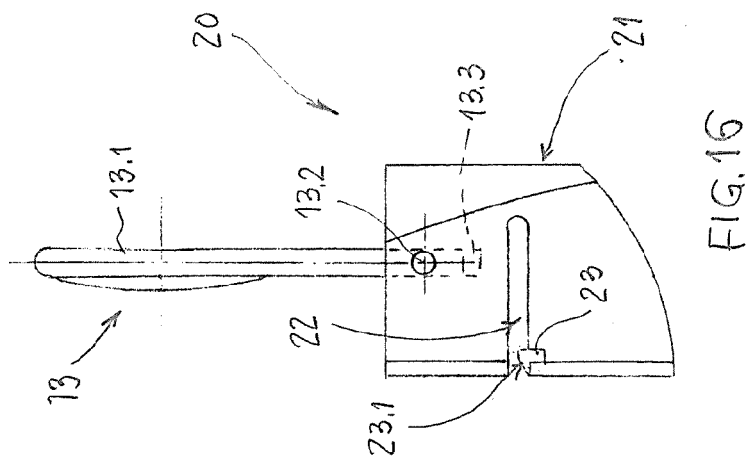
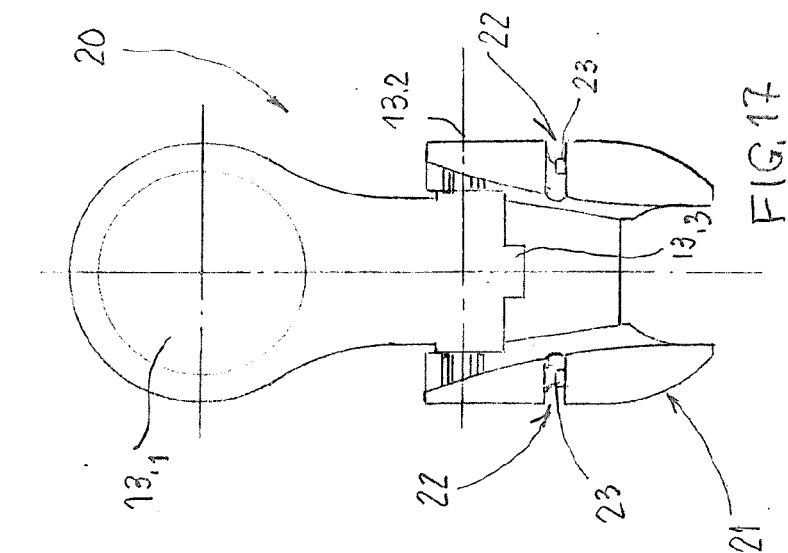


FIG. 13





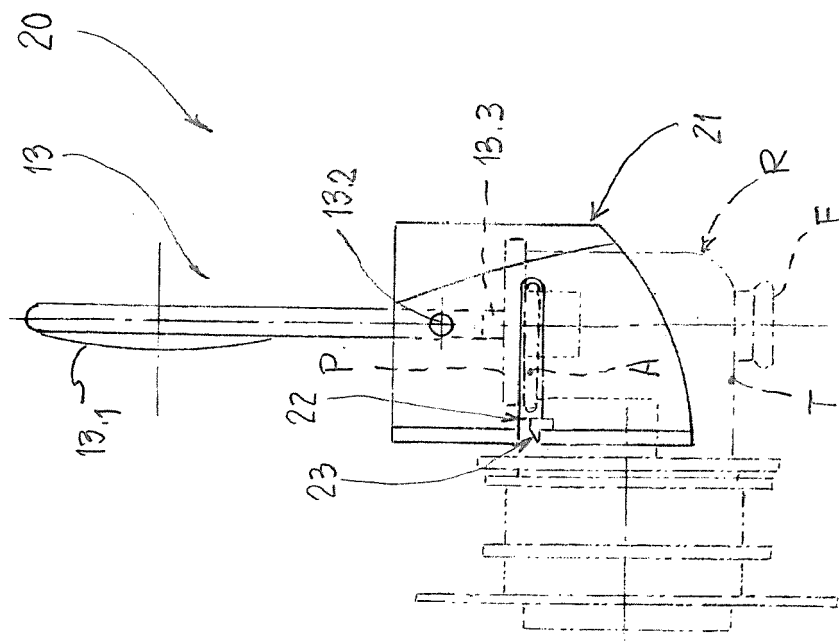


FIG. 20

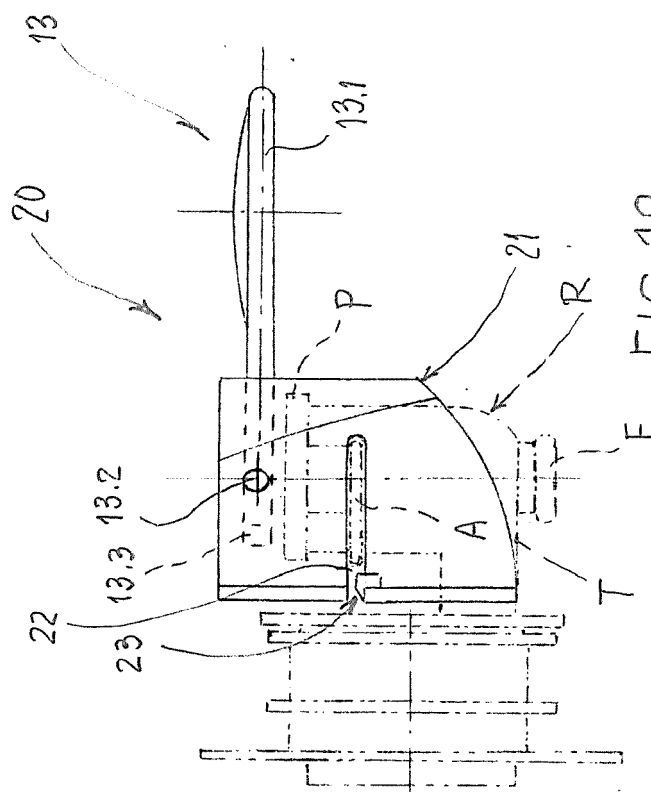


FIG. 19



EUROPEAN SEARCH REPORT

 Application Number
 EP 20 00 0103

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			TECHNICAL FIELDS SEARCHED (IPC)
			B65D B67D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 7 September 2020	Examiner Schultz, Tom
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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