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(11)

EP 1 152 096 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
07.11.2001 Bulletin 2001/45

(51) Int Cl.7: **E04C 2/292**

(21) Application number: **01500042.5**

(22) Date of filing: **20.02.2001**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

(71) Applicant: **Saint-Gobain Cristaleria, S.A.**
28046 Madrid (ES)

(72) Inventor: **Rodero Antunez, Carlos**
19200 Azuqueca de Henares (Guadalajara) (ES)

(30) Priority: **20.03.2000 ES 200000663**

(74) Representative: **Plaza Fernandez-Villa, Luis**
Francisco Gervas, No. 11-3o-D
28020 Madrid (ES)

(54) **The perfected hidden union applicable to insulation panels and similar products**

(57) The perfected hidden union applicable to insulation panels and similar products (1) consists of two parts (2) and (3) that are made up of an exterior plate (21) and (31) respectively, internal insulation (23) and

(33) respectively, and an interior plate (22) and (32) respectively, provided that the portions (24) and (25) of part (2) complement the regions (34) and (35) of part (3), and that a screw (4) exists in order to attach the unit to the building.

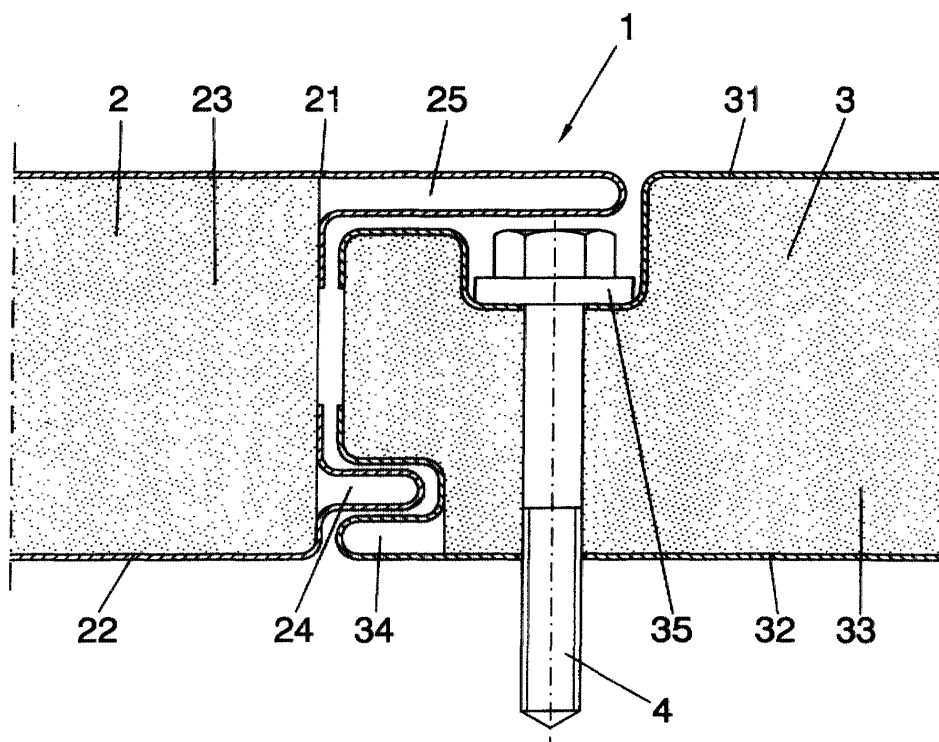


FIG. 1

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Description

AIM OF THE INVENTION

[0001] This descriptive document refers to an application for an Invention Patent relative to a perfected hidden union applicable to insulation panels and similar products whose fundamental interest lies in providing a means of connection that permits the quick union of distinct elements without the necessity of installing cover strips that hide the screw housing used in the assembly of the constitutive parts.

FIELD OF THE INVENTION

[0002] This invention is applied to the industry dedicated to the fabrication of revetment, insulation and other related types of panels with rock wool insulation.

ANTECEDENTS FOR THE INVENTION

[0003] Means of connecting that allow the union of parts are known, given that the said means of configuration includes a male element in one of the parts involved in the union and a female element that complements the male element, allowing the first part to fit into the second.

[0004] Likewise, the possibility of using screws that develop the same operation as that of the match-board, using for its construction the appropriate drills is also known.

[0005] However, it would be desirable to have the benefits that are deduced from the first proposed model in conjunction with the positive aspects that originate from the second type of union displayed.

[0006] The applicant has no knowledge of the existence of unions that include the properties and improvements that are present in this invention.

DESCRIPTION OF THE INVENTION

[0007] The perfected hidden union applicable to insulation panels and similar products presents a series of advantages that require a more detailed explanation.

[0008] First of all, it is appropriate to indicate that the screw housing of the union between panels remains hidden without using cover strips, thus making this aspect of the key to the invention.

[0009] Furthermore, the proposed type of union allows the facings and coverings to be realized without delay, thus making the installation more time efficient.

[0010] To be specific, the invention itself consists of an elongated exterior plate, a rock wool insulation and an elongated interior plate.

[0011] This configuration arranges the parts used in the connection so that a protrusion emerges from one of the parts and an indentation results in the other part, allowing for the perfect fit of both parts as they are

brought together.

[0012] The screw permits the unit that results from the union to be attached to a supporting element.

[0013] The configuration of the parts makes the presence of cover strips not necessary, given that the incorporation of the screw is not visible.

[0014] The material housed between the two plates puts a significant amount of pressure on these limiting exterior elements.

DESCRIPTION OF THE DIAGRAMS

[0015] In order to complement and clarify the written description of the characteristics of the invention, there is an essential drawing attached, which is to be used as a visual aide in understanding the invention and as a limiting model of it, in which the following is represented:

[0016] The figure number 1 shows a cross section of the perfected hidden union applicable to insulation panels and similar products, in which it is possible to appreciate each and every one of its constitutive elements, as well as their arrangement.

PREFERRED REALIZATION OF THE INVENTION

[0017] The perfected hidden union applicable to insulation panels and similar products(1) is formed by two elements (2) and (3) and a conventional screw (4).

[0018] In part (2) there is a distinction between an elongated exterior plate (21), rock wool insulation (23) and an elongated interior plate (22).

[0019] At the same time, the invention relies upon a portion (24) that originates from part (2) and that fits together with element (3).

[0020] There is also a protrusion (25) that avoids the need for cover strips, as the extension occupies all of the space defined by the housing (35).

[0021] The second element (3) presents an analogous configuration to that of the first part (2), which incorporates an elongated exterior plate (31), interior insulation (33) and an elongated structure plate (32), which differentiates it by the fact that it has a complementary indentation (34) to the protrusion (24) and by containing an enclosure (35) where the head of the screw is housed (4).

[0022] In either one of the elements (2) and (3), one must contemplate the existence of insulation (23) and (33) respectively, made from rock wool, glass or rock, which is stuck to and places great pressure on the length of the metal plate (21) and (22), (31) and (32) respectively.

[0023] In summary, the invention is arranged in two elements (2) and (3), which are formed by exterior plates (21) and (31) respectively, internal insulation (23) and (33) respectively, interior plates (22) and (32) respectively, existing in part (2) a portion (24) and a region (25) that occupy the spaces (34) and (35) respectively, as defined by part (3), which includes a screw (4) that at-

taches the unit to an element that sustains it and that forms part of the building.

[0024] It should be pointed out that the areas referenced with (24), (25) and (34) lack any type of insulation in their interiors, thus forming empty spaces that are the result of bending the plate. 5

[0025] It is not necessary to describe more extensively for any expert in the field to understand the reach of the invention and the advantages derived from it.

[0026] The materials, shape, size and arrangement of the elements may be susceptible to variation, as long as the variation does not alter the essential aspects of the invention. 10

[0027] The terms described in this document should always be understood in the broadest sense and should not be in any way limiting. 15

Claims

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1. The perfected hidden union applicable to insulation panels and similar products (1) fabricated with rock wool insulation is **characterized by** being constructed from two elements (2) and (3), which are both made up of an exterior plate (21) and (31) respectively, an internal rock wool insulation (23) and (33) respectively, which is stuck to the length of, and places great pressure on, the anterior metal plates (23) and (33) respectively, and to the elongated interior plates (22) and (32) respectively, that enclose the unit, which has a portion (24) of part (2) that fits tightly into the indentation (34) in part (3), and that has a protrusion (25) that covers the space defined by the region (35) where the head of the screw is housed and with which (4) the resulting unit is attached to the building. 25 30 35

2. The perfected hidden union applicable to insulation panels and similar products (1), according to the first claim, is **characterized by** the extremes of the panels where pliable areas exist (24), (25) and (34), which respectively lack rock wool insulation in their interiors. 40

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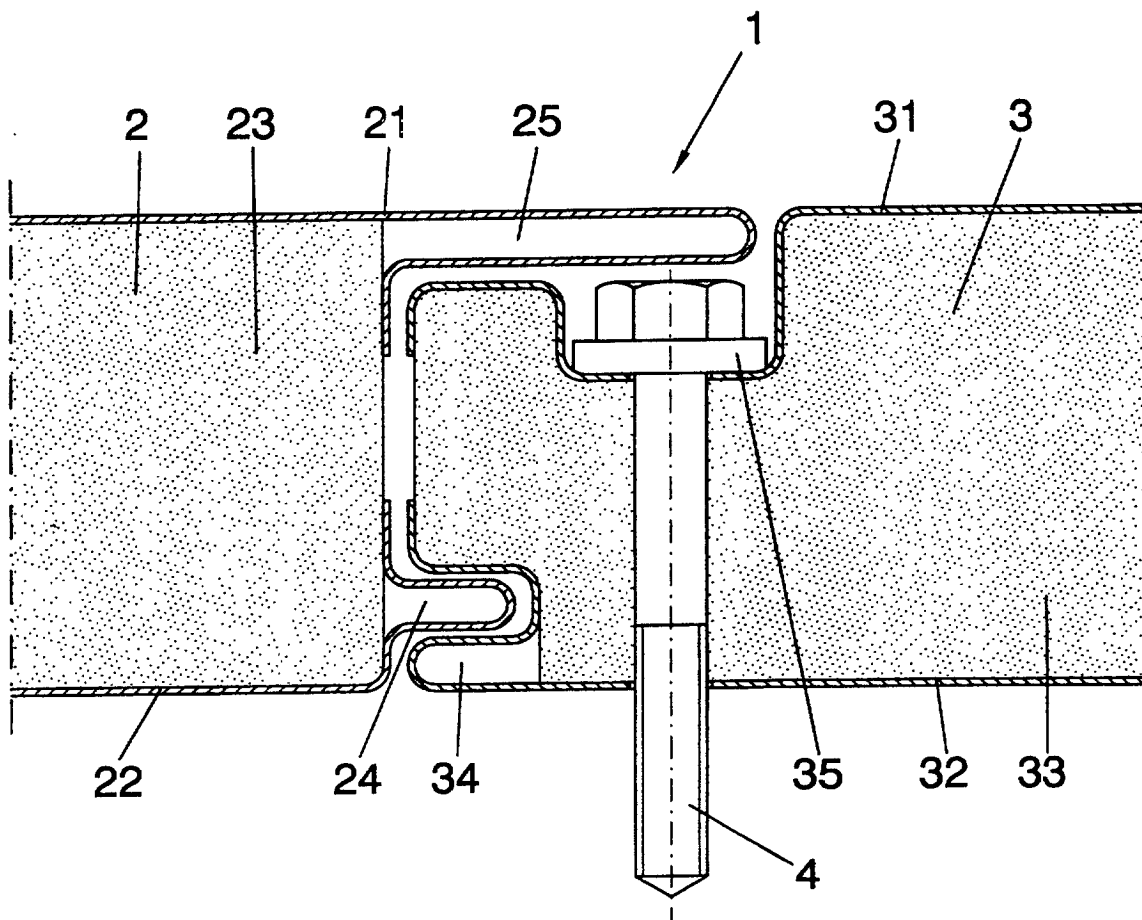


FIG. 1