



(11)

EP 3 942 979 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
26.01.2022 Bulletin 2022/04

(21) Application number: 21186970.6

(22) Date of filing: 21.07.2021

(51) International Patent Classification (IPC):
A47K 1/08 (2006.01) **A47K 3/28 (2006.01)**
A47K 5/18 (2006.01) **B05B 1/02 (2006.01)**
E03C 1/04 (2006.01) **E03C 1/08 (2006.01)**
E03C 1/086 (2006.01) **F15D 1/02 (2006.01)**
E03C 1/06 (2006.01)

(52) Cooperative Patent Classification (CPC):
E03C 1/0407; A47K 1/08; A47K 3/281; A47K 5/18;
B05B 1/02; E03C 1/04; E03C 1/0408; E03C 1/08;
E03C 1/086; E03C 1/06

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
KH MA MD TN

(30) Priority: 22.07.2020 TW 109124740

(71) Applicant: **Purity (Xiamen) Sanitary Ware Co., Ltd.**
Xiamen City, Fujian 361100 (CN)

(72) Inventors:
• **WU, James**
434 Taichung City (TW)

- **WU, Alex**
434 Taichung City (TW)
- **YANG, Ce-Wen**
Xiamen City, Fujian (CN)
- **WU, Ching-Yin**
434 Taichung City (TW)
- **LIN, Che-Min**
434 Taichung City (TW)

(74) Representative: **Melchior, Robin**
Octrooibureau Vriesendorp & Gaade B.V.
Koninginngelagte 19
2514 AB Den Haag (NL)

(54) WATER OUTPUT DEVICE

(57) A water output device (1) includes a faucet (10) and a rack. The faucet (10) includes a main body (101) and at least one inlet tube (11). The main body (101) has an outlet (101b), and the at least one inlet tube (11) is connected to a rear side (101c) of the main body (101). The rack (20) includes a receiving plate, and the receiving plate has a first connecting portion (221, 621) and a receiving portion (222). The first connecting portion (221, 621) is connected to the rear side (101c) of the main body (101) of the faucet (10). The receiving portion (222) has a first side (222a) and a second side (222b), which are opposite. The first side (222a) of the receiving portion (222) is located at a top portion of the main body (101) and is connected to the first connecting portion (221, 621). The second side (222b) of the receiving portion (222) extends in a direction away from the first side (222a) of the receiving portion (222).

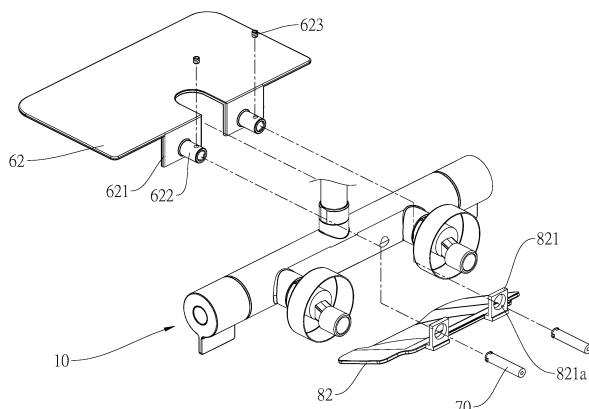


FIG. 9

Description**BACKGROUND OF THE INVENTION****Technical Field**

[0001] The present invention relates generally to a bathroom accessory, and more particularly to a bathroom accessory providing a space for receiving objects.

Description of Related Art

[0002] For the convenience of a user to obtain cleansers, cleaning tools, or bath supplies during showering and cleaning, a shelf is often disposed around the faucet for storing supplies such as the cleanser, the cleaning tools, the bath supplies, and so on.

[0003] The shelves on the market are classified into sucker-type and fixed-type according to their attaching way. The sucker-type shelves are easily aging and need to be attached to a certain kind of wall. The fixed type may damage the wall. Additionally, the shelves are usually located in a moisture environment, so that bacteria and mold may grow easily. Thus, the conventional shelf is not convenience for the user to use and possibly has safety concerns, so that the conventional shelf has room for improvement.

BRIEF SUMMARY OF THE INVENTION

[0004] In view of the above, the primary objective of the present invention is to provide a water output device and a rack which is firm to provide a space for receiving objects.

[0005] The present invention provides a water output device, including a faucet and a rack. The faucet includes a main body and at least one inlet tube, wherein the main body has an outlet, and the at least one inlet tube is connected to a rear side of the main body. The rack includes a receiving plate, wherein the receiving plate has a first connecting portion and a receiving portion. The first connecting portion is detachably connected to the rear side of the main body of the faucet. The receiving portion has a first side and a second side, which are opposite. The first side of the receiving portion is located above a top portion of the main body and is connected to the first connecting portion, and the second side of the receiving portion extends in a direction away from the first side of the receiving portion.

[0006] With the aforementioned design, the rack could provide a receiving space, wherein the receiving plate is detachably connected to the faucet and is located above the main body of the faucet, so that the rack could be firmly engaged with the faucet to solve the problem that the conventional shelf may fall down easily from the wall surface, and the rack could be easily disassembled to clean by the user, thereby solving the problem of mold growth on the conventional faucet, on the conventional

shelf, or between the conventional faucet and the conventional shelf due to a moisture environment.

5 BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0007]

FIG. 1 is a perspective view of the water output device of a first embodiment according to the present invention.

FIG. 2 is an enlarged partial view of a marked region A in FIG. 1.

FIG. 3 is an exploded view, showing a part of the components shown in FIG. 2.

FIG. 4 is similar to FIG. 2, showing an enlarged partial view of the water output device seen from another perspective.

FIG. 5 is an exploded view, showing a part of the components shown in FIG. 4.

FIG. 6 is a side view of the water output device of the first embodiment according to the present invention

FIG. 7 is a schematic view of the rack of the water output device of a second embodiment according to the present invention.

FIG. 8 is a schematic view of the water output device of a third embodiment according to the present invention.

FIG. 9 is an exploded view of the water output device of the third embodiment according to the present invention.

FIG. 10 is a partially exploded view of the water output device of the third embodiment according to the present invention.

FIG. 11 is a rear view of the water output device of the third embodiment according to the present invention.

FIG. 12 is a sectional view taken along the 12-12 line in FIG. 11.

FIG. 13 is an enlarged partial view of FIG. 12.

FIG. 14 is an enlarged partial view of FIG. 12.

FIG. 15 is a schematic view of the water output device of another embodiment according to the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0008] The present invention will be best understood by referring to the following detailed description of some illustrative embodiments in conjunction with the accompanying drawings. As illustrated in FIG. 1 to FIG. 6, a water output device 1 of a first embodiment according to the present invention includes a faucet 10 and a rack 20, wherein the faucet 10 includes a main body 101, two inlet tubes 11, an upward outlet tube 12, a downward outlet tube 13, and two shower controls. A front side 101a of the main body 101 has an outlet 101b, and a rear side

101c of the main body 101 is connected to the two inlet tubes 11, wherein the front side 101a of the main body 101 and the rear side 101c of the main body 101 face opposite directions. The two shower controls include a first knob 14 and a second knob 15 respectively disposed at a right side and a left side of the main body 101, wherein the right side of the main body 101 and the left side of the main body 101 face opposite directions. A top portion of the main body 101 has the upward outlet tube 12, and a bottom portion of the main body 101 has the downward outlet tube 13, wherein the top portion of the main body 101 and the bottom portion of the main body 101 faces opposite directions. A direction from the bottom portion to the top portion is perpendicular to a direction from the right side to the left side and is perpendicular to a direction from the rear side to the front side. The two inlet tubes 11 are respectively connected to a cold water supply and a hot water supply. By turning the first knob 14, a user could open or block paths for water to flow through of the two inlet tubes 11.

[0009] Additionally, the user could turn the second knob 15 to switch a path for water flowing from the two inlet tubes 11 into the main body 101, so that water could flow through one of the outlet 101b, the upward outlet tube 12, and the downward outlet tube 13. With such design, the faucet 10 could provide water outputted in various directions for the user to use. In the current embodiment, a number of the inlet tube 11 is two as an example, but the number of the inlet tube 11 could be one or more than two in other embodiments. The upward outlet tube 12 is adapted to be connected to a spout 30, so that water in the main body 101 could flow through the upward outlet tube 12 and flow out of one or more outlet of the spout 30, thereby providing water for the user to take a shower.

[0010] As illustrated in FIG. 3, the rack 20 includes a receiving plate 22 and a guiding plate 24. The receiving plate 22 has a first connecting portion 221 and a receiving portion 222, wherein the first connecting portion 221 is connected to the rear side 101c of the main body 101 of the faucet 10, and the receiving portion 222 has a first side 222a and a second side 222b, which are opposite. The first side 222a of the receiving portion 222 is located above the top portion of the main body 101 and is connected to the first connecting portion 221. The second side 222b of the receiving portion 222 extends in a direction away from the first side 222a of the receiving portion 222 to form a surface for the user to put objects. In the current embodiment, the surface is a flat surface as an example. Practically, the surface could be a surface in a curved shape or a surface having a slot for putting objects. The receiving portion 222 of the receiving plate 22 has a first perforation 224, wherein the upward outlet tube 12 could pass through the first perforation 224, and the spout 30 is connected to an end of the upward outlet tube 12 passed through the first perforation 224, so that the receiving plate 22 could be firmly disposed between the spout 30 and the faucet 10 by passing the upward

outlet tube 12 through the first perforation 224.

[0011] It's worthy to mention that the first connecting portion 221 of the receiving plate 22 is detachably connected to the faucet 10. As illustrated in FIG. 4 and FIG. 5, the water output device 1 includes two fasteners 40. The first connecting portion 221 of the receiving plate 22 has two through holes 225 fit for the two fasteners 40. The fasteners 40 pass through the through holes 225 of the first connecting portion 221 and are screwed into the main body 101 of the faucet 10 to engage the receiving plate 22 with the faucet 10, so that the receiving plate 22 could be firmly engaged with the faucet 10. The receiving plate 22 connected to the faucet 10 in a detachable way facilitates the user to disassemble and assemble the receiving plate 22 for cleaning or replacing the faucet 10 and the receiving plate 22, thereby solving the problem that mold easily grows on a conventional faucet, on a conventional shelf, or between the conventional faucet and the conventional shelf due to a moisture environment. In the current embodiment, a number of the fastener 40 and a number of the through holes 225 of the receiving plate 22 both are two as an example. In other embodiments, the number of the fastener 40 and the number of the through hole 225 of the receiving plate 22 could be one or more than two. Regardless of the number of the fastener and the number of the through hole, the fastener and the through hole could engage the receiving plate 22 with the faucet 10. Additionally, in the current embodiment, the fasteners 40 are screws as an example. Practically, the fastener could be a screw nail and other similar members.

[0012] As illustrated in FIG. 3 to FIG. 5, the guiding plate 24 has a second connecting portion 241 and a guiding portion 242, wherein the second connecting portion 241 is adapted to be connected to the rear side 101c of the main body 101 of the faucet 10, and the guiding portion 242 is adapted to guide water flowing out of the outlet 101b of the faucet 10. The guiding portion 242 has a first side 242a and a second side 242b, which are opposite. The first side 242a of the guiding portion 242 is located at the bottom portion of the main body 101 of the faucet 10 and is connected to the second connecting portion 241. The second side 242b of the guiding portion 242 extends in a direction away from the first side 242a of the guiding portion 242 to form a guiding surface, wherein the guiding surface of the guiding portion 242 has a guiding groove 243, so that water could flow through the guiding groove 243 in a direction from the outlet 101b to a front side of the faucet 10 for the user to obtain and to use water easily. Furthermore, the guiding portion 242 could transform a columnar water flow outputted through the outlet 101b into a waterfall. In other embodiments, the guiding surface could be surfaces in different forms and is not limited to having the guiding groove 243 in the current embodiment. For example, the guiding surface could be a flat surface without the guiding groove 243.

[0013] As illustrated in FIG. 3 to FIG. 5, the guiding portion 242 of the guiding plate 24 has a second perfo-

ration 244, and the downward outlet tube 13 could pass through the second perforation 244. An end of the downward outlet tube 13 passing out of the second perforation 244 could output water, thereby providing water outputted in various directions for the user to use.

[0014] The second connecting portion 241 of the guiding plate 24 is detachably connected to the faucet 10. As illustrated in FIG. 5, the second connecting portion 241 of the guiding plate 24 has two through holes 245 corresponding to the two fasteners 40. The fasteners 40 pass through the through holes 245 of the second connecting portion 241 and are screwed into the main body 101 of the faucet 10 to engage the guiding plate 24 with the faucet 10, so that the guiding plate 24 could be firmly engaged with the faucet 10. The guiding plate 24 connected to the faucet 10 in a detachable way facilitates the user to disassemble and assemble the guiding plate 24 for cleaning or replacing the faucet 10 and the guiding plate 24, thereby avoid mold growing on the guiding plate 24 due to a moisture environment. At the same time, the user could optionally mount the guiding plate 24 to the faucet 10 according to different situations. In the current embodiment, a number of the fastener 40 and a number of the through hole 245 of the guiding plate 24 both are two as an example. In the other embodiment, the number of the fastener 40 and the number of the through hole 245 of the guiding plate 24 could be one or more than two, as long as the fastener and the through hole could achieve an efficacy of engaging the guiding plate 24 with the faucet 10.

[0015] It's worthy to mentioned, in the current embodiment, the first connecting portion 221 of the receiving plate 22 and the second connecting portion 241 of the guiding plate 24 are overlapped and are passed through by the two fasteners 40. Each of the two fasteners 40 passes through one of the two through holes 225 of the receiving plate 22 and corresponding one of the two through holes 245 of the guiding plate 24 to connect the receiving plate 22 and the guiding plate 24 to the faucet 10. However, in other embodiment, the receiving plate 22 and the guiding plate 24 could be disposed without overlapping. For example, the first connecting portion of the receiving plate could be fixed to the faucet 10 by two fasteners, and the guiding plate could be fixed to the faucet 10 by another two fasteners. In this way, the receiving plate and the guiding plate could be connected to the faucet as well.

[0016] As illustrated in FIG. 5 and FIG. 6, the main body 101 of the faucet 10 is disposed between the receiving portion 222 and the guiding portion 242, and the first knob 14 and the second knob 15 of the two shower controls are respectively disposed at opposite sides of the main body 101. An acute angle θ is formed between the receiving portion 222 and the guiding portion 242. The first connecting portion 221 has a first arc surface 221a, and the second connecting portion 241 has a second arc surface 241a, wherein a curvature of the first arc surface 221a and a curvature of the second arc surface

241a are fitted a surface of the rear side 101c of the faucet 10, so that the first connecting portion 221 and the second connecting portion 241 are tightly fitted with the faucet 10.

5 **[0017]** As illustrated in FIG. 7 which is a schematic view of a rack 50 of a water output device of a second embodiment according to the present invention, the water output device of the second embodiment according to the present invention has almost same structure as that of the first embodiment, except that in the current embodiment, a receiving plate and a guiding plate are integrally formed as a monolithic unit. In other words, the first connecting portion 221 of the receiving plate 22 of the rack 50 is connected to the second connecting portion 241 of the guiding plate 24. In the current embodiment, the first connecting portion 221 has the through holes 225 described in the aforementioned embodiment, but the second connecting portion 241 does not have any through hole.

10 **[0018]** As illustrated in FIG. 8 to FIG. 14, a rack 60 of a water output device of a third embodiment includes two fix pins 70, wherein an end of each of the two fix pins 70 is connected to the first connecting portion 621 of the receiving plate 62, and the other end of each of the two

15 fix pins 70 extends in a direction away from the first connecting portion 621 and is adapted to abut against a mounting surface W. The mounting surface W could be a wall. Since the two fix pins 70 abuts against the mounting surface W, the rack 60 could be firmly and stably mounted on the faucet 10 and prevents from shaking.

20 **[0019]** Furthermore, the first connecting portion 621 of the receiving plate 62 has two sleeves 622, and an end of each of the two fix pins 70 is respectively inserted into the two sleeves 622, wherein each of the two fix pins 70 is movable along an axial direction of one of the two sleeves 622 to adjust a length of a portion of each of the two fix pins 70 that protrudes out of the sleeves 622. In the current embodiment, the water output device includes two set screws 623. A side wall of each of the two sleeves 35 622 has a threaded holes 622a. The end of each of two fix pins 70 is inserted into one of the sleeves 622, and each of the set screws 623 is screwed into the threaded hole 622a of one of the sleeves 622 to abut against the fix pin 70 to fix each of the fix pins 70 in one of the sleeves 40 622. By this way, the length of the portion of each of the two fix pins 70 that protrude out of the sleeves 622 could be adjusted to fit different mounting situations. For example, when the user would like to mount the rack 60, the two fix pins 70 could be inserted into the two sleeves 45 622, and then put the receiving plate 62 on a top portion of the faucet 10 and pull the two fix pins 70 outward relative to the two sleeves 622 to move to a position where the fix pins 70 could abut against the mounting surface W. After that, screw each of the set screws 623 into one 50 of the threaded holes 622a of the sleeves 622 to abut against an outer circumstance of each the fix pins 70, thereby fixing a position of the fix pins 70. With such design, the rack 60 could abut against the wall via the two

55

fix pins 70, so that the rack 60 could stably disposed on the faucet 10. During a process of mounting the rack 60, the user could directly dispose the rack 60 on the faucet 10 without disassembling the faucet 10 from the wall, thereby facilitating assembly and disassembly of the rack 60. Additionally, when a distance between the wall and the faucet 10 are different, the user could adjust the length of the portion of each of the fix pins 70 that protrudes out of the sleeves 622 to allow the fix pins 70 abut against the wall, thereby improving the flexibility and applicability of the rack 60.

[0020] In the current embodiment, by using the set screws 623 and the threaded holes 622a of the sleeves 622, the length of the portion of each of the fix pins 70 that protrudes out of the sleeves 622 could be adjusted. In other embodiment, the length of the portion of each of the fix pins 70 that protrudes out of the sleeves 622 could be adjusted by another way. For example, an inner wall of each of the sleeves could have an internal thread, and an outer wall of each of the fix pins could have an external thread corresponding to the internal thread of one of the sleeves. With such design, by screwing the fix pins into the sleeves, an end of each of the fix pins could be inserted into one of the sleeves, and the fix pins could be axially moved relative to the sleeves to adjust the length of the portion of each of the fix pins that protrude out of the sleeves.

[0021] The end of each of the fix pins 70 that is inserted into one of the sleeves 622 has an engaging portion. An inner wall of each of the sleeves 622 has a restricting portion. The restricting portion of each of the sleeves 622 is adapted to restrict the engaging portion of one of the fix pins 70 in each of the sleeves 622. In the current embodiment, the engaging portion includes a rib 701, and the restricting portion includes a first protrusion 622b and a second protrusion 622c. The first protrusion 622b and the second protrusion 622c are respectively disposed near to two end openings of the sleeves 622, and the end of each of the fix pins 70 passing through an end of each of the sleeves 622 has at least one elastic piece 702, wherein the rib 701 is located at the at least one elastic piece 702. In the current embodiment, the elastic piece 702 includes a plurality of elastic pieces 702. When each of the fix pins 70 passes through one of the sleeves 622, the elastic piece 702 could be pressed to deform to enter into one of the sleeves 622. After each of the fix pins 70 enters into one of the sleeves 622, the elastic piece 702 returns to original status, thereby avoiding each of the fix pins 70 being disengaged from one of the sleeves 622 during moving inside one of the sleeves 622.

[0022] In the current embodiment, the water output device includes a guiding plate 82, wherein the guiding plate 82 has almost the same structure as the guiding plate 24 of the first embodiment, except that the second connecting portion 821 of the guiding plate 82 includes two mounting holes 821a that provides for fitting around the two sleeves 622, wherein the two mounting holes 821a is tightly fitted around the two sleeves 622. Moreover, in

the current embodiment, a number of the fix pins, a number of the sleeves, and a number of the mounting holes are all two as an example. In practice, the number of the fix pins, the number of the sleeves, and the number of the mounting holes could be one or more than two to achieving the function of stably mounting the rack to the faucet. Besides, as illustrated in FIG. 15, the guiding plate 82 could be optionally omitted according to the required demand of the user.

[0023] In view of the above, the water output device and the rack of the present invention could provide a space for receiving objects, and since the receiving plate 22 and the guiding plate 24 are connected to the faucet 10 in a detachable way, the receiving plate 22 and the guiding plate 24 could not only be firmly connected to the faucet 10, but also be easily disassembled and assembled, facilitating the user to clean or to replace the faucet 10, the receiving plate 22, and the guiding plate 24, thereby solving the problem that mold easily grows on a conventional faucet, on a conventional rack, or between the conventional faucet and the conventional rack. Additionally, with the guiding portion 242, the water could be guided by the guiding portion 242 to flow through the outlet 101b to the front side 101a of the faucet 10 for the user to use easily.

[0024] It must be pointed out that the embodiment described above is only a preferred embodiment of the present invention. All equivalent structures which employ the concepts disclosed in this specification and the appended claims should fall within the scope of the present invention.

REFERENCE NUMERAL LIST

35 [Present Invention]

[0025]

40 1: water output device
10: faucet
101: main body
101a: front side
101b: outlet
101c: rear side
45 11: inlet tube
12: upward outlet tube
13: downward outlet tube
14: first knob
15: second knob
50 20: rack
22: receiving plate
221: first connecting portion
221a: first arc surface
222: receiving portion
222a: first side
222b: second side
55 224: first perforation
225: through hole

24: guiding plate
 241: second connecting portion
 241a: second arc surface
 242: guiding portion
 242a: first side
 242b: second side
 243: guiding groove
 244: second perforation
 245: through hole
 30: spout
 40: fastener
 50, 60: rack
 0: acute angle
 62: receiving plate
 621: first connecting portion 622: sleeve 622a: threaded hole 622b: first protrusion 622c: second protrusion 623: set screw 70: fix pin 701: protruding rib 702: elastic piece 82: guiding plate 821: second connecting portion 821a: mounting hole W: mounting surface

Claims

1. A water output device (1), comprising:

a faucet (10) comprising a main body (101) and at least one inlet tube (11), wherein the main body (101) has an outlet (101b), and the at least one inlet tube (11) is connected to a rear side (101c) of the main body (101);
 a rack (20) comprising a receiving plate (22, 62), wherein the receiving plate (22, 62) has a first connecting portion (221, 621) and a receiving portion (222); the first connecting portion (221, 621) is detachably connected to the rear side (101c) of the main body (101) of the faucet (10), and the receiving portion (222) has a first side (222a) and a second side (222b), which are opposite; the first side (222a) of the receiving portion (222) is located above a top portion of the main body (101) and is connected to the first connecting portion (221, 621), and the second side (222b) of the receiving portion (222) extends in a direction away from the first side (222a) of the receiving portion (222).

2. The water output device (1) as claimed in claim 1, wherein the faucet (10) has an upward outlet tube (12) adapted to be connected to a spout (30); the receiving portion (222) of the receiving plate (22) has a first perforation (224), and the upward outlet tube (12) passes through the first perforation (224).

3. The water output device (1) as claimed in claim 1, further comprising a guiding plate (24), wherein the guiding plate (24) has a second connecting portion (241) and a guiding portion (242); the second con-

necting portion (241) is adapted to be connected to the rear side (101c) of the main body (101) of the faucet (10), and the guiding portion (242) has a first side (242a) and a second side (242b), which are opposite; the first side (242a) of the guiding portion (242) is located at a bottom portion of the main body (101) and is connected to the second connecting portion (241); the second side (242b) of the guiding portion (242) extends in a direction away from the first side (242a) of the guiding portion (242); the guiding portion (242) is adapted to guide water outputted through the outlet (101b) of the faucet (10).

4. The water output device (1) as claimed in claim 3, wherein the second connecting portion (241) of the guiding plate (24) is detachably connected to the faucet (10), and the second connecting portion (241) and the first connecting portion (221) are overlapped.

5. The water output device (1) as claimed in claim 4, further comprising at least one fastener (40), wherein each of the first connecting portion (221) of the receiving plate (22) and the second connecting portion (241) of the guiding plate (24) has at least one through hole (225); the at least one fastener (40) passes through the at least one through hole (225) of the first connecting portion (221) and the at least one through hole (225) of the second connecting portion (241) and is screwed into the faucet (10), thereby engaging the receiving plate (22) and the guiding plate (24) with the faucet (10).

6. The water output device (1) as claimed in claim 3, wherein the faucet (10) has a downward outlet tube (13); the guiding portion (242) of the guiding plate (24) has a second perforation (244), and the downward outlet (13) tube passes through the second perforation (244).

7. The water output device (1) as claimed in claim 3, wherein the first connecting portion (221) has a first arc surface (221a), and the second connecting portion (241) has a second arc surface (241a); a curvature of the first arc surface (221a) and a curvature of the second arc surface (241a) are fitted a surface of the rear side (101c) of the faucet (10).

8. The water output device (1) as claimed in claim 3, wherein the faucet (10) comprising two shower controls respectively disposed at opposite sides of the main body (101); the main body (101) of the faucet (10) is disposed between the receiving portion (222) and the guiding portion (242), and an acute angle (0) is formed between the receiving portion (222) and the guiding portion (242).

9. The water output device (1) as claimed in claim 3, wherein the guiding portion (242) has a guiding

groove (243) adapted to guide water outputted through the outlet (101b) of the faucet (10).

10. The water output device (1) as claimed in claim 3, wherein the receiving plate (22) and the guiding plate (24) are integrally formed as a monolithic unit. 5

11. The water output device (1) as claimed in claim 1, comprising at least one fix pin (70), wherein an end of the at least one fix pin (70) is connected to the first connecting portion (621) of the receiving plate (62); another end of the at least one fix pin (70) extends in a direction away from the first connecting portion (621) and is adapted to abut against a mounting surface (W). 10

12. The water output device (1) as claimed in claim 11, wherein the first connecting portion (621) of the receiving plate (62) has at least one sleeve (622); an end of the at least one fix pin (70) is inserted into the at least one sleeve (622), wherein the at least one fix pin (70) is movable in an axial direction relative to the at least one sleeve (622), thereby adjusting a length of the at least one fix pin (70) that protrudes out of the at least one sleeve (622). 15

13. The water output device (1) as claimed in claim 12, comprising a set screw (623), a side wall of the at least one sleeve (622) has a threaded hole (622a); the end of the at least one fix pin (70) is inserted into the at least one sleeve (622), and the set screw (623) is screwed into the threaded hole (622a) of the at least one sleeve (622) to abut against a side wall of the at least one fix pin (70) to fix the at least one fix pin (70) in the at least one sleeve (622). 20

14. The water output device (1) as claimed in claim 13, wherein the end of the at least one fix pin (70) inserted into the at least one sleeve (622) has an engaging portion; an inner wall of the at least one sleeve (622) has a restricting portion, wherein the restricting portion of the at least one sleeve (622) is adapted to restrict the engaging portion of the at least one fix pin (70) in the at least one sleeve (622). 25

15. The water output device (1) as claimed in claim 14, wherein the engaging portion comprises a rib (701); the restricting portion comprises a first protrusion (622b) and a second protrusion (622c); the first protrusion (622b) and the second protrusion (622c) are respectively disposed near to two end openings of the at least one sleeve (622). 30

16. The water output device (1) as claimed in claim 15, wherein the end of the at least one fix pin (70) passing through an end of the at least one sleeve (622) has at least one elastic piece (702), and the rib (701) is located at the at least one elastic piece (702); when 35

the at least one fix pins (70) passes through the at least one sleeve (622), the at least one elastic piece (702) could be pressed to deform to enter into the at least one sleeve (622). 40

17. The water output device (1) as claimed in claim 11, comprising a guiding plate (82), wherein the guiding plate (82) has a second connecting portion (821) and a guiding portion (242); the second connecting portion (821) is adapted to be connected to the rear side (101c) of the main body (101) of the faucet (10); the guiding portion (242) has a first side (242a) and a second side (242b), which are opposite; the first side (242a) of the guiding portion (242) is located at a bottom portion of the main body (101) and is connected to the second connecting portion (821), and the second side (242b) of the guiding portion (242) extends in a direction away from the first side (242a) of the guiding portion (242); the guiding portion (242) is adapted to guide water outputted through the outlet (101b) of the faucet (10); the first connecting portion (621) of the receiving plate (62) has the at least one sleeve (622), and the second connecting portion (821) of the guiding plate (82) comprises at least one mounting hole (821a) for fitting around the at least one sleeve (622). 45

50

55

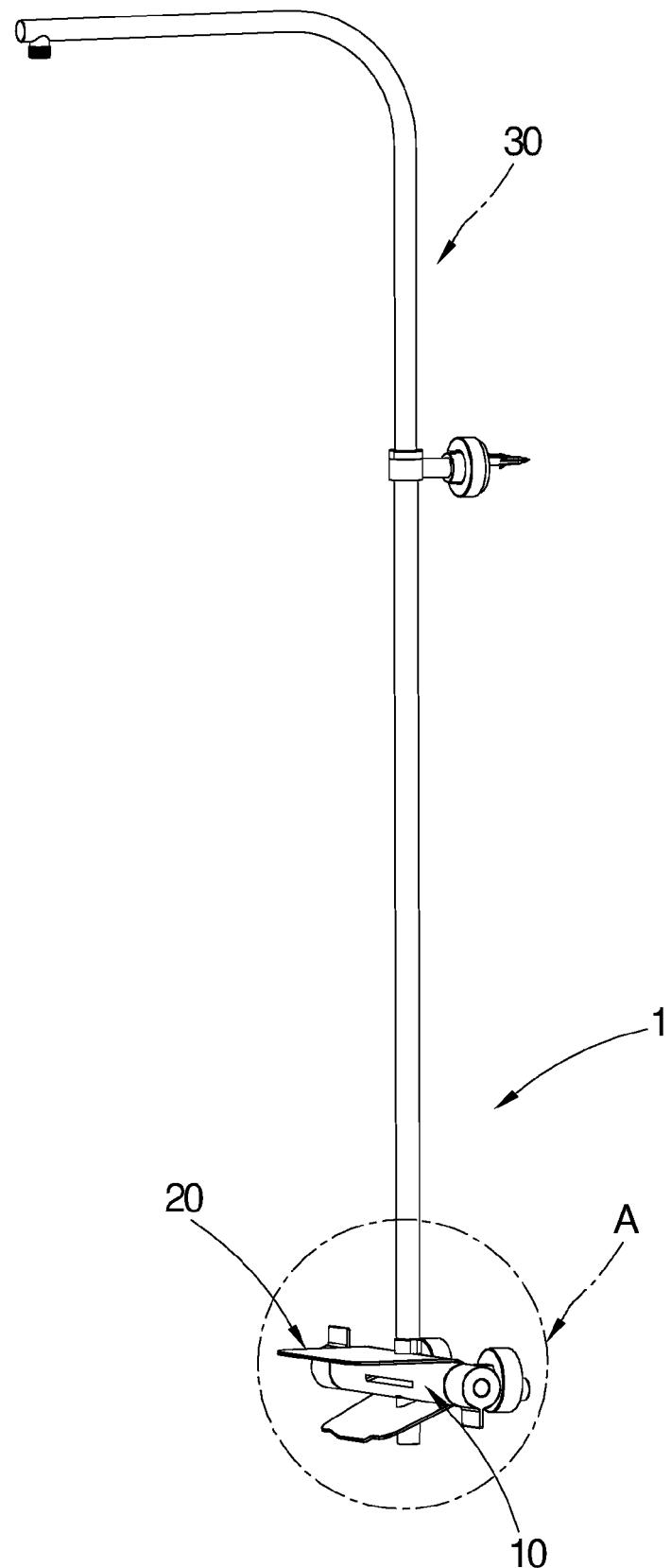


FIG. 1

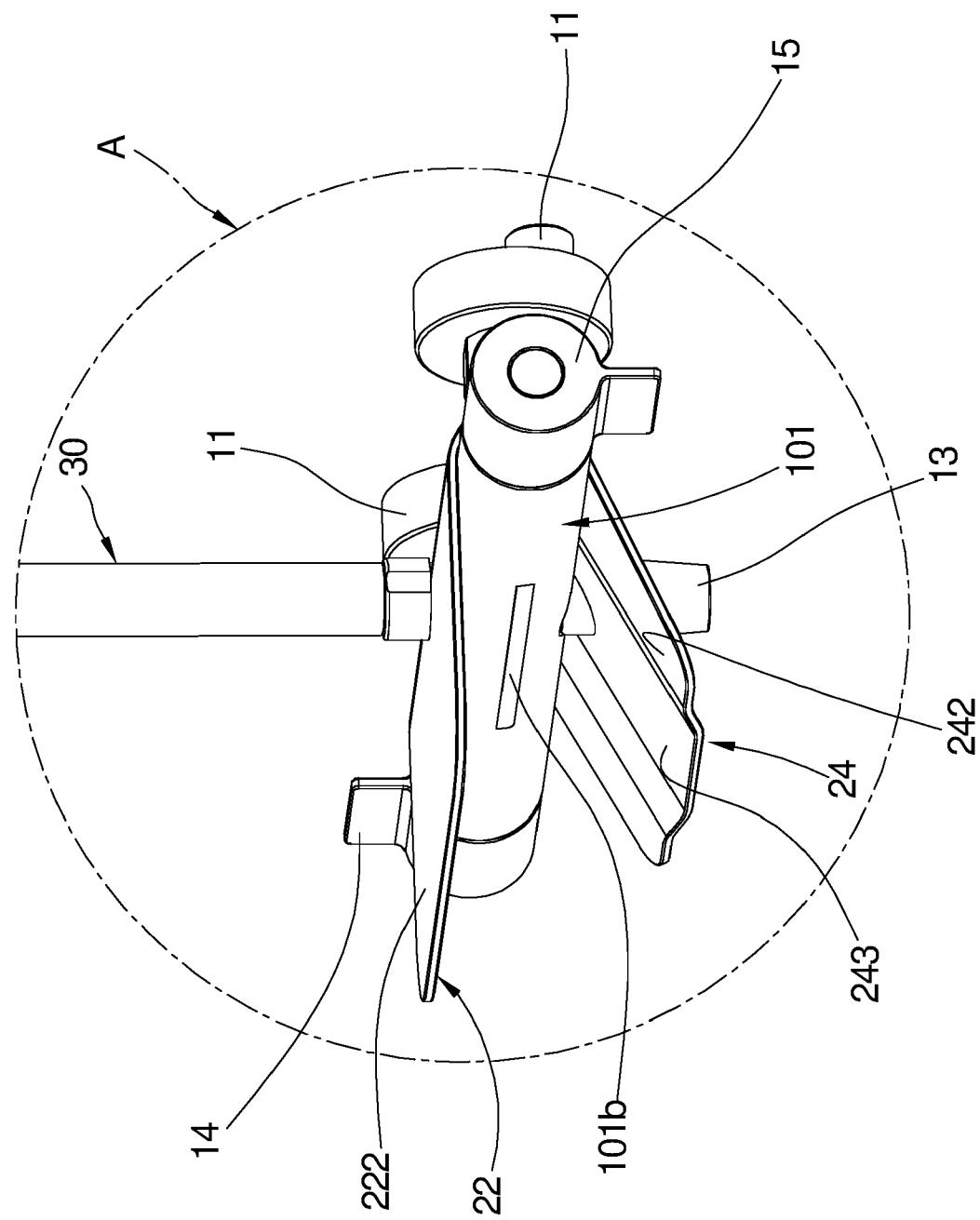


FIG. 2

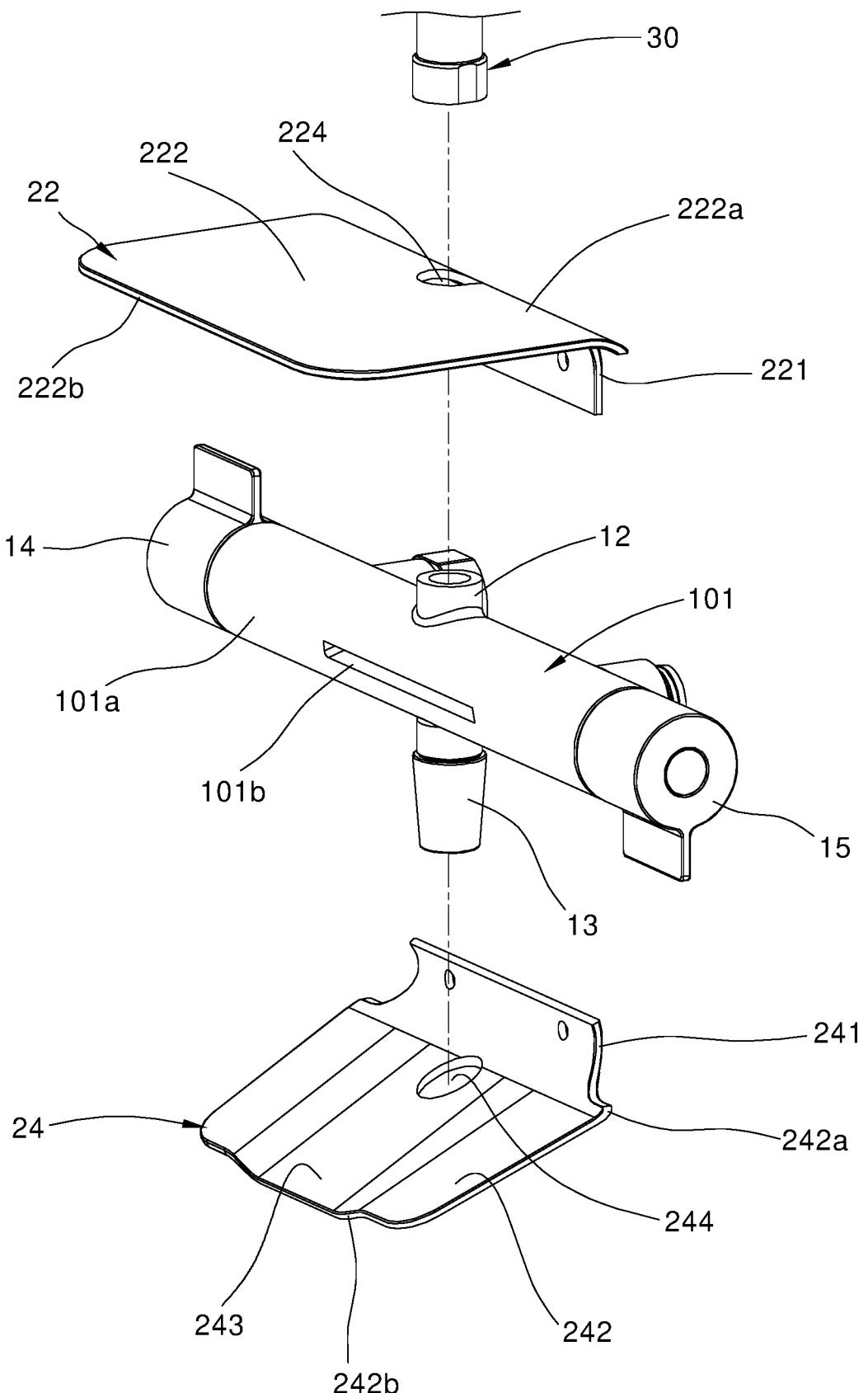


FIG. 3

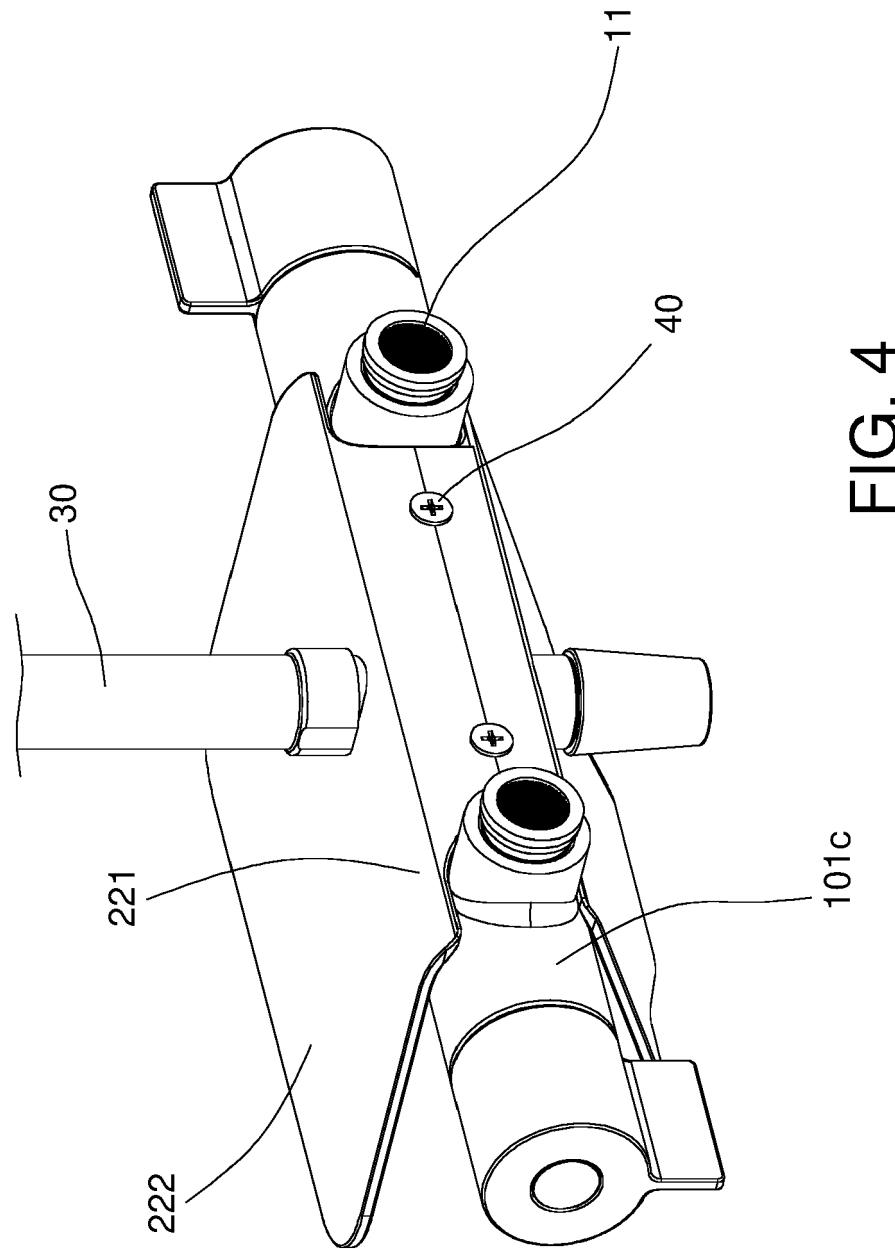
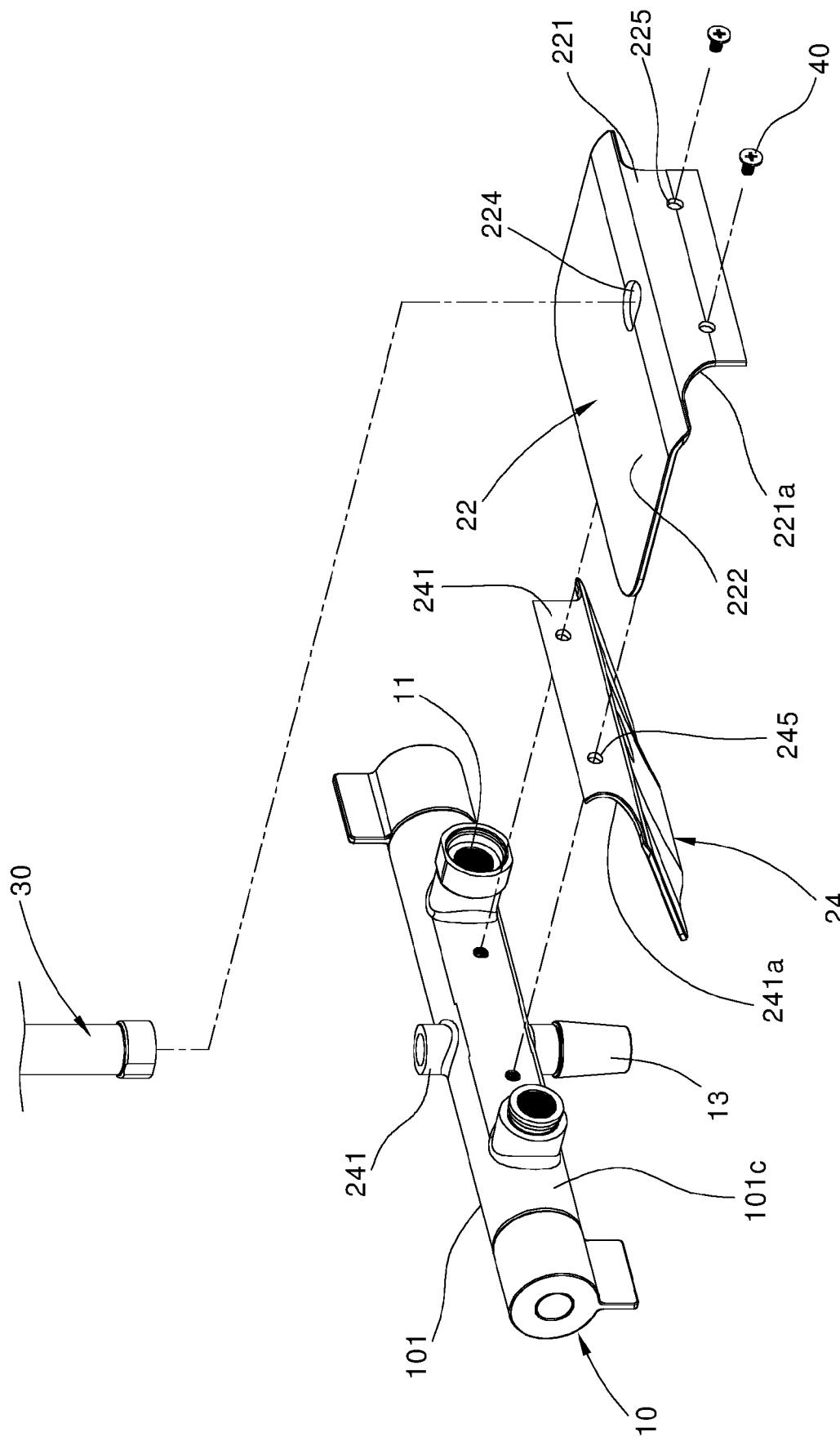


FIG. 4



5
FIG.

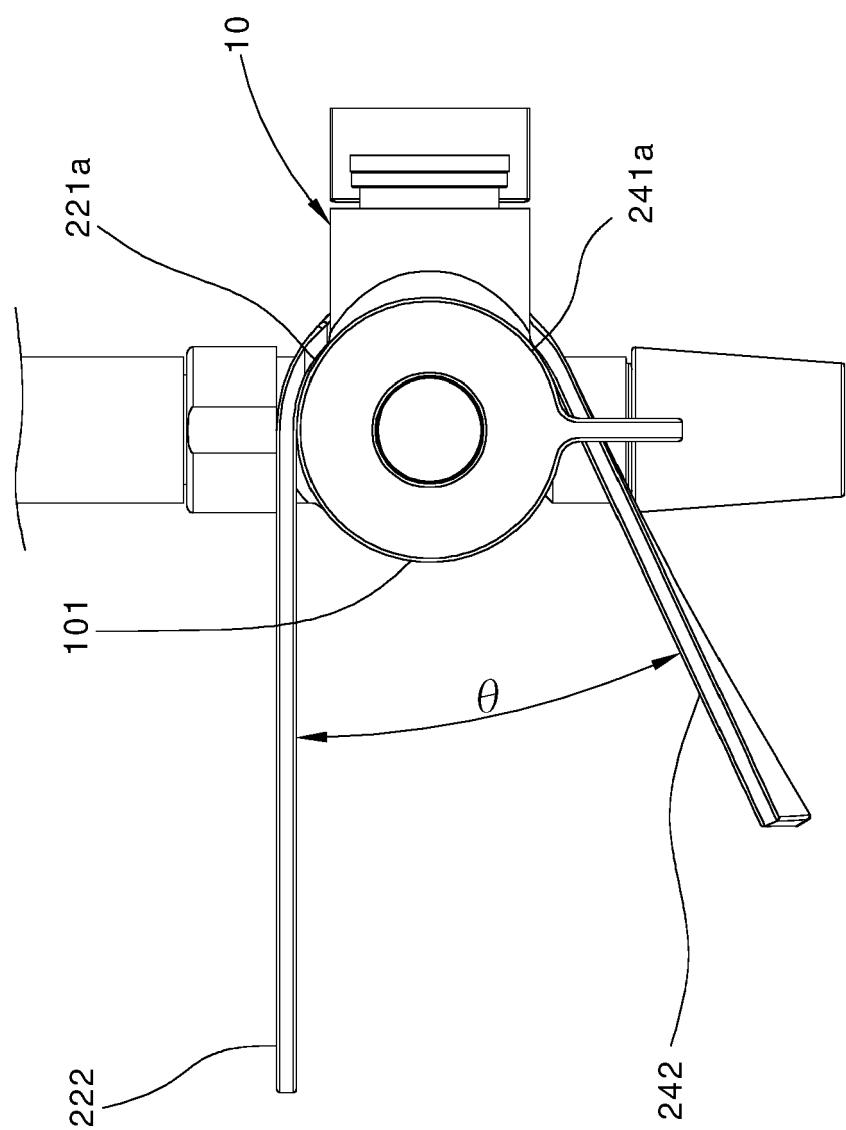


FIG. 6

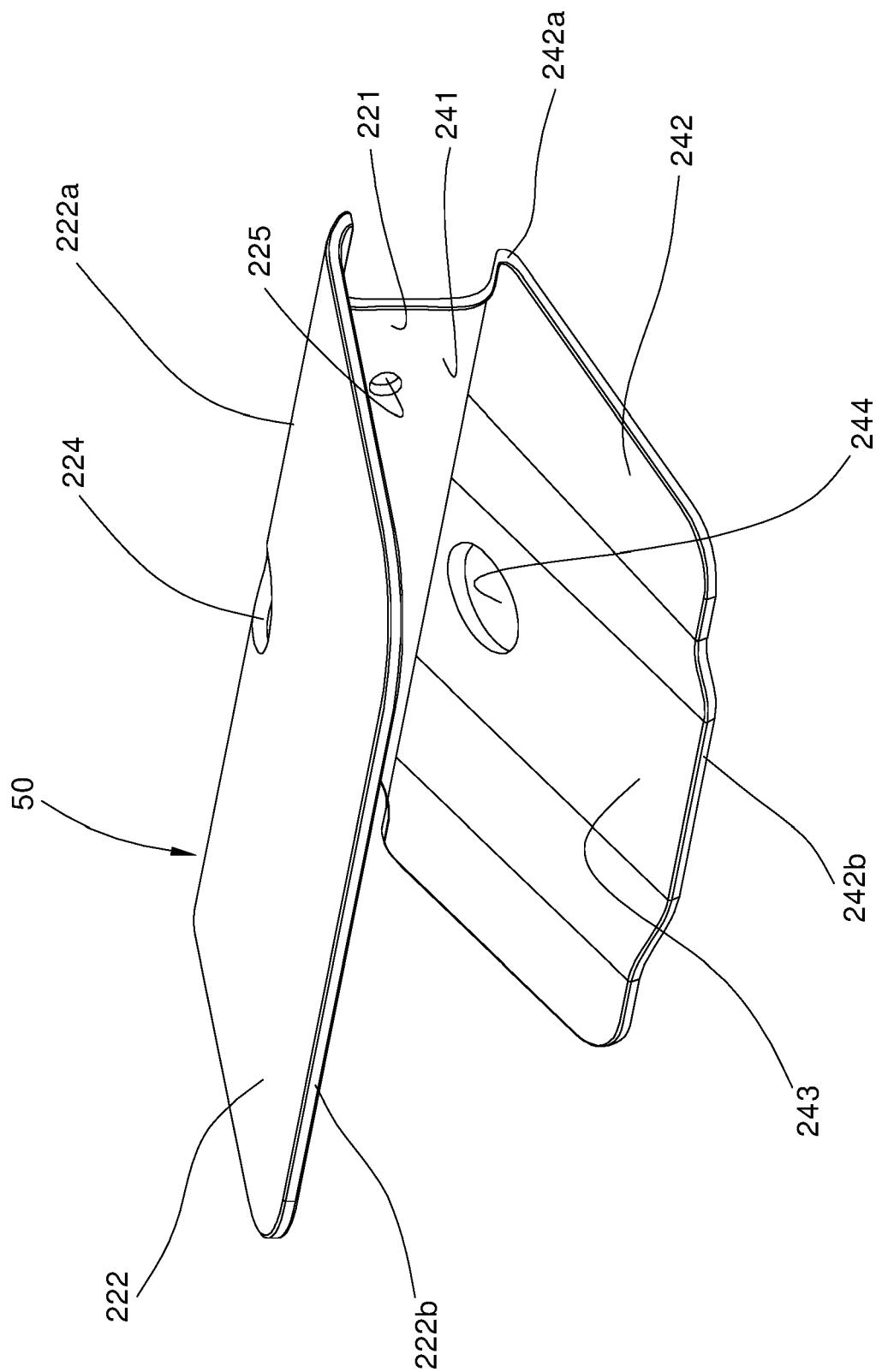
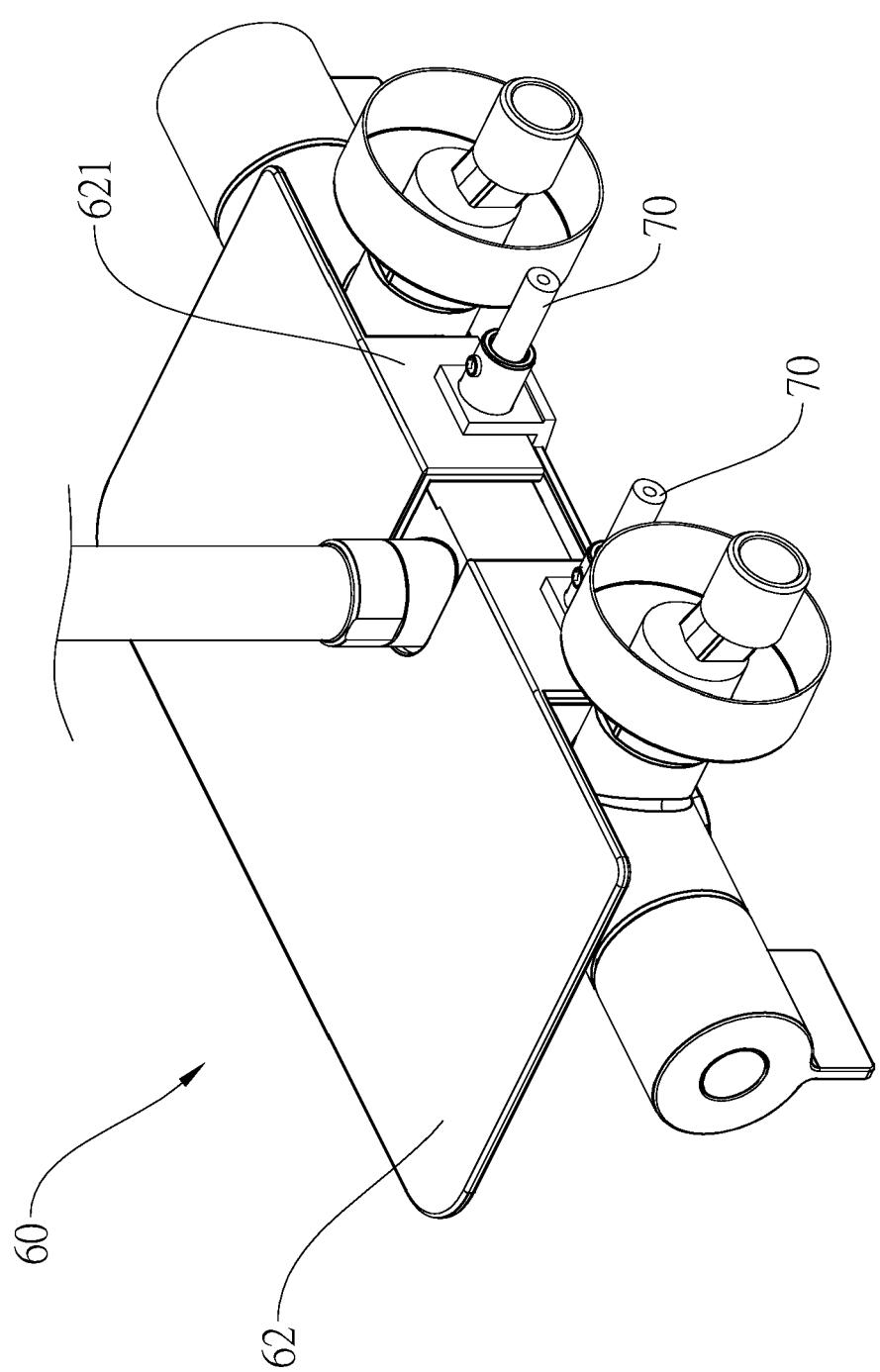


FIG. 7

FIG. 8



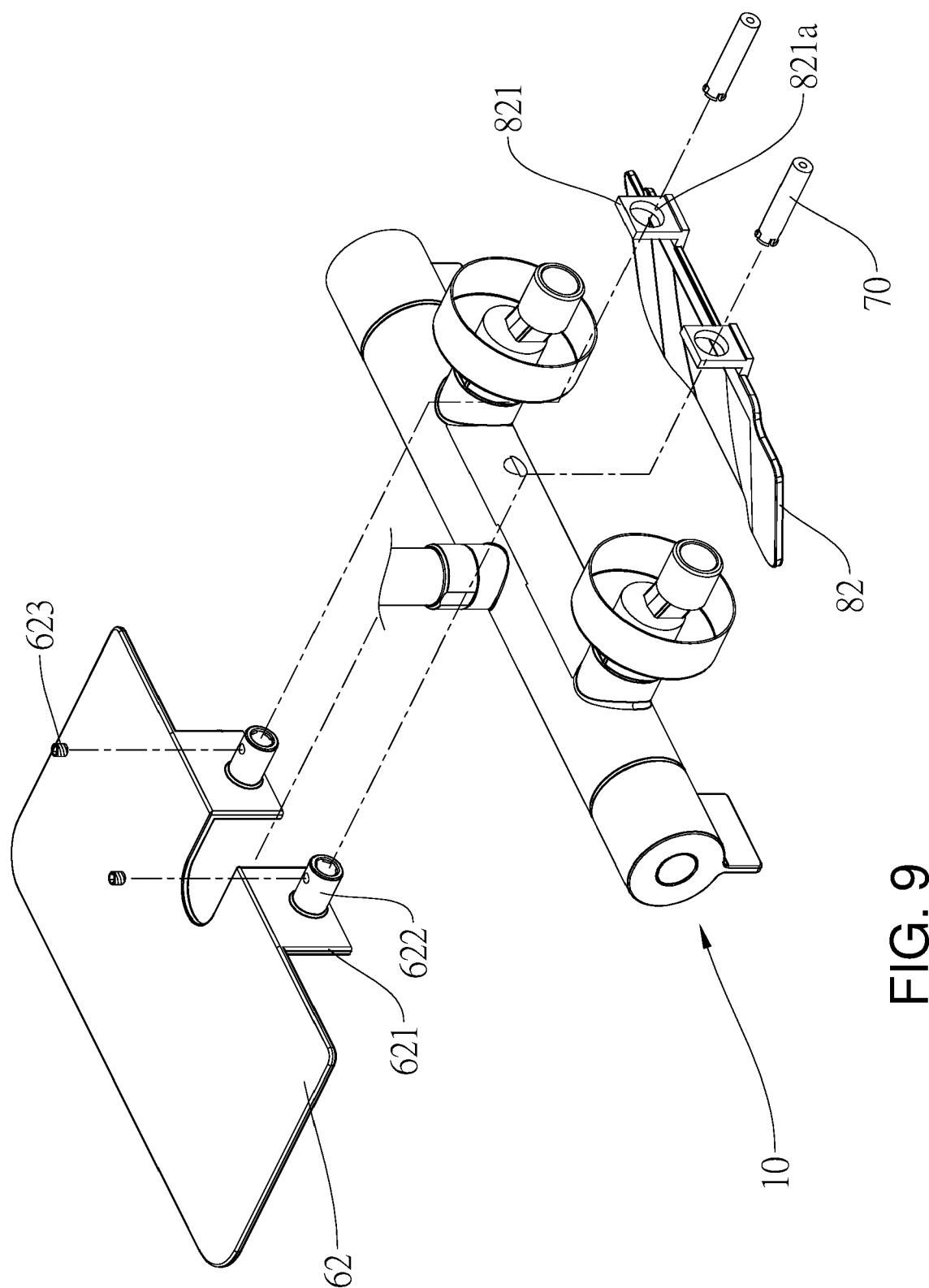
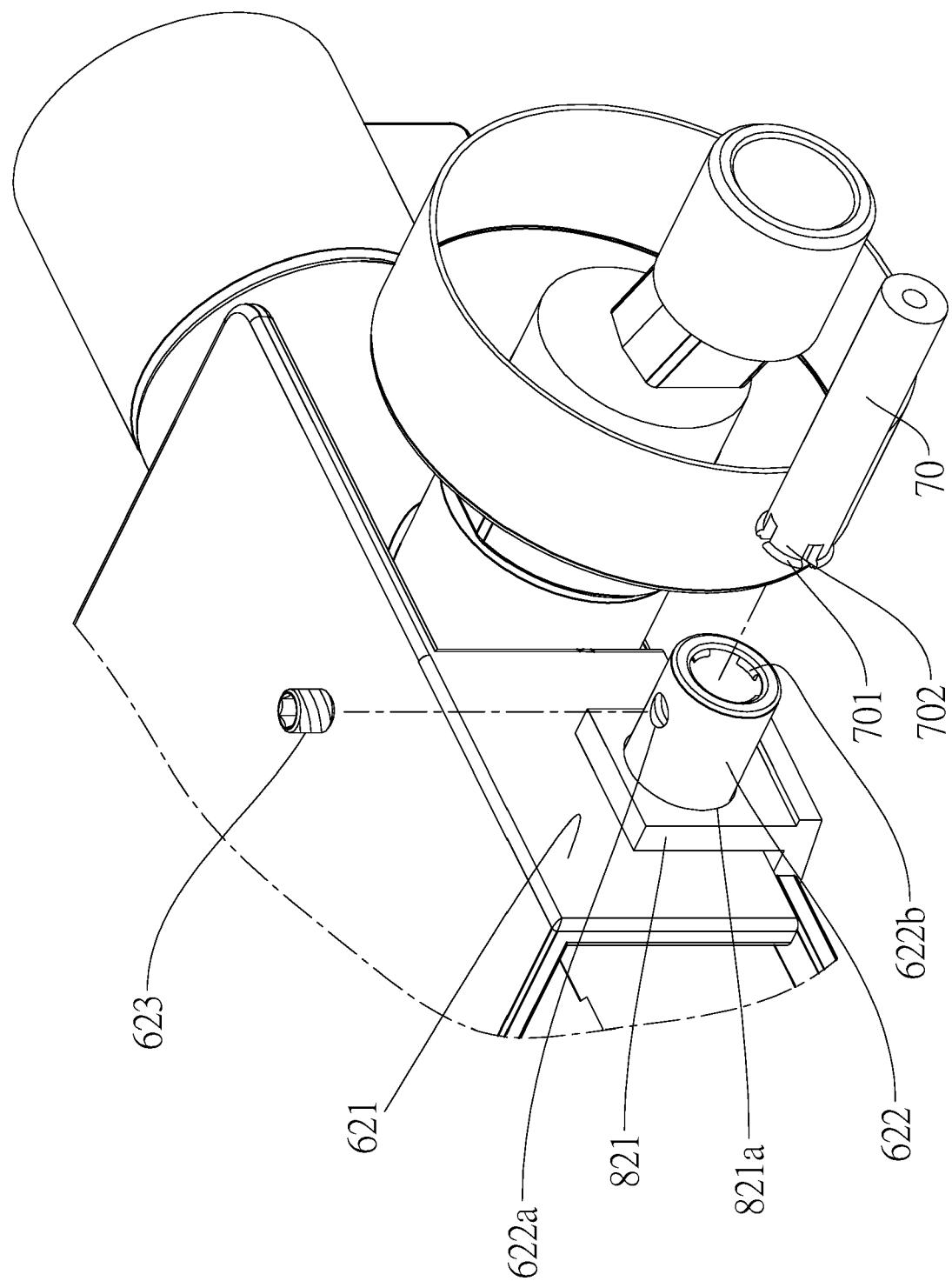


FIG. 9

FIG. 10



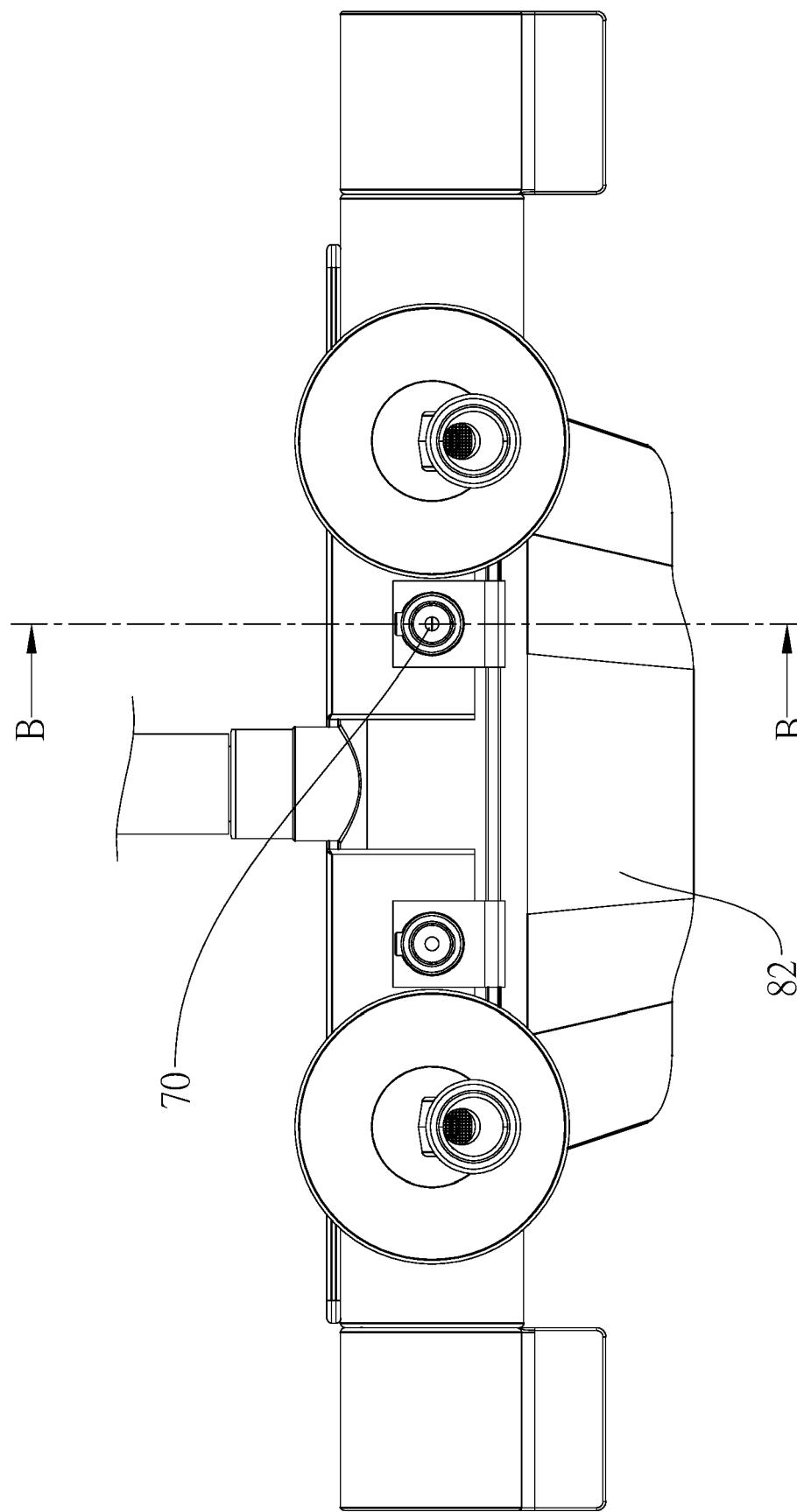


FIG. 11

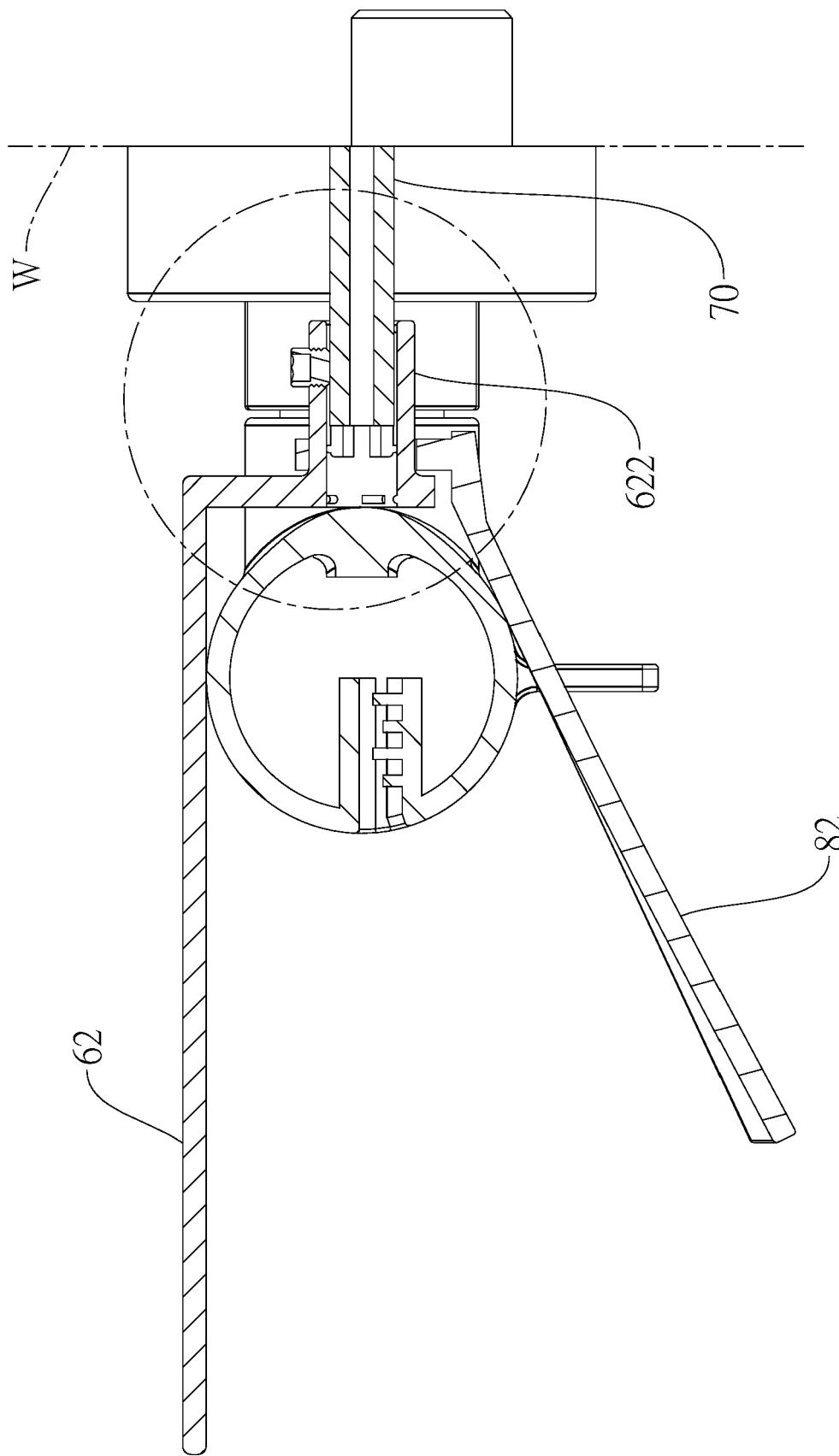


FIG. 12

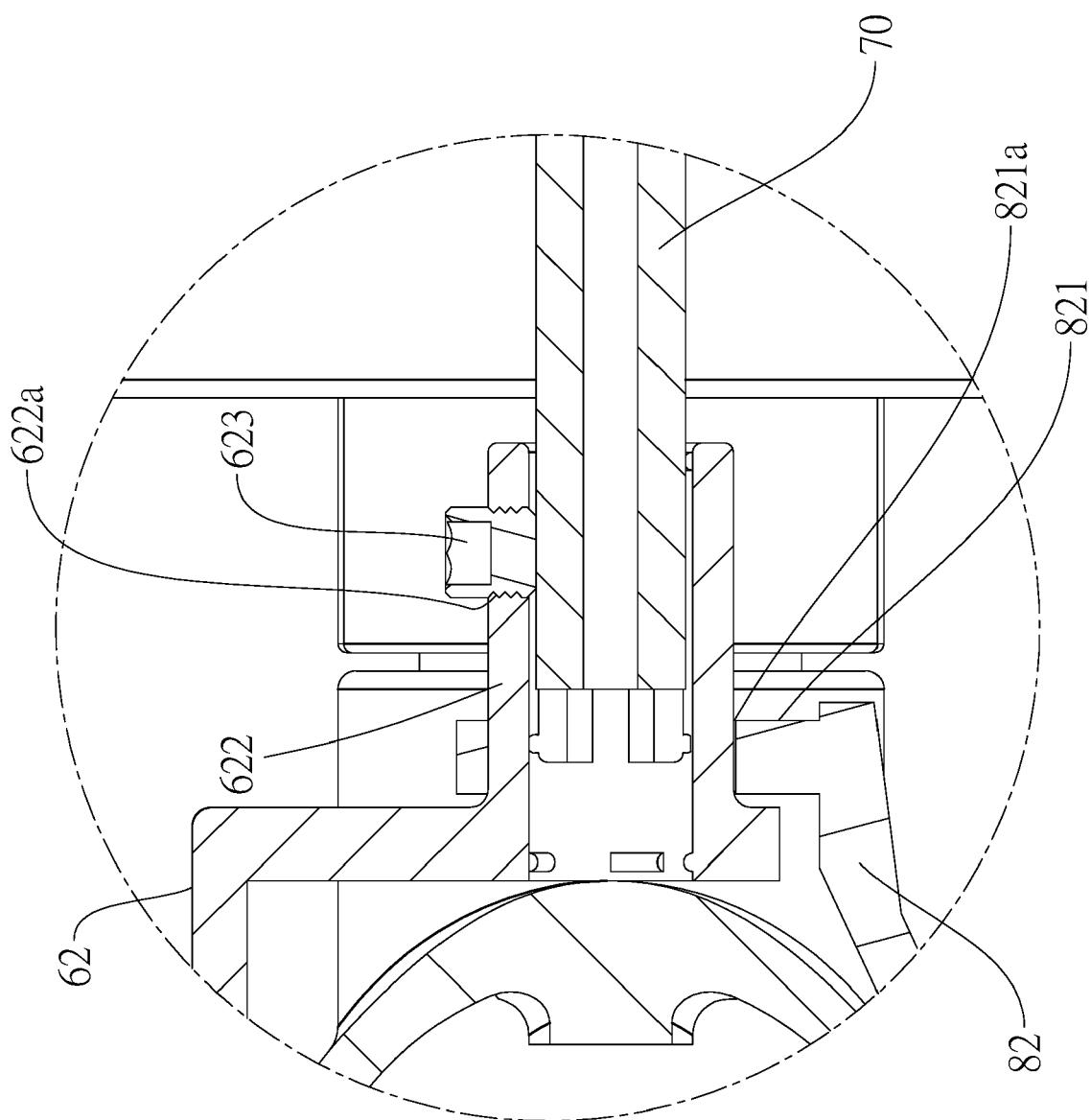


FIG. 13

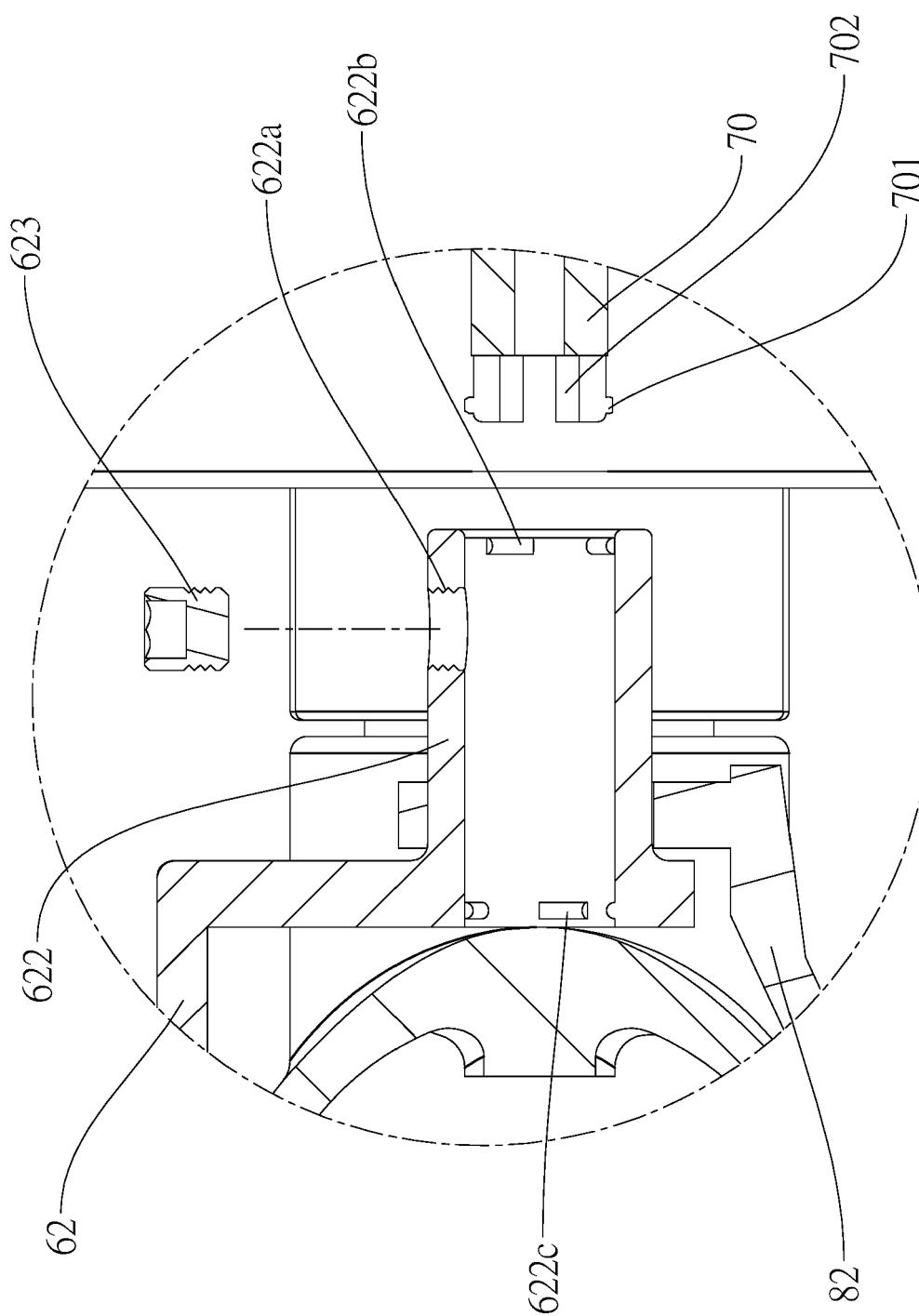


FIG. 14

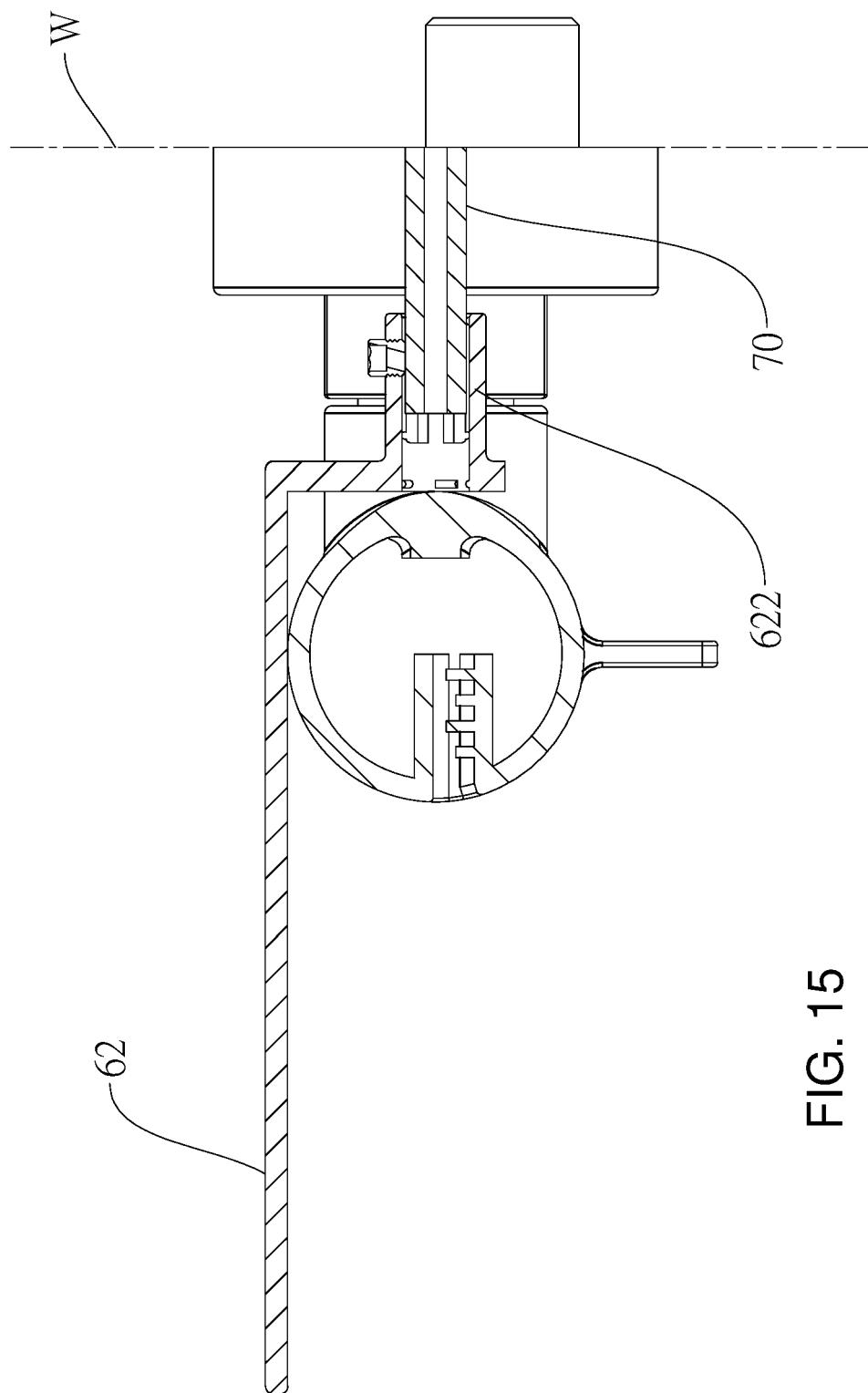


FIG. 15



EUROPEAN SEARCH REPORT

Application Number

EP 21 18 6970

5

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
10 X	WO 2007/011838 A2 (FINELL REBECCA M [US]) 25 January 2007 (2007-01-25) * page 2, line 9 - page 6, line 5 * * page 8, line 29 - page 27, line 11; figures *	1,3,4,9	INV. A47K1/08
15 A	----- DE 20 2017 105090 U1 (EISL SANITÄR GMBH [AT]) 9 October 2017 (2017-10-09) * the whole document *	6,7 1,11	A47K3/28 A47K5/18 B05B1/02 E03C1/04 E03C1/08 E03C1/086 F15D1/02
20 X	US 2 507 943 A (SWILIK EDWARD C) 16 May 1950 (1950-05-16) * the whole document *	1,2	ADD. E03C1/06
25 X	----- CH 521 488 A (MAIER RICHARD [CH]) 15 April 1972 (1972-04-15)	1	
25 A	* the whole document *	3,4,8	
30 X	----- DE 78 17 016 U1 (ROKAL ARMATUREN GMBH) 5 October 1978 (1978-10-05) * the whole document *	1	
35 A	----- WO 2006/004435 A1 (CUTTS PETER GEORGE [NZ]) 12 January 2006 (2006-01-12) * page 4, line 34 - page 8, line 28; figures *	1	E03C A47K B05B F15D B65D
35 A	----- US 5 125 577 A (FRANKEL GAIL B [US]) 30 June 1992 (1992-06-30) * column 2, line 62 - column 8, line 33; figures *	1,3,10	
40	-----		
45	-----		
50 1	The present search report has been drawn up for all claims		
50	Place of search Munich	Date of completion of the search 17 November 2021	Examiner Fajarnés Jessen, A
55	CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 21 18 6970

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

17-11-2021

10	Patent document cited in search report	Publication date	Patent family member(s)		Publication date
15	WO 2007011838 A2	25-01-2007	US	2007018014 A1	25-01-2007
			US	2010001021 A1	07-01-2010
			WO	2007011838 A2	25-01-2007
20	DE 202017105090 U1	09-10-2017	NONE		
	US 2507943 A	16-05-1950	NONE		
25	CH 521488 A	15-04-1972	NONE		
	DE 7817016 U1	05-10-1978	DE	7817016 U1	05-10-1978
			FR	2427813 A3	04-01-1980
30	WO 2006004435 A1	12-01-2006	AU	2005260229 A1	12-01-2006
			CA	2572415 A1	12-01-2006
			EP	1765129 A1	28-03-2007
			US	2009183307 A1	23-07-2009
			WO	2006004435 A1	12-01-2006
35	US 5125577 A	30-06-1992	NONE		
40					
45					
50					
55					