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(54) Perfected door for shower cubicle

(57) This invention refers to a perfected door for a shower cubicle in which there are no metal sections for fastening to the wall, but a section in acrylic crystal glass. In combination with said section, there are vari-

ous hinge elements which make it possible to regulate the shower cubicle door, along both its horizontal and transversal axes, thereby keeping it perfectly water-proof.

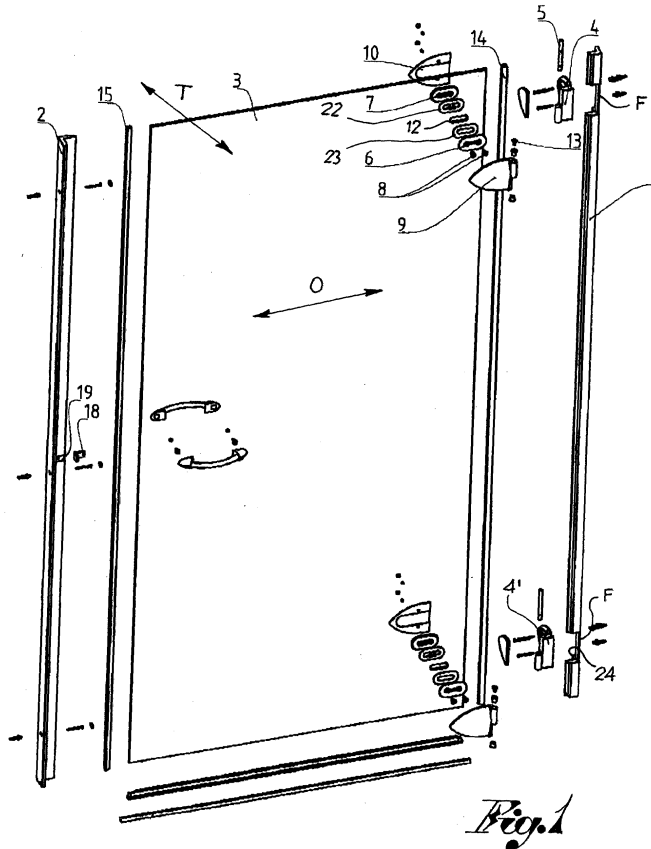


Fig. 1

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Description

[0001] This invention concerns a door for shower cubicle which has been perfected, in that, apart from maintaining all the possibilities for regulation to give correct fitting and water-tight sealing, it has no metal support elements, such as aluminium or other metal sections. In particular, the invention in question refers to shower cubicle doors which are fastened directly to the wall.

[0002] In fact, crystal glass doors are already in use for shower cubicles, where said doors are held in place by appropriate metal sections between the wall and the crystal glass sheet that constitutes the door. However, such solution, although safe and commonly applied, does not give a surface which is totally made of crystal glass. This invention resolves that problem, eliminating all metal elements for fastening to the wall.

[0003] However, the aim of this invention will become clearer with reference to the enclosed drawing, in which:

Fig. 1 is an exploded drawing of the elements which make up the door and the wall fastening element; and

Fig. 2 represents a detailed cross-section of the opening door hinge and the section for fastening said hinge to the wall.

[0004] In said drawing, the number 3 indicates the acrylic crystal sheet that constitutes the door proper of a shower cubicle (not shown). This sheet possesses, both at the top and the bottom, a slit or slotted hole 12 to which are fastened, on either side, two slotted hole washers 22 and 23. Likewise, and at the same level as the slit 12 and on top of the leak-proof washers 22 and 23, there are two plates 6 and 7, which are also slotted hole in shape and made from an appropriate material. Said elements 6, 7 and 22, 23 are blocked together between two hinge elements 9 and 10, which are fixed together in such a way that the sheet 3 can slide as necessary along its own horizontal axis O, thanks to the slit 12 in its surface.

[0005] For the purposes of the invention, at the corner of the sheet 3, near to the hinge described above, there is fastened a washer 14, with a sealing lip 14', designed to interact with an acrylic crystal section 1.

[0006] Said section 1 has an L-shaped cross-section and, at the height of the above-mentioned hinge elements, two milled recesses F and F', designed to house the hinge elements 4 which, in turn, hold the various hinge elements present on the sheet 3.

[0007] In particular, said elements 4 have practically an L-shape, given that, apart from the front part which is in view, they also have a perpendicular rib 4', furnished with slotted holes. Said rib 4' also has a milled recess (not shown), designed to couple with a projection 24 present in the milled recesses F and F'.

[0008] Likewise, on the opposite side of the sheet 3, there is a leak-proof washer 15, which has the same

shape as the washer 14 and, on the wall, another acrylic crystal section 2 with an L-shaped cross-section, to which there is fixed a bracket 18 to stop the sheet 3, this fitting into a slot 19 made in the section 2.

[0009] The method of assembling the door is fairly evident and can be carried out as follows: the hinges 4 are fixed to the wall as appropriate, with the acrylic crystal section 1 interposed and held in the right place by the presence of projections 24. Thanks to the slotted holes on the ribs 4', the group consisting of the hinges 4 and the section 1 can be correctly positioned with respect to the transversal axis T and, in the same way, thanks to the structure of the hinge elements present on the sheet 3, the latter can be correctly positioned along the horizontal axis O, at all times remaining perfectly water-proof, due to the presence of the lip 14' which ensures that the washers 14 and 15 fit tightly to the acrylic crystal sections 1 and 2.

[0010] The description above reveals how the objective of the invention has been achieved, namely the elimination of metal components for wall fastening and blocking the shower cubicle door, which is, consequently, made completely of crystal glass.

Claims

1. Perfected door for shower cubicle, consisting of a sheet of acrylic crystal glass (3), designed to be fastened to the wall, characterised by the fact of having a combination of hinge elements mounted together on the two sides (6,7,9,10), said elements having slotted holes for sliding of the sheet (3) along its horizontal axis O.
2. Perfected door for shower cubicle as described in the previous claim, characterised by the fact that the wall fastening element consists of an acrylic crystal glass section (1), with an L-shaped cross-section, equipped with milled recesses F and F', which contain projections (24) designed to interact with hinge elements (4).
3. Perfected door for shower cubicle as described in the previous claim, characterised by the fact that the hinge elements (4) have an L-shape, in that they have a rib (4') with slotted holes for fastening them to the wall, with the possibility of regulation along the T axis of the sheet (3).
4. Perfected door for shower cubicle whereof at claim 1), characterised by the fact that the sheet (3) has a washer (14) furnished with a water-tight lip (14') with respect to the section (1).
5. Perfected door for shower cubicle whereof at the previous claims, characterised by the fact that on the opposite side to the hinge elements (6,7,9,10)

and the section in acrylic crystal glass (1), there is another section (2) of the same material fixed to the wall and furnished with a bracket (18) for stopping the sheet (3), said sheet having a washer (15) similar to the washer (14).

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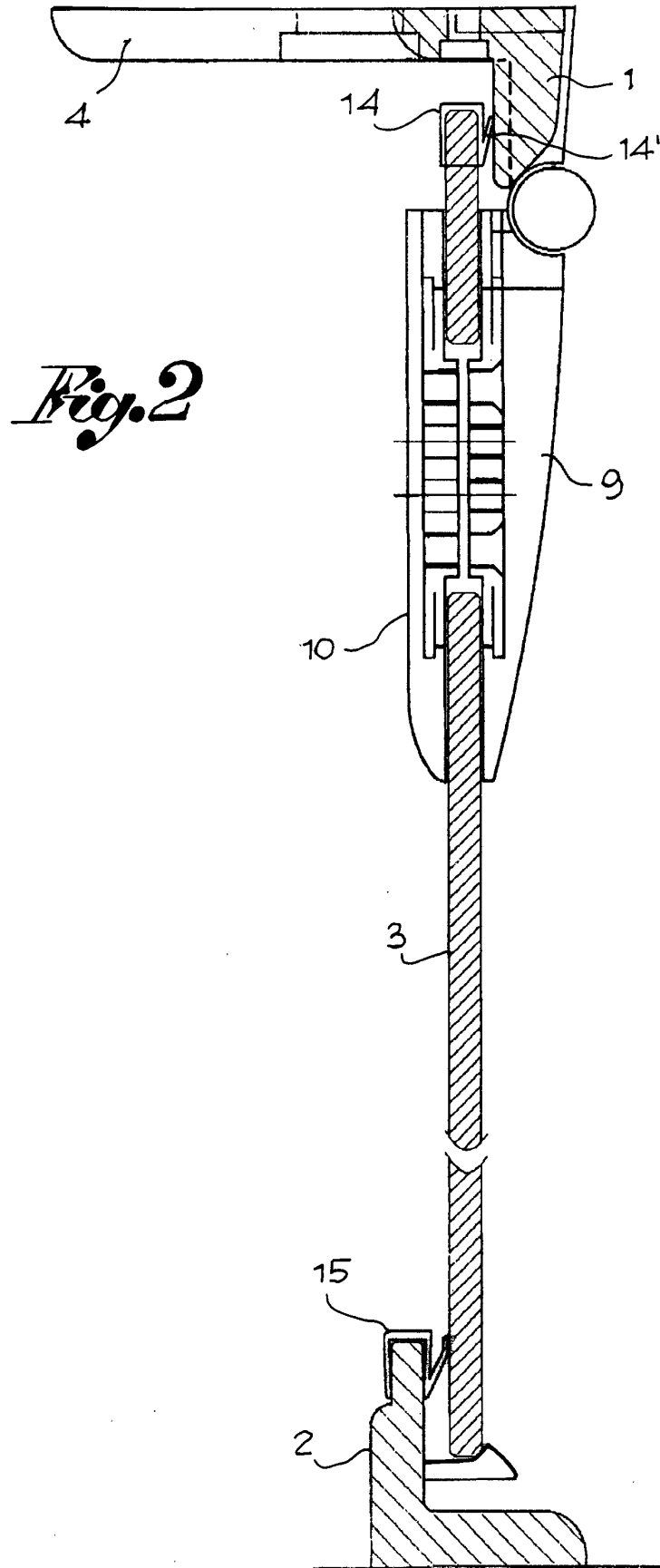
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EUROPEAN SEARCH REPORT

Application Number
EP 01 83 0054

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Y	* the whole document *	4	
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Y	DE 43 35 387 A (MUNCH PAUL JEAN) 20 April 1995 (1995-04-20)	4	
A	* column 1, line 3 - line 8 * * column 4, line 8 - column 6, line 3; figures 1-3 *	1	
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A	* abstract; claims 1,2 *	2	
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A	DE 33 26 790 A (SCHWITTERS HENRY) 9 February 1984 (1984-02-09) * page 11, line 6 - line 18; figure 1 *		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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Place of search	Date of completion of the search	Examiner	
THE HAGUE	19 April 2001	Zuurveld, G	
CATEGORY OF CITED DOCUMENTS		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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 01 83 0054

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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