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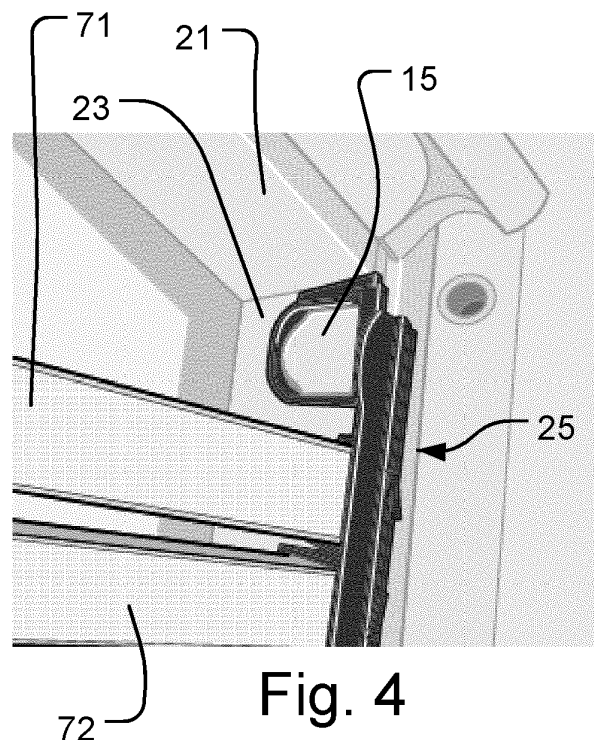
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(54) **A SCREENING ARRANGEMENT WITH IMPROVED MEANS FOR MOUNTING**

(57) A screening arrangement (1) for a window, in particular a roof window, having a supply condition and a condition of use, the screening arrangement defining, in the condition of use, a first longitudinal direction, and a second longitudinal direction, and a screening plane substantially parallel to a plane defined by the first and second directions, the screening arrangement compris-

ing at least one operating element (71, 72) extending in the first direction between a first end and a second end, a screening body (61), two side rails (8, 9), each extending, in the condition of use, in the second direction, and at least one fitting (25) releasably connected to the at least one operating element (71, 72) in the supply condition.



Description

[0001] The present invention relates to a screening arrangement for a window, in particular a roof window, having a supply condition and a condition of use, the screening arrangement defining, in the condition of use, a first longitudinal direction, and a second longitudinal direction, and a screening plane substantially parallel to a plane defined by the first and second directions, the screening arrangement comprising: at least one operating element extending in the first direction, a screening body, two side rails, each extending, in the condition of use, in the second direction, and at least one fitting releasably connected to the at least one operating element in the supply condition. The invention furthermore relates to a window frame comprising a screening arrangement, and to a method of mounting a screening arrangement in a window frame.

[0002] Such screening arrangements including screening devices in the form of blinds are traditionally used for screening an aperture of a building structure, most often the light-admitting aperture of windows, but also of doors and other building openings. The blinds are either installed to extend substantially vertically in a building façade, as in an obliquely positioned roof window installed in an inclined roof surface, or as a horizontally extending cover for openings in a horizontal surface. When not screening the aperture, the screening body is normally folded up and gathered at a top element.

[0003] The screening arrangements are retailed through a variety of channels including DIY stores. Thus, the screening arrangement most often arrives at a customer in the supply condition and, traditionally, the consumer himself or herself carries out the installation and mounts the screening arrangement in the window, thus bringing the screening arrangement from the supply condition to the condition of use.

[0004] In particular in roof windows installed in an inclined surface, the screening arrangement may be provided with means to prevent the screening body from hanging into the room, together with guiding means for guiding the screening arrangement during operation. Examples of such means could be provided by side rails, which also serve as guidance for the end edges of the screening body itself, or of end elements connected to the screening body. In addition, the side rails provide additional darkening in the case of black-out blinds. However, the provision of the side rails complicates the installation of the screening arrangement as well.

[0005] Furthermore, in the case the screening arrangement includes a cord system for ensuring parallel guidance and/or holding of the operating element or elements in the desired positions, the cords may complicate the mounting procedure.

[0006] This is even more pronounced in screening arrangements, in which both operating elements are movable in the second direction, i.e. without a top element or head rail to be connected to the sash or frame at the top

piece thereof. Hence, this applies i.a. to screening arrangements including a so-called Roman blind, in which the screening body is made from a flexible cloth including a number of pockets each with a stiffening transverse element, the ends of which are guided by the side rails via the connecting devices. In such a Roman blind, there is no head rail or top element to accommodate the screening body when folded up, but rather the screening body is fastened to one or two operating elements only. In particular in a roof window for installation in an inclined position, the mounting causes additional difficulties.

[0007] As such screening arrangements are provided in a supply condition, and the person performing the installation is most often not a craftsman, the mounting of the screening arrangement in the window frame, i.e. either a stationary frame or sash, or an openable sash, must be able to be carried out without too many difficulties and with a low risk of erroneous installation.

[0008] In order to ensure that the screening arrangement is installed correctly in the opening to be screened, a number of precautions have been taken. Examples of prior art arrangements setting out to facilitate the mounting procedure are known from for instance US 2009/0199977 A1, and Applicant's European patent No. 960 253 and published international applications Nos WO 2009/052822 A1, WO 2009/056134 A1 and WO 2009/065403 A1. In the first-mentioned WO document, a fitting is provided which is releasably attached to the top element and the bottom element to provide a predefined distance between these two elements. Although this fitting provides for facilitated installation of the screening arrangement, the field of use is limited to such screening arrangements in which a predefined distance between one top element and one bottom element is required.

[0009] With this background it is an object to provide a screening arrangement, which provides for increased flexibility regarding facilitated installation.

[0010] In a first aspect, this and further objects are met by a screening arrangement of the kind mentioned in the introduction, which is furthermore characterized in that the screening arrangement includes two operating elements and the screening body extends, in the condition of use, substantially in the screening plane between the two operating elements, each operating element being movable in said second direction, in that said at least one fitting is releasably connected with each operating element, at least one fitting being connected to the operating elements near their respective ends, and in that each fitting is provided with mounting bracket engagement means configured for releasable connection to a mounting bracket on the window.

[0011] In this manner, a new concept has been devised in that the screening arrangement provides for easy mounting by using a well-established mounting bracket already present on the window in a new manner to be able to facilitate the installation, even in such cases where no top element is provided to connect to the mounting

brackets fastened to the window.

[0012] It is noted that the term "releasable" should be interpreted as including any connection that is possible to release without damage to at least the elements of the screening arrangement.

[0013] In a constructionally simple and presently preferred embodiment which is easy to handle both during manufacture, installation and removal, the fitting comprises a main portion having an upper end and a lower end and provided with a first engagement means for connection to one operating element and a second engagement means for connection to the other operating element, and wherein the mounting bracket engagement means are formed at the upper end of the main portion.

[0014] In a further development of this embodiment, facilitating the installation process even further, the mounting bracket engagement means comprise a transition portion at the main portion and a number of flange portions around an aperture substantially having dimensions matching a mounting bracket on the window.

[0015] In still further developments, the number of flange portions of the mounting bracket engagement means include a first flange portion substantially parallel to the main portion of the fitting, a second flange portion and a third flange portion perpendicular to the first flange portion and extending away from the main portion, and a curved fourth flange portion connecting the second and third flange portions, preferably provided with a fifth flange portion connected to the fourth flange portion at right angles thereto and defining a curved abutment surface, said flange portions surrounding the aperture.

[0016] In those cases in which the screening arrangement is also provided with a cord system including at least one cord and the fitting includes a main portion, the fitting may include hook means for retaining said cord or cords temporarily, the hook means being preferably formed as at least one hook portion provided on the main portion, preferably with hook openings facing each other. This facilitates the installation yet further.

[0017] In those cases in which the screening arrangement is intended to be installed in a window provided with mounting brackets positioned on the side pieces and having a mainly rectangular shape, the mounting bracket engagement means of said fitting advantageously comprise an aperture in a plane substantially perpendicular to the screening plane.

[0018] Preferred embodiments of the invention are stated in dependent claims 2 to 14 and 17-19, respectively.

[0019] In a second aspect of the invention, a window frame comprising a screening arrangement is provided as stated in claim 15.

[0020] In a third aspect is provided a method of mounting a screening arrangement in a window frame as stated in claim 16.

[0021] The advantages of the second and third aspects of the invention and further developed embodiments also applicable to the second and third aspects of the inven-

tion have been explained in the above description, and reference is made thereto.

[0022] Further details are described, and further advantages stated, in the description of particular embodiments of the invention.

[0023] In the following the invention will be described in further detail by means of examples of embodiments with reference to the schematic drawings, in which

Fig. 1 is a perspective view of a window frame with a screening arrangement in an embodiment of the invention;

Fig. 2 is a front view of a window frame with details of a screening arrangement in an embodiment of the invention;

Fig. 3 is a perspective view of details of a screening arrangement in an embodiment of the invention;

Fig. 4 is a partial perspective view, on a larger scale, of a window and details of a screening arrangement in an embodiment corresponding to Fig. 2;

Figs 5a to 5c are views corresponding to Fig. 4 and showing the window and details of a screening arrangement in an embodiment corresponding to Fig. 2, in three different positions;

Fig. 6 is a partial perspective view, on a larger scale, of a window and details of a screening arrangement in an embodiment corresponding to Fig. 2;

Figs 7 to 9 show a window and details of a screening arrangement in an embodiment corresponding to Figs 2 and 3, in three different positions;

Fig. 10 shows a plan view, on a larger scale, of details of the screening arrangement of the embodiment of Figs 7 to 9;

Fig. 11 shows a perspective views of the details shown in Fig. 10; and

Figs 12 to 14 show perspective views, on a still larger scale, of the details of Fig. 10.

[0024] Fig. 1 shows an embodiment of a screening arrangement 1 according to the invention mounted in a window frame generally designated 2 and representing a window. In the embodiment shown, window frame 2 is an openable sash adapted to be mounted in a stationary frame to be installed in an inclined roof surface. It is noted that the terms "sash" or "frame" is to be understood as incorporating any substantially rectangular structure positioned in any opening in a building, whether in a wall or the roof, and surrounding an aperture to be screened.

[0025] As shown in Fig. 2, the window frame 2 is substantially rectangular and has a top piece 21, two side pieces 22, 23 and a bottom piece 24. Fig. 2 also shows some components of the screening arrangement 1 in one stage of the installation process, i.e. between a supply condition and a condition of use. The screening arrangement defines, in the condition of use, a first longitudinal direction, and a second longitudinal direction, and a screening plane substantially parallel to a plane defined by the first and second directions. The longitudinal direc-

tion of the top and bottom pieces 21, 24 corresponding to a width direction of the window frame is parallel to the first direction, and the longitudinal direction of the side pieces 22, 23 corresponding to a height direction is parallel to the second direction. The terms "left-hand" and "right-hand" refer to the orientation shown in for instance Figs 1 and 2, and are utilized for reasons of convenience only. Similarly, the terms "front" and "back" are utilized to denote the sides of the screening arrangement 1, "front" being the side intended to face inwards into the interior of a building, and "back" the outwards facing side. The terms "upper" and "lower" refer to the orientation of the screening arrangement installed in a frame, where "upper" refers to the top piece of the frame and "lower" refers to the bottom piece of the frame.

[0026] Fig. 3 shows other components of the screening arrangement 1 in one stage of the installation process, i.e. between a supply condition and a condition of use, viz. a screening device 6 comprising a screening body 61 and a plurality of transverse elements 64, of which one is shown as being connected to the screening body 61.

[0027] In the embodiment shown, the screening arrangement 1 is a Roman blind and the screening body 61 is made from a flexible cloth including a number of pockets 62 with openings 63 (cf. Fig. 7), each for reception of one transverse element 64 of said plurality of transverse elements. In the embodiment shown, the openings 63 of the pockets 62 are positioned on the back side of the screening body 61. The screening body could be provided with other means for receiving the transverse elements, such as for example being provided with integrated pockets in the screening body or for example loops.

[0028] The screening arrangement 1 comprises two operating elements 71, 72 extending in the first direction. The operating elements 71, 72 are adapted to act as handles in the condition of use, during operation of the screening arrangement 1, i.e. when moving the operating elements 71, 72 and hence the screening body 61 between a non-screening position and a screening position, in which the screening body 61 covers the sash or frame aperture partly or fully. The operating elements 71, 72 are formed in any suitable manner, for instance as extruded profile elements of a suitable material such as aluminium.

[0029] The screening body 61 extends, in the condition of use, substantially in the screening plane between the two operating elements 71, 72.

[0030] Two side rails 8, 9 are provided, each extending, in the condition of use, in the second direction, at the left-hand and the right-hand, respectively, side piece 22, 23 of the window frame 2. The side rails 8, 9 are formed by suitable means and materials, such as extruded profiles of aluminium and are connected to respective side pieces with fastening means such as screws and/or brackets to be described in further detail below.

[0031] As a preferred embodiment of the invention, the screening arrangement comprises a cord system com-

prising two cords 91, 92, one cord being adapted to extend from the left-hand lower corner of the sash or frame, up through or along the operating elements 71, 72 and further up to the top piece 21 of the window frame 2. The other cord is routed in a mirror-inverted manner. At the respective operating elements 71, 72, each cord is connected with a cord tightening device which is described in further detail in Applicant's co-pending application filed on the same date as the present application. The cord tightening devices entail that the cords are held suitably tight all the time during use, thereby ensuring that the operating elements 71, 72 at all times are kept substantially in parallel with the top and bottom pieces of the window frame, and makes it possible to retain the operating elements 71, 72 in an arbitrary position measured in the second direction, i.e. along the side pieces 22, 23 of the window frame 2. In principle, cords 91, 92 may be routed along at least the side pieces 22, 23 of the window frame and the operating elements 71, 72 as deemed suitable to ensure proper functioning. For instance, a so-called "H system" or "double H system" may be provided.

[0032] Eventually, Fig. 2 shows a transportation and mounting fitting 25 which acts as retaining means for the operating elements 71, 72 and the cord system in the supply condition, and also has a function during the mounting of the screening arrangement 1 in the window frame 2 as illustrated in Figs 4, 5a to 5c, and 6. As will be described in further detail below, the transportation and mounting fitting 25 is releasably connected to a mounting bracket 15 fastened to the side pieces 22, 23 of the window frame 2 to hold the operating elements 71, 72 in the correct position temporarily.

[0033] Figs 7 to 9 show further overviews of stages of installation of the screening arrangement, and attention is brought to a plurality of connecting devices 5 connecting, in the condition of use, the transverse elements 64 with a respective side rail 8, 9. Details of connecting devices 5 and the mounting thereof are described in further detail in one of Applicant's co-pending applications filed on the same date as the present application. The screening body 61 is at a first end edge 65 and a second end edge 66 provided with fastening means for fastening to a respective operating element 71, 72. These fastening means are releasable in the described embodiment, for instance Velcro, but other fastening techniques are conceivable.

[0034] In the following, details regarding the fitting 25 constituting a transportation and mounting fitting will be described in further detail with particular reference to Figs 10 to 14.

[0035] As mentioned, the screening arrangement is a Roman blind and includes two operating elements 71, 72 and the screening body 61 extends, in the condition of use, substantially in the screening plane between the two operating elements 71, 72.

[0036] One fitting 25 is releasably connected to the operating elements 71, 72 near their respective ends in the condition of use shown in Figs 10 and 11. Here, also the

cord system is shown including two cords 91, 92 and two respective cord holder blocks 911, 921 (cf. also the over-view of Fig. 2).

[0037] Referring now to the more detailed views of Figs 12 to 14, each fitting 25 is adapted to be releasably connected to the mounting bracket 15 present on the window (cf. Fig. 4). To that end, each fitting 25 is provided with mounting bracket engagement means 26 configured for releasable connection to the mounting bracket 15 on the window.

[0038] The mounting bracket engagement means 26 of the present embodiment is hence configured to be connected to the mounting bracket 15 described in the above and fastened to the side pieces of the window. The mounting bracket engagement means may thus be modified to interact with mounting brackets of other kinds and/or positioned differently on the window.

[0039] In the embodiment shown, the fitting 25 comprises a main portion 251 having an upper end and a lower end and provided with a first engagement means 253, 254 for connection to one operating element 71 and a second engagement means 255, 256 for connection to the other operating element 72. The mounting bracket engagement means 26 are formed at the upper end of the main portion 251.

[0040] Shown in these Figures is also a cord tightening device 4 which provides suitable pre-tension of the cords as described briefly in the above. For details regarding the cord tightening device 4 reference is made to Applicant's co-pending application filed on the same date as the present application. The relevant parts of the cord tightening device 4 are shown in Fig. 12. From here, it emerges that a base member 41 of the cord tightening device 4 is used alone without a shifter member 42 and then functions as an end member providing guidance in the side rails 8, 9 and ensures that smooth guidance of the cords 91, 92 is provided. This is the case in the present embodiment, in which one base member 41 is connected to each end of each operating element 71, 72 and one shifter member 42 is connected to one of the two base members 41 of each operating element 71, 72 as shown in Fig. 4. Each base member 41 is provided with a multi-purpose end element in the form of an end guide 418 to cooperate with a corresponding track in the side rails 8, 9.

[0041] In the specific embodiment, the mounting bracket engagement means 26 comprise a transition portion 261 at the main portion 251 and a number of flange portions 262-266 around an aperture 267 substantially having dimensions matching a mounting bracket 15 on the window. The flange portions may either surround the aperture in full, or in part, for instance formed as a claw or a fork. The mounting bracket 15 is in itself well-known and is for instance the subject of Applicant's published international application No. WO 2005/008013 A1 and several other patent publications. A commercially available variety is for instance the pre-installed mounting brackets which come as standard on every roof window

of the brand VELUX®.

[0042] To match the above-identified or other mounting brackets, the number of flange portions of the mounting bracket engagement means 26 include a first flange portion 262 substantially parallel to the main portion 251 of the fitting 25, a second flange portion 263 and a third flange portion 266 perpendicular to the first flange portion 262 and extending away from the main portion 251, and a curved fourth flange portion 264 connecting the second and third flange portions 263, 266. To ensure a particularly reliable intermediate condition, the engagement means 26 are here provided with a fifth flange portion 265 connected to the fourth flange portion 264 at right angles thereto and defining a curved abutment surface.

[0043] In the embodiment shown, in which a cord system is provided including at least one cord 91, 92, each fitting 25 includes hook means 258, 259 for retaining said cord or cords, in the embodiment shown two cords 91, 92, temporarily, and are here formed as at least one hook portion 258, 259 provided on the main portion 251. Here, two hook portions 258, 259 are provided on the main portion 251 with hook openings facing each other. Furthermore, in the embodiment shown the cords 91, 92 are provided with at least one cord holder block 911, 921, 912, 922, wherein the cord holder blocks 911, 921, 912, 922 are retained on said fitting 25 in the supply condition and are adapted to be brought into engagement with the side rails 8, 9 in the condition of use.

[0044] Once the intermediate condition is to be terminated to continue the mounting with other steps, it is important that the transportation and mounting fittings 25 are easily removed. To that end, each fitting 25 is here provided with removal assisting means 252, 257. In the specific embodiment, the removal assisting means comprise an ear section 252 provided at the upper end of the main portion 251, and the removal assisting means also comprise a handle section 257 at the lower end of the main portion 251.

[0045] In principle, the mounting bracket engagement means 26 of said fitting 25 may take any suitable form. In the embodiment shown, the mounting bracket engagement means 26 are configured to cooperate with a mounting bracket 15 taking the form of a mainly rectangular mounting bracket fastened to the respective side piece of the window, and hence, the mounting bracket engagement means 26 comprise an aperture 267 in a plane substantially perpendicular to the screening plane. This ensures an easy mounting of the screening arrangement from the supply condition to the intermediate condition in which a reliable temporary retention is obtained, allowing the installer to reach out for other components of the screening arrangement and to prepare further components for installation. In order to cooperate with other types of mounting brackets having different shapes and/or positions on the window, the mounting bracket engagement means of the fitting may be configured differently in order to ensure the releasable connection aimed at.

[0046] As described in the above, the window frame 2 includes a top piece 21, two side pieces 22, 23 and a bottom piece 24, and the longitudinal direction of the top and bottom pieces 21, 24 corresponding to a width direction of the window frame is parallel to the first direction, and the longitudinal direction of the side pieces 22, 23 corresponding to a height direction is parallel to the second direction, and wherein a mounting bracket 15 is fastened to each side piece 22, 23 at or near the top piece 21.

[0047] The mounting of the screening arrangement is made feasible by the features presented in the above, and the procedure is hence the following: mounting a screening arrangement in a window frame including a top piece 21, two side pieces 22, 23 and a bottom piece 24, and a mounting bracket 15 is fastened to each side piece 22, 23 at or near the top piece 21, comprising the steps of:

providing the screening arrangement in a supply condition, comprising two operating elements 71, 72, a screening body 61, two side rails 8, 9, and two fittings 25 releasably connected to both operating elements 71, 72,

connecting the fittings 25 to the respective mounting bracket 15 to attain an intermediate condition, the side rails 8, 9 with the operating elements 71, 72 by inserting the side rail 8, 9 over end elements 418 and sliding the side rail upwards,

connecting the side rails 8, 9 to the respective side piece 22, 23,

removing the fittings 25 from the mounting brackets 15 to terminate the intermediate condition, and connecting the screening body 61 to the operating elements 71, 72 to provide a condition of use.

[0048] For the embodiment shown, in which the step of providing the screening arrangement in the supply condition includes the provision of a cord system with cords 91, 92 held to the fittings 25, and wherein the additional step of connecting the cords 91, 92 stationarily with respect to the window frame is present before the step of removing the fittings. In that case the cord holder blocks 911, 921 and the step of connecting the cords 91, 92 includes connection of the cord holder blocks 911, 921 to a respective end of the side rails 8, 9.

[0049] A handle (not shown) may be connected to one of or both operating elements 71, 72 before the screening body 61 is connected to the operating elements 71, 72. Such a handle may for instance be an angular bracket which is snapped on to the operating element.

[0050] In the case in which the step of providing the screening arrangement in the supply condition includes the provision of a plurality of transverse elements 64 having two opposite ends, and a plurality of connecting devices 5, and the additional steps of

- connecting the transverse elements 64 to the screening body 61,

- connecting the connecting devices 5 with the side rails 8, 9 such that one half of the connecting devices are connected to one side rail 8, and the other half to the other side rail 9, between the operating elements 71, 72 in either side, and
- connecting the transverse elements 64 with the connecting devices 5,

are present before the step of connecting the screening body to the operating elements 71, 72.

[0051] Although the screening arrangement of the embodiments shown comprise one screening device having two operating elements, other configurations are conceivable. For instance, there may be more than two operating elements.

[0052] The invention should not be regarded as being limited to the described embodiments. Several modifications and combinations of the different embodiments will be apparent to the person skilled in the art.

Claims

1. A screening arrangement (1) for a window, in particular a roof window, having a supply condition and a condition of use, the screening arrangement defining, in the condition of use, a first longitudinal direction, and a second longitudinal direction, and a screening plane substantially parallel to a plane defined by the first and second directions, the screening arrangement comprising:

at least one operating element (71, 72) extending in the first direction between a first end and a second end,

a screening body (61);

two side rails (8, 9), each extending, in the condition of use, in the second direction, and

at least one fitting (25) releasably connected to the at least one operating element (71, 72) in the supply condition,

characterized in that the screening arrangement includes two operating elements (71, 72) and the screening body (61) extends, in the condition of use, substantially in the screening plane between the two operating elements (71, 72), each operating element (71, 72) being movable in said second direction,

in that said at least one fitting (25) is releasably connected with each operating element (71, 72), said at least one fitting (25) being connected to the operating elements (71, 72) near their respective ends, and

in that each fitting (25) is provided with mounting bracket engagement means (26) configured for releasable connection to a mounting bracket (15) on the window.

2. A screening arrangement according to claim 1, wherein the fitting (25) comprises a main portion (251) having an upper end and a lower end and provided with a first engagement means (253, 254) for connection to one operating element (71) and a second engagement means (255, 256) for connection to the other operating element (72), and wherein the mounting bracket engagement means (26) are formed at the upper end of the main portion (251).
3. A screening arrangement according to claim 2, wherein the mounting bracket engagement means (26) comprise a transition portion (261) at the main portion (251) and a number of flange portions (262-266) around an aperture (267) substantially having dimensions matching a mounting bracket (15) on the window.
4. A screening arrangement according to claim 3, wherein the number of flange portions of the mounting bracket engagement means (26) include a first flange portion (262) substantially parallel to the main portion (251) of the fitting (25), a second flange portion (263) and a third flange portion (266) perpendicular to the first flange portion (262) and extending away from the main portion (251), and a curved fourth flange portion (264) connecting the second and third flange portions (263, 266), preferably provided with a fifth flange portion (265) connected to the fourth flange portion (264) at right angles thereto and defining a curved abutment surface, said flange portions surrounding the aperture (267).
5. A screening arrangement according to any one of the preceding claims, wherein a cord system is provided including at least one cord (91, 92), and the at least one fitting (25) includes hook means (258, 259) for retaining said cord or cords (91, 92) temporarily, the hook means being preferably formed as at least one hook portion (258, 259) provided on the main portion (251), preferably with hook openings facing each other.
6. A screening arrangement according to claims 2 and 5, wherein the cords (91, 92) are provided with at least one cord holder block (911, 921, 912, 922).
7. A screening arrangement according to claim 6, wherein the cord holder blocks (911, 921, 912, 922) are retained on said fitting (25) in the supply condition and are adapted to be brought into engagement with the side rails (8, 9) in the condition of use.
8. A screening arrangement according to any one of the preceding claims, wherein each fitting (25) is provided with removal assisting means (252, 257).
9. A screening arrangement according to any one of claims 2 to 7 and 8, wherein the removal assisting means comprise an ear section (252) provided at the upper end of the main portion (251).
10. A screening arrangement according to any one of claims 2 to 7 and 8 or 9, wherein the removal assisting means comprise a handle section (257) at the lower end of the main portion (251).
11. A screening arrangement according to any one of the preceding claims, wherein the mounting bracket engagement means (26) of said fitting (25) comprise an aperture (267) in a plane substantially perpendicular to the screening plane.
12. A screening arrangement according to any one of the preceding claims, wherein the screening arrangement (1) further comprises a plurality of transverse elements (64) having two opposite ends and extending, in the condition of use, in the first direction and being connected to the screening body (61), and a plurality of connecting devices (5) connecting, in the condition of use, said plurality of transverse elements (64) with a respective side rail (8, 9).
13. A screening arrangement according to any one of the preceding claims, wherein the screening arrangement is a Roman blind and the screening body (61) is made from a flexible cloth including a number of pockets (62) with openings (63), each for reception of one transverse element (64) of said plurality of transverse elements.
14. A screening arrangement according to claim 13, wherein the screening body (61) at a first end edge (65) and a second end edge (66) is provided with fastening means for fastening to a respective operating element (71, 72), the fastening means being preferably releasable.
15. A window frame comprising a screening arrangement according to any one of claims 1 to 14, wherein the window frame (2) includes a top piece (21), two side pieces (22, 23) and a bottom piece (24), and the longitudinal direction of the top and bottom pieces (21, 24) corresponding to a width direction of the window frame is parallel to the first direction, and the longitudinal direction of the side pieces (22, 23) corresponding to a height direction is parallel to the second direction, and wherein a mounting bracket (15) is fastened to each side piece (22, 23) at or near the top piece (21).
16. A method of mounting a screening arrangement in a window frame including a top piece (21), two side pieces (22, 23) and a bottom piece (24), and a mounting bracket (15) is fastened to each side piece (22, 23) at or near the top piece (21), comprising the steps

of:

providing the screening arrangement in a supply condition, comprising two operating elements (71, 72), a screening body (61), two side rails (8, 9), and two fittings (25) releasably connected to both operating elements (71, 72),
 connecting the fittings (25) to the respective mounting bracket (25) to attain an intermediate condition,
 connecting the side rails (8, 9) with the operating elements (71, 72) by inserting the side rail (8, 9) over end elements (418) and sliding the side rail upwards,
 connecting the side rails (8, 9) to the respective side piece (22, 23),
 removing the fittings (25) from the mounting brackets (15) to terminate the intermediate condition, and
 connecting the screening body (61) to the operating elements (71, 72) to provide a condition of use.

17. The method of claim 16, wherein the step of providing the screening arrangement in the supply condition includes the provision of a cord system with cords (91, 92) held to the fittings (25), and wherein the additional step of connecting the cords (91, 92) stationarily with respect to the window frame is present before the step of removing the fittings.
18. The method of claim 17, wherein the step of providing the screening arrangement in the supply condition includes the provision of cord holder blocks (911, 921) and the step of connecting the cords (91, 92) includes connection of the cord holder blocks (911, 921) to a respective end of the side rails (8, 9).
19. The method of any one of claims 16 to 18, wherein the step of providing the screening arrangement in the supply condition includes the provision of a plurality of transverse elements (64) having two opposite ends, and a plurality of connecting devices (5), and the additional steps of
 - connecting the transverse elements (64) to the screening body (61),
 - connecting the connecting devices (5) with the side rails (8, 9) such that one half of the connecting devices are connected to one side rail (8), and the other half to the other side rail (9), between the operating elements (71, 72) in either side, and
 - connecting the transverse elements (64) with the connecting devices (5), are present.



Fig. 1

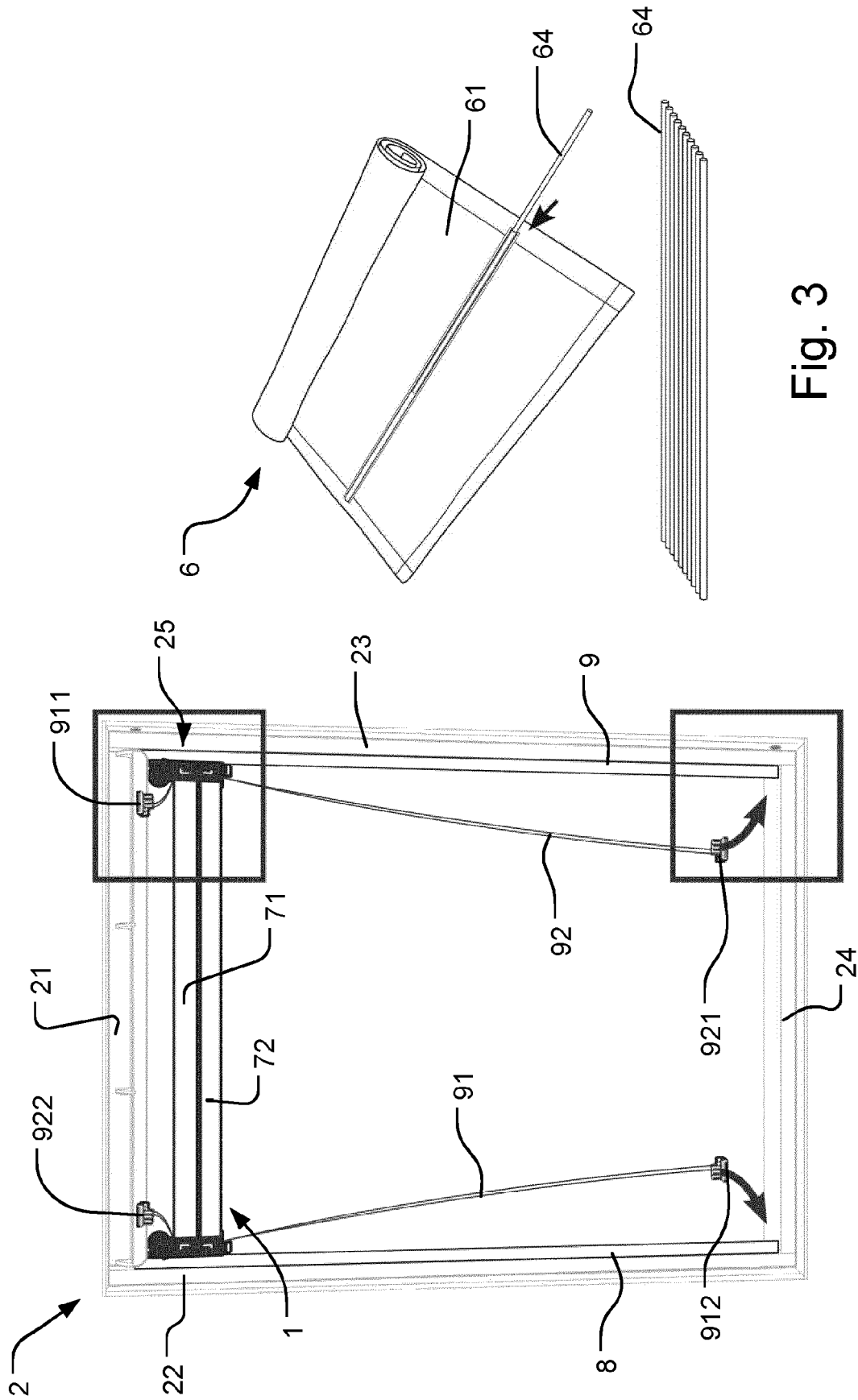
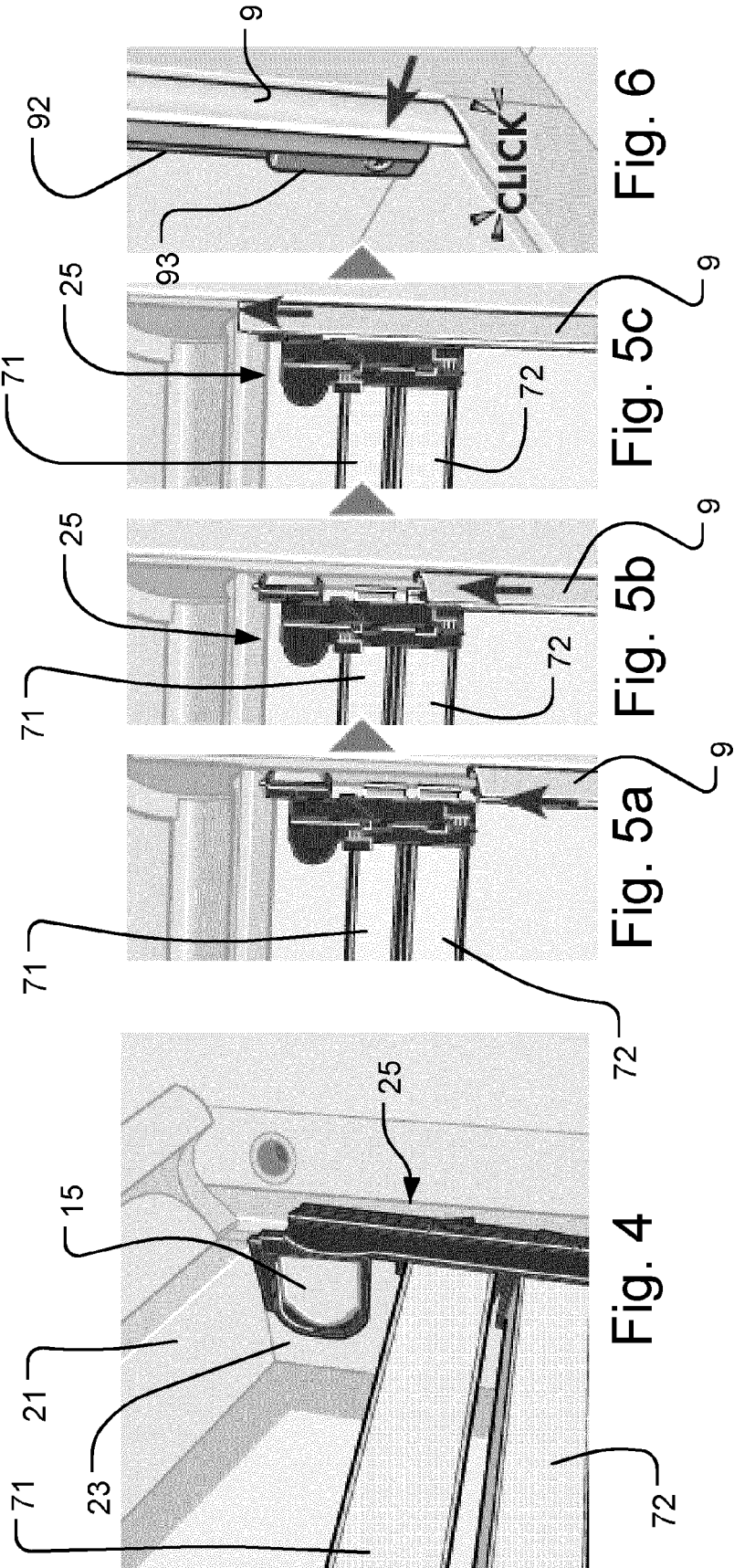


Fig. 3

Fig. 2



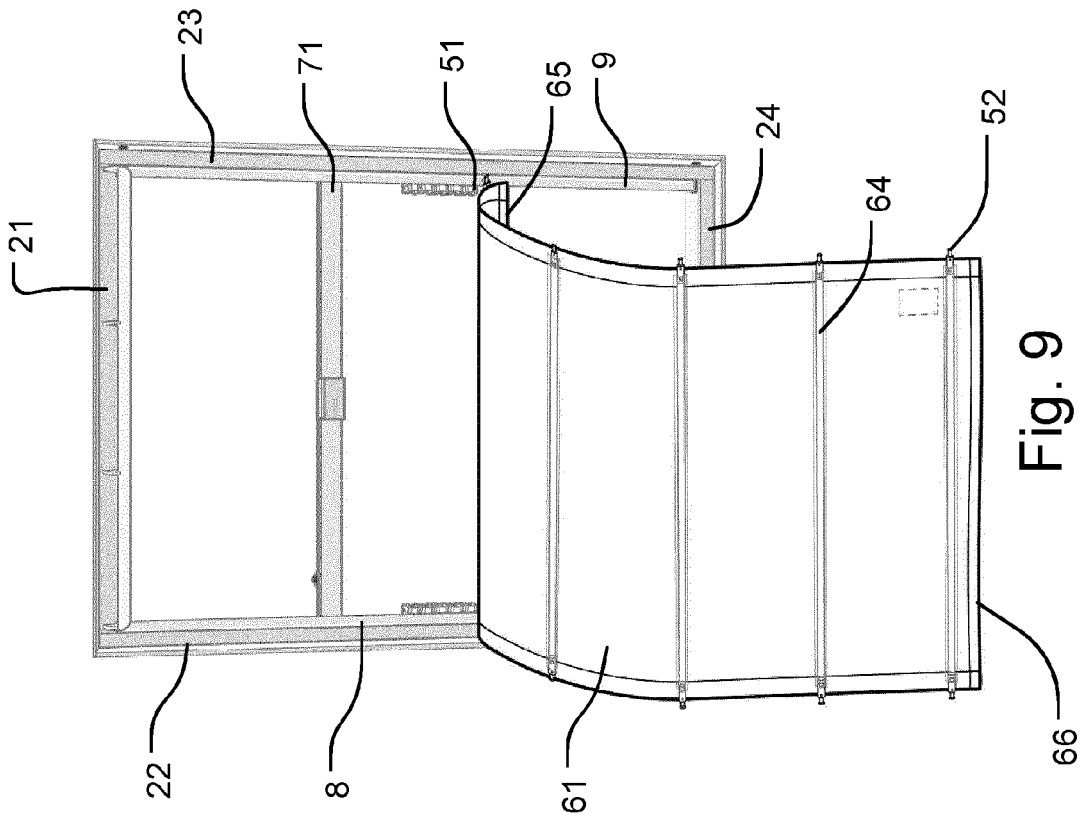


Fig. 9

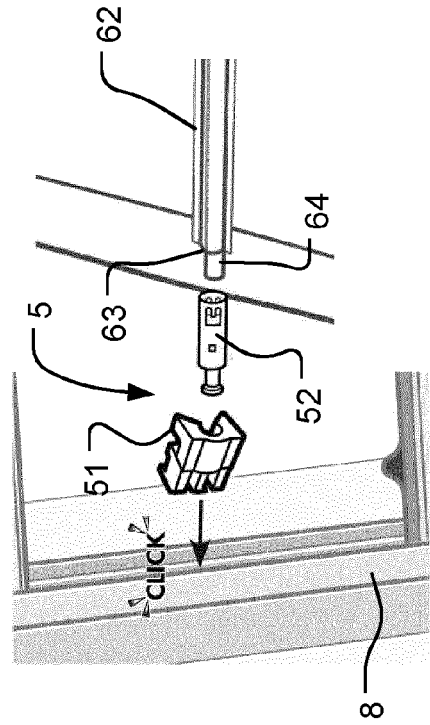


Fig. 7

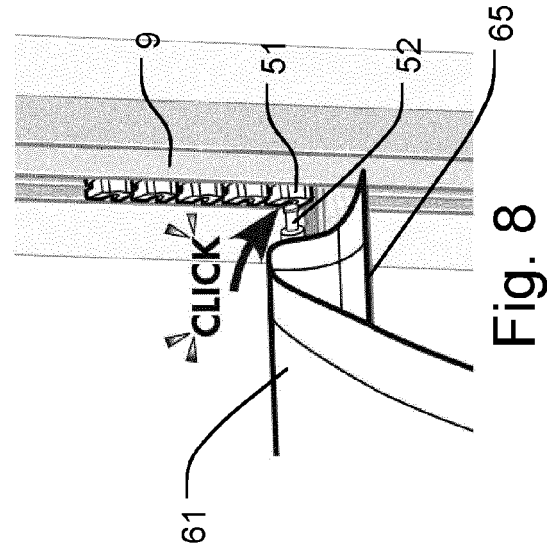


Fig. 8

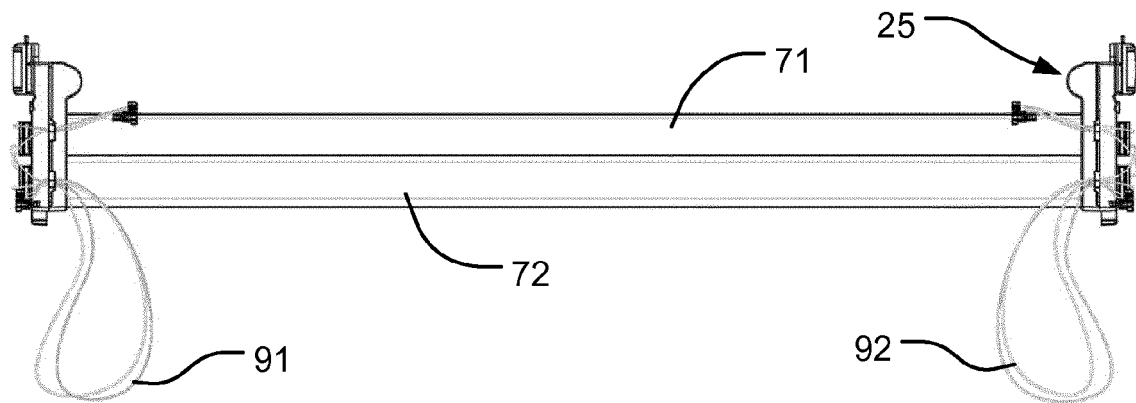


Fig. 10

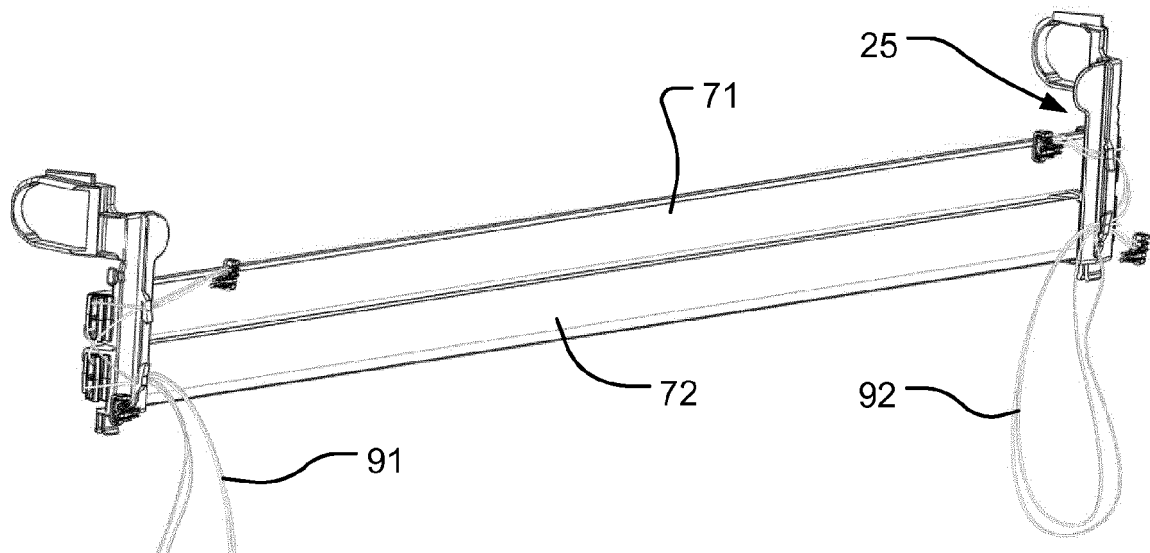


Fig. 11

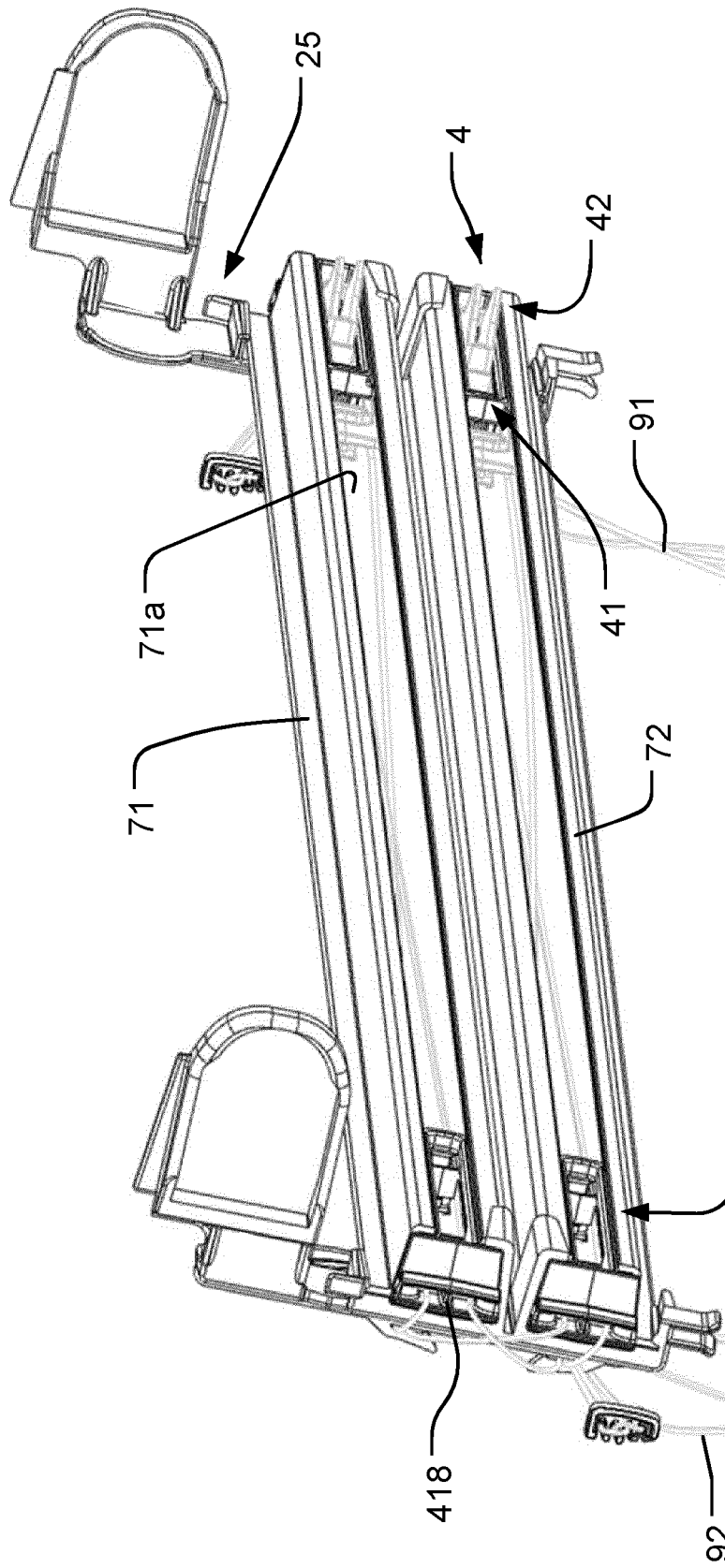
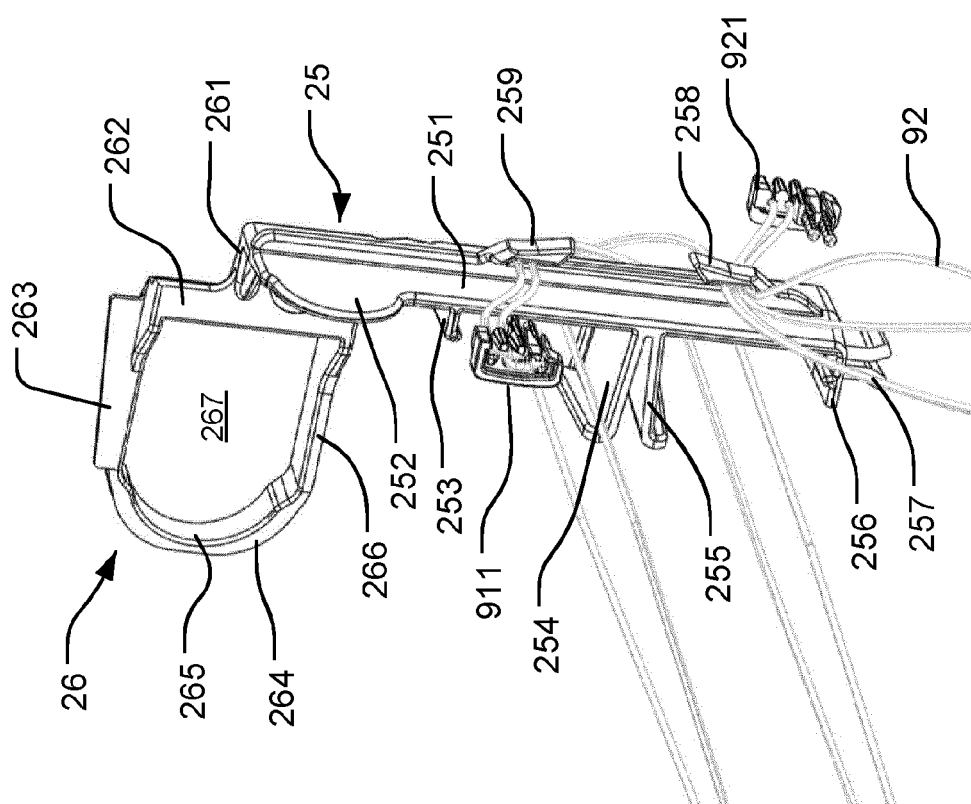
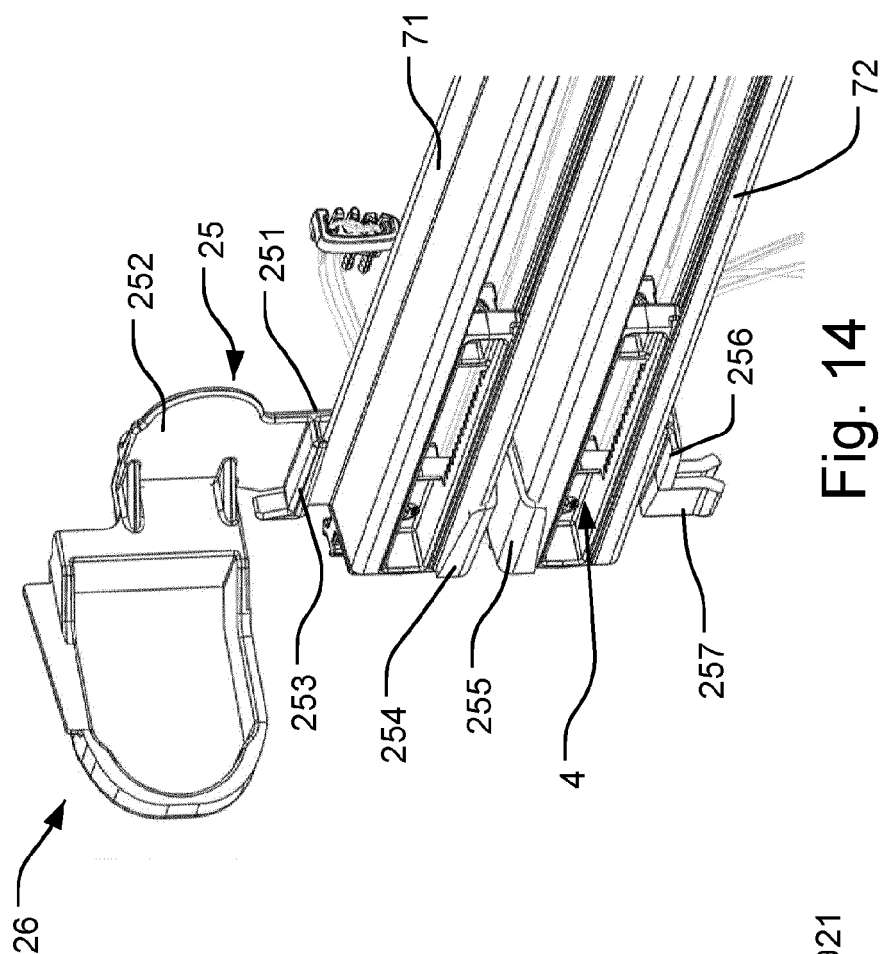


Fig. 12





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EP 15 17 0308

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