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(54) **Improved cell house**

(57) Improved cell house consisting of aluminium profiles (12) and (13), constituting a lower and a upper zone, respectively, joined together by means of anchoring elements (16) and (16'), presenting a corner arrangement formed by a outer part (3) and inner part (3'), the lower profiles (12) having projections (12'), against which inner profiles (14) constituting a floor support (17) lean, having fixing profiles (16) and (16'), similar one to other, having different length, and presenting support elements (8) at the upper part, on which panels (5), filled with insulating material, are located.

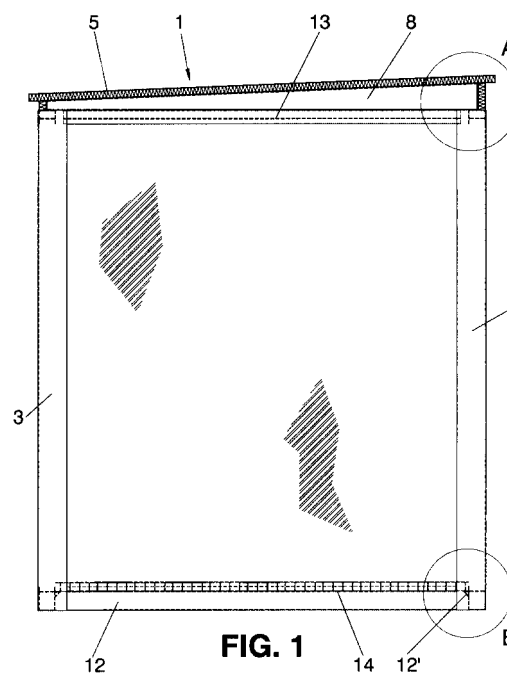


FIG. 1

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Description

BACKGROUND OF THE INVENTION

[0001] The present specification refers to an application for a Model of Utility related to an improved cell house, the evident purpose of which is to provide, starting from its construction, incorporation, protection and maintenance of different telecommunications equipments, which, duly installed inside, can be overhauled, the cell house, in the strict sense, and on the lines of its characteristics, being able to be configured according to diverse longitudinal and wideness measures, due to the incorporation -as element supporting the roof, and configuring its structure of fixation- of elements frontally adopting an omega shape, and presenting an increasing thickness from one end to the other end, so obtaining a shed roof, which can be implemented with a double sloping roof by confronting the elements supporting the roof at the area of greater thickness.

[0002] The cell house in question, owing to its structural characteristics, allows it to be adapted to the particular features of the elements to be protected.

[0003] The invention is constructed starting from aluminium or similar profiles, which joined together and implemented with insulating panels configuring partition walls, lower and upper zones, configure a fully isolated house, with an access door and, optionally, windows.

FIELD OF THE INVENTION

[0004] This invention will find application in the industry dedicated to the manufacture of modular constructions, preferably huts, installation maintenance houses, telecommunications houses, and similar.

RELATED ART

[0005] The applicant is aware of the existence, at present, of a great amount of houses configured as workshops, offices, dressing rooms, and first-aid, all them reflecting a standard structure, going from a container configuration to prefabricated elements with transport links above to make easy their lifting and lowering.

[0006] The applicant is aware of the existence of some houses erected "in situ", or preconstructed by a specialized industry, to be later implemented or complemented wherein they are erected.

[0007] Nevertheless, the applicant is not aware of the existence, at present, of a cell house being capable of presenting different longitudinal and transverse measures, without altering the general characteristics of the constructive parts used in the invention.

SUMMARY OF THE INVENTION

[0008] The improved cell house as proposed by the

invention is configured itself like an evident novelty in its specific field of application, presenting modular characteristics which, implemented as anchorage and fixing links, offer the possibility of attaining the construction of a house which can vary as for longitudinal and transverse measures, using, nevertheless, the same elements in its construction, the only modification being that these elements are to be cut in order to adapt themselves to the general measures designed to the cell house.

[0009] In a most concrete way, the improved cell house of the invention is constituted starting from a framework or frame designed to be incorporated in its lower portion, said frame being implemented at the central zone with elements constituting the floor or bottom of the cell house, the element forming the corners presenting suitable means to fix the lateral elements, - said means being configured as couplings and quick fixing areas, making easy a fast assembly, the lower profiles having floor supporting means, and the panels constituting insulating walls and sides at the inner area, apart from the corresponding means to place doors and windows.

[0010] The fixing of the roof is performed by using appreciably lengthened elements, presenting, in a front view, an omega shape, adopting a lateral configuration of a trapeze, presenting a lower straight base, straight sides of differentiated height, and an inclined upper area.

[0011] In synthesis, these elements have an increasing - thickness body going from the lesser thickness end to the opposite one

[0012] As a result of the use of these elements for supporting the roof in the strict sense, it is possible that the cell house has a sloping roof, i.e. a shed roof, which, optionally, can be complemented as a double sloping roof by facing the roof supporting beams at the higher zone, obviously after performing the corresponding cuts in order to delimit the appropriate measurements of the cell house in which they are incorporated.

DESCRIPTION OF THE DRAWINGS

[0013] In order to complement this description and aid to a better understanding of the characteristics of the invention, the appending set of drawings, which are a part of this specification, shows, by way of illustrative and non-limiting example, the following:

[0014] Figure 1 corresponds to a side elevational view of the object of the invention, related to an improved cell house.

[0015] Figure 2 illustrates a detail thru A of the object shown in Fig. 1.

[0016] Figure 3 corresponds to a view thru B of the object shown in Fig. 1.

[0017] Figure 4 corresponds to a perspective view of the elements adopting an omega shape, which are located on the upper part in order to support the panels

configuring the roof in the strict sense.

[0018] Figure 5 illustrates a perspective and exploded view of the elements constituting the house sides, - which, in collaboration with the elements retaining the upper and lower part, result in the formation of the general structure thereof, by joining these elements on the parts configuring the corners.

[0019] Figure 6 shows a detail of the union of the elements represented in Fig. 5, fixed to the corners, and resulting in the structure of the upper part.

[0020] Figure 7 represents a view similar to that of Fig. 6, but at the lower zone.

[0021] Figure 8 shows a plan view of the object of the invention incorporating the roof parts.

[0022] Figure 9 shows, lastly, a plan of the forging constituting the floor of the cell house.

DESCRIPTION OF THE PREFERRED EMBODIMENT OF THE INVENTION

[0023] Following the Fig. 1, it can be seen that the improved cell house (1) is formed starting from corner profiles (3) joined at their lower part by means of profiles (12), and at their upper part by means of profiles (13), having, at the upper part, as roof support (5), elements (8) adopting an omega shape, in a front view, and presenting an increasing thickness from one end to the other end.

[0024] The lower portion of the cell house body, such as shown in Fig. 1, is implemented with a floor (14) installed on tabs (12') emerging from the inner parts of the profiles (12), with which they form a 90° angle.

[0025] Figure 2 shows that the elements constituting the roof (5), placed on supports (8) having an increasing thickness, and cut according to the cell house length, present an inner insulating lining (6), so determining that the elements (5) constituting the roof are duly insulated inside.

[0026] In order to insulate the upper side of the cell house (1) coincidental with the side presenting a greatest thickness of the supporting elements (8), an insulating lining (6') has been provided, the front of the roof and the higher zone of supports (8) remaining outwardly closed by means of a part adopting, at the upper side, a curved configuration (7), covering the edge of the element (5), and acting as protection and flashing board, this part (7) presenting an extension (9) adopting a shape of an angle close to a right angle, its smaller side covering the lower portion of the projection or overhang of body (5), while its larger side covers the outside portion of the lining and insulating element (6') vertically located on the upper profile (13) forming the structure together with the lower profile (12), such as above mentioned.

[0027] In Fig. 3, it can be seen that the panels or partitions (10) fixed at the upper part with the collaboration of profiles (13), have, at the lower part, as fixing means, profiles (12) fitted with an inner projection (12'), where

the elements (14) constituting the floor support (17) are coupled, said projection being retained with the collaboration of a perimetric angular (15), which, immobilizing at the same time a covering (17), impede this to move, and, in its turn, presents an application like a perimetric skirting board.

[0028] Figure 4 shows the elements (8) supporting the roof (5), said elements (8), as above mentioned, adopting a front configuration of an omega, and presenting sideways an increasing thickness from the end of lesser height to the opposite end, these elements being designed to be used as a direct support of the lining panels (5), and which will be cut according to the longitudinal dimensions of the cell house, incorporating a larger or smaller number of these elements (8) according to the width of the cell house.

[0029] Following the Fig. 5, it is seen that the profiles (12) and (13) are coupled fixing the panels (10) to the corner arrangements or vertical profiles (3), which present, at their inner portion, a double angle configuration (3'), so securing that the profiles (12), in cooperation with elements (16), can be inserted into their hollow portions, and remain adapted, in a simplified way, inside the vertical corner profiles formed by the outside ones (3), and the inner one (3'), while the upper profiles (13) are embedded between said profiles (3) and (3'), both configuring the corner arrangement, with the collaboration of the bodies or elements (16') similar to the elements (16), but having a markedly lesser thickness.

[0030] It is to be pointed that the upper profiles (13) have vertical extensions (13') the function of which is to delimit the positioning and fix the placement of the lining and insulating elements (6') placed on same.

[0031] In figure 6, it can be seen that the supporting elements (8) are placed on profiles (13), a vertical tab (13'), emerging from the upper part of the profile (13), cooperating in the immobilization of the elements (8); the elements emerging from the union body (16'), like in profile (12), are inserted in the hollow profile (13).

[0032] In figure 7, it is seen that the profiles (14), on which the lining (17) has been placed, are coupled on the projection (12') emerging from the inner area of the profile (12), remaining positioned with the collaboration of a perimetric or angular profile (15), which, in its turn, fixes the position of the side panels (10) configuring the cell house walls. Said side panels (10) can exhibit a variable thickness according to structural and utilization needs of the cell house, from a maximum equivalent to the hollow defined by profiles (12) or (13), where they are embedded in, as shown in figures 3 and 5, up to a smaller thickness as deemed necessary, with only inserting a complementary element close to the panel into the hollow part of profiles (12) and (13), so that it remains immobilized between the own panels (10), the profiles (12) or (13), and the action of the perimetric profile (15), as can be seen in figure 7.

[0033] Lastly, figures 8 and 9 show a plan view of the positioning of covering panels (5) on the elements (8),

and the placing of elements (14) constituting the cell house floor, on which the covering (17) is placed, and, later, the fixing angular elements (15).

[0034] In synthesis, it should be pointed out that the invention, on the lines of its constructive capacity, endorsed by a series of profiled elements, allows an assembly out of stress limitation, obviously within some acceptable margins, attaining the configuration of the cell house (1) with the collaboration of a door to be placed on panels (10), and, optionally, of one or several windows also placed on panels (10).

[0035] It is not considered necessary to extend this description for any expert in the art to understand the scope of the invention and the advantages derived from it.

[0036] The materials, shape, size and arrangement of its components will be open to variation, provided that it does not imply any alteration to the essence of the invention.

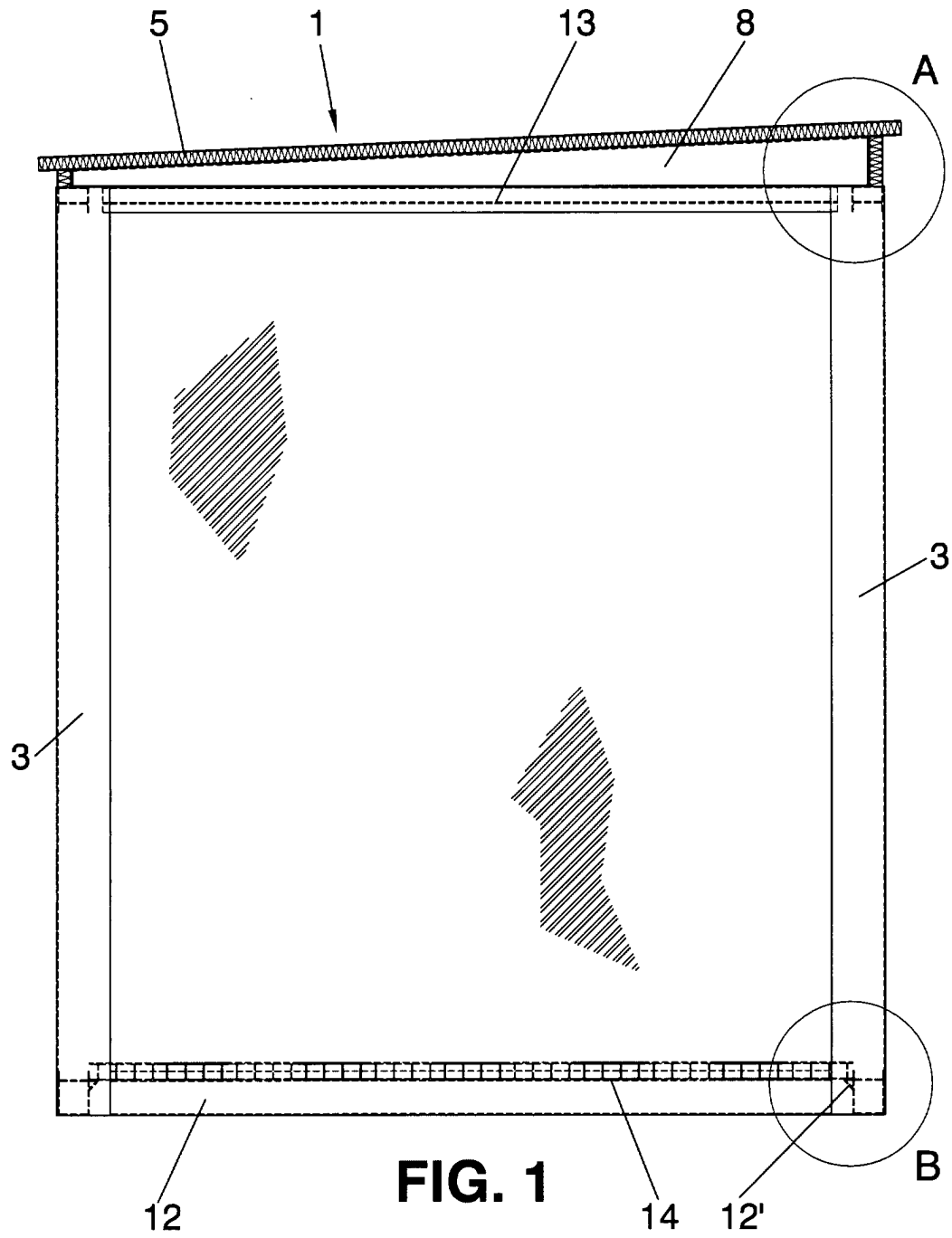
[0037] The terms under which this specification has been described should be always taken in an ample and non-limitative sense.

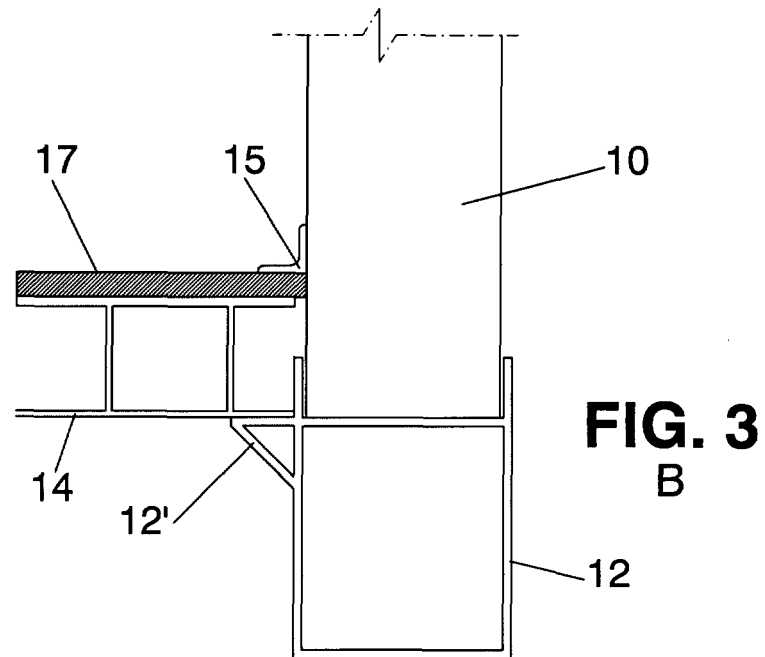
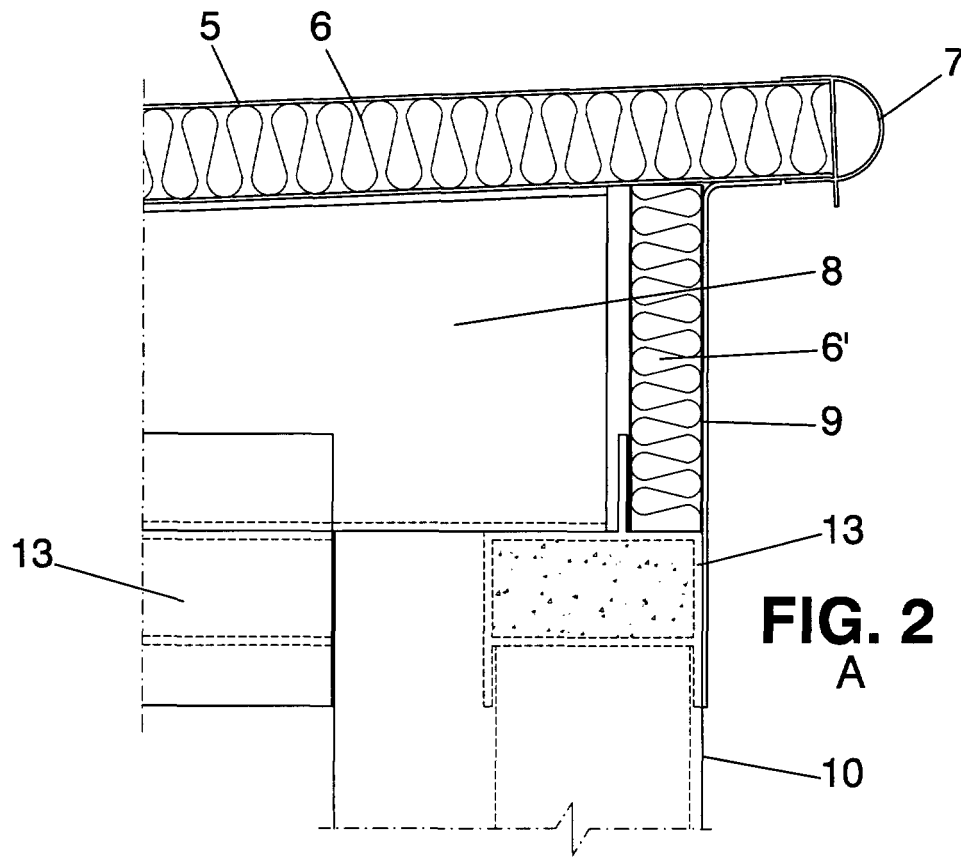
ering elements (5), parts are coupled adopting, at the upper part, a curved configuration (7), fitted with a vertical extension (9) covering a upper lateral portion of the cell house (1), on its area where the ends having a greater height of the supporting elements (8) are located, implemented with parts having an insulator (6'), vertically placed on the profiles (13).

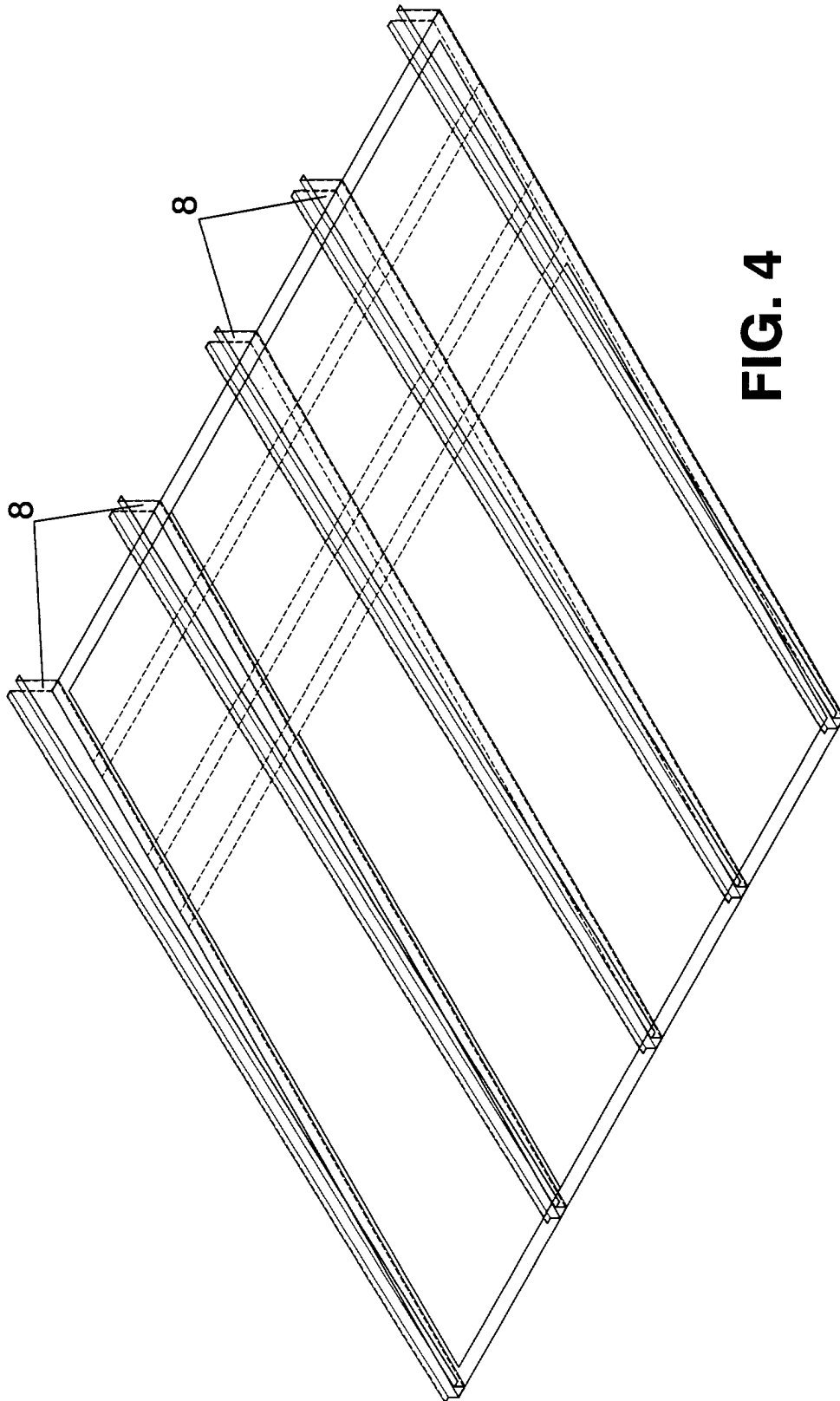
5. An improved cell house, according to the preceding claims, characterized in that the profiles (13) present, at their upper face, vertical extensions (13'), on which insulating lining parts (6') are testing, so facilitating their immobilization.

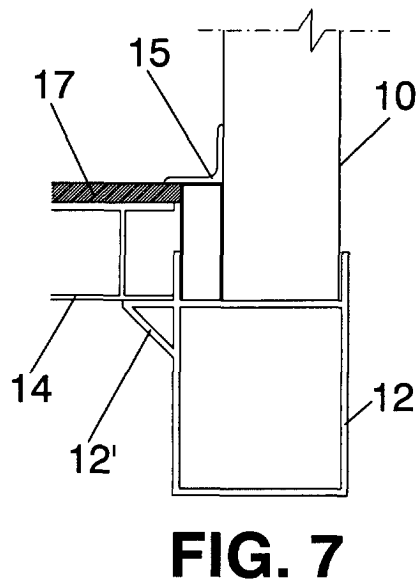
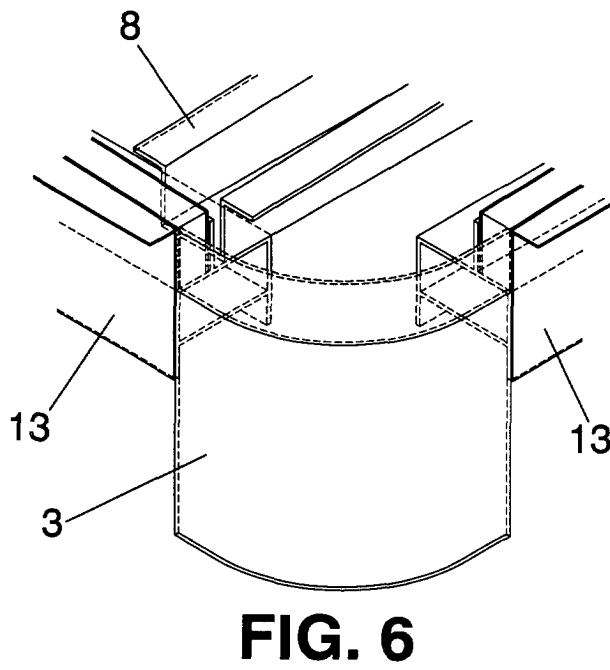
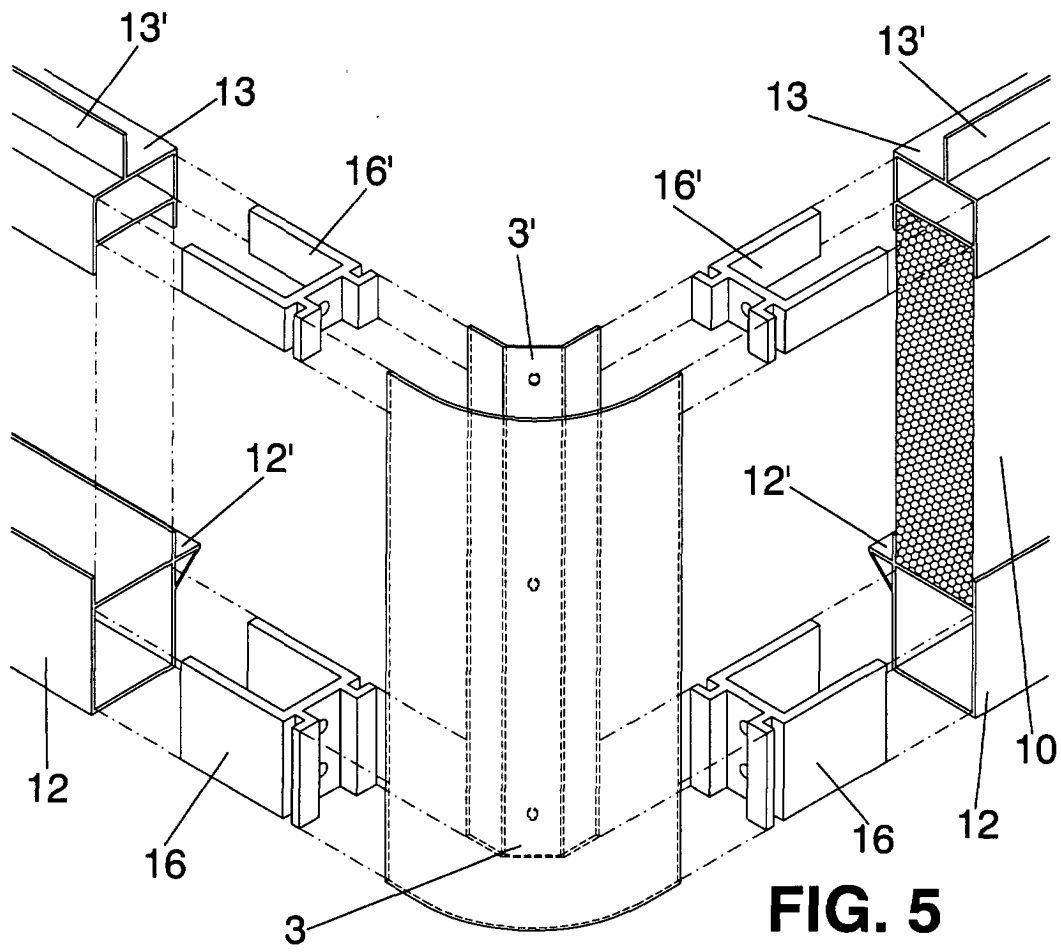
Claims

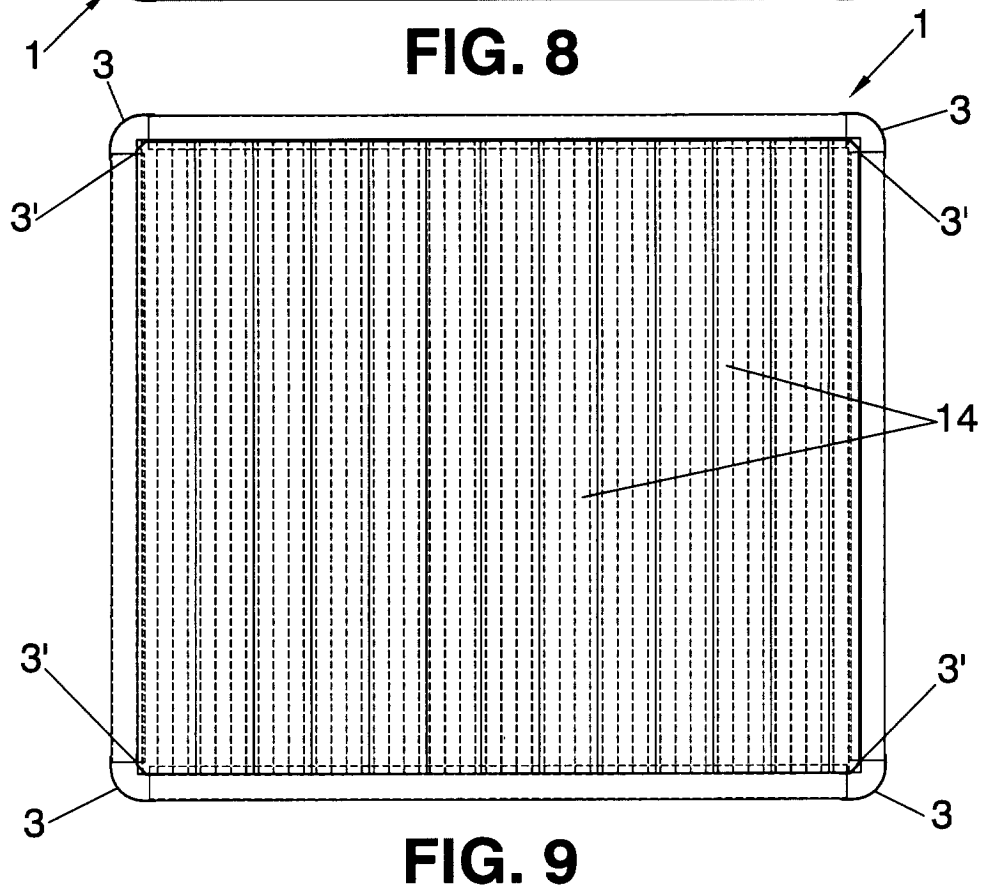
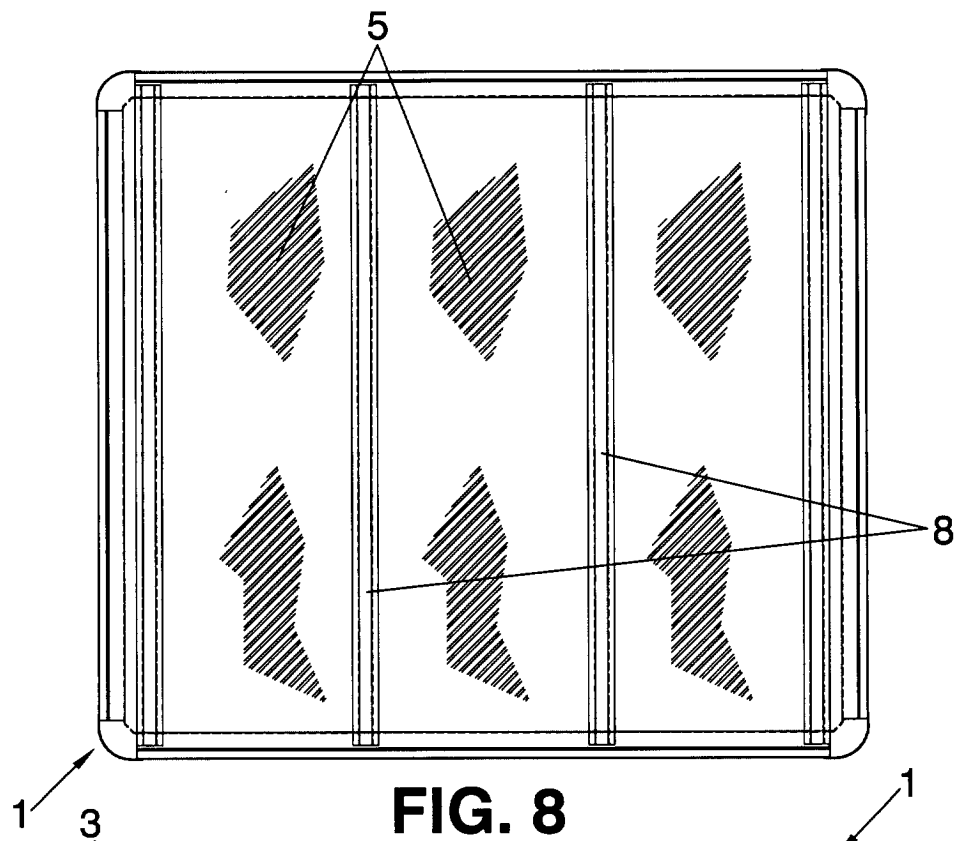
1. An improved cell house, characterized in that it is constructed starting from aluminium profiles (12) located on the lower part, and profiles (13) located on the upper part, being joined at their ends by means of anchoring parts (16) and (16'), applicable, respectively, to profiles (12) and (13), the union presenting a corner arrangement outwardly formed by a part (3), and inwardly by a part (3'), between which they are fixed by conventional means, the lower profiles (12) presenting a projection (12') wherein lower inner profiles (14) are supported, constituting supporting means of a floor (17) located inside the house, fixed by means of profiles (15) applied to the perimeter of the structure, in the union edges of the floor or ceiling with the side walls of the house.
2. An improved cell house, according to claim 1, characterized in that the fixing profiles (16) and (16') are similar one to other, but having a differentiated height.
3. An improved cell house, according to claims 1 and 2, characterized in that on the upper part of the house (1) there are located support elements (8) adopting an omega configuration, in a front view, presenting an increasing thickness from an end to the opposite end, panels (5), internally filled with insulating material (6), being placed on these supporting elements.
4. An improved cell house, according to the preceding claims, characterized in that on the ends of the cov-













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EUROPEAN SEARCH REPORT

Application Number
EP 00 50 0242

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	EP 0 112 300 A (GIANINI GIOVANNI) 27 June 1984 (1984-06-27) * the whole document *	1	E04H5/04 E04H1/12
A	FR 2 087 002 A (LENOURICHEL HENRI) 31 December 1971 (1971-12-31) * the whole document *	1	
A	FR 803 761 A (J. BRUCKER) 8 October 1936 (1936-10-08) * the whole document *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E04H E04B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12 March 2001	Examiner Delzor, F
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/02 (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 50 0242

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12-03-2001

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FR 803761	A	08-10-1936	NONE		

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