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(54) **CABINET**

(57) A cabinet (1), which comprises two or more adjacent and/or opposite closets (2a, 2b, 2c, 2d). The frame part of the cabinet comprises elements (3, 3', 3'') attached to each other by quick couplings (4, 4'), which elements form the closet walls of the cabinet so that between the adjacent and/or opposite closets (2a, 2b, 2c, 2d) there is a common wall panel formed of elements (3, 3', 3'').

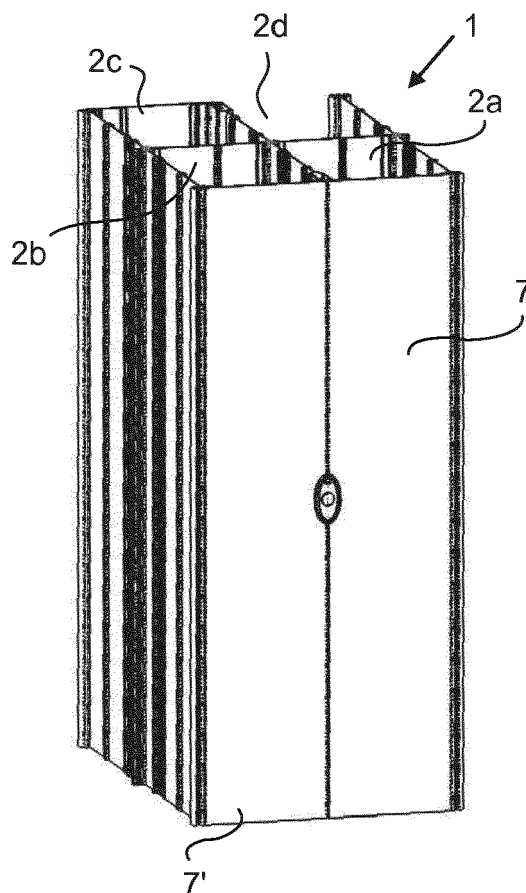


Fig. 2

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Description

Field of the invention

[0001] The invention relates to a cabinet according to the preamble of the appended independent claim.

Background of the invention

[0002] Usually the cabinets, for example the cabinets used in dressing rooms, which cabinets comprise several adjacent and/or opposite closets, are formed by attaching ready-made separate closets to each other, whereby between the adjacent and opposite closets there are wall panels of both closets. Such double walls between the closets of the cabinet reduce the storage space inside the cabinet. The closets forming the cabinet typically comprise parts, which are attached to each other by screw connections or the closets have been made by welding, so that due to the laborious assembling phase the closets are ready assembled before transportation to the installation site. The transportation of the ready-assembled closets is space-consuming and troublesome, and furthermore, transferring and installing of ready-made closets to their places is laborious.

Object and description of the invention

[0003] An object of the present invention is to reduce or even eliminate the above-mentioned problems appearing in prior art.

[0004] The object of the present invention is to provide a cabinet, the manufacture of which requires less material.

[0005] The object of the invention is also to provide a cabinet, which can be easily and quickly assembled only just on the installation site of the cabinet and the transportation of the cabinet parts of which is easy and little space-consuming.

[0006] In order to attain this object, the cabinet according to the invention is primarily characterised in what is presented in the characterising part of the independent claim.

[0007] The other, dependent claims present some preferred embodiments of the invention.

[0008] A typical cabinet according to the invention comprises two or more adjacent and/or opposite closets, the frame part of which cabinet comprises elements attached to each other by quick couplings, which elements form the closet walls of the cabinet so that between the adjacent and/or opposite closets there is a common wall panel formed of elements.

[0009] The cabinet according to the invention comprises a frame part formed of elements, so that the cabinet comprises a desired number of adjacent and/or opposite closets. The entire frame part of the cabinet is formed of elements to be attached to each other. The invention is based on the fact that the cabinet is assembled on the

site from elements attached to each other by quick couplings, so that the adjacent and/or opposite closets have a common wall formed of elements. In other words, between the adjacent and opposite closets there is only one wall panel formed of elements, each closet having no separate wall panels of their own. Thus, less material is needed for the manufacture of the cabinet and the structure is made lighter. The structure according to the invention also makes the assembling of the cabinet easier and quicker. Further, the cabinet according to the invention is assembled only just on the installation site, whereby transported are only elements, that are remarkably simpler to be transported than the ready-made closets. The elements fit into a small space, whereby remarkable saving is achieved in the transportation costs.

[0010] The closets of the cabinet according to the invention are also more spacious, since between the adjacent and/or opposite closets there is only one wall panel formed of elements.

[0011] The closets of the cabinet according to the invention typically comprise extruded aluminium elements to be attached to each other by quick couplings. The extruded aluminium elements comprise all the forms needed for the assembling of the closet in one uniform element. The size of the elements can vary and the design of the edges of the elements depends on the quick coupling to be used. Aluminium is typically used as a material of the elements, since a light structure and good corrosion resistance are thus achieved and furthermore aluminium is a recyclable material. The elements can also be made of other material suitable for the purpose.

[0012] In a cabinet according to the invention the closet walls are formed of one or more elements in the lateral and depth direction of the closet. The size of the elements depends i.a. on the width and the depth of the closet to be manufactured. Typically, the closets of the cabinet according to the invention comprise a first and a second side wall, back wall and a door. The side wall(s) and the back wall are, depending on the structure of the cabinet, common between two adjacent and opposite closets. The width of the side wall determines the depth direction of the closet and the width of the back wall determines the lateral direction of the closet. In the cabinet ends, the side wall of the closet formed of elements forms the end of the cabinet. If the closets have only been arranged next to each other, the back wall formed of the closet elements forms the back wall of the cabinet.

[0013] The frame part of the cabinet according to the invention is formed so that the elements are attached to each other by quick couplings without any separate fastening means. The quick coupling refers to the fastening of elements to each other so that the edges of the elements attach to each other without any separate fastening means, such as screws. The elements according to the invention comprise in the longitudinal edges of the elements necessary designs for quick couplings, which designs can be freely chosen. The edges of the elements to be attached to each other comprise opposite forms of

the quick coupling.

[0014] The element or elements formed by the wall panel of the cabinet according to the invention can also comprise a corner part of the closet/closets, or the corner part can be a separate element of its own, which is attached to the elements formed by the wall panel. Depending on the purpose of use in the structure of the cabinet, parts having different designs, such as a T part, L part or a + part, can be used to form the corner parts of the closets. These corner parts are typically extruded aluminium elements, such as also the other elements to be used in the structure.

[0015] In a typical cabinet according to the invention the elements forming the frame part are uniform in the height direction of the cabinet. The dimensioning of the elements in the longitudinal and lateral direction can vary depending on the cabinet to be formed. Typically, the height of the closet is determined according to the length of the element. The longitudinal direction of the element is thus the same as the height direction of the closet.

[0016] In a preferred embodiment of the invention the hinge part of the closet for fastening the door is a stationary part of the element formed by the wall. In the case of the elements extruded from aluminium, the hinge is thus formed as a part of the element already in the extrusion stage. Thus, the hinge part is of the same uniform material with the element. A counterpart to the hinge part of the element is fastened to the closet door, so that with this counterpart the door can be mounted to the hinge part of the element. In a preferred embodiment of the invention the hinge part is continuous in the longitudinal direction of the element and thus in the height direction of the closet. Also the counterpart of the hinge part to be attached to the closet door is typically a uniform profile having a length of the entire door. This makes the assembling of the cabinets quicker and simpler, since separate hinges do not need to be assembled to the structure.

[0017] In an embodiment of the invention, a closet of the cabinet is divided into several parts in the height direction of the closet by arranging intermediate floors in the closet. This way, the frame part of the closet is manufactured in the height direction of the closet of uniform elements, whereby also the hinge part of the closet is continuous in the height direction of the closet, and the closet can be easily and simply divided into several parts with the aid of intermediate floors and separate doors.

[0018] The cabinet according to the invention can also comprise two or more pillars travelling through the closets in the vertical direction of the closet, with the aid of which pillars the cabinet can be fastened to the floor and to the ceiling. The pillars are typically arranged to the frame part of the cabinet at intervals of 1 200-3 000 mm in the lateral direction of the cabinet. In a preferred embodiment of the invention the vertical pillars are formed of vertical pipes or profiles attached to each other, which are arranged to the inner corners of the adjacent and opposite closets and attached to each other for forming a solid

pillar structure. The pipes or profiles to be arranged in the inner corners are typically manufactured of aluminium, like the wall elements as well, but also other materials can be used. Such pillar structure makes it possible to integrate the fastening pillars easily as a part of the cabinet and the structure becomes solid and the number of the fastening points in the floor or in the ceiling is as small as possible. Furthermore, the pillar structure brings lightness to the space and makes the cleaning easier. The use of the pillar structure is possible due to the structure to be assembled on site according to the invention.

[0019] In a preferred embodiment of the invention the cabinet comprises adjacent and opposite closets, and the vertical pipes or profiles forming the fastening pillar of the cabinet are arranged in the inner corners of four crossing closets and attached solidly to each other for forming a fastening pillar.

Short description of the drawings

[0020] In the following, the invention will be described in more detail with reference to the appended drawings, in which

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| 25 | Figure 1 | shows a cabinet according to the invention comprising adjacent and opposite closets, |
| 30 | Figure 2 | shows another cabinet according to the invention, |
| | Figure 3 | shows a cabinet according to Figure 2 illustrated from above, |
| 35 | Figure 4 | shows a frame part assembled from the elements of a cabinet according to the invention, |
| 40 | Figure 5 | shows a hinge part of a closet according to the invention, and |
| | Figures 6 and 7 | show a pillar structure of the cabinet according to the invention. |

Detailed description of the invention

[0021] Figures 1 and 2 show cabinets according to the invention comprising adjacent and opposite closets. The cabinet 1 comprises closets 2a, 2b, 2c, 2d, which have a closet door 7, 7'. In one embodiment, the cabinet 1 is placed on a separate base 8.

[0022] Figure 3 shows the structure of the cabinet according to Figure 2 illustrated from above. The frame part of the cabinet 1 shown in the Figure is formed of elements 3, 3', 3" (all elements are not numbered) attached to each other so, that the elements form the walls, side walls and the back wall of the closets 2a, 2b, 2c and 2d of the cabinet. Between the opposite closets 2b, 2c and 2a, 2d there

is a common wall panel formed of elements 3, and correspondingly between the adjacent closets 2a, 2b and 2c, 2d there is a common wall panel formed of elements 3". The elements forming the walls of the closets 2a, 2b, 2c, 2d also comprise a hinge part 6, 6', 6", to which a closet door 7, 7', 7" can be fastened.

[0023] Figure 4 shows in more detail a frame part of the cabinet according to the invention, and especially a corner part 5 between the closets. The frame part of the cabinet is formed of elements 3, 3' attached to each other. The elements have been attached to each other by quick couplings 4, 4'. The Figure shows one possible structure of a quick coupling, however, it does not limit the invention, but the design of the coupling can vary.

[0024] The hinge part 6 according to the invention is shown in more detail in Figure 5, which hinge part is a stationary part of the element 3 formed by the frame part of the cabinet. The closet door 7 comprises an opposite hinge part suitable for the hinge part 6 of the element, whereby the door 7 can be easily installed to the frame part of the cabinet with this hinge part without any separate fastening means.

[0025] Figures 6 and 7 show a pillar structure of the cabinet according to the invention, which pillar structure enables the fastening of the cabinet to the floor and to the ceiling. The cabinet 1 comprises vertical pillars 9, 9' arranged in the closets 2a, 2b, 2c, 2d. Figure 7 shows pillars 9, 9' arranged in the cabinet, which comprises adjacent and opposite closets 2a, 2b, 2c, 2d. The vertical pipes or profiles forming the fastening pillar 9, 9' are arranged in the inner corners of four crossing closets 2a, 2b, 2c, 2d and attached solidly to each other.

Claims

1. A cabinet (1) comprising two or more adjacent and/or opposite closets (2a, 2b, 2c, 2d), **characterised in that** the frame part of the cabinet comprises elements (3, 3', 3") attached to each other by quick couplings (4, 4'), which elements form the closet walls of the cabinet so that between the adjacent and/or opposite closets (2a, 2b, 2c, 2d) there is a common wall panel formed of elements (3, 3', 3").
2. Cabinet according to claim 1, **characterised in that** between the adjacent and/or opposite closets there is one wall panel formed of elements (3, 3', 3").
3. Cabinet according to claim 1 or 2, **characterised in that** the elements (3, 3', 3") are extruded aluminium elements.
4. Cabinet according to any of the previous claims, **characterised in that** in the lateral and depth direction of the closet (2a, 2b, 2c, 2d) the closet walls are formed of one or more elements (3, 3', 3").

5. Cabinet according to any of the previous claims, **characterised in that** the elements (3, 3', 3") have been attached to each other by quick couplings (4, 4') without any separate fastening means.
6. Cabinet according to any of the previous claims, **characterised in that** the element (3, 3', 3") comprises a corner part (5) of the closet.
7. Cabinet according to any of the previous claims, **characterised in that** the hinge part (6, 6', 6") of the closet is a stationary part of the element (3, 3', 3").
8. Cabinet according to claim 7, **characterised in that** the hinge part (6, 6', 6") is continuous in the longitudinal direction of the element (3, 3', 3").
9. Cabinet according to any of the previous claims, **characterised in that** the element (3, 3', 3") is uniform in the height direction of the closet.
10. Cabinet according to any of the previous claims, **characterised in that** the closet (2a, 2b, 2c, 2d) is divided into several parts in the height direction of the closet by arranging intermediate floors in the closet.
11. Cabinet according to any of the preceding claims, **characterised in that** the cabinet (1) comprises two or more vertical pillars (9, 9') travelling through the closets (2a, 2b, 2c, 2d) in the vertical direction of the closet.
12. Cabinet according to claim 11, **characterised in that** the pillars (9, 9') are arranged to the frame part of the cabinet at the intervals of 1 200 - 3 000 mm in the lateral direction of the cabinet.
13. Cabinet according to claim 11 or 12, **characterised in that** the pillar (9, 9') is formed of pipes or profiles attached to each other, which are arranged in the inner corners of the adjacent and opposite closets.

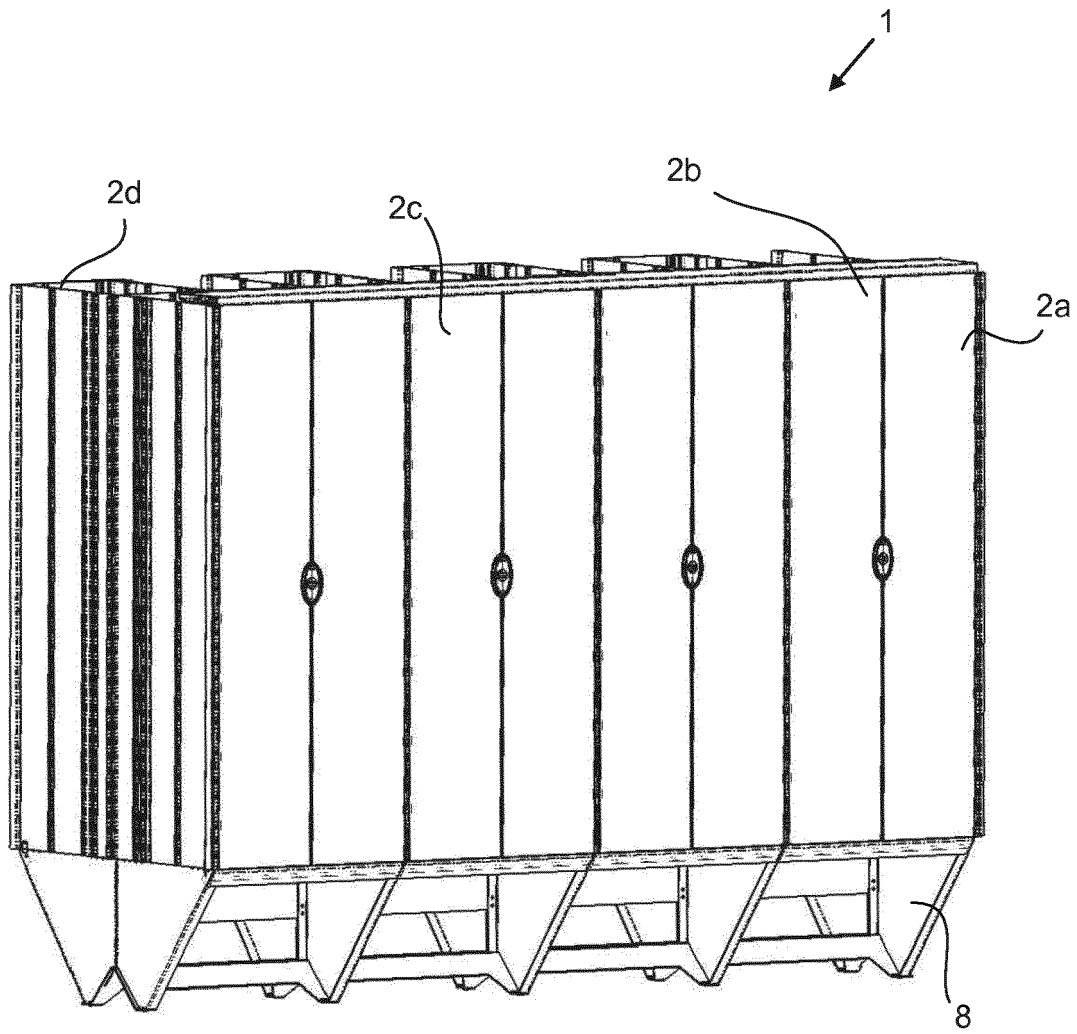


Fig. 1

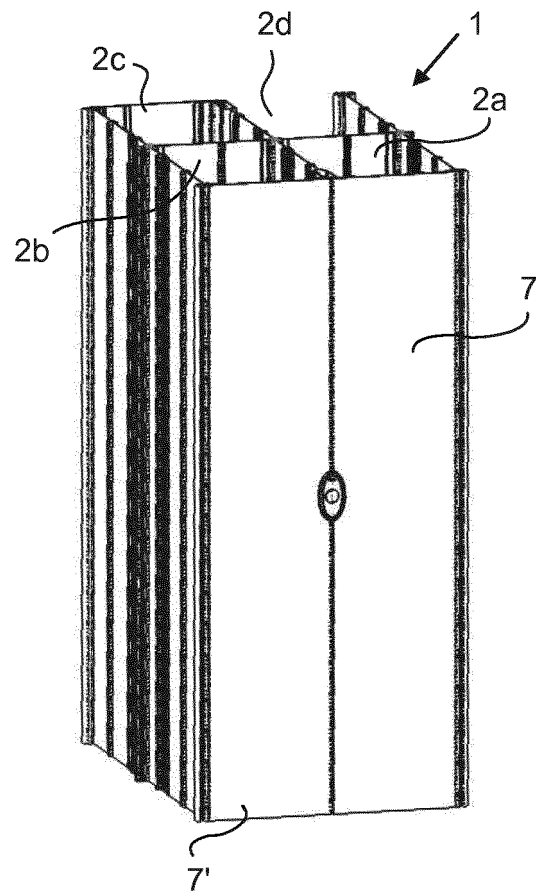


Fig. 2

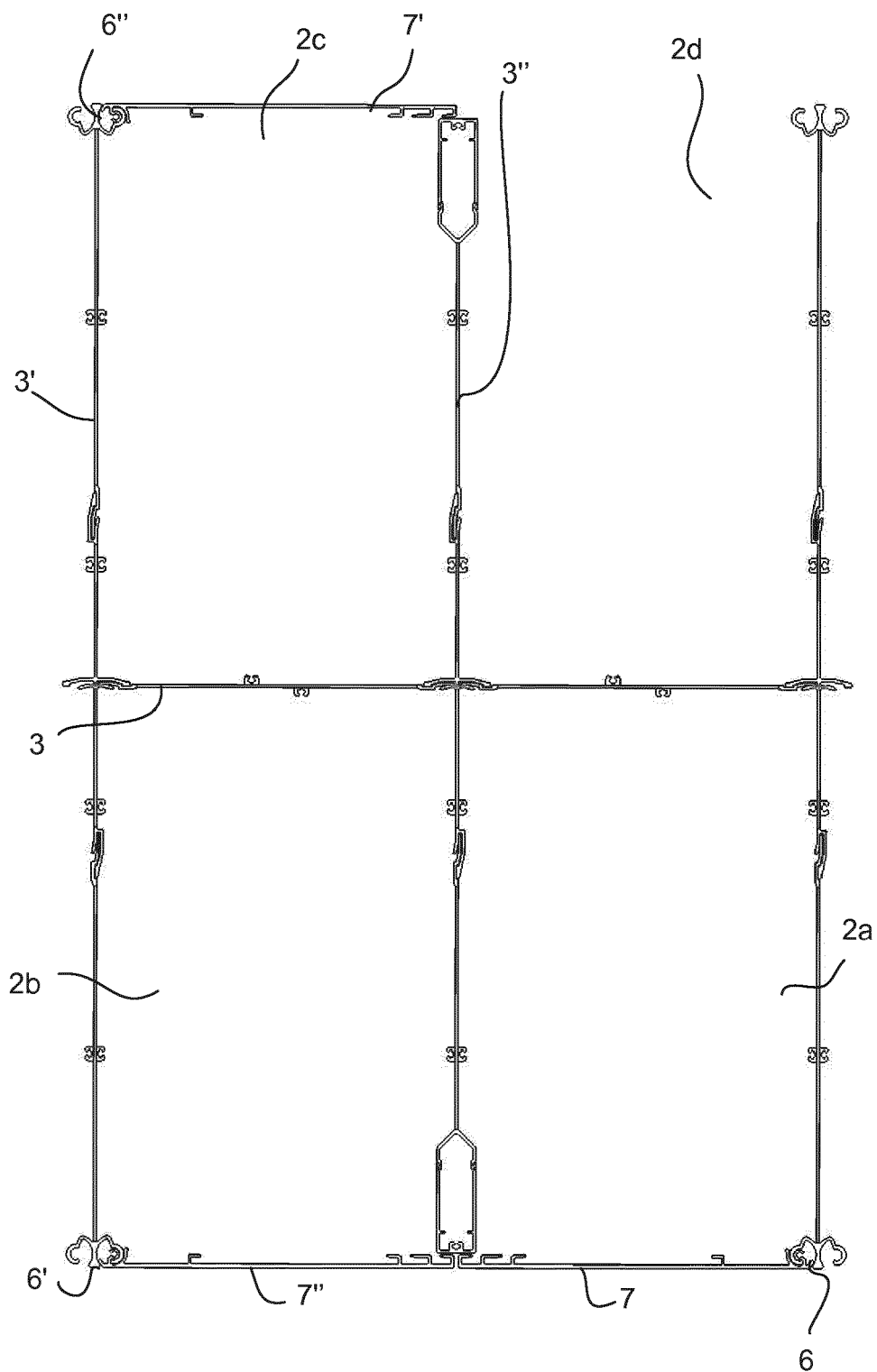


Fig. 3

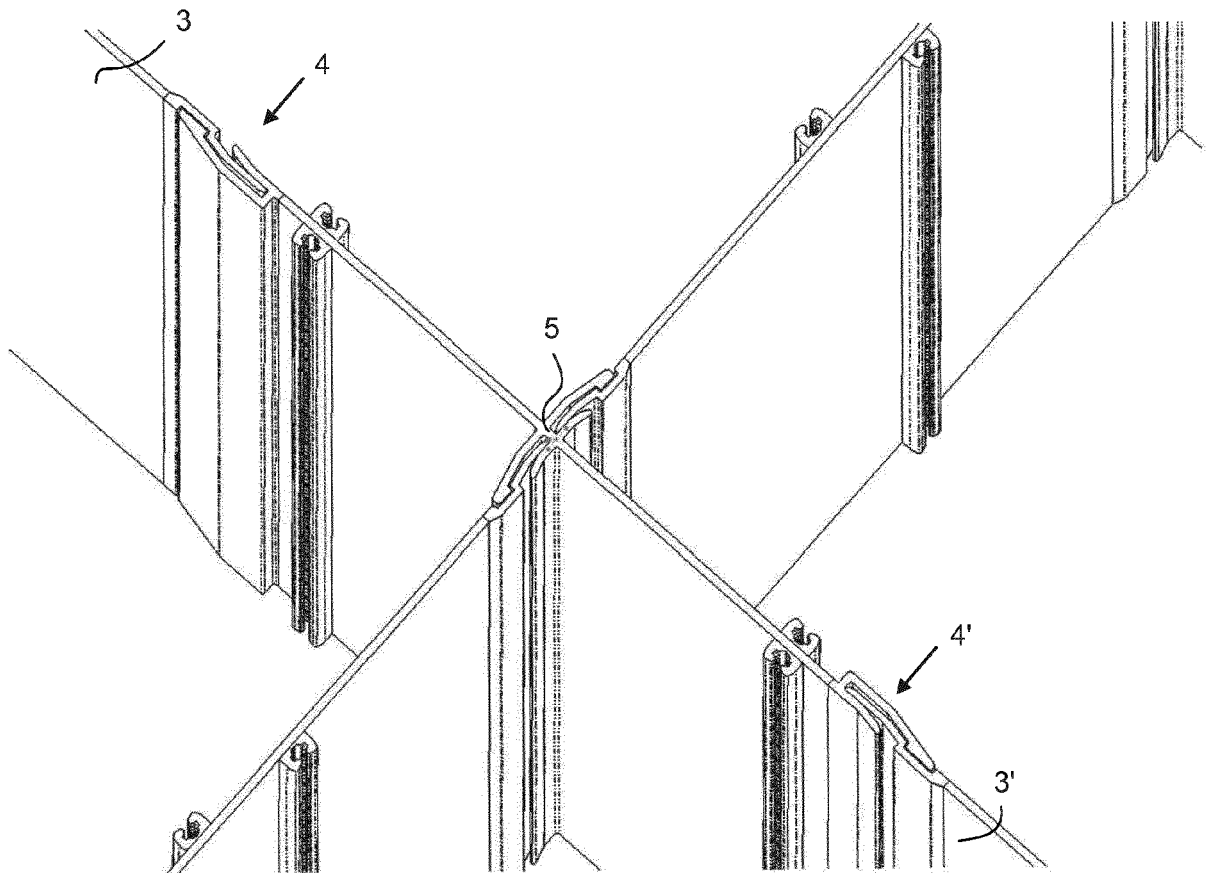


Fig. 4

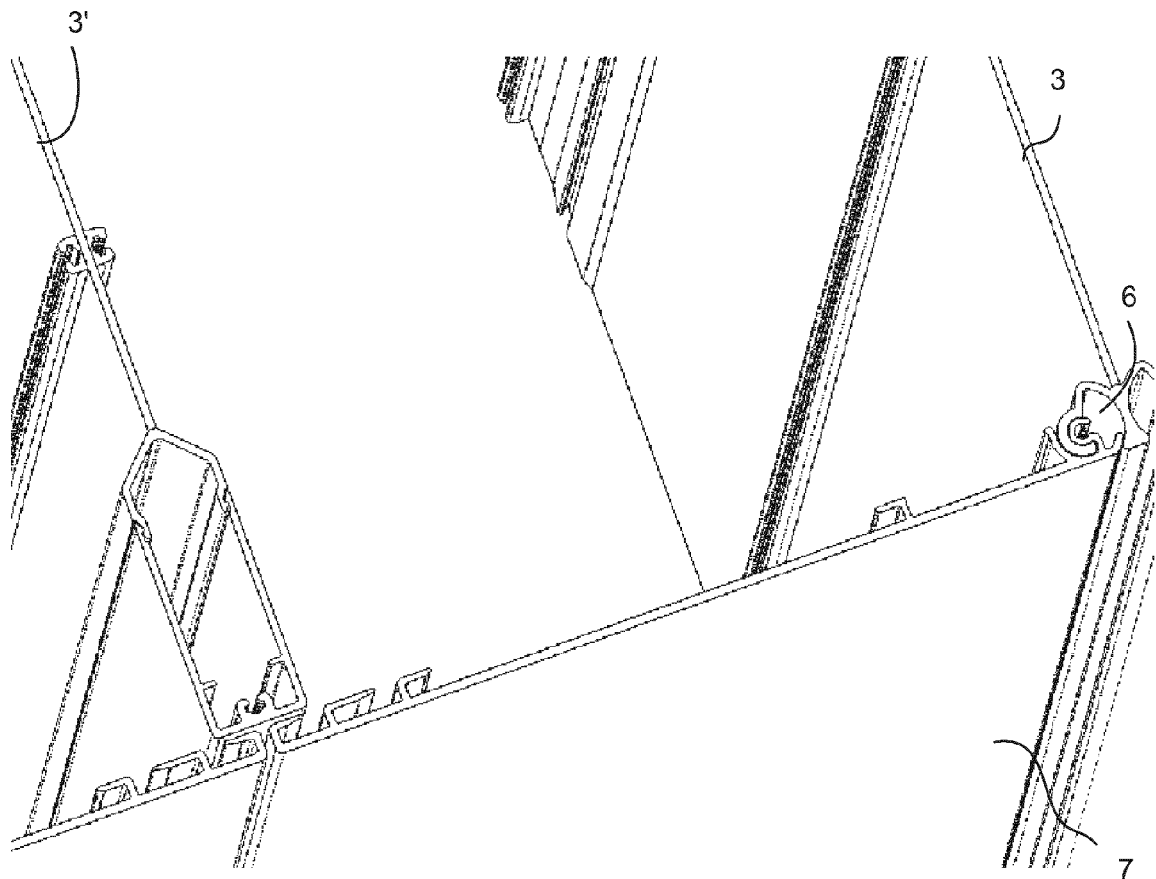


Fig. 5

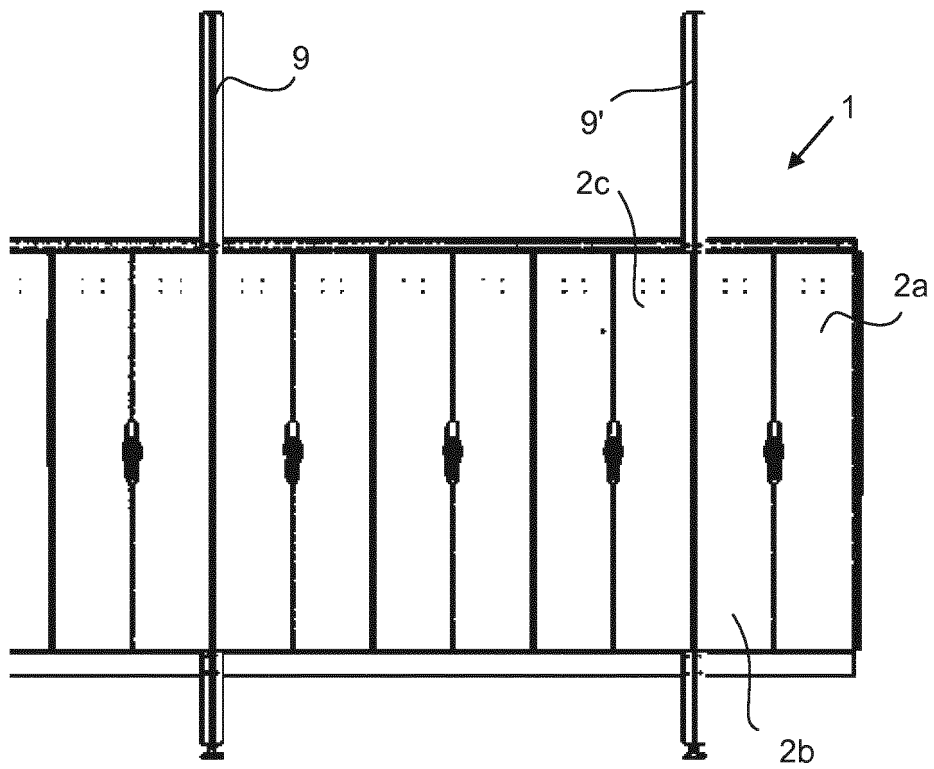


Fig. 6

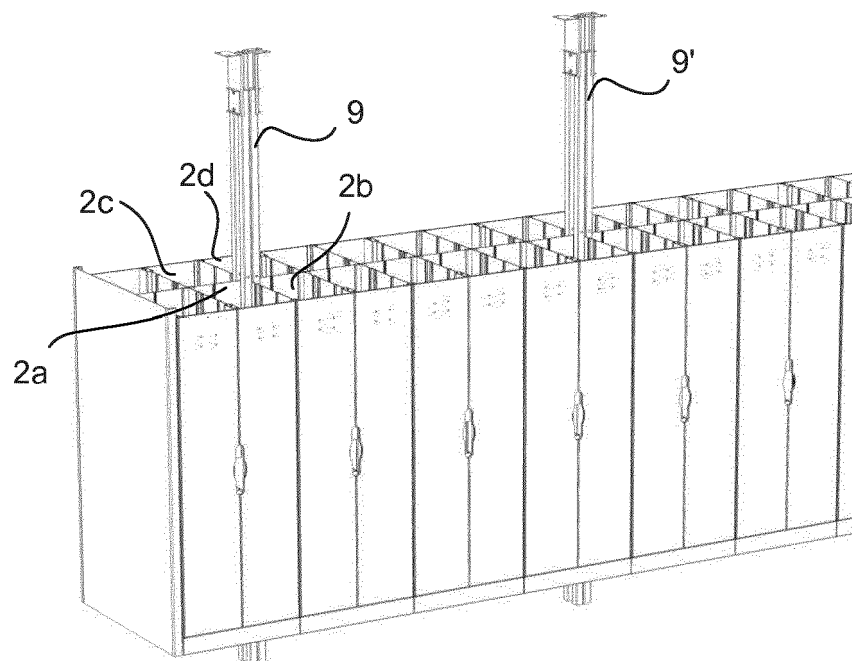


Fig. 7



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Application Number
EP 16 15 3556

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Place of search The Hague		Date of completion of the search 19 April 2016	Examiner Pössinger, Tobias
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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