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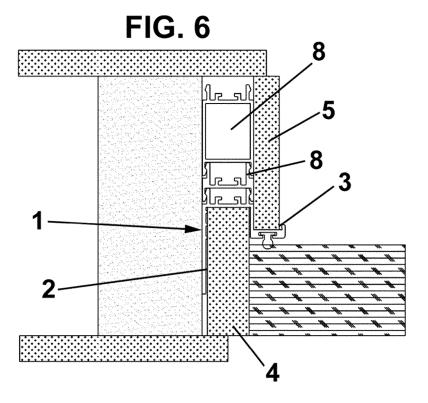
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#### (54) PROFILE FOR DOOR CASINGS AND DOOR CASING COMPRISING SAID PROFILE

(57) The present invention relates to a profile (1) for door jambs comprising a first housing (2) for a support molding and a second housing (3) for a cover molding, the first housing (2) defining a first longitudinal axis (A) and the second housing (3) defining a second longitudi-

nal axis (B), said first and second longitudinal axes (A, B) being parallel to one another.

The present invention prevents the need to provide a large number of references for forming the door jamb.



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**[0001]** The present invention relates to a profile for door jambs which prevents the need to provide a large number of references for adaption thereof to different measurements existing in civil works. Furthermore, the present invention also relates to a door jamb comprising said profile.

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#### Background of the Invention

**[0002]** A door jamb is an L-shaped part that receives the impact of the door when closing said door, also referred to as rebate or rabbet.

**[0003]** This part forming the door jamb is often manufactured from solid or composite wood; however, for civil work with special requirements, it is also manufactured from steel, aluminum, or other materials.

**[0004]** The jamb is usually fixed to a sub-frame or to a frame of a previous door that is used as a sub-frame for the new door. There are also cases in which the jamb is directly secured to the work site without the sub-frame, but this only occurs with specific technical doors.

**[0005]** The jamb may or may not house a rubber weatherstrip or a specific attachment solution with casings, such as an extendable system, a casing system with flanges, etc.

[0006] Doors which are installed on this frame usually have a straight edge and hinges or butt hinges on the edge.

**[0007]** The installation of doors without the sub-frame is performed in many countries, where a U-shaped frame securing the wall in the middle is made.

**[0008]** Furthermore, doors are usually manufactured as overlay doors, i.e., instead of having a straight edge, they have an overlay on the side where the fittings pivot. **[0009]** The large number of references constitutes a problem in a normal jamb.

**[0010]** Jambs for different wall thicknesses (usually from 60 to 155 mm, for example) and different rabbets (for a door 35, 40, and 45 mm thick) are available in warehouses. For the warehouser, this amount of references entails a significant sunk cost that is necessary to prevent the shortage of a reference and to allow it to provide service to customers.

**[0011]** Furthermore, it makes storing jamb assemblies machined for door fittings from the factory unviable. This would lead to an even higher cost, as it will be necessary to have unmachined jambs, jambs for a right-hand door, and jambs for a left-hand door, and the risk of the material becoming obsolete due to the manufacturer's machining change, the warehouseman's decision to change manufacturer, or a change in market trends.

[0012] The extendable solution makes it easier to machine the material, as it may have jambs with the minimum measurement (60 mm) and reach the required wall width with an expander part. Customers often do not like this solution because a rabbet is seen on the portion op-

posite the door esthetically speaking.

**[0013]** On the other hand, jambs with flanges allow some regulation, albeit limited, specifically, only that regulation performed by the flange. Furthermore, it is necessary to cut off the upper portion of the flange when installing the casings.

**[0014]** Therefore, an objective of the present invention is to provide a profile for door jambs which prevents the need to provide a large number of references.

#### Description of the Invention

**[0015]** Above mentioned drawbacks are solved with the profile and jamb of the invention, there being other advantages that will be described below.

**[0016]** The profile for door jambs, according to the present invention, comprises a plurality of housings, characterized in that it comprises a first housing for a support molding and a second housing for a cover molding, the first housing defining a first longitudinal axis and the second housing defining a second longitudinal axis, said first and second longitudinal axes being parallel to one another, the first and second housings being located side by side.

**[0017]** Advantageously, said first and second housings are oriented in opposite directions.

**[0018]** According to one embodiment, the profile for door jambs according to the present invention comprises a first housing groove which is preferably placed in a position opposite to that of the first or second housings.

**[0019]** Furthermore, the profile for door jambs according to the present invention comprises coupling elements which are preferably placed in a position opposite the first housing.

**[0020]** The profile for door jambs according to the present invention can also comprise a second housing groove which is preferably placed between said coupling elements.

**[0021]** The profile for door jambs according to the present invention can comprise at least one expander which can be mounted on said coupling elements.

**[0022]** In one embodiment, the profile for door jambs comprises a side partition in the second housing, comprising a plurality of weakening grooves.

5 [0023] Furthermore, the profile for door jambs and the at least one expander can comprise a plurality of holes arranged around at least one of said housings.

**[0024]** In the profile for door jambs according to the present invention, the or each expander comprises additional coupling elements and/or an additional groove.

**[0025]** According to a second aspect, the present invention also relates to a door jamb comprising a profile as described above, a support molding for a door housed in the first housing, and a cover molding housed in the second housing.

**[0026]** The profile and the jamb according to the present invention provide several advantages, such as: Reducing the amount of references required for door

jambs.

Allowing the manufacture of doors regardless of the orientations thereof (left-hand or right-hand doors). For this purpose, the molding which supports the door in the horizontal portion thereof performs a direct entry, instead of a 45°, with the vertical coming to an end on the horizontal. Therefore, with specific fittings, the door and these moldings can be turned by putting the upper portion downwards or vice versa. Allowing a frame without casings to be mounted on gypsum plasterboard. In this case, the profile is installed directly in the structure of the dry partition walls without the sub-frame. This solution leads to savings with respect to the trims of the faces of the door and to the outer face of the jamb has the same finish as the wall, since the cover molding can also be made from gypsum plasterboard. If the molding securing the door is manufactured with pre-painting, for example, it can all be painted the color of the wall and the door will be left with a different finish. Allowing the frame of the door to be completely waterproof. This allows manufacturing the moldings, both door securing molding and cover molding, from a plastic or synthetic material, making a completely waterproof frame.

Allowing sub-frames to be sold with the profile already installed, which allows significant progress during installation.

The profile allows the adaptation thereof to the installation for covering a framework for a sliding door. This solves a common problem relating to making one wall thicker than the other due to bathroom tiles, for example.

#### Brief Description of the Drawings

**[0027]** To better understand what has been set forth, drawings schematically depicting a practical embodiment only by way of non-limiting example are attached.

Figure 1 is a section view of the profile according to the present invention, according to a first embodiment;

Figure 2 is a section view of the profile according to the present invention, according to said first embodiment, in its mounting position;

Figure 3 is a section view of the profile according to the present invention, according to a second embodiment:

Figure 4 is a section view of the profile according to the present invention, according to said second embodiment, in its mounting position;

Figure 5 is a section view of the profile according to the present invention, according to a third embodiment;

Figure 6 is a section view of the profile according to the present invention, according to said third embodiment, in its mounting position;

Figure 7 is a section view of the profile according to the present invention, according to a fourth embodiment; and

Figure 8 is a section view of the profile according to the present invention, corresponding to the second embodiment, but with mounting holes and the mounting skirt.

#### Description of Preferred Embodiments

**[0028]** A jamb for doors formed by several parts, comprising the profile according to the present invention, is described below.

**[0029]** The profile 1 according to a present invention is preferably made of aluminum, although it could be made of any suitable extruded or bent material, for example, PVC or steel.

[0030] The profile 1 comprises a first housing 2 receiving, on one hand, a support molding 4 of the door, and a second housing 3 receiving, on the other hand, a cover molding 5, their longitudinal axes A, B being parallel to one another, and the first and second housings 2, 3 being located side by side. In other words, the first housing 2 is laterally shifted with respect to the second housing 3.

**[0031]** Furthermore, it can also comprise a first housing groove 6 for inserting a rubber weatherstrip.

**[0032]** Furthermore, according to an additional embodiment depicted in Figures 3 to 6, coupling elements 7 allow the coupling of an expander 8 which is used as a substructure of the jamb, which is formed by a profile and a wooden part, for example.

**[0033]** According to the embodiment depicted in Figures 3 to 6, the profile 1 can also comprise a second housing groove 9 for housing a bracket (not shown in the drawings). It must be indicated that this second housing groove may also be included in the embodiment of Figures 1 and 2.

**[0034]** A support molding 4 of the door which can be an overlay door or a door with a straight edge is placed in said first housing 2. This support molding 4 can have, though it is not indispensable, the same finish as the door and it is the part which receives the fitting machining in order to secure it.

**[0035]** The support molding 4 preferably has a rectangular section as shown in the drawings, although it may also have an L-shaped section.

**[0036]** The depth of the support molding 4 will be determined by the thickness of the door and of the type of installation desired.

**[0037]** A cover molding 5 which can have the same finish as the door is placed in said second housing 3; however, said cover molding 5 could also be a board for dry partition walls, a fiberboard, or the like.

**[0038]** This cover molding 5 serves to cover the portion of the profile 1 that is not visible and the entire substructure that has been installed, if applicable.

**[0039]** According to a standard installation, the section of the cover molding 5 is rectangular, although it may have an L-shaped section and a standardized width greater than the area to be covered, which in the installation is cut longitudinally if needed so as to be adapted

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to the required measurement.

**[0040]** The profile 1 according to the present invention can also comprise one or more expanders 8, as shown in Figures 3 to 6. The expanders 8 allow making a substructure until reaching the required wall thickness, as shown in Figures 4 and 6.

**[0041]** Said expanders 8 are preferably made of aluminum, although they could be made of any other suitable material, such as aluminum and wood or PVC. Furthermore, the expanders 8 can have the same or different dimensions.

**[0042]** For example, as shown in Figure 5, this profile 1 comprises an expander having a greater length than the other, and preferably comprises at one of its ends an additional housing groove 11 for housing a bracket (not depicted) and additional coupling elements 10.

**[0043]** Figure 7 shows a profile according to the present invention, according to an additional embodiment.

**[0044]** In this embodiment, the profile 1 comprises a side partition 14 of one of the housings 2, 3, such as the second housing 3. This side partition 14 comprises a plurality of weakening grooves 12 which allow adjusting the total length of the profile 1 as desired by cutting or bending this side partition 14 by means of one of these weakening grooves 12.

**[0045]** Figure 8 shows another embodiment of the profile 1 according to the present invention, comprising a plurality of holes 13 for the installation of additional elements, such as skirts or the like. Said holes 13 can be arranged around the first and/or second housings 2, 3 and/or in said expanders 8.

**[0046]** Although reference has been made to a specific embodiment of the invention, it is obvious for one skilled in the art that the described profile is susceptible to a number of variations and modifications, and that all the mentioned details can be replaced with other technically equivalent details without departing from the scope of protection defined by the attached claims.

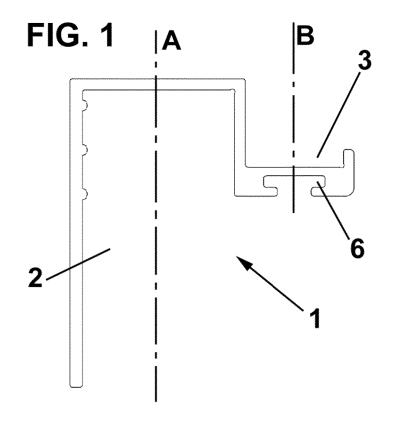
Claims

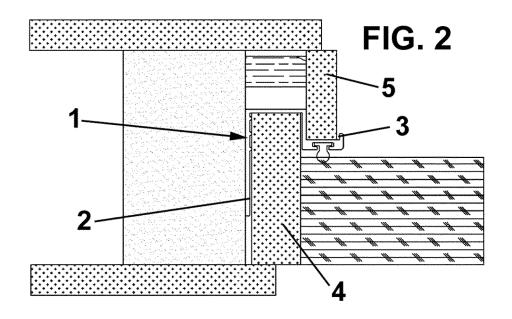
- 1. Profile (1) for door jambs, comprising a plurality of housings, **characterized in that** it comprises a first housing (2) for a support molding and a second housing (3) for a cover molding, the first housing (2) defining a first longitudinal axis (A) and the second housing (3) defining a second longitudinal axis (B), said first and second longitudinal axes (A, B) being parallel to one another, the first and second housings (2, 3) being located side by side.
- Profile (1) for door jambs according to claim 1, wherein said first and second housings (2, 3) are oriented 55 in opposite directions.
- 3. Profile (1) for door jambs according to claim 1, com-

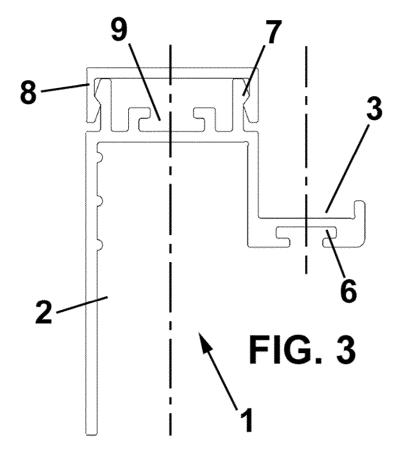
prising a first housing groove (6).

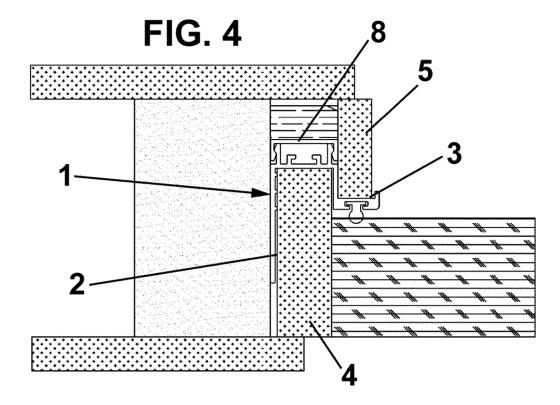
- 4. Profile (1) for door jambs according to claim 3, wherein said first housing groove (6) is placed in a position opposite to that of the first or second housings (2, 3).
- **5.** Profile (1) for door jambs according to claim 1, comprising coupling elements (7).
- Of the profile (1) for door jambs according to claim 5, wherein said coupling elements (7) are placed in a position opposite the first housing (2).
  - **7.** Profile (1) for door jambs according to claim 1, comprising a second housing groove (9).
  - **8.** Profile (1) for door jambs according to claims 5 and 7, wherein said second housing groove (9) is placed between said coupling elements (7).
  - **9.** Profile (1) for door jambs according to claim 1, comprising at least one expander (8).
  - **10.** Profile (1) for door jambs according to claims 5 and 9, wherein said at least one expander (8) is mounted on said coupling elements (7).
    - 11. Profile (1) for door jambs according to claim 1, comprising a side partition (14) in one of said first or second housings (2, 3), comprising a plurality of weakening grooves (12).
    - **12.** Profile (1) for door jambs according to claim 1, comprising a plurality of mounting holes (13) arranged around at least one of said housings (2, 3).
    - **13.** Profile (1) for door jambs according to claim 9, wherein said at least one expander (8) comprises at least one hole (13).
    - **14.** Profile (1) for door jambs according to claim 9, wherein each or the expander (8) comprises additional coupling elements (10) and/or an additional groove (11).
- 45 15. Door jamb, characterized in that it comprises a profile (1) according to any one of the preceding claims, a support molding (4) for a door housed in the first housing (2) and a cover molding (5) housed in the second housing (3).

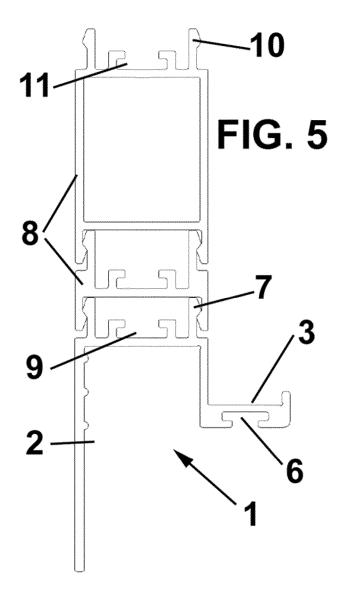
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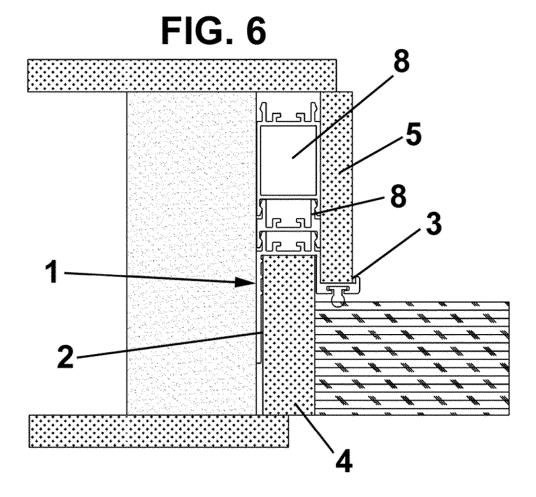


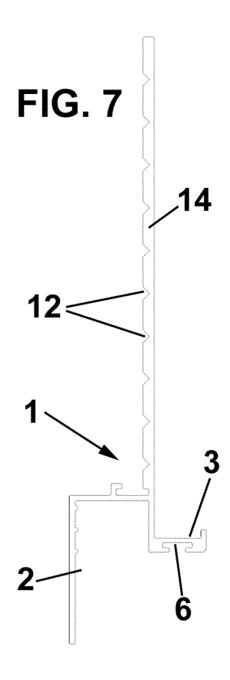


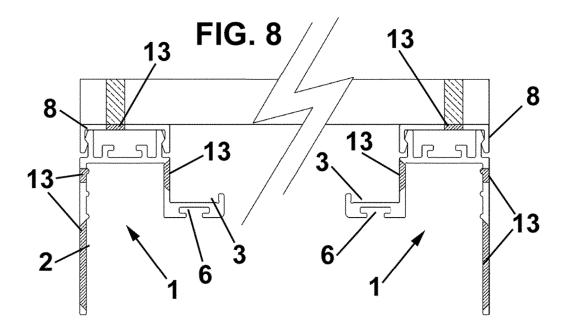












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# INTERNATIONAL SEARCH REPORT

International application No PCT/ES2018/070453

	·	C1/E32016/0/0455				
5	A. CLASSIFICATION OF SUBJECT MATTER INV. E06B1/10 E06B1/34 E06B1/32 E06B1/30 E06B1/30 E06B1/30	06B1/20				
	According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED						
10	Minimum documentation searched (classification system followed by classification symbols) E06B					
	Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)					
15	EPO-Internal, WPI Data					
	C. DOCUMENTS CONSIDERED TO BE RELEVANT					
20	Category* Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.				
25	X EP 2 400 098 A2 (PUR MOEBELPROFILE VERTRIEBS GMBH [DE]) 28 December 2011 (2011-12-28) figure 1	1-4,15				
30	X WO 99/32751 A1 (JAMES HARDIE RES PTY LTD [AU]; ALLEN ROBERT ANDREW [AU]; SHARPELS COLI) 1 July 1999 (1999-07-01) figure 12	1-4,15				
	X DE 20 2015 101526 U1 (LICHT & HARMONIE GLASTÜREN GMBH [DE]) 30 April 2015 (2015-04-30) figures 1-4, 5, 6	1-15				
35	X US 2007/022699 A1 (WANG GUO-CHI [TW]) 1 February 2007 (2007-02-01) figures 2,3	1,2,12, 15				
40	X Further documents are listed in the continuation of Box C. X See patent family annex.					
	* Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent but published on or after the international  "X" document of particular relevance; the companies the particular relevance re	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be</li> </ul>				
45	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed  "A" document or cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone on sidered to involve an inventive step when the document is combined with one or more other such documents, such combined with one or more other such documents, such combined with one or more other such documents, such combined with one or more other such documents, such combined with one or more other such documents, such combined with one or more other such documents, such combined with one or more other such documents, such combined with one or more other such documents of the same patent family					
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Ju	15 February 2019 13/03/2019					
55	Name and mailing address of the ISA/  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016  Jülich, Saskia					
55	Form PCT/ISA/210 (second sheet) (April 2005)					

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International application No
PCT/ES2018/070453

	C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT					
5	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
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Information on patent family members

International application No PCT/ES2018/070453

5	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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