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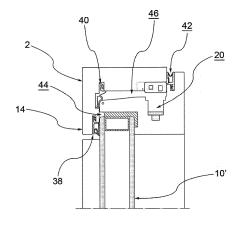
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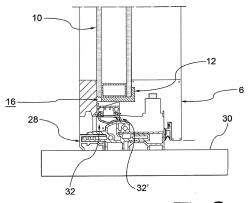
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### (54) DOOR, WINDOW OR FRENCH WINDOW ASSEMBLY

(57) Door or (French-) window (1) assembly comprising a fixed frame (2) suitable for fitting in a door or (French-)window opening (4), a moving door (6), connected in a rotatable or sliding manner to the fixed frame (2) or in a sliding manner to a translation guide between a position of abutment with the fixed frame or with a vertical upright (58) thereof, and a position of partial separation from said frame/upright.

Such door (6) comprises a cornice (8) inside which at least one transparent panel (10, 10', 10") is supported, preferably of glass, wherein the cornice (8) and the panel (10, 10', 10") are glued to each other so that the panel acts as a reinforcement element of the cornice.





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#### Description

[0001] The present invention relates to a door, window or French window assembly.

1

[0002] Public taste is continually changing, especially as regards the furnishings and features of the places in which daily working or private activities are performed.

[0003] A recent tendency relates a greater focus on the use of natural light, using extensive windows or skylights which on the one hand improve visual impact and on the other reduce the need to use artificial light.

[0004] As a result, the R&D of companies active in this sector is increasingly aimed at identifying, for the quantity of space occupied, technical expedients permitting maximisation of the entrance of external light in interior spaces.

[0005] The present invention falls within such context, setting out to provide a window assembly of unequalled luminosity and furthermore highly resistant to intrusion and to heat dispersion.

[0006] Such objective is achieved by an assembly according to claim 1 and according to claim 21. The dependent claims show advantageous or preferred embodiment variations.

[0007] The object of the present invention will now be described in detail with the help of the appended drawings, wherein:

- figure 1 shows an internal front view of an assembly of the present invention, according to a possible embodiment, partially in cross-section;
- figures 2, 6, 7 and figures 3, 8 respectively represent longitudinal cross-sections and transversal crosssections of the assembly in figure 1, along the lines II-II and III-III shown in such figure, according to possible embodiments;
- figure 2a shows an alternative embodiment of the upper part of the assembly shown in the longitudinal cross-section of figure 2;
- figures 4 and 5 show corresponding cross-sections to those discussed for figures 2 and 3, but for an assembly according to a second embodiment;
- figures 9 and 10 show two frontal views of the assembly which the present invention relates to, according to two further possible embodiments;
- figures11a-11b and 12, 16, 17 show cross-sections respectively along the planes III-III and IV-IV in figure
- figure 11c shows an enlargement of the lower zone of figure 11b;
- figures 13 and 14 show two perspective views of retention devices respectively implemented in figure 9 and in figure 10, without the handles and further surface finishing elements;
- figure 15 shows a detail of a closure element according to a possible embodiment;
- figure 18 shows a further embodiment of the upper portion of the assembly shown in figure 11a, without

- the panels; and
- figure 19 shows a further embodiment of the components illustrated in figure 11c.
- [0008] With reference to the aforementioned figures, reference numerals 1, 50, 50' globally denote a door or (French-)window assembly comprising a fixed frame 2 suitable for fitting in a door, window or French window opening 4.
  - [0009] The assemblies denoted by reference numerals 50, 50' differ only in the different orientation of the retention device 56, 56' and for the different direction of rotation of the relative handle; as a result, except as otherwise specified, in the following description the same reference numerals will correspond to the same parts or technical components. Such consideration applies to all the embodiments shown in the drawings.

[0010] According to a preferred variant, the fixed frame 2 forms a door threshold 28 (or window sill) underneath, which preferably projects above a lower support surface 30, such as a floor surface (or windowsill).

[0011] The fixed frame 2 is suitable for fitting in a door or (French-)window opening 4, and is preferably secured to at least two of the margins 60, 62, 64 which frame such opening. For example, such attachment is made at least at the top and the bottom according to the orientation shown in figures 9 and 10, that is to say at the upper and lower ends of the frame.

[0012] The assembly 1 further comprises a moving door 6, connected in a rotatable manner to the fixed frame 2 around a primary rotation axis X or connected in a sliding manner to a translation guide 52, 54 which extends parallel to a primary movement direction Z, between a position of abutment with the fixed frame or with a vertical upright 58 thereof, and a position of partial separation from said frame/upright.

[0013] For example, figures 1-8 show the first of the aforesaid variants in an abutment position; figure 1 shows in particular a vertical rotation axis X. Figures 9-19 show instead a translatable version of the moving door.

[0014] As a result, as long as the moving door 6 remains in the abutment position, the aperture identified by the door or by the (French-)window is substantially occluded in that a cornice component 68 is advantageously in contact with the vertical upright 58.

[0015] Conversely, in the separation position, the moving door leaves a free space around its cross-section, thereby forming for example a passage through the door or (French-)window.

- 50 [0016] As regards the translation guide 52, 54, it extends parallel to a primary movement direction Z. Advantageously, a pair of opposite translation guides are provided, and optionally a pair of vertical uprights, only one of which is shown in the drawings.
  - [0017] According to one embodiment, the fixed frame 2 comprises the translation guide 52, 54 or the plurality thereof, and at least one vertical upright 58 connected and substantially orthogonal to such guide 52, 54.

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**[0018]** According to an advantageous embodiment, in the abutment position, two or three sealing elements 38, 40, 42 act between the moving door 6 and the fixed frame 2 so that respectively, the aforesaid elements enclose a single heat insulation compartment 44, or a pair of such compartments 44, 46.

**[0019]** Consequently, when the moving door 6 is placed so as to close the aperture delimited by the fixed frame 2, the two or three sealing elements are partially compressed to prevent air currents, cold or dust from getting through the thickness of the moving door, through the space or air needed to move the door.

**[0020]** For the variants which provide for two sealing elements 38, 40 (one of which is shown schematically in figure 4), the latter are partially aligned on a vertical plane and, preferably, facing outwards towards the fixed frame 2.

**[0021]** For the variants which provide instead for three sealing elements 38, 40, 42 (figure 2a), of these three one sealing element 40 is placed at an edge portion of the moving door 6, while the other two elements 38, 42 are distanced from such sealing element 40 in directions substantially orthogonal to each other.

**[0022]** In other words, such variant differs from the embodiment with two elements by the presence of the additional sealing element 42, which defines a heat insulation compartment 46 through the thickness of the moving door 6.

**[0023]** Optionally, the moving door may define at least one longitudinal recess 20 for the partial housing of the hardware; preferably, said hardware and/or a reinforcement plate 22 the function of which will be explained below is positioned at the bottom of the aforesaid recess.

**[0024]** Within the present description, the term "hardware" is understood to mean the components and mechanisms needed to constrain the moving door to the fixed frame in a reversible manner, for example following the operation or rotation of a handle 34 by a user.

**[0025]** According to a particularly advantageous embodiment, the primary rotation axis X is identified by one or more visible or concealed hinges 18, 18' (the latter corresponding to the areas shown by the dotted lines in figure 1), optionally distanced along said axis X, which remain hidden from view when the moving door 6 is in the abutment position.

**[0026]** According to one variant a fixed hinge portion is connected to the frame 2, while a mobile portion is connected to the door 6, where such portions are connected by a pin (not shown) so as to swivel.

**[0027]** According to a particularly advantageous variant, the portion of hinge 18, 18' joined to the moving door 6 is attached by means of at least one screw 36, advantageously of the self-tapping type, which partially crosses the thickness of the door (or of a relative cornice 8) and which acts on one side on the reinforcement plate 22.

[0028] The moving door 6 further comprises a cornice 8 inside which at least one transparent panel 10, 10', 10" is supported. For example, the cornice supports the

handle 34 for the operation of a bolt (not shown).

**[0029]** Preferably, such assembly is constituted mainly of wood, that is to say one or more components described below may be made of such material in a reciprocally independent manner. For example, the moving door 6 described below may be made entirely from wood, while the translation guide could be metallic, preferably an extruded profile, according to a preferred embodiment.

[0030] According to a further embodiment, the translation guide may be made of wood, and could preferably be at least partially coated by an insulating material 114. To such purpose, a semi-crystalline thermoplastic material could be used. For example, the material known by the brand name of Polizene® manufactured by the company Rochling Machined Plastics Italia S.r.l. could be used.

**[0031]** According to a first variant, the cornice 8 is made by joining wooden elements.

**[0032]** According to further variants, the cornice 8 may be made by joining profiles in PVC (polyvinylchlorine) or aluminium.

[0033] Optionally, the cornice 8 and/or the fixed frame 2 may be coated independently, at least partially, by a finishing element 48 which partially covers the surface, whether external and/ or internal. Such variant is for example shown schematically in figure 3. For example, the finishing element may be a component in metal material, for example of steel or of aluminium, preferably with a polished visible surface.

**[0034]** According to an advantageous embodiment, the panel is made from one glass pane 10, from a double glass pane 10, 10', or a triple glass pane 10, 10',10".

**[0035]** The cornice 8 and the panel 10, 10', 10" are glued to each other so that the panel acts as a reinforcement element of the cornice.

**[0036]** This way, despite the dimensions of the cornice being extremely limited, the resistance of the door is at least equal to that of a traditional door, in that the panel itself acts as a stiffening element of the structure.

**[0037]** In other words, in the assembly which the present invention relates to the panel 10, 10', 10" is a proper structural element, essential for the mechanical and thermal resistance of the moving door.

**[0038]** The panel 10, 10', 10" and the cornice 8 may be glued together in peripherally continuous manner, or at separate gluing points, peripherally distanced from each other.

**[0039]** Optionally, gluing and/or screwing of the hardware to the cornice 8 all along its length, in particular inside the longitudinal recess 20, may also be provided for

**[0040]** For the variants providing for a door threshold 28, this may be inclined on one side in relation to the lower support surface, for example outwards, so as to pose greater resistance to infiltrations of rain.

**[0041]** Optionally, a sealing element 32, such as a balloon sealing element may be connected to the moving door 6, a free end portion 32' of which is rounded or bev-

elled to favour the positioning of the door in the abutment position

**[0042]** In fact, such free end portion favours a slight compression of the sealing element (for example a gasket) when the moving door is placed in the abutment position. This way, the resistance to wind and rain is practically total.

**[0043]** Preferably, as shown for example schematically in figure 6, the panel 10 could abut against a gasketholder component 110 to which the sealing element 32 is joined.

**[0044]** According to one embodiment, a panel-blocking component 12 may be inserted between the cornice 8 and the panel 10, 10', 10" at least on the side of the moving door 6 opposite the fixed frame 2. However such component 12 is preferably absent on the side facing the fixed frame 2.

**[0045]** In the embodiments shown, the panel-blocking component 12 (or glass pane-blocking component according to some variants) is absent or does not extend as far as the outer surface of the door.

**[0046]** According to different variants, the panel-blocking component 12 could be made in one piece with the cornice 8, or could be a component connected to the moving door.

**[0047]** Preferably, in the abutment position, at least a portion 14 of the fixed frame 2 partially overlaps the panel 10, 10', 10", so as to partially cover the line or area of separation 16 with the cornice.

**[0048]** In fact, the adhesion of the panel to the cornice is not total, even more so in the case in which the panel-blocking element 12 is used.

**[0049]** According to a further preferred embodiment, the aforesaid line or area of separation 16 is visible in the position of partial separation of the moving door 6.

**[0050]** As regards the dimensional aspects of the assembly described, the moving door 6 may for example have a maximum thickness of 65 to 95 millimetres, preferably 62 to 92 millimetres, advantageously of approximately 62, approximately 82 millimetres or 95 millimetres.

**[0051]** Preferably, a thickness of 82 or of 95 millimetres proves particularly suitable for moving doors fitted with a triple glass pane 10, 10', 10", such last variant being for example shown schematically in figure 4.

**[0052]** According to a particularly advantageous embodiment of the invention, on a plane parallel to one of the exposed surfaces 24, 26 of the moving door 6, the cornice 8 has a maximum thickness of 60 millimetres, preferably less than 55 millimetres, but optionally over 45 millimetres, advantageously approximately 50 millimetres.

**[0053]** According to one embodiment, the assembly 50, 50' further comprises a fixed cornice 88 adjacent to the moving door 6, such fixed cornice being for example inserted in the fixed frame 2.

**[0054]** According to said variant, when the moving door 6 is in the separation position, the cornices 6, 88 at least

partially overlap each other. Such overlapping preferably occurs in a direction transversal to the primary movement direction Z.

**[0055]** As mentioned above, at least one transparent panel 10, 10', 10" is preferably provided for, advantageously in glass or in any case in a partially transparent material, retained in the moving door 6 and movable in an integral manner therewith. According to a further variant, the fixed cornice 88 also encloses a further panel, preferably in a material permeable to light (for example of glass).

**[0056]** According to a preferred embodiment, at least the section 74, 76 of moving door 6 facing the translation guide 52, 54, which in the variants shown comprises at least one of the cornice components 74, 76 positioned horizontally, has a transversal dimension 78 of 60 millimetres or less.

**[0057]** As a result, given the extremely limited projection of such section 74, 76 the assembly which the present invention relates to presents unequalled luminosity compared to the door and window fittings of the prior art.

**[0058]** According to a preferred embodiment, the assembly comprises a retention device 56, 56' of the moving door 6 to the fixed frame 2, and preferably of the moving door 6 to the vertical upright 10, where the aforesaid device 32, 32' is supported by the door 6.

**[0059]** According to a first embodiment, the retention device 56, 56' is operable by means of a handle 34 or similar actuator, having a rotation axis R1 incident, for example orthogonal, to the primary movement direction 7.

**[0060]** As a result, as shown for example in figure 1, the handle 34 is rotatable in the direction of the arrow 46 (in particular anti-clockwise) so as to release the moving door from the fixed frame.

**[0061]** According to a further embodiment, the retention device 56, 56' is operable by means of a handle 34 or different actuator having a rotation axis R2 substantially parallel to the primary movement direction Z. To such purpose, see figures 10 and 14, where the handle is moved away from the transparent panel, therefore in the direction of the arrow 92 in figure 14 (where the handle has been omitted for the purpose of greater clarity).

45 [0062] for example, the mechanical coupling of the handle 34 with the respective device take place by means of a square pin (not shown) engaged in a lock seat 94 shaped in a complementary manner to the pin. This way, the rotation of the handle causes the movement of a bolt (not shown).

**[0063]** Preferably, the moving door 6 is further mobile in a secondary movement direction Y incident, for example orthogonal, to the primary movement direction Z.

**[0064]** As may be noted for example from the comparison of figures 11a and 11b, when the moving door 6 is in the abutment position, it is movable along the secondary movement direction Y between a stop configuration in which such cornice abuts with at least one translation

guide (in the drawings the lower one marked by reference numeral 52), and a sliding configuration, wherein the cornice and the guide are advantageously detached from each other. For example such movement takes place by the raising/lowering of the moving door according to the orientation shown in the drawings.

**[0065]** According to a preferred embodiment, the assembly 50, 50' comprises second sealing means 104, 106 acting between the moving door 6 and the translation guide 52, 54; according to said variant, the movement from the sliding configuration to the stopped configuration causes a flattening or deformation of such means 60, 62. For example, the second sealing means 104, 106 are borne by the moving door 6 or a section 74 thereof.

**[0066]** More specifically, the variant shown in figure 18 shows second sealing means 106 comprising a support lip 82 which extends from the moving door 6 above the fixed frame 2. Advantageously, such lip bears, at the surface thereof facing said frame, a gasket 112. Optionally, the support lip 82 could be at least partially flexible (for example in a vertical direction according to the orientation in the figures).

**[0067]** According to a preferred embodiment, the movement in the direction of secondary movement Y is controlled by operating the handle 34 of the retention device 56, 56' of the moving door 6 to the vertical upright 10.

**[0068]** According to an advantageous embodiment, the transparent panel 10, 10', 10" laterally delimits a panel split 86 for the at least partial housing of the retention device 56, 56'.

**[0069]** Consequently, since the overall dimensions of the moving door are extremely reduced so as to increase the luminosity of the interior space, the transparent panel 10 is counter-shaped to the retention device so as to partially house the kinematisms of the latter inside its thickness.

[0070] For example, the panel split 86 (figure 13) is made laterally to the panel and in particular is in the form of a recess of one of the side rims 10a of said panel 10. [0071] According to an advantageous embodiment, the moving door 6 comprises one or more cornice components 74, 76, 80, 68 glued directly to the transparent panel 10, 10', 10" so that the latter acts as a structural stiffener.

[0072] In fact, the thinness of the cross sections aimed at increasing the luminosity of the assembly which the present invention relates to, could cause an excessive weakening of the structure and thus, merely by way of example, an increased risk of break-in through the assembly. However, by choosing an appropriate panel, such as burglar-proof or security glass, this indirectly permits a strengthening of the components surrounding it.

[0073] In addition, the gluing of the cornice components is an operation which can be performed rapidly, and is highly favourable as regards production times and logistics aspects.

[0074] Advantageously, at least a pair of cornice com-

ponents 80, 68 are adherent, preferably glued, to opposite sides of said panel 10, for example at an inner side 96 and an outer side 98.

**[0075]** According to one variant (figures 11a and 18), the translation guide 52, 54 is configured to be at least partially recessed in an attachment or housing seat 66, 66', for example lowered or raised, of the door opening 4. In other words, such guide is predisposed to be inserted at least partially in the seat 66, 66'.

**[0076]** According to the variants shown, such seat may be made in the thickness of an upper margin 60 and/or of a lower margin 62 which circumscribes the door opening 4, or may be made directly in the fixed frame.

[0077] Preferably, the translation guide 52, 54 is suitable to be completely housed in the attachment/housing seat 66, 66', so that the single moving door 6 projects inwards of the opening identified by the door or window. [0078] As may be noted for example in the representation in figures 9 and 10, the upper and lower translation guides are fully hidden from view, so that only the limited thickness of the section (or sections) 74, 76 permits the presence of the moving door 6 in the abutment position to be noted

[0079] According to a preferred embodiment, the translation guide 52, 54 at least partially houses roller means to support the moving door 6 in a sliding manner. [0080] Preferably, such roller means comprise at least one wheel or roller 70 (advantageously a plurality thereof spaced along the guide). For example, the wheel or roller 70 slides along a longitudinal bead 72 of such guide 52, 54.

**[0081]** More in particular, two or more wheels 70 may be borne by carriages 116 attached to the moving door, for example two or more carriages being provided for each cornice (optionally for each section 74).

**[0082]** In fact, the guide 52 shown in the drawings is preferably an open box-like section (upwards or downwards), for example generally U-shaped, on the bottom of which the aforesaid bead 108 is positioned. For example, the insulating material 114 could rest in such box-like section, for example between the longitudinal bead 72 and the aforesaid bottom.

**[0083]** Conversely, the guide 54 shown in the drawings has a generally "T" or "Y" shaped guide bead 108, which couples geometrically with the moving door.

**[0084]** According to a further variant, a section 74 of the moving door facing the longitudinal bead 72 is advantageously provided with the wheel or roller 70, so that the latter move integrally with the cornice between the abutment position and the separation position.

[0085] Advantageously, the wheel or roller 70 is at least partially housed in the translation guide 52, 54, and in particular in an inner compartment 100 of such guide. In such situation, an access mouth to the inner compartment 100 may be fitted with at least one closure element 102 suitable to permit the translation of the moving door 6 (consequently shaped so as not to obstruct the movement of the cornice or rollers thereof), and contemporarily

to prevent the entrance of dust or dirt inside such inner compartment 100.

**[0086]** For example, according to one embodiment (not shown), the closure element comprises one or more pairs of components fitted with bristles, each of which centrally defines a groove for the transit of the cornice or of the rollers.

**[0087]** According to a preferred embodiment, the closure element 102 comprises one or more flexible tapes 118, connected at a lower portion 120 of the moving door 6 and guided thereby along the access mouth.

**[0088]** Advantageously, a flexible tape 118 is provided for each axial end of the moving door, in relation to the primary movement direction Z.

**[0089]** According to the embodiment shown in figure 15, the flexible tape 118 comprises a plurality of plate-like elements 122 adjacent and connected to each other in a jointed manner.

**[0090]** For example, collection means of the flexible tape 118 could be provided in the translation guide 52 (such as a drawer positioned at the end of the guide), or return means to make the flexible tape 118 run under the external visible portion thereof.

[0091] The present invention also relates to a door or (French-)window assembly 1 which comprises a fixed frame 2 suitable for fitting in a door or (French-)window opening 4, a moving door 6, connected in a rotatable/sliding manner to the fixed frame 2 - between the positions mentioned above - wherein the moving door 6 further comprises a cornice 8 inside which at least one transparent panel 10, 10', 10" is supported, and wherein the moving door 6 has a maximum thickness of 65 to 95 millimetres.

**[0092]** With regard to the preferred characteristics of such assembly, see the above description. In particular merely by way of example, the aforesaid maximum thickness may advantageously be 62 to 92 millimetres, and may preferably be 62 millimetres, 82 millimetres or 95 millimetres.

**[0093]** Innovatively, the assembly which the present invention relates to provides an extremely luminous structure, unequalled by the systems currently known of in the sector.

**[0094]** Nonetheless, such assembly has heat resistance, wind and rain proof characteristics in no way inferior to the traditional fixtures.

**[0095]** In fact, according to an advantageous aspect, the assembly which the present invention relates to guarantees a substantially hermetic peripheral seal, in that the moving door slots onto specially designed heat-insulation components.

**[0096]** In addition, according to a further advantageous aspect, the assembly which the present invention relates to guarantees a substantially hermetic peripheral seal, in that the weight of the cornice falls on the seals to improve their insulating action.

**[0097]** Advantageously, the assembly which the present invention relates to makes it possible to optimise

production times and drastically reduce logistics costs.

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**[0098]** Advantageously, the assembly which the present invention relates to has a simple but specially designed construction to permit the reduction of thicknesses, and the increase in luminosity for the same surface area.

**[0099]** Advantageously, the assembly which the present invention relates to is solidly constructed both as regards resistance to break-in and as regards functioning reliability.

**[0100]** Advantageously, the assembly described does not require special components, but makes it possible to adapt substantially traditional hardware and to combine it in an unusual and unforeseen manner.

[0101] Advantageously, the abutment position of the assembly described above is maintained with great reliability.

**[0102]** A person skilled in the art may make variations to the embodiments of the aforesaid assembly so as to satisfy specific requirements, replacing elements with others functionally equivalent.

**[0103]** Such variants are also contained within the scope of protection defined by the following claims.

**[0104]** In addition, each of the characteristics described as belonging to a possible embodiment may be realised independently of the other embodiments described.

#### 30 Claims

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- Door or (French-)window assembly (50, 50') comprising:
  - a fixed frame (2) suitable for fitting in a door or (French-)window opening (4);
  - a moving door (6), slidingly connected to a translation guide (52, 54) that extends parallel to a primary movement direction (Z) between an abutment position with the fixed frame or its vertical upright (58), and a position of partial separation from said frame/upright; wherein the translation guide (52, 54) at least partially houses roller means for slidingly supporting the moving door (6), said means comprising at least one wheel or roller (70) at least partially received in a translation guide (52, 54) having an open box-like section;
  - sealing means (104, 106) acting between the moving door (6) and the translation guide (52, 54):

wherein the moving door (6) comprises a cornice (8) inside which at least one transparent panel (10, 10', 10") is supported, for example made of glass, wherein the cornice (8) and the panel (10, 10', 10") are glued to each other so that said panel acts as a reinforcement element of the cornice;

said assembly being **characterised in that** the at least one wheel or roller (70) is completely housed in the translation guide (52, 54), **in that** the moving door (6) is further movable along a secondary movement (Y) direction incident with respect to the primary movement direction (Z) and wherein, when disposed in the abutment position, the moving door (6) is movable along the secondary movement direction (Y) between a stop configuration, in which said frame is in abutment with at least one translation guide (52, 54), and a sliding configuration, in which the cornice and the guide are detached from each other, the movement of the moving door (6) from the sliding configuration to the stop configuration causing a flattening or a deformation of the sealing means.

- 2. Assembly according to claim 1, wherein the secondary movement direction (Y) is orthogonal with respect to the primary movement direction (Z).
- 3. Assembly according to claim 1 or 2, wherein the movement of the moving door (6) along the secondary movement direction (Y) occurs by lifting/lowering said door.
- 4. Assembly according to any of the preceding claims, comprising a retention device (56, 56') of the moving door (6) to the fixed frame (2), wherein said device is supported by the door (6) and is operable by means of a handle (34) or a similar rotatable actuator.
- Assembly according to the preceding claim, wherein said handle (34) or actuator has a rotation axis (R2) essentially parallel to the primary movement direction (Z).
- 6. Assembly according to claim 4, wherein said handle (34) or actuator has a rotation axis (R1) incident, for example orthogonal, with respect to the primary movement direction (Z).
- Assembly according to any of the preceding claims when dependent on claim 4, wherein the movement in the secondary movement direction (Y) is controlled by operating the handle (34) of the retention device (56, 56').
- **8.** Assembly according to any of the preceding claims when dependent on claim 4, wherein the transparent panel (10) is counter-shaped with respect to the retention device (56, 56') so as to partially accommodate kinematisms of the latter within its thickness.
- **9.** Assembly according to any of the preceding claims when dependent on claim 4, wherein the transparent panel laterally delimits a panel split (86) for at least partially housing the retention device (56, 56').

- **10.** Assembly according to any of the preceding claims, wherein the cornice (8) is made by joining wooden elements.
- **11.** Assembly according to any of the preceding claims, wherein the panel (10, 10', 10") and the cornice (8) are glued in a peripherally continuous manner.
- **12.** Assembly according to any of the preceding claims, wherein the sealing means (104, 106) are carried by the moving door (6).
- 13. Assembly according to any of the preceding claims, wherein, in a plane parallel to one of the exposed surfaces (24, 26) of the moving door (6), the cornice (8) has a maximum thickness smaller than 55 millimetres.
- **14.** Assembly according to any of the preceding claims, wherein the translation guide (52, 54) is received in an attachment or housing seat (66, 66') of the door opening (4), in such a way that only the moving door (6) projects inside of the opening identified by said door or said window.

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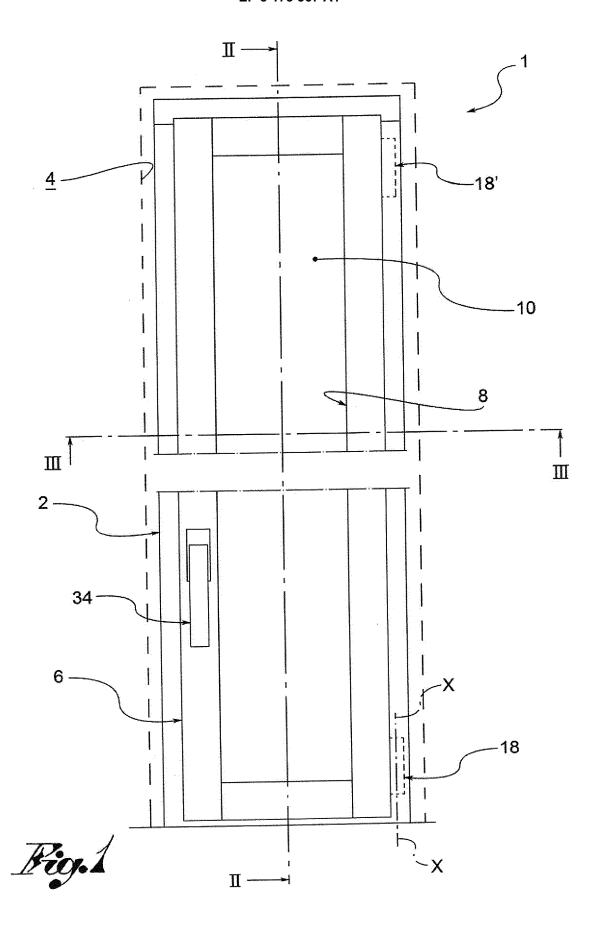
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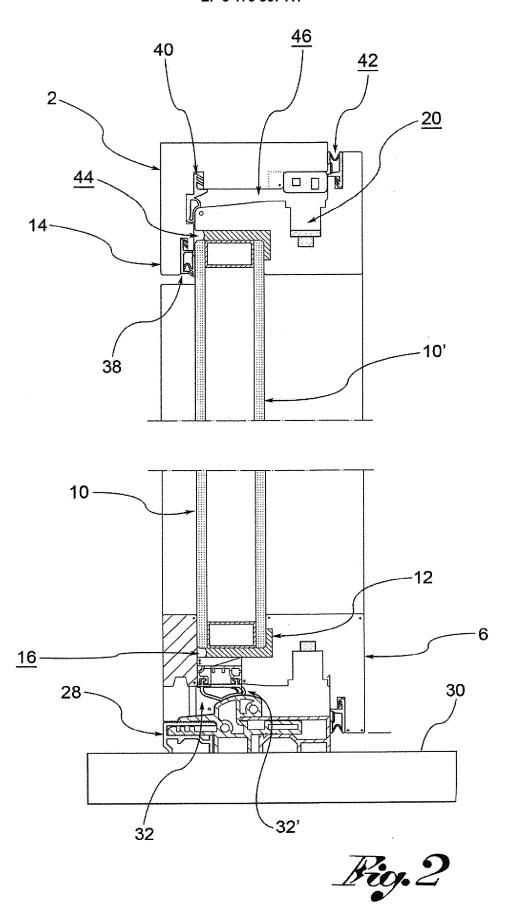
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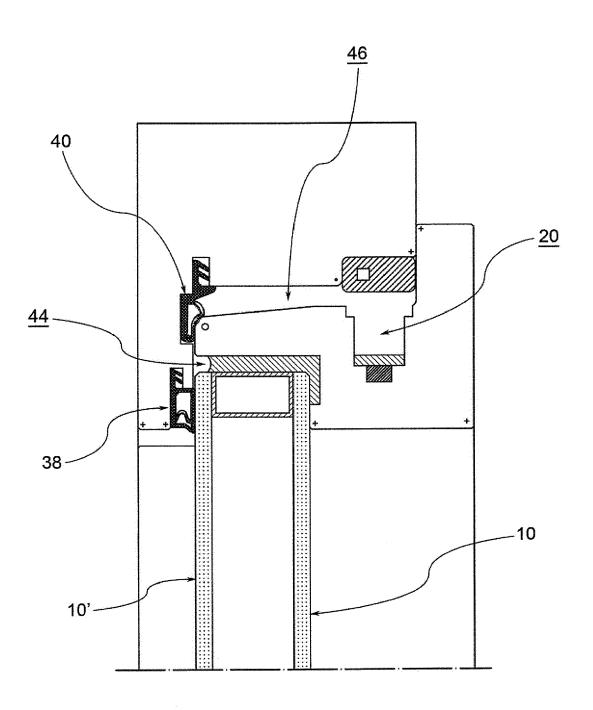
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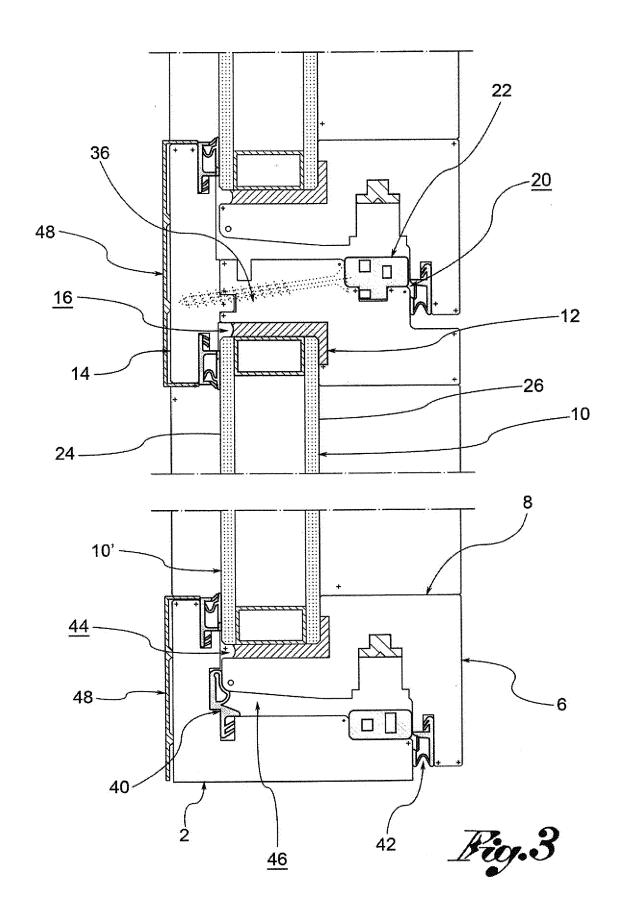
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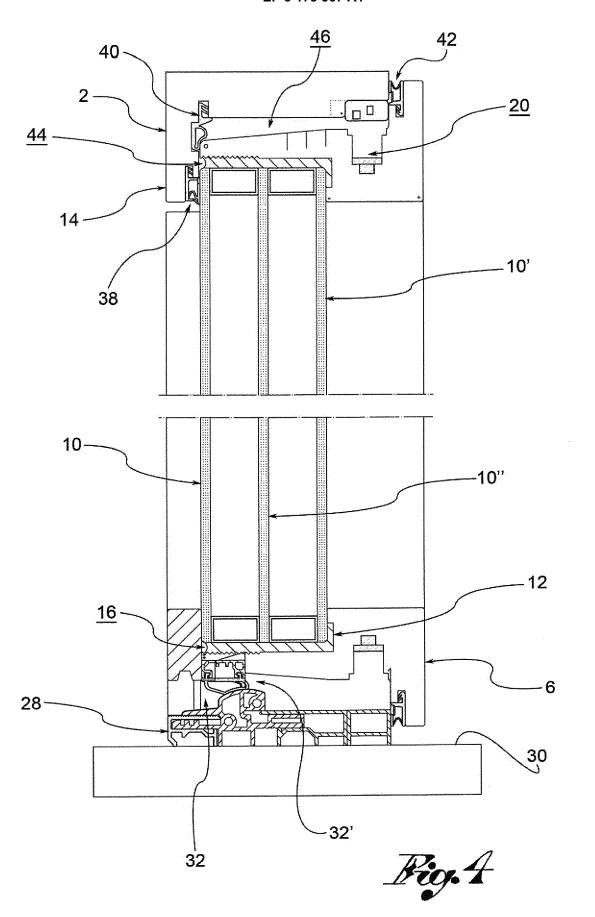


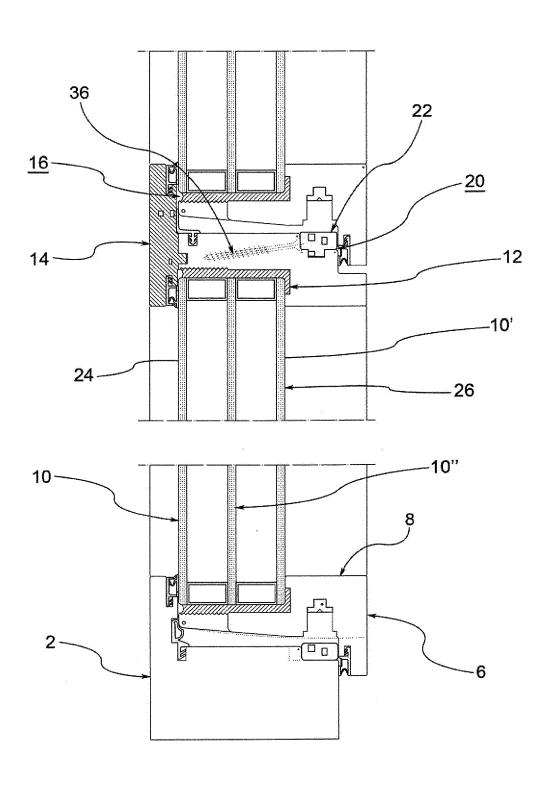




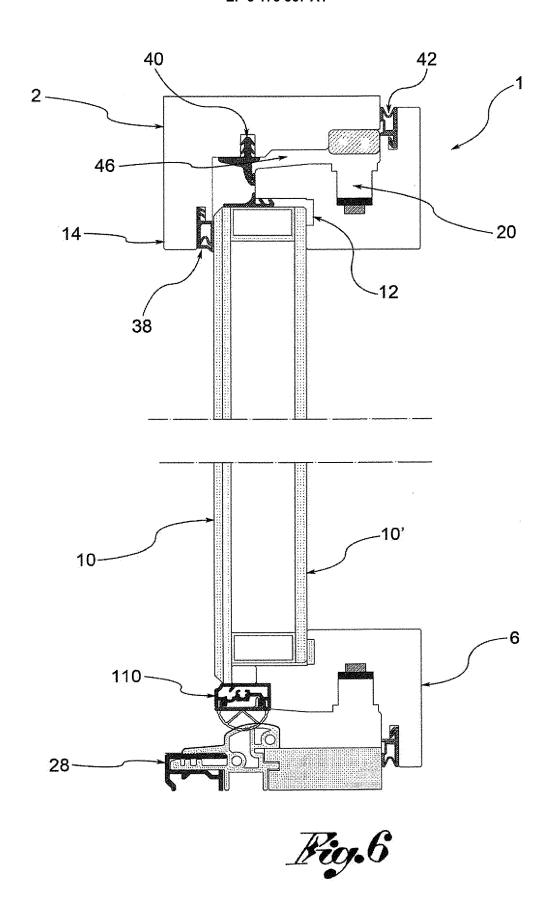


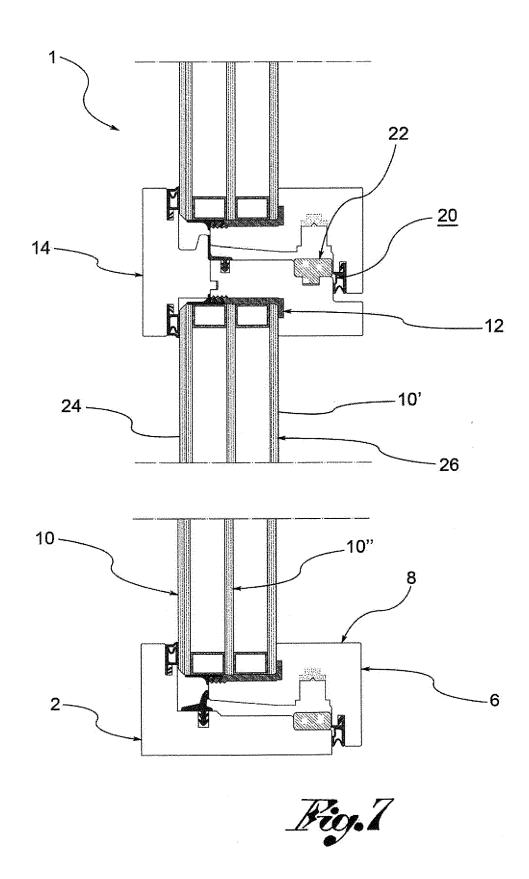


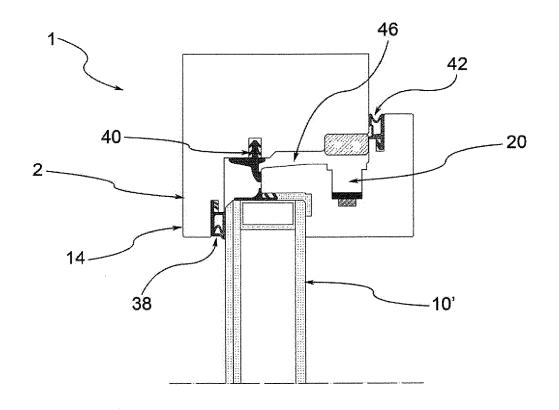


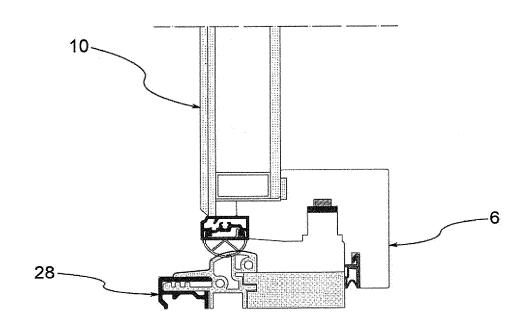




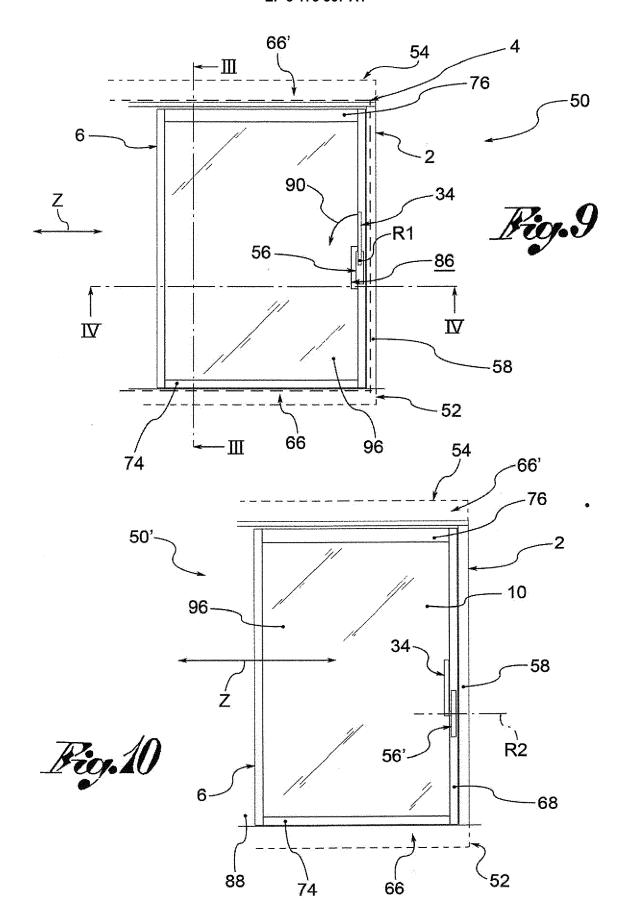


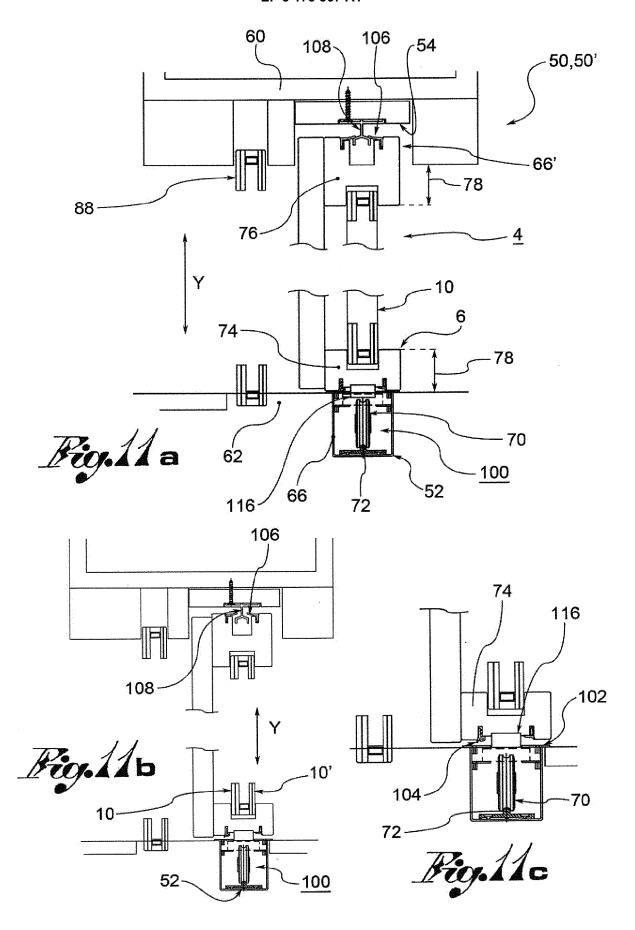












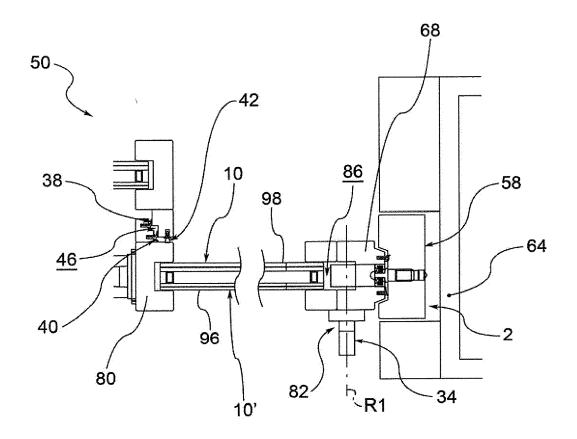
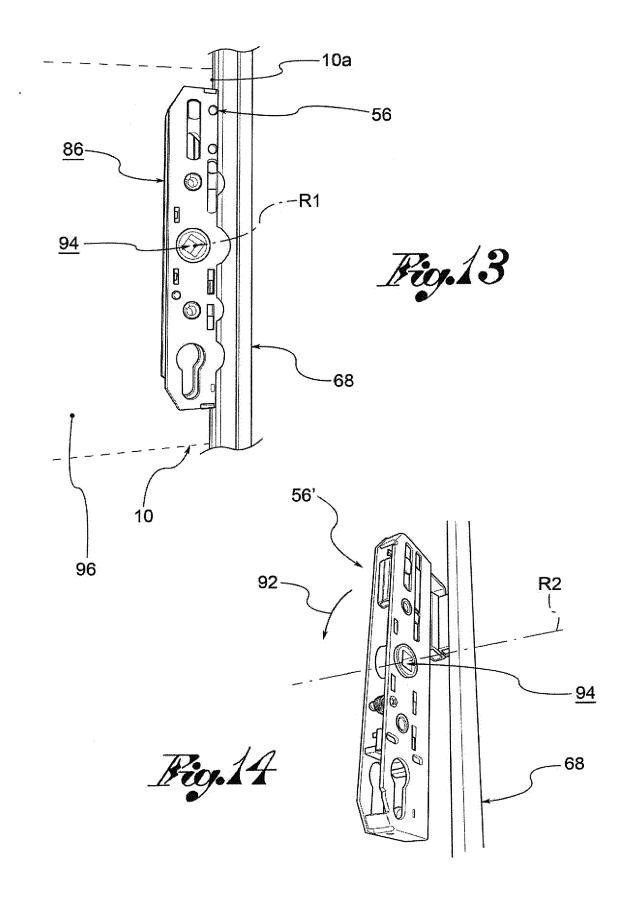
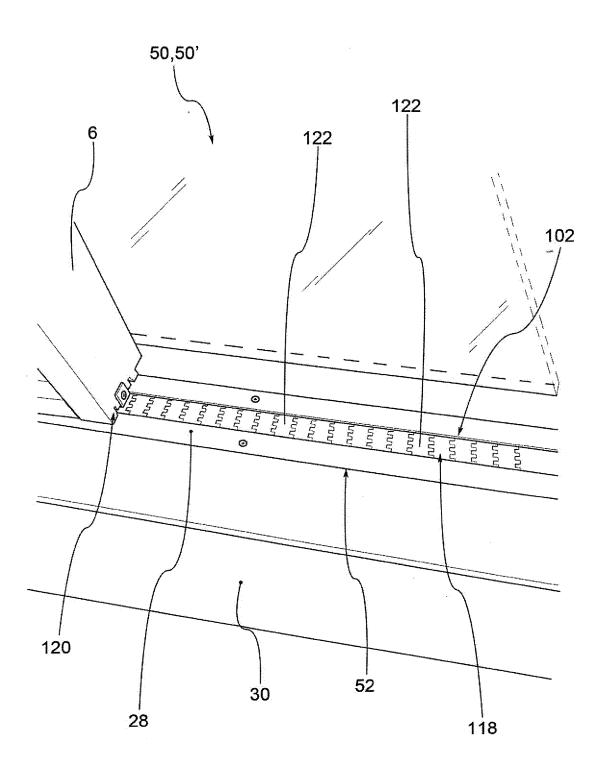
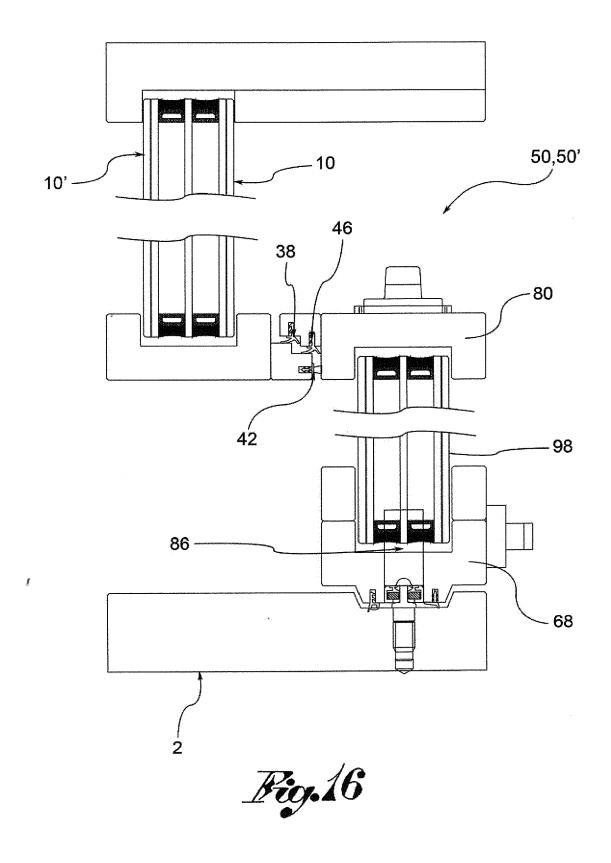


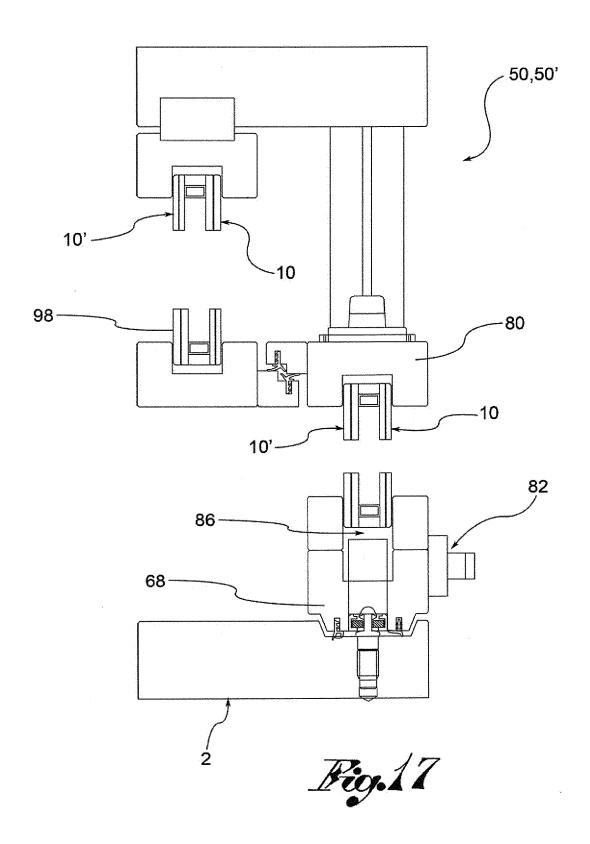
Fig.12

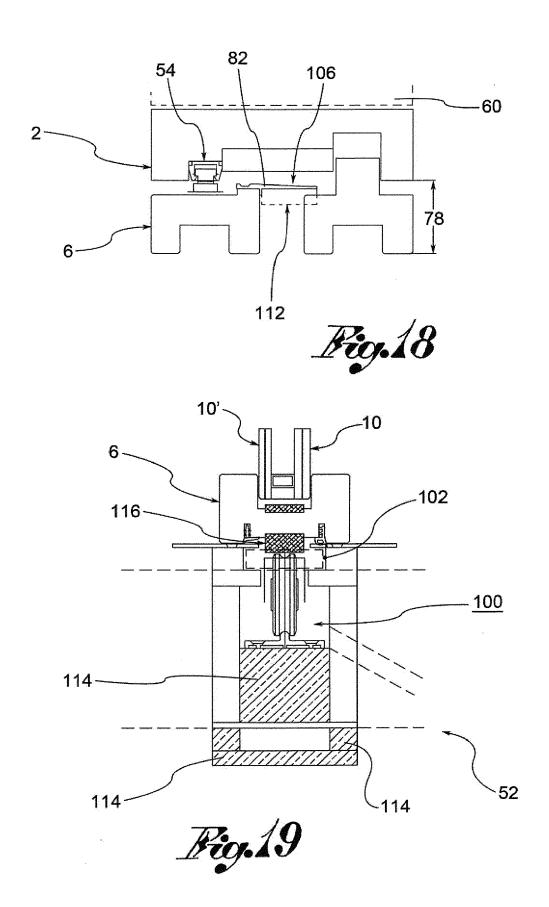














Category

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#### **EUROPEAN SEARCH REPORT**

**DOCUMENTS CONSIDERED TO BE RELEVANT** 

Citation of document with indication, where appropriate,

EP 2 317 054 A2 (BLOESCH DIETER [DE]) 4 May 2011 (2011-05-04) \* paragraph [0012] - paragraph [0013];

DE 20 2008 007829 U1 (SIEGENIA AUBI KG

[DE]) 21 August 2008 (2008-08-21) \* the whole document \*

of relevant passages

figures 1-5b \*

**Application Number** 

EP 16 20 3948

CLASSIFICATION OF THE APPLICATION (IPC)

INV. E06B3/42 E06B3/52

E06B3/56

Relevant

1-14

1-14

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	Place of search
04C01)	The Hague

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	TECHNICAL FIELDS SEARCHED (IPC)			
	E06B			
n up for all claims				
Date of completion of the search	Examiner			
14 February 2017	Cobusneanu, D			
T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document oited in the application L: document cited for other reasons				

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document

# EP 3 173 567 A1

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 16 20 3948

5

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14-02-2017

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	EP 2317054 A2	04-05-2011	DE 202009014785 U1 EP 2317054 A2	30-12-2010 04-05-2011
15	DE 202008007829 U1	21-08-2008	DE 202008007829 U1 EP 2283197 A1 WO 2009149768 A1	21-08-2008 16-02-2011 17-12-2009
20				
25				
30				
35				
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55 0G				

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