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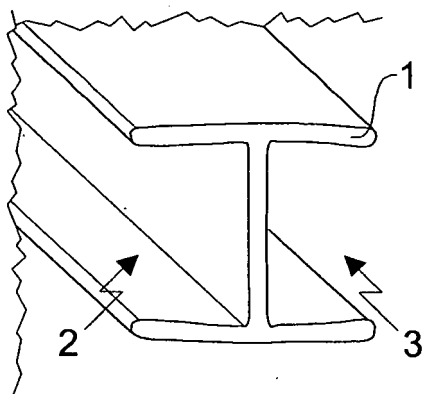
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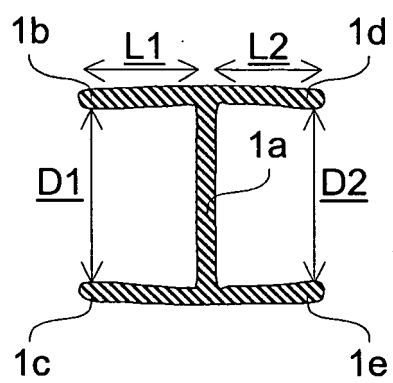
(54) **Gasket for mobile partitions**

(57) Gasket for mobile partitions, for example mobile outdoor glass partitions, which comprises a section bar (1) made of a semirigid material which includes two lateral walls (1b, 1c, 1d, 1e) joined in a substantially perpendicular manner to the lateral edges of a central wall (1a)

suitable for being arranged between two aligned panels (4, 5) of a mobile partition, wherein both the first lateral wall (1b, 1d) and the second lateral wall (1c, 1e) protrude from both sides of the central wall (1a), so as to obtain two opposing canals (2, 3) for housing the adjacent edges of the two aligned panels (4, 5).



***Fig. 1***



***Fig. 2***

## Description

**[0001]** The present invention relates to a gasket for mobile partitions, and in particular a gasket which can be employed for closing the slit between two panels of a mobile partition, for example two glass panels of a foldable mobile outdoor glass partition.

**[0002]** Italian patent application MI99A001105 discloses a gasket consisting of a section bar made of transparent polycarbonate which includes two lateral walls joined in a substantially perpendicular manner to the lateral edges of a central wall suitable for being arranged between two aligned glass panels of a mobile glass partition, wherein the first lateral wall protrudes from one side only of the central wall, while the second lateral wall protrudes from both sides of the central wall.

**[0003]** This particular known gasket has a semirigid structure suitable for being applied with pressure to an edge of a panel and for covering from one side the edge of an adjacent panel when the two panels are mutually aligned, thereby allowing at the same time the mutual movement of the panels during the opening and the closing of the mobile partition. However, the seal of said gasket is good but not so high as the one provided by the H-shaped gaskets in an elastomeric material, i.e. provided with two opposing canals, which, however, due to their high flexibility, can only be employed in the fixed and not mobile partitions, especially if the movement of the panels includes mutual rotations, as in the folding mobile glass partitions.

**[0004]** It is therefore an object of the present invention to provide a gasket free from said disadvantages, i.e. a gasket which can be applied to mobile partitions and provides a very good seal. Said object is achieved with a gasket, the main features of which are disclosed in the first claim and other features are disclosed in the subsequent claims.

**[0005]** Thanks to its particular shape and to its particular dimensions, the gasket according to the present invention can be applied along an edge of a panel of a mobile partition and automatically coupled or uncoupled with the edge of an adjacent panel during the closing or the opening, respectively, of the mobile partition, even if this can be folded in a bellows-like manner.

**[0006]** Furthermore, the thermal, acoustic and/or atmospheric insulation of this gasket is greater than the insulation of said known gasket for mobile partitions and is substantially the same insulation of the elastomeric gaskets for fixed partitions.

**[0007]** The gasket according to the present invention also increases the rigidity of the coupling between two panels arranged side by side, which is useful especially during wind or manual pressures onto these panels.

**[0008]** Further advantages and features of the gasket according to the present invention will become clear to those skilled in the art from the following detailed and non-limiting description of an embodiment thereof with reference to the attached drawings, wherein:

- figure 1 shows a perspective partial view of the gasket;
- figure 2 shows a cross-sectioned view of the gasket of figure 1;
- figures 3 to 5 show some cross-sectioned views during the use.

**[0009]** Referring to figures 1 and 2, it is seen that the gasket according to the present embodiment of the invention comprises in a known way a section bar 1 made of a semirigid material, preferably transparent polycarbonate, which includes a central wall 1a which is suitable for being arranged between two aligned panels of a mobile partition. Two lateral walls are joined in a substantially perpendicular manner to the lateral edges of the central wall 1a.

**[0010]** According to the invention, both the first lateral wall, as in the prior art, and the second lateral wall suitably protrude from both sides of the central wall 1a, so as to obtain two opposing canals 2, 3 for housing the adjacent edges of the two aligned panels.

**[0011]** In particular, width L1 of portions 1b, 1c of the lateral walls which protrude from one side of the central wall 1a is wider than width L2 of portions 1d, 1e of the lateral walls which protrude from the opposite side of the central wall 1a. In the present embodiment the difference between said widths L1 and L2 is comprised between 0,5 and 3 mm, while their absolute value is comprised between 5 and 8 mm.

**[0012]** Furthermore, distance D1 between portions 1b, 1c of the lateral walls which protrude more from the central wall 1a is shorter than distance D2 between portions 1d, 1e of the lateral walls which protrude less from the central wall 1a. In the present embodiment the difference between said distances D1 and D2 is comprised between 0,5 and 2 mm, while their absolute value is comprised between 8 and 31 mm and depends essentially on the thickness of the panels to be inserted into canals 2, 3.

**[0013]** The free edges of one or more portions 1b, 1c, 1d and/or 1e of the lateral walls are slightly bent inwards, so that distances D1 and D2 are shorter than the width of the central wall 1a.

**[0014]** Section bar 1 is therefore preferably symmetric with respect to a median axis crossing the central wall 1a and asymmetric with respect to a longitudinal axis passing along the same wall 1a.

**[0015]** The thickness of the central wall 1a is preferably comprised between 1 and 2,5 mm, while the thickness of one or more portions 1b, 1c, 1d, 1e of the lateral walls is comprised between 1 and 2,5 mm and grows from their edge joined to the central wall 1a to their free edge.

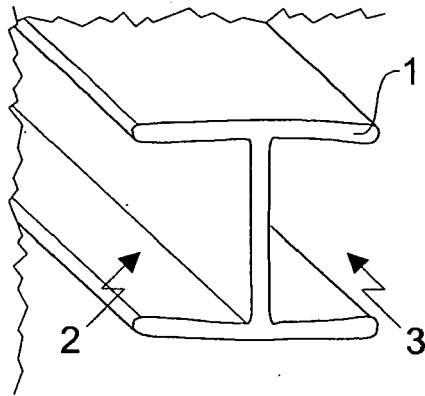
**[0016]** Figure 3 shows an edge of a panel 4, in particular a glass sheet of a mobile glass partition, which is inserted with pressure and/or glued into the narrower and deeper canal 2 of section bar 1, the other canal 3 being free. When panel 4 provided with section bar 1 is rotated and brought near a second panel 5 having the same thickness, for example during the closing of the mobile glass

partition, the free edge of portion 1e of the lateral wall of section bar 1 closer to panel 5 hits against the surface of this second panel, so that it bends slightly outwards, as shown in figure 4. When the two panels 4 and 5 are aligned and brought near to each other, the second panel 5 is inserted with pressure into the larger canal 3 of section bar 1, as shown in figure 5. The same result is obtained if panels 4 and 5 are brought near to each other already aligned, i.e. with a translatory and not rotating movement, as shown in figure 6. When panels 4 and 5 are separated, section bar 1 remains joined to panel 4, since the pressure exerted by the free edges of portions 1b and 1c of the lateral walls of section bar 1 onto the surfaces of panel 4 is greater than the pressure exerted by the free edges of portions 1d and 1e onto the surfaces of panel 5.

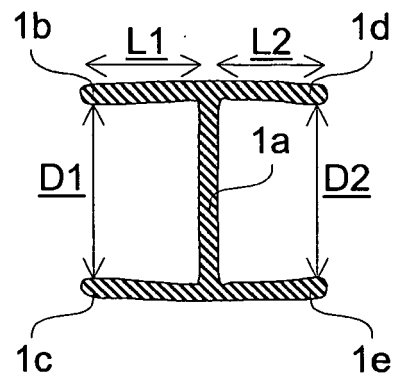
**[0017]** Modifications and/or additions can be made by those skilled in the art to the embodiment of the invention hereinabove described and illustrated while remaining within the scope of the same invention.

### Claims

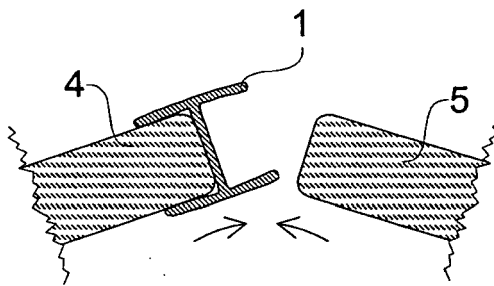
1. Gasket for mobile partitions, which comprises a section bar (1) made of a semirigid material which includes two lateral walls (1b, 1c, 1d, 1e) joined in a substantially perpendicular manner to the lateral edges of a central wall (1a) suitable for being arranged between two aligned panels (4, 5) of a mobile partition, **characterized in that** both the first lateral wall (1b, 1d) and the second lateral wall (1c, 1e) protrude from both sides of the central wall (1a), so as to obtain two opposing canals (2, 3) for housing the adjacent edges of the two aligned panels (4, 5).
2. Gasket according to the previous claim, **characterized in that** the section bar (1) is made of transparent polycarbonate.
3. Gasket according to one of the previous claims, **characterized in that** the width (L1) of the portions (1b, 1c) of the lateral walls (1b, 1c, 1d, 1e) which protrude from one side of the central wall (1a) is wider than the width (L2) of the portions (1d, 1e) of the lateral walls (1b, 1c, 1d, 1e) which protrude from the opposite side of the central wall (1a).
4. Gasket according to the previous claim, **characterized in that** the difference between said widths (L1, L2) is comprised between 0,5 and 3 mm.
5. Gasket according to the claim 3 or 4, **characterized in that** the value of said widths (L1, L2) is comprised between 5 and 8 mm.
6. Gasket according to one of the previous claims, **characterized in that** the distance (D1) between the portions (1b, 1c) of the lateral walls (1b, 1c, 1d, 1e) which protrude more from the central wall (1a) is shorter than the distance (D2) between the portions (1d, 1e) of the lateral walls (1b, 1c, 1d, 1e) which protrude less from the central wall (1a).
7. Gasket according to the previous claim, **characterized in that** the difference between said distances (D1, D2) is comprised between 0,5 and 2 mm.
8. Gasket according to claim 6 or 7, **characterized in that** the value of said distances (D1, D2) is comprised between 8 and 31 mm.
9. Gasket according to one of the previous claims, **characterized in that** the free edges of one or more portions of the lateral walls (1b, 1c, 1d, 1e) are bent inwards, so that the distances (D1, D2) between said free edges are shorter than the width of the central wall (1a).
10. Gasket according to one of the previous claims, **characterized in that** the section bar (1) is symmetric with respect to a median axis crossing the central wall (1a).
11. Gasket according to one of the previous claims, **characterized in that** the section bar (1) is asymmetric with respect to a longitudinal axis passing along the central wall (1a).
12. Gasket according to one of the previous claims, **characterized in that** the thickness of the central wall (1a) is comprised between 1 and 2,5 mm.
13. Gasket according to one of the previous claims, **characterized in that** the thickness of one or more portions of the lateral walls (1b, 1c, 1d, 1e) is comprised between 1 and 2,5 mm.
14. Gasket according to one of the previous claims, **characterized in that** the thickness of one or more portions of the lateral walls (1b, 1c, 1d, 1e) grows from their edge joined to the central wall (1a) to their free edge.
15. Gasket according to one of the previous claims, **characterized in that** the pressure exerted by the free edges of the portions (1b, 1c) of the lateral walls (1b, 1c, 1d, 1e) of the section bar (1) onto the surfaces of a panel (4) inserted into a canal (2) is greater than the pressure exerted by the free edges of the portions (1d, 1e) of the lateral walls (1b, 1c, 1d, 1e) of the section bar (1) onto the surfaces of a panel (5) inserted into the opposite canal (3).



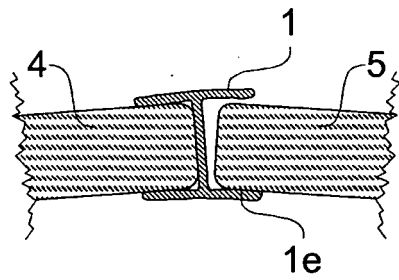
***Fig. 1***



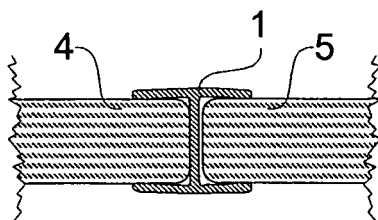
***Fig. 2***



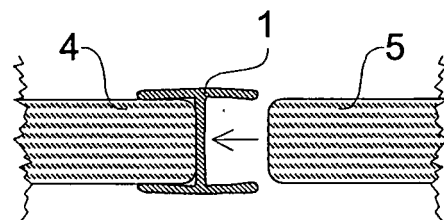
***Fig. 3***



***Fig. 4***



***Fig. 5***



***Fig. 6***