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(54) **Safety profile for swing doors**

(57) The present invention refers to a safety profile for swing doors, of the type intended to avoid any possible cutting, trapping or accident to hands, fingers or other body-parts of people, or animals, between the door and fixed jamb at the moment it closes, characterised by com-

prising a tubular body, that, by means of conventional fastening systems, such as screws, silicon sealing, etc., is firmly joined to the end side of the swing door opposite the side opening area, adjacent to the fixed jamb, its length matching the height of the door, so that the tubular body totally covers the aforementioned side of the door.

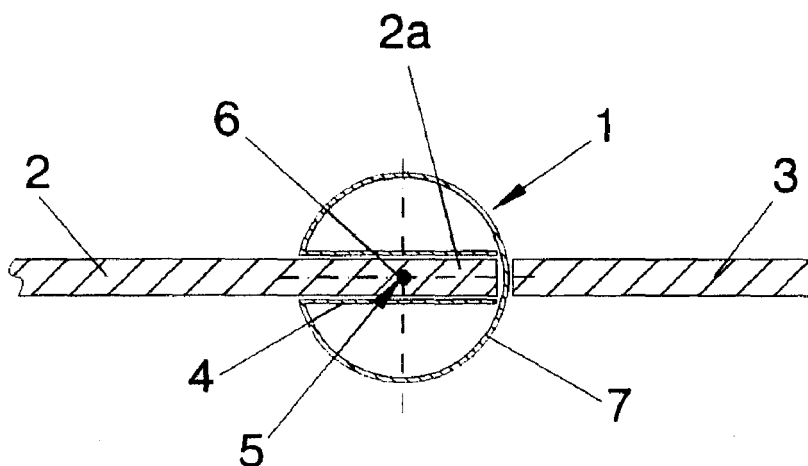


FIG. 2

Description

OBJECT OF THE INVENTION

[0001] The present invention refers, as the heading of the present descriptive summary mentions, to a safety profile for swing doors that adds a series of advantages and characteristics to the function it carries out, apart from others inherent in its organization and embodiment, which will be later described in detail and constitute an innovative alternative and/or improvement to that already familiar with in this field.

[0002] More specifically, the aim of the invention consists of a profile specially designed to be fitted to a glass (or any other material) door at its pivoting point from top to bottom, so as to avoid any possible cutting or accident to hands, fingers or other body-parts of the people at the time the door closes.

BACKGROUND OF THE INVENTION

[0003] It is unfortunately well-known that accidents, especially in the case of children, are often produced due to the insertion of fingers and hands into the existing space that is created in a swing-type door between its pivoting point and fixed adjacent jamb, producing the above-mentioned accident on the door closing and trapping the hand, occasionally with enough force to cause very serious injuries to the person affected.

[0004] This type of doors has the joint or pivoting point fixed to the jamb above and below, normally at a certain distance from the end of the opposite door that is opened, giving place, on this opening, to a considerably wide space between it and the fixed jamb, large enough for the involuntary insertion of fingers or hands, or other body-parts of people, children or even animals.

[0005] The invention of safety systems to avoid the aforementioned type of accidents taking place therefore became necessary.

[0006] It must be mentioned, on the other hand, that the applicant ignores the existence of a safety profile for swing doors with technical, structural, fundamental characteristics similar to the ones recommended in the present invention, whose aim is to resolve the previously mentioned disadvantages.

EXPLANATION OF THE INVENTION

[0007] On its own, the safety profile for swing doors that the invention proposes is an evident innovation within its field of use, since its use, in a specific, simple, rapid and especially effective way, provides a safe, protective system to avoid any type of cutting or accident produced by the cutting or trapping of fingers, hands or other parts of the body in the type of doors for which the invention is intended.

[0008] The main innovation of the device that the invention proposes consists of fitting a safety profile to the

door in question, that, placed along the side adjacent to the pivoting point and fixed jamb of the door, prevents any space between the above-mentioned point and jamb being created, which in turn will prevent anyone from inadvertently inserting fingers, hands or other parts of the body, and, as a result, will prevent any accident being produced due to the aforementioned cause.

[0009] More specifically, the safety profile for swing doors that the invention proposes is made of a tubular body, which may be made from any type of sufficiently rigid material, which adds the advantage of aesthetically maintaining the line of the piece, that, by means of conventional fastening systems, such as screws, silicon sealing, etc., is firmly joined to the end side of the door opposite the opening area, whose length will adequately match the height of the door, thus covering it completely.

[0010] The aforementioned tubular body includes a sideways opening or longitudinal groove whose dimensions coincide with the thickness of the door, allowing its side to be inserted, and its diameter will have the necessary size for its centre, once in place, to match the pivoting point of the door, so that when it swings open or closed, the perimeter of the tubular body is always adjacent to the end of the fixed jamb, no open space existing between the tubular body and the above-mentioned jamb when the door is open or ajar.

[0011] In this way, the impossibility of people, children or animals accidentally inserting fingers, hands or any other part of the body between the swing door and fixed jamb is ensured, the intended aim of the profile the invention refers to constituting an innovative, effective safety element.

[0012] The new safety profile for swing doors consequently comprises an innovative structure with structural, fundamental characteristics unknown up till now to such an end; these reasons, along with its usefulness in practice, sufficiently justify the request to obtain the requested privilege of exclusive rights.

DESCRIPTION OF THE DRAWINGS

[0013] To complement the description that is being given and in order to help give a better understanding of the invention's characteristics, a set of drawings with illustrative, not limitative character is attached to the present report as an integral part of it, showing the following:

Figure 1. - Shows a lateral vertical section of a swing door fitted with the safety profile of the invention.

Figures number 2 and 3. -Each show sectional views, according to a cross section, of a swing door closed and open, respectively, fitted with the safety profile of the invention, its configuration and functional effect being noticeable.

Figure number 4. -Shows a sectional view, according to a cross section, of the swing door shown in the

previous figures but lacking the safety profile, the opening that is produced, the cutting area and its potential danger on being open being noticeable.

PREFERRED EMBODIMENT OF THE INVENTION

[0014] In view of the aforementioned figures and in accordance with the given numeration, it may be seen how they reflect an example of the preferential embodiment of the safety profile for swing doors, the parts of which are comprised and described in detail as follows.

[0015] In this way, just as is seen in the first figure, the profile in question comprises a tubular body (1), that, by means of conventional fastening systems, such as screws, silicon sealing, etc., is firmly joined to the end side (2a) of the swing door (2) opposite the side opening area (2b), adjacent to the fixed jamb (3), its length matching the height of the door (2), so that the tubular body (1) totally covers the aforementioned side (2a) of the door (2).

[0016] The tubular body (1), as may be seen in figures 2 and 3, shows a sideways opening or longitudinal groove (4) whose dimensions coincide with the thickness of the door (2), allowing its side (2a) to be tightly inserted, and its diameter will have the necessary size for its centre (5), once in place, to match the pivoting point (6) of the door (2), so that when it swings open or closed, the perimeter (7) of the tubular body (1) is always adjacent to the end of the fixed jamb (3).

[0017] In this way, in the case where the profile is not fitted, the existence of the open space (8), on the door being open or ajar, existing between the end side (2a) of the door (2) and the fixed jamb (3) is avoided, as figure 4 graphically illustrates, where fingers, hands or other parts of the body are prone to be inserted and accidentally cut or trapped by the door (2) when it closes.

[0018] Having sufficiently described the nature of the present invention, as well as the way to embody it in practice, it must be emphasized that it may be put into practise in other ways different from that detailed here as an example, as long as they do not alter or modify the fundamental principle of providing the protection insisted on.

Claims

1. - SAFETY PROFILE FOR SWING DOORS, of the type intended to avoid any possible cutting, trapping or accident to hands, fingers or other body-parts of people, or animals, between the door and fixed jamb at the moment it closes, **characterised by** comprising a tubular body (1), that, by means of conventional fastening systems, such as screws, silicon sealing, etc., is firmly joined to the end side (2a) of the swing door (2) opposite the side opening area (2b), adjacent to the fixed jamb (3), its length matching the height of the door (2), so that the tubular body (1)

totally covers the aforementioned side (2a) of the door (2).

2. - SAFETY PROFILE FOR SWING DOORS, according to claim 1, **characterized by** the fact that the tubular body (1) includes a sideways opening or longitudinal groove (4), whose dimensions match the thickness of the door (2), apt for the tight insertion of its side (2a), its diameter having the necessary size for its centre (5), once in place, to match the pivoting point (6) of the door (2).

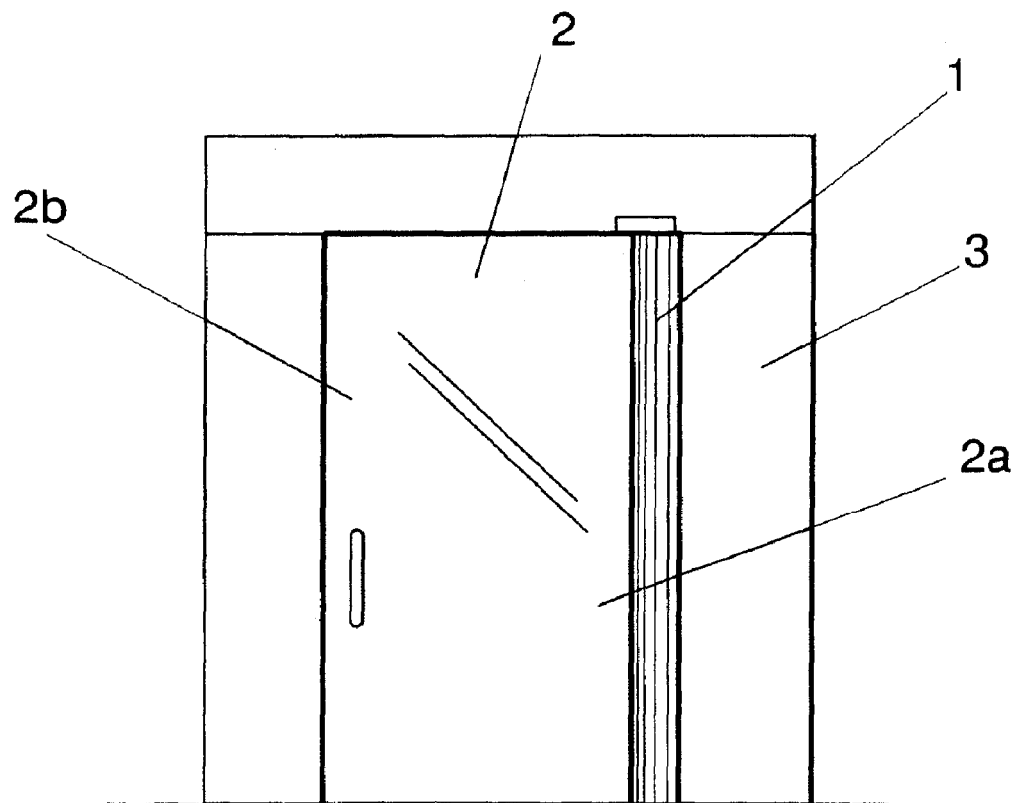


FIG. 1

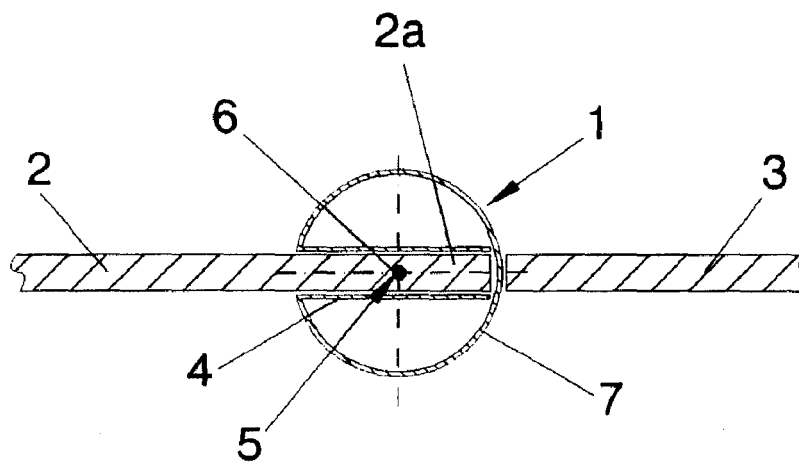


FIG. 2

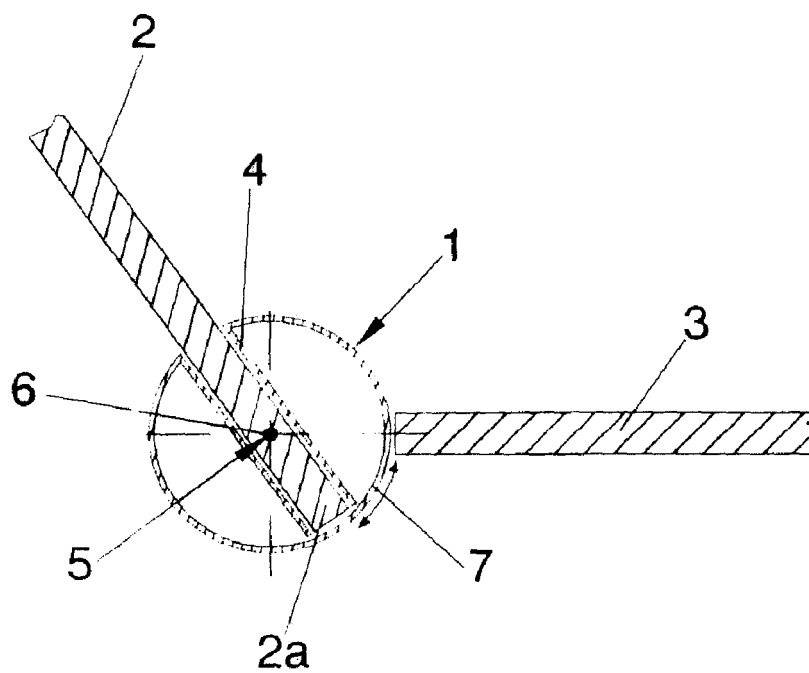


FIG. 3

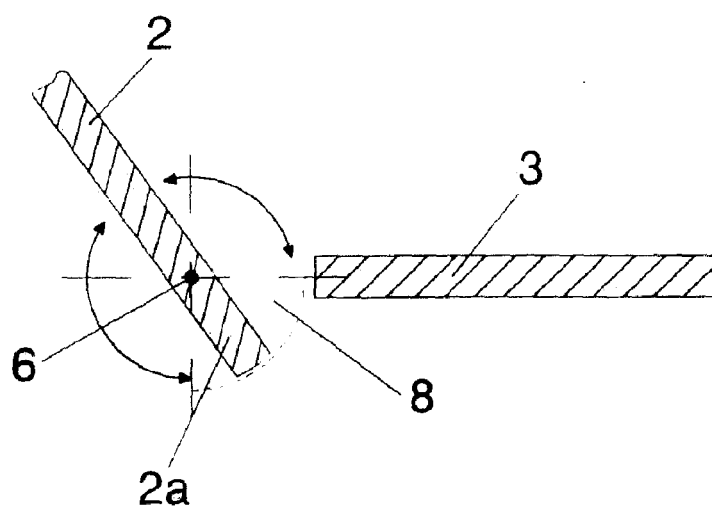


FIG. 4