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(54) **COMBINATION OF A PROFILE AND HINGE FOR A WINDOW OR A DOOR WITH AN ACCESSORY FOR ADJUSTING THE POSITION BETWEEN SAID HINGE AND SAID PROFILE OF SAID WINDOW OR DOOR**

KOMBINATION EINES PROFILS UND EINES SCHARNIERS FÜR EIN FENSTER ODER EINE TÜR MIT ZUBEHÖR ZUR ANPASSUNG DER POSITION ZWISCHEN DEM SCHARNIER UND DEM PROFIL DES FENSTERS ODER DER TÜR

COMBINAISON D'UN PROFILÉ ET D'UNE CHARNIÈRE POUR PORTE OU FENÊTRE ÉQUIPÉ D'UN ACCESSOIRE POUR LE RÉGLAGE DE LA POSITION ENTRE LA CHARNIÈRE ET LE PROFILÉ DE LA FENÊTRE OU DE LA PORTE

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Description

[0001] The invention relates to a combination of a profile and a hinge and an accessory for adjusting the position between the hinge and the profile of a window or door for a building.

[0002] To mount a turnable leaf of a window or door in the fixed frame of the window or door in a building, use is made of hinges, which as known are formed by two hinge leafs with which the hinge is fastened to the leaf and the fixed frame, whereby the hinge parts are hingeably connected together by means of a hinge pin.

[0003] When mounting the leaf in the fixed frame, it is important that the position of the leaf in the fixed frame can be adjusted to be able to easily open and close the door or window without snaring and to be able to easily operate the closing mechanism without pinching.

[0004] It is already known from BE 1.016.414 that an accessory with an adjustable thickness can be used for this purpose that is affixed between the hinge and the profile of the window or door to which the hinge is fastened during the mounting of the window or door.

[0005] This accessory is composed of two plate-shaped parts that are affixed together by one side and which are each provided on this side with a wedge-shaped relief with wedge-shaped elements that are such that when both parts are moved with respect to one another in the longitudinal direction with their wedge-shaped elements, the plate-shaped parts move away from one another so to speak, such that the thickness of the accessory can be adjusted by a mutual movement of the plate-shaped parts.

[0006] The thickness of the accessory is infinitely adjustable by means of an adjustment screw that is also provided to keep the plate-shaped parts in place with respect to one another in the aforementioned longitudinal direction.

[0007] A disadvantage of this known accessory is that a tool is required to be able to make the aforementioned adjustment by means of an adjustment screw.

[0008] The facilities for adjustment by means of an adjustment screw also burden the production cost.

[0009] An accessory is known from DE 31.14.660 for furniture doors in the form of a plate-shaped part that is provided on one side with upright teeth that in the mounted situation grip in corresponding slots that are provided to this end in a hinge leaf of the hinge.

[0010] This accessory is manually movable in the longitudinal direction to adjust the furniture door and after adjustment is secured by means of a screw with which the hinge leaf concerned is fastened to the piece of furniture.

[0011] However, these types of hinges are not suitable for heavy doors and windows of a building, as the forces with which the hinge leaf and the accessory must be fastened by means of the aforementioned screw ensure that, when screwing down the screw, the accessory inevitably moves with respect to the hinge leaf on account of the smooth edges of the aforementioned teeth.

[0012] In addition, a precise adjustment is not possible and when taking down and remounting a door or window the adjustment has to be made again.

[0013] A hinge and an accessory for the sideways adjustment of the position of the hinge leaf is known from DE9300931U.

[0014] The invention relates to a combination according to claim 1, in particular a combination of a profile and a hinge for a window or a door of a building, the hinge comprising an accessory for the sideways adjustment of the position of a hinge leaf (6) of the hinge (4) on the profile (2) of the window or door.

[0015] The sideways adjustment of the hinge on the profile can thereby be very easily done within certain limits by simply moving the sliding piece in the aforementioned groove of the profile.

[0016] According to an embodiment, the hinge is provided with an additional accessory for adjusting the distance between a hinge of a window or door and a profile of a window or door, whereby this accessory is composed of two essentially plate-shaped parts that are affixed together by one side and which are movably affixed with respect to one another by these sides in a certain sliding direction, whereby the sides that are affixed together are each provided with one or more wedge-shaped elements that are such that when both parts are moved with respect to one another with their wedge-shaped elements in one or another direction according to the aforementioned sliding direction, the thickness of the accessory increases or decreases, whereby both plate-shaped parts are formed such that they are freely movable, manually without tools, over a distance with respect to one another in the mounted situation of the accessory, between the hinge and the aforementioned profile of the window or door.

[0017] Thanks to such an additional accessory ,the position of the leaf in the fixed frame can be easily done manually without the need for any tools.

[0018] The hinge that is provided with an additional accessory as described above, can comprise two hinge leafs that are hingeably connected together and of which at least one hinge leaf is provided with one or more passages corresponding to the aforementioned passages in the accessory for a screw.

[0019] This provides the advantage that the accessory and the hinge together can be fastened to the window or door by means of the same screws and thus no extra screw holes are required in the window or door.

[0020] With the intention of better showing the characteristics of the invention, a preferred embodiment of a hinge for a window or a door of a building and a combination of such a hinge and a profile, the hinge comprising an accessory for the sideways adjustment of the position of a hinge leaf of the hinge on the profile of the window or door, the combination being described hereinafter by way of an example, without any limiting nature, with reference to the accompanying drawings, wherein:

figure 1 schematically shows a perspective view of a section of a window that is equipped with a hinge not part of the present invention;
figure 2 shows a section of the window and the hinge of figure 1 in an exploded view;
figure 3 shows the section that is shown in figure 2, but from another point of view;
figure 4 shows the accessory that is indicated by F4 in figure 2, but in an assembled state;
figure 5 shows the accessory of figure 4 seen from behind according to arrow F5;
figure 6 shows the part indicated by F6 in figure 2 on a larger scale;
figure 7 shows a view according to arrow F7 in figure 6;
figure 8 shows the part indicated by F8 in figure 2 on a larger scale;
figure 9 shows a cross-section along line IX-IX in figure 5;
figure 10 shows a view of the accessory such as that of figure 5, but in a different assembled state;
figure 11 shows a cross-section along line XI-XI in figure 10;
figure 12 shows the section indicated by F12 in figure 3 on a larger scale;
figure 13 shows a perspective view such as that of figure 1, but with an additional accessory for adjusting the position of the hinge according to the invention;
figures 14 and 15 show views such as those of figures 2 and 3, but for the embodiment of figure 13;
figures 16 and 17 respectively show a front view and back view of the section that is indicated by the bracket F16 in figure 14, but in a mounted situation;
figures 18 and 19 show analogous drawings to those of figures 4 and 5, but for the alternative embodiment of figure 13;
figure 20 shows the section of the hinge of figure 13 that is indicated by F20;
figure 21 shows a perspective view of the section indicated by F21 in figure 20 on a larger scale;
figure 22 shows the back of the section shown in figure 21;
figure 23 shows a cross-section according to line XXVIII-XXVIII of figure 20;
figures 24 and 25, respectively 26 and 27, are analogous representations to those of figure is 20 and 23, but for other mounted situations.

[0021] Figure 1 shows a section of a window 1 comprising a profile 2 of the fixed frame of the window 1 and a profile 3 of the leaf of the window 1, whereby these profiles 2 and 3 are hingeably connected together by means of a hinge 4 that is composed of two hinge leafs 6 and 7 that are connected together by means of a hinge pin 8.

[0022] The hinge 4 is fastened to the profiles 2 and 3 by means of screws 9 that are screwed through appropriate passages 10 in the screw leaves and in passages 11 in the aforementioned profiles 2 and 3.

[0023] The hinge 4 comprises an essentially plate-shaped accessory 12 according that in this case is mounted between the hinge leaf 7 and the profile 3 and which to this end is provided with passages 13 for the screws 9, whereby to this end these passages have the same distance between centres A from one another as the distance between centres A between the passages 10 in the hinge leaf 7.

[0024] The accessory 12 is composed of two plate-shaped parts 12a and 12b with sub-passages 13a and 13b for the screws 9.

[0025] The first plate-shaped part 12a is movably affixed by the back 14a onto the hinge leaf 7 along a sliding direction X-X', to which the plate-shaped part 12a concerned is affixed by two opposite edges between two guides, respectively a guide 17 that in the example is formed by a U-shaped folded rib 19 that forms a groove 20 where the movable plate-shaped part 12a concerned is movably held by its edge 15 and a guide 18 that is formed by an upright wall 21 that forms a guide for the edge 16 of the hinge leaf 7 and which in this case is formed by a separate guide element 18 that can be snapped onto a free edge 22 of the hinge leaf 7.

[0026] The snap-fastenable guide 18 is constructed as an L-profile of which one wall forms the aforementioned upright wall 21 and there are elastic lips 24 at a distance from the other wall 23 at the end around a folded edge 25 to form a small hook with which the guide 18 can be snap-fastened behind a groove 26 along the aforementioned edge 22 of the hinge leaf 7, as is best seen in figure 12.

[0027] The snap-fastenable guide 18 is provided at the ends of a stop wall 27, whereby the distance between the stop walls 27 corresponds to the length of the edge 22, so that in the mounted situation the guide 18 cannot move in the sliding direction X-X'.

[0028] The sub-passages 13a in the plate-shaped part 12a are constructed as slip holes such that, when the hinge 4 is mounted with screws 9, the plate-shaped part 12a remains movable over the length of the slip holes in the sliding direction X-X' with respect to the hinge leaf 7.

[0029] Furthermore the hinge is provided with means that enable the position of the movable plate-shaped element 12a with respect to the hinge leaf 7 to be read.

[0030] In the example shown these means are formed by a mark 28 in the form of a tooth affixed on the edge 16 of the movable plate-shaped part 12a that is movably held in a rectangular window 29 in the aforementioned upright wall 21 opposite a graduated scale 30 on the outside of the aforementioned upright wall 21.

[0031] The plate-shaped part 12a is provided at both ends with an operating element 31 with an elongated body that can be grasped by the fingers of a fitter and which extends in the aforementioned sliding direction X-X' in line with the plate-shaped element 12a concerned, such that in a mounted situation of the accessory 12 the

operating elements 31 remain accessible between the hinge leaf 7 and the aforementioned profile 3 for a manual movement by a fitter, at least insofar the leaf of the window 1 is turned sufficiently open.

[0032] At the same time means can be provided to keep the part 12a in position and to be able to move it incrementally with respect to the hinge leaf 7 and thus to provide a resistance against unwanted movement of the part 12a.

[0033] In the example these means are formed by both surfaces being provided with toothing or ribs at certain places where the plate-shaped element 12a is in contact with the hinge leaf 7, such as for example ribs 32 on the back 14 of the plate-shaped element 12a that move opposite ribs 33 on the lips 24, or in the form of ribs 34 opposite a tooth 35 on the upright wall 21 of the guide 18, which is snap-fastened to the hinge leaf 7.

[0034] The second plate-shaped part 12b is provided with sub-passages 13b for the screws 9 in the form of fitted holes with a diameter that is somewhat greater than the diameter of the screws 9 so that in the mounted situation of the accessory, this plate-shaped part 12b concerned is prevented from moving with respect to the hinge leaf 7 by the screws 9, while the first plate-shaped part 12a can move with respect to the second part 12b.

[0035] Both parts 12a and 12b are provided with a relief on the sides turned towards one another, with corresponding wedge-shaped elements 36 and 37 that can best be seen in figures 7 and 8 and which are arranged in series behind one another in the sliding direction X-X' and as it were form toothings extending alongside one another that are located with respect to one another in the sliding direction X-X' according to a slanted pattern.

[0036] The toothings that are formed by the wedge-shaped elements 36 and 37 fit into one another and are affixed movably against one another by their oblique sides such as can be seen in the cross-section in figures 9 and 11 in which it can be seen that in figure 11 the teeth are completely moved into one another, while in figure 9 the plate-shaped part 12b is moved upwards with respect to the other part 12a, such that the outermost surfaces 14a and 14b of the accessory 12 are as it were pushed away from one another, which comes down to the thickness D of the accessory 12 in figure 9 being greater than the thickness D of the accessory 12 in figure 11.

[0037] The oblique sides of the wedge-shaped elements 36 and 37 are provided with ribs 38 that extend in a direction transverse to the aforementioned sliding direction X-X' and which must provide a resistance against the accidental sliding apart of the parts 12a and 12, and in this way form means to incrementally move the plate-shaped parts 12a and 12b with respect to one another and keep them in position.

[0038] By the slanted toothing next to one another fitting into one another, a guide is also obtained from the parts 12a and 12b mutually in the direction X-X'.

[0039] The parts 12a and 12b are held together by means of an elastic lip 39 that is affixed to one of the two plate-shaped parts, in this case on part 12b, and which is elastically tightly hooked behind the back 14a of this plate-shaped part 12a via a passage 40 in the other part 12a, or as in the example shown, behind a sloping base of a deepened section 41 in this back 14a.

[0040] The end of the lip 39 is preferably provided with ribs 42 that can mesh with ribs 43 on the base of the deepened section 41.

[0041] The use of a hinge 4 is simple and as follows.

[0042] The hinge is fastened to the profiles 2 and 3 of the fixed frame and the leaf of the window 1 by means of the screws 9, as shown in figure 1.

[0043] The screws 9 for fastening onto the profile 3 of the leaf are inserted through the passages 10 in the hinge leaf 7 and through the passages 13 in the accessory 12, and screwed tight in the passages 11 in the profile 3, but not completely tightened such that a movement of the movable plate-shaped part 12a of the accessory 12 remains possible.

[0044] Then the plate-shaped part 12a is moved upwards or downwards by means of an operating element 31 in order to thus move this part 12a of the accessory 12 with respect to the other part 12b of the accessory 12 in order to adjust the thickness D of the accessory 12 in this way according to desire, and thereby also the position of the leaf in the frame of the window 1.

[0045] Once the accessory 12 has been set to the desired thickness D, the screws 9 can be completely tightened such that the parts 12a and 12b of the accessory can no longer move and the thickness of the accessory 12 takes on a fixed value.

[0046] In order to correct the position of the leaf if necessary, it is sufficient for the screws 9 of the hinge leaf 7 to be slightly loosened and to move the movable part 12 of the accessory 12 by hand to the desired position and then to tighten the screws 9 again.

[0047] If the leaf of the window 1 must be taken down for one or another reason, the position of the movable part 12a of the accessory can be read off beforehand by noting the position of the mark 28 with respect to the graduated scale 30, so that when refitting the leaf in the frame the movable part 12a can be brought back to the same position.

[0048] It goes without saying that the accessory 12 can also be used separately between a conventional hinge without guides 17 and 18 and a profile 3.

[0049] It is clear that the accessory can also be used to adjust the distance of the hinge leaf 6 with respect to the profile 2 of the fixed frame.

[0050] It is clear that the number of wedge-shaped elements 36, 37 can vary from one per plate-shaped part to a number of elements per plate-shaped part.

[0051] Figure 13 shows a variant of a hinge according to the invention with a variant embodiment of the accessory 12 as described above, and of an additional accessory 44 to be able to adjust the lateral position of the hinge leaf 6 with respect to the profile 2.

[0052] In this case, the first accessory 12 is provided

with a guide element 45 that replaces the aforementioned guides 17 and 18 and brings them together into one element in the form of a plate 46 with two parallel guides 17 and 18 thereon in the form of upright walls 19 and 21, between which the plate-shaped part 12a of the connecting piece 12 is movably affixed and is clipped between them by providing the sides of these guides 17 and 18 that are turned towards one another with clips 47.

[0053] In this case the guide element 45 is provided with taps 48 whereby the guide element 45 can be clamped in passages 49 of the hinge leaf 7.

[0054] Just like the guide 18, the guide element 45 is also provided with a window 29 with a graduated scale 30 for the reading of the mark 28, and on the inside of the plate 46 is provided with ribs 33 that can mesh with ribs 32 on the back 14a of the plate-shaped part 12a of the accessory 12.

[0055] The guide element 45 is made as one component of plastic for example by injection moulding so that the clips 47 and taps 48 can be realised in one injection operation.

[0056] The second accessory 44 is intended to adjust the sideways position of the hinge leaf 6 according to a direction Z-Z' transverse to the longitudinal direction of the profile 2.

[0057] The hinge leaf 6 is incorporated in a groove 51 of the profile 2 of the fixed frame with a certain sideways play with a thickened section 50. The passages 10 for the screws 9 in the hinge leaf 6 are executed in this case as slotted holes 10 that extend along the longitudinal direction of the profile 2, in order to be able to also make a height adjustment of the leaf, and these slotted holes 10 are somewhat larger in width than the diameter of the shank of the screws 9 to enable a sideways movement of the hinge leaf 6.

[0058] The second accessory 44 is constructed as a sliding piece 52 that is affixed between the hinge leaf 6 and the profile 2 and which is provided with a guide rib 53 with which the sliding piece 52 is movably affixed in the axial direction in a groove 54 of the profile 2, and which is provided with a peg 55 that is guided in a slot 56 of the hinge leaf 6, whereby this slot 56 runs obliquely with respect to the longitudinal direction of the profile 2.

[0059] The peg 55 and the hinge leaf 6 are provided with horizontal marks 57, respectively 58, that enable their mutual position to be indicated.

[0060] In the situation of figures 20 and 23 the marks are at the same height, corresponding to a neutral position of the hinge leaf 6 whereby the thickened section 50 of the hinge leaf 6 is located approximately centrally in the groove 54 with a play S and S' on both sides of the thickened base 50.

[0061] To adjust the sideways position of the hinge leaf 6 when mounting the window the screws 9 of the hinge leaf 6 are not fully tightened and the sliding piece 52 with the peg 48 is moved upwards or downwards according to the desired position.

[0062] Figures 24 and 25 show a situation whereby the sliding piece 52 is moved downwards with respect to the neutral position of figures 20 and 23 and whereby the thickened section 50 is pushed to the right in the groove 54 to a maximum, whereby the play S is a maximum and the play S' is zero.

[0063] In figures 26 and 27 the sliding piece 52 is moved upwards to move the hinge leaf 6 in the other direction, resulting in a maximum play S'.

[0064] It goes without saying that an adjustment between these two extreme situations is possible.

[0065] It is clear that certain parts of the accessories can be entirely or partially integrated into the hinge itself.

[0066] The present invention is by no means limited to the embodiment described as an example and shown in the drawings, but such a combination according to the invention of a profile and a hinge for a window or a door of a building, can be realised in different variants without departing from the scope of the invention as defined by the appended claims.

Claims

1. Combination of a profile (2) and a hinge (4)for a window or a door of a building, the hinge comprising an accessory for the sideways adjustment of the position of a hinge leaf (6) of the hinge (4) on the profile (2) of the window or door, wherein the profile (2) is provided with a first groove (51) and with a second groove (54) and the hinge leaf (6) is provided with a thickened section (50) that in the mounted situation of the position of the hinge leaf (6) on the profile (2) is slidably engaged in the first groove (51) with a certain sideways play , **characterised in that** the hinge leaf (6) is provided with a slot (56) that, in the mounted situation of the hinge leaf (6) on the profile (2), extends in a direction that runs obliquely with respect to the longitudinal direction of the profile (2), and **in that** the hinge (4) is provided with an accessory (44) that is constructed as a sliding piece (52) that in the mounted situation of the hinge (4) on the profile (2) is affixed between the hinge leaf (6) and the profile (2) and which is provided with a guide rib (53) with which the sliding piece (52) is movably affixed in the second groove (54) of the profile (2) and which is provided with a peg (55) that is guided in the slot (56) of the hinge leaf (6).

2. Combination according to claim 1, **characterised in that** the hinge leaf (6) is provided with passages (10) for affixing the hinge (4) to the profile (2) by means of screws (9) and **in that** the hinge (4) is provided with screws (9) for affixing the hinge leaf (6) to the profile (2) through said passages (10) and that said passages (10) are somewhat larger than the diameter of the shank of the screws (9) to enable a sideways movement of the hinge leaf (6) on the profile (2).

3. Combination according to claim 2, **characterised in that** the passages (10) are provided as slotted holes (10) that extend along the longitudinal direction of the profile (2), in order to also allow for a height adjustment of the hinge leaf (6) on the profile (2).

4. Combination according to any of the previous claims, **characterised in that** the peg (55) and the hinge leaf (6) are provided with horizontal marks (57), respectively (58) that enable their mutual position to be indicated.

5. Combination according to any of the previous claims, **characterised in that** the neutral sideways position of the hinge leaf (6) corresponds to a position wherein the thickened section (50) of the hinge leaf (6) is located approximately centrally in the groove (54) with a play (S,S') on both sides of the thickened section (50).

6. Combination according to any of the previous claims, **characterised in that** the hinge (4) is provided with a second hinge leaf (7) for fixing the hinge (4) to a second profile (3) and with an additional accessory (12) to adjust the distance between the second hinge leaf (7) and the second profile (3), whereby said additional accessory (12) is composed of two essentially plate-shaped parts (12a and 12b) that are affixed against one another by one side and which are movably affixed with respect to one another by these sides in a certain sliding direction (X-X'), whereby the sides that are affixed against one another are each provided with one or more wedge-shaped elements (36,37) that are such that when both parts (12a and 12b) are moved with respect to one another with their wedge-shaped elements (36,37) in one or another direction according to the aforementioned sliding direction (X-X'), the thickness (D) of the accessory (12) increases or decreases, and whereby both plate-shaped parts (12a and 12b) are formed such that they are freely movable, manually without tools, over a distance with respect to one another in the mounted situation of the accessory (12), between the hinge (4) and the aforementioned profile (2,3) of the window (1) or door.

7. Use of a combination according to any of the claims 2 to 6 for adjusting the position of the hinge (4) by adjusting the position of hinge leaf (6) on the profile (2), **characterised in that** the hinge (4) is affixed to the profile (2) by means of the screws (9) which are screwed in the profile (2) passing through the passages (10) and **in that** the sideways position of the hinge leaf (6) is adjusted with the screws not fully tightened by moving the peg (48) of the sliding piece (52) upwards or downwards in the slot (56) depending on the desired sideways position and fixing the hinge leaf (6) in the desired position by fully tightening the screws (9).

8. Use according to claim 7, **characterised in that** the above mentioned passages (10) are provided as slotted holes (10) that extend along the longitudinal direction of the profile (2), whereby the height position of the hinge leaf (6) on the profile (2) is adjusted simultaneously with the sideways adjustment of the hinge leaf (6) by moving the hinge leaf (6) up or down.

Patentansprüche

1. Kombination eines Profils (2) und eines Scharniers (4) für ein Fenster oder eine Tür eines Gebäudes, wobei das Scharnier ein Zubehörteil zur seitlichen Einstellung der Position eines Scharnierblatts (6) des Scharniers (4) am Profil (2) des Fensters oder der Tür umfasst, wobei das Profil (2) mit einer ersten Nut (51) und mit einer zweiten Nut (54) versehen ist und das Scharnierblatt (6) mit einer Verdickung (50) versehen ist, die im montierten Zustand der Position des Scharnierblatts (6) am Profil (2) mit einem gewissen seitlichen Spiel in die erste Nut (51) gleitend eingreift, **dadurch gekennzeichnet, dass** das Scharnierblatt (6) mit einem Schlitz (56) versehen ist, der sich im montierten Zustand des Scharnierblatts (6) am Profil (2) in einer schräg zur Längsrichtung des Profils (2) verlaufenden Richtung erstreckt, und dadurch, dass das Scharnier (4) mit einem als Schiebestück (52) ausgebildeten Zubehörteil (44) versehen ist, das im montierten Zustand des Scharniers (4) am Profil (2) zwischen dem Scharnierblatt (6) und dem Profil (2) befestigt ist, und das mit einer Führungsrippe (53) versehen ist, mit der das Schiebestück (52) beweglich in der zweiten Nut (54) des Profils (2) befestigt ist, und das mit einem Zapfen (55) versehen ist, der im Schlitz (56) des Scharnierblatts (6) geführt wird.

2. Kombination nach Anspruch 1, **dadurch gekennzeichnet, dass** das Scharnierblatt (6) mit Durchgängen (10) zum Befestigen des Scharniers (4) am Profil (2) mithilfe von Schrauben (9) versehen ist und dadurch, dass das Scharnier (4) mit Schrauben (9) zum Befestigen des Scharnierblatts (6) am Profil (2) durch die Durchgänge (10) versehen ist, und dass die Durchgänge (10) etwas größer sind als der Durchmesser des Schaftes der Schrauben (9), um eine seitliche Bewegung des Scharnierblatts (6) auf dem Profil (2) zu ermöglichen.

3. Kombination nach Anspruch 2, **dadurch gekennzeichnet, dass** die Durchgänge (10) als Langlöcher (10) ausgeführt sind, die sich entlang der Längsrichtung des Profils (2) erstrecken, um auch eine Höhenverstellung des Scharnierblatts (6) am Profil (2) zu ermöglichen.

4. Kombination nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Zapfen (55) und das Scharnierblatt (6) mit horizontalen Markierungen (57) bzw. (58) versehen sind, die eine Anzeige ihrer Position in Bezug zueinander ermöglichen.

5. Kombination nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die neutrale seitliche Position des Scharnierblatts (6) einer Position entspricht, bei der die Verdickung (50) des Scharnierblatts (6) etwa mittig in der Nut (54) mit einem Spiel (S, S') auf beiden Seiten der Verdickung (50) liegt.

6. Kombination nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das Scharnier (4) mit einem zweiten Scharnierblatt (7) zur Befestigung des Scharniers (4) an einem zweiten Profil (3) und mit einem zusätzlichen Zubehörteil (12) zum Einstellen des Abstands zwischen dem zweiten Scharnierblatt (7) und dem zweiten Profil (3) versehen ist, wobei das zusätzliche Zubehörteil (12) aus zwei im Wesentlichen plattenförmigen Teilen (12a und 12b) besteht, die an einer Seite aneinander befestigt sind und die an diesen Seiten in einer bestimmten Gleitrichtung (X-X') in Bezug zueinander beweglich befestigt sind, wobei die aneinander befestigten Seiten jeweils mit einem oder mehreren keilförmigen Elementen (36, 37) versehen sind, die so beschaffen sind, dass sie beim Bewegen beider Teile (12a und 12b) mit ihren keilförmigen Elementen (36, 37) in der einen oder der anderen Richtung entsprechend der vorgenannten Gleitrichtung (X-X') gegeneinander die Dicke (D) des Zubehörteils (12) zu- oder abnimmt, und wobei beide plattenförmigen Teile (12a und 12b) so ausgebildet sind, dass sie im montierten Zustand des Zubehörteils (12) zwischen dem Scharnier (4) und dem zuvor genannten Profil (2, 3) des Fensters (1) oder der Tür manuell und ohne Werkzeug über eine Distanz in Bezug zueinander frei beweglich sind.

7. Verwendung einer Kombination nach einem der Ansprüche 2 bis 6 zum Einstellen der Position des Scharniers (4) durch Einstellen der Position des Scharnierblatts (6) auf dem Profil (2), **dadurch gekennzeichnet, dass** das Scharnier (4) am Profil (2) mithilfe der Schrauben (9) befestigt ist, die durch die Durchgänge (10) in das Profil (2) eingeschraubt sind, und dadurch, dass die seitliche Position des Scharnierblatts (6) bei nicht fest angezogenen Schrauben eingestellt wird durch Bewegen des Zapfens (48) des Schiebestücks (52) je nach der gewünschten seitlichen Position nach oben oder unten im Schlitz (56) und durch Fixieren des Scharnierblatts (6) in der gewünschten Position durch vollständiges Anziehen der Schrauben (9).

8. Verwendung nach Anspruch 7, **dadurch gekennzeichnet, dass** die zuvor genannten Durchgänge (10) als Langlöcher (10) bereitgestellt sind, die sich entlang der Längsrichtung des Profils (2) erstrecken, wobei die Höhenposition des Scharnierblatts (6) auf dem Profil (2) gleichzeitig mit der seitlichen Einstellung des Scharnierblatts (6) durch Auf- oder Abwärtsbewegen des Scharnierblatts (6) eingestellt wird.

Revendications

1. Combinaison d'un profilé (2) et d'une charnière (4) destinée à une fenêtre ou à une porte d'un bâtiment, la charnière comprenant un accessoire destiné au réglage latéral de la position d'une lame de charnière (6) de la charnière (4) sur le profilé (2) de la fenêtre ou de la porte, dans laquelle le profilé (2) est muni d'une première rainure (51) et d'une deuxième rainure (54), et la lame de charnière (6) est munie d'un tronçon plus épais (50) qui, à l'état monté de la position de la lame de charnière (6) sur le profilé (2), est inséré par glissement dans la première rainure (51) avec un certain jeu latéral, **caractérisée en ce que** la lame de charnière (6) est munie d'une fente (56) qui, à l'état monté de la lame de charnière (6) sur le profilé (2), s'étend dans une direction qui va en oblique par rapport à la direction longitudinale du profilé (2), et **en ce que** la charnière (4) est munie d'un accessoire (34) qui est réalisé sous la forme d'une pièce de glissement (52) qui, à l'état monté de la charnière (4) sur le profilé (2), est fixée entre la lame de charnière (6) et le profilé (2), et qui est muni d'une nervure de guidage (53) avec laquelle la pièce de glissement (52) est fixée en mobilité dans la deuxième rainure (54) du profilé (2) et qui est munie d'une cheville (55) qui est guidée dans la fente (56) de la lame de charnière (6).

2. Combinaison selon la revendication 1, **caractérisée en ce que** la lame de charnière (6) est munie de passages (10) qui sont destinés à fixer la charnière (4) au profilé (2) au moyen de vis (9) et **en ce que** la charnière (4) est munie de vis (9) qui sont destinées à fixer la lame de charnière (6) au profilé (2) par l'intermédiaire desdits passages (10), et **en ce que** lesdits passages (10) sont légèrement plus grands que le diamètre de la tige des vis (9) afin de permettre un déplacement de la lame de charnière (6) sur le profilé (2) dans la direction latérale.

3. Combinaison selon la revendication 2, **caractérisée en ce que** les passages (10) sont prévus sous la forme de trous qui prennent la forme de fentes (10) qui s'étendent dans la direction longitudinale du profilé (2), dans le but de permettre également un réglage en hauteur de la lame de charnière (6) sur le

profilé (2).

4. Combinaison selon l'une quelconque des revendications précédentes, **caractérisée en ce que** la cheville (55) et la lame de charnière (6) sont équipées de repères horizontaux (57), respectivement (58) qui permettent d'indiquer leurs positions réciproques.

5. Combinaison selon l'une quelconque des revendications précédentes, **caractérisée en ce que** la position latérale neutre de la lame de charnière (6) correspond à une position dans laquelle le tronçon plus épais (50) de la lame de charnière (6) est situé approximativement au centre de la rainure (54) avec un jeu (S, S') des deux côtés du tronçon plus épais (50).

6. Combinaison selon l'une quelconque des revendications précédentes, **caractérisée en ce que** la charnière (4) est munie d'une deuxième lame de charnière (7) qui est destinée à fixer la charnière (4) à un deuxième profilé (3) et d'un accessoire supplémentaire (12) qui est destiné à régler la distance entre la deuxième lame de charnière (7) et le deuxième profilé (3) ; dans laquelle ledit accessoire supplémentaire (12) se compose de deux éléments (12a et 12b) possédant essentiellement la forme d'une plaque qui sont fixés l'un contre l'autre sur un côté et qui sont fixés en mobilité l'un par rapport à l'autre par l'intermédiaire de ces côtés dans une certaine direction de glissement (X - X'), dans laquelle les côtés qui sont fixés l'un contre l'autre sont chacun munis d'un ou de plusieurs éléments (36, 37) possédant une configuration de forme cunéiforme, qui sont tels que, lorsque les deux éléments (12a et 12b) sont mis en mouvement l'un par rapport à l'autre avec leurs éléments (36, 37) possédant une configuration de forme cunéiforme dans une ou dans l'autre direction conformément à la direction de glissement (X - X') qui a été mentionnée ci-dessus, l'épaisseur (D) de l'accessoire (12) augmente ou diminue, et dans laquelle les deux éléments (12a et 12b) possédant essentiellement la forme d'une plaque sont réalisés d'une manière telle qu'ils peuvent être déplacés librement, à la main, en l'absence d'outils, sur une distance réciproque à l'état monté de l'accessoire (12), entre la charnière (4) et le profilé susmentionné (2, 3) de la fenêtre (1) ou de la porte.

7. Utilisation d'une combinaison selon l'une quelconque des revendications 2 à 6, destinée au réglage de la position de la charnière (4) par l'intermédiaire d'un réglage de la position de la lame de charnière (6) sur le profilé (2), **caractérisée en ce que** la charnière (4) est fixée au profilé (2) au moyen des vis (9) qui sont vissées dans le profilé (2) par le fait d'emprunter les passages (10), et **en ce que** la position latérale de la lame de charnière (6) est réglée en procédant à un serrage incomplet des vis par l'intermédiaire d'un déplacement de la cheville (48) de la pièce de glissement (52) vers le haut ou vers le bas dans la fente (56) en fonction de la position latérale que l'on souhaite obtenir et par l'intermédiaire d'une fixation de la lame de charnière (6) dans la position désirée en procédant à un serrage complet des vis (9).

8. Utilisation selon la revendication 7, **caractérisée en ce que** les passages (10) que l'on a mentionnés ci-dessus sont prévus sous la forme de trous qui prennent la forme de fentes (10) qui s'étendent dans la direction longitudinale du profilé (2), dans laquelle la position en hauteur de la lame de charnière (6) sur le profilé (2) est réglée de manière simultanée au réglage de la lame de charnière (6) dans la direction latérale par l'intermédiaire d'un déplacement de la lame de charnière (6) vers le haut ou vers le bas.

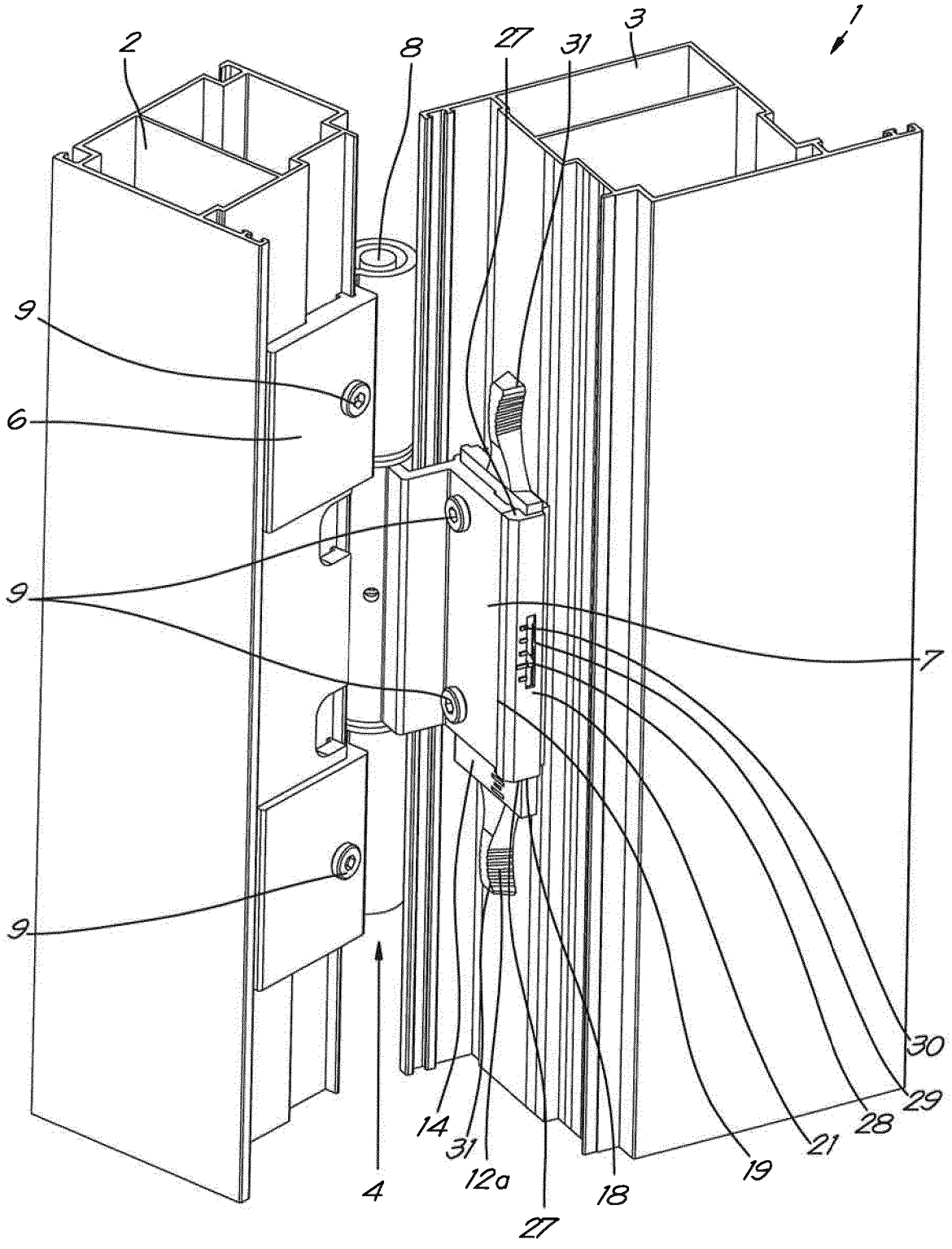
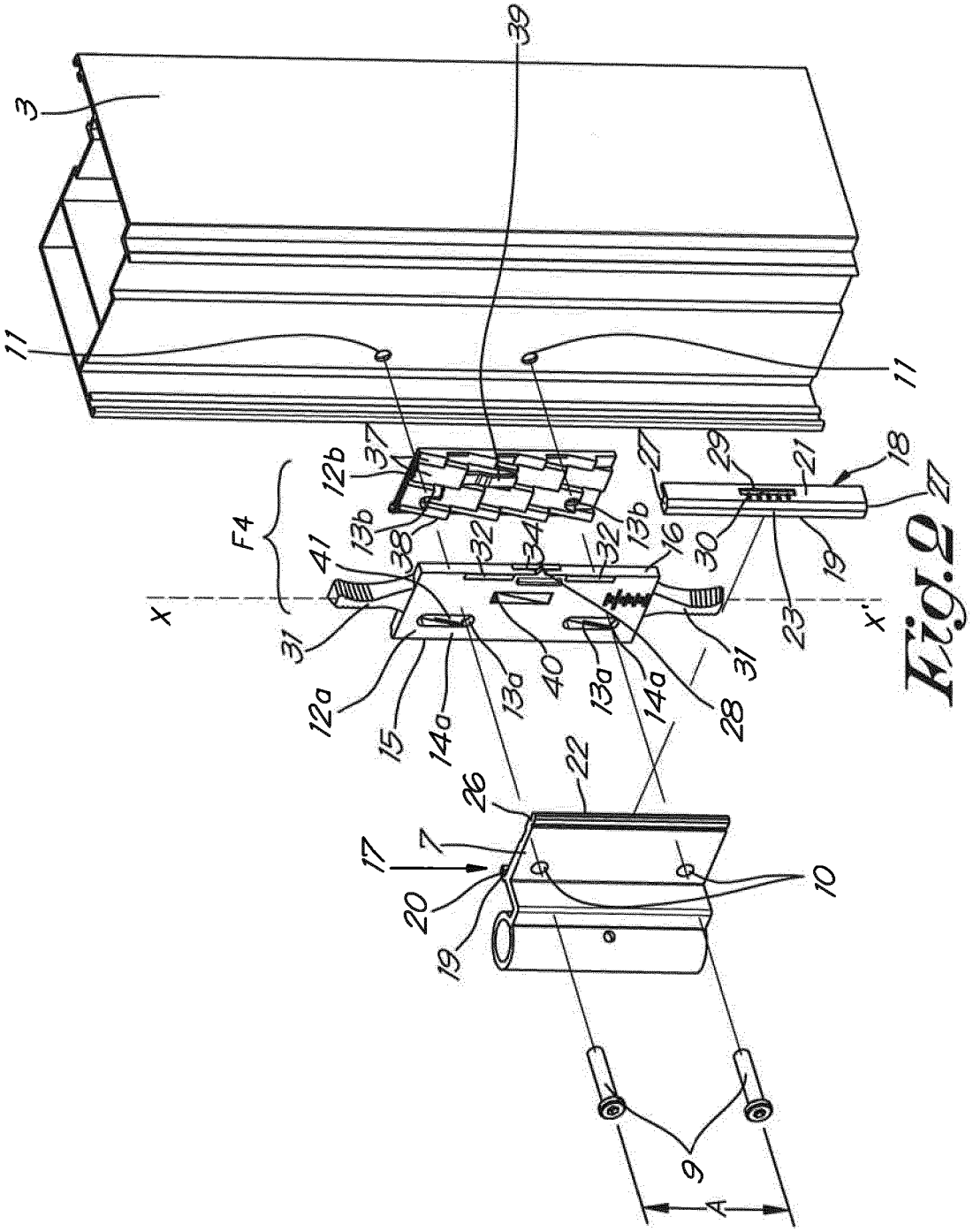


Fig. 1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27
41
19
X
X'
31
23
31
12a
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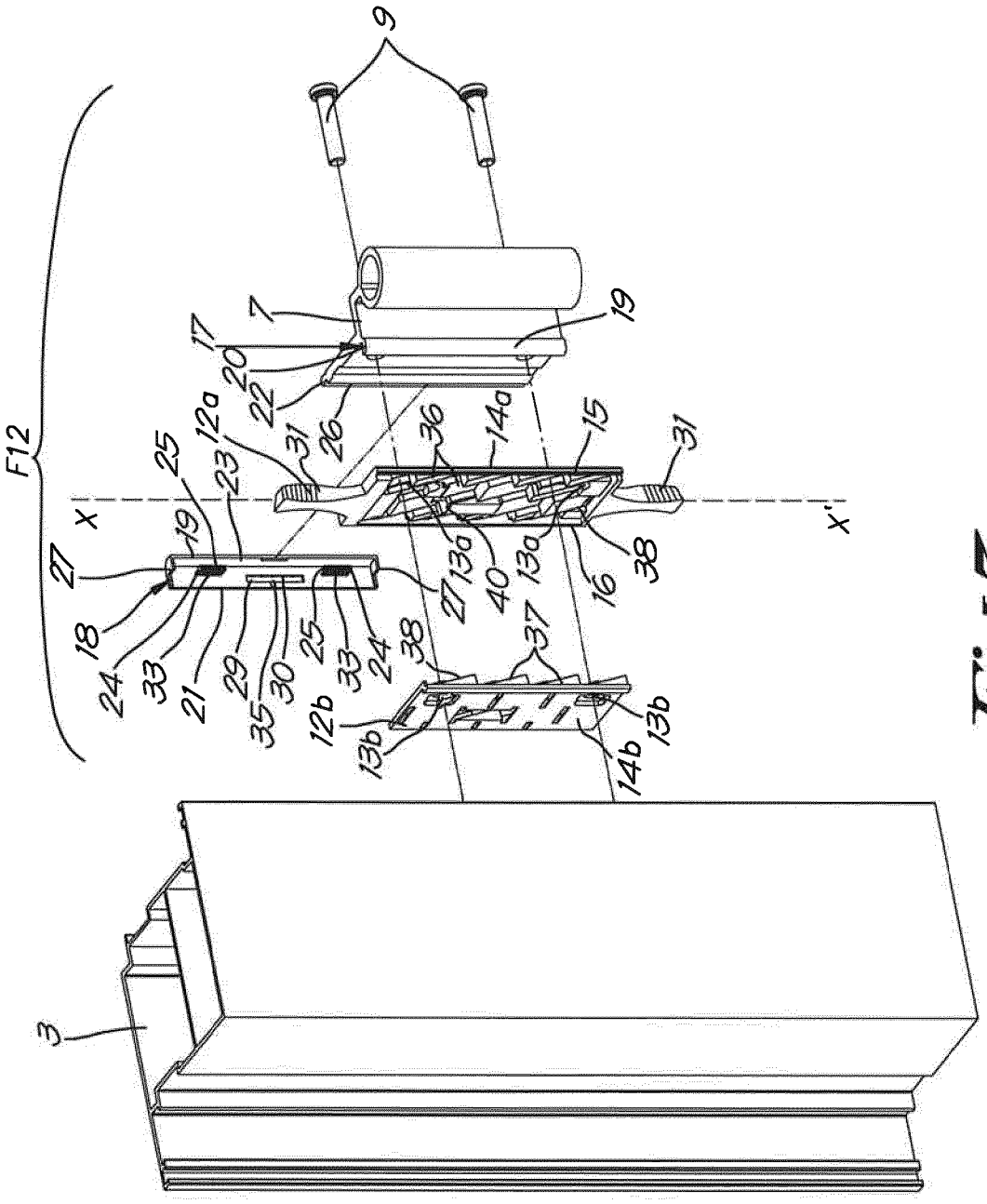
13a
40
13a
14a
28
22
26
17
7
10
20
19
9
A

Fig.2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18
24
33
21
29
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14b
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Fig.3

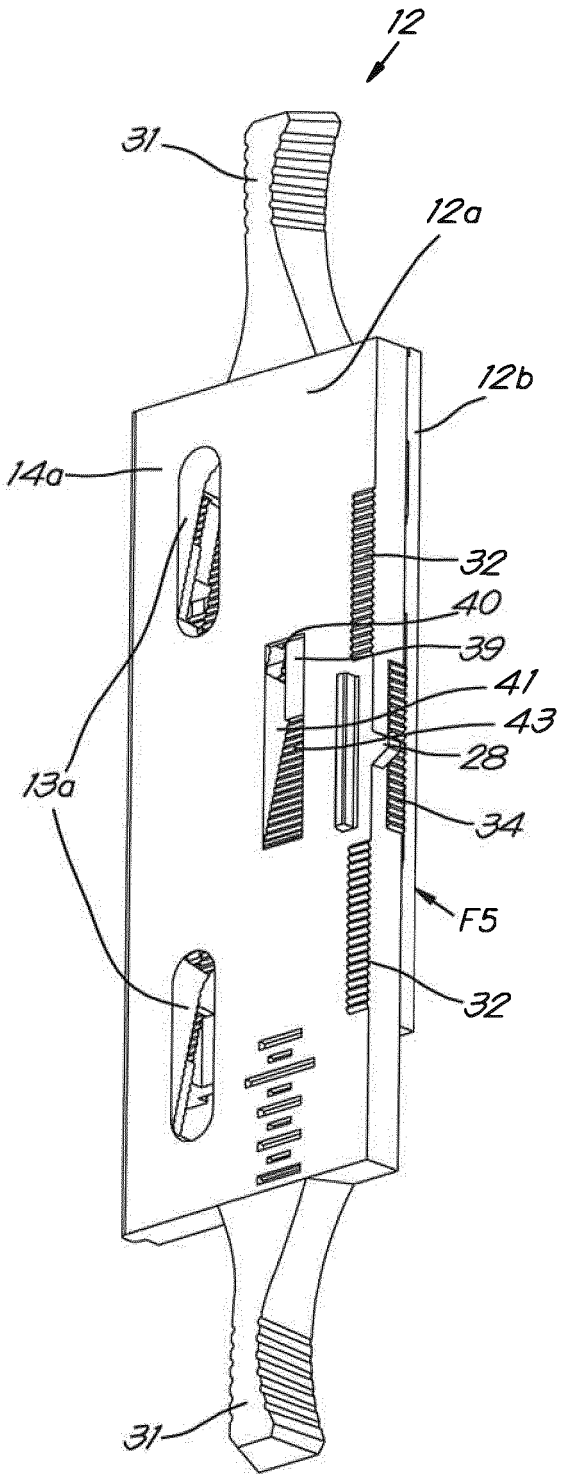
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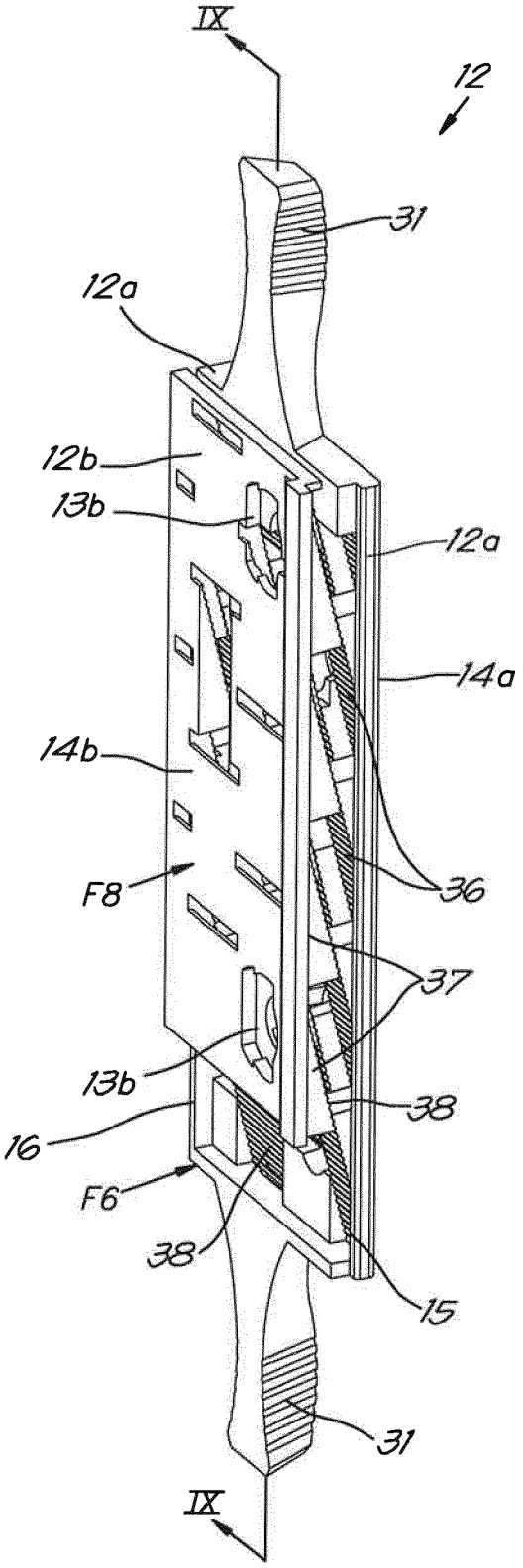
Fig.4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12a
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F6
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IX

Fig.5

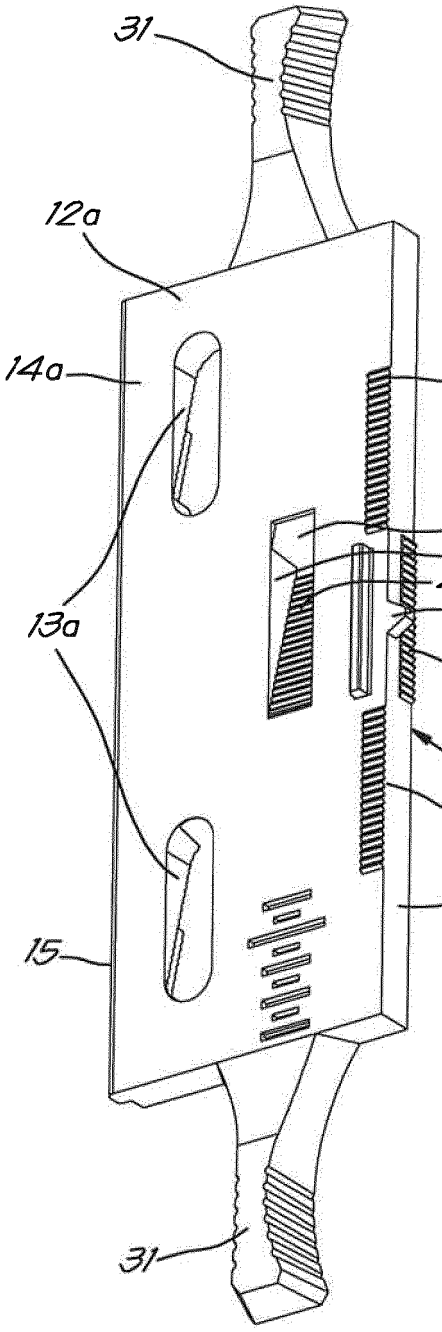
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Fig.6

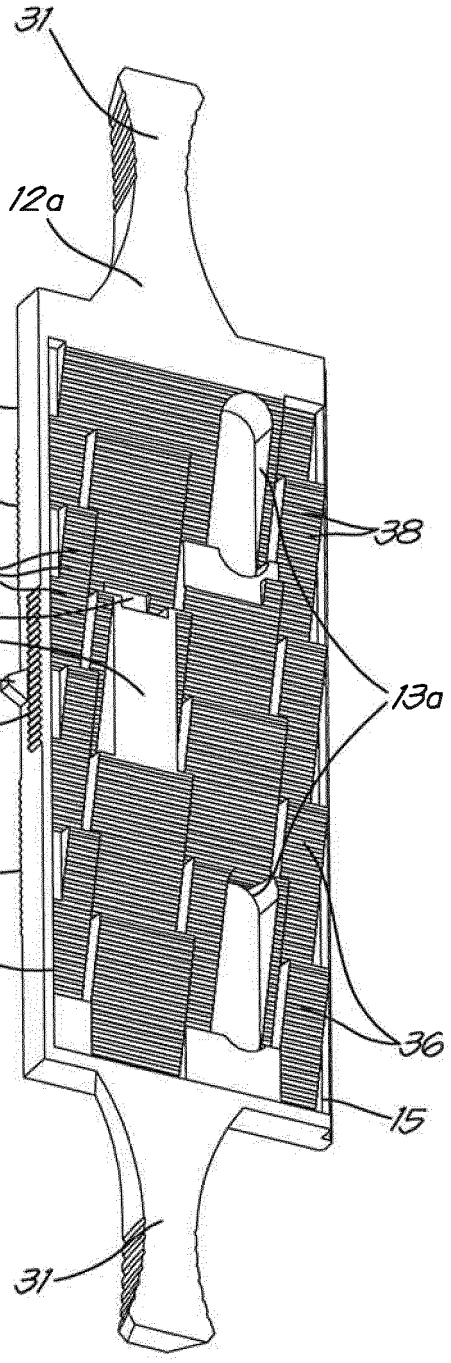
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Fig.7

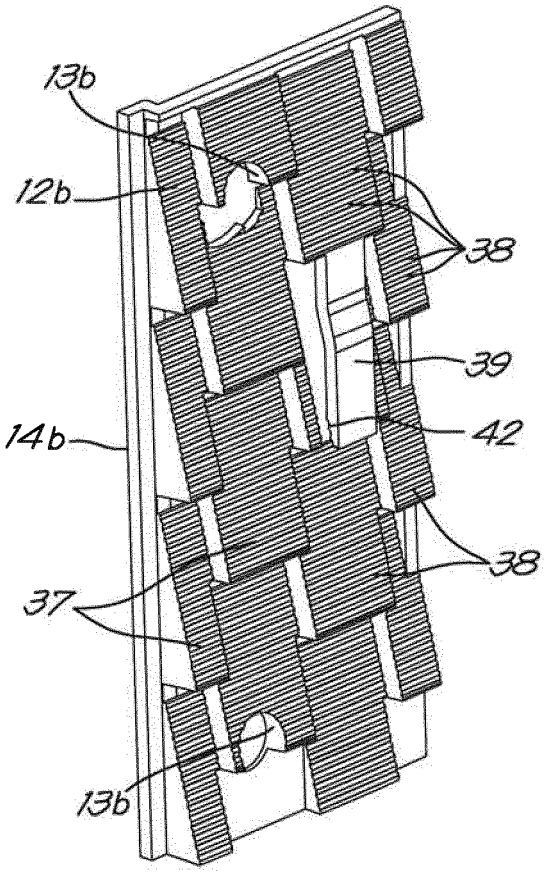
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Fig.8

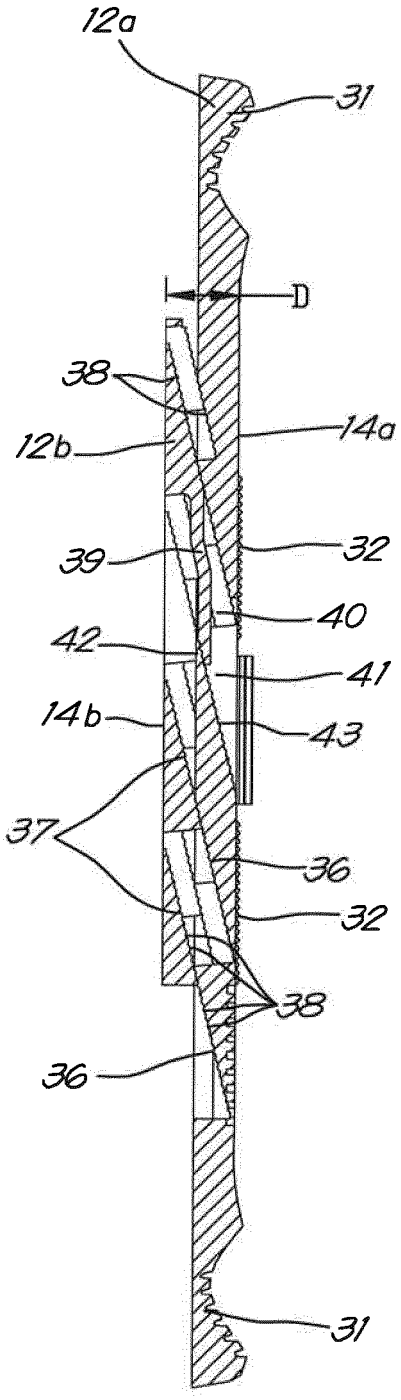
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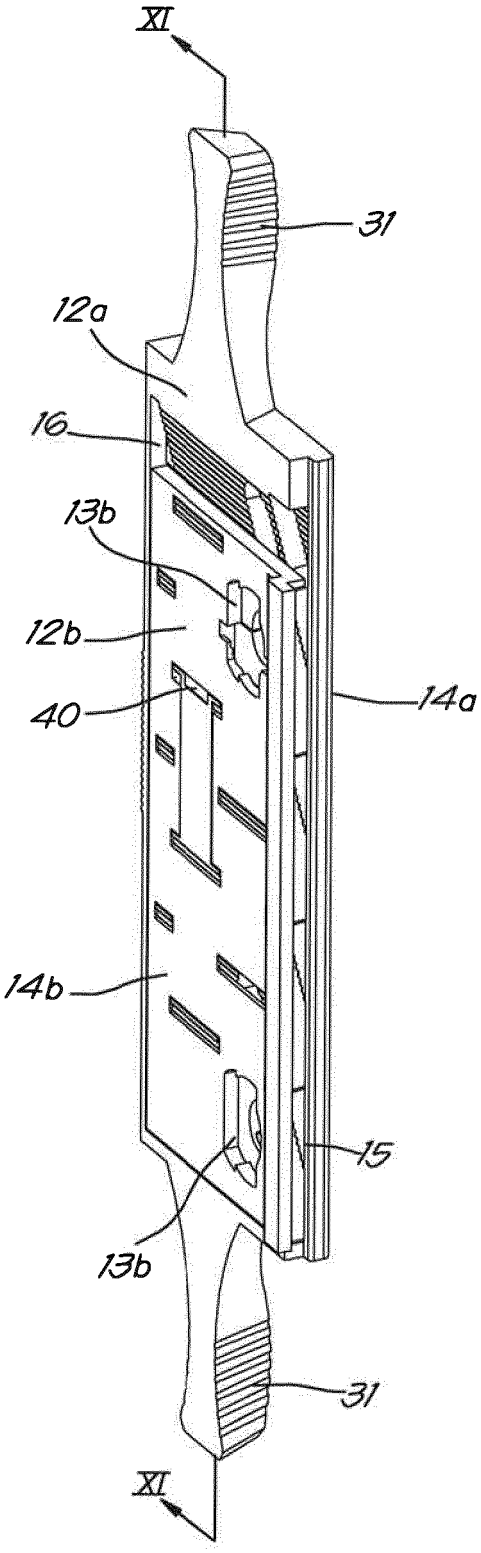
Fig.9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XI

Fig.10

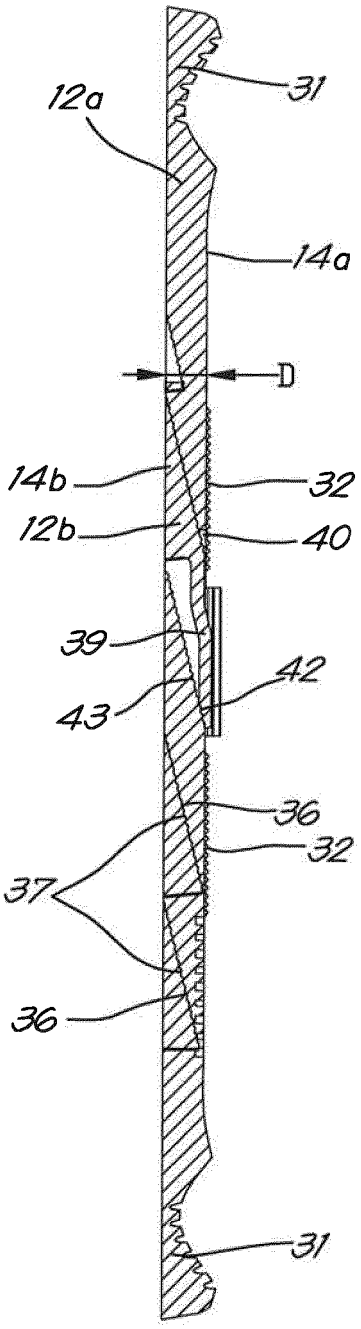
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Fig.11

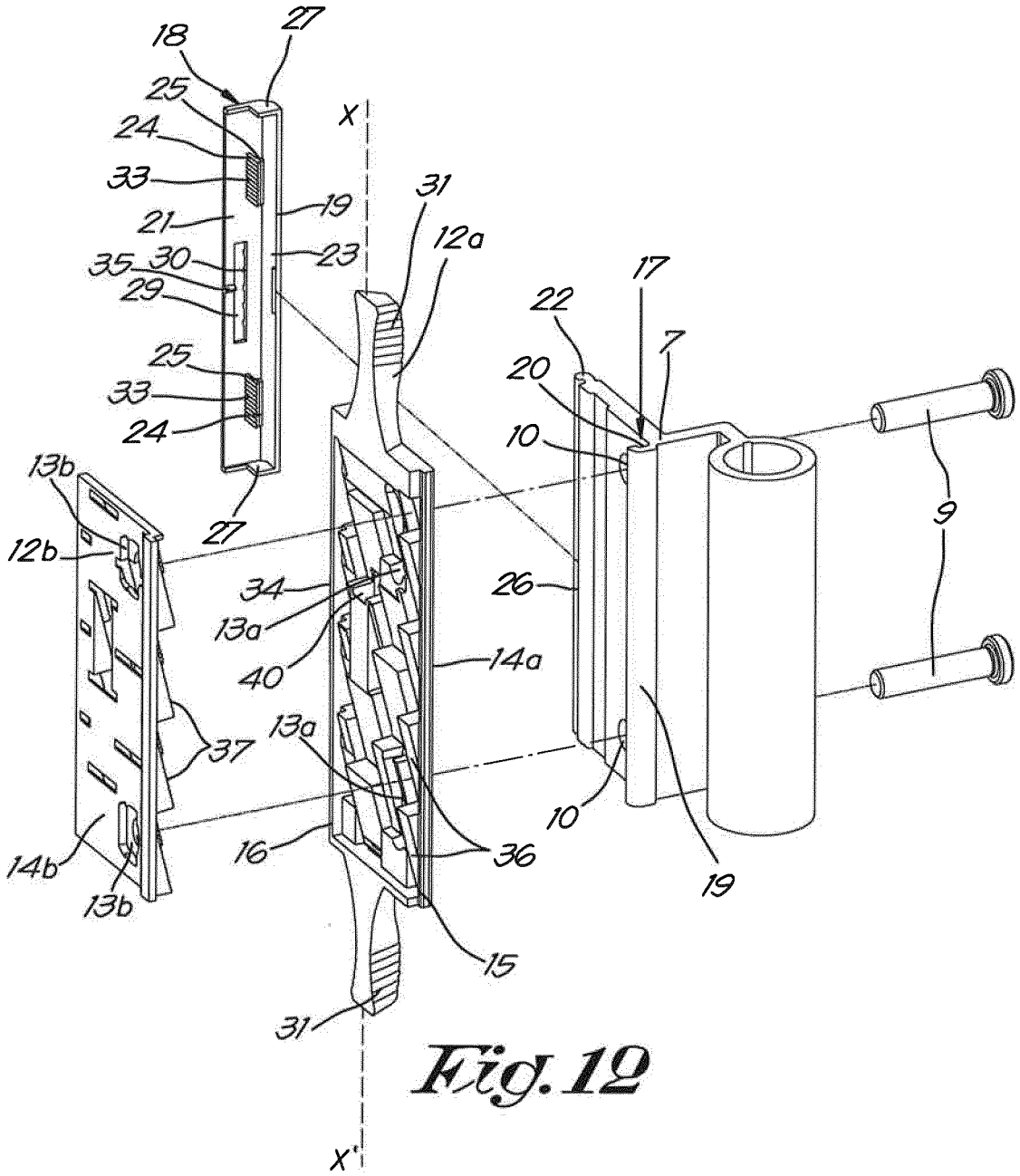
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Fig. 12

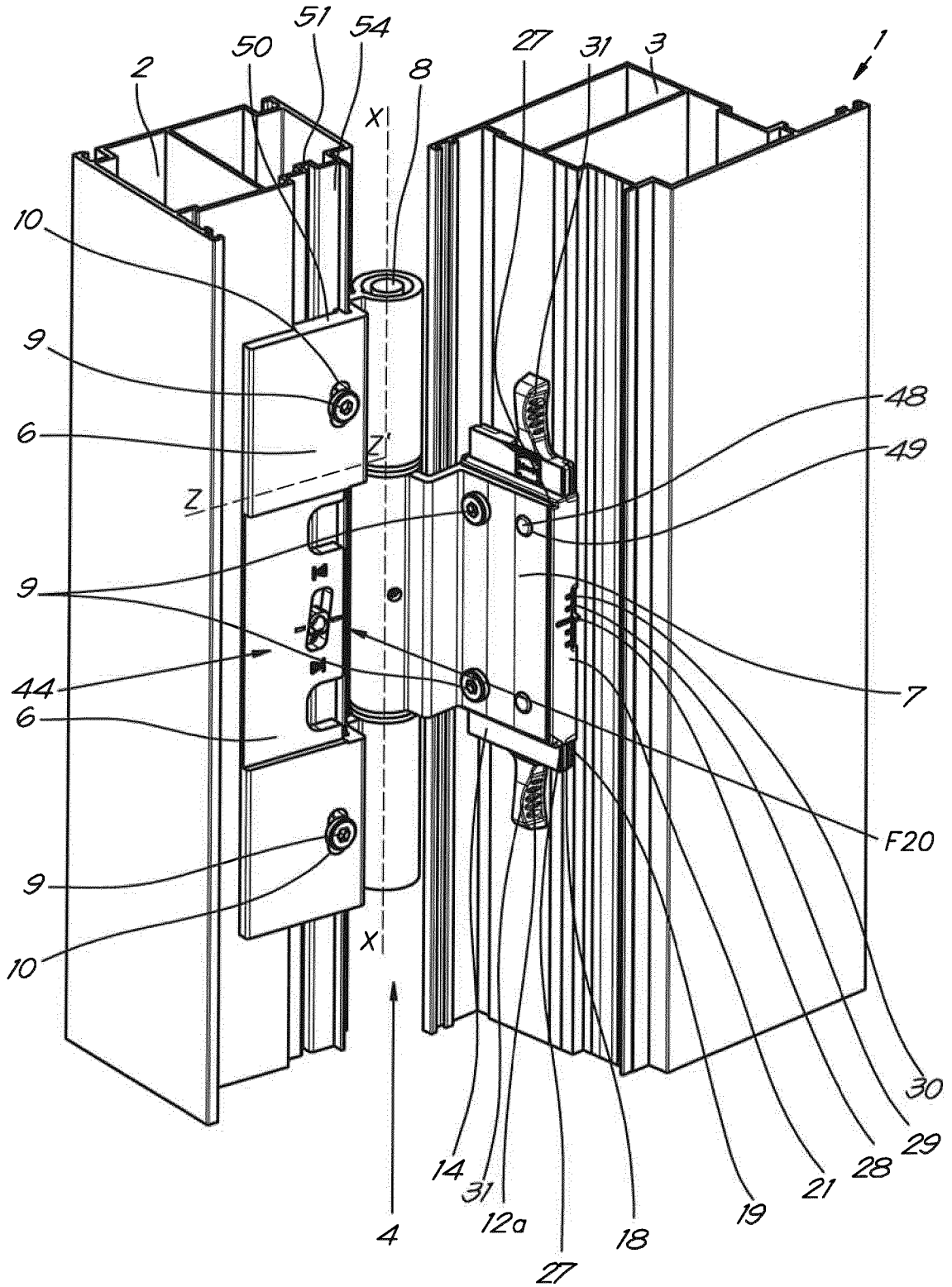
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Fig. 13

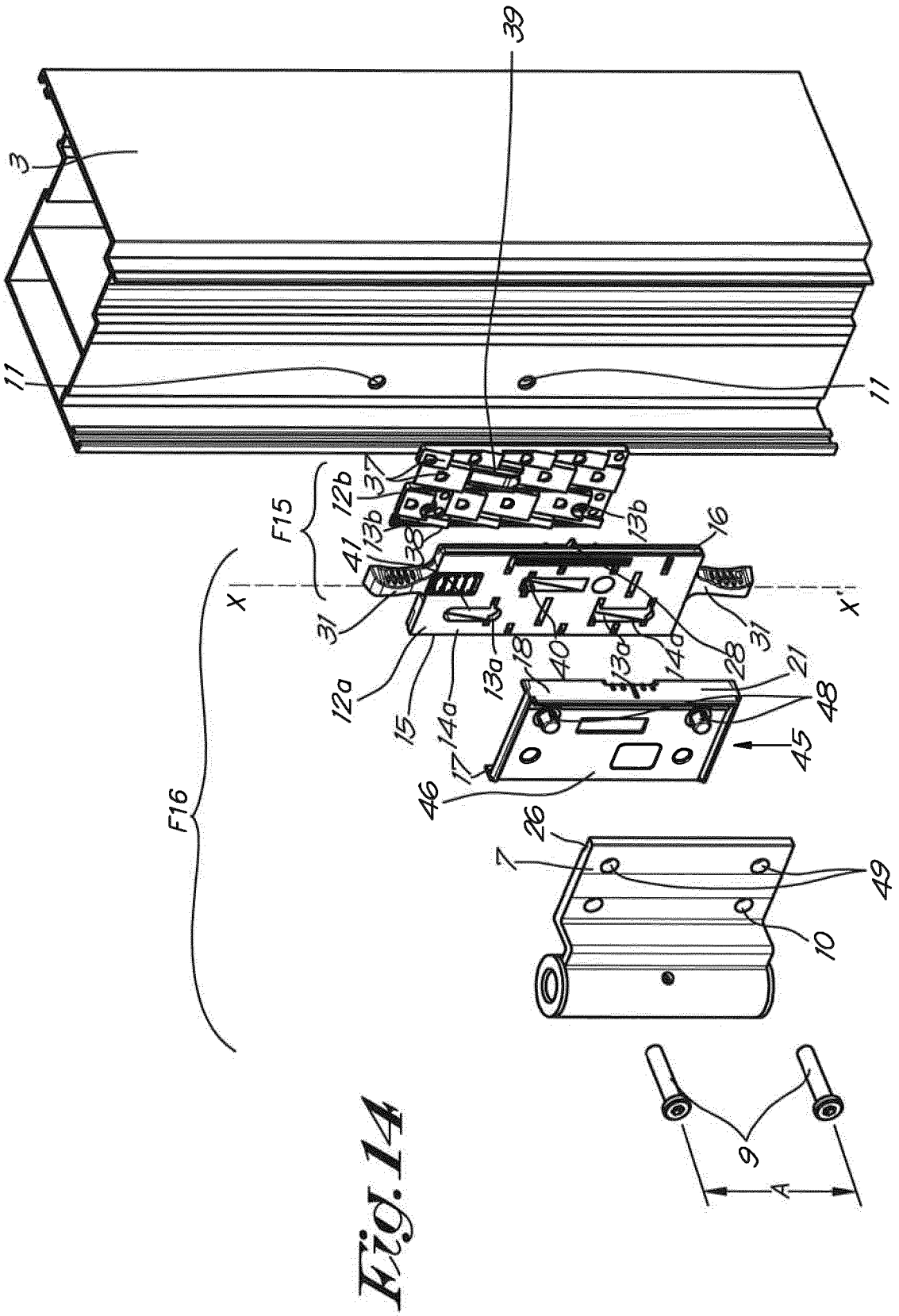
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Fig. 14

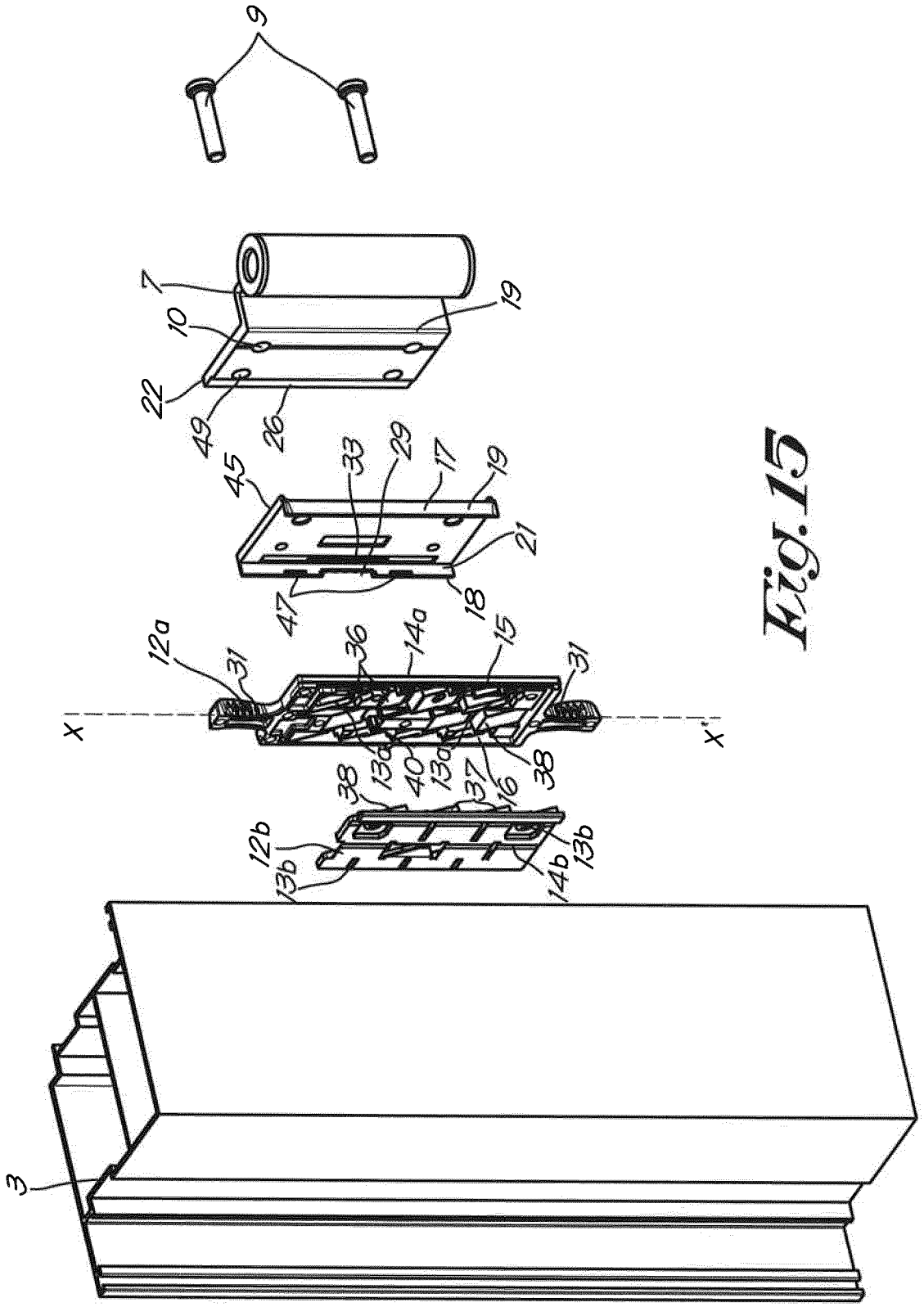
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Fig. 15

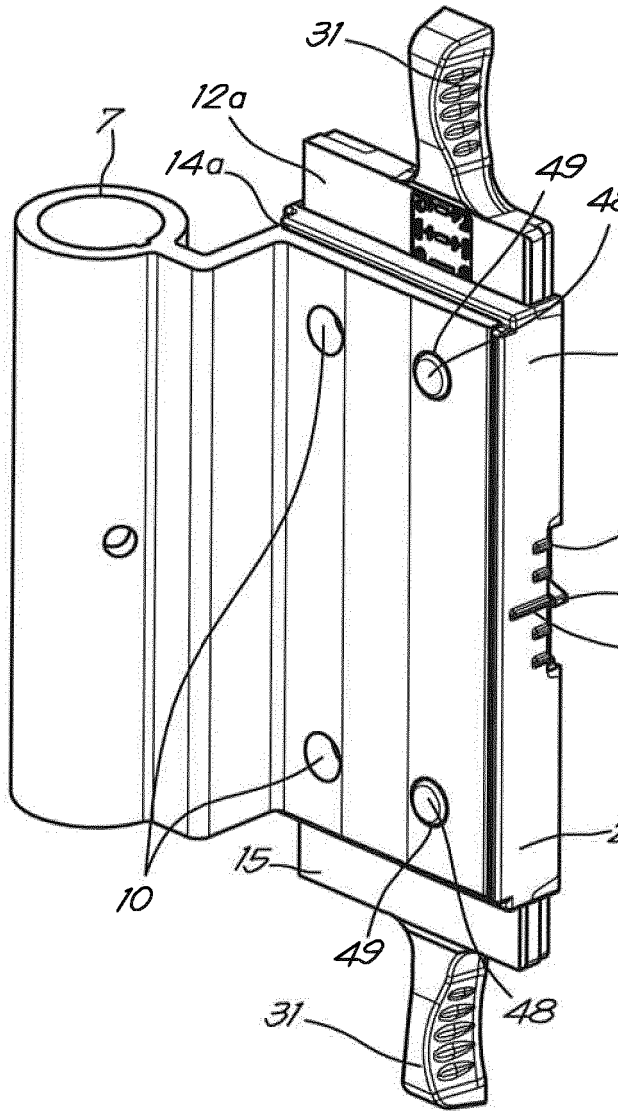
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Fig. 16

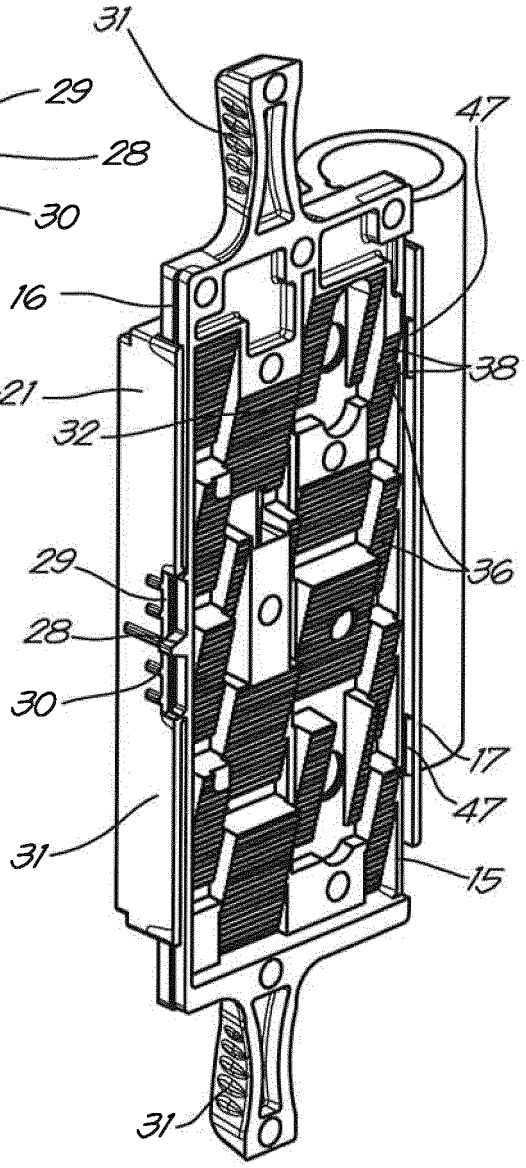
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Fig. 17

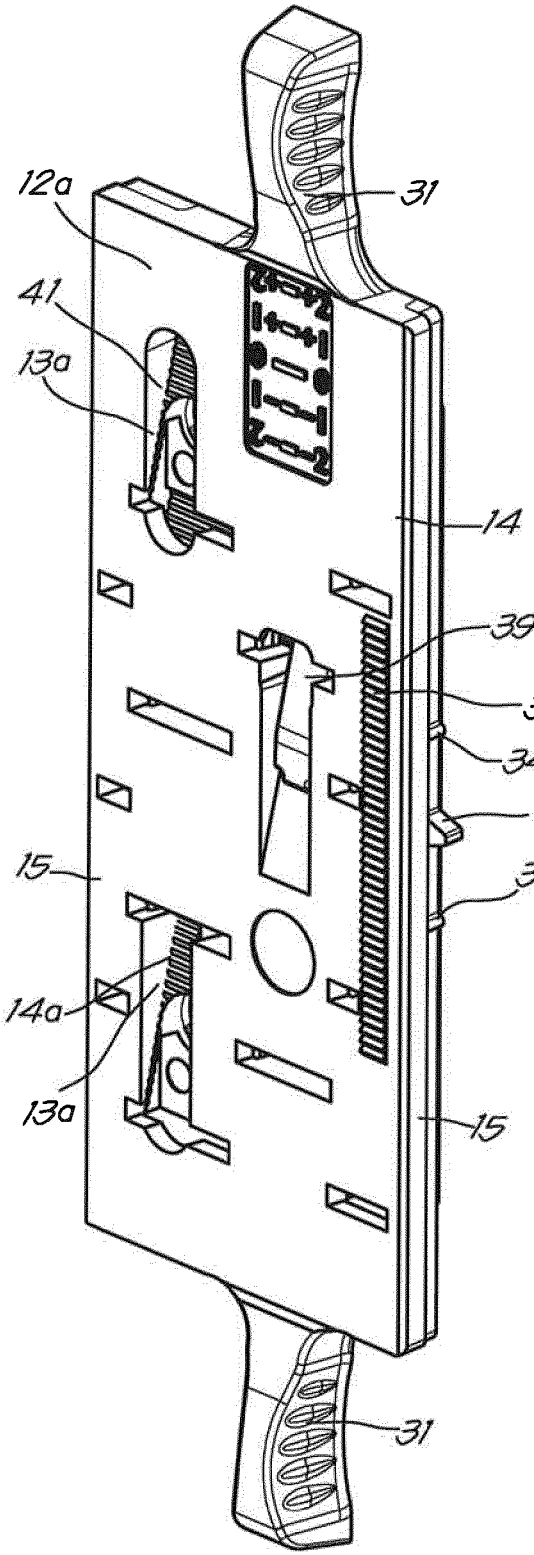
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Fig. 18

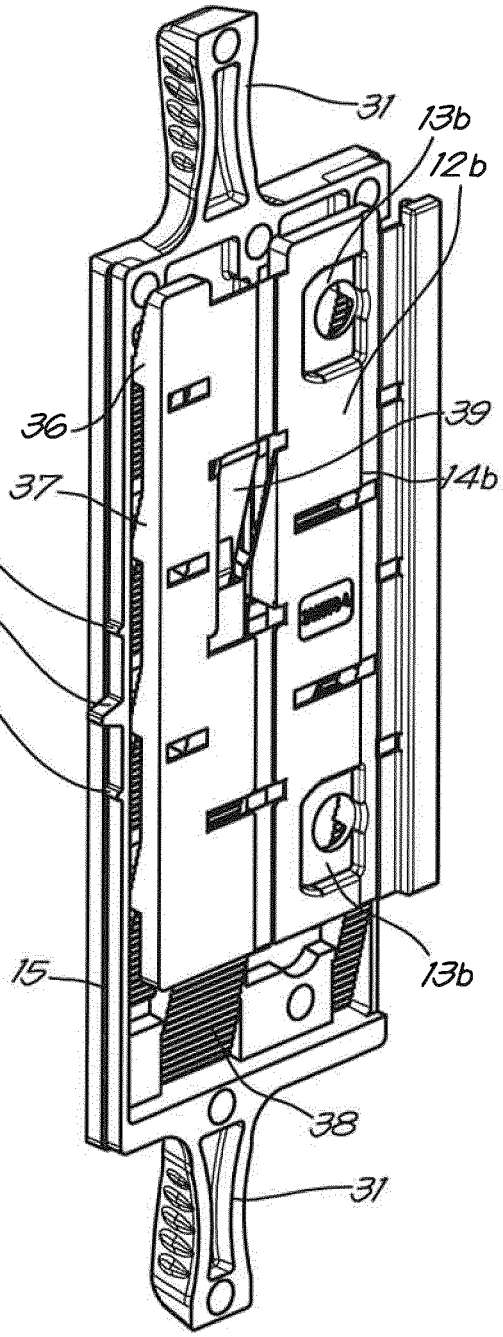
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Fig. 19

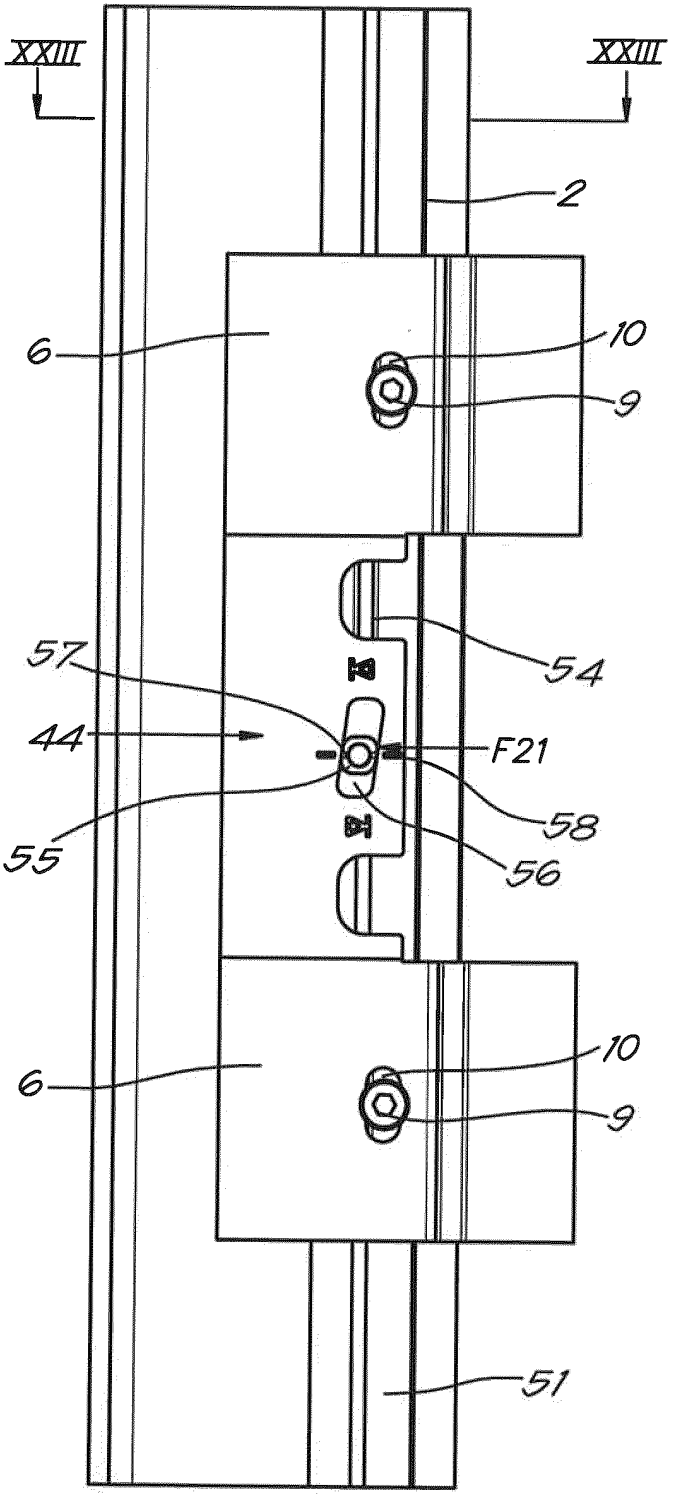
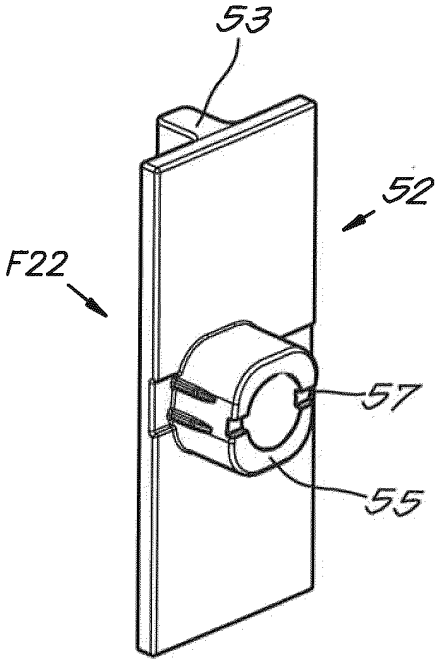


Fig.20



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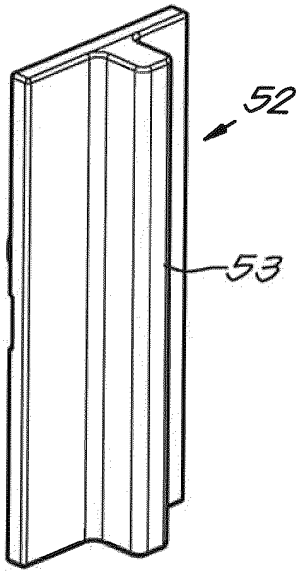

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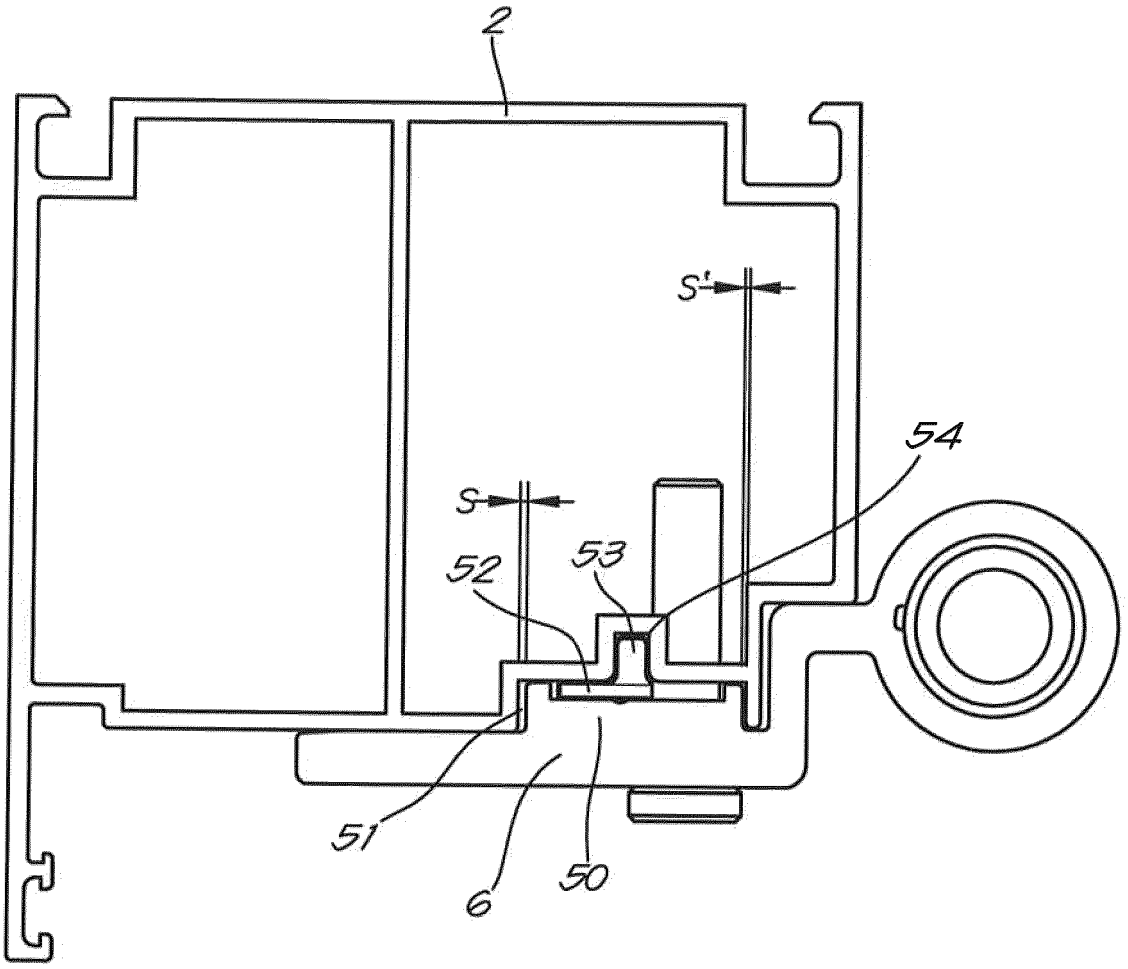


Fig.23

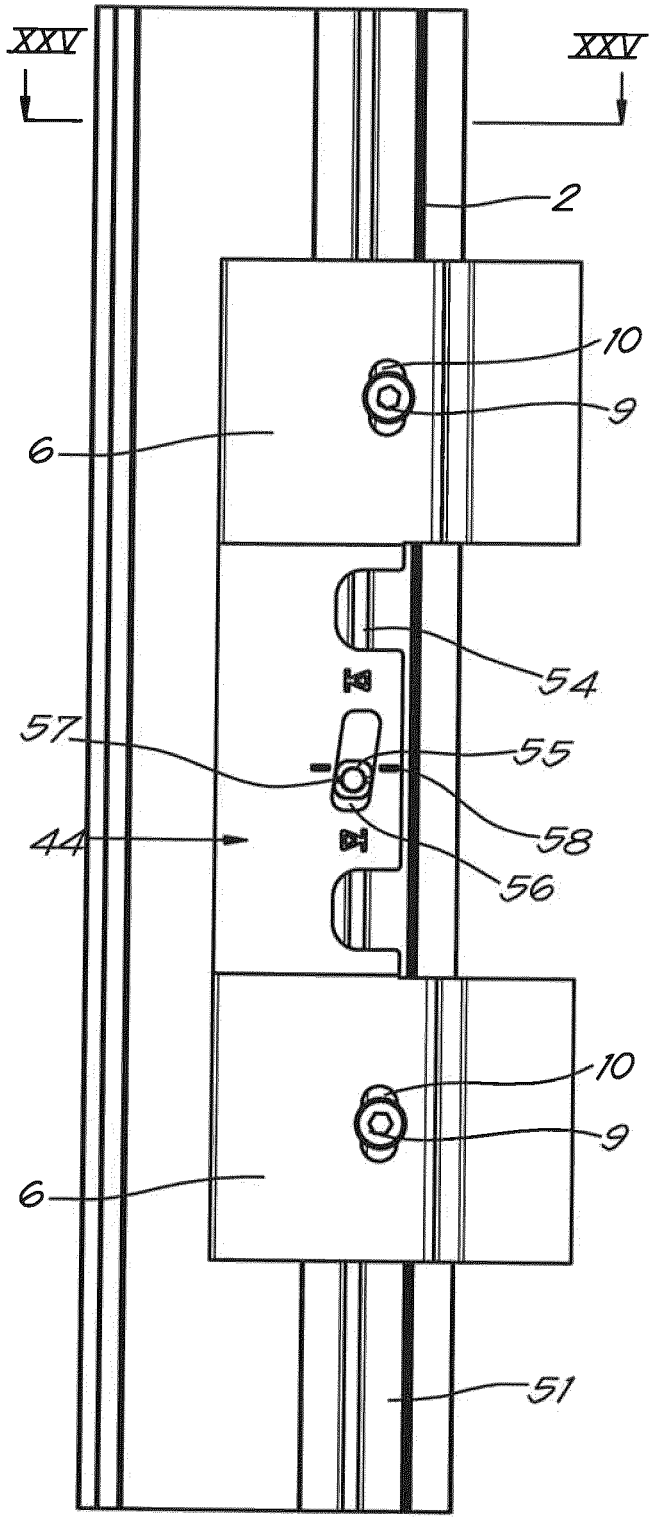
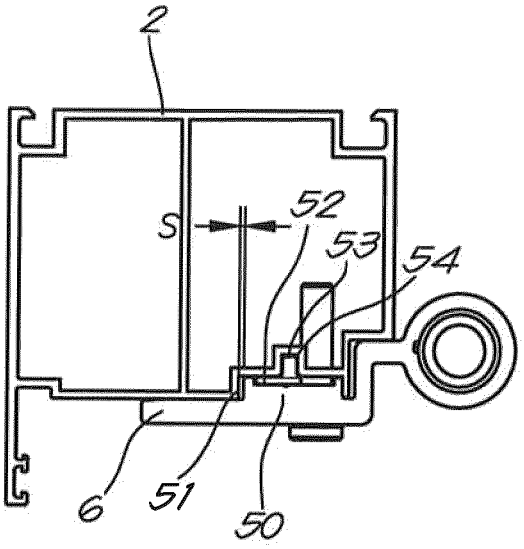


Fig.24



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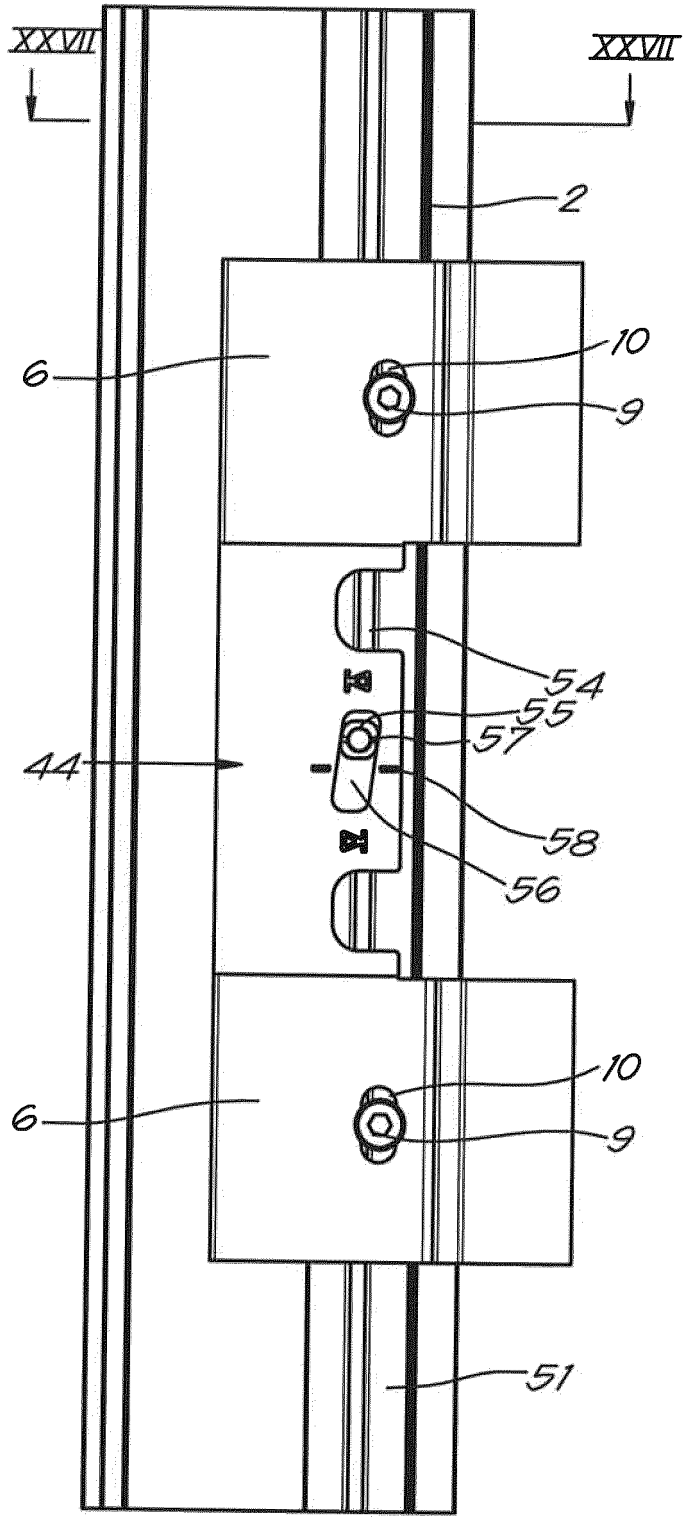

Fig.26

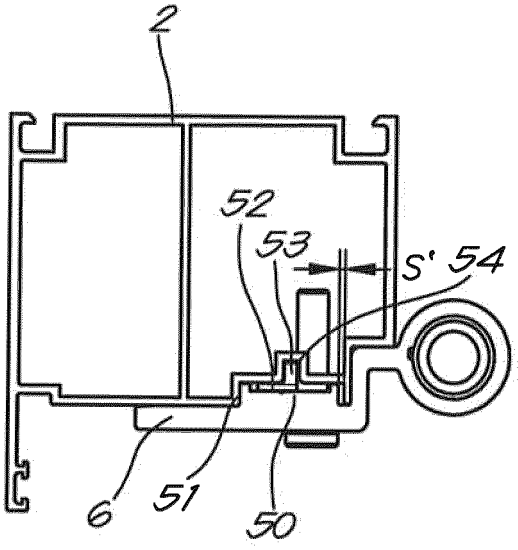

Fig.27

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Patent documents cited in the description

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- DE 9300931 U **[0013]**