



(12)

EUROPEAN PATENT APPLICATION

- (43)

Date of publication:  
18.12.2024 Bulletin 2024/51
- (51)

International Patent Classification (IPC):  
B25H 3/04 (2006.01)
- (21)

Application number: 24179316.5
- (52)

Cooperative Patent Classification (CPC):  
B25H 3/04
- (22)

Date of filing: 31.05.2024

- (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 ME MK MT NL  
NO PL PT RO RS SE SI SK SM TR  
Designated Extension States:  
BA  
Designated Validation States:  
GE KH MA MD TN
- (72)

Inventors:
  - RIGONI, Mattia  
31015 Conegliano (TV) (IT)
  - CAMERON, James  
31030 Casier (TV) (IT)
  - TOLOTTO, Daniele  
31040 Chiarano (TV) (IT)
  - MARTONE, Dario  
35138 Padova (PD) (IT)
  - VILLANOVA, Marco  
31020 Sernaglia della Battaglia (TV) (IT)
- (30)

Priority: 15.06.2023 IT 202300012327
- (71)

Applicant: Stiga S.p.A.  
31033 Castelfranco Veneto (TV) (IT)
- (74)

Representative: PGA S.p.A.  
Via Mascheroni, 31  
20145 Milano (IT)

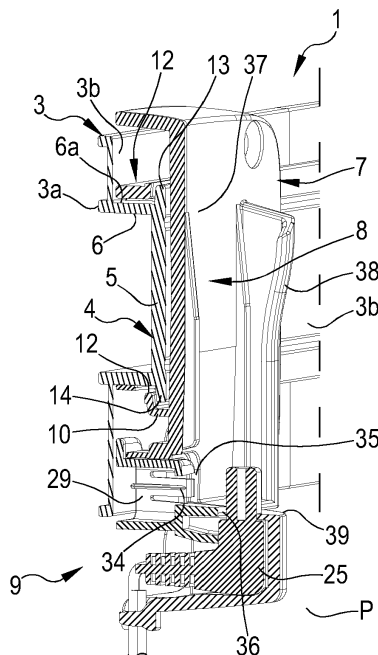
(54)

WALL MOUNT FOR LAND OR GARDEN MAINTENANCE DEVICES

- (57)

The present invention relates to a wall mount (1) for devices for the maintenance of gardens or land, comprising a base (3) with a bearing side (3a) engageable with a wall (P) and an operating side (3b) opposite the bearing side, as well as a support structure (4), constrained to the operating side (3b) of the base, having a spacer (6) interposed between a guide (5) of the support
- structure and the operating side (3b) of the base. The support structure also has an anchoring body (7) couplable to the guide and positionable in a plurality of different engagement positions along the guide itself. The anchoring body (7) defines a main seat (8) configured to receive an attachment portion (2a) of a device (2) for the maintenance of gardens or land.

FIG.4



## Description

### FIELD OF THE INVENTION

**[0001]** The object of the present invention is a wall mount for land or garden maintenance devices, capable of supporting one or more maintenance devices and or components thereof, such as batteries. The invention further relates to a wall mount with the function of a charger of electrical battery-powered land or garden maintenance devices.

### STATE OF THE ART

**[0002]** Various types of cutting devices for executing maintenance operations, such as for mowing turfgrass and pruning plants such as trees or hedges, are used in the field of gardening and land maintenance. In the field of garden maintenance, other devices such as blowing devices, devices for collecting cut material and still more are also known. In this context, known electrically-powered devices using one or more batteries carried by the device itself have recently become widespread.

**[0003]** In this situation, the operator, having finished the use of one or more maintenance devices in question, often needs to neatly store them. There is also a need, in the case of battery-powered devices, to also charge each battery.

### OBJECT OF THE INVENTION

**[0004]** The object of the present invention is therefore to offer a wall mount capable of adequately meeting one or more of the needs highlighted above.

**[0005]** A first objective is to provide a wall mount capable of effectively supporting one or more devices, for example one or more cutting devices.

**[0006]** A further objective is to provide a wall mount capable of allowing an easy positioning of the devices by the operator.

**[0007]** Another objective is to provide a wall mount capable of recharging the batteries of the maintenance device when the latter is engaged to the wall mount.

**[0008]** A further objective is to provide a wall mount which can be easily installed and assembled in an intuitive manner. These and other objects, which will appear more clearly from the following description, are substantially achieved by a wall mount for land or garden maintenance devices in accordance with one or more of the appended claims and/or the following aspects.

### SUMMARY

**[0009]** Aspects of the present invention are disclosed here below.

**[0010]** In a 1st aspect, a wall mount (1) is provided, in particular for land or garden maintenance devices, comprising:

- a base (3) having a bearing side (3a), configured to contact a wall (P) to which the wall mount (1) is intended to be fixed, and an operating side (3b), opposite the bearing side (3a);
- a support structure (4) constrained to the operating side (3b) of the base (3) and having:
  - a guide (5),
  - a spacer (6) interposed between the guide (5) and the operating side (3b) of the base (3) to distance the guide itself from said operating side (3b),
- at least one anchoring body (7) couplable to the guide (5), each anchoring body (7) being positionable in a plurality of distinct engagement positions along the guide itself, in which each anchoring body (7) defines:
  - a main seat (8) configured to receive an attachment portion (2a) of a device (2) for the maintenance of gardens or land.

**[0011]** In a 2nd aspect according to the preceding aspect, the guide (5) and the spacer (6) of the support structure (4) extend along a same main longitudinal extension direction (A).

**[0012]** In a 3rd aspect according to any one of the preceding aspects, the spacer (6) has an active surface (6a) adjacent to the guide (5), and

in which at least one among an active surface (6a) of the spacer (6) and a coupling portion (10) of the anchoring body (7) comprises a plurality of reliefs (11) spaced apart from each other along said/a main longitudinal extension direction (A).

**[0013]** In a 4th aspect according to the preceding aspect, said reliefs (11) are configured to define distinct engagement positions as stable engagement positions, between the anchoring body (7) and the support structure (4), spaced apart from each other.

**[0014]** In a 5th aspect according to any one of the two preceding aspects, the reliefs (11) of said plurality of reliefs are spaced apart from each other by a constant pitch along said main longitudinal extension direction (A).

**[0015]** In a 6th aspect according to the two preceding aspects, the reliefs are configured to define said stable engagement positions, between the anchoring body (7) and the support structure (4), spaced apart from each other by said constant pitch.

**[0016]** In a 7th aspect according to any one of the preceding aspects, the spacer (6) comprises a side wall extending transversely, optionally orthogonally, to the base (3).

**[0017]** In an 8th aspect according to any one of the five preceding aspects, the side wall of the spacer (6) defines said active surface (6a) which has said plurality of reliefs (11) spaced apart from each other.

**[0018]** In a 9th aspect according to any one of the pre-

ceding aspects, the spacer (6) of the support structure (4) protrudes from the operating side (3b) of the base (3).

**[0019]** In a 10th aspect according to any one of the preceding aspects, the spacer (6) is interposed between the guide (5) and the same operating side (3b) of the base (3) defining a gap (12) extending between the guide (5) itself and said operating side (3b).

**[0020]** In an 11th aspect according to the preceding aspect when dependent on any one of the four preceding aspects, the side wall of the spacer (6) delimits a bottom of said gap (12) on which said active surface (6a) is defined.

**[0021]** In a 12th aspect according to any one of the preceding aspects, the support structure (4) is fixed to the base (3) or is a single piece with the base (3).

**[0022]** In a 13th aspect according to any one of the preceding aspects, the guide (5) comprises first and a second longitudinal lip (13, 14) projecting from opposite sides with respect to the spacer (6).

**[0023]** In a 14th aspect according to the preceding aspect, the anchoring body (7) comprises a coupling seat (15) configured to slidably engage the first and the second longitudinal lip (13, 14) of the guide (5).

**[0024]** In a 15th aspect according to any one of the two preceding aspects, the first and the second lip (13, 14) comprise, at opposite ends of the guide (5), respective first and second arcuate portions (13a, 13b, 14a, 14b) which are converging and defining lead-in portions to facilitate the insertion of the coupling seat (15) of the anchoring body (7) into the guide (5) of the support structure (4).

**[0025]** In a 16th aspect according to any one of the two preceding aspects, the coupling seat (15) of the anchoring body (7) comprises a first and a second groove (16, 17) spaced apart and parallel to each other.

**[0026]** In a 17th aspect according to the preceding aspect, the first and second groove (16, 17) are arranged at opposite ends of said coupling seat, defining a respective first and second undercut (18, 19) active in contrast against the respective one of said first and second lip (13, 14) of the guide (5) to allow a longitudinal sliding of the anchoring body (7) along the guide (5) and, at the same time, prevent the extraction of the guide (5) from the sliding seat (15) according to a direction transverse to the operating side (3b) of the base (3).

**[0027]** In an 18th aspect according to any one of the two preceding aspects, the coupling seat (15) further comprises a connecting portion (20) delimited by a first and by a second sliding face (21, 22) adjacent to the first and the second groove (16, 17), respectively, and configured to slidably contact opposite flanks of the side wall of the spacer (6).

**[0028]** In a 19th aspect according to the preceding aspect, one between the first and the second sliding face (21, 22) comprises an elastically deformable section (23) configured to exert an elastic thrust action on the side wall of the spacer (6).

**[0029]** In a 20th aspect according to the preceding as-

pect, the elastically deformable section (23) has a thinned and inwardly curved wall portion of said coupling seat (15).

**[0030]** In a 21st aspect according to any one of the three preceding aspects, the other of said first and second sliding face (21, 22) comprises protrusions (24) intended to cooperate with the reliefs (11) of said plurality of reliefs to snap-insert between two consecutive reliefs.

**[0031]** In a 22nd aspect according to the preceding aspect, the other of said first and second sliding faces (21, 22) comprises at least two protrusions spaced apart from each other and having a rounded surface.

**[0032]** In a 23rd aspect according to any one of the preceding aspects, the anchoring body (7) comprises an auxiliary seat (9) configured to receive an electrical connector (25);

alternatively, in a variant of the 23rd aspect, always according to any one of the preceding aspects from the 1st to the 22nd, the anchoring body (7) comprises:

- an electrical connector (25),
- an auxiliary seat (9) configured to receive the electrical connector, optionally wherein said electrical connector is locked in said auxiliary seat (9).

**[0033]** In a 24th aspect according to one of the two preceding aspects, the mount comprises an electrical power supply (26), which is electrically connected or connectable to the electrical connector and to an electrical connection plug (27) engageable to a respective power socket (28).

**[0034]** In a 25th aspect according to any one of the two preceding aspects, the mount comprising a locking box (29) of the connector (25) in the auxiliary seat (9), said box (29) inserting in the auxiliary seat (9) locking the extraction of the connector itself,

In a 26th aspect according to the preceding aspect, the box (29) can be snap-inserted into the auxiliary seat (9).

**[0035]** In a 27th aspect according to any one of the two preceding aspects, the locking box (29) is configured to be interposed between the base (3) and the anchoring body (7).

**[0036]** In a 28th aspect according to any one of the three preceding aspects, the locking box (29) has:

- a respective base (30) intended to act in contact with the operating side (3b) of said base (3),
- a trunk (31) emerging from said base and configured to be inserted, at least partially, into the auxiliary seat (9), and
- a head (32), opposite the base (3), having a respective active surface (32a) counter-shaped to, and configured for, acting on at least one flank of the connector (25).

**[0037]** In a 29th aspect according to the preceding aspect, the active surface (32a) of the head (32) of the locking box (29) is arcuate in shape.

**[0038]** In a 30th aspect according to any one of the two preceding aspects, the active surface (32a) of the head (32) of the locking box (29) is delimited by opposite arms (33) of the head (32) of the locking box (29).

**[0039]** In a 31st aspect according to any one of the three preceding aspects, the trunk (31) of the locking box (29) comprises at least one engagement tooth (34) intended to snap-engage a respective recess (35) provided in the auxiliary seat (9).

**[0040]** In a 32nd aspect according to any one of the four preceding aspects, the trunk (31) comprises two engagement teeth (34) opposite each other and intended to snap-engage respective recesses (35) provided in the auxiliary seat (9).

**[0041]** In a 33rd aspect according to any one of the preceding aspects from the 23rd to the 32nd, the main seat (8) of the anchoring body (7) and the auxiliary seat (9) are adjacent to each other and facing one and the same side of the anchoring body (7) opposite the side facing the guide (5).

**[0042]** In a 34th aspect according to any one of the preceding aspects from the 23rd to the 33rd, a passage opening (36) extends from the auxiliary seat (9) towards the main seat (8), for receiving in crossing at least one electrical connection part of the connector (25).

**[0043]** In a 35th aspect according to any one of the preceding aspects, the anchoring body (7), on the/on a side of the anchoring body (7) itself opposite the side facing the guide (5), comprises:

- a bottom wall (37), optionally flat, frontally delimiting said main seat (8),
- two side profiles (38), spaced apart from each other, emerging from the bottom wall and laterally delimiting said main seat (8).

**[0044]** In a 36th aspect according to the preceding aspect, the anchoring body (7) comprises a base profile (39) transverse to the two side profiles (38) and delimiting the main seat (8) below.

**[0045]** In a 37th aspect according to any one of the two preceding aspects, each of the side profiles (38) comprises an end lip (38a) folded towards the inside of the main seat (8).

**[0046]** In a 38th aspect according to any one of the three preceding aspects, each of the side profiles (38) comprises a step (40) extending along each side profile directly adjacent to or in contact with the bottom wall (37).

**[0047]** In a 39th aspect according to the two preceding aspects, each end lip (38a) and each step (40) define, on a flank facing the main seat (8) of the respective side profile, an insertion track (41) of variable width and progressively decreasing proceeding from an initial portion of the insertion track to an end portion of the insertion track.

**[0048]** In a 40th aspect according to the preceding aspect, each insertion track (41) is arranged to receive, according to an insertion direction defined by respective

side profiles (38) and counter-shaped coupling elements (42) carried by the attachment portion (2a) of the device (2) for the maintenance of gardens or land.

**[0049]** In a 41st aspect according to any one of the preceding aspects from the 35th to the 40th, a pushing rib (43) emerges from the bottom wall, which is substantially parallel to said side profiles (38) and of progressively increasing height proceeding along said insertion direction.

**[0050]** In a 42nd aspect according to any one of the preceding aspects, the mount comprises two or more anchoring bodies (7).

**[0051]** In a 43rd aspect according to any one of the preceding aspects, the guide (5) has a longitudinal extension along a/the direction (A) which is greater than a maximum width of each anchoring body (7) and such that said guide (5) is capable of simultaneously accommodating said two or more anchoring bodies (7) in a mutually flanking relationship with each other.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0052]** Some embodiments and aspects of the invention will be described hereinafter with reference to the accompanying drawings, given merely for illustrative, non-limiting purposes in which:

- figure 1 is a front view of a wall mount in accordance with the present disclosure;
- figure 2 is a detailed view of an anchoring body in an engagement condition with a support structure of the wall mount in accordance with the present disclosure;
- figure 3 is a rear perspective view of an anchoring body of the wall mount in accordance with the present disclosure;
- figure 4 is a cross-sectional perspective view along the line IV-IV of the anchoring body of figure 2;
- figures 5 and 6 are detailed views of the anchoring body of figure 2;
- figures 7 and 8 are perspective views of a wall mount locking box in accordance with the present disclosure;
- figures 9 and 10 are perspective views of a wall mount in accordance with the present disclosure in an engagement condition with a land or garden maintenance device;
- figures 11 and 12 are detailed perspective views of land or garden maintenance devices which can be coupled with a wall mount in accordance with the present disclosure.

## DEFINITIONS AND CONVENTIONS

**[0053]** It should be noted that in the present detailed description, corresponding parts illustrated in the various figures are indicated with the same numerical references. The figures could illustrate the object of the invention

through non-scale depictions; therefore, the parts and components illustrated in the figures related to the object of the invention could exclusively relate to schematic depictions.

#### DETAILED DESCRIPTION

**[0054]** A wall mount for devices 2 for the maintenance of land, for example a hedge-trimming device, blowers or cutting devices for mowing the turfgrass of a land such as brush cutters or turf trimmers, is indicated overall by the reference number 1. As for example shown in figures 10 and 11, the wall mount is capable of supporting or stowing in an orderly manner, one or more devices 2 when not in use. It should be noted how the wall mount 1 can carry out, in addition to the function of supporting the maintenance devices, also functions for charging batteries, both when coupled to the device itself, and when decoupled from the device and individually stored in the mount 1. Each device 2, to be able to be stored and supported by the wall mount 1, can comprise an attachment portion 2a having coupling elements 42 intended to engage the support 1 (figures 12 and 13).

**[0055]** As will be clear from the following disclosure, the wall mount 1 can be made in two bodies which can be removably coupled to each other, i.e., an anchoring body 7 which can be removably coupled, on one side, to a device 2 and, on the other side, to a support structure 4 which can be anchored to a wall P by means of a base 3. Below the components and functions of the base 3 and the support structure 4 will be disclosed, to then move on to the anchoring body 7.

**[0056]** With reference to figures 1, 2 and 4, the wall mount 1 can comprise a base 3 having a bearing side 3a engageable with a wall P and, on the opposite side, an operating side 3b to which the anchoring body 7 for supporting the device 2 is constrained. The wall mount 1 can also comprise a support structure 4 constrained to the operating side 3b of the base 3 and in turn having a guide 5 to facilitate the insertion and movement relative to the base 3, of the anchoring body 7 carrying a device 2. As shown in figures 1 and 2, the guide 5 extends along a main longitudinal extension direction A for a preponderant part, optionally for the whole, a longitudinal overall dimension of the base 3 extending parallel to the direction A. The guide 5 can also comprise a first and a second longitudinal lip 13, 14, emerging from a peripheral edge of the guide 5 on the side opposite the operating side 3b of the base 3 and extending parallel to the main longitudinal extension direction A. In an example, the first and the second longitudinal lip 13, 14 extend at opposite longitudinal ends of the guide 5, joined together by respective first and second arcuate portions 13a, 13b, 14a, 14b which connect together the same first and second longitudinal lip 13, 14 to define a single protruding body. It should be noted how the first and second arcuate portions 13a, 13b, 14a, 14b define lead-in portions for facilitating the insertion of the anchoring body 7 in engagement with

the support structure 4.

**[0057]** Referring to figures 2 and 4, the support structure 4 can also comprise a spacer 6 protruding from the operating side 3b of the base 3 forming a gap 12 interposed between the guide 5 and the same operating side 3b. The spacer 6 can extend for a preponderant part of the longitudinal overall dimension of the base 3 parallel to the direction A. In an example, the spacer 6 comprises a side wall which emerges transversely, optionally orthogonally, from the operating side 3b of the base 3, integrally joining the guide 5 to the base itself. It should be noted how the side wall of the spacer 6 engages the guide 5 at a central area of the guide itself, so that the first and the second longitudinal lip 13, 14 and each arcuate portion protrude laterally. In an example, the side wall of the spacer 6 delimits a bottom of the gap 12 on which an active surface 6a is defined, from which a plurality of reliefs 11 can emerge. With reference to figure 6, the reliefs 11 can extend adjacent to the first and second lip 13, 14 of the guide 5, being spaced from each other parallel to the main longitudinal extension direction A, to define a plurality of distinct engagement positions adapted to constrain the anchoring body 7 to the support structure 4. In this case, two reliefs 11 adjacent to each other define a position for stably engaging the support structure 4 to the anchoring body 7. In an example, the reliefs 11 are spaced apart parallel to the direction A, by a constant pitch, forming respective stable engagement positions having the same dimensions. The reliefs 11 thus shaped allow to move the anchoring body 7 parallel to the direction A by discrete steps equal to each other.

**[0058]** Passing now to describe the anchoring body 7, this can comprise a rear side configured to releasably engage the support structure 4 and a front side configured to couple with the attachment portion 2a of the land maintenance device 2. With reference to figures 2 and 4, the anchoring body 7 has, on the front side, a main seat 8 configured to receive the attachment portion 2a of the device 2. In an example, the main seat 8 is frontally delimited by a bottom wall 37, laterally delimited by two side profiles 28 and delimited below by a base profile 39 which transversely joins the two side profiles 28. The coupling between the anchoring body 7 and the attachment portion 2a of the device can be made by means of the two side profiles 28, which emerge from the bottom wall 37 to define, at an end opposite the bottom wall 37, an end lip 38a engageable with the same attachment portion of the device. The end lip 38a can be folded towards the inside of the main seat 8 defining a real hook which prevents the extraction of the attachment portion 2a along a direction transverse to the bottom wall 37. The anchoring body can also have two steps 40, each of which emerging from one side inside the main seat 8 of a respective side profile 38, to define, in cooperation with a respective end lip 38a, a track 41 for inserting the attachment portion 2a of the device 2. In an example, each step 40 extends along a respective side profile directly adjacent to the bottom wall, along a length of the

side profile 38 along a direction transverse to the main longitudinal extension direction A. Additionally, each step 40 has a tapered shape proceeding from the base profile 39 towards an opposite end of a respective end lip 38a to facilitate the insertion of the attachment portion 2a of the device 2.

**[0059]** The anchoring body 7 can also comprise a pushing rib 43 which emerges from the bottom wall 37 inside the main seat 8. In an example, the pushing rib 43 can have an elongated body which extends parallel to the side profiles 38 and is tapered away from the base profile 39, to contact the attachment portion 2a of the device 2 and push it against the respective end lips 38a of the side profiles 38.

**[0060]** Continuing now to disclose the rear side of the anchoring body 7, this can comprise a coupling seat 15 configured to slidably engage the first and the second longitudinal lip 13, 14 of the guide 5 and move the anchoring body itself relative to the support structure 4. As shown in figure 3, the coupling seat 15 of the anchoring body 7 can comprise a first and a second groove 16, 17 located at opposite ends of the coupling seat 15, thus being spaced apart from each other. The first and the second groove 16, 17 can define a respective first and second undercut 18, 19 active in contrast with the respective one of said first and second lip 13, 14 of the guide 5, to allow a longitudinal sliding of the anchoring body 7 along the guide 5 and, at the same time, prevent the extraction of the sliding seat 15 from the guide 5, according to a direction transverse to the operating side 3b of the base 3.

**[0061]** The coupling seat 15 can also comprise a connecting portion 20 delimited by a first and by a second sliding face 21, 22 adjacent to the first and the second groove 16, 17, respectively, to slidably contact opposite flanks of the side wall of the spacer 6. The first sliding face 21 can comprise protrusions 24 intended to cooperate with the reliefs 11 of the spacer 6 of the support structure 4, snap-inserting between two consecutive reliefs. In an example, the first sliding face 21 can comprise at least two protrusions emerging from the first sliding face 21 towards the coupling seat 15, spaced from each other and having a rounded surface. On the second sliding face 22 there can be an elastically deformable section 23 configured to contact the operating area 6a of the spacer 6 and exert an elastic thrust action on the same side wall of the spacer 6. In an example, the elastically deformable section 23 can comprise a thinned and inwardly curved wall portion of said coupling seat 15, which acts substantially as a spring pushing the second sliding face 22 along a direction exiting from the coupling seat 15. In an embodiment variant not shown in the attached figures, it is possible to make the protrusions 24 on the second sliding face 22 and, in turn, make the elastically deformable section 23 on the first sliding face 21.

**[0062]** As previously mentioned, the wall mount 1, in addition to supporting devices 2 for land or garden maintenance, can further allow charging the devices 2 stored

on the mount itself. To this end, the mount 1 can comprise an electrical connector 25 insertable and lockable inside an auxiliary seat 9 defined on the anchoring body 7. The connector 25 can be, on the one hand, insertable inside the device 2 to recharge it and, on the other hand, electrically connected to an electrical power supply 26 (integrated in the support or detachable from the latter) which in turn can be connected to a power socket 28 by means of an electrical connection plug 27. As mentioned, the connector 25 is located inside an auxiliary seat 9, adjacent to the main seat 8 of the anchoring body 7 and facing the front side of the anchoring body 7. The auxiliary seat 9 can also comprise a passage opening 36, extending towards the main seat 8 of the anchoring body 7, for receiving in crossing at least a part of the connector 25 through (figure 6).

**[0063]** The electrical connector 25, once inserted in the auxiliary seat 9, can be locked in place by means of a locking box 29, which can be snap-inserted in the auxiliary seat 9 itself, to prevent the extraction of the same connector 25. With reference to figures 7 and 8, the locking box 29 can comprise a base 30 which acts in contact with the rear side of the anchoring body 7 and from which a trunk 31 emerges which can be inserted in the auxiliary seat 9 to contact the electrical connector 25. In an example, the locking box 29 can also comprise a head 32, defined on an end of the trunk 31 opposite the base 30 and having an active surface 32a of arcuate shape which is counter-shaped to the connector 25. The trunk 31 of the locking box 29 can also comprise at least one engagement tooth 34 which laterally delimits the head 32 and is intended to snap-engage a respective recess 35 provided in the auxiliary seat 9. In an example, the trunk 31 comprises two engagement teeth 34 which are opposite with respect to the head 32 and intended to snap-engage respective recesses 35 provided in the auxiliary seat 9.

**[0064]** It should further be noted, as also shown in figure 1, how the wall mount 1 can have two or more anchoring bodies 7 which are relatively movable with each other along the guide 5 of the support structure 4 and configured to simultaneously receive respective devices 2 or individual batteries which can be coupled to devices 2 for land maintenance.

## Claims

1. Wall mount (1), in particular for devices for the maintenance of gardens or land, comprising:
  - a base (3) having a bearing side (3a), configured to contact a wall (P) to which the wall mount (1) is intended to be fixed, and an operating side (3b), opposite the bearing side (3a);
  - a support structure (4) constrained to the operating side (3b) of the base (3) and having:

- a guide (5),
  - a spacer (6) interposed between the guide (5) and the operating side (3b) of the base (3) to distance the guide itself from said operating side (3b),
- at least one anchoring body (7) couplable to the guide (5), each anchoring body (7) being positionable in a plurality of distinct engagement positions along the guide itself, in which each anchoring body (7) defines:
- a main seat (8) configured to receive an attachment portion (2a) of a device (2) for the maintenance of gardens or land.
2. Mount according to claim 1, wherein the guide (5) and the spacer (6) of the support structure (4) extend along a same main longitudinal extension direction (A),
- wherein the spacer (6) has an active surface (6a) adjacent to the guide (5), and
- wherein at least one among an active surface (6a) of the spacer (6) and a coupling portion (10) of the anchoring body (7) comprises a plurality of reliefs (11) spaced apart from each other along said main longitudinal extension direction (A), said reliefs (11) being configured to define said distinct engagement positions as stable engagement positions, between the anchoring body (7) and the support structure (4), spaced apart from each other.
3. Mount according to claim 2, wherein the reliefs (11) of said plurality of reliefs are spaced apart from each other by a constant pitch along said main longitudinal extension direction (A), said reliefs being configured to define said stable engagement positions, between the anchoring body (7) and the support structure (4), spaced apart from each other by said constant pitch.
4. Mount according to any one of the preceding claims, when combined with claim 2, wherein the spacer (6) comprises a side wall extending transversely, optionally orthogonally, to the base (3), and wherein the side wall of the spacer (6) defines said active surface (6a) which has said plurality of reliefs (11) spaced apart from each other.
5. Mount according to the preceding claim, wherein the spacer (6) of the support structure (4) protrudes from the operating side (3b) of the base (3) and is interposed between the guide (5) and the same operating side (3b) of the base (3) defining a gap (12) extending between the guide (5) itself and said operating side (3b), and wherein the side surface of the spacer (6) delimits a bottom of said gap (12) on which said ac-
- tive surface (6a) is defined, optionally wherein said support structure (4) is fixed to the base (3) or is a single piece with the base (3).
6. Mount according to any one of the preceding claims, wherein the guide (5) comprises a first and a second longitudinal lip (13, 14) projecting from opposite sides with respect to the spacer (6), and wherein the anchoring body (7) comprises a coupling seat (15) configured to slidably engage the first and the second longitudinal lip (13, 14) of the guide (5), optionally wherein the first and the second lip (13, 14) comprise, at opposite ends of the guide (5), respective first and second arcuate portions (13a, 13b, 14a, 14b) which are converging and defining lead-in portions to facilitate the insertion of the coupling seat (15) of the anchoring body (7) into the guide (5) of the support structure (4).
7. Mount according to the preceding claim, wherein the coupling seat (15) of the anchoring body (7) comprises a first and a second groove (16, 17) spaced apart and parallel to each other, said first and second groove (16, 17) being arranged at opposite ends of said coupling seat, said first and second groove (16, 17) defining a respective first and second undercut (18, 19) active in contrast against the respective one of said first and second lip (13, 14) of the guide (5) to allow a longitudinal sliding of the anchoring body (7) along the guide (5) and, at the same time, prevent the extraction of the guide (5) from the sliding seat (15) according to a direction transverse to the operating side (3b) of the base (3).
8. Mount according to the preceding claim, wherein the coupling seat (15) further comprises a connecting portion (20) delimited by a first and by a second sliding face (21, 22) adjacent to the first and the second groove (16, 17), respectively, and configured to slidably contact opposite flanks of the side wall of the spacer (6).
9. Mount according to the preceding claim, wherein one among the first and the second sliding face (21, 22) comprises an elastically deformable section (23), optionally a thinned and inwardly curved wall portion of said coupling seat (15), configured to exert an elastic pushing action on the side wall of the spacer (6).
10. Mount according to any one of the two preceding claims, wherein the other of said first and second sliding face (21, 22) comprises protrusions (24), optionally at least two protrusions spaced apart from each other and having a rounded surface, intended to cooperate with the reliefs (11) of said plurality of reliefs to snap-insert between two consecutive reliefs.

11. Mount according to any one of the preceding claims, wherein the anchoring body (7) comprises:

- an auxiliary seat (9) configured to receive an electrical connector (25),

5

or wherein the anchoring device (7) comprises:

- an electrical connector (25), and  
- an auxiliary seat (9) configured to receive the electrical connector, optionally wherein said electrical connector is locked in said auxiliary seat (9);

10

the mount further having an electrical power supply (26), which is electrically connected or connectable to the electrical connector and to an electrical connection plug (27) engageable to a respective power socket (28).

15

12. Mount according to the preceding claim comprising a locking box (29) of the connector (25) in the auxiliary seat (9), said box (29) inserting, optionally snap-inserting, in the auxiliary seat (9) locking the extraction of the connector itself,

20

25

wherein the locking box (29) is configured to be interposed between the base (3) and the anchoring body (7) and has:

30

- a respective base (30) intended to act in contact with the operating side (3b) of said base (3),  
- a trunk (31) emerging from said base and configured to be inserted, at least partially, into the auxiliary seat (9), and  
- a head (32), opposite the base (3), having a respective active surface (32a) counter-shaped to, and configured for, acting on at least one flank of the connector (25), even more optionally wherein said active surface is arcuate in shape and delimited by opposite arms (33) of the head (32) of the locking box (29),

35

40

wherein the trunk (31) of the locking box (29) comprises at least one engagement tooth (34) intended to snap-engage a respective recess (35) provided in the auxiliary seat (9), optionally wherein the trunk (31) comprises two opposite engagement teeth (34) intended to snap-engage respective recesses (35) provided in the auxiliary seat (9).

45

50

13. Mount according to any one of the two preceding claims, wherein the main seat (8) of the anchoring body (7) and the auxiliary seat (9) are adjacent to each other and facing one and the same side of the

55

anchoring body (7) opposite the side facing the guide (5), and

wherein a passage opening (36) extends from the auxiliary seat (9) towards the main seat (8), for receiving in crossing at least one electrical connection part of the connector (25).

14. Mount according to any one of the preceding claims, wherein the anchoring body (7), on the/on a side of the anchoring body (7) itself opposite the side facing the guide (5), comprises:

- a bottom wall (37), optionally flat, frontally delimiting said main seat (8),

- two side profiles (38), spaced apart from each other, emerging from the bottom wall and laterally delimiting said main seat (8),

- optionally a base profile (39) transverse to the two side profiles and delimiting the main seat (8) below, and wherein each of the side profiles (38) comprises an end lip (38a) folded towards the inside of the main seat (8) and a step (40) extending along each side profile directly adjacent to or in contact with the bottom wall (37), each end lip (38a) and each step (40) defining, on a flank facing the main seat (8) of the respective side profile, an insertion track (41) of variable width and progressively decreasing proceeding from an initial portion of the insertion track to an end portion of the insertion track,

furthermore wherein each insertion track (41) is arranged to receive, according to an insertion direction defined by respective side profiles (38) and counter-shaped coupling elements (42) carried by the attachment portion (2a) of the device (2) for the maintenance of gardens or land, optionally wherein a pushing rib (43) emerges from the bottom wall, which is substantially parallel to said side profiles (38) and of progressively increasing height proceeding along said insertion direction.

15. Mount according to any one of the preceding claims comprising two or more anchoring bodies (7), said guide (5) having longitudinal extension along said direction (A) which is greater than a maximum width of each anchoring body (7) and such that said guide (5) is capable of simultaneously accommodating said two or more anchoring bodies (7) in a mutually flanking relationship with each other.



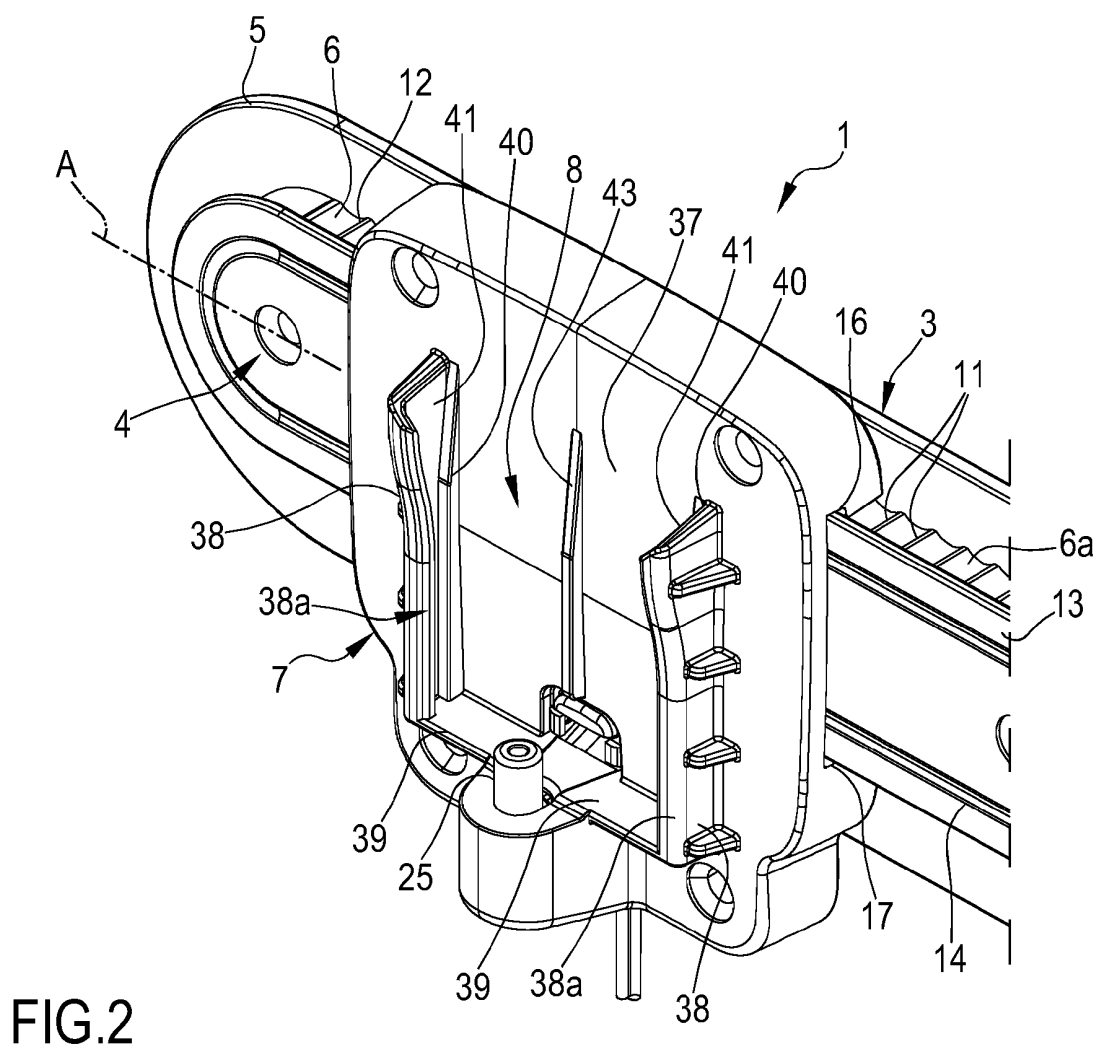
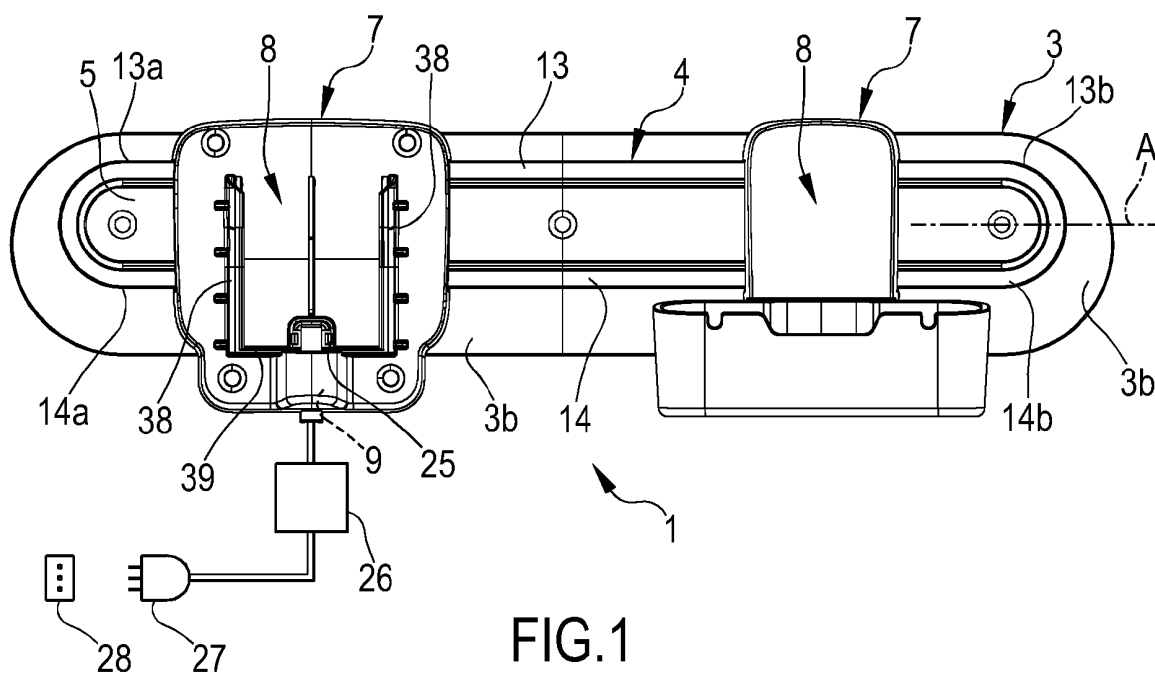


FIG.3

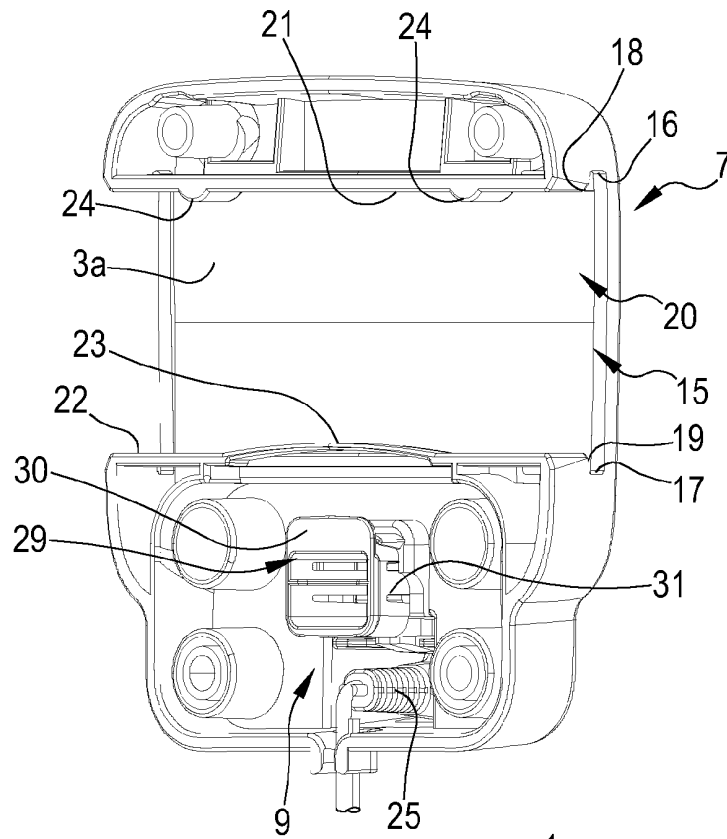
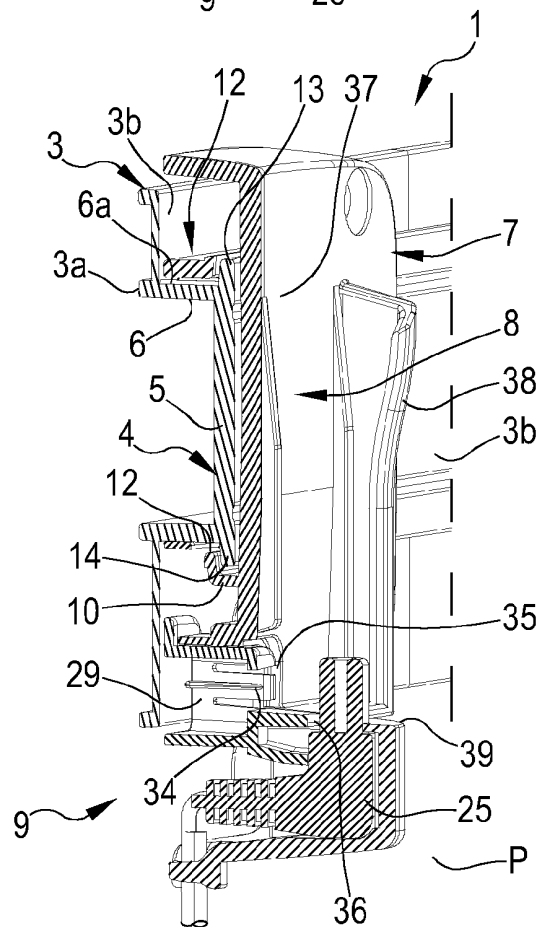


FIG.4



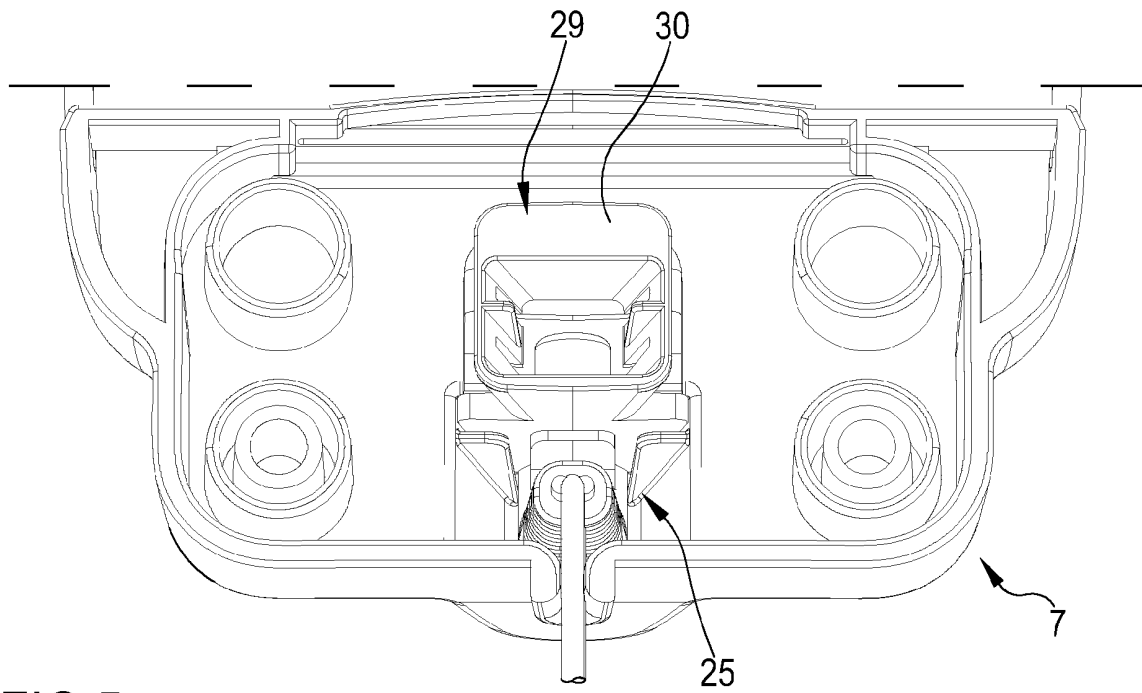


FIG. 5

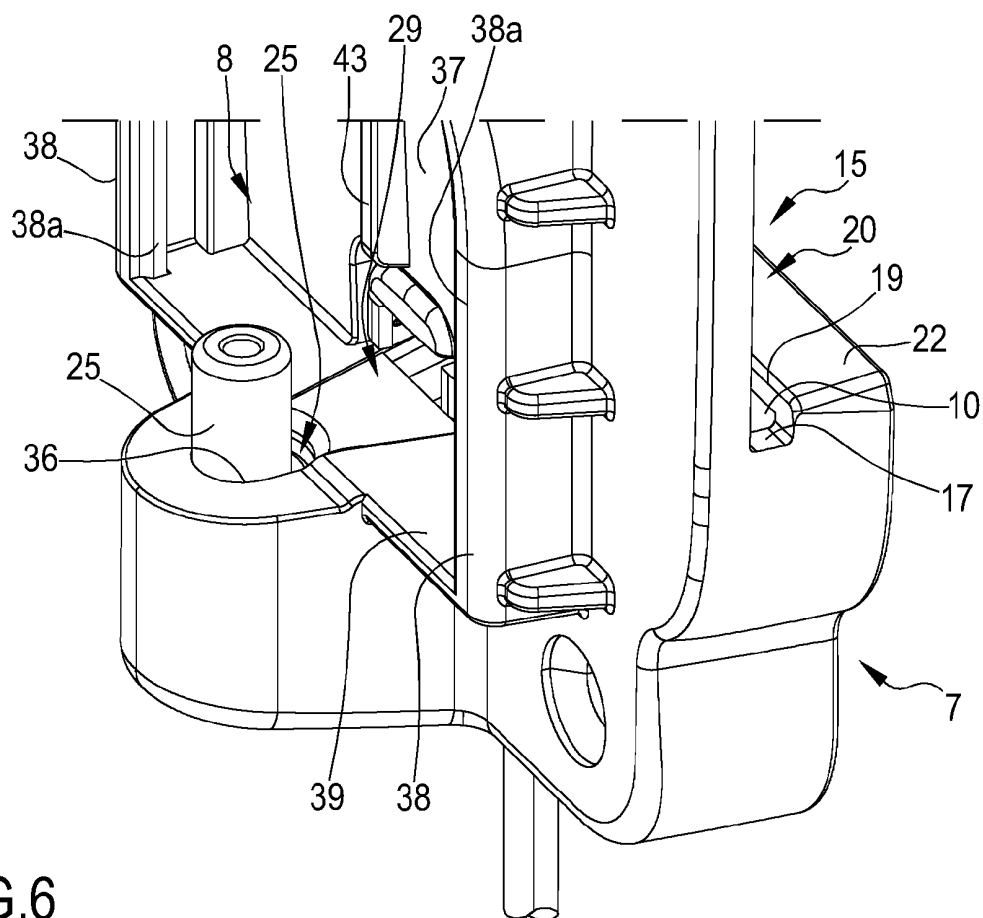


FIG. 6

FIG.7

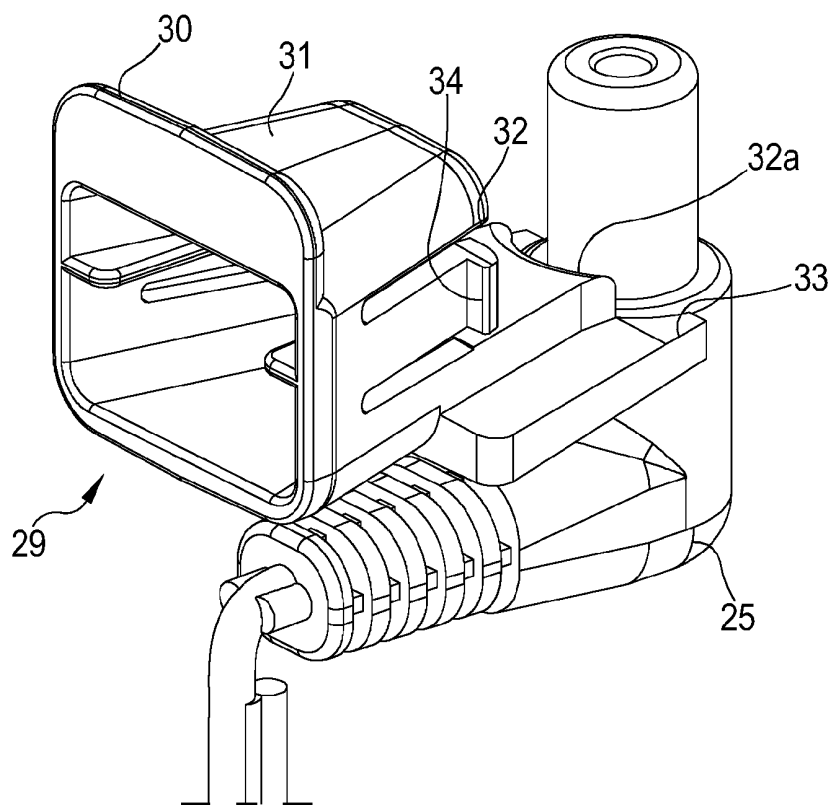


FIG.8

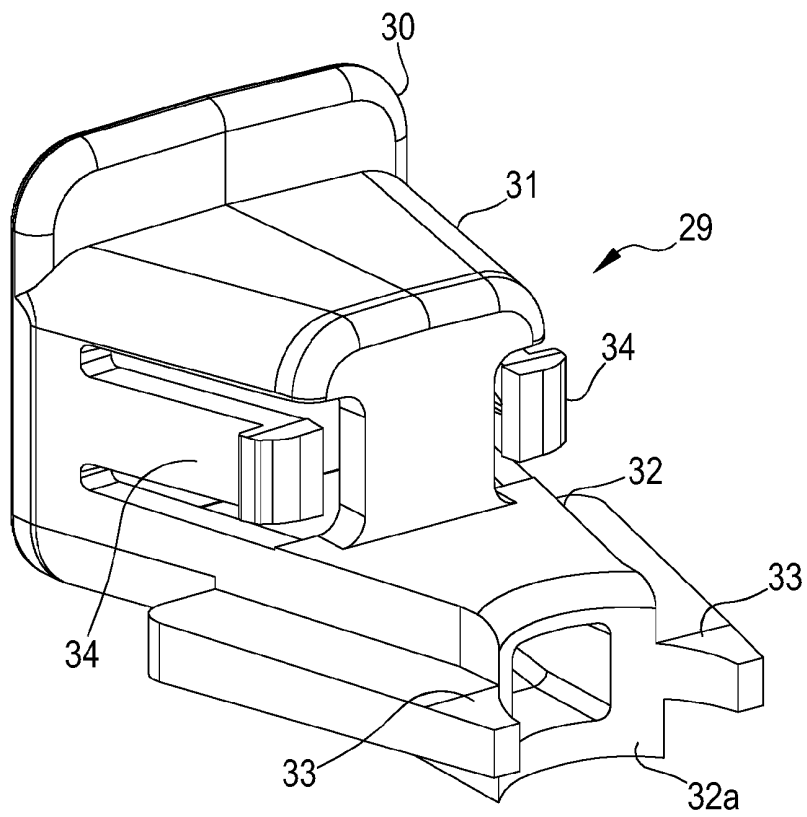


FIG.9

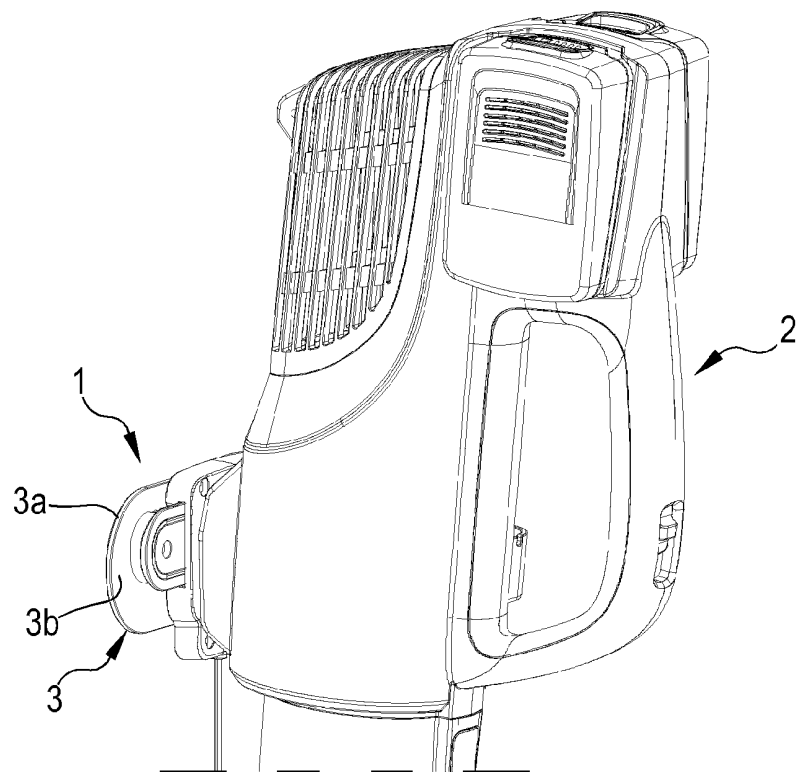


FIG.10

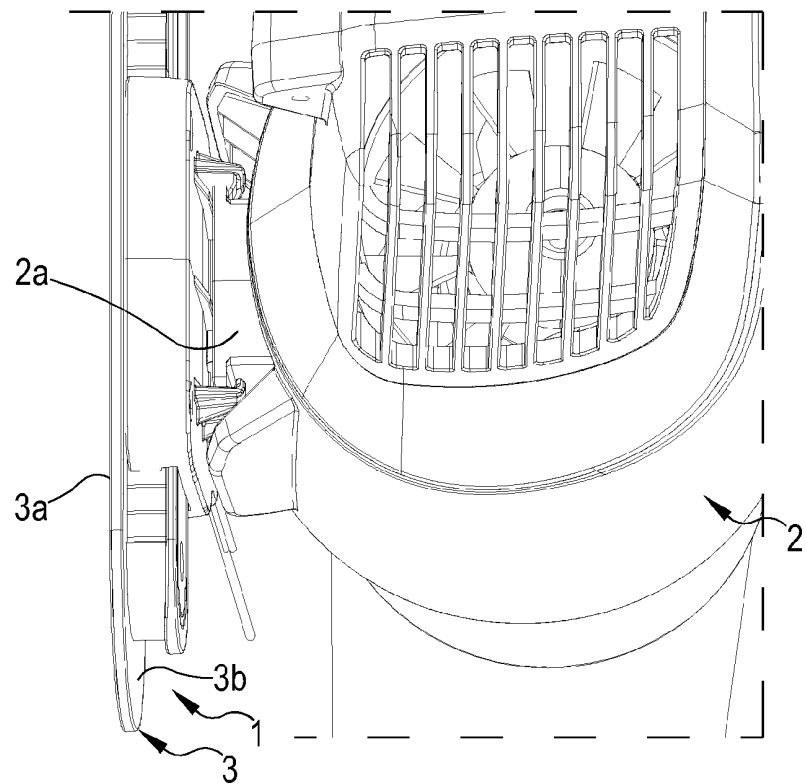


FIG.11

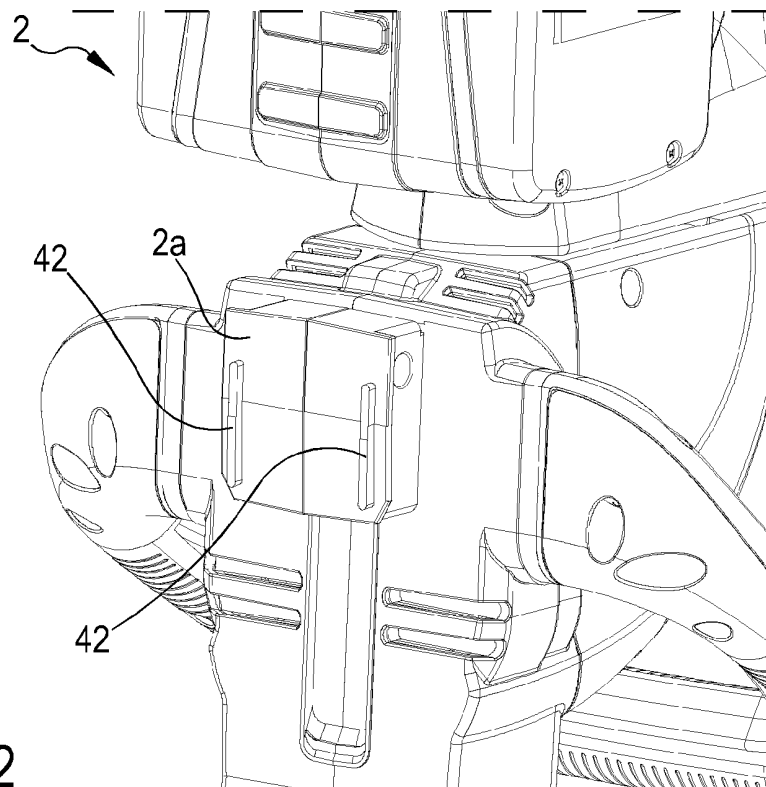
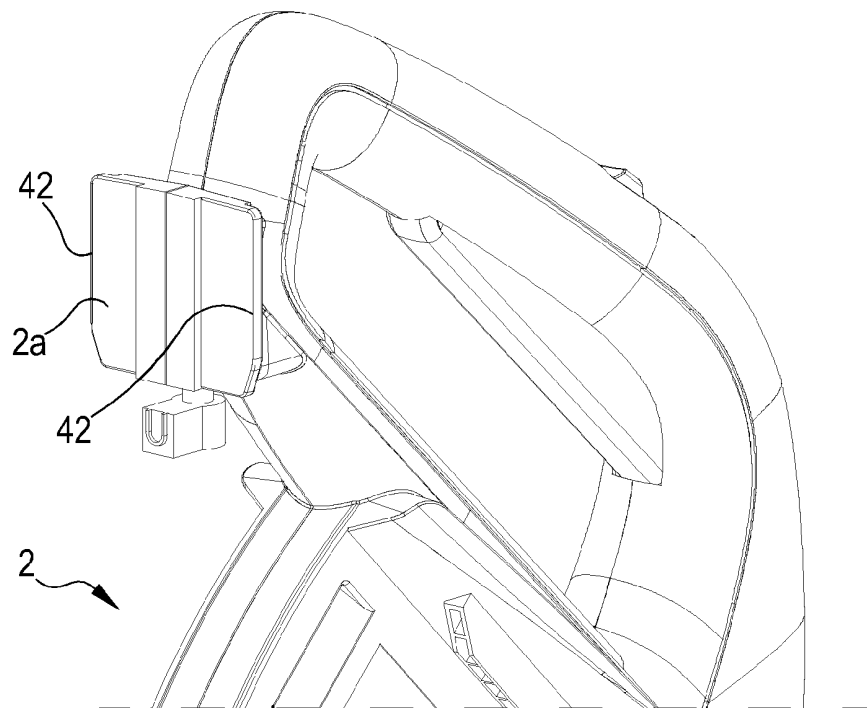


FIG.12



## EUROPEAN SEARCH REPORT

Application Number

EP 24 17 9316

5

10

15

20

25

30

35

40

45

50

55

1

EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2010/213346 A1 (CHEN HENRY [TW]) 26 August 2010 (2010-08-26)	1,6-10, 12,14,15	INV. B25H3/04
Y	* paragraphs [0002], [0023] - [0033]; figures *	11,13	
X	FR 2 925 382 A1 (KAO JUI CHIEN [TW]) 26 June 2009 (2009-06-26)	1-6	
X	US 2021/205979 A1 (JESSOP DAVID P [US]) 8 July 2021 (2021-07-08)	1-3, 6-10,12	
Y	* paragraphs [0002] - [0004], [0060], [0061]; figures *	11,13	
X	CA 2 688 957 A1 (KAO JUI-CHIEN [TW]) 7 June 2011 (2011-06-07)	1,6	
X	GB 2 453 379 A (KAO JUI-CHIEN [TW]) 8 April 2009 (2009-04-08)	1,6	
Y	EP 3 427 902 A1 (BLACK & DECKER INC [US]) 16 January 2019 (2019-01-16)	11,13	
	* paragraphs [0036] - [0040]; figures *		
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		7 October 2024	David, Radu
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 24 17 9316

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.

07-10-2024

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010213346 A1	26-08-2010	NONE	
FR 2925382 A1	26-06-2009	NONE	
US 2021205979 A1	08-07-2021	NONE	
CA 2688957 A1	07-06-2011	NONE	
GB 2453379 A	08-04-2009	NONE	
EP 3427902 A1	16-01-2019	EP 3427902 A1	16-01-2019
		US 2019014925 A1	17-01-2019
		US 2020060439 A1	27-02-2020
		US 2021127855 A1	06-05-2021
		US 2022330722 A1	20-10-2022
		US 2023346140 A1	02-11-2023

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82