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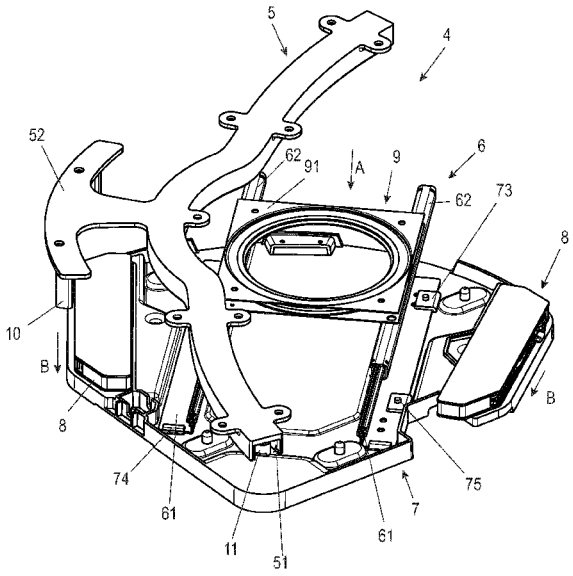
(54) **Title:** GUIDE FITTING, AND FURNITURE OR HOUSEHOLD APPLIANCE ELEMENT

(54) **Bezeichnung:** FÜHRUNGSBESCHLAG UND MÖBEL- ODER HAUSHALTSGERÄTEELEMENT

Fig. 6



(57) **Abstract:** The invention relates to a guide fitting (4) for guiding the movement of a carcass part (3) which is mounted so as to be movable translationally and rotationally at the same time relative to a fixed base, which guide fitting has a curved guide track (5), a guide element (11) which is guided in the at least one curved guide track (5), and a linear guide (6) comprising at least one guide rail (61) and a running rail (62) which is movable in relation to the guide rail, of which rails one is fixedly coupled to the guide element (11) and the other is coupled to the curved guide track (5), being mounted by means of a rotary bearing (9). The curved guide track (5) or the guide element (11) can be fixedly secured to the carcass part (3), at least one ejector device (8) comprising an unlockable energy store is provided, by means of which ejector device the carcass part (3) can be driven out of at least one end position along a limited distance by an exertion of force counter to an ejection direction, and at least one activator (10) for unlocking the energy store of the ejector device (8) is provided. The invention also relates to a furniture or household appliance element (1).

(57) **Zusammenfassung:** Ein Führungsbeschlag (4) zur Bewegungsführung eines gleichzeitig translatorisch und rotatorisch bewegbar gelagerten Korpusteils (3) relativ zu einer ortsfesten Basis weist eine Führungskurvenbahn (5), ein in der mindestens einen Führungskurvenbahn (5) geführtes Führungselement (11) sowie eine Linearführung (6) mit wenigstens einer Führungsschiene (61) und einer relativ zu dieser verschiebbaren Laufschiene (62) auf, von denen eine ortsfest mit dem Führungselement (11) und die andere mittels eines Drehlagers (9) gelagert mit der Führungskurvenbahn (5) gekoppelt ist, wobei die Führungskurvenbahn (5) oder das

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[Fortsetzung auf der nächsten Seite]

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— *mit internationalem Recherchenbericht (Artikel 21 Absatz 3)*

Führungselement (11) ortsfest an dem Korpusteil (3) befestigbar ist, wobei wenigstens eine Ausstoßvorrichtung (8) mit einem entriegelbaren Kraftspeicher, mit der das Korpusteil (3) aus wenigstens einer Endposition heraus durch Kraftausübung entgegen einer Ausstoßrichtung entlang einer begrenzten Wegstrecke antreibbar ist und wenigstens einen Aktivator (10) zur Entriegelung des Kraftspeichers der Ausstoßvorrichtung (8). Des Weiteren wird ein Möbel- oder Haushaltsgeräteelement (1) beschrieben.

Guide fitting and furniture or household appliance element

The present invention relates to a guide fitting for guiding a body part mounted for simultaneous translational and rotational movement according to the preamble of claim 1.

The invention further relates to a furniture or household appliance element according to the preamble of claim 13.

Such furniture or household appliance elements, such as shelves or racks, in which a body part mounted in a support body so that it can rotate and move in translation at the same time, are known, for example, from DE 10 2019 109 866 A1.

A translational-rotational bearing is used to perform the translational-rotational movement of the body part.

Particularly in the case of larger and/or taller furniture or household appliance elements, such as refrigerators and freezers or wine coolers, it is necessary to provide additional support for the movement of the translational-rotationally movable body part for reasons of stability.

For this purpose, it is known from DE 10 2019 132 207 A1, for example, to arrange a guide bearing between the cover plates of the support body and the body part, with which the translational-rotational movement is additionally guided.

Such a furniture or household appliance element has proven itself in practice.

To actuate such a translational-rotational movement, it may be necessary in some situations to pull the body part to be moved forward from a first end position.

For example, a handle can be fitted for this purpose. However, such a handle can, under certain circumstances, restrict the movement options of the body part relative to the support body, as such a handle would, for example, prevent the body part from rotating 180° relative to the support body in order to reach a desired position with the same surface area as the starting position before

reaching the 180° rotated position on the support body by bumping against the support body.

The object of the present invention is to provide a guide fitting and a furniture or household appliance element with which the triggering of a combined translational-rotational movement is facilitated.

This object is solved by a guide fitting with the features of claim 1.

The object is further solved by a furniture or household appliance element with the features of claim 13.

The guide fitting according to the invention has a guide cam track, a guide element guided in the at least one guide cam track and a linear guide with at least a first connecting part and a second connecting part movable relative thereto, one of which is coupled in a stationary manner to the guide element and the other of which is coupled to the guide cam track by means of a pivot bearing.

The guide cam track or the guide element can be fixed to the body part.

The guide fitting is characterized by at least one ejection device with an unlockable force accumulator, with which the body part can be driven from at least one end position by exerting force against an ejection direction along a limited distance.

The guide fitting also has at least one activator for unlocking the force accumulator of the ejection device.

A guide fitting designed in this way makes it easy to trigger a combined translational-rotational movement of the body part relative to a fixed base.

Advantageous embodiments of the invention are the subject of the subclaims.

According to an advantageous embodiment, the at least one ejection device is arranged in a fixed position relative to the guide element.

In a preferred embodiment, two activators are arranged on or at a fixed distance from the guide cam track.

The arrangement of such activators on the guide cam track makes it easy to trigger the translational-rotational movement via the rotational movement of the body part by pushing the body part against the desired rotational movement.

According to a preferred further development, the guide cam track has a guide groove accommodating the guide element and an arm extending outside the guide groove, on which at least one activator is arranged, in particular integrally formed.

According to one embodiment, two activators are arranged on the arm, in particular molded on.

By molding the activators to the guide cam track, the assembly effort of such a guide fitting is further advantageously reduced.

According to a further advantageous embodiment, the guide fitting also has a support plate to which the at least one first connecting part of the linear guide, the guide element and the at least one ejection device are fixed.

The design of the guide fitting with such a support plate also simplifies the assembly and installation of the guide fitting.

In an advantageous further development, the support plate has a central region, on which two first connecting parts of the linear guides, which are aligned parallel to one another, are fastened, and two mirror-symmetrically shaped edge regions, with an ejection device being fixed to at least one of the edge regions. Preferably, an ejection device is fixed to each of the two edge regions.

This makes it possible to trigger the translational-rotational movement from two different end positions.

According to a further alternative embodiment, the at least one activator is arranged in a fixed position on the second connection part of the linear guide and the ejection device is arranged in a fixed position on or near the first connection part of the linear guide.

The arrangement of the activator on the linear guide also makes it easy to trigger the translational-rotational movement by activating the ejection device via the translational movement of the body part.

In all embodiments, the ejector device utilizes the relative movement between stationary furniture and furniture that initially moves approximately translationally. Approximately translatory here means that the translatory movement component of the furniture is significantly greater than the rotatory movement component at the start of the movement from an end position.

According to a further advantageous embodiment, the guide fitting has at least one further guide cam track in which a further guide element is guided, which additionally supports the guidance of the furniture.

The furniture or household appliance element according to the invention has a support body with a base support plate, a top support plate and at least one side wall, a body part which is mounted so as to be simultaneously movable in translation and rotation relative to the support body and has a base plate, a top plate and at least one side wall.

A guide fitting is arranged between the top support plate and the top plate and/or between the base support plate and the base plate.

The guide fitting has at least one guide cam track and a guide element guided in or on the guide cam track, which are arranged on respective facing surfaces of the top support plate and the top plate or the base support plate and the base plate.

The guide fitting also has a linear guide with connecting parts that can be displaced relative to one another in a direction of translation, one of which is arranged on the top support plate or the top plate and the other of which is mounted on the other of the top support plate or the top plate by means of a pivot bearing.

The linear guide preferably consists of two guide rails aligned parallel to each other and running rails that can be moved relative to these.

The guide fitting has at least one ejection device with an unlockable force accumulator and at least one activator for unlocking the force accumulator of the ejection device, with which the body part can be driven from at least one end position by exerting force against an ejection direction along a limited distance.

According to a further embodiment, the at least one ejection device is designed as an at least partially electric ejection device, with an electric motor for tensioning an ejector and/or for driving the ejection movement itself and/or with a sensor system for detecting a desired opening of the body part.

In an advantageous embodiment, the guide cam track is fixed to the base plate or the top plate of the body part and the guide element is fixed to the base support plate or the top support plate of the support body.

In a further advantageous embodiment, a first guide fitting is arranged between the base support plate and the base plate and a second guide fitting is arranged between the top support plate and the top plate.

An arrangement of two guide fittings is particularly suitable for furniture or household appliance elements with a larger height.

In a further advantageous embodiment, the body part can be moved relative to the support body from a first functional position into a second functional position rotated by a predetermined angle relative to the starting position, wherein in both functional positions the base plates and the top plates of the body part and the support body are aligned in matching geometries relative to one another.

In the following, preferred embodiments of the invention are explained in more detail with reference to the accompanying drawings, wherein:

Figure 1	shows an embodiment of a furniture element according to the invention with support body and body part, with a body part positioned in an initial position corresponding to a closed position,
Figure 2	shows an isometric view of the furniture element corresponding to Figure 1 in an intermediate position of the body part relative to the support body caused by the ejection device,
Figure 3	shows an isometric view of the furniture element corresponding to Figure 1 in an end position of the body part with access to shelves of the body part,

Figure 4 shows an isometric view of the furniture element corresponding to Figure 2 with the top support plate hidden to show a guide fitting arranged between the top support plate and the top plate,

Figure 5 shows an additional isometric view of the furniture element shown in Figure 1 in a partially exploded view with a variant of two guide fittings arranged between the base support plate and base plate and the top support plate and top plate,

Figure 6 shows an isometric magnified view of the guide fitting shown in Figure 5,

Figure 7 shows an exploded view of the guide fitting shown in Figure 6,

Figure 8 shows an isometric representation of the guide fitting shown in Figure 6 with the ejection device extended,

Figure 9 shows a further isometric representation of the guide fitting shown in Figure 8 with a tensioned ejection device,

Figure 10 shows an isometric representation corresponding to Figure 9 in the unlocked position of the activator on the ejection device,

Figure 11 shows an isometric representation of an alternative design variant of a guide fitting with an ejection device arranged on the linear guide,

Figure 12 shows an isometric exploded view of the guide fitting shown in Figure 11,

Figure 13 shows an isometric representation of a further embodiment of a guide fitting according to the invention with an ejection device arranged between parallel guide rails of a linear guide and an activator arranged on one of the guide rails,

Figure 14	shows an exploded view of the guide fitting shown in Figure 13 and
Figure 15	shows a detailed isometric representation of the ejection device and the activator arranged on a running rail in the starting position,
Figure 16	shows a representation corresponding to Figure 15 with the ejection device triggered,
Figure 17	shows a perspective view of an ejection device in the assembled position;
Figures 18A to 18D	show multiple views of the ejection of a movable furniture part by the ejection device; and
Figures 19A to 19D	show several views when clamping the ejection device by moving the lever in the closing direction.

In the following description of the figures, terms such as top, bottom, left, right, front, rear, etc. refer exclusively to the exemplary representation and position of the guide fitting, the furniture or household appliance element, the ejection device, activator, guide fitting, guide cam track, linear guide and the like selected in the respective figures. These terms are not to be understood restrictively, i.e. these references may change due to different working positions or the mirror-symmetrical design or the like.

In Figures 1 - 5, the reference sign 1 is used to designate an embodiment of a furniture element according to the invention.

The furniture element 1 shown here essentially consists of a support body 2 with a base support plate 21 and a top support plate 22 and side walls 23 connecting the base support plate 22 to the top support plate 21, as well as a body part 3 that can be moved simultaneously in translation and rotation relative to the support body 2.

Instead of the side wall 23 connecting the base support plate 21 to the top support plate 22, a design variant of the support body 2 without side wall 23 is also

conceivable, for example when the base support plate 21 and the top support plate 22 are attached to a building wall.

The body part 3 also has a base plate 31, a top plate 32 and a connecting element connecting the base plate 31 to the top plate 32, in the embodiment example shown in the form of at least one side wall 33.

In the embodiment shown in these figures, the shelf-like body part 3 has a square base area with two side walls 33, which close an interior space in a closed position shown in Figure 1, and two open vertical sides, shown in Figures 2 and 3, which allow access to the interior space.

Instead of the side walls, it is also conceivable to connect the base plate 31 to the top plate 32 via support spars 36, shown as an example in Figure 3, or a central post in the middle of the surface of the base plate 31 or top plate 32.

In the embodiment shown here, the interior of the body part 3 has several shelves 35. However, other configurations or subdivisions of the interior of the body part 3 are also conceivable in principle.

As further shown in Figures 2, 4 and 5, a guide fitting 4 is arranged between the top support plate 22 and the top plate 32, shown in Figures 2 and 4, and/or between the base support plate 21 and the base plate 31, shown in Figure 5, by means of which the simultaneous translational and rotational movement of the body part 3 relative to the support body 2 is made possible.

Preferred embodiments of such a guide fitting 4 are shown in more detail in Figures 6-16.

A first embodiment of such a guide fitting 4 is shown in Figures 6 - 10.

As shown in Figures 6 and 7, the guide fitting 4 has a guide cam track 5 and a guide element 11 guided in the guide cam track 5. In principle, it is also conceivable to provide several guide cam tracks 5 with a respective guide element 11 on the guide fitting 4.

The guide fitting 4 also has a linear guide 6 with at least two connecting parts that can move relative to each other, one of which is coupled to the guide

element 11 in a fixed position and the other is coupled to the guide cam track 5 by means of a pivot bearing 9.

In the embodiment shown in the figures, the linear guide consists of two guide rails 61 aligned parallel to one another and running rails 62 that can be moved relative to these.

Other design variants of linear guides are also conceivable, for example in the form of a guide rail and a roller carriage, rack or similar guided on or along it.

The guide cam track 5 or the guide element 11 can be fixed to the body part 3.

As can also be seen in Figures 6 and 7, the guide fitting 4 has at least one, in this embodiment example two, ejection devices 8 with an unlockable force accumulator, with which the body part 3 can be driven from at least one end position by exerting force against an ejection direction B along a limited distance.

The drive is effected by power transmission to at least one activator 10, which is used to unlock the power accumulator of the ejection device 8.

In the first embodiment shown in Figures 6-10, the guide cam track 5 is fixed to the top plate 32 of the body part 3 or the base plate 31 of the body part 3, as can also be seen by way of example in Figures 4 and 5.

The guide cam track 5 has a guide groove 51 in which the guide element 11, designed here as a wheel, can be guided.

The guide element 11, as well as the two first connecting parts, in this case the guide rails 61 of the linear guides 6 and the ejection devices 8, are fixed to a support plate 7. Alternatively, the guide rails 61, the guide element 11 and/or the ejection devices can be arranged directly on the top support plate 22 and/or base support plate 21.

For its part, the support plate 7 is fixed to the top support plate 22 or the base support plate 21 of the base, or in the case of a furniture element 1, to the support body 2.

Different fixing elements 73, 74, 75 are provided in a central region 71 of the support plate 7 to fix the guide rail on 61 of the linear guides 6 to the support plate 7.

Thus, the fixing elements 75 are designed as pins projecting from the central region 71 of the support plate 7, which are accommodated in holes provided for this purpose in a fastening area of the respective guide rail 61 and thus enable the guide rails 61 to be positively fixed in the plane of the support plate 7.

The other fixing elements 73 and 74, which are designed like plates and overlap the fastening area of the guide rails 61, are provided to prevent lifting.

An ejection device 8 is attached to each of the edge regions 72 of the support plate 7. It is also conceivable to provide an ejection device 8 only on one of the edge regions 72 of the support plate 7.

The ejection devices 8 are known per se from the prior art and have a housing 81, an ejector 82 coupled in the housing 81 along a track 83 with the (not shown) force accumulator, which can be moved with the aid of an activator 10 from a relaxed extended position shown, for example, in Figure 8 to a tensioned function shown in Figure 10 by pressing the ejector 82 against the ejection direction B.

This tensioning of the energy accumulator takes place in the movement sequence of the body part 3 relative to the support body 2 when the body part 3 moves into an end position, as shown in Figures 1 and 3, in which the body part 3 occupies the same space in both different end positions relative to the support body 2 when viewed in a horizontal plane. Other ejection devices can also be used, in which the tensioning of the force accumulator can additionally or alternatively take place during further extension of the body part 3.

If the body part 3 is to be moved out of this position, the body part 3 can be unlocked by pressing it slightly against the direction of rotation R1, R2 controlled by the guide cam track 5, in the example of Figure 2 by pressing in direction R2, using the activator 10, as shown in Figure 10, for example.

After unlocking the energy accumulator, this drives the ejector 82 in the ejection direction B. The ejector 82 presses against the activator 10 and thereby pushes

the guide cam track 5 and with it the body part 3 in the ejection direction B out of the end position into the position shown in Figure 2.

After this ejection process, the user can easily move the body part 3 further into the desired position.

Furthermore, in the embodiment shown in Figures 6 - 10, two activators 10 are arranged on an arm 52 branching off from a central region of the guide cam track 5. It is also conceivable to arrange only one activator 10 on the arm 52, provided that an assisted abutment of the furniture is only required in one direction.

The geometry of the arm 52 is designed in such a way that the activators 10 slide along the respective outer sides of the ejection devices 8 and accordingly come into contact with a respective ejector 82 in a predetermined position before the body part 3 reaches its end position.

The activators 10 can be molded directly onto the arm 52. It is also conceivable, for example, to screw the activators 10 to the arm 52 or directly to the body part 3.

The alignment of the two linear guides 6 attached here to the support plate 7, i.e. the guide rails 61 and the running rails 62 that can be moved linearly on them, determine the direction of translation A of the combined translational-rotational movement of the body part 3 relative to the support body.

The pivot bearing 9 fastened to the two running rails 62 comprises a first and second fastening plate 91, 93, wherein the second fastening plate 93 is fastened to the running rails 62 and the first fastening plate 91 can be fastened correspondingly to the top plate 32 or the base plate 31 of the body part 3. In an exemplary embodiment shown in Figure 9, a turntable 92 is additionally fastened to the first fastening plate 91. The fastening plates 91, 93 are rotatably mounted relative to one another.

In the alternative embodiment shown in Figures 11 and 12, ejection devices 8 are fixed directly to the running rails 62 of the linear guide 6.

The activators 10 are fixed at a suitable position on the guide rail 61.

In this design variant, the force is transmitted from the force accumulator of the ejection devices 8 via the linear guides 6 and not via the guide cam track 5.

A third embodiment of such a guide fitting 4 is shown in Figures 13 to 16.

A preferred embodiment of an ejection device 8 that can be used here is shown in Figures 17 and 18.

In this embodiment, only one ejection device 8 is provided, the housing of which is fixed to the support plate 7 like the guide rails 61 or alternatively to the base plate 31 or the top plate 32 of the body parts 3. In this case, the activator 10 is arranged on the running rail 62. This embodiment thus represents a quasi-kinematic reversal of the embodiment variant shown in Figures 11 and 12.

In Figure 15, the ejector 82 of the ejection device 8 is shown in the position in which the body part 3 is in an end position.

Figure 16 shows the ejector 82 of the ejection device 8 with the force accumulator released, in which the running rail 62 has been displaced accordingly over the activator 10, which is accompanied by a movement of the body part 3 into the position shown here as an example in Figure 2.

Instead of the mechanical ejection devices 8 shown here, it is also conceivable to provide electrically or electromechanically driven ejection devices in which the ejector is electrically preloaded, for example with the aid of an electric motor or an electromagnetic drive.

The ejection device can be triggered, for example, by a motion, force or touch sensor. It is conceivable to use a force sensor, which senses a force exerted by a user on the movable body part 3, or a force/displacement detection by a sensor. A touch sensor system can, for example, use electrically conductive materials to detect a touch that initiates an opening movement. It is also conceivable to control an electric motor or electromagnetic drive via a preferably wireless remote control, for example via a cell phone, voice control or similar, or via a proximity sensor or an optical sensor that recognizes gestures. The ejection device 8 is returned to a standby position after a predetermined time or after an opening process has been detected.

It is also conceivable to operate only the reset of the ejection device 8 electrically and to carry out the ejection process itself mechanically, for example by using one or more springs (described in more detail below).

It is also conceivable to operate the unlocking of the ejection device 8 electrically and to carry out the ejection process itself mechanically.

A preferred variant of such an ejection device 8 is shown in Figures 17, 18A-18D and 19A-19D. Further details of the ejection device described with reference to these figures can be found in the post-published DE 10 2022 134 222 A1, the contents of which are expressly referred to here. The ejection device 8 comprises a housing 81 on which the ejector 82 is rotatably mounted. The ejector 82 acts on the activator 10, which can be coupled to a movable furniture part. The ejector 82 is pretensioned by a force accumulator 85 in a direction of rotation in the opening direction of the movable furniture part, whereby the ejector 82 can be latched by a latching mechanism with tensioned force accumulator 85. A clamping element 84 is also shown on the ejection device 8, which is fixed to the movable furniture part.

The ejector 82 comprises a control section which is arranged inside the housing 81. A slider 88, which has a latch 861 and a control element 871, is slidably held on the control section. The latch 861 is guided in the cam guide 86 on an insert element, while the control element 871 is guided on the control cam 87.

Furthermore, a pressure piece 89 is rotatably mounted on the control section and is held by a fastening plate 891, which is fixed to the control section. The pressure piece 89 is guided by a driver on a further control cam, which is fixed to the insert element.

Figures 18A and 18B show the ejection device 8 ejecting a movable piece of furniture not shown. The ejector 82 is rotated counterclockwise in Figure 18A and clockwise in Figure 18B by the force of the force accumulators 85 and thus acts on the activator 10, which moves the movable furniture part from the starting position in the opening direction.

The ejector 82 pivots so far that the latch 861 moves out of the cam guide 86, which is open and has an extension channel and a retraction channel. In Figure 18B, the latch 861 is still in the extension channel of the cam guide 86, and in Figures 18C and 18D, the latch 861 has moved away from the cam guide 86 at

the slider 88. The movable furniture part moves with the activator 10 from right to left in figures 18B to 18D, and the clamping element 84 attached to the movable furniture part reaches the pressure piece 89 attached to the ejector 82 in the ejected opening position.

As a result of the rotary movement of the ejector 82, the control element 871 moves along the control cam 87 and displaces the slider 88 in a radial outward direction, as can be seen from Figures 18B and 18C, until the control element 871 is arranged in a channel which extends substantially in the circumferential direction around the axis of rotation 821. From this opening position, the movable furniture part can now be moved either in the closing direction or in the opening direction, whereby in both cases the ejector 82 is pivoted back into the starting position and the latching mechanism is brought into the starting position.

Figures 19A to 19D show the clamping process of the ejector 82 when the movable furniture part with the activator 10 is moved back in the closing direction. The activator 10 then presses against the ejector 82 and pivots it clockwise in Figure 19A and counterclockwise in Figures 19B to 19D.

The ejector 82 is rotated by the activator 10, and the control element 871 moves along the control cam 87 and displaces the slider 88 in a radial direction towards the axis of rotation 821. The latch 861 is positioned via the control cam 87 so that it enters the entry channel of the cam guide 86 and takes over the guidance of the slider 88 there.

In Figure 19C, the movable furniture part with the activator 10 is shown in an overpressure position, and the ejector 82 has been pivoted to such an extent that the latch 861 has been moved along the cam guide 86 via the latching receptacle 862. The guidance of the slider 88 is now determined by the latch 861, and the control element 871 has no function.

When the movable furniture part is released, the activator 10 is moved in the opposite direction by the force of the force accumulator 85, whereby a latching projection 864 pushes the latch 861 into the latching receptacle 862 via a stop 863, where the latch 861 latches. Figure 19D thus corresponds to the starting position and the closed position of the movable furniture part, which can be unlocked again by pressing it into an overpressure position, as described above.

The ejection device 8 can also be tensioned from the position shown in Figure 18D by moving the movable furniture part in the opening direction by the clamping element 84 instead of by moving the movable furniture part in the closing direction.

List of reference signs

1	Furniture or household appliance element
2	Support body
21	Base support plate
22	Top support plate
23	Side wall
3	Body part
31	Base plate
32	Top plate
33	Page wall
35	Shelf
36	Support spar
4	Guide fitting
5	Guide cam track
51	Guide groove
52	Arm
6	Linear guide
61	Guide rail
62	Rail
7	Support plate
71	Central region
72	Edge region
73	Fixing element
74	Fixing element
75	Fixing element
8	Ejection device
81	Housing
82	Ejector
821	Axis of rotation
83	Track
84	Clamping element

85	Force accumulator
86	Cam guide
861	Latch
862	Latching receptacle
863	Stop
864	Latching projection
87	Control cam
871	Control element
88	Slider
89	Pressure piece
891	Fastening plate
9	Pivot bearing
91	Fastening plate
92	Turntable
10	Activator
11	Guide element
A	Direction of translation
B	Ejection direction
R1, R2	Direction of rotation

Claims

1. Guide fitting (4) for guiding the movement of a body part (3) mounted for simultaneous translational and rotational movement relative to a stationary base, comprising
   - a guide cam track (5),
   - a guide element (11) guided in the guide cam track (5),
   - a linear guide (6) with at least one first connecting part and a second connecting part movable relative thereto, one of which is coupled in a stationary manner to the guide element (11) and the other of which is coupled to the guide cam track (5) by means of a pivot bearing (9),
   - wherein the guide cam track (5) or the guide element (11) can be fixedly attached to the body part (3),

   characterized by
   - at least one ejection device (8) with an unlockable force accumulator (85), with which the body part (3) can be driven from at least one end position by exerting force counter to an ejection direction along a limited distance, and
   - at least one activator (10) for unlocking the force accumulator (85) of the ejection device (8).

2. Guide fitting (4) according to claim 1, **characterized in that** the at least one ejection device (8) is arranged in a fixed position relative to the guide element (11).

3. Guide fitting (4) according to claim 1 or 2, **characterized in that** two activators (10) are arranged on or fixedly spaced from the guide cam track (5).

4. Guide fitting (4) according to claim 1 or 2, **characterized in that** the guide cam track (5) has a guide groove (51) accommodating the guide element (11) and an arm (52) extending outside the guide groove (51), on which the at least one activator (10) is arranged, in particular integrally formed.

5. Guide fitting (4) according to claim 4, **characterized in that** two activators (10) are arranged, in particular integrally formed, on the arm (52) extending outside the guide groove (51).

6. Guide fitting (4) according to one of the preceding claims, **characterized by** a support plate (7), on which at least one of the connecting parts of the

linear guide (6), which can be moved relative to one another, the guide element (11) and the at least one ejection device (8) are fixed.

7. Guide fitting (4) according to claim 6, **characterized in that** the support plate (7) has a central region (71), to which two first connecting parts of the linear guide (6), which are aligned parallel to one another, are fastened, and two edge regions (72) of mirror-symmetrical shape, an ejection device (8) being fixed to at least one of the edge regions (72).

8. Guide fitting (4) according to claim 1 or 2, **characterized in that** the at least one activator (10) is arranged in a stationary manner on the second connection part of the linear guide (6) and the at least one ejection device (8) is arranged in a stationary manner on or near the first connection part of the linear guide (6).

9. Guide fitting (4) according to claim 8, **characterized in that** the at least one ejection device (8) is arranged between two second connecting parts of the linear guide (6) arranged next to each other and parallel to each other.

10. Guide fitting (4) according to one of the preceding claims, **characterized in that** the at least one ejection device (8) is designed as an at least partially electrical ejection device (8).

11. Guide fitting (4) according to one of the preceding claims, **characterized in that** the linear guide consists of two guide rails (61) aligned parallel to one another and running rails (62) displaceable relative to these.

12. Guide fitting (4) according to one of the preceding claims, **characterized by** at least one further guide cam track in which a further guide element is guided.

13. Furniture or household appliance element (1), comprising
    - a support body (2) with a base support plate (21), a top support plate (22) and at least one side wall (23),
    - a body part (3) mounted for simultaneous translational and rotational movement relative to the support body (2), with a base plate (31), a top plate (32) and at least one side wall (33),

- wherein a guide fitting (4) is arranged between the top support plate (22) and the top plate (32) and/or between the base support plate (21) and the base plate (31),
- wherein the guide fitting (4) has at least one guide cam track (5) and a guide element (11) guided in or on the guide cam track (5), which are arranged on respective mutually facing surfaces of the top support plate (22) and the top plate (32) or of the base support plate (21) and the base plate (31),
- wherein the guide fitting (4) further comprises a linear guide (6) with connecting parts displaceable relative to one another in a direction of translation (A), of which one is arranged on the top support plate (22) or the top plate (32) and the other is mounted on the other of the top support plate (22) or the top plate (32) by means of a pivot bearing (9) and/or the one connecting part is arranged on the base support plate (21) or the base plate (31) and the other is mounted on the other of the base support plate (21) or the base plate (31) by means of a pivot bearing (9),

characterized in that

- the guide fitting (4) has at least one ejection device (8) with an unlockable force accumulator (85) and at least one activator (10) for unlocking the force accumulator (85) of the ejection device (8), with which the body part (3) can be driven from at least one end position by exerting force counter to an ejection direction along a limited path.

14. Furniture element (1) according to claim 13, **characterized in that** the guide cam track (5) is fixed to the base plate (31) or the top plate (32) of the body part (3) and the guide element (11) is fixed to the base support plate (21) or the top support plate (22) of the support body (2).

15. Furniture element (1) according to claim 13 or 14, **characterized in that** a first guide fitting (4) is arranged between the base support plate (21) and the base plate (31) and a second guide fitting (4) is arranged between the top support plate (22) and the top plate (32).

16. Furniture element (1) according to one of claims 13 to 15, **characterized in that** the body part (3) can be moved relative to the support body (2) from a first functional position into a second functional position rotated by a predetermined angle relative to the starting position, the base plates (21, 31) and the top plates (22, 32) of the body part (3) and of the support body (2) being

aligned in matching geometries relative to one another in both functional positions.

Fig. 1

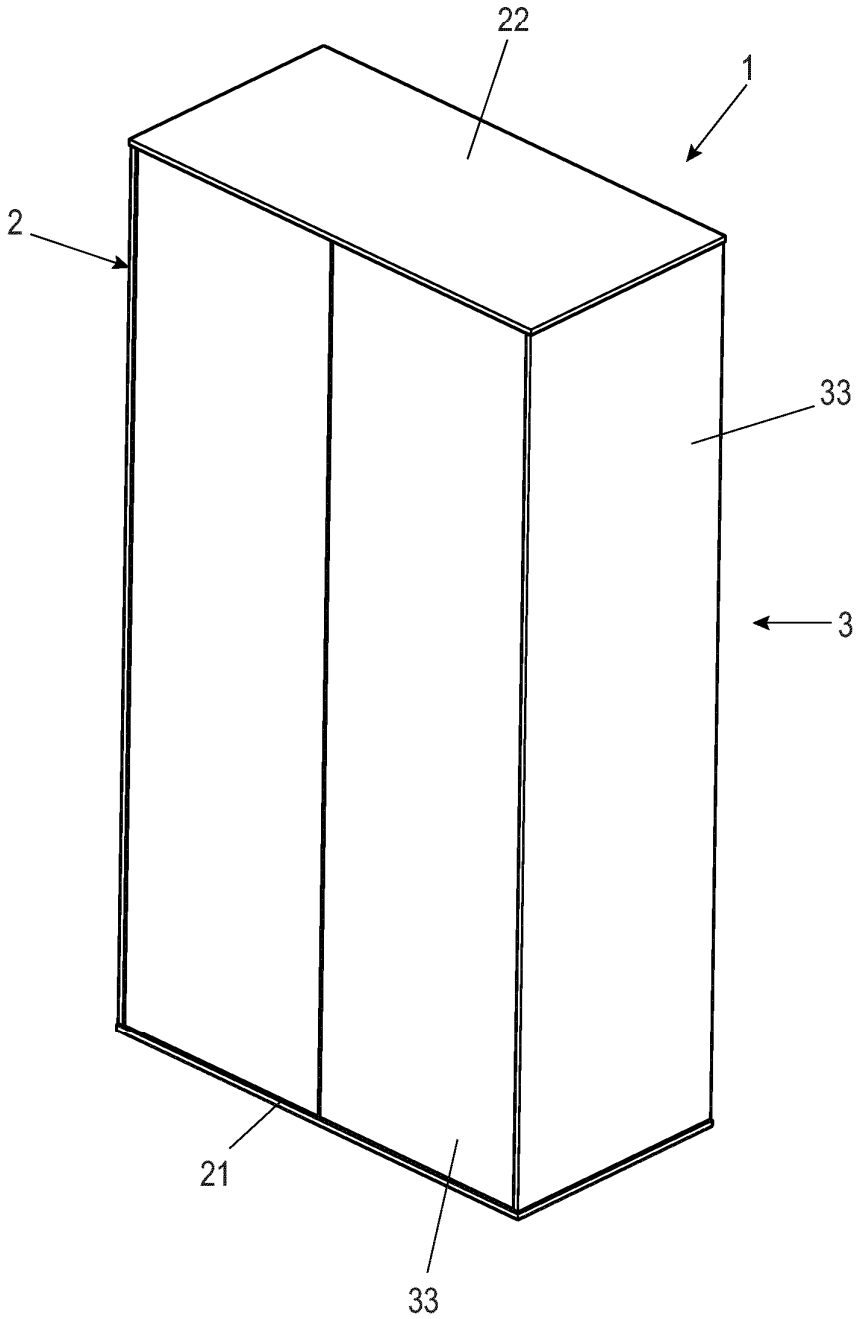

Fig. 2

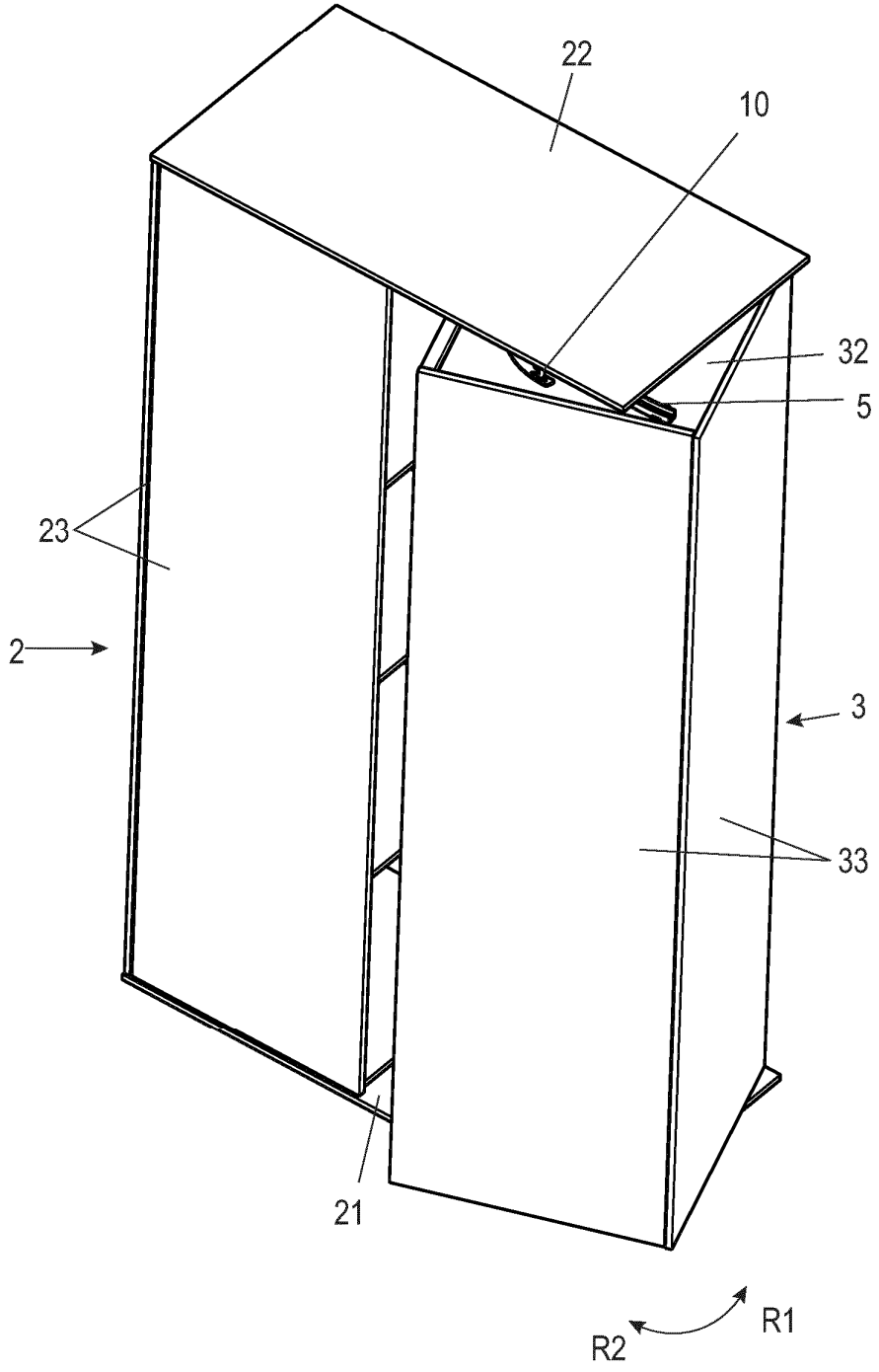

Fig. 3

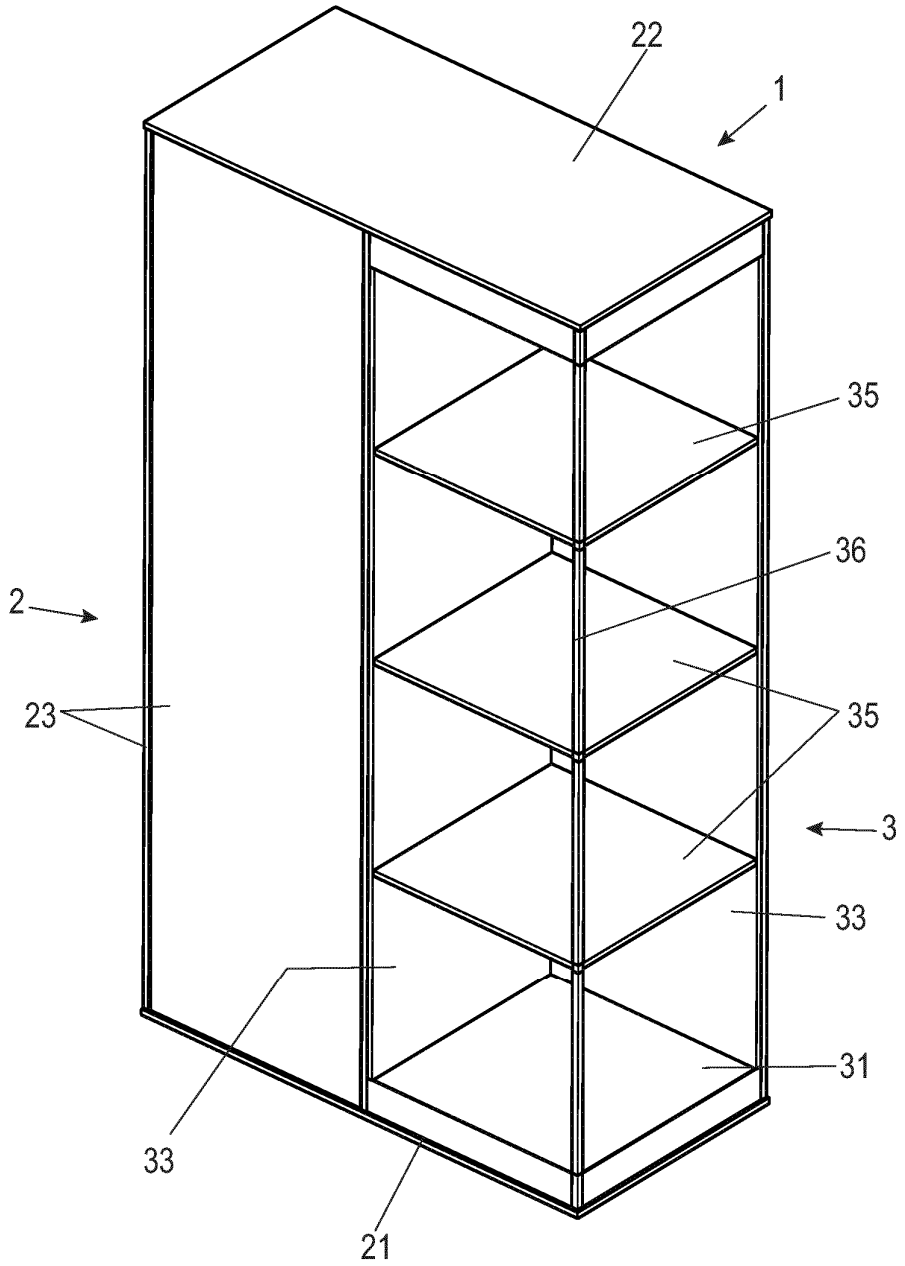

Fig. 4

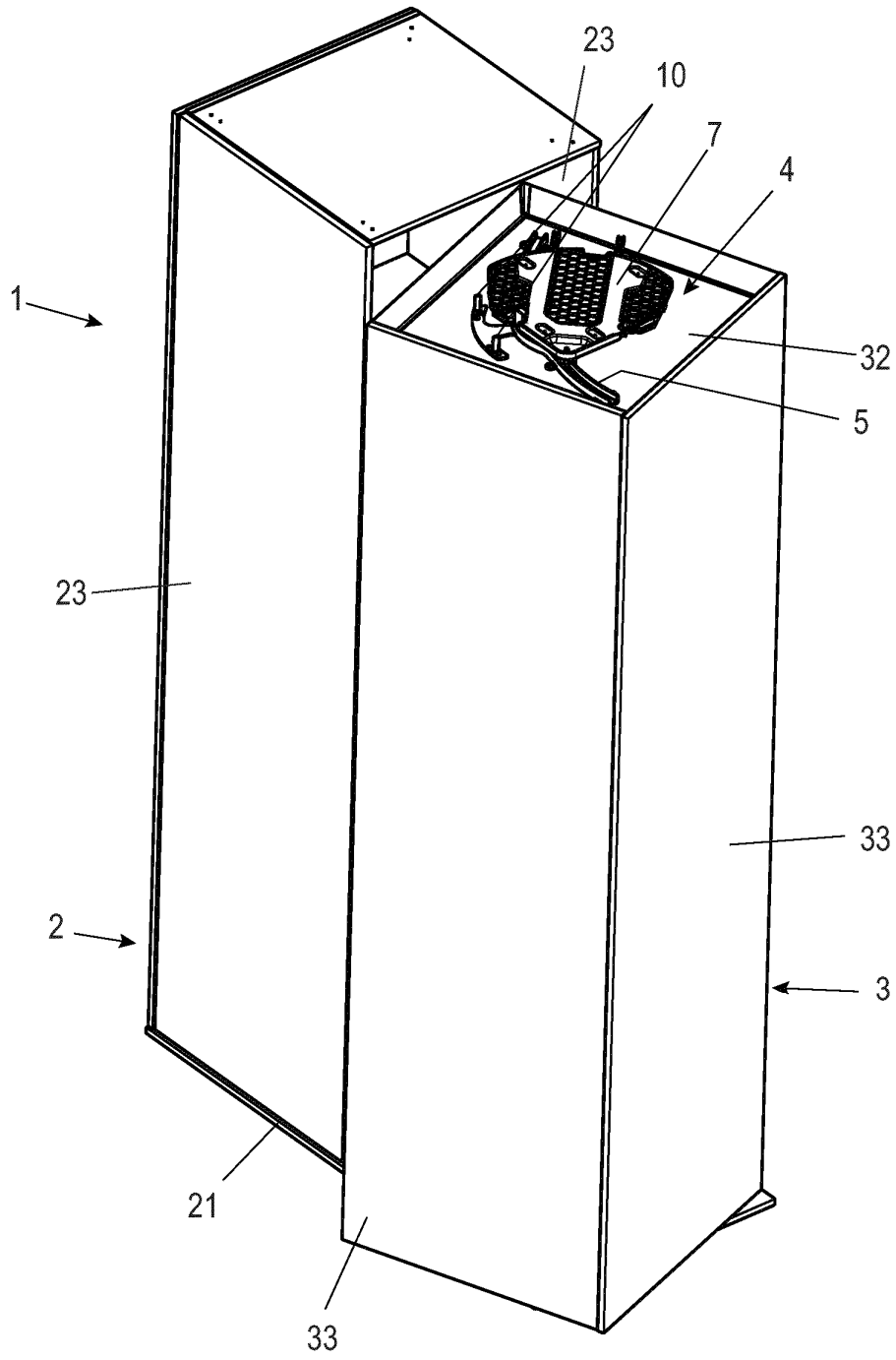

Fig. 5

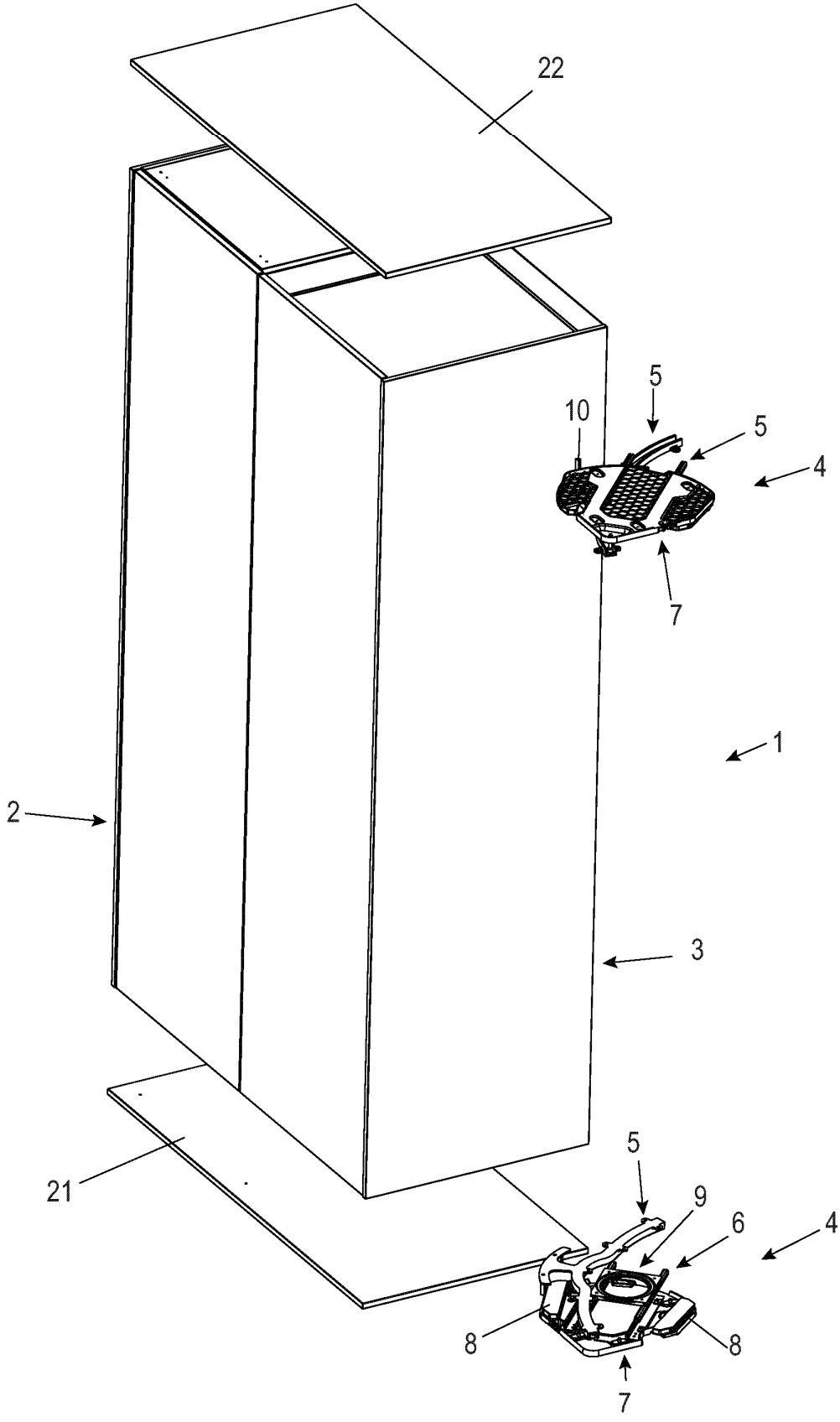

Fig. 6

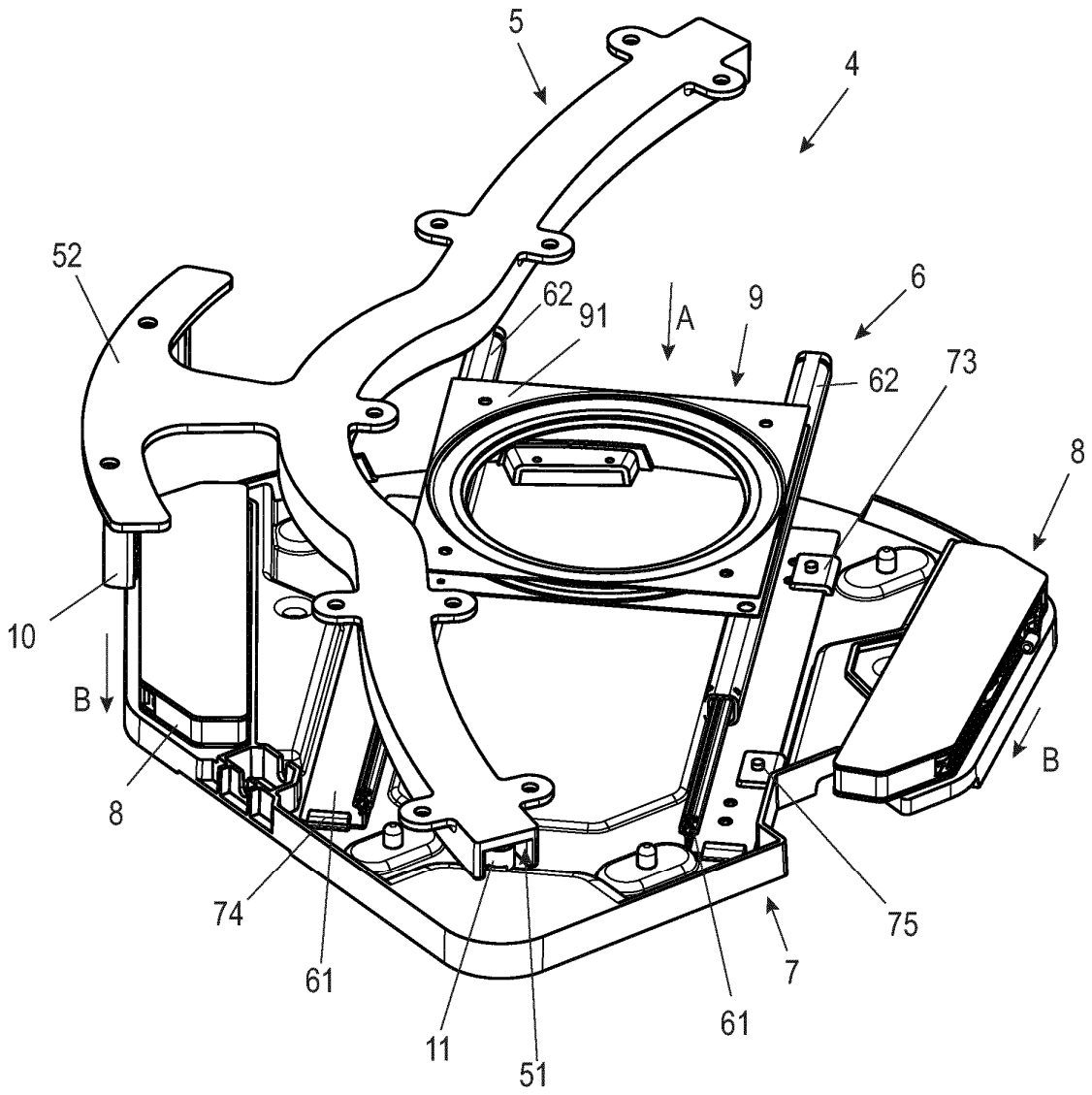

Fig. 7

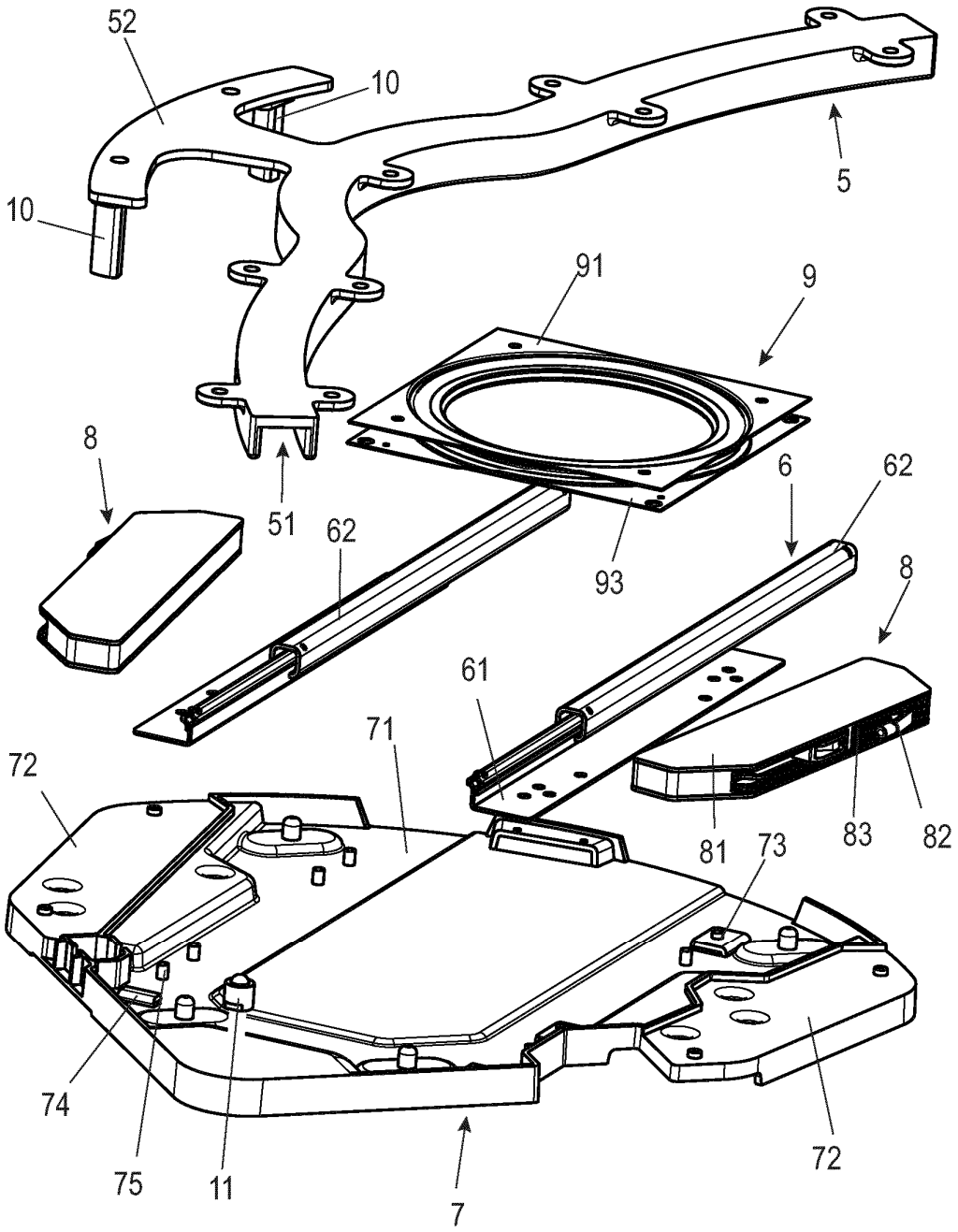

Fig. 8

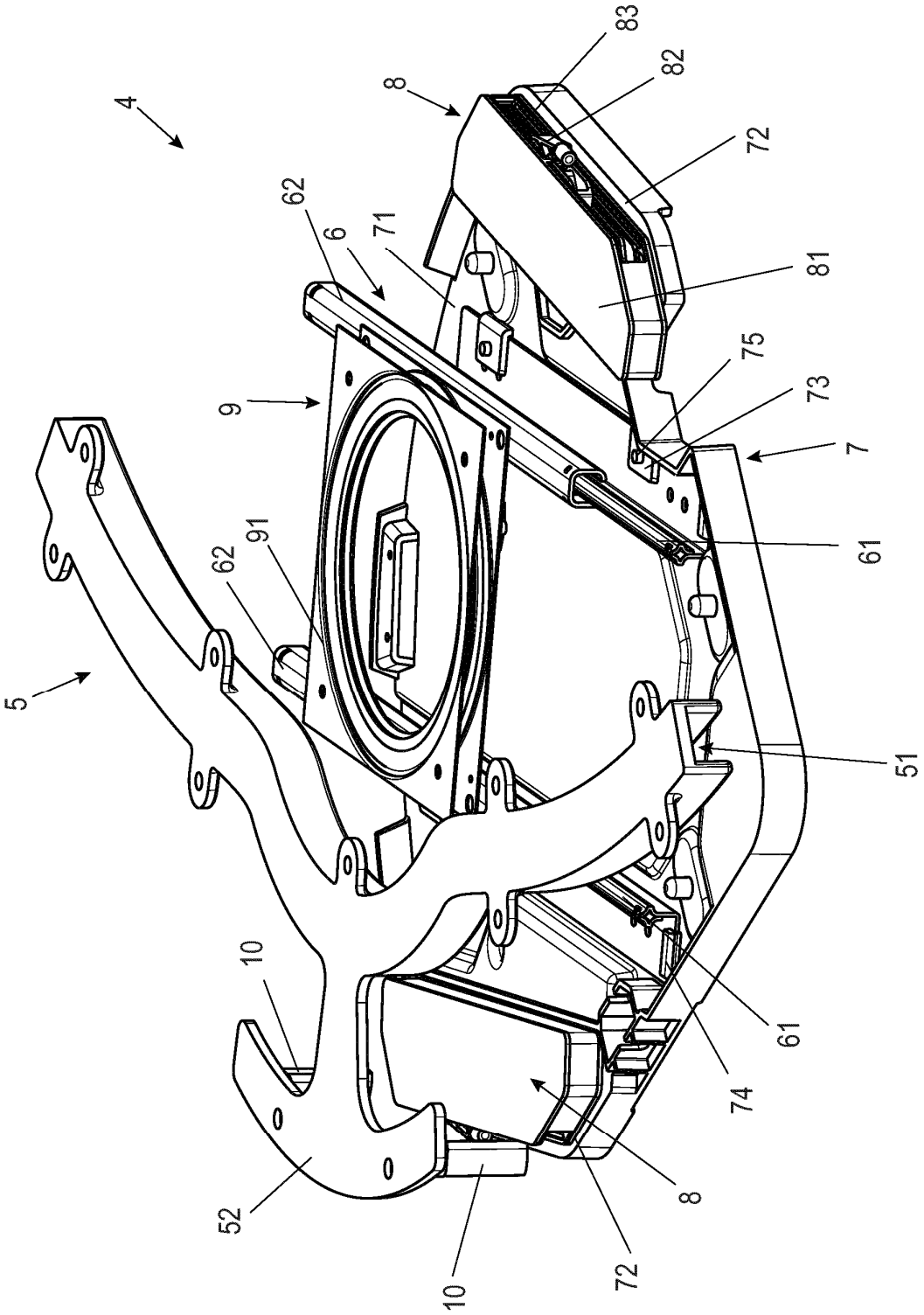

Fig. 9

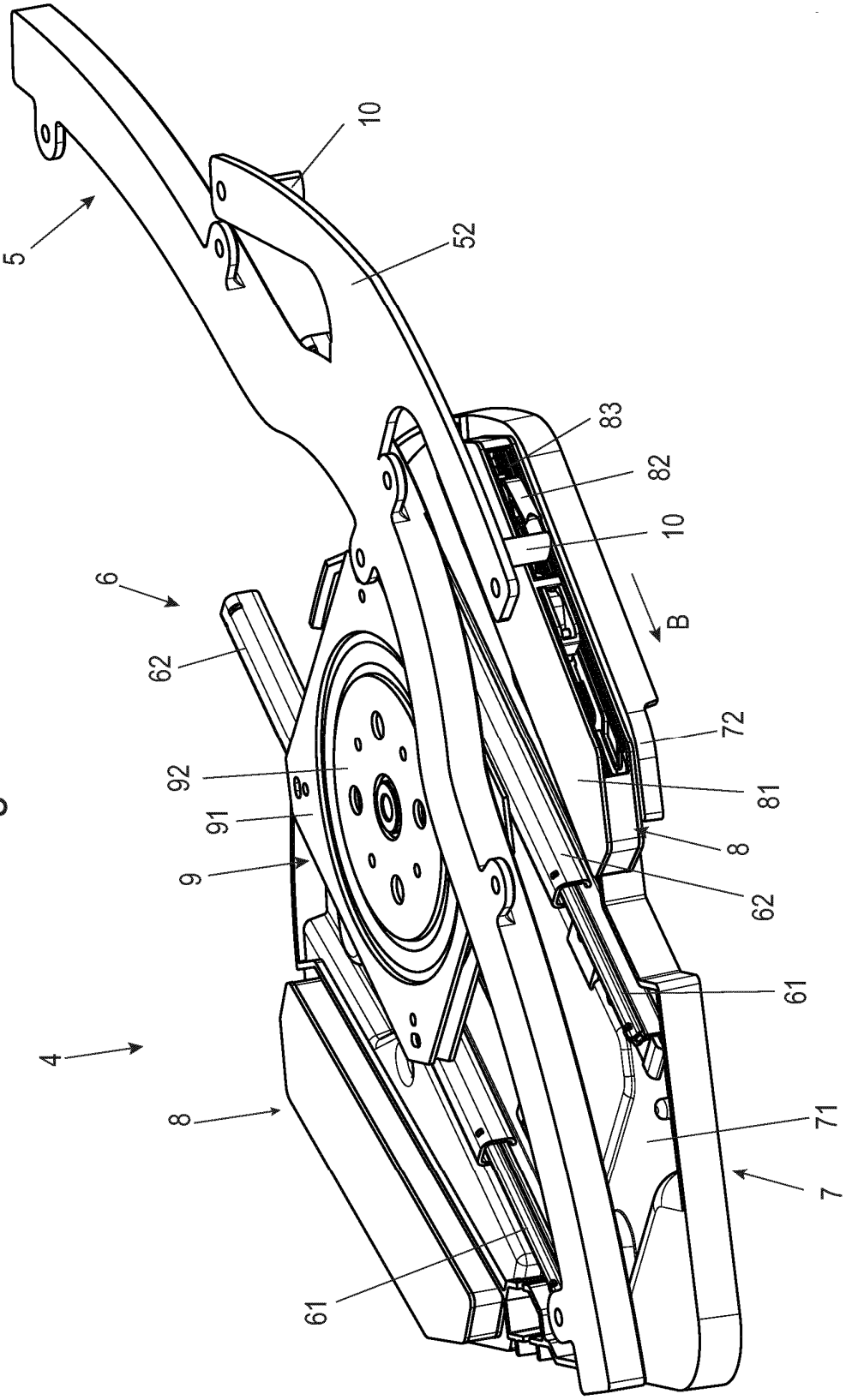

Fig. 10

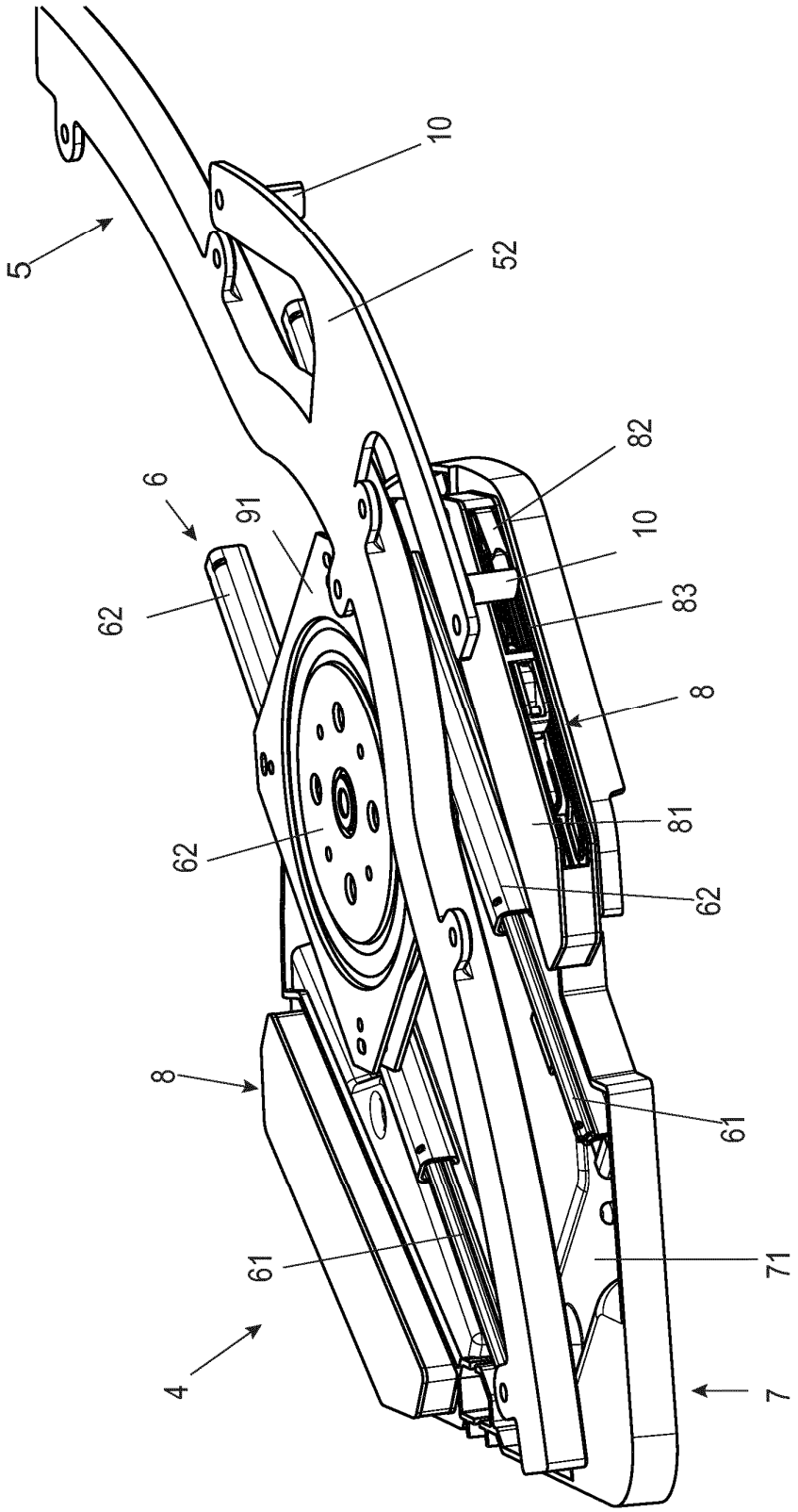

Fig. 11

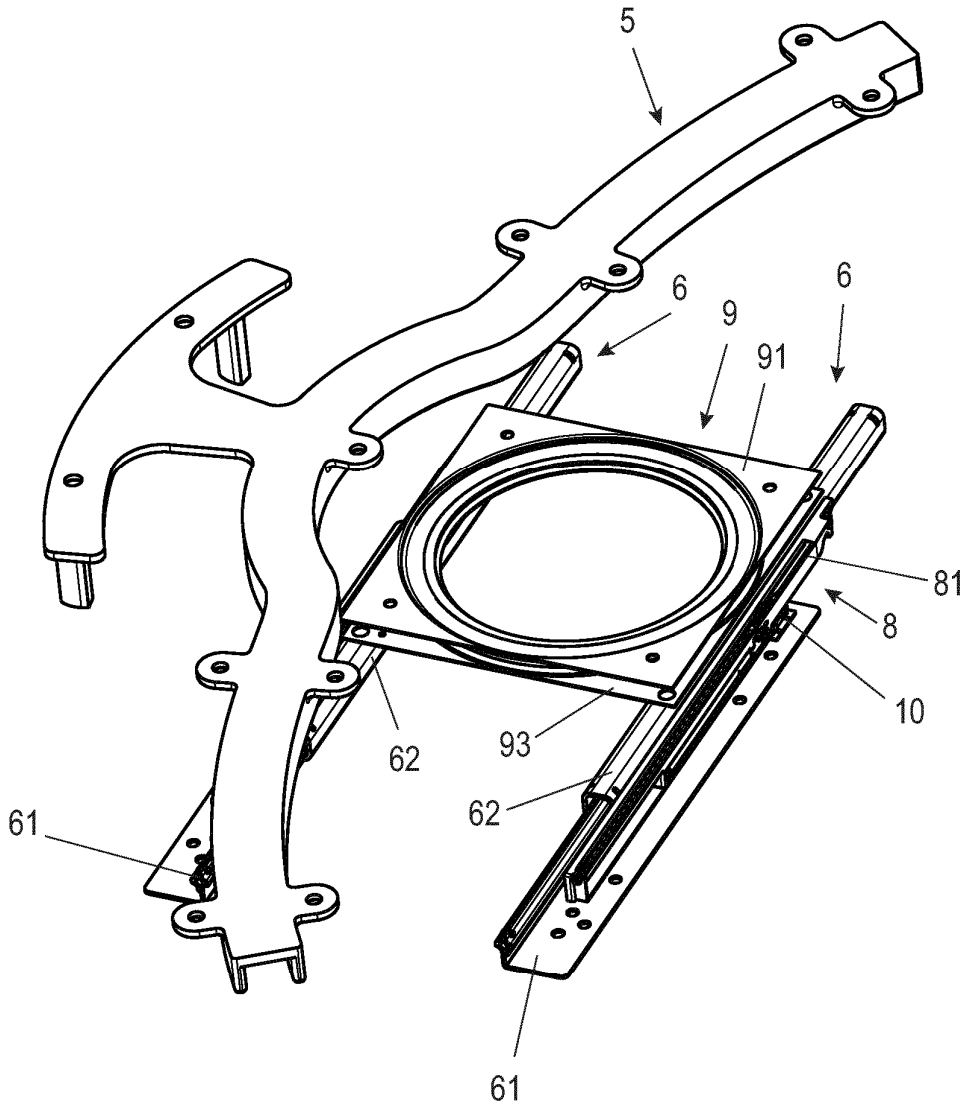

Fig. 12

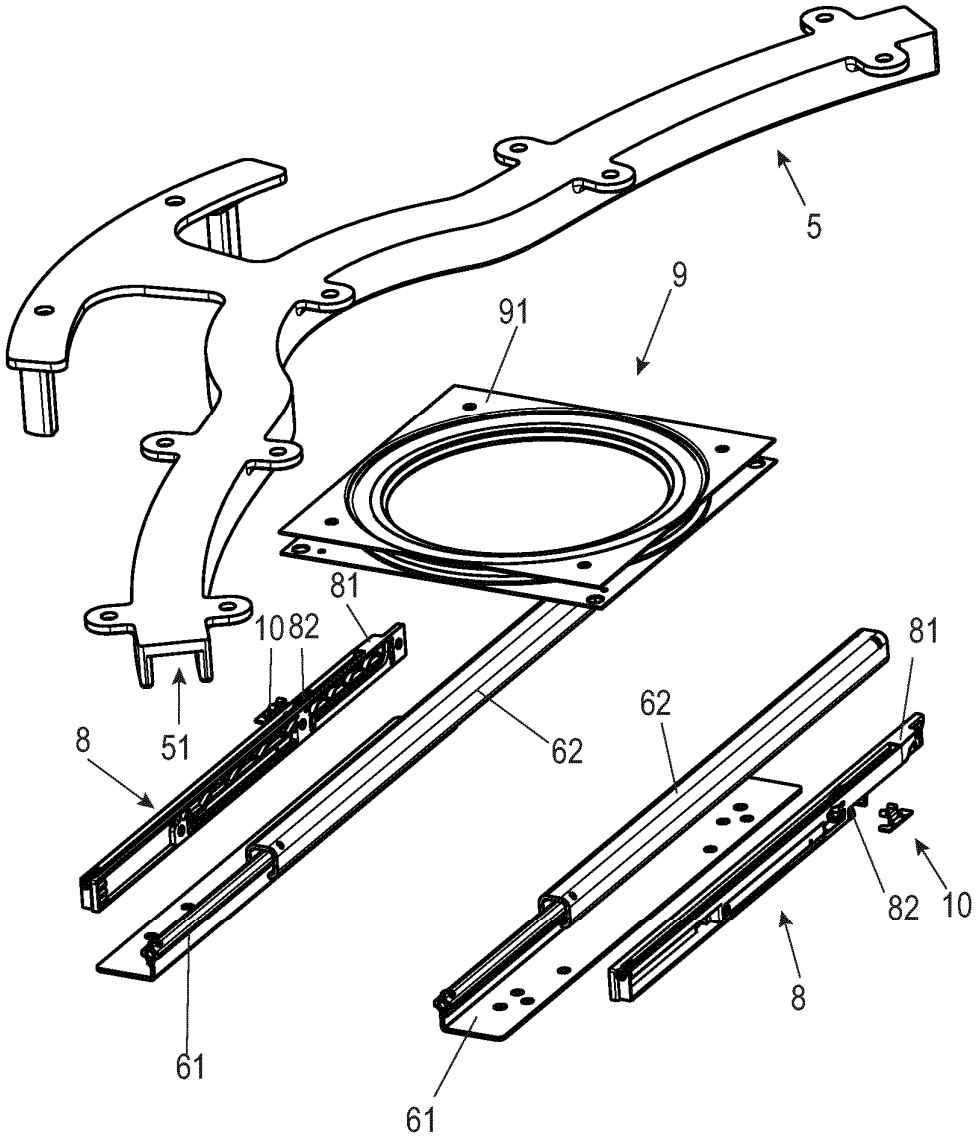

Fig. 13

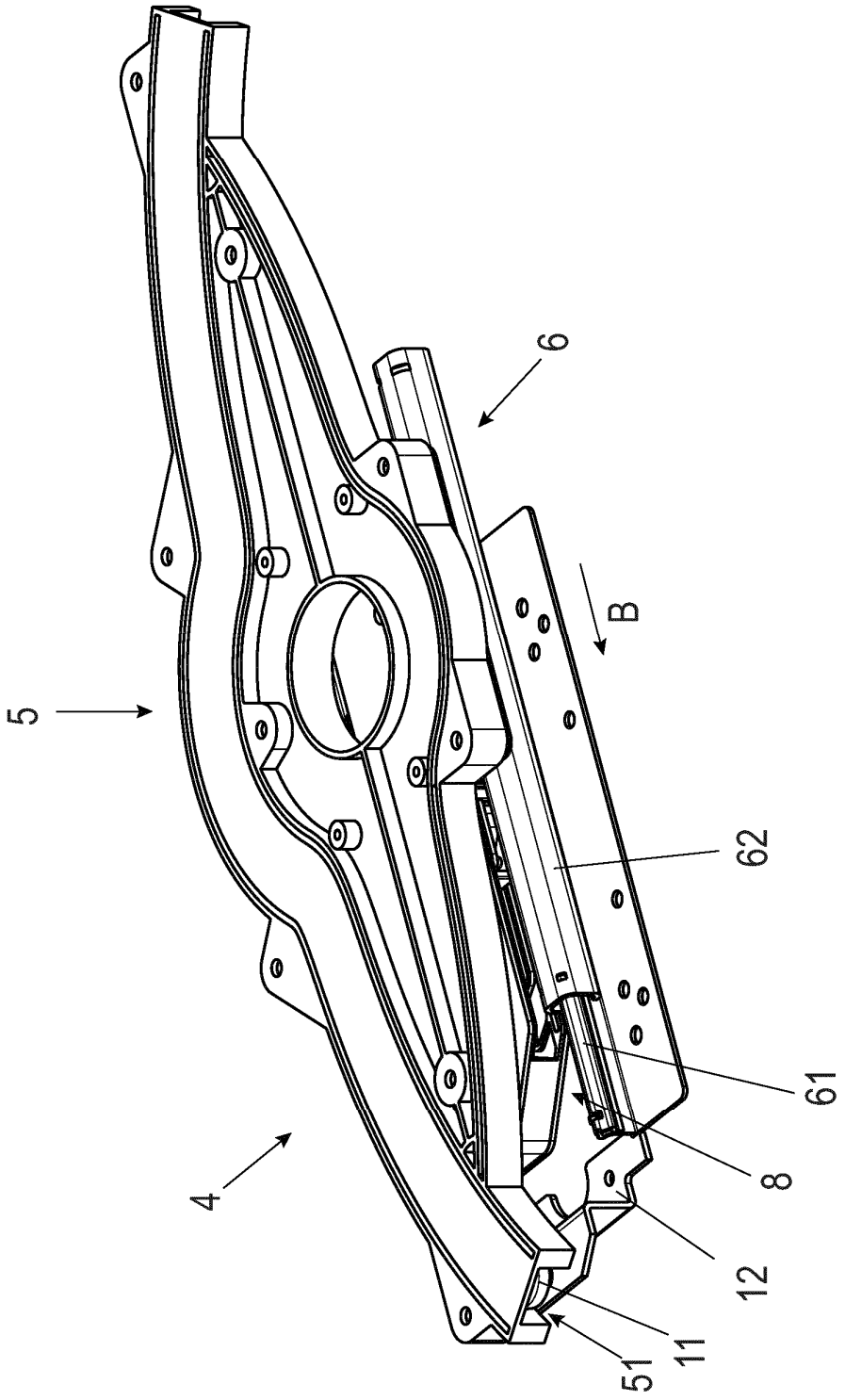

Fig. 14

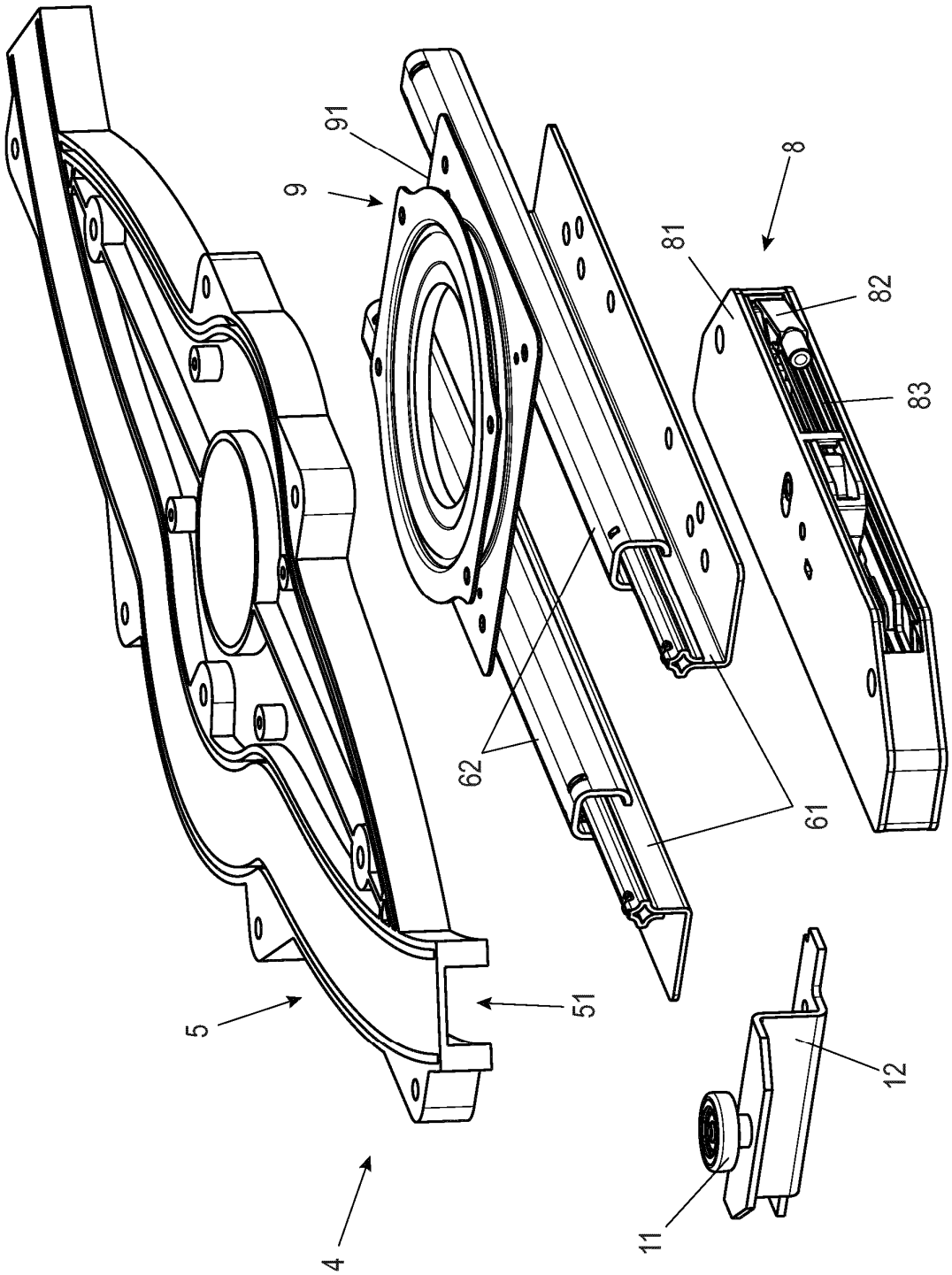

Fig. 15

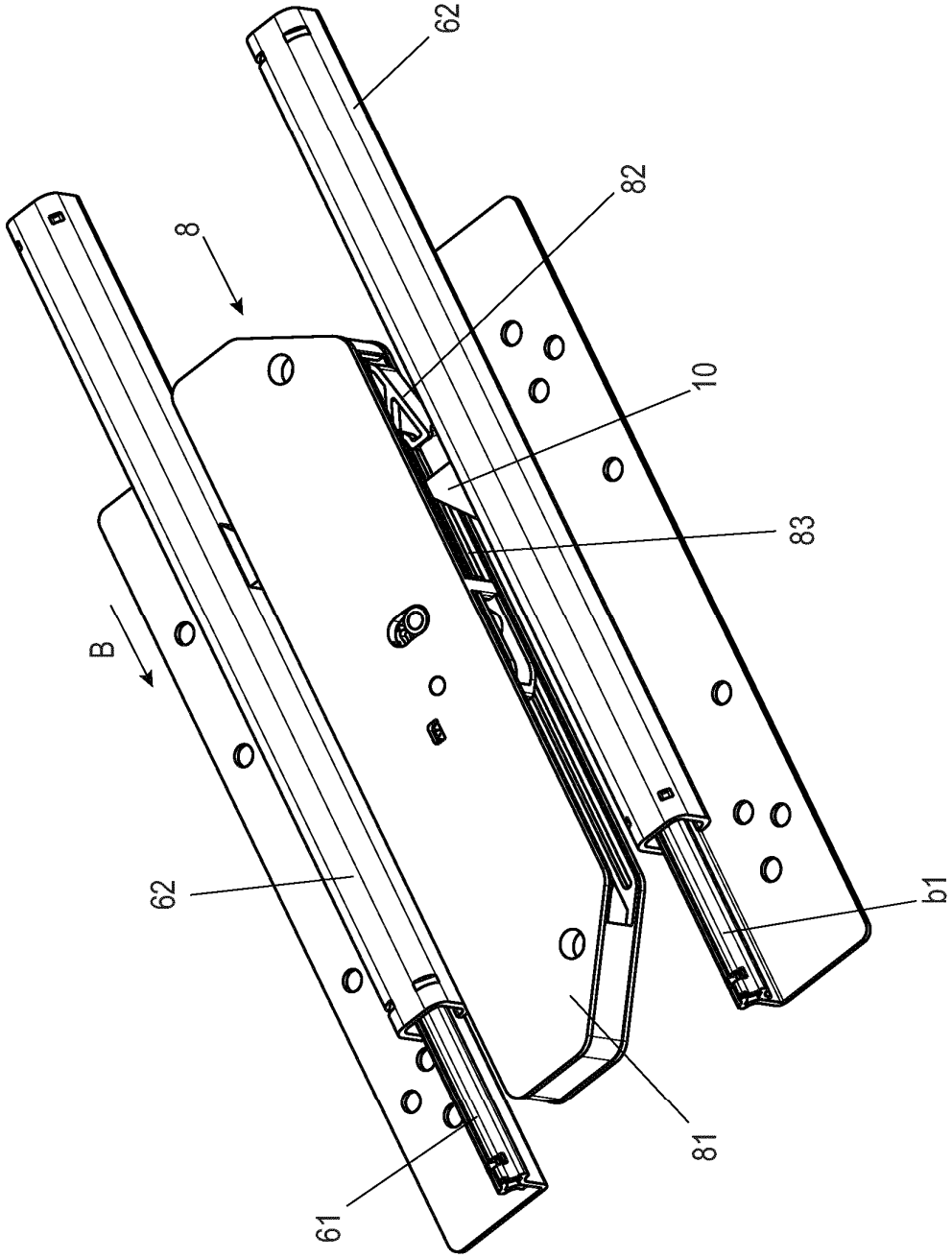

Fig. 16

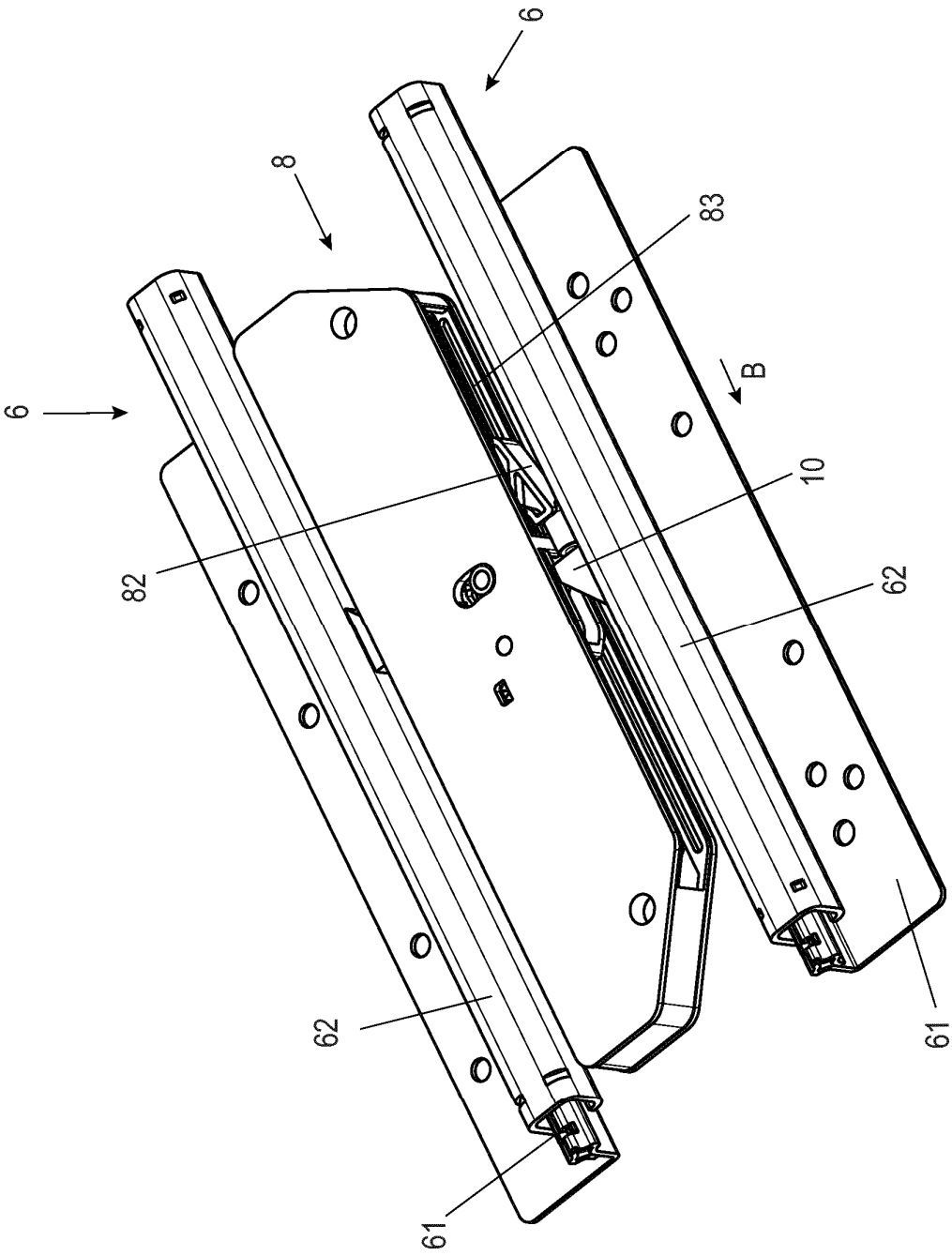

Fig. 17

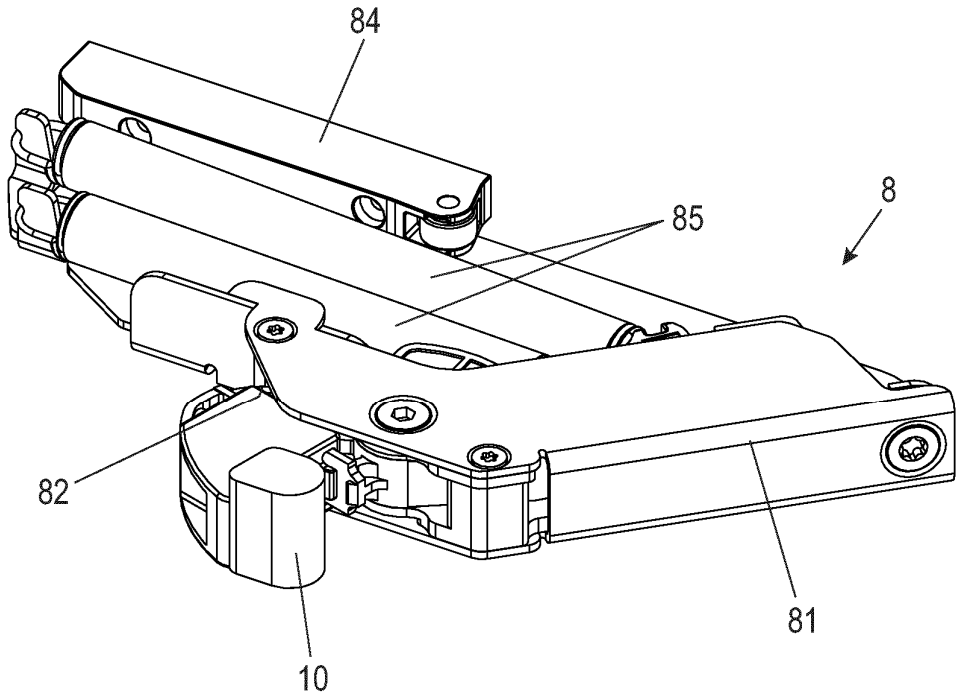

Fig. 18A

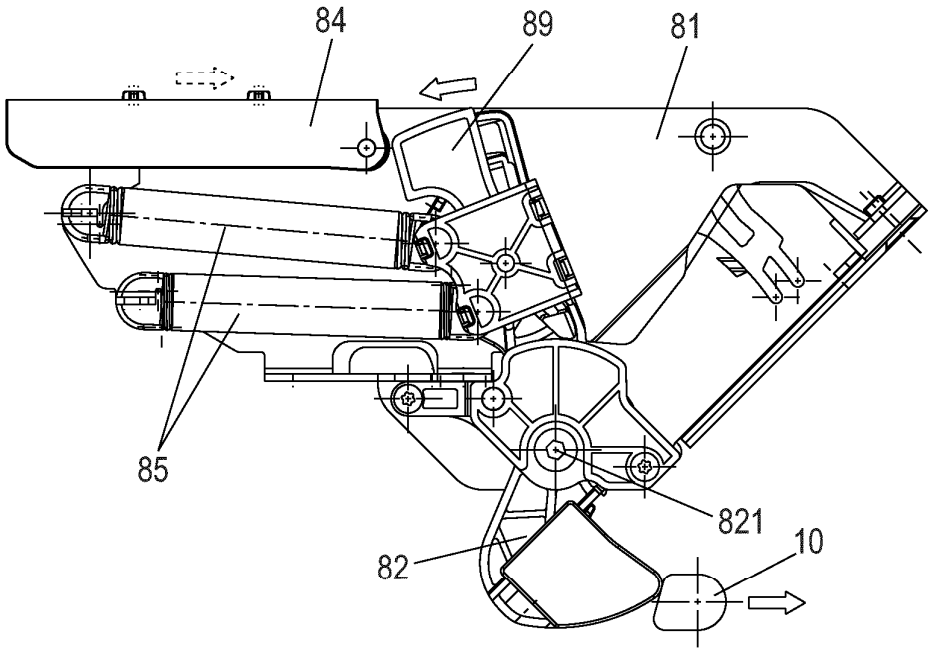

Fig. 18B

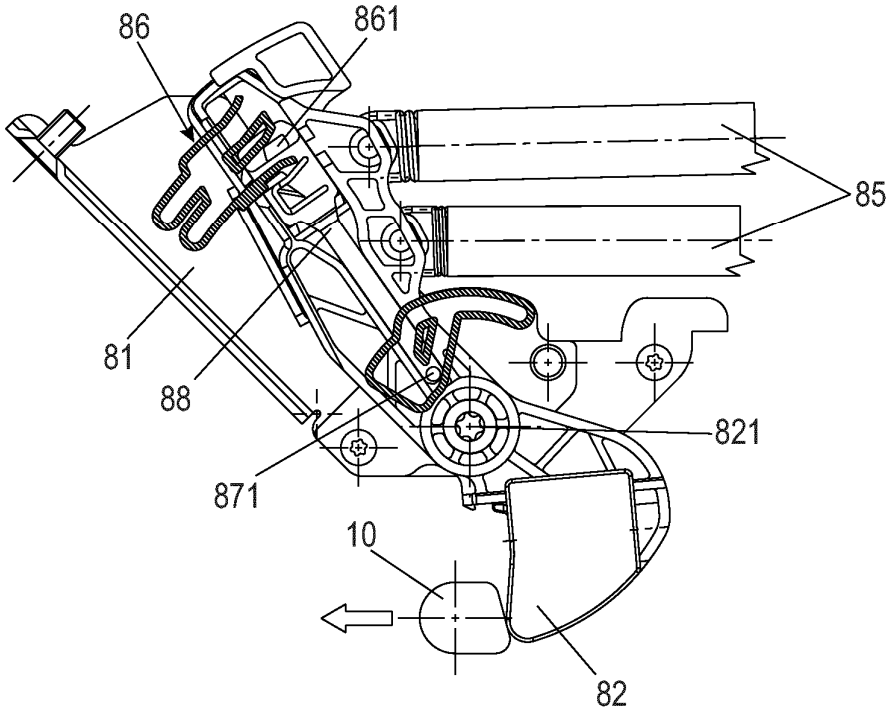

Fig. 18C

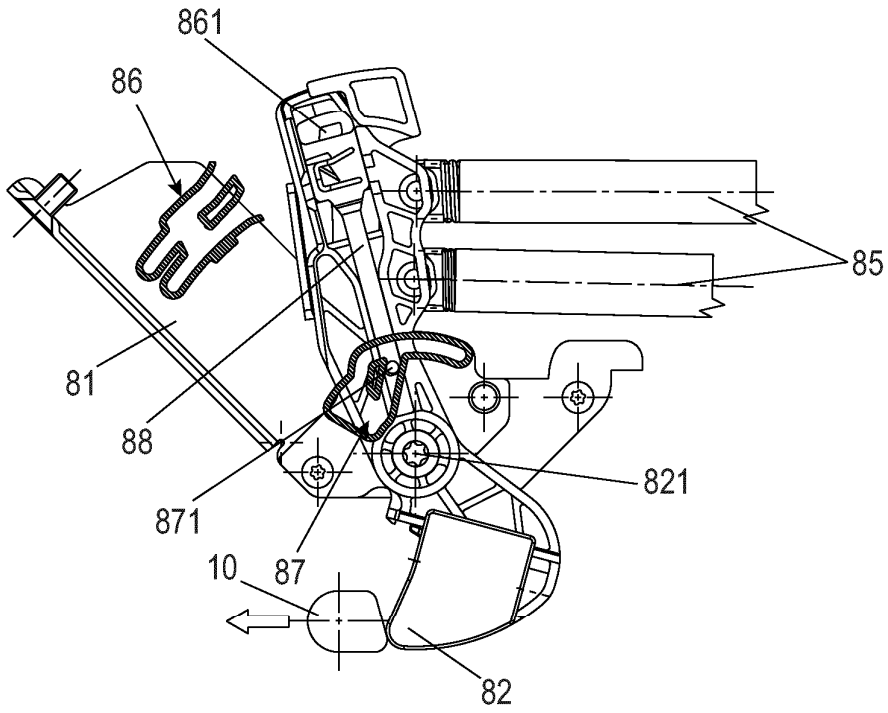

Fig. 18D

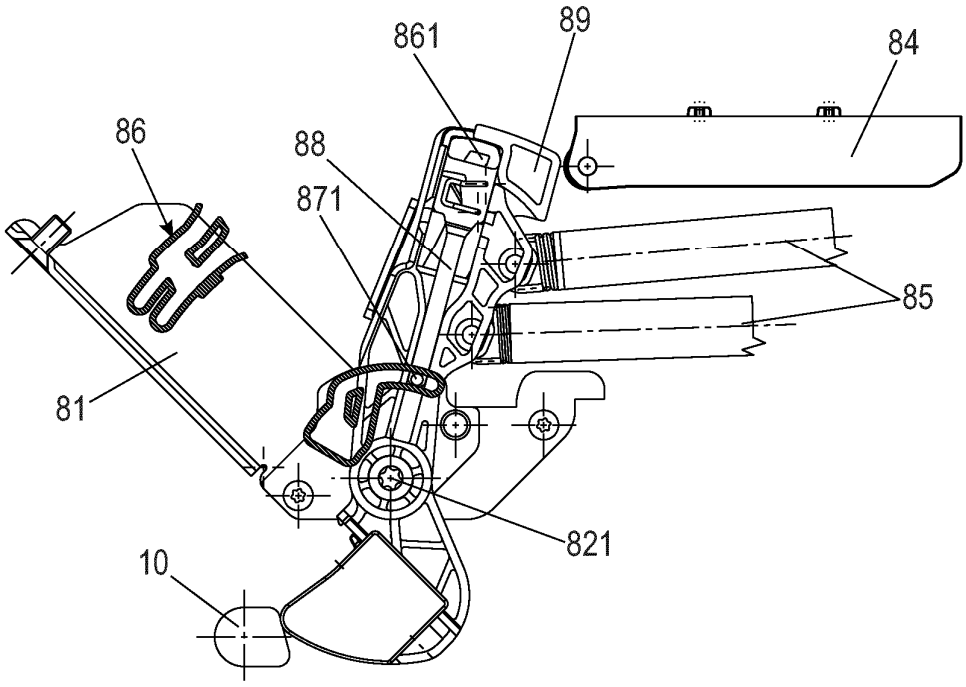

Fig. 19A

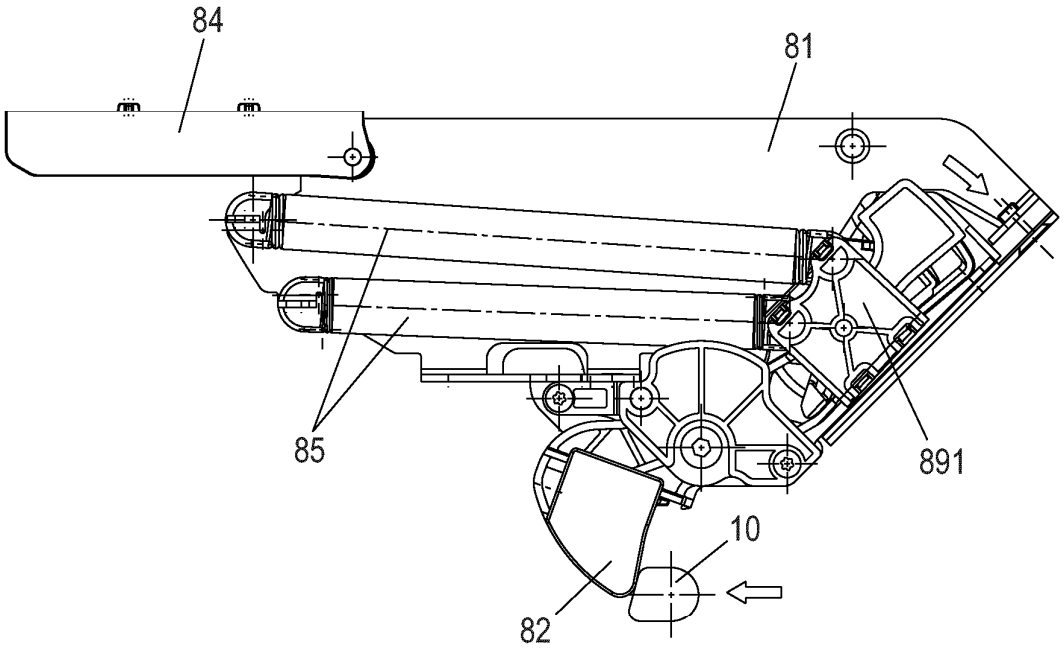

Fig. 19B

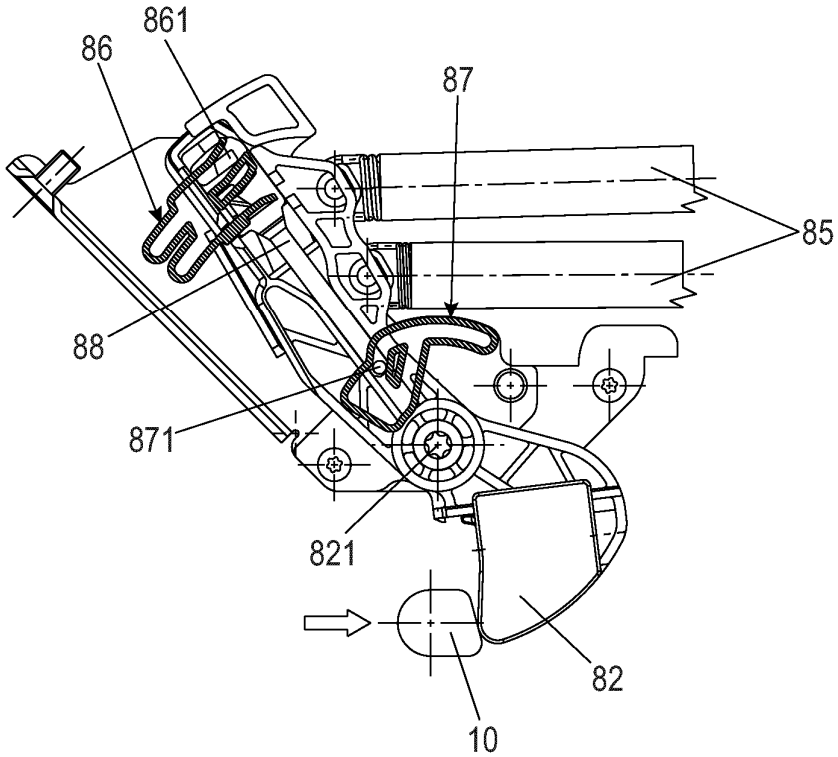

Fig. 19C

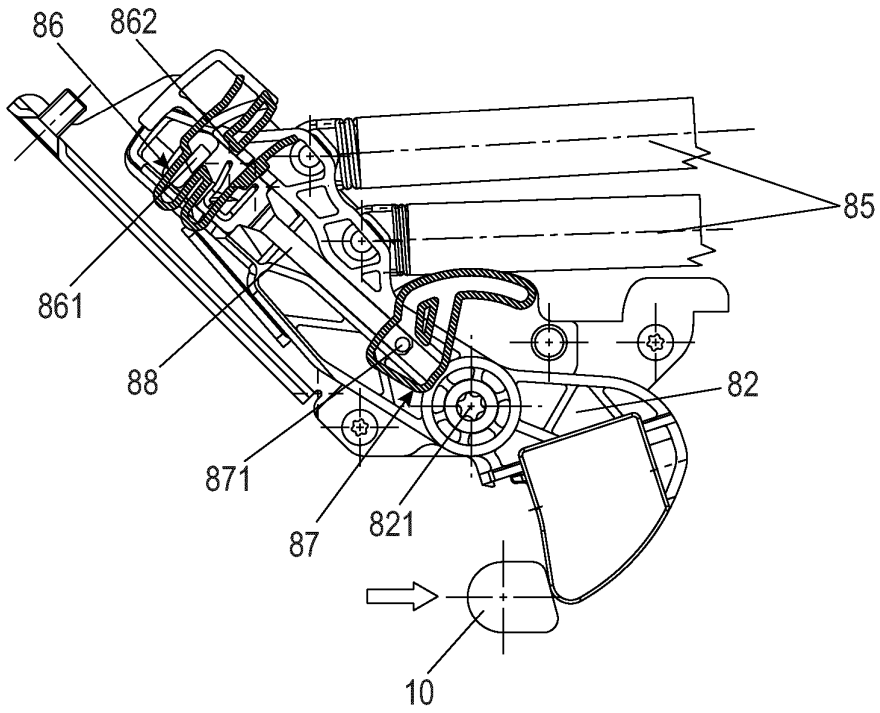

Fig. 19D