



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
25.01.2006 Bulletin 2006/04

(51) Int Cl.:
E04C 1/42 (2006.01)

(21) Application number: **05385002.0**

(22) Date of filing: **23.02.2005**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR**
Designated Extension States:
AL BA HR LV MK YU

• **Pastor Soler, Francisco Javier**
46980 Valencia (ES)

(72) Inventors:
• **Galbis Linero, Francisco Javier**
46980 Valencia (ES)
• **Pastor Soler, Francisco Javier**
46980 Valencia (ES)

(30) Priority: **26.02.2004 ES 200400448 U**

(71) Applicants:
• **Galbis Linero, Francisco Javier**
46980 Valencia (ES)

(74) Representative: **Sanz-Bermell Martinez, Alejandro**
C/Játiva, 4
46002 Valencia (ES)

(54) **Structural profile for building**

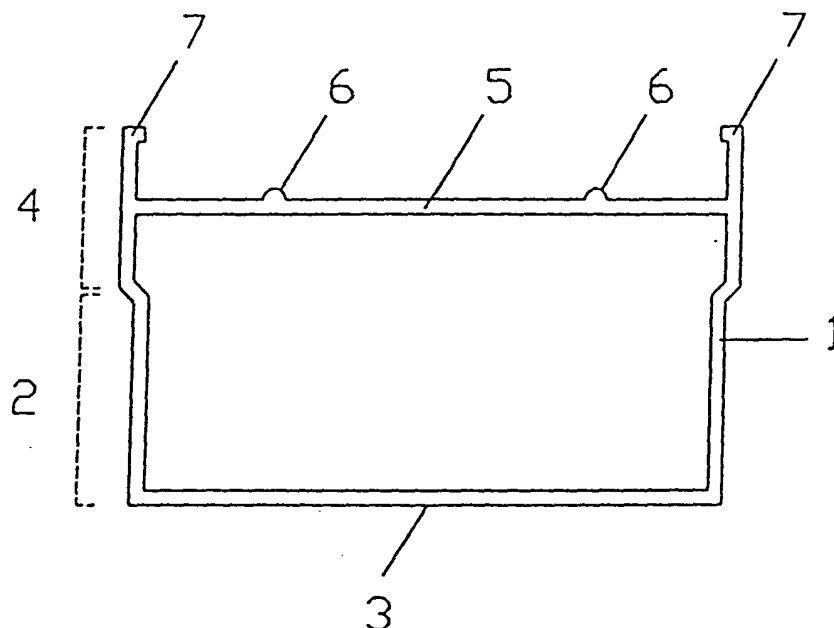
(57) The aim of the invention refers to any system making use of aluminium with glass bricks for building compact modular structures, walls and partition walls, with no need for cement or other similar items.

The structure consists of a structural grid formed of a set of short aluminium profiles defining recesses in which glass bricks are inserted constituting the internal

structure of the system, all embedded in the outer perimeter frame with a square or rectangular section, joined together perpendicularly and at the ends.

The versatility of the system allows other modular compact constructions (tables, shelving, pillars ...etc) to be created using the same aluminium profiles and glass bricks for this purpose.

Fig. 1



Description

[0001] The object of this invention, as stated in the initial statement of this descriptive report, consists of a "Structural profile for building" preferably used in modular building of walls with glass bricks with no need for cement or other similar securing items.

[0002] The techniques used until now in building vertical walls with glass bricks require diverse metal profiles allowing glass bricks to be fixed with no need to use any adhesive material or metal reinforcement rods, considerably reducing their cost and facilitating compositions with no need for qualified professionals.

[0003] These walls are thus arranged in a structural grid formed of a set of short and long profiles which define recesses in which the glass bricks are inserted, with the whole assembly being set in a trim frame then embedded in an outer frame.

[0004] In general the framework consists of an association of square or rectangular section pieces, joined together perpendicularly or by their ends, defining the perimeter of the wall and seated directly on the plane of the work, either the floor or a wall. The trim frame is fitted against the frame and consists of an association of "H" section pieces, joined together perpendicularly and at their ends. Both items constitute the seating of the wall.

[0005] The new profile has an ingenious arrangement thanks to which a single item carries out the same functions of frame and trim frame with the undoubted advantages involved by this as regards easier installation and cutting costs.

[0006] The structural profile covered by this invention more specifically consists of a tubular parallelepiped body in which two differentiated areas can be appreciated.

[0007] The first of these areas is the one that plays the role of frame in which a section can be seen with a closed core of general rectangular area, whose top suddenly widens out and whose lower outer side fits on the surface acting as a support for the construction.

[0008] The second area acts as a trim frame and is the part that comes into contact with the glass bricks. It starts just in the widening section of the part and is in a general H shape, having a small symmetrical projection on the outer face of the horizontal section, on which the glass brick rests. The lateral tabs in this zone acting as a trim frame have edges facing inwards, whose function is to secure the glass brick properly, thus ensuring a perfect layout of the modular construction.

[0009] The installation of the structural profile can basically be performed in two positions: horizontal, resting against the floor or the ceiling of the place where the glass wall is going to be erected and vertically, resting against the walls.

DESCRIPTIONS OF THE WALLS

[0010] In order to illustrate what has been stated so

far, drawings are enclosed with this descriptive report, forming an integral part of this, simply as illustrations of an embodiment and not limiting the practical possibilities of the invention.

[0011] In these drawings Figure 1 corresponds to the front view of the section of the invention.

[0012] Figure 2 corresponds to a view in space to illustrate the direction of the length of the extrusion (at will) of the "structural profile for building".

DESCRIPTION OF A PRACTICAL CASE

[0013] This invention consists of a structural profile for building consisting of a parallelepiped tubular body (1) in which one can appreciate a zone for fitting to the ground or ceiling (2) whose lower outer side (3) fits on the surface acting as a support for the construction, and a zone for seating the glass bricks (4) generally in H shape, which has two small symmetrical projections (6) positioned in the outer face of the horizontal section (5) on which the glass brick rests. The lateral tabs of this zone acting as a trim frame have projections (7) facing inwards, whose function is to hold the brick properly, thus ensuring a perfect layout of the modular construction.

Claims

1. "Structural profile for building" used preferably in the modular construction of walls with glass bricks with no need for cement or other similar securing items to replace conventional frame and trim frame profiles, essentially **characterised in that** this consists of a tubular body, preferentially parallelepiped-shaped, in which one can appreciate a zone for fitting to the floor or ceiling of straight walls whose outer lower side is intended to rest on the surface which acts as a support for the construction, and a zone for seating the glass bricks, generally H-shaped, which has small symmetrical projections positioned in the outer side of the horizontal section as well as projections facing the inside of the profile, set at the ends of the lateral tabs in this zone.

Fig. 1

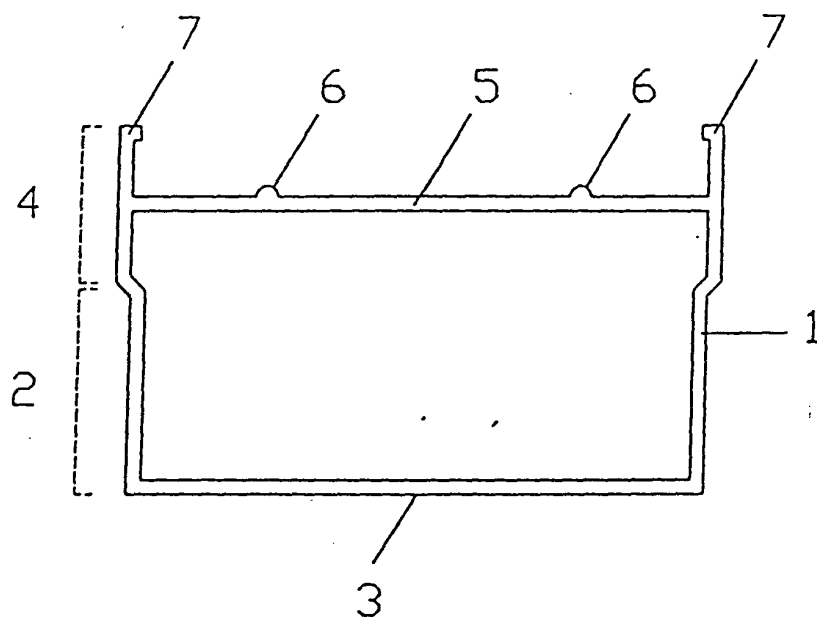


Fig. 2

