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(54) **FRONT PART OF A STEP**

(57) It has a head (1) with inverted shoring steps (2), with rounded end (3) and grooved non-slip horizontal support (4), a wide corner undulating recess (5), followed by a central body (7), either flat and which incor-

porates or not an adhesive or provided with a wide external recess (6) and, finally, a base (8) projecting from the front, irregularly stepped, as well as a vertical alignment of dovetailed rear protuberances (9) for securing.

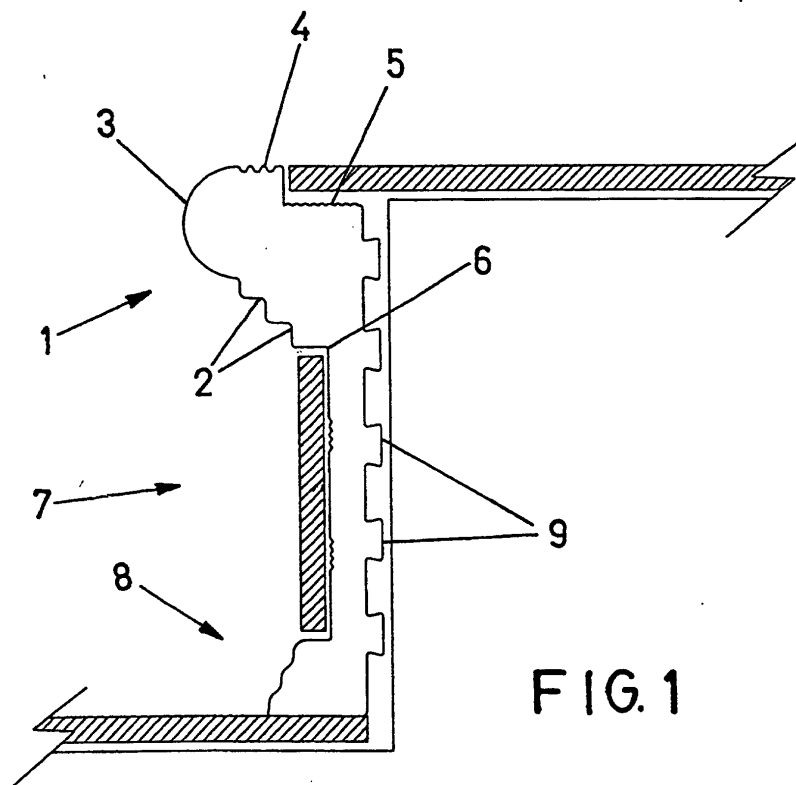


FIG. 1

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Description

OBJECT OF THE INVENTION

[0001] The invention proposed herein consists of a step front, of among the different step fronts that have special pieces projecting from their upper external dihedron.

[0002] This invention is characterized in a special construction of the front based on a vertical piece with a head, for upper lodging of the projecting segment of the conventional stair, provided with upper grooves, followed by an external recessed segment that houses a step coping, supported in turn on the step of the base, the front also being provided with a vertical alignment dovetailed securing projections.

BACKGROUND OF THE INVENTION

[0003] Among the finishes for the fronts of steps mention can be made of some simple systems, a reproduction of the outline of the stair in some steps that are arranged on the edge of the step, leaving a projecting head provided with a lower protuberance, for housing and securing the vertical segment of stair that covers the riser, to face the stair tread and which rests on the other consecutive piece of the step.

[0004] This construction, ideal for manufacturers of stairs and steps, suffers from the defect of a degree of breakage resulting from the shearing effect, produced when the user rests on the edge of the step, with the subsequent breaking of the head of the stair.

[0005] On the other hand, the manufacturers exclusively of tiles can only recur the finished disposition of the stair with whole pieces or segments thereof, with the problem of the poor aesthetics, even when if care is taken in the disposition of supporting the edge of the stair that serves to cover the tread with which the riser is covered from its support on the step below, there is no additional problem of risk of detachment or breakage of any of the steps implicated in that external double dihedron.

[0006] Another solution for these manufacturers is that of including a special piece, in the style of the borders of their own catalogue, although asymmetric and provided with an internal protuberance, that fits under the step that serves as the stair, housed in turn in an upper recess antagonistic of this piece, that rests on another step segment, cut to a lesser height to compensate the height of this piece.

[0007] The inconvenience of this finish is the easiness with which this piece may break, in the projecting corner segment, also due to the user supporting himself thereon and because of the aforementioned shearing effect.

[0008] The applicant is unaware of the existence of stair fronts with the characteristics of that now described hereunder.

DESCRIPTION OF THE INVENTION

[0009] The invention object of the present specification relates to a stair front, of among all those different stair fronts that have some special pieces projecting from their upper external dihedron, although it is not constructed by way of an upper head of the front but rather it covers the entirety of the stair riser.

[0010] This invention is characterized in a special construction of the front, not subjected to the shearing effect, based on a vertical piece provided with an upper head, multi-stepped and protruding above, for the purpose of shoring the forces to which the rounded edge of this head is subjected, which finishes these inverted steps.

[0011] This rounded segment is followed by another horizontal one grooved to prevent the user from slipping and, next, a wide corner recess, for upper lodging of the projecting segment of the conventional stair.

[0012] The vertical segment of the front can be flat and have applied thereto or not later an adhesive film with the figure of the stair, as well as being able to have a wide external recess that houses a stair coping, in accord with the upper covering stair and that rests, in turn, on the step of the projecting base of the front, in irregular stepping, also to better withstand forces in the assembly.

[0013] Likewise the front is provided, in its vertical back face with a vertical alignment of dovetailed securing protuberances that facilitate the securing of the front to the stair riser and that reach from the projection of the upper part of the base to the proximity of the extreme edge of the upper recess.

[0014] The present descriptive specification is completed with a set of drawings that illustrate but in no way restrict the preferred embodiment of the invention.

Figure 1 shows a schematic cross section in elevation of the front of this preferred embodiment of the invention, for the purpose of better observing the integral parts thereof.

Figure 2 is a sectional view in perspective of the invention.

PREFERRED EMBODIMENT OF THE INVENTION

[0015] In the light of the foregoing exposition, the present invention relates to a stair front, of among the different stair fronts in projecting pieces from their upper external dihedron, characterized in that it has a head (1) with inverted supporting steps (2), with rounded end (3) and grooved non-slip horizontal support (4), a wide corner undulating recess (5), followed by a central body (7), either flat and which incorporates or not an adhesive or provided of a wide external recess (6) and, finally, a base (8) projecting from the front, irregularly stepped, as well as a vertical alignment of dovetailed rear protuberances (9) for securing.

[0016] The essential nature of this invention is not altered by variations in materials, form, size and disposition of the component elements, described in a non-restrictive manner, this being sufficient for an expert to proceed to its reproduction.

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Claims

1. Stair front, of among the different stair fronts in pieces projecting from their upper external dihedron, **characterized in that** it has a head (1) with inverted shoring steps (2), with rounded end (3) and grooved non-slip horizontal support (4), a wide comer undulating recess (5), followed by a central body (7), either flat and which incorporates or not an adhesive or provided with a wide external recess (6) and, finally, a base (8) projecting from the front, irregularly stepped, as well as a vertical alignment of dove-tailed rear protuberances (9) for securing.

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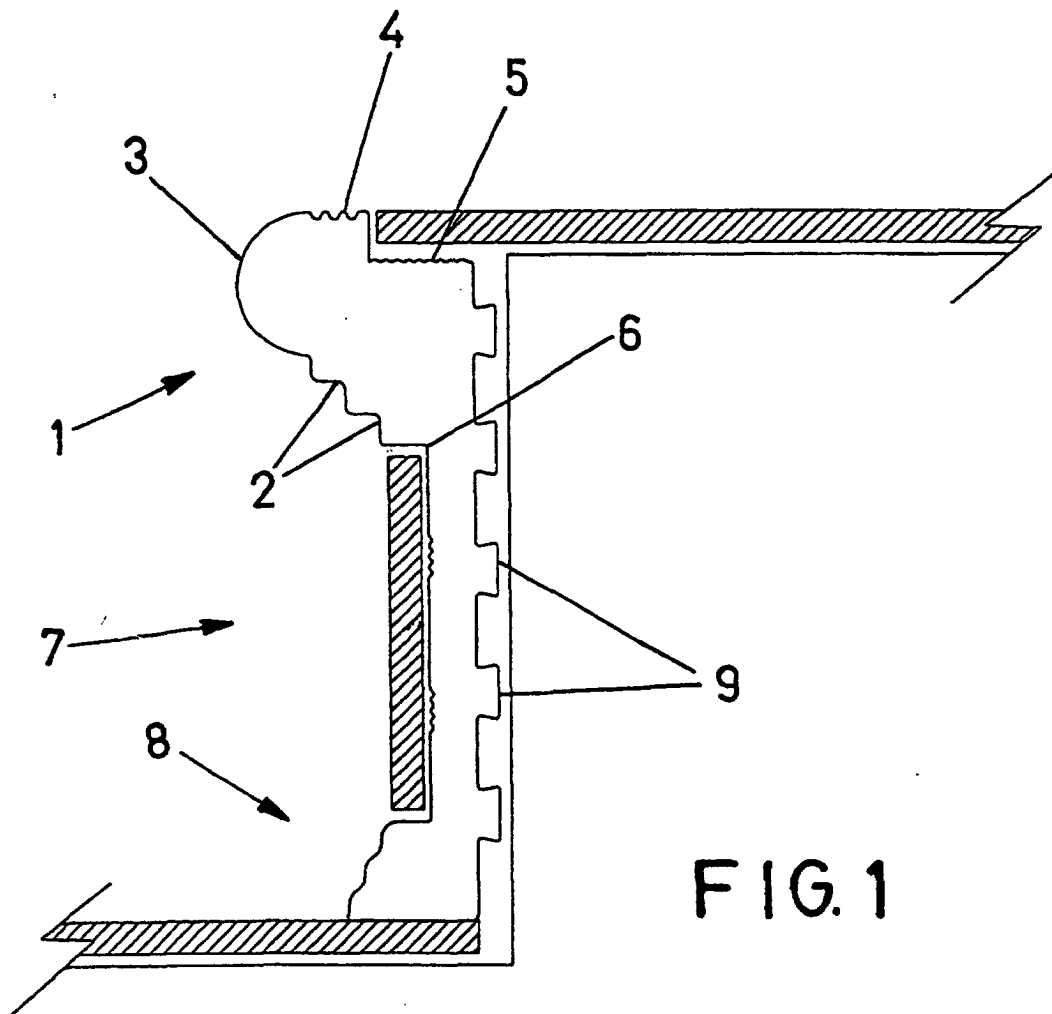
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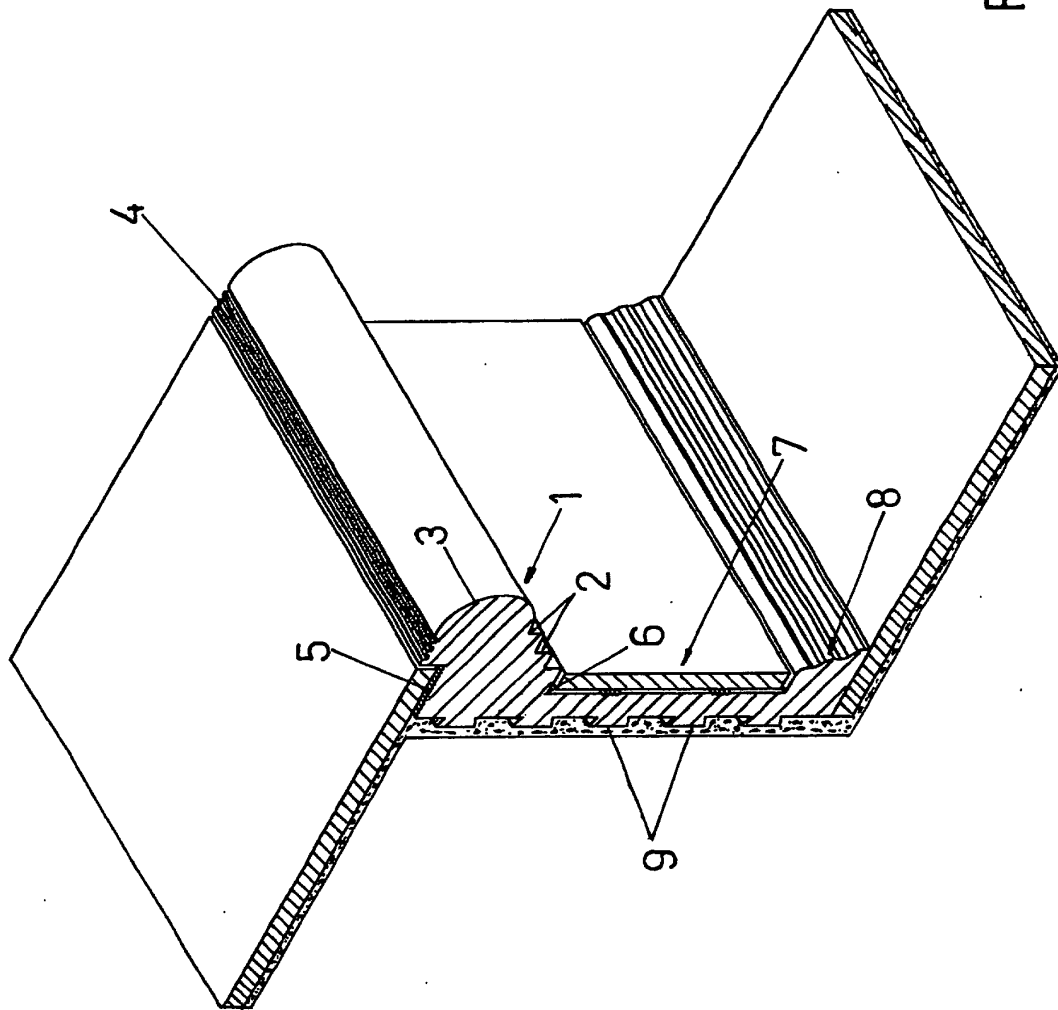


FIG. 2

INTERNATIONAL SEARCH REPORT

International Application No

PCT/ES 02/00184

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 E04F11/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
IPC 7 E04F

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 practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DE 196 32 301 A (BUERKNER LUTZ) 25 September 1997 (1997-09-25) abstract; figures ---	1
Y	EP 0 784 132 A (PASTORELLI CERAMICHE SPA) 16 July 1997 (1997-07-16) column 3, line 37 -column 4, line 47; figure 3 ---	1
A	US 2 881 485 A (LEO HYMAN) 14 April 1959 (1959-04-14) figure 8 ---	1
A	US 1 681 073 A (ASHLEY WELCOME HAROLD) 14 August 1928 (1928-08-14) figure 6 --- -/--	1

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

2 July 2002

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09. 08. 2002

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/ES 02/00184

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 562 691 A (RICHARD LAURENT) 16 November 1923 (1923-11-16) figure 2 -----	1

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/ES 02/00184

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FR 562691	A	16-11-1923	NONE	
