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(54) **Partition wall system, method for mounting a partition wall system**

(57) Partition wall system comprising at least two posts configured to be erected uprightly; at least one profiles that are removable connectable to the posts in a horizontal way; wherein the horizontal profile, at their respective ends, is provided with a connection element that is arranged for removable connection to a corresponding connection element in the post, such that cooperation of the corresponding connection elements provides for a removable connection.

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Title: Partition wall system, method for mounting a partition wall system

The invention relates to a partition wall system.

Partition walls are known and are often used in interior constructions, such as for example in office buildings, utility buildings such as airports or hospitals, industrial buildings, public institutions, schools, laboratories, hotels etc. Such walls are designed and used as permanent constructions, and once installed form a permanent part of the interior of the building. Such walls usually comprise horizontal posts fixedly mounted to the floor and the ceiling, with a wall element fixed in between. Between adjacent wall elements vertical posts are provided.

Since these structures have a permanent character, re-organizing the space in the building requires renovation works for removing the permanent walls and installing new walls. After removal the walls can often not be re-used. This not only largely impairs the flexibility for the users of the building, but also for the architect designing the interior construction. Screens are known to temporary shield part of a space in the building, however, such screens do not have the appearance nor functionality of a wall. There is thus a need for a more flexible wall system.

Thereto, the invention provides for a partition wall system according to claim 1.

By providing a system with at least two uprightly erected posts with at least one horizontal profile removable connectable in between, a flexible and modular system can be provided that can be installed in an interior of a building. The uprightly erected posts, are, once installed, approximately vertically oriented, and can be considered as vertical posts for the conciseness of the description. The horizontal profile can be connectable to the vertical posts without using any tools or instruments, for example by using a simple click-connection or pen-hole connection. As such,

no workmen are required for erecting the partition wall system. This not only may reduce costs, but also may increase flexibility and versatility for the users.

The wall system may comprise a further profile that can be horizontally connected to the vertical posts. The at least two horizontal profile are connected one above the other, such that there is a gap between the at least two horizontal profiles. Further, a panel may be provided that is mountable to and between the at least two horizontal profiles connected one above the other. As such, the gap between the at least two horizontal profiles can be filled. By positioning a number of panels above each other, a closed wall can be obtained.

The vertical posts are advantageously erected between a floor and a ceiling in a building interior. The vertical post is at least releasable fixated to the floor, as to provide a firm connection to the floor at one end, and to allow flexibility and modularity at the other end by providing the fixation to the floor in a releasable manner. The post can thereto be provided with an adjustable foot, which foot, can be releasable fixatable to the floor. Advantageously, the fixation to the ceiling can be done in a similar fashion, as the fixation to the floor, for example by using the same or similar foot that can be releasable fixated to the ceiling. In another aspect of the wall system, the vertical post can be fixated to the floor, but does not extend up to the ceiling and, thus, has a free upper end. Advantageously, the post may have a hollow cross-section. As such, the post may be relatively easily manufactured from metal, preferably from steel, preferably manufactured by rolling. Also, the adjustable foot can be a separate element that can be inserted to a hollow end of the post, and as such can be connected to the post and providing for the fixation of the post to the floor and/or ceiling. Thus, the post and/or the foot can be manufactured separately allowing a flexibility in manufacturing, storage and installation.

Advantageously, two or more profiles can be connected between adjacent vertical posts. Between horizontal posts arranged above each other, a panel can be mounted. By providing multiple panels above each other, the space between the adjacent vertical posts can be closed and a closed wall can be obtained. However, the user and/or architect can choose to close one or more gaps between the respective horizontal posts, and as such have a large flexibility how to fill the partition wall system with panels.

Furthermore, since the panel is removable engageable to the horizontal profiles, a panel can easily be exchanged, removed or replaced by another panel. Advantageously, the panel comprises a frame with a panel body. The panel body can be of any kind of material such as metal, textile, plastic, composite, fabric, wood, etc. Alternatively and/or additionally, the panel and/or the panel body can have various shapes and/or appearances. For example, the panel and/or the panel body can be a cabinet, or a shelve, or a green panel comprising plants, etc. The panel and/or the panel body may comprise a display, a touch screen or a tv-screen etc. Many variants of the panel and/or the panel body are possible.

Advantageously, the horizontal profile is provided with at least one protruding flange, wherein the flange is arranged for engaging with the panel, in particular with a lower edge or an upper edge of the panel. As such, the panel can easily be engaged to the profiles and may be supported, at a lower end, by the protruding flange.

In an example, the horizontal profile has a hollow cross-section, advantageously a cross-shaped cross-section. By providing such a cross-shaped cross-section, there are two protruding flanges or arms, extending horizontally, and two protruding ribs, extending vertically. As such, the cross-shaped cross-section allows panels to be engaged at both sides of the horizontal profile, namely one panel can be engaged to the profile at one side thereof and another panel can be engaged to the profile at the opposite side thereof. Further, the protruding flanges may provide support to the panel,

whereas the ribs may facilitate mounting of the panel to the profile, the panel may abut against the rib. Advantageously, the profile has a cross-section that is symmetrical with respect to a first symmetry axis and/or is symmetrical with respect to a second symmetry axis. As such, manufacturing and/or installation of the profile can be more simple, as, due to the symmetry, it may be connected to the vertical posts either way. When the profile is of a hollow construction, it may be for example manufactured by steel rolling. It is understood that other materials and/or manufacturing may be possible, e.g. metallic or composite extrusion, or plate welding etc.

The vertical post and the horizontal profile may have the same cross-section, for example the same hollow cross-shaped cross-section. Thus, the arms of the cross-shaped cross-section of the profile, in use, extending horizontally, may extend for the post, in use, vertically. Providing the posts and the profiles with the same cross-section, manufacturing and storage of the posts and profiles can be more simple and more cost effective. In fact, then a longitudinally extending shape may be manufactured, advantageously by steel rolling, which then may be cut to a designated length for the post or the profile.

Advantageously, the panel is provided with engagement elements for engaging to the horizontal profile. The engagement elements may provide for cooperation of the panel with the horizontal profile. For example, the engagement element may comprise a magnetic element. The engagement element can be provided in a lower edge and/or an upper edge of the panel, and may also be embodied differently, e.g. as a protrusion engaging in a groove or a pen engaging in a slot etc. The engagement element may engage with the profile, for example with a vertical rib of the profile to which the upper and/or lower edge of the panel may abut. The profile may be provided with corresponding magnetic elements, or may be manufactured from a magnetisable material, such as a metallic material, preferably steel. Alternatively, the profile is provided with the engagement

elements for engaging with the panel when is mounted to the profile. By providing a magnetic element as engagement element, engagement of the panel with the profile is possible in a simple and reliable manner without the use of any tools. Such tool-less engagement is beneficial for assembly by the user.

The panel may comprise a frame and a panel body. The frame may comprise the upper edge and the lower edge, and may, additionally, also comprise side edges. The panel body advantageously is comprised inside of the frame and may have various variants, such as a wooden panel body, or a white board panel body, or a display panel body, or a tv-screen panel body etc. By providing the panel also with side edges, the side edges may engage to the vertical posts when mounting the panel to the horizontal profiles. The side edges may also be provided with engagement elements, advantageously magnetic engagement elements, or may be provided with different engagement elements as the upper edge and the lower edge. When, advantageously, the posts and the profiles have the same cross-sectional shape, the panel may engage to the posts in the same or similar manner as it engages to the profiles. This is beneficial for the simplicity of assembly by a single person without the use of any tools or instruments. Additionally, providing a panel comprising a frame having an upper edge, a lower edge and side edges improves the visual appearance of the panel mounted to the posts and profiles.

The profile is removable connectable to the posts. Thereto, the profile is provided with a connection element at both ends of the profile. The post as well is provided with a corresponding connection element, such that cooperation of the corresponding connection elements provides for removable connection of the profile to the post. Such a connection can be a click-connection or a pin-hole connection or a click-finger-connection, or a pin-slit connection etc. Many variants are possible. The connection element and the corresponding connection element are configured to establish a

connection in a tool-less manner, i.e. without the use of any tools or instruments, such as a screwdriver or a key, e.g. a hex key. This provides for simple, easy and/or reliable assembly, without the need for a technician.

Advantageously, the connection element of the profile comprises a plug insertable into an end of the profile. The plug may be a composite element that can be inserted into a hollow end of the profile. The corresponding connection element in the post may comprise a pen engageable to the plug. In the post, a bore, e.g. a through-bore, or, when the post is hollow aligned openings in opposite sides of the post may be provided for receiving the pen. The pen may thus be inserted through the bore, or openings, in the post and into the plug to provide for a connection between the profile and the post. The pen itself may for example comprise two parts that are connectable to each other via a screw connection. The two parts may for example have the same or similar ends, such as a knob acting as a stop to prevent the pen from slipping through the bore of the post. The two parts may thus be inserted into the bore, one from each end of the bore, and may, via the screw connection be connected to each other to form the pen inserted in the post. The knobs at each end of the pen may serve as a protrusion over which the plug can be mounted, as such the plug can be hooked to the pen and a firm, though releasable, connection can be obtained.

Advantageously, a transverse wall of the plug, that is, after insertion facing the outside, is somewhat inclined with respect to a plane perpendicular to a longitudinal axis of the profile about an inclination angle. The transverse wall may have an inclination of about 1 to about 10 degrees, preferably about 5 degrees. By providing an inclination to the transverse wall, the profile can be tightly fitted to the pen and the post when moving the opening over the end of the pen. As such, a tight fitting of the profile to the post can be obtained. Also, due to the inclination of the transverse wall, upon mounting of the horizontal profile to the post, the transverse wall may provide for some searching of the connection element with respect to the

post. So, a reliable positioning of the connection element with respect to the post can be obtained. The transverse wall further is provided with an opening that may fit around the knob or end of the plug. The opening is advantageously a slit or a V-shaped opening in which the pen, in particular an end of the pen may hook. When mounting the profile to the post, the plug of the profile engages with the pen inserted through the post. The profile, and thus the plug, will approach the pen from above in a downward movement. Upon engagement of the pen in the opening or slit of the transverse wall of the plug, and with further downward movement of the plug, the plug is moved over the pen until it abuts to the end of the opening. When the transverse wall is slightly inclined, upon further downward movement of the plug, the pen pulls the plug towards the post, and as such a rather tight, stable and reliable connection can be obtained. Also, when the opening in the transverse wall is V-shaped it has a wider receiving width at the bottom of the opening than the width at the top end of the opening, providing for a tight clamping or confinement of the plug to the transverse wall. Moreover, the wider bottom opening allows for some 'searching' of the plug to find the pen, allowing for easy assembly by a layman user. Also, the inclination of the transverse wall, in that an underside of the transverse wall extends more outwardly with respect to the plug than an upper side of the transverse wall, facilitates searching of the post. The bottom side of the transverse wall may contact the post first when mounting the profile to the post. Due to the inclination of the transverse wall, then a stable path of the plug towards the pen and post can be followed, providing for a reliable and relatively easy connection.

Also, a locking element can be provided for securing the panel to the horizontal profile The locking element can be provided on the panel and/or on the profile. The locking element may be provided as a clip that is insertable to the plug of the connection element to an end of the profile. The plug may thereto be provided with a chamber for receiving the locking

element, and the profile may be provided with a hole through which the clip can be inserted into the chamber of the plug. In an example, the clip can be provided with at least one transversely extending finger that is configured to engage with the panel. In another example, two transversely extending fingers can be provided, advantageously one finger per side of the locking clip as to engage with one panel at each side of the horizontal profile. The fingers can for example be click-fingers that engage via a click connection to the panel. As such, the panel is not only connected to the profile, via the engagement elements, but also secured to the profile, via the locking elements. This is advantageous for the user, as the wall system is intended for use in buildings where persons are working or residing, the secure connection of the panel to the profiles prevents accidental loosening of a panel and thus improves the safe and secure use of the wall system.

Advantageously, the locking clip comprises an upper part that is insertable to the profile connection element and the at least one downwardly extending finger at a lower part extends downwardly from the upper part and is provided with the transverse finger or click-finger at a lower free end thereof. This provides for a simple clip configuration that is easy insertable into the profile connection element. The locking clip may further comprise at least one leg arranged for cooperation with the profile connection element such that the clip is removable connectable to the profile connection element. The leg may extend downwardly from the upper part as well and may be provided with a groove that may click-fit with a protrusion of the profile connection element. As such, the upper part is in fact a bridge part from which the at least one leg and the at least one finger are downwardly extending. Advantageously, the downwardly extending leg is arranged more outwardly with respect to the downwardly extending finger, seen in a longitudinal direction of the profile connection element, preferably both facing the side to which a panel may be connected. The clip may also be configured symmetrically with respect to a symmetry plane coinciding with

the longitudinal axis of the profile connection element. Then, two legs may be downwardly extending from the upper part that are arranged for removable connection with the profile connection element. Also, two fingers may be downwardly extending from the upper part, which fingers are provided with the transverse finger or click-finger for securing to the panel. When providing such a symmetrical locking clip, it is possible to secure two panels engaged to the same horizontal profile, one panel at each side of the profile, at the same time in the same manner. This may provide for compact installation and mounting of the panels to the profile.

By providing a wall system in which all components are removable or releasable connectable to each other, as well as that the vertically erected posts are releasable fixatable to, at least, the floor, a versatile, flexible and modular system can be provided. The wall system can easily be extended with additional posts, profiles and panels. Also, a versatile configuration of the wall system is possible by positioning the posts in a configuration allowing an angular configuration of the wall system. Alternatively and/or additionally, the panel can be of a straight or curved design allowing many configurations of the wall system.

In another aspect of the disclosure, there is provided a method for mounting such a partition wall system. In a further aspect of the disclosure, there is provided a method for customizing such a partition wall system by removing and/or replacing a panel. In still another aspect, there is provided a method for repositioning the partition wall system, by also releasing the fixation of the posts and fixating the posts to, at least the floor, at another location.

Further advantageous embodiments are represented in the subclaims.

These and other aspects will be further elucidated with reference to the drawing comprising figures of exemplary embodiments. Corresponding

elements are designated with corresponding reference signs. In the drawing shows:

Figure 1 a schematic exploded view of a partition wall system;

Figure 2 a schematic exploded view of a connection of a horizontal profile and a vertical post;

Figure 3 a schematic cross-sectional view of a panel engaged to a horizontal profile;

Figure 4 a schematic exploded view of an adjustable foot for a vertical post;

Figure 5 a schematic perspective bottom view of a connection element for a profile;

Figure 6 a schematic perspective side view of a panel engaged to a horizontal profile with connection plug and locking element;

Figure 7 a schematic perspective bottom view of a locking element and a horizontal profile with connection plug;

Figure 8 a schematic cross-sectional view of a locking element engaged to the connection plug of a horizontal profile.

It is to be noted that the figures are given by way of exemplary examples and are not limiting to the disclosure.

Figure 1 gives a schematic exploded view representation of a partition wall system 1. The partition wall system 1 comprises at least two posts 2 that can be erected uprightly. Further, the partition wall system 1 comprises at least one profile 3, that is removable connectable to two adjacent vertical posts 2. In the example of figure 1, there are three horizontal profiles 3 between the left and middle vertical posts 2 and there are two horizontal profiles 3 between the right and middle vertical posts 2.More or less horizontal profiles can be provided. The horizontal profiles 3 are connected to the posts 2 one above the other, such that there is a gap 4 between them. Between an upper and a lower profile 3, a panel 5 can be

provided. The panel 5 may engage the lower profile 3 as well as the upper profile 3 and thus may fill the gap 4 between the respective profiles 3.

The posts 2, or so-called upright posts or vertical posts, can be erected between a floor 6 and a ceiling 7, or can be fixated to a floor 6 only. For fixating the post 2 to the floor 6 and/or the ceiling 7, a fixation element 8 is provided. The fixation element 8 can be an adjustable foot 8, comprising a post insert 9 and a foot base 10. Figure 4 shows the fixation element 8 in exploded view. The post insert 9 has a cross-sectional shape corresponding to the cross-section of the post 2, at least to the cross-section of an upper end or a lower end of the post 2. In the post insert 9, a bore 11 is provided in which the foot base 10, in particular a threaded body 12 can be screwed. The bore 11 can be provided with a corresponding thread, or can be without thread. The bore 11 can be a through bore, as shown in figure 4, or can be a bore having a closed end. By adjusting the foot base 10 with respect to the post insert 9, the height of the post 2 can be adjusted. The foot base 10 can be a plastic or metallic piece, the post insert 9 is advantageously of a plastic material, but may have a metallic threaded insert in the bore 11 for receiving the threaded body of the foot base 10. The foot base 10 further is provided with two slit openings 13. Screws may be inserted through these openings for fixating the foot base 10 to the floor 6 or ceiling 7. Alternatively, such screws may be omitted. Alternative embodiments of an adjustable foot are possible, e.g. a foot as insert in the vertical post can be adjustable by means of a pin-in-hole connection, or via a rack-and-pinion system or via a finger cooperating with a saw-tooth, etc.

The profiles 3 can be connected to the posts 2 by means of a connecting element 14, the post 2 is advantageously provided with a corresponding connection element 15. Various examples of the connection elements 14, 15 are possible. For example, the connection element 14 may be provided as a protrusion that fits in a cut-out connection element 15 of the post 2. Alternatively, the connection element 14 of the profile 3 may be a

hook that can be hooked over or in a corresponding protrusion or opening of the post 2. Alternatively, the connection element 14 can be a pin with a head, a mushroom shaped element, that can be inserted into a key-hole shaped opening of the post 2, as shown in figure 2. The opposite configurations may also be possible, for example, in that the post may be provided with a pin as connection element 15 that may fit into an opening of the profile 3. In the example shown in figure 1, the connection element 14 is schematically represented as well as the corresponding connection element 15 is also schematically represented. It may be evident that multiple connection elements are possible that allow for establishing a removable connection between the profile 3 and the post 2.

To align the connection elements 15 of the adjacent posts 2, the height of the posts 2 can be adjusted with the adjustable foot 8.

The profile 3 is advantageously of a hollow cross-section and may be made from metal, e.g. steel, it can thus be a steel rolled profile. The profile 3, as shown in the cross-section of figure 3, has in this example a cross-shaped cross-section. The cross-shaped cross-section comprises two protruding flanges 16, 17 and two protruding ribs 18, 19. Alternative shapes, such as a T-shape or an L-shape are also possible. Advantageously, the cross-section of the profile 3 is symmetrical with respect to a first symmetry axis S1, in use a vertical axis, such that the protruding flanges 16, 17 are symmetrical. In a further embodiment, the profile 3 can be symmetrical with respect to a second symmetry axis S2, in use, a horizontal axis. As such, the profile 3 can be easy to handle as then, the orientation as to how connect the profile 3 to the post 2 can be relatively free. More advantageously, the post 2 is of the same shape and/or has the same cross-section, preferably the same hollow cross-section as the profile 3. This may make manufacturing of the posts 2 and profiles 3 more simple, and more cost effective, as the same shape can be used for the profile as well as for the post. For example, in figure 2 is schematically illustrated that the profile 3

and the post 2 have the same shape. When the post 2 and the profile 3 have the same shape, the above description regarding the cross-section of the profile 3 is equally applicable to the cross-section of the post 2.

The protruding flange 16, 17 may provide for a support for the panel 5 that can be engaged to the profile 3. More particular, the rib 18, 19 may provide for engagement of the panel 5 to the profile 3. The panel 5, in particular the upper edge 20 and/or lower edge 21 can be provided with engagement elements 22, 23. The engagement elements 22, 23 of the upper and lower edge 20, 21 can be the same, but may be different as well. For example, the engagement element 23 of the lower edge 21 can be a protrusion fitting in a groove of the flange 16, while the engagement element 22 of the upper edge 20 can be a pin or click-finger fitting in an opening of the rib 19. In another example, both engagement elements 22, 23 can be the same, for example click-fingers engaging in openings of the ribs 19, 18. Here, the engagement elements 22, 23 are embodied the same, namely as magnetic elements connected to the upper edge 20 and the lower edge 21 of the panel respectively. However, the magnetic elements can be connected to the ribs 18, 19 as well. The magnetic elements 22, 23 can be connected to the outside of the panel 5 and/or profile 3, or can be mounted inside of the panel 5 and/or profile 3.

Advantageously, the profile 3 is from a magnetisable material, such as steel. Alternatively and/or additionally, the upper edge 20 and/or the lower edge 21 of the panel 5 can be of a magnetisable material as well. In an embodiment, the panel 5 comprises a frame 51 and a panel body 52. The upper edge 20 and the lower edge 21 may provide the frame 51. The frame 51 may further comprise side edges as well. The panel body 51 may be integral to the frame 51, as shown in the embodiment of figure 3, but may be separate from the frame and connectable to the frame. For example, the panel body 52 can be made from textile, plants, fabric, composite or plastic

material, wood etc., and/or may comprise shelves, a cabinet or a display etc. Many variants of the panel or panel body are possible.

By providing magnetic elements 22, 23 as engagement elements, the engagement of the panel 5 to the profiles 3 can be relatively simple. The panel 5 is first supported on the flange 16 of the lower profile 3, preferably in the corner between the flange 16 and the rib 18. Then, the panel 5 can be rotated towards the upper profile 3 until the upper edge 20 of the panel 5 engages the rib 19. Due to the magnetic force of the magnetic elements 22, 23 a firm connection can then be established. At the opposite side of the profiles 3, another panel 5 may be engaged to the profiles 3 as well, as schematically indicated in figure 3.

The panel 5 may further be provided with side edges in a similar way as the upper edge 20 and the bottom edge 21. The side edges may then engage with arms of the posts 2 in a similar way as the upper and lower edges engage with the arms 18, 19 of the profile 3. In fact, when the profile and post have the same cross-section and the side edges of the panel are similar to the upper and lower edges, the section of the system shown in figure 3, made in a vertical plane, parallel to a post, is equally applicable to a possible section of the system in a horizontal plane through the panel, parallel to a horizontal profile.

The upper and lower edges of the panel may form the frame of the panel. If present, the frame may further comprise the side edges as well.

Figure 5 shows a bottom view of an alternative connection element 14 for connection of the profile 3 to the post 2. Here, the connection element 14 comprises a plug 24 and the corresponding connection element 15 may comprise a pen 25. The plug 24 is insertable in a hollow end of the profile 3, and has a shape corresponding to the shape of the cross-section of the profile 3. Here, the shape of the plug 24 is approximately cross-shaped. The corresponding connection element 15 of the post 2, further comprises a through bore through which the pen 25 can extend. In case of a hollow

shaped post, the through bore may be embodied as aligned openings in opposite sides of the post.

The pen 25 comprises here two pen parts 25a, 25b that are connectable to each other via screw thread. One pen part 25a is provided with a threaded rod 26 while the other pen part 25b is provided with a threaded bore in which the threaded rod can be screwn. Both pen parts 25a, 25b have the same or similar end shape, namely comprising a knob 27, a rejuvenation 28 and a rib 29 connected to a pen body 30. The rejuvenation 28 may have a smaller diameter than the pen diameter and may form a space between the knob 27 and the rib 29 Advantageously, the pen part 25a, 25b is integrally manufactured as a single piece part, e.g. from metal or composite.

The plug 24 can be provided with a transverse wall 31 in which an opening 32 is provided. Advantageously, the transverse wall 31 fits in the space between the knob 27 and the rib 29 provided by the rejuvenation 28. The opening 32 is preferably V-shaped such that finding the pen 25 can relatively easy, and upon moving the plug 24 downwardly over the pen 25, a tight connection can be obtained.

The posts 2 are in a beneficial manner provided with pre-bored bores 15 through with pen parts 25a, 25b can be inserted and can be connected to each other to form pen 25. As such, the pens 25 can be connected to the posts 2 at positions corresponding to a user's preference. When the pens 25 are inserted to the posts 2, the profiles 3 can be mounted over the pens 25. In particular, the plugs 24 inserted in ends of the profiles 3 can be mounted over the pens 25. More in particular, the transverse wall 31 of the plug 24 can be mounted in the space formed by the rejuvenation 28.

The opening 32 in the transverse wall 31 may be key-hole shaped, as to tight-fitting the pen, in particular the rejuvenation 28, when in engaged position. Furthermore, the transverse wall 31 may have a slight

inclination, an angle alpha between about 1 degree to about 10 degrees, preferably about 5 degrees, with respect to a plane perpendicular to a longitudinal direction L of the plug 24, as can be seen in figure 6.

Also shown in figure 6 is the securing between the panel 5 and the profile 3. This securing is obtained via a locking element 33, comprising click-fingers 34 for securing the connection between the panel 5 and the profile 3. The mere connection between the panel 5 and the profile 3 has already been established by means of the engagement elements 23, e.g. magnetic elements 23. For the purpose of a safe, reliable and secured connection, the locking element 33 is provided. The click-finger 34 is engageable in an opening 35 of the panel 5. The panel 5 is here provided with an upper edge 20 and a panel body 51 that has a depth D that is larger than the depth d of the upper edge 20, mutatis mutandis for the lower edge 21 as well. As such, a shoulder 52 is obtained, in this shoulder 52 openings 35 can be provided in which the click-finger 34 of the locking element 33 can click. By providing the panel body 51 with a depth D larger than the depth d of the upper edge 20, or lower edge 21, when engaged a recess 36 is obtained between the profile 3 and the panel body 51. In this recess, typically a finger of a user may fit which finger of the user can hold the panel 5 for engaging it to the profile 3. Also, when disengaging the panel 5, the user can push the click-finger 34 inward and as such, may undo the securing of the click-finger 34 to the opening 35 allowing the panel 5 to be removed from the profile 3.

Figure 7 shows the locking element 33 in a perspective view. The locking element 33 is provided as a locking clip insertable into the plug 24. The plug 24, as well as the profile 3 is thereto provided with an opening 37 through which the locking clip 33 can be inserted to be tightly clipped to the plug 24. The plug 24 is provided with protrusions 38 that fit in recesses 39 of the clip 33. The recesses 39 are provided on two outwardly and downwardly extending legs 41. The locking clip 33 comprises a bridge 42 from which the legs 41 extend downwardly. When moving the legs 41

towards each other, the recesses 39 may become free from the protrusions 38 and the clip 33 can be removed from the plug 24. Advantageously, the legs 41 have at their lower ends a transverse arm 43. The user may easily engage with the transverse arms 43 to move the legs 41 towards each other for disengaging the locking element 33 from the plug 24 and the profile 3.

More inwardly with respect to the outer legs 41, two inner legs 44 extend downwardly from the bridge 42 of the locking clip 33. The bridge 42 is in fact the upper part from which the legs 44 extend. The legs 44 end in the transversely extending click-fingers 34. Due to the L-shape of the configuration of the leg 44 with the click-finger 34, flexibility is provided to the locking element 33, allowing downward movement of the click-finger 34, and thus, disengagement of the click-finger 34 from the opening 35 in the panel 5. The locking element 33 not only provides for a secure and reliable connection of the panel 5 to the profile 3, but it is also designed as to be removable itself. This allows a large flexibility and versatility to the user of the wall system. In the example of the locking clip 33 shown in figure 7 and figure 8, the locking clip 33 is symmetrically with respect to a symmetry plane S coinciding with a longitudinal axis of the plug 24 of the profile connection element 14.

The locking clip 33 is in this example shown with two legs 44 and two fingers 41 downwardly extending from the bridge 42, allowing two panels 5, one panel 5 at each side of the profile 3, to be secured to the horizontal profile 3 at the same time. However, in another example, the locking clip 33 may comprise a single leg 44 and a single finger 41 for securing a panel 5 at one side of the horizontal profile 3 only.

As can be seen in the various examples, the partition wall system and all its components are configured as to be removable, disengageable, re-usable, re-positionable etc. All connections provided between the components of the partition wall system are easy removable or loosenable without the need for any tools or instruments, by simply disconnecting or

disengaging of connection elements or disengagement elements. Also, the locking element is easy insertable to the profile with a single hand and without tools. Thus the system is relatively simple and straightforward in use and can be easy modified, extended, adapted, customized etc. to the preferences of the user. For example, in one situation a straight wall is required in a certain colour, whereas for the next occasion the colour is to be different. It is then easy to remove the wall panels and to replace with panels in a different colour and/or colour pattern. In another example, in one occasion a floor to ceiling wall is required, whereas in the next occasion, a shoulder high partition is need. The upper panels can then simply be removed from the wall system. Lower panels may be replaced by cabinet- or shelve-shaped panels. In still another example, a wall system having posts not extending up to the ceiling, but ending e.g. a shoulder height can be sufficient while the wall system is configured in an L-configuration. At both sides of the posts and profiles panels can be mounted, giving versatility and flexibility at both sides of the wall system. Moreover, the elements of the partition wall system may be connected to each other without using any tools or instruments, namely tool-less. Connecting a profile to a post, or connecting a panel to a profile can be relatively simple and straightforward, A single person, in particular a single layman person, can in fact assembly the partition wall system on his own, without tools or instruments and without the need for assistance from other persons. Many variants and configurations are possible.

In another aspect, a partition wall system is provided comprising at least two vertical posts that can be erected uprightly and on each post a support element can be provided. A panel can be mounted to adjacent vertical posts supporting on the respective support elements. The support elements can be adjusted with respect to the posts, e.g. via a plug-in-hole connection, to ensure that the support elements in adjacent posts are at approximately the same height to receive the panel in an approximately

horizontal way. Here, the panel may be provided with side edges comprising an engagement element for engagement to the corresponding vertical post. The engagement elements are, similar to the above described, preferably magnetic elements. The vertical post preferably has a hollow cross-section, more preferably a hollow cross-shaped cross-section. As such, a side edge of the panel can engage to an arm of the cross-shaped post. The support element may, relatively simple, be a pen mounted through a through bore of the post, or, in case of a hollow post, through aligned openings in opposite sides of the post. Other variants of a support element, e.g. a click-finger or a hook may be possible as well. In a further example, the support element may be a horizontal profile as described above.

For the purpose of clarity and a concise description, features are described herein as part of the same or separate embodiments, however, it will be appreciated that the scope of the claims and disclosure may include embodiments having combinations of all or some of the features described. It may be understood that the embodiments shown have the same or similar components, apart from where they are described as being different.

In the claims, any reference signs placed between parentheses shall not be construed as limiting the claim. The word 'comprising' does not exclude the presence of other features or steps than those listed in a claim. Furthermore, the words 'a' and 'an' shall not be construed as limited to 'only one', but instead are used to mean 'at least one', and do not exclude a plurality. The mere fact that certain measures are recited in mutually different claims does not indicate that a combination of these measures cannot be used to an advantage. Many variants will be apparent to the person skilled in the art. All variants are understood to be comprised within the scope defined in the following claims.

Conclusies

1. Scheidingswand systeem omvattende
- ten minste twee palen ingericht om rechtop te zetten;
- ten minste één profiel dat verwijderbaar verbindbaar is met de palen op een horizontale manier;
- waarbij het horizontale profiel, aan hun respectievelijke eindes, voorzien is van een verbindingselement dat ingericht is voor verwijderbare verbinding met een overeenkomstig verbindingselement in de paal, zodanig dat samenwerking tussen de overeenstemmende verbindingselementen voorziet in een verwijderbare verbinding.

2. Scheidingswand systeem volgens conclusie 1, verder omvattende een volgend horizontaal profiel verwijderbaar verbindbaar met de palen op een horizontale manier, waarbij de minstens twee horizontale profielen boven elkaar verbindbaar zijn met de palen.

3. Scheidingswand systeem volgens conclusie 2, verder omvattende een paneel dat monteerbaar is aan en tussen de ten minste twee horizontale profielen.

4. Scheidingswand systeem volgens conclusie 3, waarbij de horizontale profielen voorzien zijn met ten minste één uitstekende flens welke ingericht is voor koppeling met een onderste rand respectievelijk bovenste rand van het paneel.

5. Scheidingswand systeem volgens één van de voorgaande conclusies, waarbij het horizontale profiel een holle kruisvormige doorsnede omvat.

6. Scheidingswand systeem volgens één van de voorgaande conclusies, waarbij het horizontale profiel een doorsnede omvat die symmetrisch is ten opzichte van een eerste symmetrieas en/of ten opzichte van een tweede symmetrieas loodrecht ten opzichte van de eerste symmetrieas.

7. Scheidingswand systeem volgens één van voorgaande conclusies, waarbij het paneel voorzien is van aangrijpingselementen voor het koppelen met het horizontale profiel.

8. Scheidingswand systeem volgens conclusie 7, waarbij het koppelingselement een magnetisch element is.

9. Scheidingswand systeem volgens één van conclusies 7-8, waarbij het paneel voorzien is van een bovenste rand en een onderste rand aan welke het verbindingselement is gemonteerd.

10. Scheidingswand systeem volgens één van conclusies 3-9, verder omvatten een volgend paneel gemonteerd aan het profiel aan een andere zijde van het profiel.

11. Scheidingswand systeem volgens één van voorgaande conclusies; waarbij het paneel een frame en een paneellichaam voorzien in het frame, omvat, bij voorkeur waarbij het frame een bovenste rand en een onderste rand van het paneel omvat.

12. Scheidingswand systeem volgens één van de voorgaande conclusies, waarbij het horizontale profiel magnetiseerbaar is, bij voorkeur vervaardigd van een metallisch materiaal.

13. Scheidingswand systeem volgens één van de voorgaande conclusies, waarbij de palen en/of de profielen vervaardigd zijn uit staal, bij voorkeur door middel van staalwalsen.

14. Scheidingswand systeem volgens één van de voorgaande conclusies, waarbij het overeenstemmende verbindingselement van de paal geconfigureerd is als een boring doorheen de paal, of, in het geval van een holle paal, uitgelijnde openingen aan weerszijden van de paal.

15. Scheidingswand systeem volgens één van de voorgaande conclusies, waarbij het verbindingselement van het horizontale profiel een plug opneembaar in een einde van het profiel omvat.

16. Scheidingswand systeem volgens conclusie 14 of 15, waarbij het overeenstemmende verbindingselement van de paal verder een pin omvat koppelbaar met het verbindingselement van het profiel, in het bijzonder met de plug.

17. Scheidingswand systeem volgens conclusie 15 en 16, waarbij de pin koppelbaar is met een dwarswand van de plug.

18. Scheidingswand systeem volgens conclusie 17, waarbij de dwarswand van de plug helt met een hellingshoek ten opzichte van een vlak loodrecht op de longitudinale as van de plug.

19. Scheidingswand systeem volgens conclusie 18, waarbij de hellingshoek zich bevindt tussen ongeveer 1 graad en ongeveer 10 graden.

20. Scheidingswand systeem volgens één van conclusies 17-19, waarbij de pin koppelbaar is in een uitsnijding van de dwarswand, bij voorkeur een V-vormige uitsnijding.

21. Scheidingswand systeem volgens één van de voorgaande conclusies, verder omvatten een vergrendelelement voor het borgen van het paneel aan het horizontale profiel.

22. Scheidingswand systeem volgens conclusie 21, waarbij het vergrendelelement is voorzien als een vergrendelclip omvattende een bovenste deel dat opneembaar is in het profiel verbindingselement en ten minste één transversaal uitstekende vinger aan een onderste deel daarvan, waarbij de transversaal uitstekende vinger ingericht is om te koppelen met het paneel voor het borgen van het paneel aan het profiel.

23. Scheidingswand systeem volgens conclusie 22, waarbij de vergrendelclip verder ten minste een been omvat, ingericht voor samenwerking met het profiel verbindingselement, zodanig dat de clip verwijderbaar verbindbaar is met het profiel verbindingselement.

24. Scheidingswand systeem volgens één van de voorgaande conclusies, waarbij de paal losmaakbaar te fixeren is aan een vloer en/of een plafond.

25. Scheidingswand systeem volgens conclusie 24, waarbij de paal voorzien is van een instelbare voet, welke voet, bij voorkeur losmaakbaar te fixeren is aan de vloer en/of het plafond.

26. Scheidingswand systeem volgens één van de voorgaande conclusies, waarbij de paal een holle doorsnede heeft.

27. Scheidingswand systeem volgens één van de voorgaande conclusies, waarbij de palen en de profielen dezelfde doorsnede hebben, bij voorkeur een holle doorsnede, meer bij voorkeur een holle kruisvormige doorsnede.

28. Werkwijze voor het monteren van een scheidingswand systeem volgens één van de voorgaande conclusies, omvattende :

- het opzetten van ten minste twee verticale palen;
- het horizontaal verbinden van ten minste één profiel met de verticale palen.

29. Werkwijze volgens conclusie 28, verder omvattende

- het horizontaal verbinden van een volgend profiel met de verticale palen, op een afstand van het reeds gemonteerde horizontale profiel;
- het koppelen van een paneel met de horizontale profielen.

30. Werkwijze volgens conclusie 29, waarbij het koppelen van het paneel met de horizontale profielen ook voorziet in het borgen van het paneel met de horizontale profielen met behulp van een vergrendelelement.

31. Werkwijze voor het customizen van een scheidingswand systeem volgens één van conclusies 1-27, omvattende: het monteren van een scheidingswand systeem volgens conclusies 28-30, het verwijderen van een paneel van het scheidingswand systeem en het vervangen van het verwijderde paneel door een ander paneel.

32. Werkwijze volgens conclusie 31, verder omvattende het voorzien van een veelvoud aan horizontale profielen, en het koppelen van panelen met vooraf bepaalde profielen van de horizontale profielen.

33. Werkwijze voor het herpositioneren van het scheidingswand systeem volgens één van conclusies 1-27, omvattende het monteren van het scheidingswand systeem volgens één van conclusies 28-30, het demonteren van het scheidingswandsysteem door het verwijderen van de panelen, het loskoppelen van de horizontale profielen van de palen en het losmaken van de palen uit hun huidige positie, het opzetten van de palen op een andere positie en het verbinden van de horizontale profielen en ten minste één paneel.

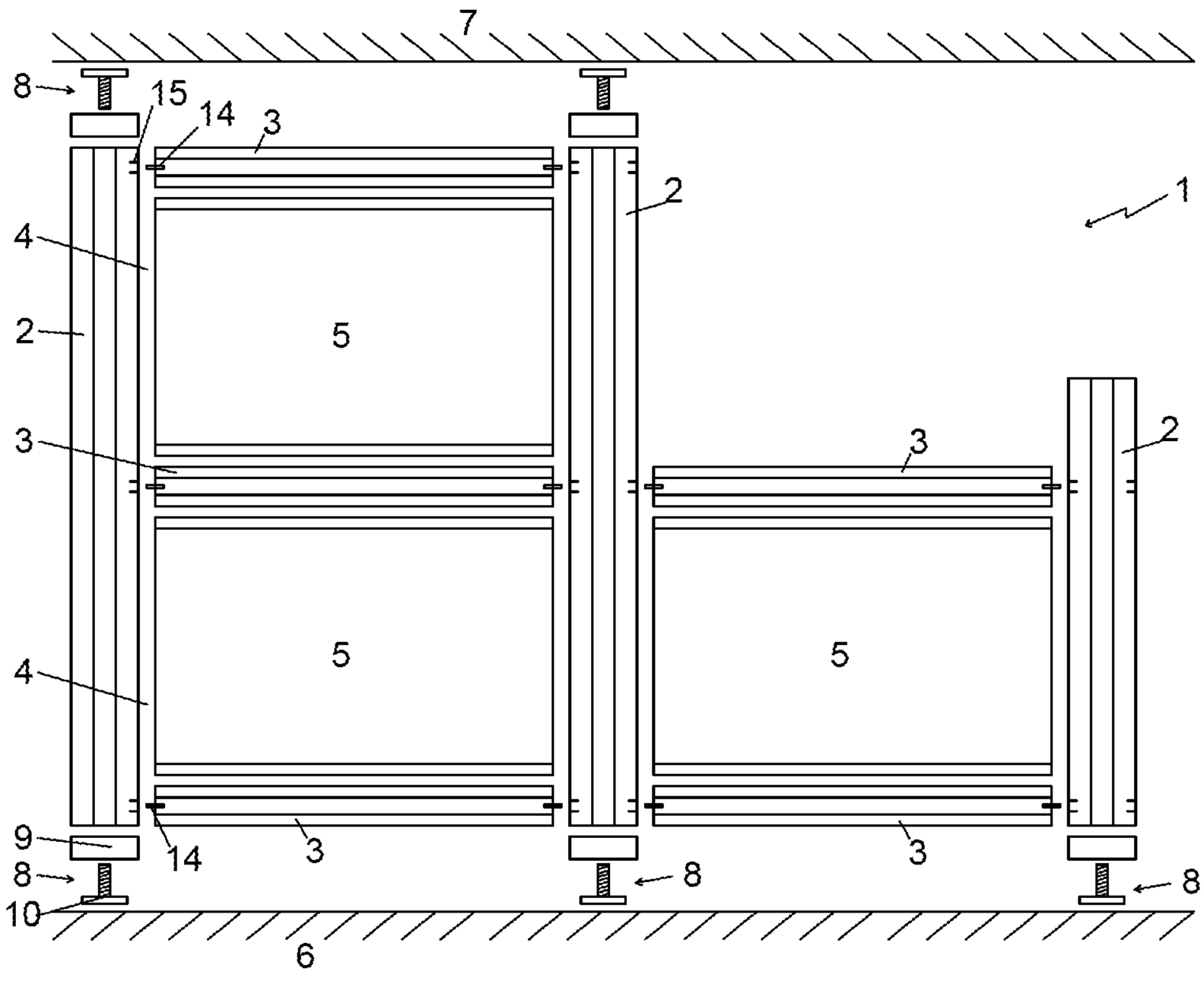

Fig. 1

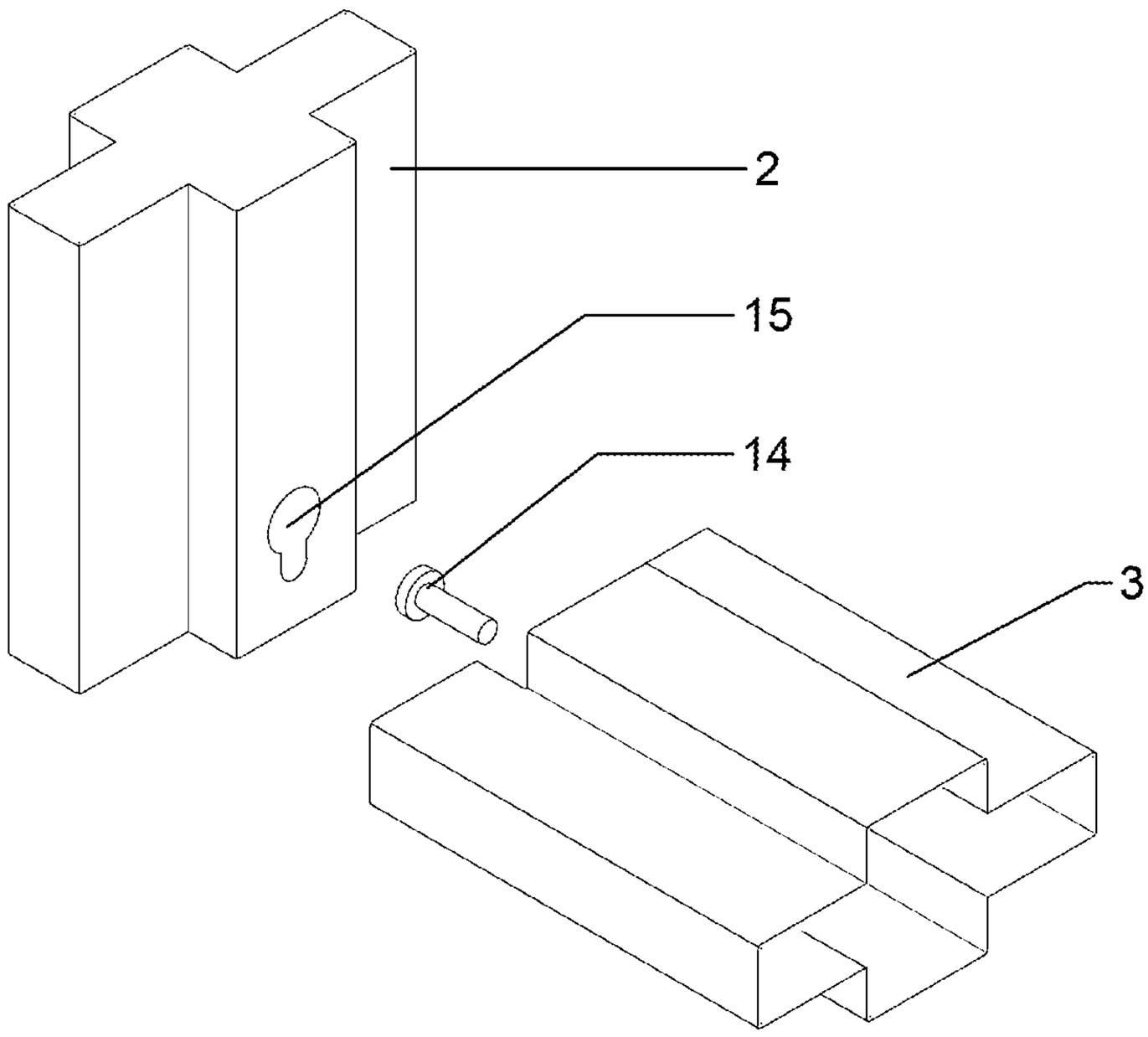

Fig. 2

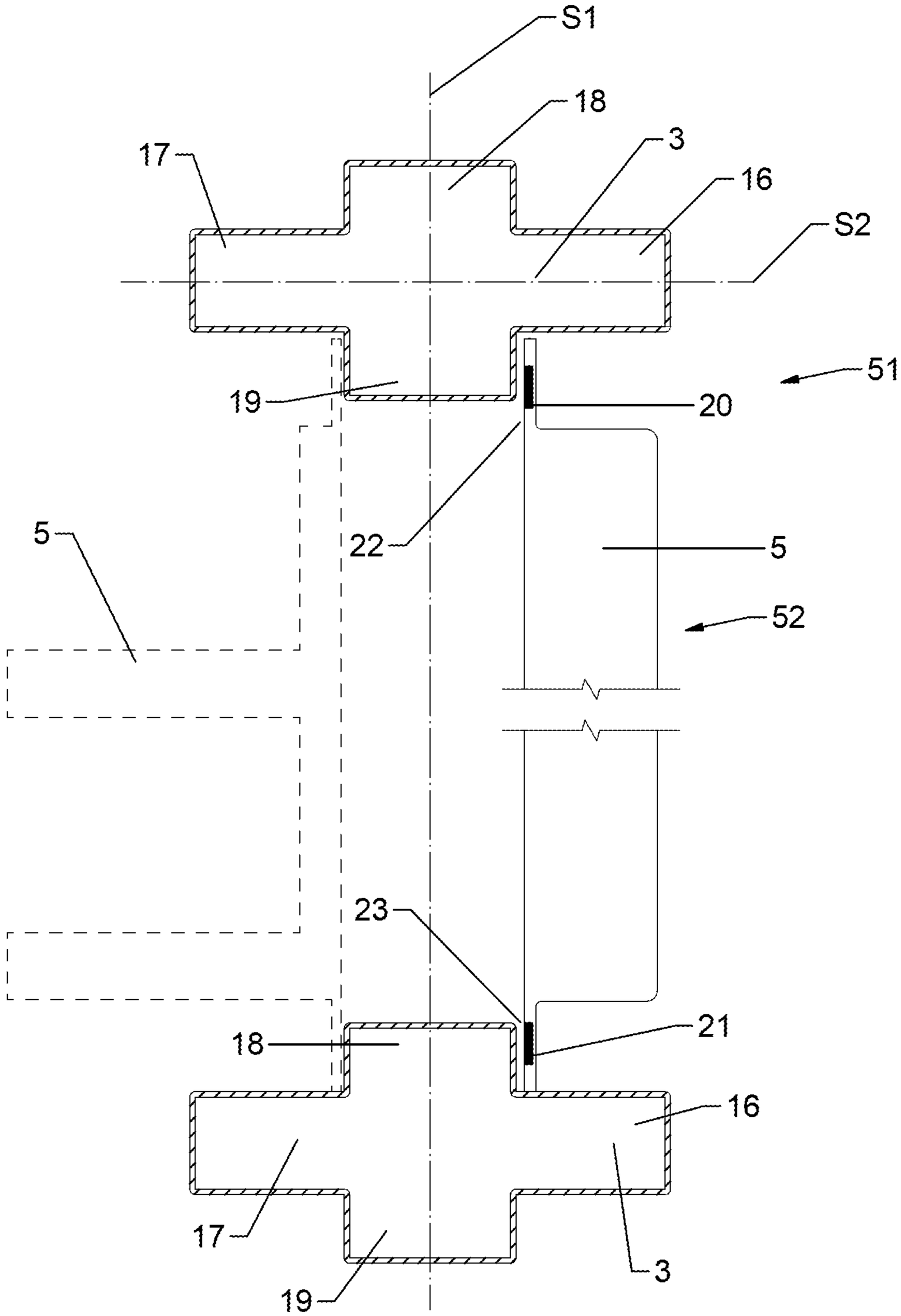

Fig. 3

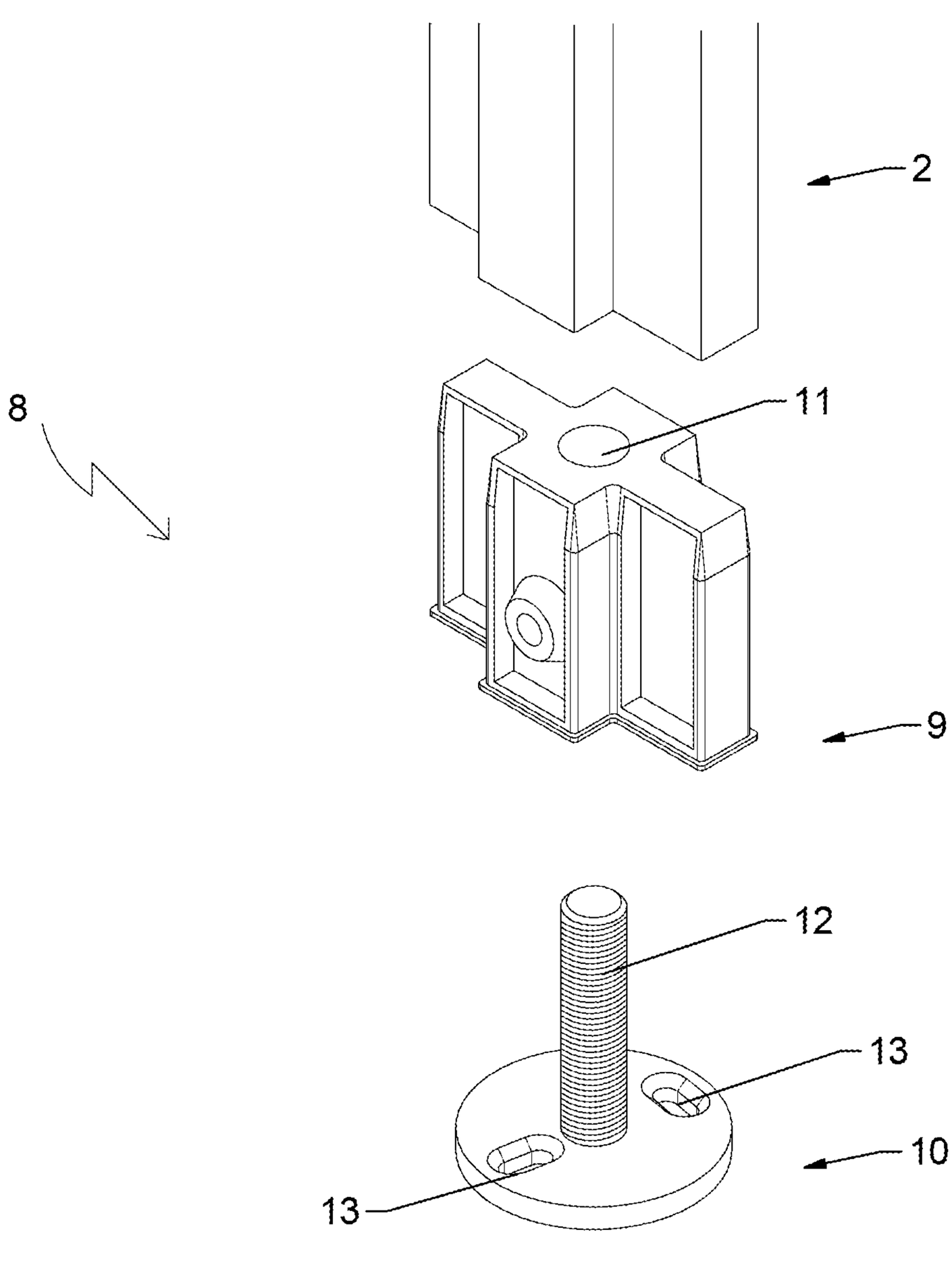

Fig. 4

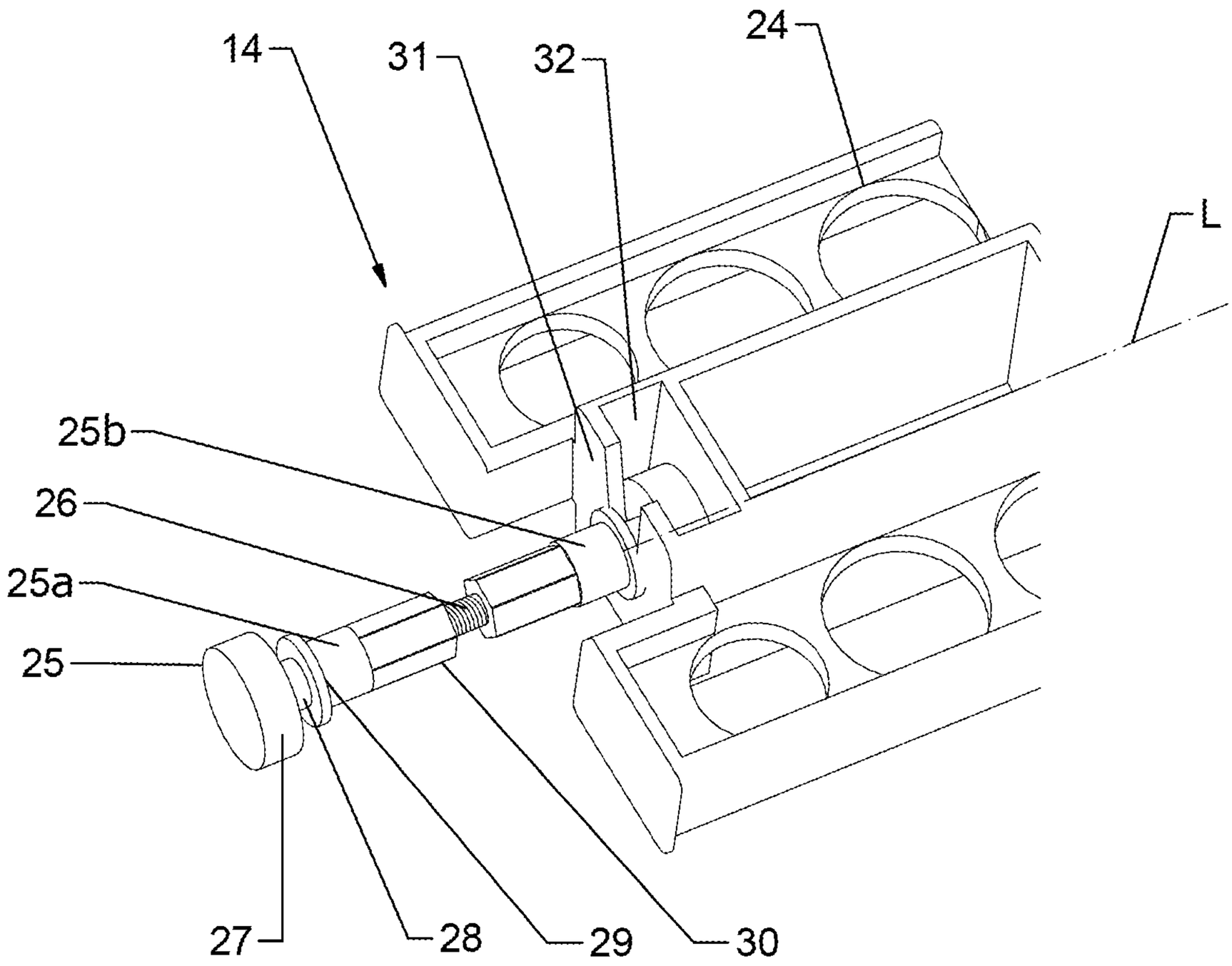

Fig. 5

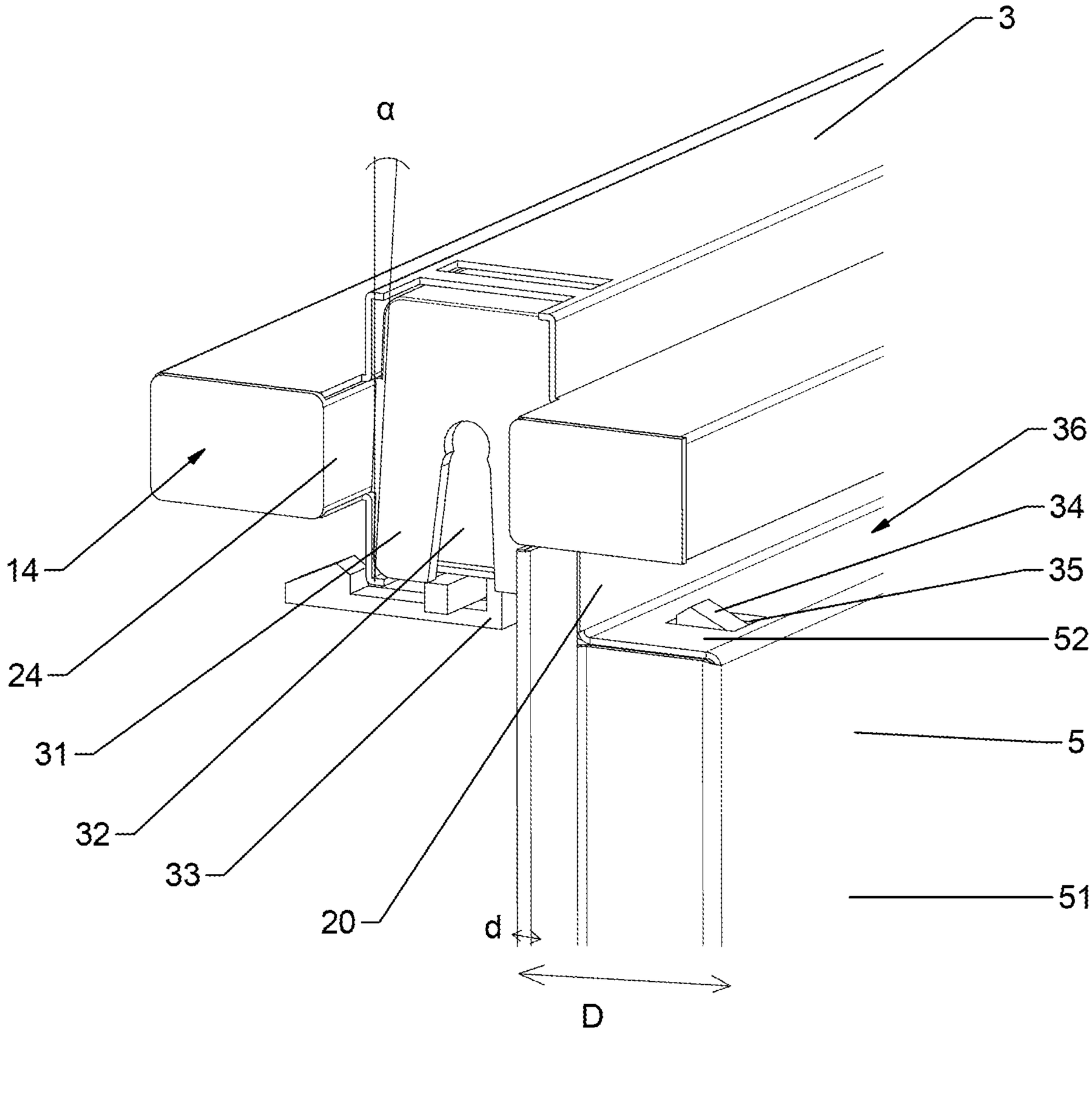

Fig. 6

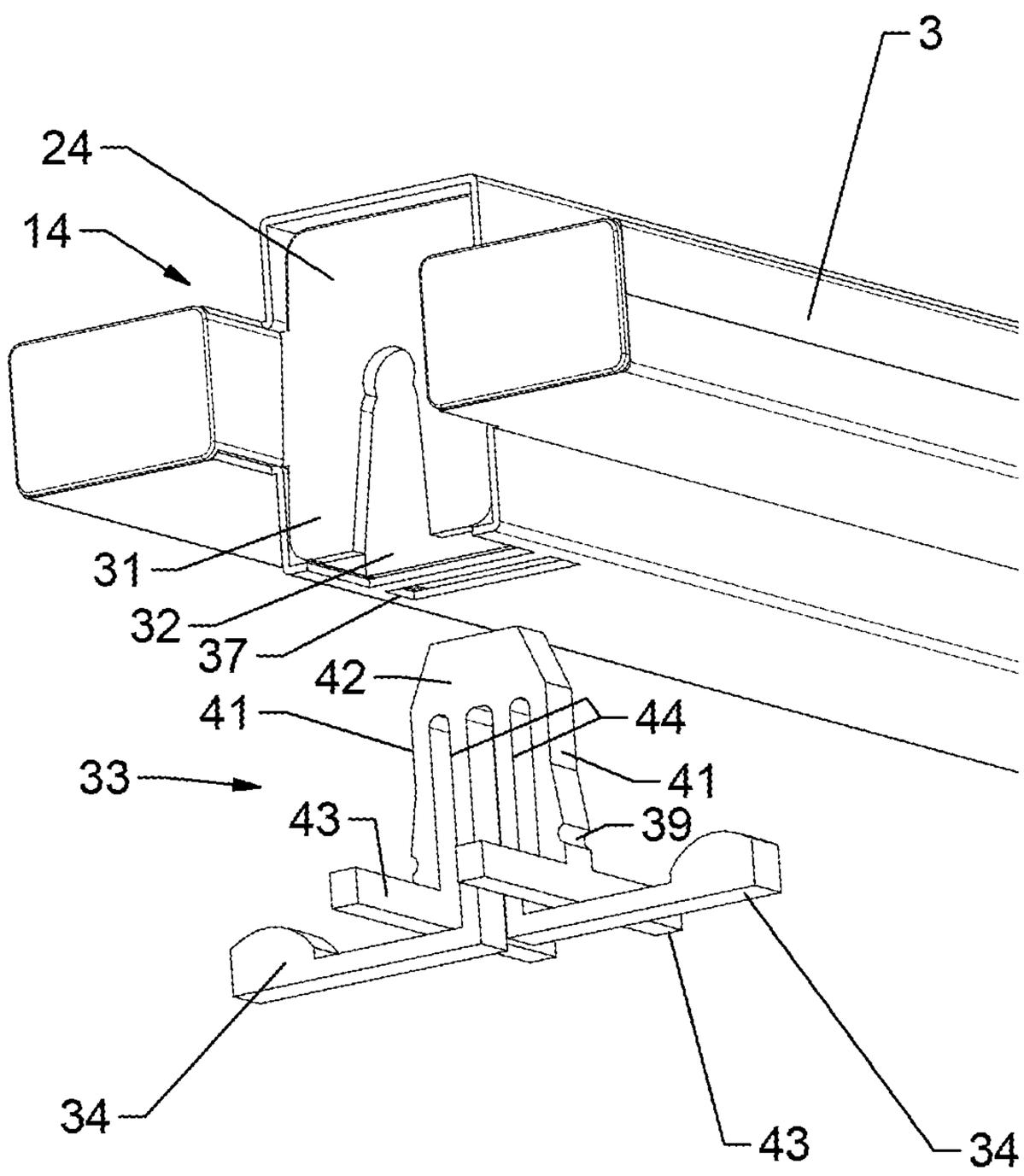

Fig. 7

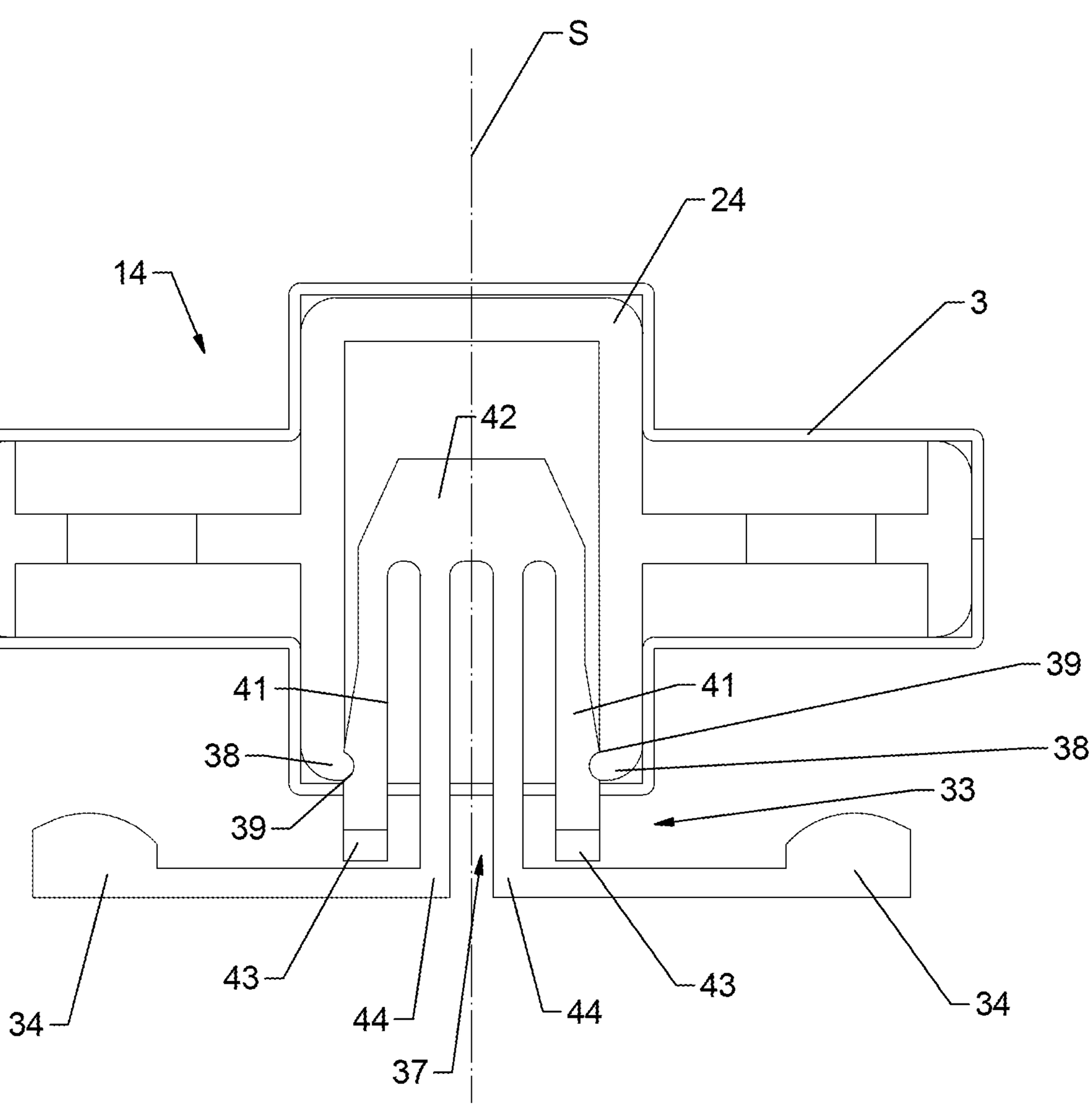

Fig. 8

SAMENWERKINGSVERDRAG (PCT)

RAPPORT BETREFFENDE NIEUWHEIDSONDERZOEK VAN INTERNATIONAAL TYPE

IDENTIFICATIE VAN DE NATIONALE AANVRAGE	KENMERK VAN DE AANVRAGER OF VAN DE GEMACHTIGDE **P122880NL00**
Nederlands aanvraag nr. **2022880**	Indieningsdatum **05-04-2019**
	Ingeroepen voorrangsdatum
Aanvrager (Naam) **Maars Holding B.V.**	
Datum van het verzoek voor een onderzoek van internationaal type **06-07-2019**	Door de Instantie voor Internationaal Onderzoek aan het verzoek voor een onderzoek van internationaal type toegekend nr. **SN74032**

I. CLASSIFICATIE VAN HET ONDERWERP (bij toepassing van verschillende classificaties, alle classificatiesymbolen opgeven)

Volgens de internationale classificatie (IPC)

E04B2/74;E04B2/76;E04B2/78

II. ONDERZOCHTE GEBIEDEN VAN DE TECHNIEK

Onderzochte minimumdocumentatie

Classificatiesysteem	Classificatiesymbolen
IPC	**E04B**

Onderzochte andere documentatie dan de minimum documentatie, voor zover dergelijke documenten in de onderzochte gebieden zijn opgenomen

III.	☐	**GEEN ONDERZOEK MOGELIJK VOOR BEPAALDE CONCLUSIES**	(opmerkingen op aanvullingsblad)
IV.	☐	**GEBREK AAN EENHEID VAN UITVINDING**	(opmerkingen op aanvullingsblad)

ONDERZOEKSRAPPORT BETREFFENDE HET RESULTAAT VAN HET ONDERZOEK NAAR DE STAND VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE

Nummer van het verzoek om een onderzoek naar de stand van de techniek
NL 2022880

A. CLASSIFICATIE VAN HET ONDERWERP
INV. E04B2/74
ADD. E04B2/76 E04B2/78

Volgens de Internationale Classificatie van octrooien (IPC) of zowel volgens de nationale classificatie als volgens de IPC.

B. ONDERZOCHTE GEBIEDEN VAN DE TECHNIEK

Onderzochte miminum documentatie (classificatie gevolgd door classificatiesymbolen)
E04B

Onderzochte andere documentatie dan de mimimum documentatie, voor dergelijke documenten, voor zover dergelijke documenten in de onderzochte gebieden zijn opgenomen

Tijdens het onderzoek geraadpleegde elektronische gegevensbestanden (naam van de gegevensbestanden en, waar uitvoerbaar, gebruikte trefwoorden)
EPO-Internal, WPI Data

C. VAN BELANG GEACHTE DOCUMENTEN

Categorie °	Geciteerde documenten, eventueel met aanduiding van speciaal van belang zijnde passages	Van belang voor conclusie nr.
X	US 3 456 966 A (MULLER HERMANN) 22 juli 1969 (1969-07-22) * kolom 1, regel 34 - regel 41 * * kolom 2, regel 58 - kolom 4, regel 33; figuren 1-6 * -----	1-33
X	NL 1 025 718 C2 (VIKA METAAL B V [NL]) 14 september 2005 (2005-09-14) * het gehele document * -----	1-33
X	WO 2013/001486 A2 (STEVENS JASON JAMES [ZA]; STEINHOBEL BRIAN ARTHUR [ZA]) 3 januari 2013 (2013-01-03) * bladzijde 4, regel 19 - bladzijde 8, regel 15; figuren 1-5 * -----	1-33

☐ Verdere documenten worden vermeld in het vervolg van vak C.

☒ Leden van dezelfde octrooifamilie zijn vermeld in een bijlage

° Speciale categorieën van aangehaalde documenten

"A" niet tot de categorie X of Y behorende literatuur die de stand van de techniek beschrijft

"D" in de octrooiaanvrage vermeld

"E" eerdere octrooi(aanvrage), gepubliceerd op of na de indieningsdatum, waarin dezelfde uitvinding wordt beschreven

"L" om andere redenen vermelde literatuur

"O" niet-schriftelijke stand van de techniek

"P" tussen de voorrangsdatum en de indieningsdatum gepubliceerde literatuur

"T" na de indieningsdatum of de voorrangsdatum gepubliceerde literatuur die niet bezwarend is voor de octrooiaanvrage, maar wordt vermeld ter verheldering van de theorie of het principe dat ten grondslag ligt aan de uitvinding

"X" de conclusie wordt als niet nieuw of niet inventief beschouwd ten opzichte van deze literatuur

"Y" de conclusie wordt als niet inventief beschouwd ten opzichte van de combinatie van deze literatuur met andere geciteerde literatuur van dezelfde categorie, waarbij de combinatie voor de vakman voor de hand liggend wordt geacht

"&" lid van dezelfde octrooifamilie of overeenkomstige octrooipublicatie

Datum waarop het onderzoek naar de stand van de techniek van internationaal type werd voltooid	Verzenddatum van het rapport van het onderzoek naar de stand van de techniek van internationaal type
28 november 2019	

Naam en adres van de instantie	De bevoegde ambtenaar
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Galanti, Flavio

Formulier PCT/ISA/201 (tweede blad) (Januari 2004)

ONDERZOEKSRAPPORT BETREFFENDE HET RESULTAAT VAN HET ONDERZOEK NAAR DE STAND VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE

Informatie over leden van dezelfde octrooifamilie

Nummer van het verzoek om een onderzoek naar de stand van de techniek
NL 2022880

In het rapport genoemd octrooigeschrift	Datum van publicatie	Overeenkomend(e) geschrift(en)	Datum van publicatie
US 3456966 A	22-07-1969	BE 693033 A	03-07-1967
		CH 442870 A	31-08-1967
		CH 456253 A	15-05-1968
		DE 1575197 A1	02-01-1970
		FR 1508759 A	05-01-1968
		GB 1161946 A	20-08-1969
		SE 311100 B	27-05-1969
		US 3456966 A	22-07-1969
NL 1025718 C2	14-09-2005	GEEN	
WO 2013001486 A2	03-01-2013	GEEN	

WRITTEN OPINION

File No.	Filing date *(day/month/year)*	Priority date *(day/month/year)*	Application No.
SN74032	05.04.2019		NL2022880
International Patent Classification (IPC) INV. E04B2/74 ADD. E04B2/76 E04B2/78			
Applicant Maars Holding B.V.			

This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the application
- ☒ Box No. VIII Certain observations on the application

	Examiner
	Galanti, Flavio

Application number

WRITTEN OPINION

NL2022880

Box No. I Basis of this opinion

1. This opinion has been established on the basis of the latest set of claims filed before the start of the search.

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the application and necessary to the claimed invention, this opinion has been established on the basis of:

   a. type of material:

   ☐ a sequence listing

   ☐ table(s) related to the sequence listing

   b. format of material:

   ☐ on paper

   ☐ in electronic form

   c. time of filing/furnishing:

   ☐ contained in the application as filed.

   ☐ filed together with the application in electronic form.

   ☐ furnished subsequently for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

Box No. V Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty	Yes:	Claims	11, 13, 15-23, 30-33
	No:	Claims	1-10, 12, 14, 24-29
Inventive step	Yes:	Claims	
	No:	Claims	1-33
Industrial applicability	Yes:	Claims	1-33
	No:	Claims	

2. Citations and explanations

see separate sheet

Application number

WRITTEN OPINION

NL2022880

Box No. VIII Certain observations on the application

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following documents:

D1 US 3 456 966 A (MULLER HERMANN) 22 juli 1969

D2 NL 1 025 718 C2 (VIKA METAAL B V [NL]) 14 september 2005

D3 WO 2013/001486 A2 (STEVENS JASON JAMES [ZA]; STEINHOBEL BRIAN ARTHUR [ZA]) 3 januari 2013

2 The present application does not meet the criteria of patentability, because the subject-matter of claim 1 is not new.

2.1 D1 discloses (see column 1, lines 34-41; column 2, line 58 - column 4, line 33; figures 1-6):

Scheidingswand systeem omvattende
- ten minste twee[1] palen (1) ingericht om rechtop te zetten;
- ten minste één profiel (2) dat verwijderbaar verbindbaar is met de palen (1) op een horizontale manier;
- waarbij het horizontale profiel (2), aan hun respectievelijke eindes, voorzien is van een verbindingselement (holding claw means 7) dat ingericht is voor verwijderbare verbinding met een overeenkomstig verbindingselement (sholuder means 5) in de paal, zodanig dat samenwerking tussen de overeenstemmende verbindingselementen (7) voorziet in een verwijderbare verbinding.

[1] implicit feature.

2.2 A similar partition wall system is known from D2 (see figure 3).

2.3 Another similar partition wall system is known from D3 (see page 4, line 19 - page 8, line 15; figures 1-5).

2.4 Therefore, all the features of claim 1 are known from D1, D2 and D3.

3 Dependent claims 2-27 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements in respect of novelty and/or inventive step.

3.1 The features of the following claims appear to be known from the cited documents:

- claim 2: D1-D3 implicitly or explicitly disclose the additional feature of a second horizontal profile;
- claims 3 and 4: D3 discloses the feature of a panel and a flange;
- claim 5: D1 discloses a hollow cross-shaped profile;
- claim 6: D1-D3 disclose symmetrical profiles;
- claims 7-10: see D3 which discloses features relating to the manner of connecting a panel and a further panel;
- claim 12: a metallic material appears to be implicitly known from D1 and D2;
- claim 14: aligned openings are disclosed in D2;
- claim 24: the uprights in D1-D3 are all releasably connectable to a floor or ceiling;
- claim 25: see D2 fig. 5 showing a foot;
- claim 26: hollow profiles are known from D1 and D2;
- claim 27: uprights and transoms with same section are known from D1.

3.2 In claims 11, 13, 15 slight constructional changes in the partition wall system are suggested which come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. Consequently, the subject-matter of these claims also appears to lack an inventive step.

4 The additional features described in claims 16-20 merely represent several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill in order to connect the profiles at a joint. Similarly, claims 21-23 represent obvious alternatives for releasably connecting panels to the horizontal profiles. Consequently, the subject-matter of claims 16-23 lacks an inventive step.

5 The present application does not meet the criteria of patentability, because the subject-matter of claims 28-30 does not meet the requirements in respect of novelty and/or inventive step.

5.1 The corresponding method of mounting a partition wall system described in claim 28 is implicitly known from D1, D2 and D3.

5.2 The additional feature of claim 29 (connecting a panel to the horizontal profiles) is known from D3.

5.3 The additional feature of claim 30 represents an obvious alternative for releasably connecting panels to the horizontal profiles.

6 The present application does not meet the criteria of patentability, because the subject-matter of claims 31-33 does not involve an inventive step.

Method claims 31-33 concern the set up/layout of a partition wall. As such, they merely describe obvious steps which the user would undertake according to circumstances.

Re Item VIII

Certain observations on the application

1 The features of the claims are not provided with reference signs placed in parentheses.

2 Claims 7 and 11 are not clear.

2.1 Claim 7 cannot be dependent on claims 1, 2, 5 or 6 because these claims do not mention the feature of a panel.

2.2 Similarly, claim 11 is also not clear because the feature of a panel has no antecedent.