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(54) **An architectural covering support and a method of mounting the support**

(57) An architectural covering support and a method of enabling the mounting of such an architectural covering support selectively by either a first option of insertion into an architectural opening seal or a second option of adhesion to an architectural opening surround. The support may include an elongate element having one end defining an opening extending longitudinally into the elongate element and a support bracket having a first leg for fitment into the opening and a second leg for supporting an architectural covering. The method includes providing the first leg with a first insertion member having a mounting surface and an oppositely facing receiving surface, and fitting the first insertion member within the opening of the elongate element such that between the first insertion member and the opening, alongside the receiving surface of the first insertion member, a space is available for fitment of a second insertion member. The method may also include providing the first leg with a tongue configured to be inserted into the architectural opening seal, or providing the first leg without such a tongue.

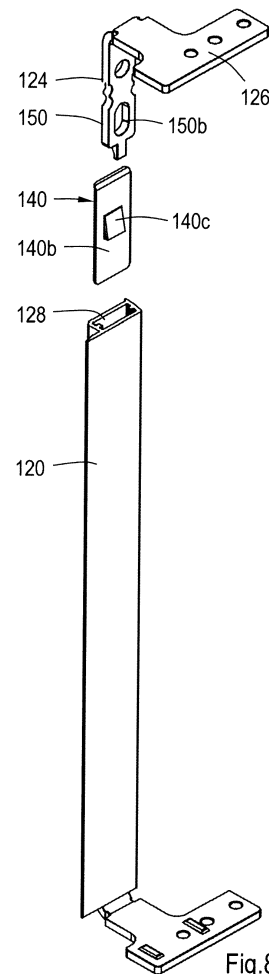


Fig. 8a

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Description

[0001] The present invention relates to an architectural covering support and a method of mounting that support to an architectural opening such as a door or window, so as to support an architectural covering to be extended across the architectural opening.

[0002] It has been known previously to provide a window blind or shade that is supported by parallel elongate elements provided at each respective vertical edge of the window. The elements are used to support parts of the blind or shade, for instance for moving that blind or shade up and down across the window. Support brackets may be provided at the respective ends of the elongate elements, for example for supporting cords, tapes or the like which may tension, support and/or carry the blind or shade. In particular, the blind or shade may include one or more rails that extend substantially perpendicular to the elongate elements and are moveable along the elongate elements so as to open and close the blind/shade.

[0003] DE 10 2011 087 443 describes an arrangement in which the elongate elements are adhered to opposite lateral sides of a door or glass pane by means of adhesive tape. The elongate elements may be cut according to the length of the lateral sides. L-shaped support brackets are inserted into ends of the profiled elongate element.

[0004] It is possible to secure the bracket at its position in the profiled section of the elongate element by, for example, tightening a pawl, set screw or the like from the inserted leg of the bracket against a surface of the elongate element.

[0005] DE 20 2007 014 450 describes another way in which the elongate elements may be secured to a window frame. It will be appreciated that the glass of a window is generally held in place in the window frame by means of a seal having some resilience. It is proposed that the ends of the elongate elements are provided with thin tongues or wedge shaped portions which can be inserted between the seal and the glass so as to hold the elongate elements in place.

[0006] Although these earlier arrangements both operate satisfactorily once installed, it is possible that an installer will not be able to judge an appropriate mounting or installation method until the actual time of installation. Hence, purchase or supply of alternative types of architectural covering support will be required prior to installation. Also, manufacturers and suppliers are required to provide alternative architectural covering supports for use as required, thereby adding to manufacture, supply and storage costs.

[0007] It is an object of the present invention to provide an architectural covering support and a method of mounting such a support that is more appropriate for all types of application.

[0008] According to the present invention, there is provided a method of enabling the mounting of an architectural covering support selectively by either a first option (1) of insertion into an architectural opening seal or a

second option (2) of adhesion to an architectural opening such as a door, a window or a surround. The architectural covering support may include an elongate element having one end defining an opening extending longitudinally along the elongate element and a support bracket having a first leg for fitment into the opening and a second leg that may for instance extend substantially perpendicular to the first leg, for supporting an architectural covering. The method includes providing the opening with longitudinally extending facing support surfaces, providing the first leg with a first insertion member having a mounting surface and an oppositely facing receiving surface, and fitting the first insertion member within the opening of the elongate element such that between the first insertion member and the opening, alongside the receiving surface of the first insertion member, a space is available for fitment of a second insertion member. The method may also include providing alternative arrangements of the first leg. In particular, the first leg may be configured either to have a tongue configured to extend away from the first and second legs substantially parallel with the first leg and to be inserted into the architectural opening seal. An alternative arrangement of the first leg may be provided without such a tongue. The method may include selecting the first option (1) by selecting a first leg with the tongue and mounting the architectural covering support by inserting the tongue into the architectural opening seal. Alternatively, the second option (2) may be selected by selecting a first leg without a tongue and using adhesive, such as an adhesive tape, to secure the elongate element to a periphery of the architectural opening, such as a peripheral edge of a door or window pane or a surrounding frame or wall.

[0009] According to the present invention, there may also be provided an architectural covering support for mounting to the periphery of an architectural opening. The support may include an elongate element having one end defining an opening extending longitudinally along the elongate element with longitudinally extending facing support surfaces and a support bracket having a first leg for fitment into the opening of the elongate element and a second leg for supporting an architectural covering. The first leg may include a first insertion member having a mounting surface and an oppositely facing receiving surface. The first insertion member may be configured to fit within the opening of the elongate element such that between the first insertion member and the opening, alongside the receiving surface of the first insertion member, a space is available for fitment of a second insertion member. At least one of the first and second insertion members may be configured to secure the first leg in place. The other one of the first and second insertion members may be provided with a tongue that is configured so as, in mounted condition, to extend away from the first and second legs substantially parallel with the first leg and to be inserted into the architectural opening seal.

[0010] In this way, when installing the architectural cov-

ering support, a user may choose whether or not to provide the support bracket with a tongue, and consequently whether or not to use adhesive (such as an adhesive tape) to secure the elongate element to a periphery of an architectural covering. For example, the elongate element could be adhered to a glass pane of a window or to the window frame. Alternatively, when a user decides not to use the adhesive option, the first leg of the support bracket may be provided with a tongue for mounting the architectural covering support into a seal of the architectural opening.

[0011] The second insertion member may be configured in such way that it can be secured into the opening by the same tightening or securing means as the first insertion member. In this way, no additional securing means are needed, regardless whether the second insertion member is fitted into the opening or not.

[0012] Preferably, one of the first and second insertion member is configured to secure the first leg of the support bracket into the opening, e.g. through a frictional fit and the other one of the first and second insertion member is provided with aforementioned tongue. In this way, depending on whether the user desires to mount the support to the architectural opening via adhesive or tongue, he may selectively fit the latter insertion member into the opening or not, without the need for additional tightening means, such as screws or the like.

[0013] Alternatively, the first and second insertion member may be configured so as to work together to secure the first leg of the support bracket in place. In such case, one of the first and second insertion members may be provided in duplicate, one with tongue and the other one without tongue.

[0014] In a first arrangement, the first insertion member may be provided integrally with the first leg. A separate second insertion member may be provided having the tongue. The second insertion member may be fitted alongside the receiving surface of the first insertion member so as to form a first leg of the first type having a tongue and for use without adhesive.

[0015] In a second arrangement, the second insertion member may be provided integrally with the first leg. Two separate first insertion members may be provided so as to provide two alternative first legs, one with and one without a tongue.

[0016] According to the first arrangement, the method may further include providing the first leg with an integral first insertion member and providing the tongue on a second insertion member configured to fit against the receiving surface of the first insertion member. The method may also include selectively fitting the second insertion member against the receiving surface so as to select the first option.

[0017] According to the second arrangement, the method may further include providing the first leg with an integral second insertion member configured to fit against the receiving surface of the first insertion member. Two alternative first insertion members may be provided, in-

cluding one with the tongue and another one not having the tongue. The method may further include selectively fitting one of these first insertion members to the second insertion member of the first leg according to the first and second options respectively.

[0018] In the first arrangement, the second insertion member includes the tongue and may be selectively inserted into the elongate element with the first insertion member to form a support bracket with a tongue.

[0019] According to the second arrangement, different first insertion members are provided with and without tongues and are selectively provided with the second insertion member to form respective support brackets with and without tongues.

[0020] In either arrangement, the tongue may be configured so as, with the first and second insertion member fitted together as part of the support bracket, to extend away from the first and second legs substantially parallel with the first leg.

[0021] In this way, the tongue forms an extension in an opposite direction to the first leg and extends away from the end of the elongate element, which allows the tongue to be inserted into or behind a window seal to secure the architectural covering support in position.

[0022] Where the second arrangement is to be used with adhesive, the first insertion member need not be provided with a tongue. Hence, the first insertion member, when inserted into the opening of the elongate element with the second insertion member, extends only to the outer limits of the opening. The first insertion member does not include a tongue extending away from the first and second legs. It may include merely a flange extending around the end of the opening.

[0023] Thus, to allow the user to choose or select the option of installation, the architectural covering support may be provided with an additional insertion member for use in place of the first insertion member with tongue, the additional insertion member having no tongue.

[0024] In this way, a user is able to choose selectively between the first insertion member and the additional insertion member when choosing or selecting whether to use a tongue to mount the architectural covering support.

[0025] The tongue of any of the embodiments may be configured so as, with the second insertion member fitted against the receiving surface, to extend offset from the first leg away from the second leg. In this way, with the first insertion member and second insertion member fitted in the opening, the first leg extends substantially in line with an outer surface of the elongate element. Where the elongate element is fitted against the surface of the glass pane of the window, the tongue thus can extend along that glass surface and protrude into or behind the window seal.

[0026] According to either arrangement, the receiving surface of the first insertion member may comprise a protrusion. The second insertion member may define at least one aperture therein. The second insertion member may

be configured to fit alongside the receiving surface of the first insertion member with the protrusion protruding into or through the aperture.

[0027] If the second insertion member has no aperture, then the first insertion member may still be advantageously provided with a protrusion. In use, when the first insertion member is fitted in the opening together with a second insertion member, the protrusion may press against the second insertion member and urge this second insertion member into frictional engagement with a support surface of the opening.

[0028] If the second insertion member includes an aperture, the protrusion of the first insertion member may be configured to protrude into said aperture. In this way, the protrusion in the aperture may act to hold the second insertion member relative to the first insertion member.

[0029] If the aperture in the second insertion member is formed as a through-hole, the protrusion of the first insertion member may be configured to protrude through said aperture and frictionally engage a support surface of the opening. In this way, the first insertion member alone will be able to secure the first leg in the opening of the elongate element.

[0030] The protrusion (or protrusions) may be formed as curved extensions of the receiving surface. The protrusion may have a shape that is part of a substantially hemispherical surface. This shape facilitates insertion of the first leg into the opening of the elongate element whilst providing good frictional engagement with the respective facing support surface of the opening.

[0031] Alternatively, the protrusion may be formed as a cantilevered arm extending away from the receiving surface at an acute angle. The end of the cantilevered arm may provide frictional engagement with the respective facing support surface of the opening and bending of the cantilevered arm towards the receiving surface against its resilience will provide force for frictional engagement.

[0032] The receiving surface of the first insertion member may have two of said protrusions spaced apart in the direction of insertion of the first leg into the opening of the elongate element. In this way, the first leg is supported within the elongate element along a larger elongate extent. It may be located more securely with additional frictional engagement.

[0033] The second insertion member may also extend further into the opening of the elongate element and be provided with two respective apertures or through holes. However, it may be sufficient for the second insertion member to extend only as far as the first protrusion.

[0034] The first insertion member may further include two respective longitudinally extending edges between the mounting surface and the receiving surface, each edge having a respective recess. The second insertion member may include a mating surface for fitting against the receiving surface of the first insertion member and respective flanges extending away from the mating surface for fitment into the recesses of the edges.

[0035] The flanges can cooperate with the recesses so as to withstand pushing and pulling forces in the longitudinal direction of the elongate element, for example during installation. Also, the flanges may serve to retain the second insertion member against the first insertion member prior to insertion of the first leg into the elongate element.

[0036] The opening of the elongate element may include additional support surfaces extending alongside said facing support surfaces and configured to receive and support lateral edges of the first and/or second insertion member.

[0037] The elongate element may have another said opening at another end which is opposite to said end. Another said support bracket may be provided for fitment in that another end. In this way, support may be provided for an architectural covering at both ends of the elongate element. Both support brackets at the respective ends of the elongate element preferably include the same features as defined above. However, mounting features on the respective second legs may be different according to the support requirements for the architectural covering.

[0038] The elongate element may be provided as a profile section having a constant cross-sectional shape along its length. In this way, a user may cut the elongate element to length according to the dimensions of the architectural opening to which the elongate element is to be mounted.

[0039] The elongate element may have a substantially rectangular outer cross-section with an additional elongate flange along its length for concealing a window seal when mounted against a window. Where the elongate element is to be mounted against the glass of a window, it may be necessary to space the element's elongate edge away from the window frame by the width of the window seal that runs along the window frame. The additional elongate flange may be provided to extend towards the window frame so as to conceal the window seal.

[0040] The architectural covering support may further include a cord guiding part for attachment to the second leg of the support bracket on a side opposite to the first leg. The cord guiding part may be configured to support at least one cord of a covering. The cord guiding part may be provided with a cover. The cord guiding part may be chamfered towards the second leg at a side of the first leg so as to avoid interference with a window seal when the support bracket is mounted in the corner of a window.

[0041] For example, with the elongate element mounted against a surface of a glass pane, its end will be located proximate the window seal running along the edge of the window frame. There will, thus, be a gap between the end of the elongate element and the window frame corresponding to the width of the window seal. The chamfered end of the cord guiding part may fit into that gap. Generally, window seals have an angled profile extending away from the glass surface to the window frame.

The chamfered end may be provided corresponding to that profile so as to fit closely towards the window seal.

[0042] An architectural covering may be provided with two architectural covering supports for mounting on opposite respective sides of an architectural opening. Furthermore, a mechanism may be provided at each respective support bracket to mount a covering for movement along the elongate elements.

[0043] The architectural covering may include at least one rail from which a shade is to be extended. The respective mechanisms may be arranged to support the respective opposite ends of the rail and to move the rail along the elongate elements. In this way, the rail may be provided substantially perpendicular to the elongate elements and may be moved simultaneously along both elongate elements so as to open and close the covering.

[0044] So as to ensure that the rail securely reaches an end position adjacent the respective ends of the elongate elements, at least one magnet may be provided. In particular, a magnet may be provided in one or both of the rail and the support bracket. If only one magnet is provided in either of the support bracket and the rail, then the other of the support bracket and the rail is formed with a ferrous metal. In this way, irrespective of the mechanism used to move the rail, the rail will securely come to rest at a position against the support bracket.

[0045] The invention will be more clearly understood from the following description, given by way of example only, with reference to the accompanying drawings, in which:

Figure 1 illustrates a window having mounted thereto an architectural covering including an architectural covering support embodying the present invention; Figure 2 illustrates component parts of a first embodiment of a support bracket;

Figure 3 illustrates the assembled parts of the support bracket;

Figure 4 illustrates the support bracket for insertion into an elongate element;

Figures 5(a) and (b) illustrate an architectural covering support having support brackets installed at each end of an elongate element;

Figure 6 illustrates an architectural covering including a cord guiding part;

Figure 7 illustrates a cord guiding part in greater detail;

Figures 8(a) and (b) illustrate component parts of a support bracket according to a second embodiment, together with an elongate element;

Figure 9 illustrates a profile section for the elongate element;

Figures 10(a) and (b) illustrate alternative first insertion members for use in the second embodiment;

Figures 11 (a) and (b) illustrate support brackets including respective first and second insertion members;

Figure 12 illustrates assembly of a support bracket

in the end of an elongate element;

Figures 13(a) and (b) illustrate architectural covering supports having alternative support brackets at each end;

Figures 14 and 15 illustrate use of an insertion element at a central portion of the elongate element; Figures 16(a) and (b) illustrate further use of said insertion element in an opening of the elongate element; and

Figures 17(a) and (b) illustrate the insertion element of Figures 16(a) and (b) in greater detail.

[0046] Although the present invention may be used to support architectural coverings of various types and may be mounted to the periphery of a variety of different architectural openings, it is particularly useful when applied to supporting an architectural covering for a window having a frame.

[0047] Figure 1 illustrates an embodiment of the present invention mounted at the periphery of a window.

[0048] The window includes a frame 2 around the periphery of the window opening with a window pane 4, such as glass, extending within the frame 2. A seal 6 extends around the inner periphery of the frame 2 and provides sealing between the window frame 2 and the window pane 4.

[0049] An architectural covering assembly 8 is illustrated mounted in the window within the frame 2. A support 10 is provided at each of two opposite peripheral edges of the frame 2 and window pane 4. A cover 12 is supported between the two supports 10 and is movable selectively along the supports 10 to cover and uncover the window opening. As mentioned above, a variety of different covers 12 could be used with the present invention.

However, in the illustrated embodiment, an expandable cellular structure cover 12 extends between a head rail 14 and a bottom rail 16. The head rail 14 and bottom rail 16 may be independently movable along the opposite supports 10 so as to selectively cover all or any part of the window opening with the cover 12.

[0050] Each support 10 includes an elongate element 20 which is secured adjacent a respective edge of the window frame 2. Also, at least one of the supports 10 includes a support bracket 22 at at least one end of the elongate element 20. A cord guiding part may be attached to the support bracket 22 and may provide cords running parallel with the respective elongate element 20 for supporting and/or moving parts of the cover 12, for example moving one or both of the head rail 14 and the bottom rail 16.

[0051] In one arrangement of the architectural covering, magnetic parts may be provided in one or both of the support brackets 22 and head rail 14. In particular, a) the support brackets 22 may include a magnet and the head rail 14 include a ferrous material, b) the head rail 14 may include one or more magnets and the support brackets include a ferrous material or c) both the support brackets 22 and the head rail 14 may include magnets.

In this way, the head rail 14 is attracted to the support brackets 22, thereby ensuring that the head rail 14 reaches its end of travel adjacent the support brackets 22 and can maintain its position when operating forces are exerted on the bottom rail 16 to move said bottom rail up or down. It will be appreciated that the same arrangement may be used between support brackets 22 and the bottom rail 16 so as to ensure that the bottom rail 16 reaches its end of travel at the opposite ends of the elongate elements 20 and can maintain said position when operating forces are exerted on the head rail 14 to move the head rail up or down.

[0052] It is proposed that the support 10 is configured for mounting to a window as illustrated in Figure 1 selectively according to two different installation options chosen by the user or installer. In particular, it is proposed that each elongate element 20 can be mounted either by adhesive, for instance using double-sided adhesive tape, or using a tongue at each end which is inserted into the seal 6 or between the seal 6 and the window pane 4.

[0053] Figure 2 illustrates a (lower) end of an elongate element 20 in conjunction with a support bracket 22 according to a first embodiment.

[0054] The support bracket has a first leg 24 and a second leg 26. In use, the second leg 26 is configured to support features of the architectural covering. To that end, the second leg 26 may for instance extend substantially perpendicular to the first leg 24, as illustrated.

[0055] The first leg 24 itself provides what will be described as a first insertion member 40 having a mounting surface 40a on one side as illustrated in Figure 2 and a receiving surface 40b on an opposite side as illustrated in Figure 3. The receiving surface 40b may include at least one outwardly facing protrusion 40c and the arrangement of Figure 3 is shown with two such protrusions 40c.

[0056] Referring to Figure 4, it will be seen that the end of the elongate element 20 defines an opening 28 which extends longitudinally into the elongate element 20 along its axis. In particular, the opening 28 is defined by two respective facing support surfaces 28a which extend longitudinally into the elongate element 20.

[0057] In the embodiment illustrated in Figure 4, it will be seen that the opening 28 may also be open along an elongate edge portion of the elongate element 20. In other words, the elongate element 20 may have an incomplete peripheral wall section and have a cross sectional shape which is c-shaped with two opposite substantially parallel facing surfaces 28a. An elongate flange may be provided to prevent sideways movement of the support bracket 22 once inserted.

[0058] From the state illustrated in Figure 4, the first leg 24 of the support bracket 22 is inserted into opening 28 at the end of the elongate element 20. Figures 5(a) and (b) illustrate an elongate element 20 having two such support brackets 22 inserted respectively at each end of the elongate element 20.

[0059] Considering now the mounting surface 40a and

protrusion 40c of the first insertion member 40 of the first leg 24 and the facing support surfaces 28a of the opening 28 of the elongate element 20, the thickness provided between the distal extent of the protrusion 40c and the mounting surface 40a corresponds to the distance between the facing support surfaces 28a. Actually, taking account of the resilient material properties of the first insertion member 40 and/or the elongate element 20, the thickness offered by the protrusion 40c and mounting surface 40a is slightly greater than the spacing between the facing support surfaces 28a. In this way, when the first leg 24 and its first insertion member 40 is inserted into the opening 28, there is a force exerted between one of the facing support surfaces 28a and the mounting surface 40a and a force exerted between the other of the facing support surfaces 28a and the one or more protrusions 40c. These forces create a frictional resistance to lateral/elongate movement of the first insertion member 40 and thus of the first leg 24 within the opening 28 such that the support bracket 22 is secured in the end of the elongate element 20. In the embodiment illustrated in Figure 4 with an opening 28 open at one longitudinal edge, two opposing walls of the elongate element 20 may spring resiliently apart by insertion of the first leg 24 and first insertion member 40 into the opening 28. The returning resilient force of those two walls press the facing support surfaces 28a onto the mounting surface 40a and the one or more protrusions 40c so as to cause the required frictional resistance.

[0060] In the illustrated embodiment, the protrusions 40c have a curved profile, such as part of a hemisphere. This assists with insertion of the second leg 24 into the opening 28, in particular when the protrusion 40c first passes the peripheral edge of the opening 28. The relatively flat curvature of the protrusion 40c at its distal extent assists in maximising surface contact with the respective facing support surface so as to provide more secure engagement. Other forms of protrusion can also be provided, such as cantilevered arms which themselves flex so as to provide resilient force against the respective facing support surface 28a.

[0061] With the arrangement as described above, the elongate element 20 may be secured to the window pane 4 or part of the frame 2 by applying adhesive between the elongate element 20 and the window pane 4 or frame 2, for example with double-sided adhesive tape. However, according to this embodiment, an additional part is provided allowing an installer to choose an option of installation which does not require adhesive.

[0062] As illustrated in Figure 2, a second insertion member 50 is provided for use with the first insertion member 40 as part of the first leg 24. The second insertion member 50 includes a mating surface 50a configured to fit against the receiving surface 40b of the first insertion member 40. The second insertion member 50 may further define at least one through hole 50b extending from the mating surface 50a.

[0063] As illustrated in Figure 3, with the mating sur-

face 50a of the second insertion member 50 engaged with and fitting against the receiving surface 40b of the first insertion member 40, the protrusion 40c of the first insertion member 40 protrudes into and through the through hole 50b. In particular, the height of the protrusion 40c is at least equal to and preferably slightly greater than the thickness of the second insertion member 50.

[0064] In this way, as illustrated, it is also possible to insert the first leg 24 into the opening 28 of the elongate element 20 with the second insertion member 50 against the first insertion member 40 without affecting the operation of the first insertion member 40 to secure the support bracket 22 in place in the end of the elongate element 20.

[0065] The second insertion member 50 is provided with a tongue 52. As illustrated, with the second insertion member fitted against the receiving surface 40b of the first insertion member 40, the tongue 52 extends substantially parallel with the first insertion member 40 and first leg 24, but away from the second leg 26. In other words, the tongue 52 extends beyond the end of the elongate element 20 when its respective support bracket 22 is mounted in the end of the elongate element 20.

[0066] With such tongues 52 fitted in place as illustrated in Figures 5(a) and (b), the resulting support 10 can be mounted to a window by sliding the elongate element against a respective edge of the frame 2 and inserting each tongue 52 into a respective seal 6, between that seal 6 and the window pane 4.

[0067] So that the tongue 52 extends along the surface of the window pane 4 in line with an outer surface of the elongate element 20, the second insertion member 50 includes a step portion 54 between a main part of the second insertion member 50 to be inserted into the opening 28 and the tongue 52. The step portion 54 provides an offset between the main body of the second insertion member 50 and the tongue 52 so that the tongue 52 extends substantially in line with an outer surface of the elongate element 20.

[0068] In order to further secure the second insertion member 50 to the first insertion member 40, the illustrated embodiment includes at least two respective flanges 56 on opposite edges of the main body of the second insertion member 50 extending away from the mating surface 50b.

[0069] So that the first insertion member 40 of the first leg 24 is mounted securely within the opening 28 of the elongate element 20, the width between its two opposite edges may correspond substantially to a width of the opening 28. In the illustrated example, each of the two respective longitudinally extending edges of the first insertion member 40 is provided with a respective recess 42. The flanges 56 of the second insertion member 50 are configured to fit closely into the respective recesses 42. The flanges cooperate with the recesses to withstand pushing and pulling forces in a longitudinal direction of the elongate element which may occur during installation. The flanges also serve to retain the second insertion

member 50 against the first insertion member 40 prior to their combined insertion into the elongate element 20.

[0070] As noted above, the second leg 26 of the support bracket 22 may be used to support features of the architectural covering. Figure 6 illustrates the arrangement described above with second insertion members 50 fitted so as to provide tongues 52 and in conjunction with a cord guiding part 60. This is illustrated schematically in conjunction with the start of guide cords or wires 62 at the top of the arrangement. The cord guiding part 60 may be provided with a cover 64 illustrated in greater detail in Figure 7. The cord guiding part 60 is preferably mounted on the side of the second leg 26 that in use faces the window seal (which in Fig 7 corresponds to the upper side of the second leg 26). The cover 64 may be fitted over the second leg to keep the cord guiding part and cord in position. Preferably, the bottom wall of the cover 64 is relatively thin, so as not to interfere with any magnetic forces between the support bracket 22, in particular the second leg 26 thereof, and the head rail 14 or bottom rail 16.

[0071] Noting that the elongate element 20 is to be mounted against a window pane 4 with the tongue 52 inserted under a window seal 6, that window seal 6 will protrude towards the second leg 26. In the illustrated embodiment, the cord guiding part 60 and the cover 64 are each provided with a chamfered end 60a and 64a respectively which is sized and angled so as to match, at least approximately, the profile of the window seal 6. In this way, the cord guiding part 60 and cover 64 may be fitted closely against the window seal 6.

[0072] Finally, for this embodiment, it will be noted, in particular from Figure 4, that, although the elongate element 20 has a generally rectangular cross-section, one edge, taking the form of an additional elongate flange 20a extends beyond the general rectangular cross-section. Where the elongate element 20 is to be mounted closely against a window pane 4, a window seal 6 will run along the edge of the elongate element 20 between the elongate element 20 and the window frame 2. By providing the additional elongate flange 20a, this window seal 6 can be covered and a close fitting can be provided between the outer surface of the elongate element 20 and the window frame 2.

[0073] In use, elongate elements 20 can be provided with a constant cross sectional profile along their lengths, thereby defining the shape of the opening 28 at all points along their lengths. An installer can cut the elongate element profile to an appropriate length for use as an elongate element 20 with a particular window frame 2. The installer can fit support brackets 22 having first insertion members 40 and may choose selectively to fit or not fit second insertion members 50 according to whether or not the elongate element 20 is to be fitted using adhesive or by insertion in the window seals 6. Manufacturers need only supply the small additional second insertion members 50 to allow freedom of installation and use to the installer. The second insertion member 50 may for in-

stance be made of a relatively thin strip of stainless spring steel. The rest of the support bracket 22 may for instance be made of a somewhat thicker strip of ferrous steel.

[0074] There will now be described an alternative embodiment in which the first insertion member for frictionally engaging within the opening of the elongate element is provided as a separate component and the second insertion member is provided as an integral part of the first leg and support bracket. This is first illustrated in Figures 8(a) and (b).

[0075] The support 110 includes an elongate element 120 having an opening means 128 at at least one end. As with the first embodiment, the elongate element may preferably have a constant cross-section so that it can be cut to length according to an installer's needs.

[0076] The bracket 122 includes a first leg 124 for insertion into the opening 128 and a second leg 126 which may for instance extend substantially perpendicular to the first leg 124, as illustrated, and can be used to mount various components for supporting a covering.

[0077] In contrast to the first embodiment, the first leg 124 is not formed with an integral first insertion member. Instead, a separate first insertion member 140 is provided for insertion into the opening 128 alongside the first leg 124. The first insertion member may be provided with a protrusion 140c. The first leg 124 is configured to include a second insertion member 150, 150', which may or may not be provided with an aperture 150b, as respectively illustrated in Figure 8a and Figure 8b.

[0078] In the embodiment according to Figure 8a, the protrusion 140c of the first insertion member 140 may be configured to protrude through the aperture 150b and engage an opposite support surface within the elongate opening 128. In other words, the separate first insertion member 140 is provided with a mounting surface 140a on one side and a receiving surface 140b on the other side. The protrusion 140c is formed in the receiving surface 140b. With the first insertion member 140 and second insertion member 150 inserted into opening 128 of the elongate element 120, the mounting surface 140a may engage one facing support surface and the protrusion 140c, protruding through the through hole 150b, may engage an opposite facing support surface.

[0079] An alternative means for mounting the first and second insertion member may be provided in case where the second insertion member 150' has no aperture, as illustrated in Figure 8b, or in case where the aperture 150b is not a through hole and/or the protrusion 140c cannot protrude through said aperture 150b all the way.

[0080] In such case, the facing support surfaces 128a for supporting the first insertion member 140, though not compulsory, may advantageously be provided between a wall of the elongate element 120 and two oppositely facing internal flanges 128b which extend longitudinally along the elongate element 120, as illustrated in Figure 9.

[0081] Additional support surfaces 128c may be provided along an opposite side of the elongate element 120 for receiving and supporting separately the second in-

sertion member 150. In particular, as illustrated, additional support surfaces 128c are provided by a wall of the elongate element 120 as well as the inwardly facing flanges 128b. Each of the longitudinally extending flanges 128b includes oppositely directed facing support and additional support surfaces 128a, 128c. Between the pair of longitudinally extending flanges 128b, a space is provided through which the protrusion 140c may extend from the first insertion member 140 to the second insertion member 150.

[0082] With this arrangement, the facing support surfaces 128a are configured to frictionally engage the oppositely facing mounting surface 140a and receiving surface 140b of the first insertion member 140 so as to secure the first insertion member 140 in place. The protrusion 140c extends between the flanges 128b and engages the second insertion member 150, 150' formed integrally with the first leg 124. In this way, the second insertion member 150, 150' and the first leg 124 are held securely in place, received by the additional support surfaces 128c. If the second insertion member 150 is provided with an aperture 150b, the protrusion may engage said aperture which may increase the resistance against longitudinal movement of the second insertion member relative to the first insertion member.

[0083] Any appropriate shape of protrusion 140c may be provided for engaging the second insertion member 150, 150' and/or the aperture 150b where the first insertion member 140 and second insertion member 150, 150' are to be brought alongside one another and then inserted into the opening 128. However, the illustrated embodiment includes a protrusion 140c which takes the form of a projection which angles from the receiving surface 140b. With the projection 140c orientated within the elongated element 120 such that it extends further towards the second insertion member 150 further into the opening 128, it becomes possible to first locate the first insertion member 140 in the opening 128 and then slide the second insertion member 150 up and over the projection 140c until it engages into the aperture 150b. The projection may be provided as a resilient cantilevered arm.

[0084] In order to allow for selective use of a tongue 152 for mounting the architectural covering support, two alternative first insertion members 140 are provided. Figure 10(a) illustrates a first insertion member 140 having a tongue 152 and Figure 10(b) illustrates an alternative first insertion member 140 without a tongue.

[0085] Where a user chooses a first option of mounting the architectural covering support by inserting tongues 152 into the seal 6 of a window frame 2, a first insertion member 140 having a tongue 152 is chosen for insertion into the opening 128 of the elongate element 120 together with the second insertion member 150 of the first leg 124. On the other hand, where a user chooses a second option of mounting the architectural covering support by using an adhesive (such as double-sided adhesive tape) on the elongate element 120, an alternative, tongue-less first insertion member 140, such as illustrated in Figure

10(b), can be inserted into the opening 128 of the elongate element 120 together with the second insertion member 150 of the first leg 124.

[0086] In the illustrated embodiment of Figure 10(a), it will be seen that a flange or step portion 154 is provided so as to offset the tongue 152 from the main body of the first insertion member 140 in the same way as was proposed for the second insertion member 50 of the first embodiment. In this way, the tongue 152 may form a continuation of the outer surface of the elongate member 120. For first insertion members 140 not having a tongue, such as illustrated in Figure 10(b), it is still advantageous to provide the flange or step portion 154. This acts as a stop and prevents the first insertion member 140 from being inserted too far into the opening 128.

[0087] Figures 11 (a) and (b) illustrate respective support brackets arranged without and with a tongue 152 and ready for insertion into the opening 128 of the elongate element 120. On the other hand, Figure 12 illustrates a first insertion member 140 having a tongue 152 already inserted between the facing support surfaces 128a of the opening 128 of the elongate element 120. The second insertion member 150 of the first leg 124 is then ready to be inserted between the additional support surfaces 128c of the opening 128 of the elongate element 120. With the protrusion formed as an angled projection 140c, the second insertion member 150 will slide past the protrusion 140c until that protrusion clicks into place within the aperture 150b.

[0088] Figures 13(a) and (b) illustrate respectively the architectural covering support assembled either with first insertion members 140 without tongues or first insertion members 140 with tongues 152.

[0089] It should be appreciated that although the use of tongues 152 as illustrated in Figure 13(b) negates the need for adhesive, an installer may choose additionally to apply adhesive to the back surface of the elongate element 120, for instance using an adhesive pad at a central portion. This may be useful where the elongate element 120 has a significant length and might have a tendency to move away from the window pane 4 at its central section.

[0090] Figure 14 illustrates an alternative arrangement in which the back surface of the elongate element 120 includes an aperture 160 for receiving an insertion element 162 as illustrated in Figure 15. A tongue 164 of the insertion element 162 extends substantially perpendicular to the longitudinal extent of the elongate element 120 and may be fitted into the seal 6 of a window which extends alongside the elongate element 120 when the architectural covering support is fitted to the window. It will be understood that the insertion element 162 thus provides support for a central portion of the elongate element 120, holding it against the window pane 4.

[0091] Alternatively, the insertion element 162 may be inserted into an opening 228 of the elongate element 220, as illustrated in Figures 16(a) to 17(b). In these figures, the support bracket for the upper opening 228 of

the elongate element 220 is omitted, for clarity reasons. The insert element 162 may be inserted in a first orientation, as illustrated in Figure 16(a), in which the tongue 164 extends in longitudinal direction, away from the end of the elongate element 220, similar to the embodiments shown in Figures 5(a), 5(b) and 13(b). Alternatively, the insertion element 162 can be rotated over about 90 degrees to a second orientation, as illustrated in Figures 16(b), 17(a) and 17(b), in which the tongue 164 extends substantially perpendicular to the longitudinal extent of the elongate element 220. In such orientation, the tongue 164 can be fitted into the seal 6 of a window which extends alongside the elongate element 220 when the architectural covering support is fitted to the window. To allow for such rotation towards the second orientation, one of the support faces 228a of the elongate element may be partly cut away, as illustrated.

[0092] The insertion element 162 may be secured in place in a similar way as described in relation to the first insertion members 40, 140 of the previous embodiments. More particularly, the insertion element 162 includes a mounting surface 162a and an oppositely facing receiving surface 162b that, when fitted into the opening 228, can frictionally engage respective opposing support surfaces 228a of the opening so as to secure the insertion element 162 in place.

[0093] The receiving surface 162b of the insertion element 162 may be provided with a protrusion (not shown) similar to the protrusions 40c, 140c described in relation to previous embodiments. This protrusion may either protrude through an aperture in a second insertion member 50, 150 that may be integrally formed to a support bracket, so as to frictionally engage a support face 228c of the opening 228, or may press against a mating surface of said second insertion member 50, 150 so as to urge said second insertion member into frictional engagement with said support surface 228c.

[0094] Finally, it will be seen that, as with the previous embodiments, the elongate element 220 may be provided with a flange 220a which extends along the length of the elongate element 220 and is used to conceal the window seal 6 along its side.

[0095] The following paragraphs provide further disclosure of the present subject matter.

[0096] An architectural covering support for mounting to the periphery of an architectural opening, the support including: an elongate element having one end defining an opening extending longitudinally along the elongate element with longitudinally extending facing support surfaces; and a support bracket having a first leg for fitment into the opening of the elongate element and a second leg for supporting an architectural covering; wherein the first leg includes a first insertion member with a mounting surface and an oppositely facing receiving surface; and the first insertion member is configured to fit within the opening of the elongate element with the mounting surface and receiving surface frictionally engaging respective facing support surfaces of the opening.

[0097] According to an aspect of the invention, the architectural covering support may further include a second insertion member configured to fit into the opening of the elongate element alongside the receiving surface of the first insertion member.

[0098] According to an aspect of the invention, the receiving surface of the first insertion member may comprise a protrusion.

[0099] According to an aspect of the invention, the second insertion member may comprise an aperture.

[0100] According to an aspect of the invention, the protrusion of the first insertion member may be configured to protrude into the aperture of the second insertion member when the second insertion member is fitted alongside the receiving surface of the first insertion member.

[0101] According to an aspect of the invention, the aperture may form a through-hole; and the protrusion may be configured to protrude through the through-hole and frictionally engage a respective support surface of said elongate opening when the second insertion member is fitted against the receiving surface of the first insertion member, to fit together within the opening of the elongate member.

[0102] According to an aspect of the invention, the first insertion member may be an integral part of the support bracket. The second insertion member may include a tongue and the tongue may be configured so as, with the second insertion member fitted against the receiving surface, to extend away from the first and second legs substantially parallel with the first leg.

[0103] According to an aspect of the invention, the second insertion member may be an integral part of the support bracket. The first insertion member may include a tongue, the tongue being configured so as, with the second insertion member fitted against the receiving surface, to extend away from the first and second legs substantially parallel with the first leg. Alternatively, the architectural covering support may include an additional first insertion member for use in place of said first mentioned first insertion member, and a tongue extending from the additional first insertion member, the tongue being configured so as, with the second insertion member fitted against the receiving surface, to extend away from the first and second legs substantially parallel with the first leg.

[0104] According to an aspect of the invention, the tongue may be configured so as, with the second insertion member fitted against the receiving surface, to extend offset from the first leg away from the second leg so as, with the first insertion member and second insertion member fitted in the opening, to extend substantially in line with an outer surface of the elongate element.

[0105] According to an aspect of the invention, the first insertion member may include two respective longitudinally extending edges between the mounting surface and the receiving surface, each edge having a respective recess, and the second insertion member includes a mating surface for fitting against the receiving surface of the first

insertion member and respective flanges extending away from the mating surface for fitment into the recesses of the edges.

[0106] According to an aspect of the invention, the protrusion may be a curved extension of the receiving surface, such as part of a substantially hemispherical surface. Alternatively, the protrusion may be a cantilevered arm extending away from the receiving surface at an acute angle.

[0107] According to an aspect of the invention, the receiving surface may have two of said protrusions spaced apart in the direction of insertion of the first leg into the opening of the elongate element.

[0108] According to an aspect of the invention, the elongate element may have another said opening at another end and another said support bracket for fitment therein.

[0109] According to an aspect of the invention, the elongate element may be a profile section having a constant cross-sectional shape along its length.

[0110] According to an aspect of the invention, the elongate element may have a substantially rectangular outer cross-section with an additional elongate flange along its length for concealing a window seal when mounted against a window.

[0111] According to an aspect of the invention, the architectural covering support may further include a cord guiding part for attachment to the second leg of the support bracket and configured to support at least one cord of a covering. The cord guiding part may be chamfered at a side facing the first leg so as to avoid interference with a window seal when the support bracket is mounted.

[0112] According to an aspect of the invention, an architectural covering may be provided, including two architectural covering supports which may include any of the aspects of the invention as described above, for mounting on opposite respective sides of an architectural opening and a mechanism provided at each respective support brackets to mount a covering for movement along the elongate elements.

[0113] According to an aspect of the invention, the architectural covering may further include at least one rail from which a shade is to be extended, the respective mechanisms being arranged to support the respective opposite ends of the rail and to move the rail along the elongate elements. At least one of the rail and the support brackets may include a magnet and the other of the rail and the support brackets includes a ferrous metal, if not a magnet.

[0114] According to an aspect of the invention, a method may be provided, enabling the mounting of an architectural covering support selectively by either a first option of insertion into an architectural opening seal or a second option of adhesion, the support including an elongate element having one end defining an opening extending longitudinally along the elongate element and a support bracket having a first leg for fitment into the opening and a second leg for supporting an architectural cov-

ering. The method may include: providing the opening with longitudinally extending facing support surfaces; providing the first leg with a first insertion member having a mounting surface and an oppositely facing receiving surface; fitting the first insertion member within the opening of the elongate element with the mounting surface and receiving surface frictionally engaging the respective facing support surfaces of the opening; providing alternative arrangements of the first leg either having a tongue configured to extend away from the first and second legs substantially parallel with the first leg and to be inserted in the architectural opening seal or not having a tongue; and selecting the first option by selecting a first leg with the tongue and mounting the architectural covering support by inserting the tongue into the architectural opening seal or the second option by selecting a first leg without a tongue and using adhesive to secure the elongate element to a periphery of the architectural opening.

[0115] According to an aspect of the invention, the method may further include: providing the first leg with an integral second insertion member; providing a first insertion member having the tongue and an additional first insertion member not having the tongue; and selectively fitting the first insertion member or the additional first insertion member to the second insertion member of the first leg according to the first and second options respectively.

[0116] According to an aspect of the invention, the method may further include: providing the first insertion member integrally with the first leg; providing the tongue on a second insertion member configured to fit against the receiving surface of the first insertion member; and selectively fitting the second insertion member against the receiving surface so as to select the first option.

Claims

1. An architectural covering support for mounting to the periphery of an architectural opening, the support including:

an elongate element having one end defining an opening extending longitudinally along the elongate element with longitudinally extending facing support surfaces; and

a support bracket having a first leg for fitment into the opening of the elongate element and a second leg for supporting an architectural covering; wherein

the first leg includes a first insertion member with a mounting surface and an oppositely facing receiving surface; and wherein

the first insertion member is configured to fit within the opening of the elongate element such that between the first insertion member and the opening, alongside the receiving surface of the first insertion member, a space is available for

fitment of a second insertion member.

2. An architectural covering support according to claim 1 wherein the first insertion member is configured to secure the first leg of the support bracket into the opening.
3. An architectural covering support according to claim 2 wherein the second insertion member is configured to be secured in the opening, alongside the receiving surface of the first insertion member without additional securing means.
4. An architectural covering support according to any preceding claim wherein the second insertion member is configured to secure the first leg of the support bracket into the opening, or wherein the first and second insertion member are configured to together secure the first leg of the support bracket into the opening.
5. An architectural covering support according to any preceding claim wherein the first and second insertion member are configured to be secured in the opening through one and the same securing means, wherein for instance the first and/or second insertion member are configured to be secured in the opening by frictionally engaging the facing support surfaces of the opening.
6. An architectural covering support according to any preceding claim wherein the first insertion member is configured to secure the first leg of the support bracket in the opening by having its mounting surface and receiving surface frictionally engage respective facing support surfaces of the opening.
7. An architectural covering support according to any preceding claim wherein one of the first and second insertion member is an integral part of the support bracket, more particularly of the first leg, wherein optionally the other one of the first and second insertion member includes a tongue that is configured so as, with the second insertion member fitted against the receiving surface of the first insertion member, to extend away from the first and second legs, substantially parallel with the first leg, or wherein optionally the other one of the first and second insertion member is provided in duplicate, one with tongue that is configured so as, with the second insertion member fitted against the receiving surface of the first insertion member, to extend away from the first and second legs, substantially parallel with the first leg, and the other one without such a tongue.
8. An architectural covering support according to claim 7 wherein the tongue is configured so as, with the first insertion member and second insertion member

fitted in the opening, to extend substantially in line with an outer surface of the elongate element.

9. An architectural covering support according to any preceding claim wherein one of the first insertion member and the second insertion member comprises an aperture and the other one of the first insertion member and the second insertion member comprises a protrusion, wherein the protrusion is configured to protrude into the aperture when the second insertion member is fitted alongside the receiving surface of the first insertion member. 5
10. An architectural covering support according to claim 9 wherein the protrusion is a curved extension of the receiving surface, such as part of a substantially hemispherical surface, or wherein the protrusion is a cantilevered arm extending away from the receiving surface at an acute angle. 10
11. An architectural covering support according to any preceding claim wherein the first insertion member includes two respective longitudinally extending edges between the mounting surface and the receiving surface, each edge having a respective recess, and the second insertion member includes a mating surface for fitting against the receiving surface of the first insertion member and respective flanges extending away from the mating surface for fitment into said recesses. 20
12. An architectural covering support according to any preceding claim wherein the elongate element is a profile section having a constant cross-sectional shape along its length, wherein optionally the elongate element has a substantially rectangular outer cross-section with an additional elongate flange along its length for concealing a window seal when mounted against a window, wherein optionally the elongate element has another said opening at another end and another said support bracket for fitment therein. 25
13. An architectural covering support according to any preceding claim further including a cord guiding part for attachment to the second leg of the support bracket and configured to support at least one cord of a covering, wherein optionally the cord guiding part is chamfered at a side facing the first leg so as to avoid interference with a window seal when the support bracket is mounted. 30
14. An architectural covering including two architectural covering supports according to any preceding claim for mounting on opposite respective sides of an architectural opening and a mechanism provided at each respective support brackets to mount a cover- 35

ing for movement along the elongate elements, optionally further including at least one rail from which a shade is to be extended, the respective mechanisms being arranged to support the respective opposite ends of the rail and to move the rail along the elongate elements, wherein optionally at least one of the rail and the support brackets includes a magnet and the other of the rail and the support brackets includes a ferrous metal, if not a magnet. 40

15. A method of enabling the mounting of an architectural covering support selectively by either a first option of insertion into an architectural opening seal or a second option of adhesion, the support including an elongate element having one end defining an opening extending longitudinally along the elongate element and a support bracket having a first leg for fitment into the opening and a second leg for supporting an architectural covering, the method including: 45

providing the opening with longitudinally extending facing support surfaces;
 providing the first leg with a first insertion member having a mounting surface and an oppositely facing receiving surface;
 fitting the first insertion member within the opening of the elongate element such that between the first insertion member and the opening, alongside the receiving surface of the first insertion member, a space is available for fitment of a second insertion member;
 providing alternative arrangements of the first leg either having a tongue configured to extend away from the first and second legs substantially parallel with the first leg and to be inserted in the architectural opening seal or not having a tongue; and
 selecting the first option by selecting a first leg with the tongue and mounting the architectural covering support by inserting the tongue into the architectural opening seal or the second option by selecting a first leg without a tongue and using adhesive to secure the elongate element to a periphery of the architectural opening, 50

optionally further including:

providing the first leg with an integral second insertion member;
 providing a first insertion member having the tongue and an additional first insertion member not having the tongue; and
 selectively fitting the first insertion member or the additional first insertion member to the second insertion member of the first leg according to the first and second options respectively, 55

optionally further including:

providing the first insertion member integrally
with the first leg;
providing the tongue on a second insertion member configured to fit against the receiving
surface of the first insertion member; and
selectively fitting the second insertion member
against the receiving surface so as to select the
first option.

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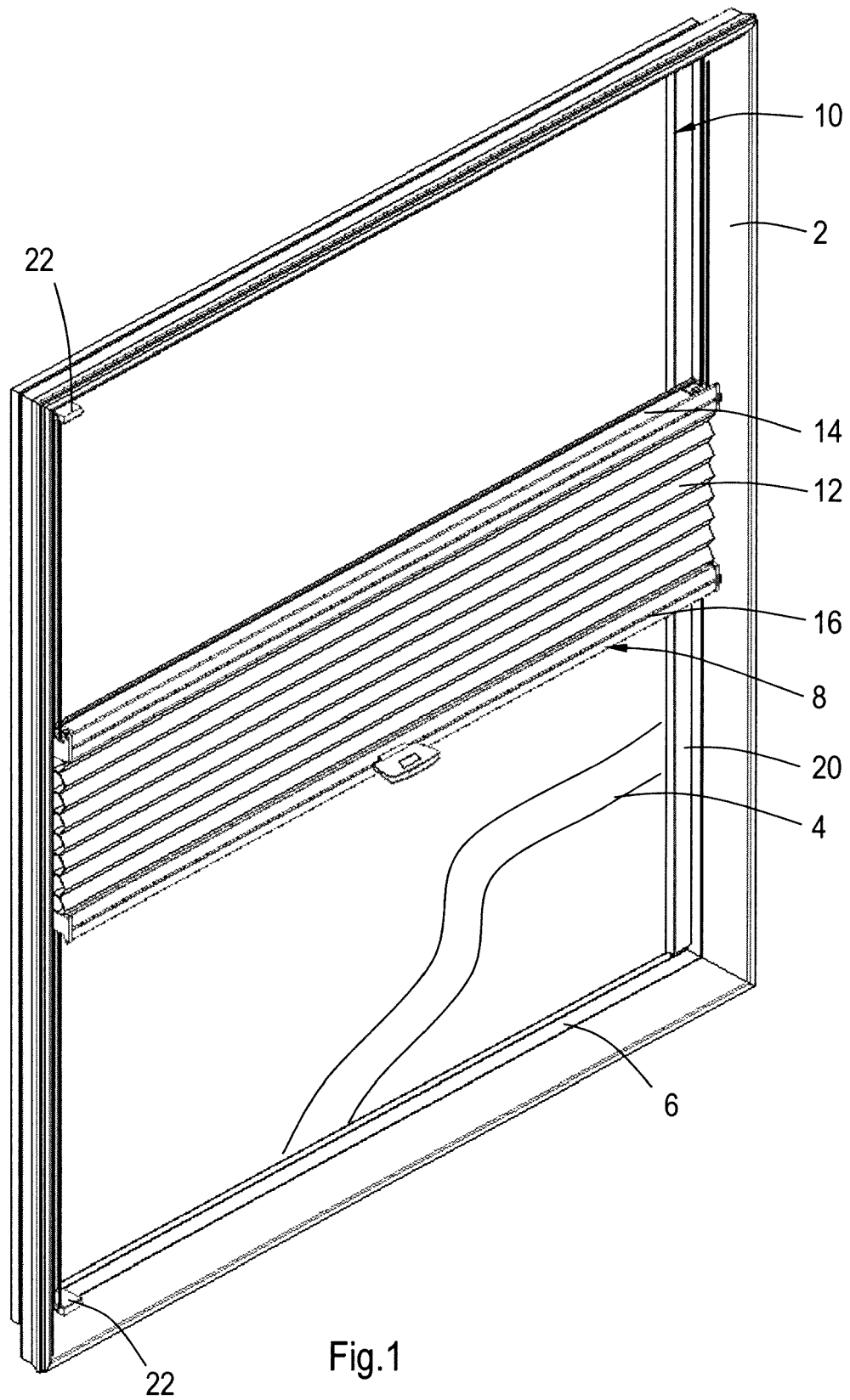


Fig.1

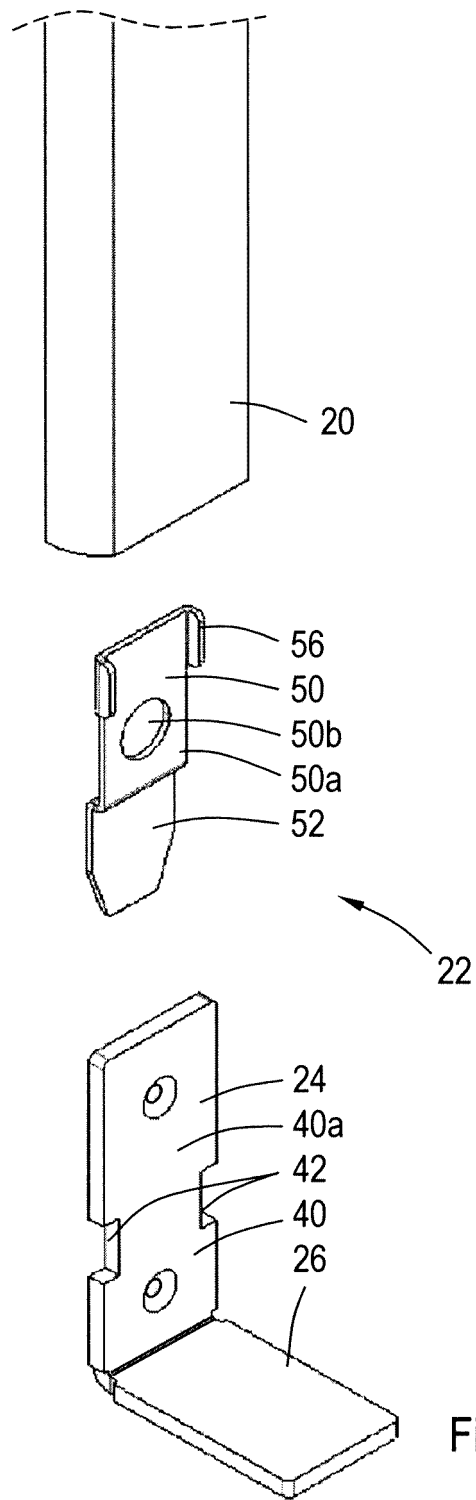
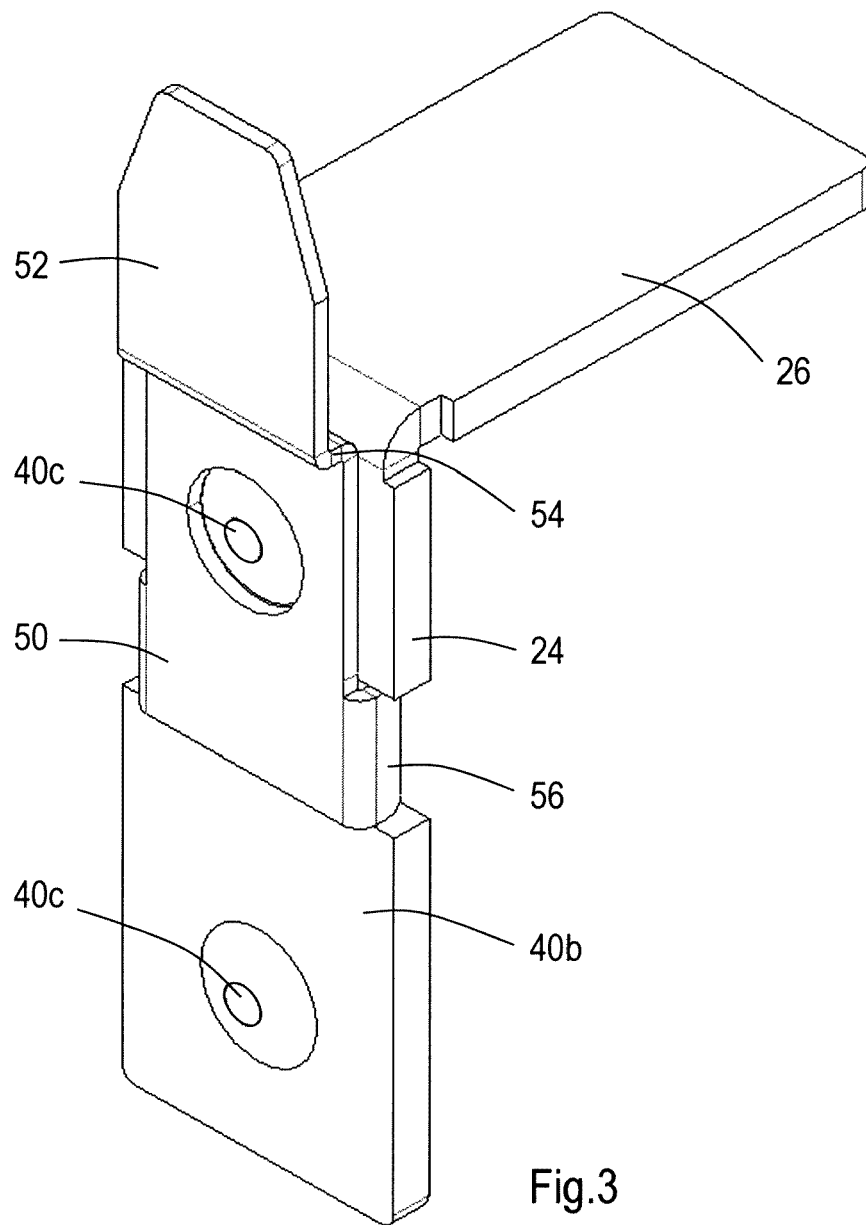


Fig.2



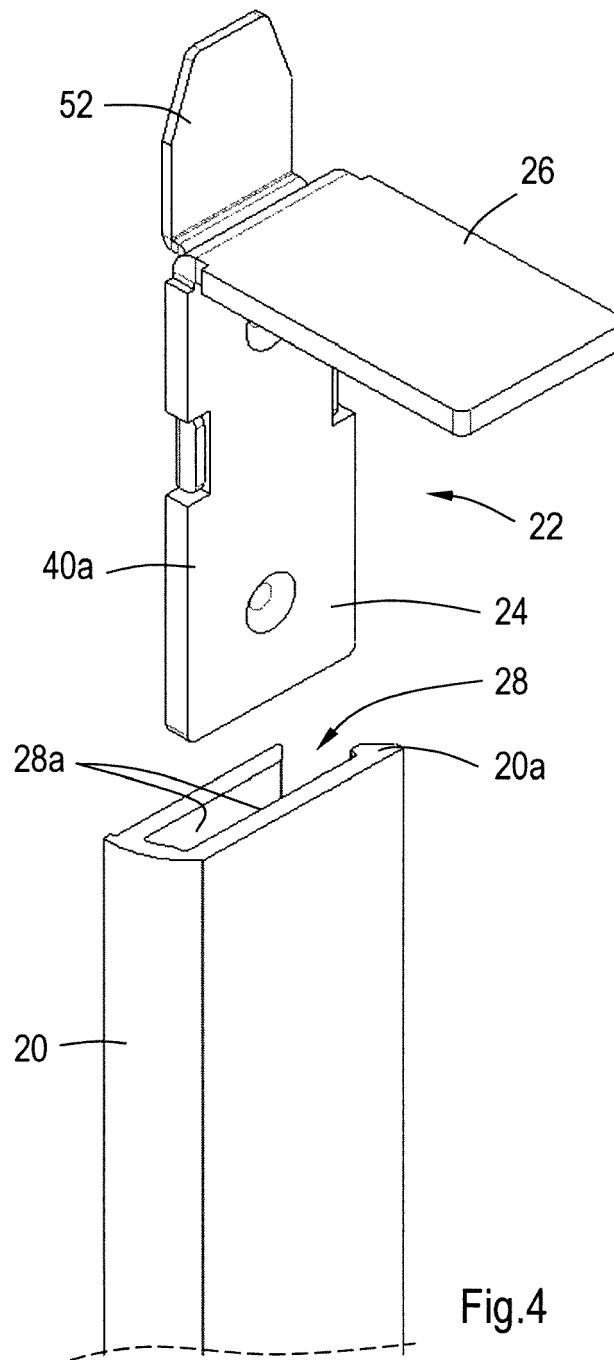
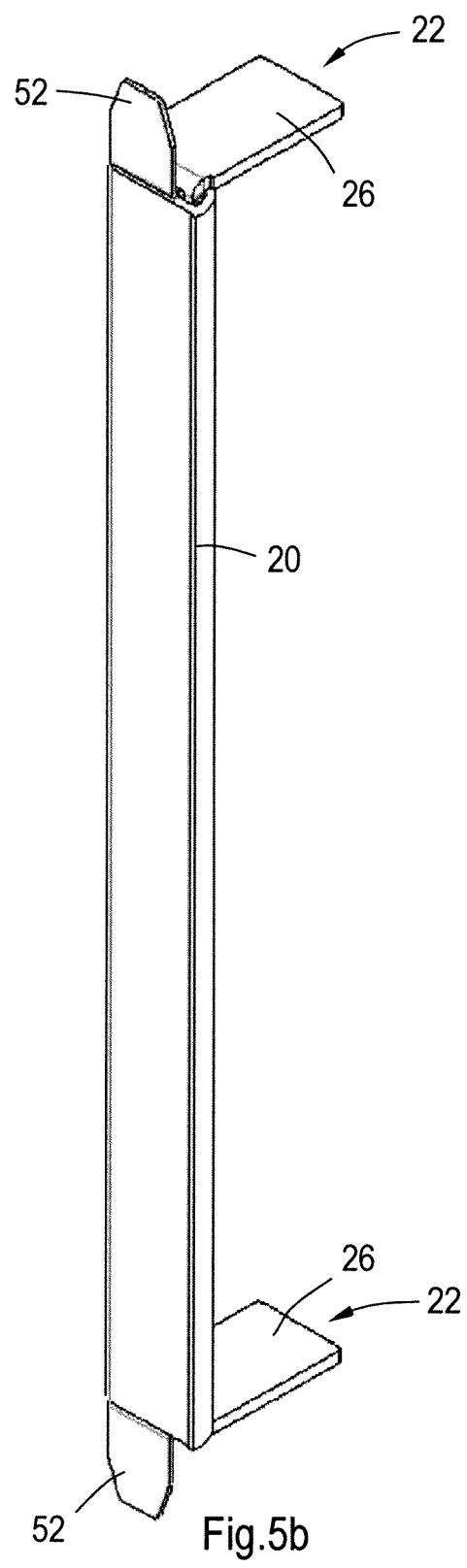
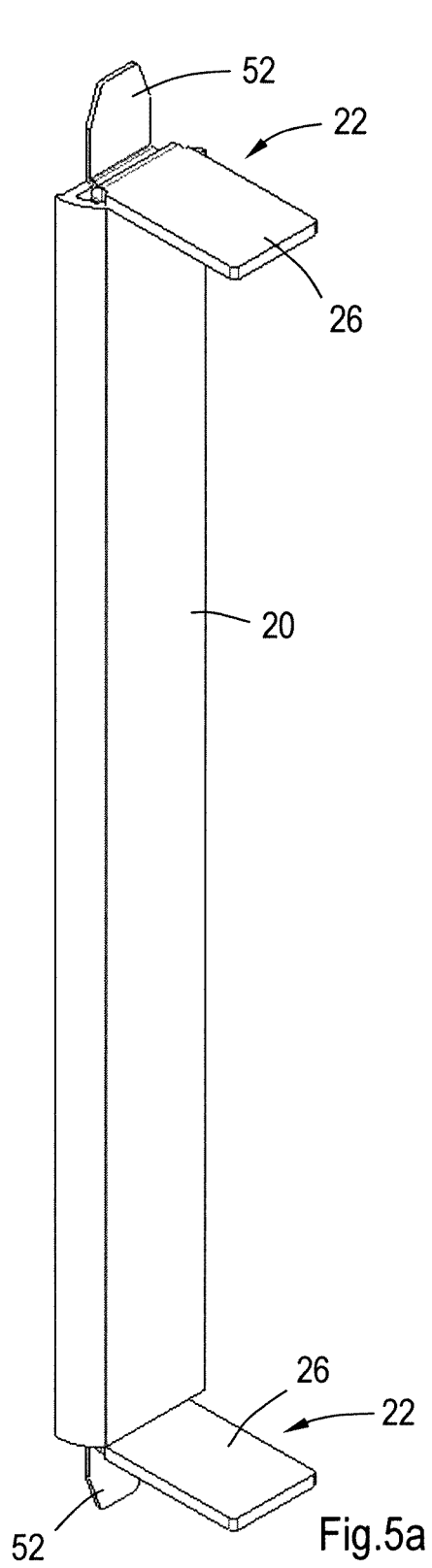


Fig.4



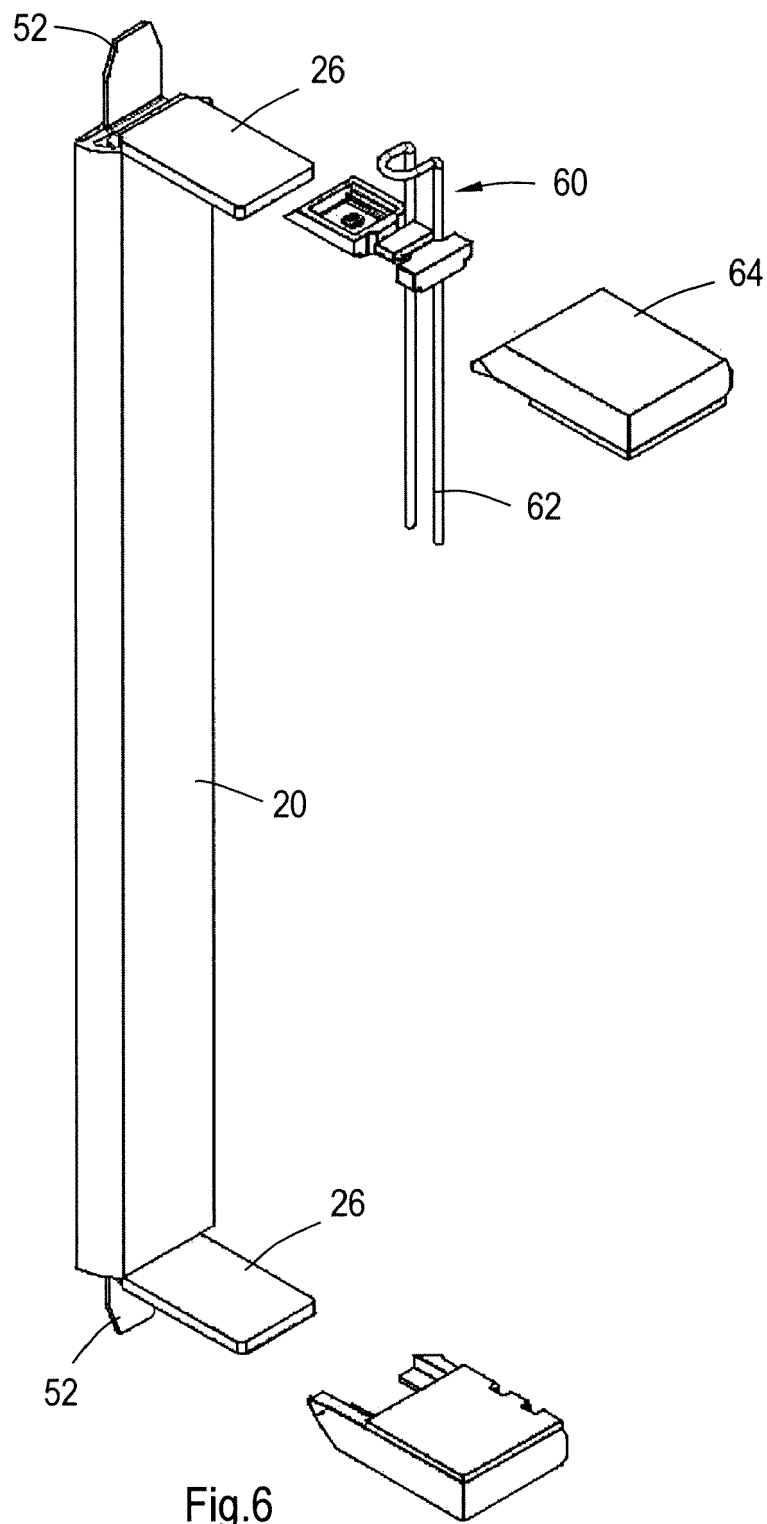


Fig.6

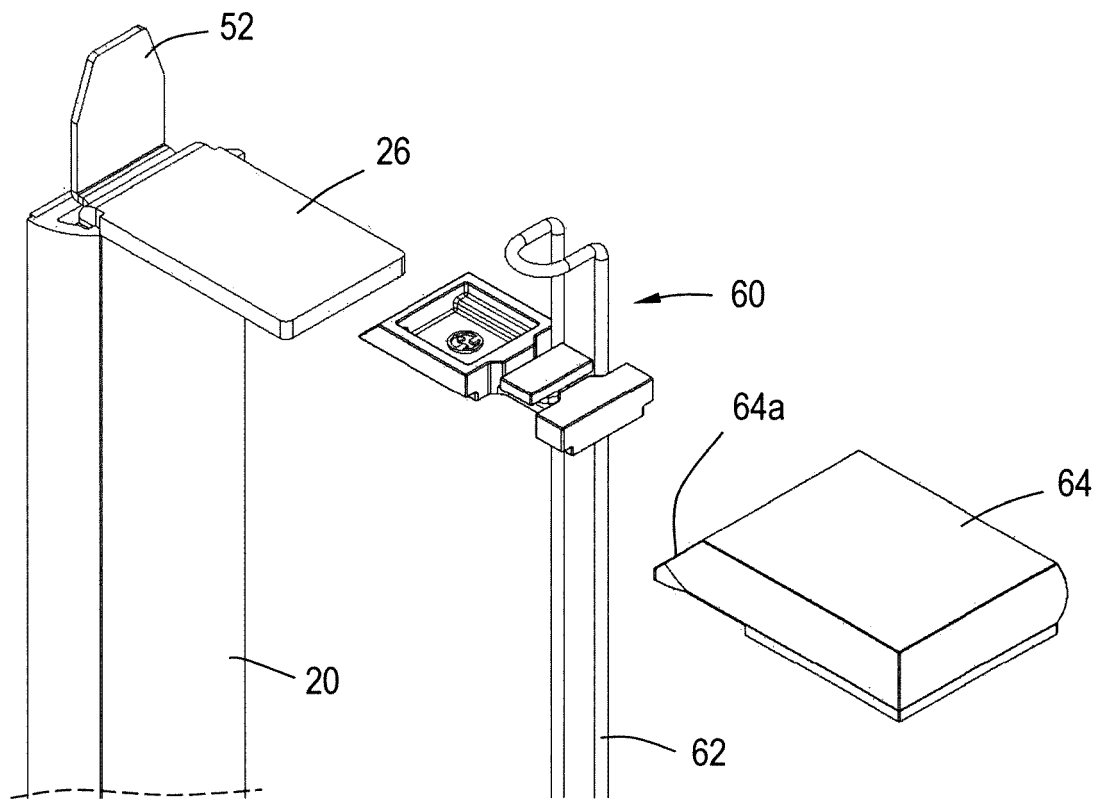
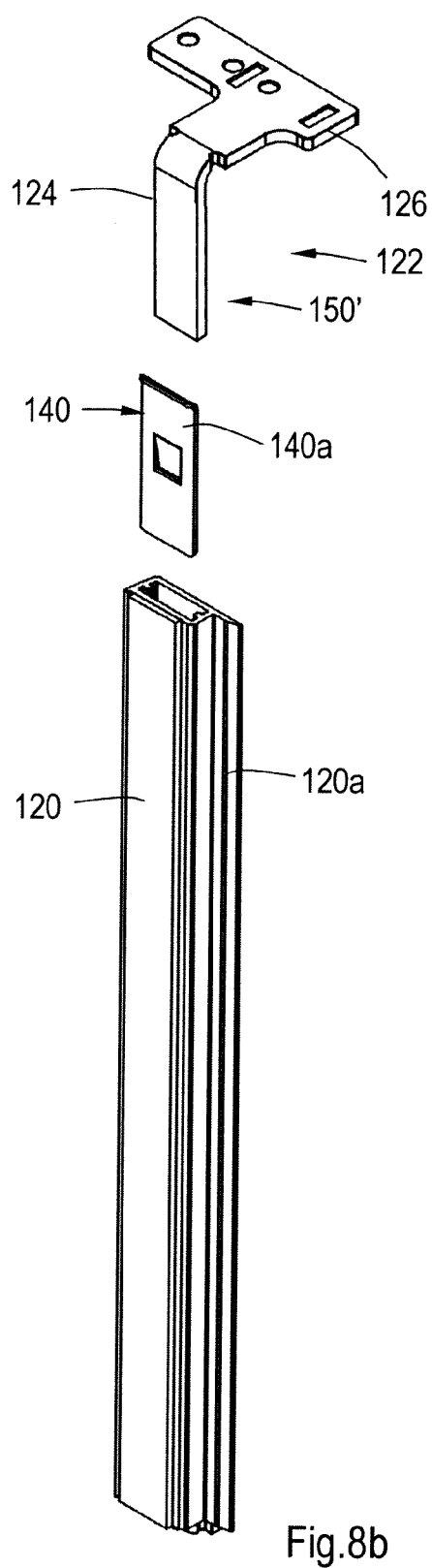
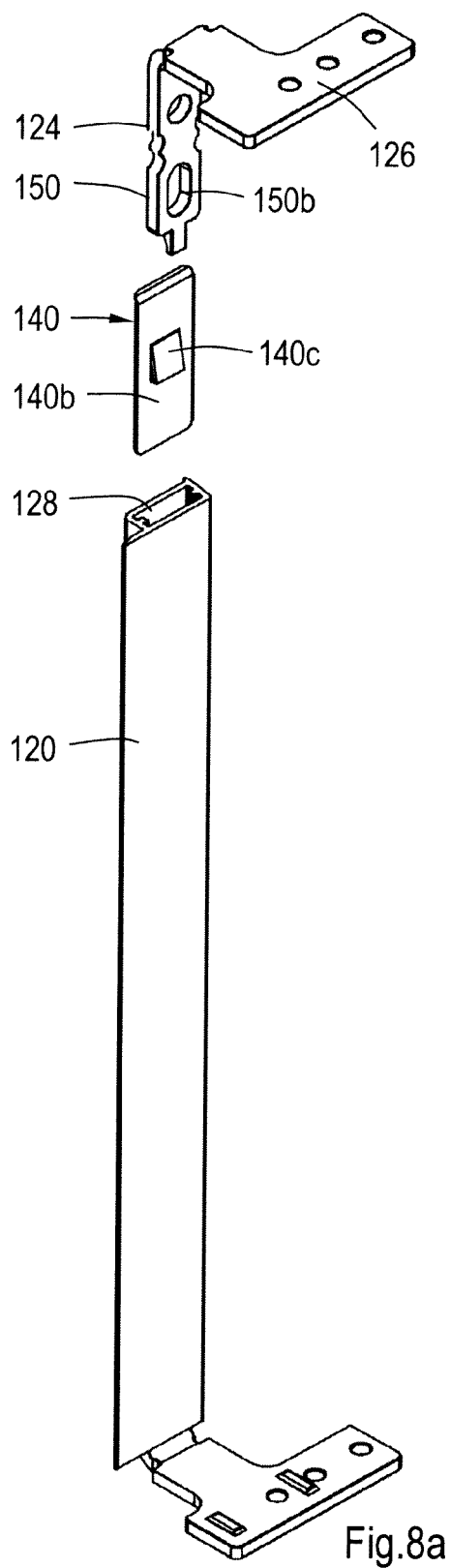
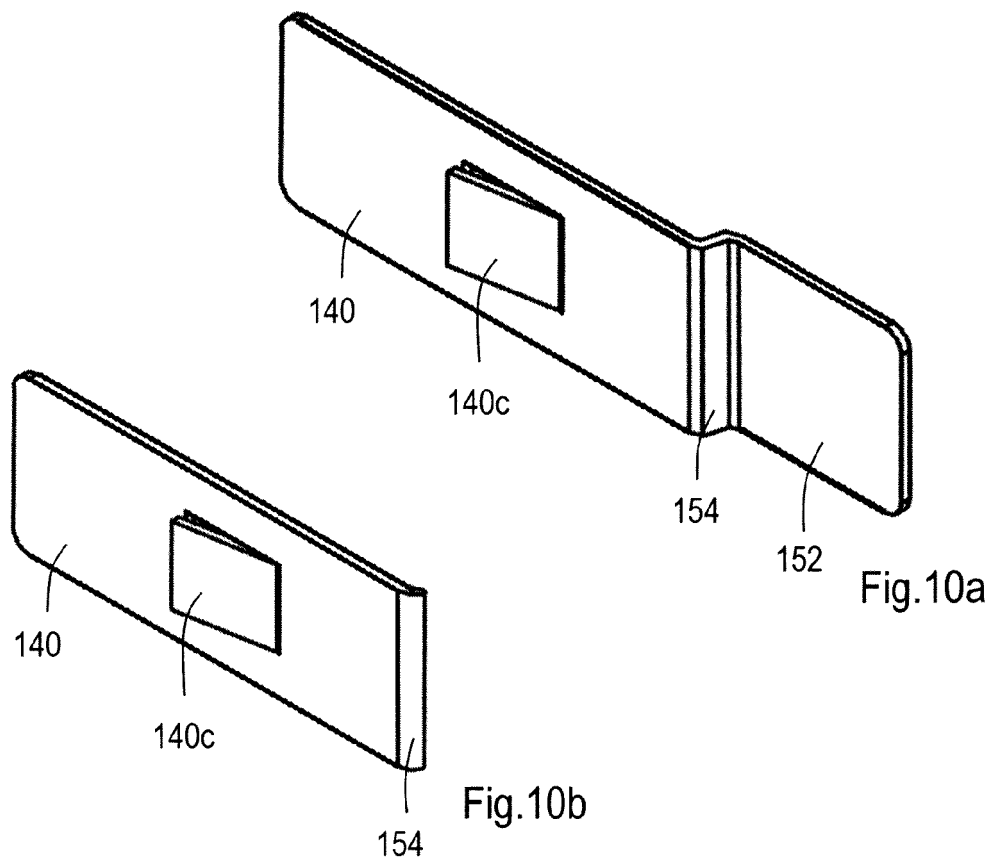
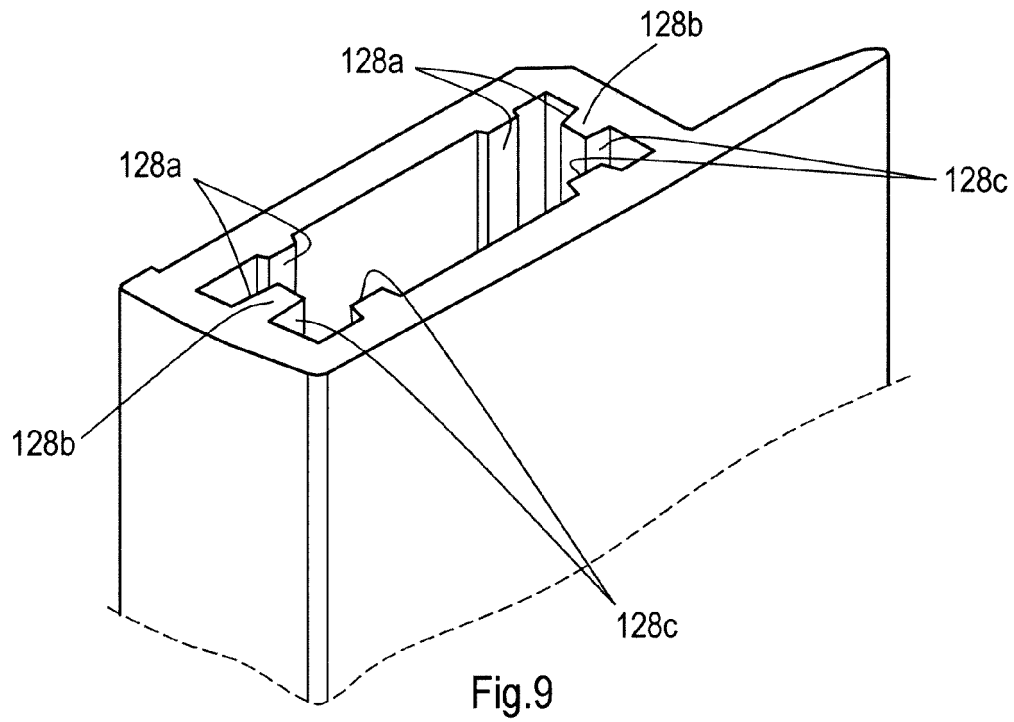


Fig.7





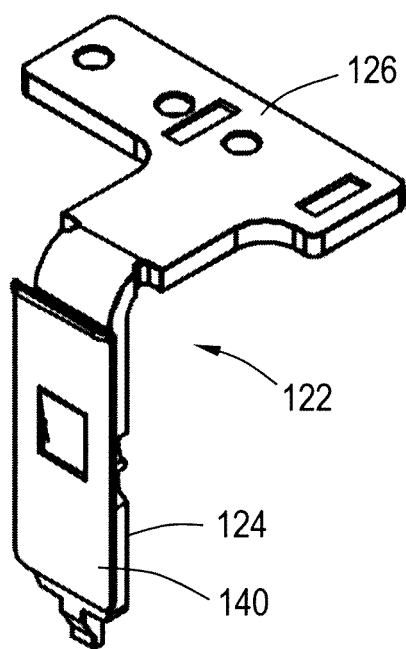


Fig. 11a

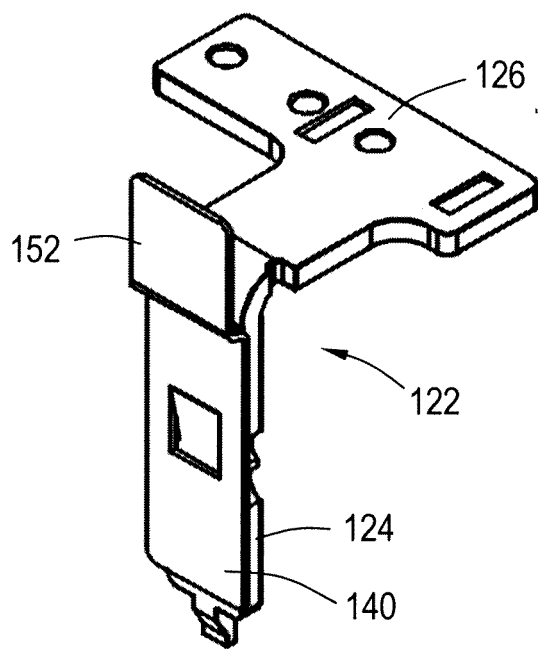


Fig. 11b

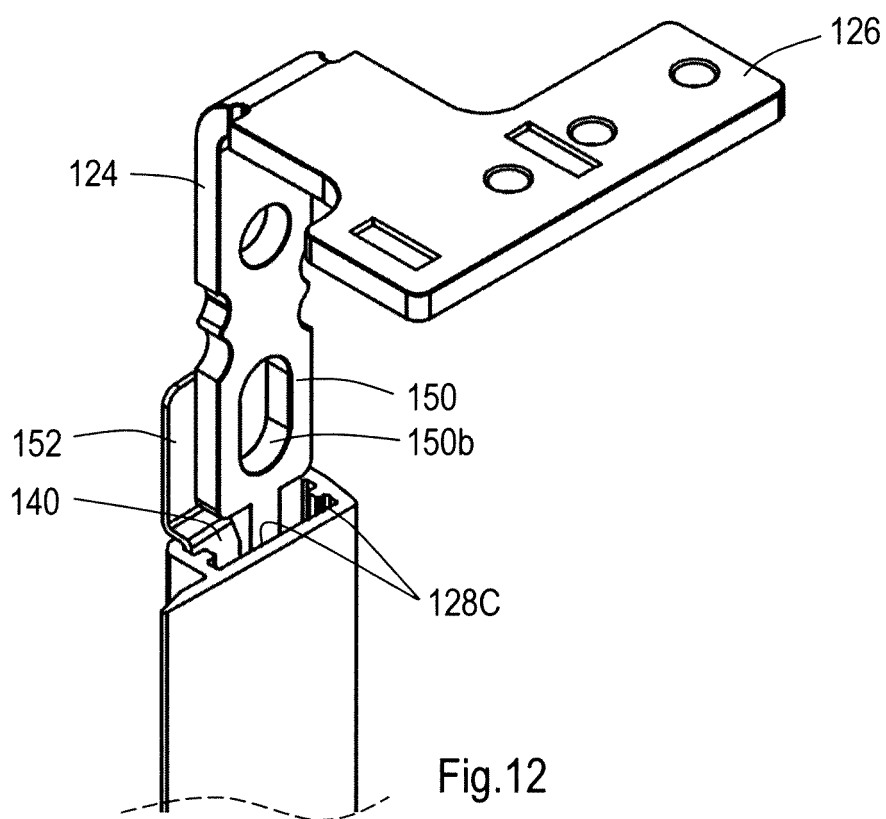


Fig. 12

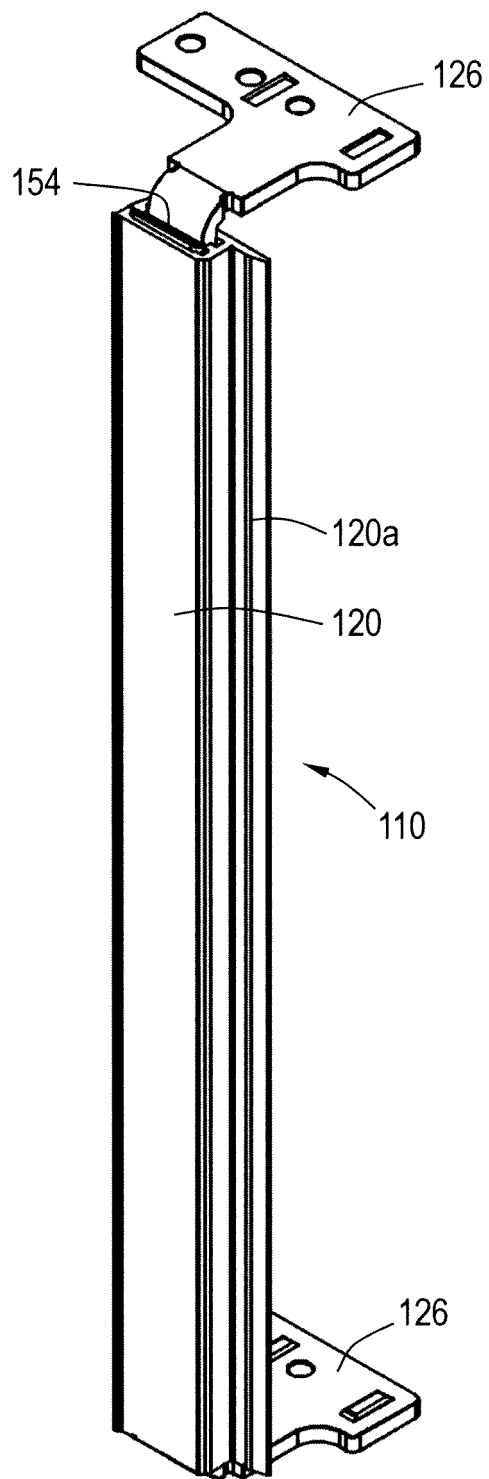


Fig.13a

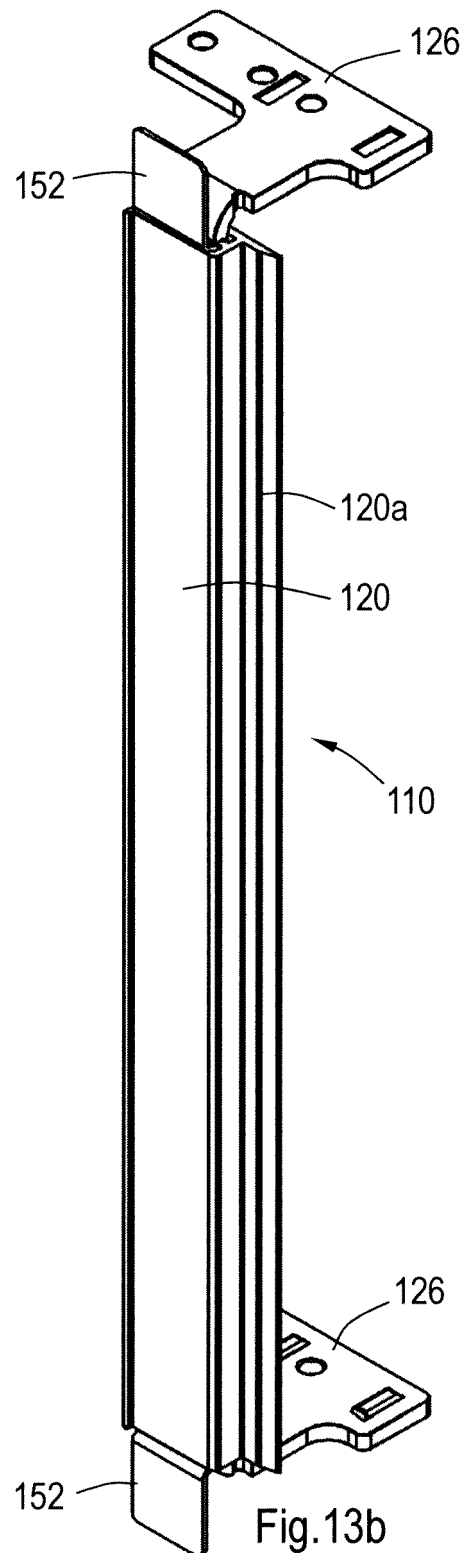
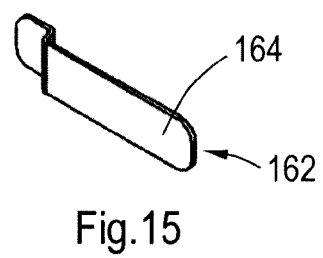
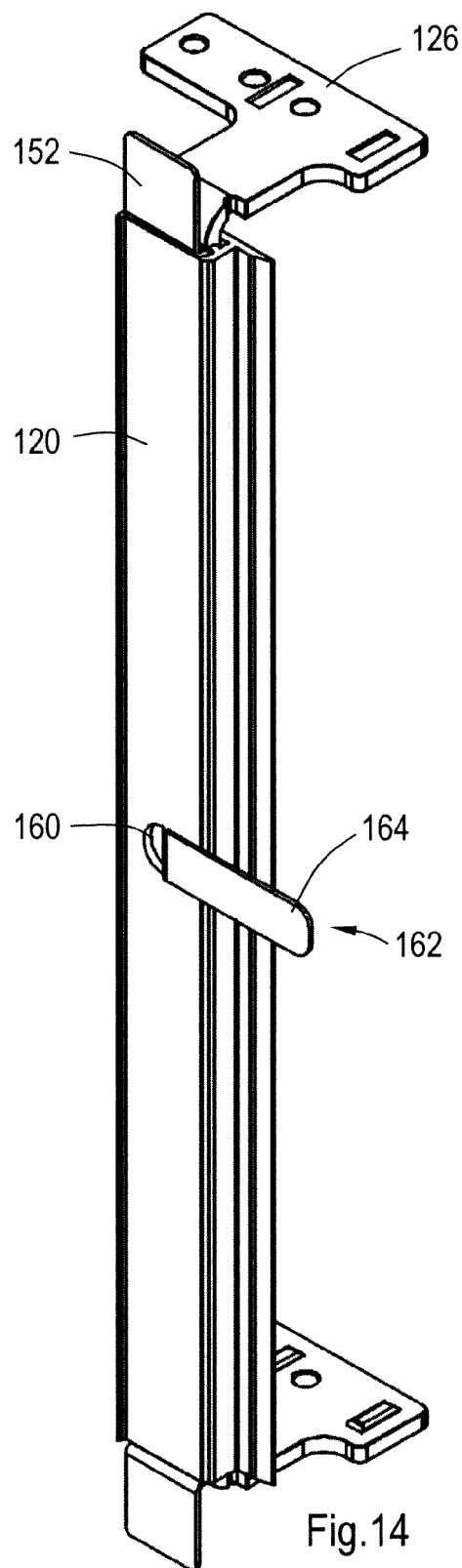


Fig.13b



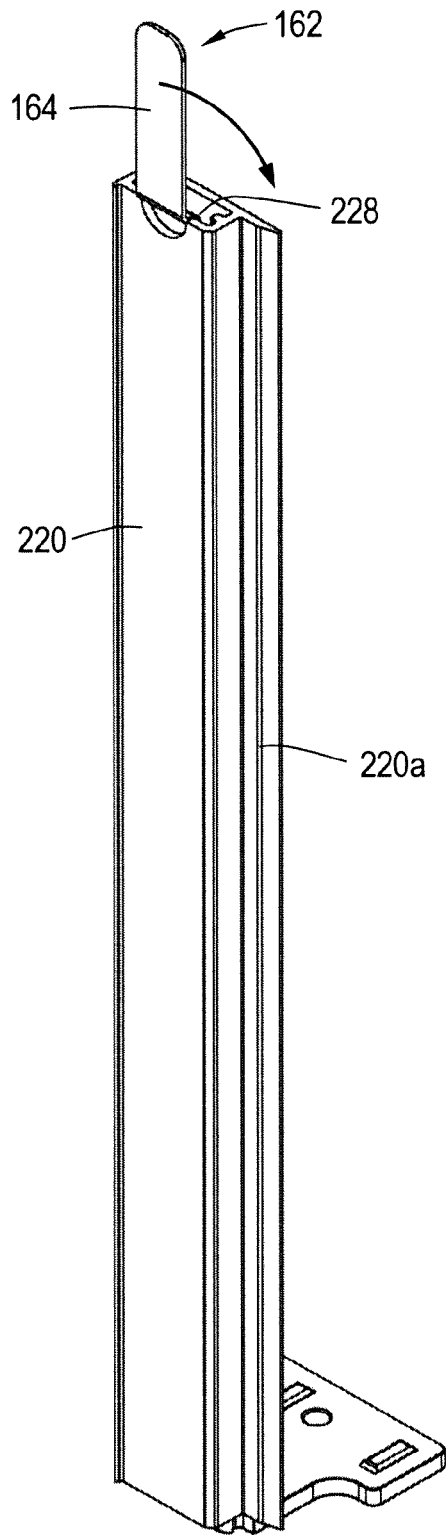


Fig. 16a

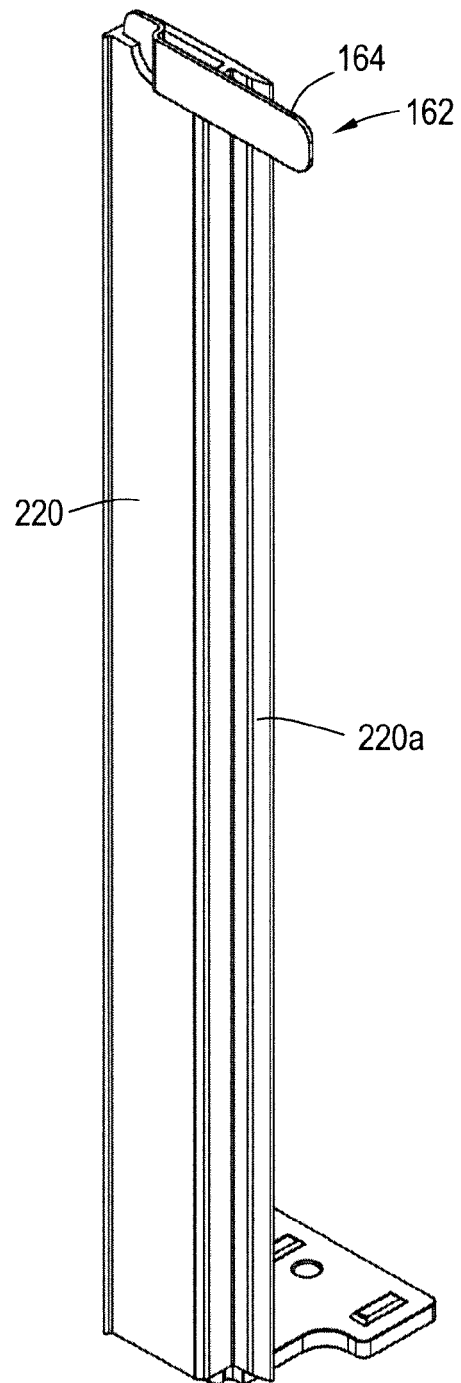
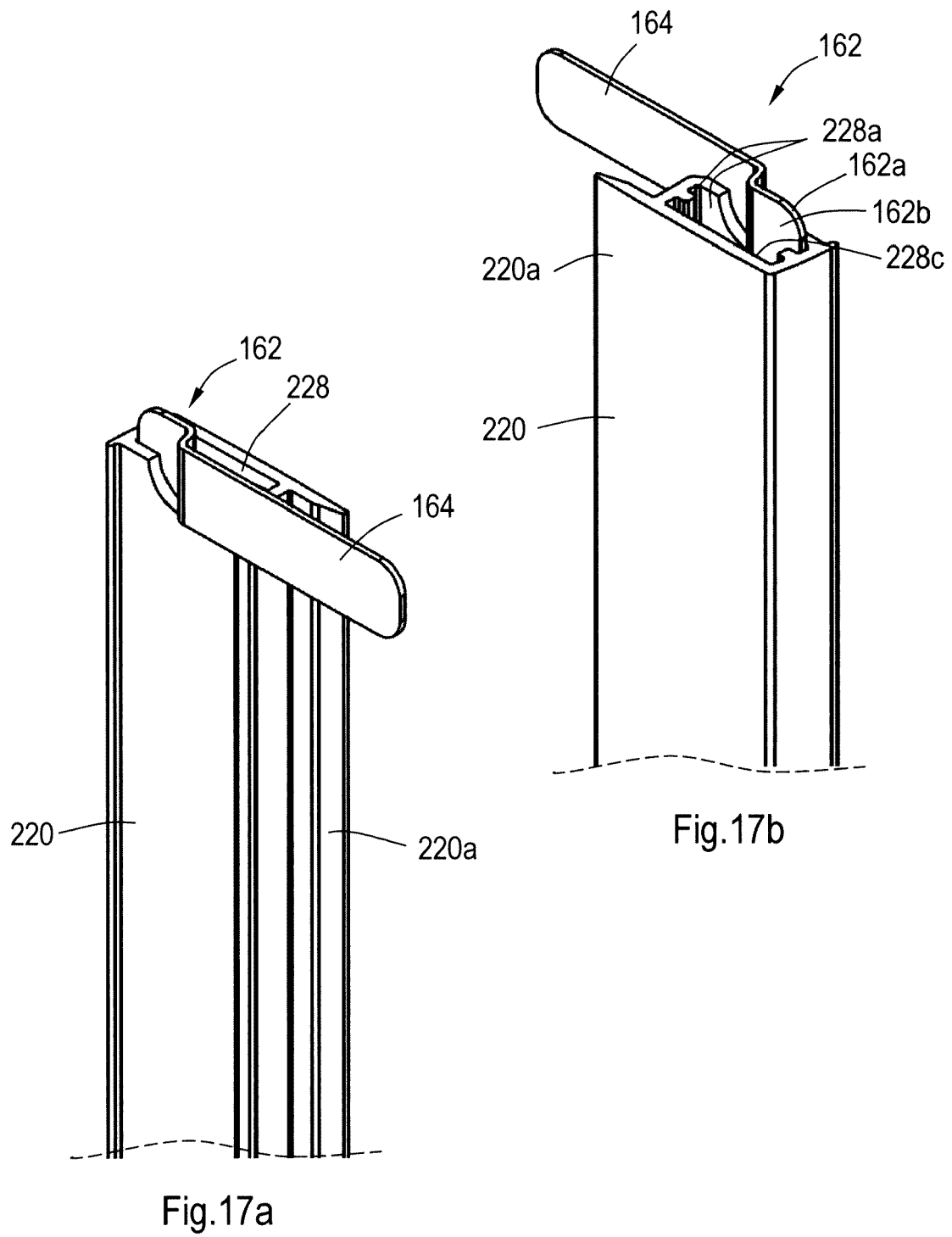


Fig. 16b





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 Application Number
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Place of search Munich		Date of completion of the search 23 February 2015	Examiner Peschel, Gerhard
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The members are as contained in the European Patent Office EDP file on
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23-02-2015

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