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(71) Applicant: **Duscholux Iberica, S.A.**
08040 Barcelona (ES)
(72) Inventor: **Gomez, Juan Jose**
08040 Barcelona (ES)
(74) Representative: **Maldonado Jordan, Julia**
Linares, 7 - 3
46018 Valencia (ES)

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(54) **BATHROOM SCREEN**

(57) A bathroom screen comprising at least: - a fixed panel (1) provided with fastening means for fastening to a supporting wall (P); - a mobile, movable panel (2), provided with at least one upper support (3) and one lower support (4), each one of which is provided with wheels (31, 41) for moving along horizontal guides (51, 52), and fixed supports (61, 62) for guiding the movable panel.

The upper and lower supports (3, 4) comprise protective impermeable covers (32, 42) which cover the top and sides of the movement wheels (31, 41). The fastening means of the fixed panel (1) comprise: - an anchor profile (11) fixed to a supporting wall (P); - an edge profile (12), and means for adjusting (13) the position of the edge profile (12) with respect to the anchor profile (11)

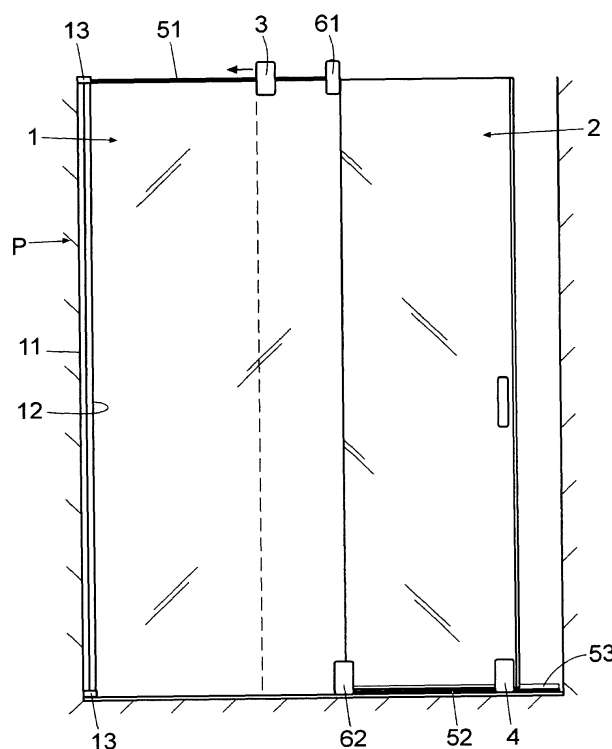


Fig. 1

Description

Object of the invention

[0001] The object of the invention is a bathroom screen comprising at least: - a fixed panel provided with fastening means to a supporting wall; - a mobile panel parallel to the fixed panel and movable between an open position and a closed position, the mobile panel of which is provided with at least one upper support and one lower support, each one of which is provided with wheels for moving along horizontal guides; and - upper and lower fixed supports for guiding the mobile panel without the possibility of a lateral rocking motion.

[0002] This bathroom screen has constructive particularities aimed at protecting the movement wheels, at improving the fastening of the fixed panel or panels of the screen, at guaranteeing the closure between the fixed panel and a vertical supporting wall and at allowing for the formation of angular screens without the need for the screen to be secured to the wall on all of the faces thereof.

Field of application of the invention

[0003] This invention applies to the manufacturing of bathroom screens, for both showers and bathtubs.

State of the art

[0004] Different types of bathroom screens which generally have at least a fixed panel, and a mobile panel, making the movement between an open position and a closed position possible, said mobile panel moving parallel and close to the fixed panel, are currently known.

[0005] Also known are angled bathroom screens with two fixed panels arranged on perpendicular planes, intended to be fixed to two perpendicular supporting walls and with a mobile panel which acts as a door; these angled screens, together with the supporting walls, delimiting a quadrangular space for the bath tub or shower.

[0006] Both straight bathroom screens and angled bathroom screens generally have wheels fixed to the mobile panel and mounted on horizontal guides for the movement of said mobile panel between an open position and a closed position.

[0007] On bathroom screens of this type, such as the one described in utility model ES 1075118U, the wheels for the movement of the mobile panel are uncovered, and thereby exposed to water and dirt, which may cause hygiene problems given that they define holes which are difficult to access and clean, in addition to a faster deterioration of the means for moving the mobile panel.

[0008] Also known is the fastening of one of the vertical ends of the fixed panel or panels to a supporting wall by means of a securing profile generally fastened by screws to the aforementioned supporting wall, said securing profile in turn being fastened to the vertical end of the corresponding fixed panel by means of silicon or another

similar product during the installation of the bathroom screen.

[0009] These fastening means have several drawbacks with regard to use, given that it does not suitably solve the possible errors in the vertical relationship of the supporting wall, nor do they guarantee a correct seal of the joint of the bathroom screen to the supporting wall, since said seal depends on how a worker applies a silicone or product for joining the fixed panel of the bathroom screen to the securing profile of the wall.

[0010] These sealing problems may be compounded in the case of angled bathroom screens which require the sealing of two outer fixed panels to each supporting wall.

[0011] Although there is a wide variety of bathroom screens on the market with different structures and configurations, the applicant is not aware of the existence of any prior art of bathroom screens that satisfactorily solve the previously presented problem and which have similar technical characteristics to those of the bathroom screen of the present invention.

Description of the invention

[0012] The bathroom screen of the invention, being of the type previously described and mentioned in the preamble of the first claim, has constructive particularities aimed at solving the aforementioned problem.

[0013] This bathroom screen has at least one upper support and one lower support provided with wheels, or with the mobile panel on horizontal guides, and upper and lower fixed supports for guiding the mobile panel without the possibility of a lateral rocking motion. In accordance with the invention, the upper and lower supports provided with the movement wheels comprise impermeable protective covers which cover the tops and sides of said movement wheels, providing them with protection against water and dirt, which facilitates the cleaning of the screen, avoiding the accumulation of dirt in the area of the wheels and extending the useful life of the moving mechanisms.

[0014] In accordance with the invention, this screen has fastening means for the fixed panel which, corresponding to one vertical end of said fixed panel, comprise a section securing profile, intended to be fastened to a supporting wall; an edge profile glued with a mono-component glue to said vertical end of the fixed panel and able to be frontally coupled to the securing profile; and means for adjusting the position of the edge profile with respect to the securing profile.

[0015] It has been envisaged that the fixed panel is provided with the edge profile, factory glued with a mono-component adhesive, with the aim of avoiding possible sealing problems during the mounting thereof.

[0016] The means for adjusting the position of the edge profile with respect to the securing profile comprise an elongated hole which allows the vertical relationship of the edge profile and, consequently, the fixed panel, to be

adjusted, regardless of whether the securing profile is perfectly vertical due to, for example, the Irregularities of the supporting wall.

[0017] Another characteristic of the invention is that the fastening means for the fixed panel comprise at least one horizontal arm which has a first end joined to a fixed support, mounted on the upper end of said fixed panel, and which has, on a second end, a fastening element for fastening to a supporting wall which is perpendicular to the fixed panel, said horizontal arm forming an angle smaller than 90 degrees with the plane of the fixed panel and with the supporting wall.

[0018] This characteristic allows for the stable securing of angular bathroom screens, without the screen needing to be secured to the wall on all of the faces thereof.

[0019] These characteristics, and other characteristics, of the invention will be more readily understood through the exemplary embodiments shown in the attached figures.

Description of the figures

[0020] As a complement to the description being made, and for the purpose of helping to make the characteristics of the invention more readily understandable, this specification is accompanied by a set of drawings which, by way of illustration and not limitation, represent the following.

- Figure 1 shows a front elevation view of an exemplary embodiment of a straight bathroom screen according to the invention.
- Figures 2a and 2b show profile and perspective views of the upper support of the mobile panel with the corresponding disassembled cover, showing the corresponding movement wheel for moving along a horizontal guide mounted on the fixed panel.
- Figures 3a and 3b show perspective and profile views of the lower support for the movement of the mobile panel on the lower horizontal guide, which has a height regulation system, the cover corresponding to this lower support having been represented disassembled.
- Figures 4a and 4b respectively show a disassembled perspective view of one of the horizontal supporting arms of a fixed panel of the screen, and a partial profile view of said horizontal supporting arm fixed to the upper fixed support of the fixed panel of the screen.
- Figure 5 shows an upper plan view of a variant of the embodiment of the screen, in this case an angular screen with two fixed panels arranged perpendicularly to each other and each one fixed to a supporting wall by means of corresponding horizontal arms.

Preferred embodiment of the invention

[0021] The exemplary embodiment shown in figure 1 shows a straight screen provided with a fixed panel (1) and a mobile panel (2) provided with an upper support (3) and a lower support (4), arranged inside of which are wheels for the movement thereof along horizontal guides (51, 52), mounted on the fixed panel (1) and the floor, respectively.

[0022] The screen further comprises fixed upper and lower supports (61, 62), respectively, for guiding the mobile panel (2) without the possibility of a rocking or lateral movement.

[0023] The fixed panel (1) has an edge profile (12) on one of the vertical ends, intended to be fixed to a supporting wall (P), fixed by gluing to said fixed panel (1) and able to be frontally coupled to a securing profile (11), with a U-shaped cross section, vertically fixed to the aforementioned supporting wall (P). The fastening of the edge profile (12) to the securing profile (11) is carried out by adjustment means (13) which include an elongated hole for adjusting the vertical relationship of said edge profile (12).

[0024] As can be seen in figures (2a, 2b), the upper support (3), mounted on the mobile panel (2), is provided with a movement wheel (31) for moving along a guide (51) which is fixed to the upper end of the fixed panel (1). This upper support (3) comprises an impermeable cover (32), intended to cover the top and sides of the wheel (31), protecting it from water and dirt.

[0025] The lower support (4) fixed to the mobile panel (2) and represented in figures 3a and 3b, have a movement wheel (41) for moving along a horizontal guide (52), in this case fixed to the floor, and an impermeable cover (42) for protecting the aforementioned wheel (41). As can be seen in figures 1 and 3b, the screen comprises a lower gutter (53) arranged on the inner side of the horizontal guide (52) and which prevents water from accessing said guide (52) in the closed position of the mobile panel (2).

[0026] As can be seen in figures 4a and 4b, the means for fastening the fixed panel (1) comprise a horizontal arm (14) fastened by a first end to the fixed support (61) which is mounted to the aforementioned fixed panel and has a channel for the circulation of the mobile panel (2).

[0027] Said horizontal arm (14) has, on a second end, a fastening element (15) for fastening to a supporting wall.

[0028] Figure 5 shows an angled bathroom screen, provided with two mobile panels (2, 2a) and two fixed panels (1, 1a) with horizontal fastening arms (14, 14a) for fastening to respective vertical supporting walls, perpendicular to said fixed panels (1, 1a); said arms (14, 14a) forming an angle smaller than 90 degrees with the corresponding wall (P) and the fixed panel.

[0029] Having sufficiently described the nature of the invention, in addition to an example of preferred embodiment, it is hereby stated for the relevant purposes that the materials, shape, size and layout of the described

elements may be modified, provided that it does not imply altering the essential characteristics of the invention claimed below.

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Claims

1. A bathroom screen comprising at least: - a fixed panel (1) provided with fastening means for fastening to a supporting wall (P); - a mobile panel (2) movable between an open position and a closed position, parallel to the fixed panel (1), the mobile panel of which is provided with at least one upper support (3) and one lower support (4), each one of which is provided with movement wheels (31, 41) for moving along horizontal guides (51, 52); and upper and lower fixed supports (61, 62) for guiding the movable panel without the possibility of a lateral rocking motion; **characterized in that** the upper and lower supports (3, 4), provided with movement wheels, comprise impermeable protective covers (32, 42) which cover the top and sides of said movement wheels (31, 41).

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2. The screen, according to claim 1, **characterized in that** the fastening means of the fixed panel (1) comprise, corresponding to one vertical end of said fixed panel: - a securing profile (11) with a U-shaped cross section, intended to be fixed to a supporting wall (P); - an edge profile (12) fixed by gluing to said vertical end of the fixed panel (1) and able to be frontally coupled to the securing profile (11); and - means for adjusting (13) the position of the edge profile (12) with respect to the securing profile (11).

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3. The screen, according to claim 1, **characterized in that** the fastening means of the fixed panel (1) comprise at least one horizontal arm (14) which has a first end joined to a fixed support (61), mounted on the upper end of said fixed panel (1), and which has on a second end a fastening element (15) for fastening to a supporting wall (P), said horizontal arm (14) forming an angle smaller than 90 degrees with the plane of the fixed panel (1) and with the supporting wall (P).

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4. The screen according to claim 3, **characterized in that** it comprises two fixed panels (1, 1a) arranged on two oblique vertical planes and provided with oblique horizontal arms (14, 14a), for anchoring to each supporting wall (P).

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5. The screen, according to any of the preceding claims, **characterized in that** it comprises a lower gutter (53) arranged on the inner side of the horizontal guide (52) and which prevents water from accessing said guide (52) In a closed position of the mobile panel (2).

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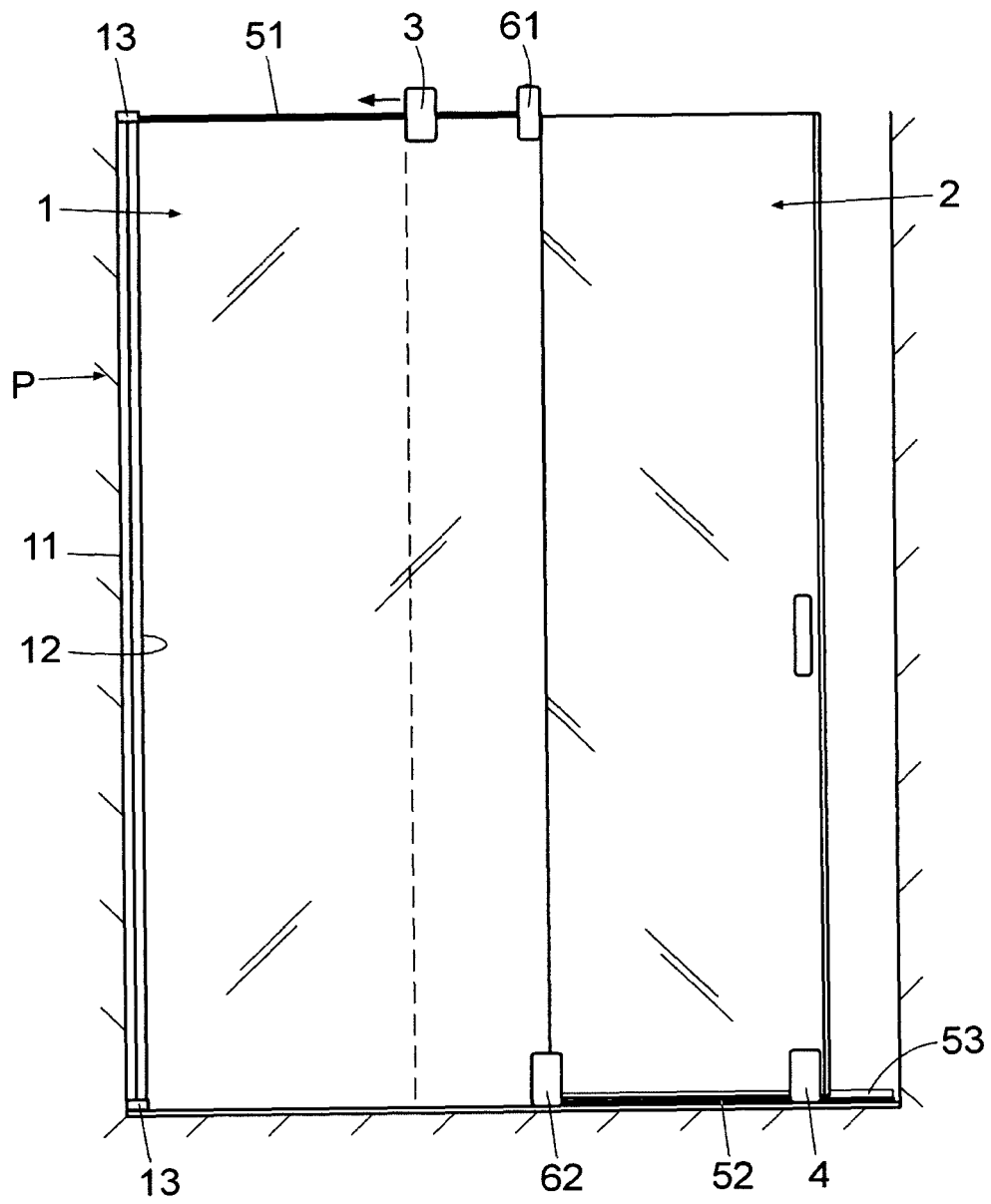


Fig. 1

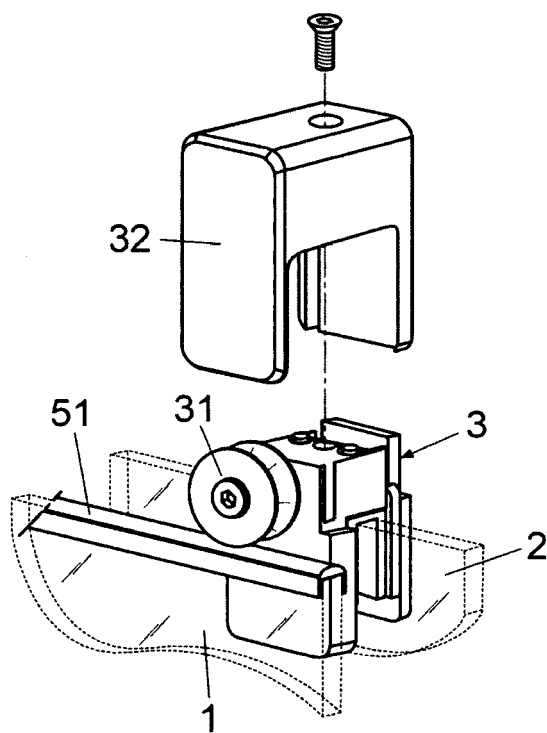


Fig. 2a

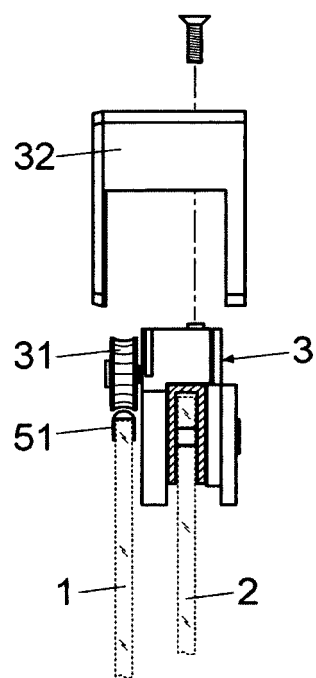


Fig. 2b

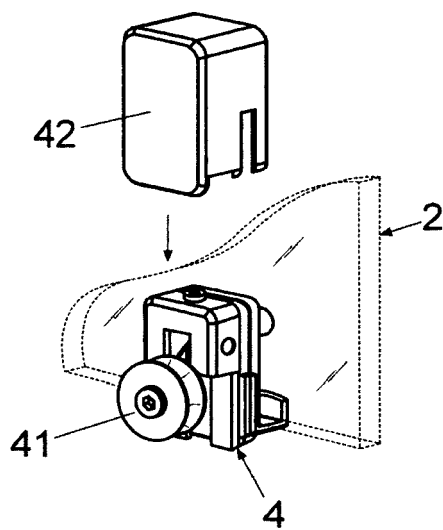


Fig. 3a

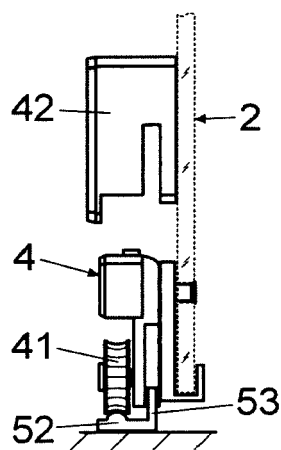
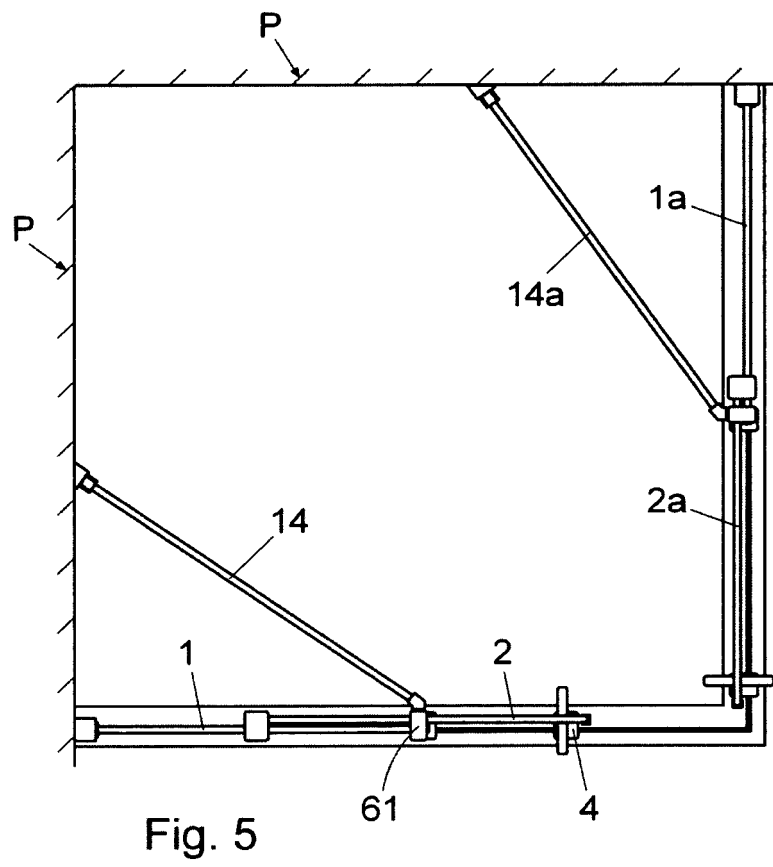
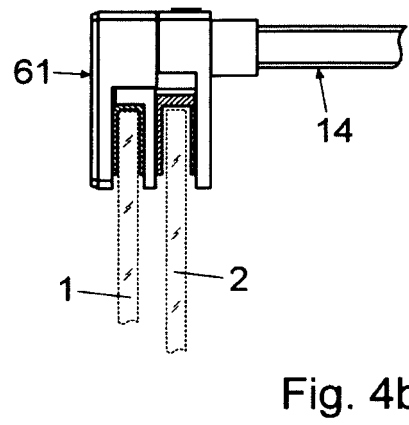
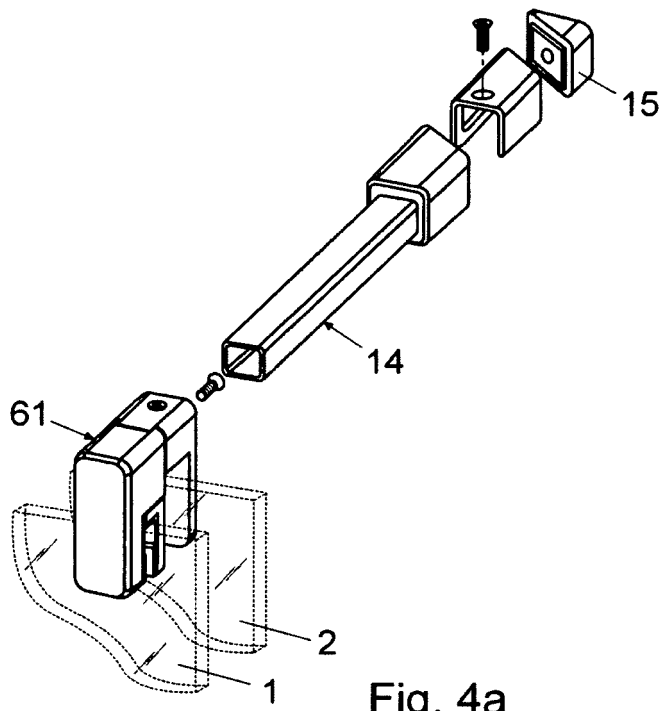


Fig. 3b





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Application Number
EP 17 00 0712

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 15 August 2017	Examiner Fordham, Alan
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