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(54) NEW SYSTEM FOR ROOF COVERING

(57) New roof covering system consisting in using a tile (1-1') made of ceramic or similar material and presenting a rectangular surface (2) and provided at its major sides with two perpendicular, vertical or oblique pronunciations (3 and 4) arranged in opposite directions, and aligning in a first step four tiles of which three are cut gradually in appropiate dimensions and emerging from the roof to a predetermined distance, the first tile (1') being positioned at the lower left corner of the roof (40).

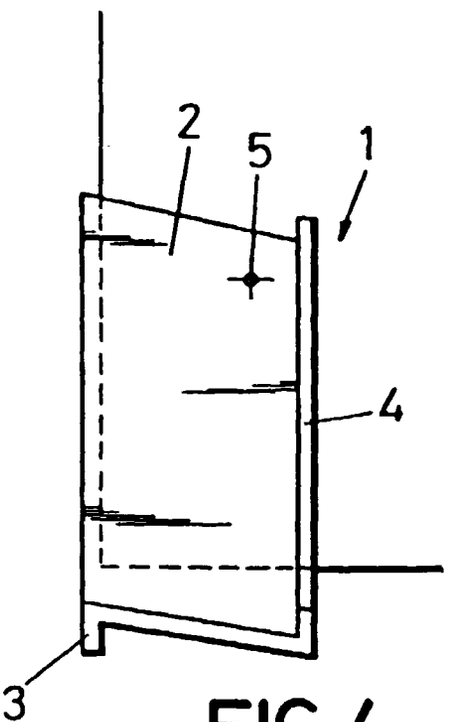

FIG.4

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Description

BACKGROUND OF THE INVENTION

[0001] The present specification relates to an application for a patent of invention referring to a new roof covering system, the clear purpose of which is to obtain a fully novel configuration of a building roof, the system using a tile adopting a "Z" shape, the central section presenting a rectangular plan configuration and having at its major sides pronunciations like edges which are perpendicular to the base, or also, oblique if desired, and arranged in opposite directions, relying on variable widths and lengths, including their thickness.

FIELD OF THE INVENTION

[0002] This invention finds application in the building industry, and it can be also used by the industry dedicated to the manufacture of tiles or roof covering parts.

RELATED ART

[0003] The applicant is not aware of the existence at present of a system for roof covering fitted with the characteristiques of the present invention, in which a rectangular tile with two edges perpendicular to the base is used as basic element, with the possibility that said edges can be perpendicular or oblique, according to technical or aesthetic conditions of the roof to be covered.

SUMMARY OF THE INVENTION

[0004] The new roof covering system as proposed by the invention constitues, per se, en evident novelty within its field of application, the result of the application of this system being a roof fitted with technical and aesthetic characteristics not contemplated up to now.

[0005] In a most specific manner, the new roof covering system, which is the object of the present invention, is constitued starting from the utilization, as basic element, of a tile having a rectangular plan surface made of a ceramic material, or any other as deemed convenient, with insulating material included, having two protruding pronunciations or edged emerging from its major sides, arranged in opposite directions, or else in perpendicular or oblique direction.

[0006] When configuring the roof, a first tile is placed at the lower left corner of the roof, this tile emerging an approximate distance of 10 cm from the lower part, this distance being capable of varying according to the technical charactaristics of the roof.

[0007] The tile is placed by means of a lag screw or by using an appropiate amount of mortar, said distance emerging sideways, that is to say, at its side of minor widthd.

[0008] Next, a tile having similar characteristics is cut 10 cm, and aligned with the opposite one, also emerging outwardly.

[0009] This tile is also positioned by means of a lag screw or mortar.

[0010] It should be pointed out that the tiles can present a perforations or perforations destined to allow the lag

[0011] Next, another tile is cut at a length double to the cut made at the previous tile, this third tile being placed again aligned with the emerging zone of the two incorporated tiles, and, later a fourth tile is placed which is cut in a triple amount to the first cut tile, that is to say, if the second tile already placed has been cut 10 cm, the second one it cut 20 cm, and the fourth, 39 cm.

[0012] Obviously, it should be pointed out thet the tiles will be overlapped through an appropiate leaning of the adjacent tiles throught their vertical descending branches with the vertical ascending pronunciation of the adjacent tile, and so on.

[0013] Next, a full tile is placed aligned with the first tile placed, being slided until making a stop with the second tile arranged.

[0014] Later, a new full tile is placed on the edge of that previouslt placed, and, at the same time, it is slided on the plane until stopping with the third tile placed.

[0015] Again, a full tile is placed on the edge of the previously placed tile and, at the same time, it is slided on the plane of the third tile placed until stopping at the fourth tile placed.

[0016] Subsequently, a new full tile is placed on the edge previously placed, and, at the same time, it is slided on the plane of the previously placed tile, and on the plane of the fourth tile placed until a distance from the lower edge of the roof similar to the distance of the four tiles placed in first place, in order to obtain a same diagonal.

[0017] Later, a full file is again placed, which is slided on the bare roof until levelling up the eaves, so finishing the diagonal, and the operation is repeated again in an analogous way until fully covering the roof.

DESCRIPTION OF THE DRAWINGS

[0018] In order to complement this description and to aid to a better understanding of the characteristics of the invention, the two appending sheets of drawings, which are a part of this specification, show, by way of illustrative and non-limitings example, the following:-

Figure 1 corresponds to a view in perspective of the tile used as basic element in the new roof covering system.

Figure 2 shows a side elevational view of the object represented in figure 1.

Figure 3 shows a plan view of the object represented in figures 1 and 2.

Figure 4 shows a new view of the object represented in any of the preceding figures, as seen on the opposite face to that represented in figure 3.

Figure 5 corresponds to a perspective view of the first placing steps of the roof covering, in order to configure the new roof covering system of the invention.

Figure 6 shows a second step of the invention.

Figure 7 corresponds to another view of a roof covering step.

Figure 8 shows another step of the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT OF THE INVENTION

[0019] From these figures, in can be seen that the new roof covering system of the invention, is constituted starting from the utilization of tiles (1) and (1 '), which adopt a rectangular plan configuration, presenting a central portion (2), and two emerging pronunciations or edges (3) and (4) arranged in opposite directions, with the peculiarity that these pronunciations or edges (3) and (4) can be configured in a perpendicular or oblique sense, according to the characteristics of the building to be covered, these parts (1-1') being made of a ceramic, cement or any other material as deemed convenient.

[0020] Ces tiles (1) and (1') can optionally present one perforation (5), destined to allow a lag screw to pass for fixing them on the bare surface of the roof, replacing a mortar.

[0021] The first step of the new system is configured starting from fixing a tile (1') at the lower left corner of the roof (40), emerging from the lower part a distance of 10 cm. This distance can vary according to the technical characteristics of the roof. Said tile (1') is placed, as already mentioned, by means of a lag screw, or utilizing plaster, mortar or similar.

[0022] Next, a tile (10) is used, cut in a length of 10 cm and it is placed at the right of the tile (1'), bonding it to the edge of the previous tile, by using similar means of fastening.

[0023] Subsequently, a tile (20) is longitudinally cut, removing it a portion of 20 cm, that is to say, a double of the tile already positioned, being bonded againt to the edge by overlapping and using identical fastening means.

[0024] Next, a fourth tile (30) is cut in a portion of 30 cm, that is to say, three times the first tile cut, and a third more that the adjacent tile.

[0025] All the tiles previously placed, that is to say (1) (10), (20) and (30) are arranged on the roof (40) emerging towards the exterior a similar distance, that is to say, aligned.

[0026] Later, an entire tile (1) is incorpored, sliding it on the tile (1') surface, until abutting against the tile (10).

[0027] Subsequently, the operation continue by incorporing and fastening a tile (1) on the roof until this tile slides on the tile pronunciations (10), and abuts on the tile (20).

[0028] Again, a tile (1) is arranged, overlapping it with the tile pronunciations (20), until abutting on the tile (30).

[0029] Next, a tile (1) is placed, sliding it on the bare roof, until remaining flush with the alignment formed by tiles (1'), (10), (20) and (30), emerging from the roof (40).

[0030] Then, the operation proceeds with similar shaped tiles (1) until covering the roof (40) surface.

Claims

1. A new roof covering system, characterized in that it uses tiles (1-1'), made of ceramic, cement or similar material, including insulating material, presenting a rectangular surface (2), and provided at its major sides with perpendicular vertical or oblique pronunciations (3) and (4), and relying on a perforation or more perforations (6) destined to allow a lag screw or similar tool to pass, positioning aligned tiles, properly cut in appropriate lengths, remaining overlapped ones over others by said pronunciations, and a first tile alignement being made, emerging towards the exterior of the roof a predetermined distance.

2. A new roof covering system, according to claim 1, characterized in that a tile (1') is positioned at the lower left corner of the roof (40), emerging from the lower part a delimited distance, being fastened on the roof (40) by means of a lag screw or mortar, like the remainder, placing, next, a tile (10), which is transversely cut in a distance similar to a fifth of the total length of the whole piece, remaining overlapped on the first entire tile (1') already placed, and placing next a third tile (20), having cut a portion similar to twice that cut to the tile (10), proceeding next to overlap and fasten a tile (30) aligned with the tiles (1'), (10) and (20), the tile (30) having transversely cut a portion similar to three times the portion removed from the tile (10)

3. A new roof covering system, according to claim 2, characterized in that, later on, in the upper end of the tile (1') a tile (1) is incorpored, which will slide on the tile (1') surface until abutting on the tile (10), after overlapping the pronunciation of the tile (1').

4. A new roof covering system, according to claim 3, characterized in that on the tile (10), a tile (1) is arranged, being overlapped until abutting against the tile (20), proceeding to place a tile (1) overlapped with the tile (20) until abutting against the tile

(30).

5. A new roof covering system, according to claims 3 and 4, characterized in that, later on, a tile (1) is placed, which will slide on the bare roof, overlapping the tile (30) and being aligned with the tiles (1), (10), (20) and (30), proceeding next to cover the roof in a similar way.

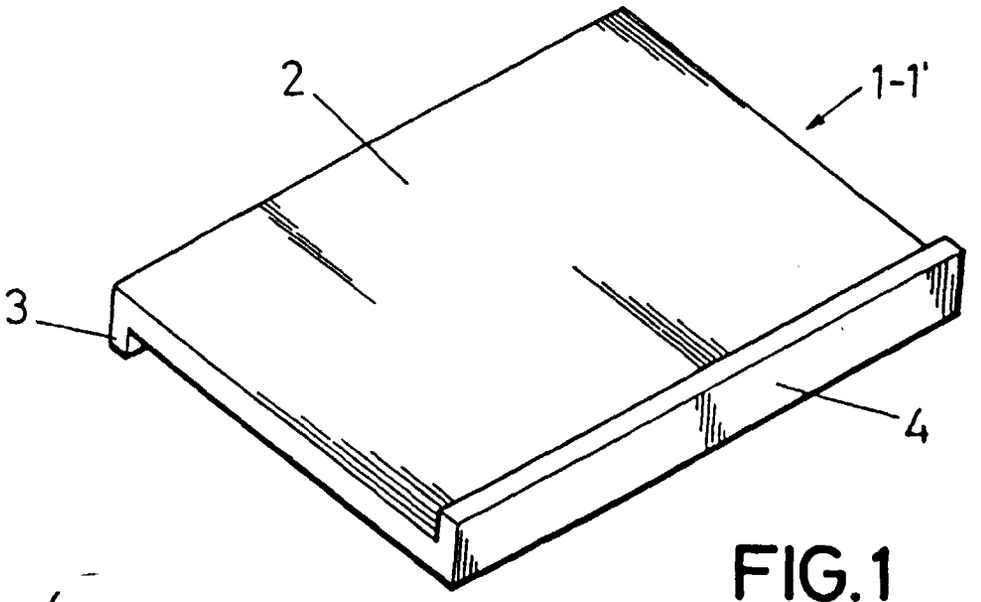


FIG.1

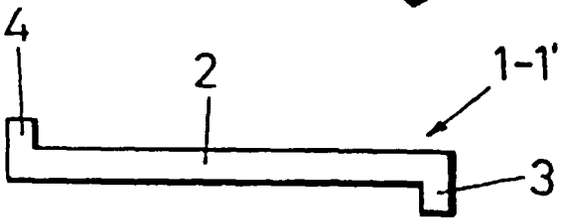


FIG.2

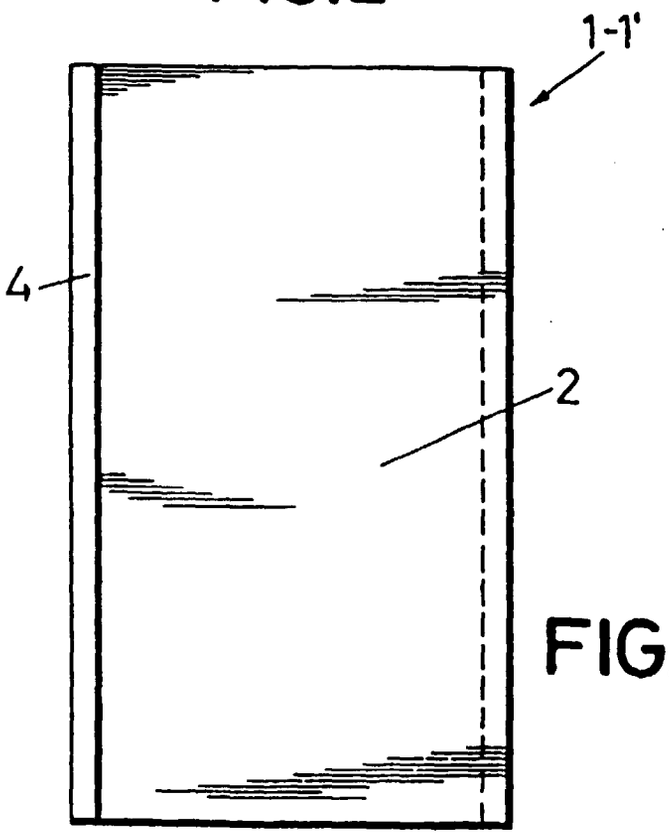


FIG.3

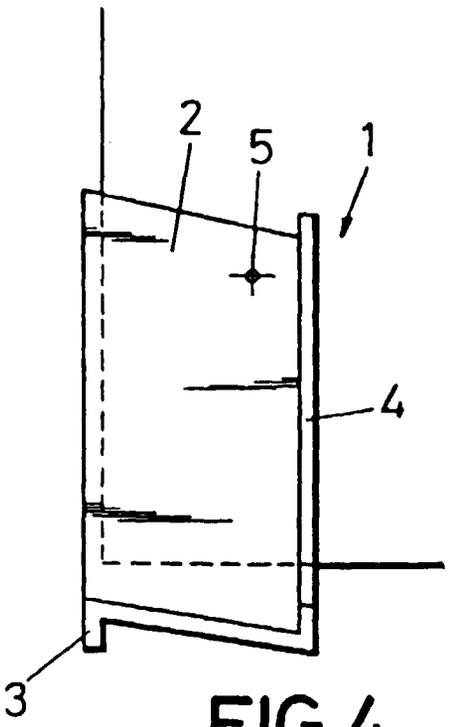


FIG.4

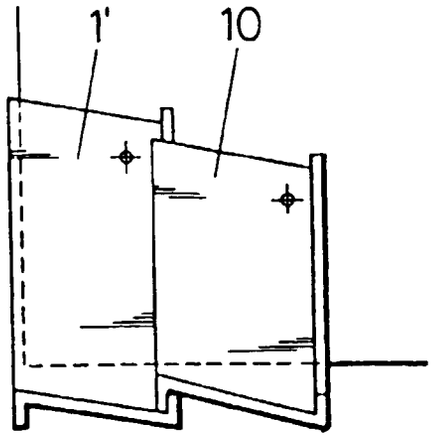


FIG.5

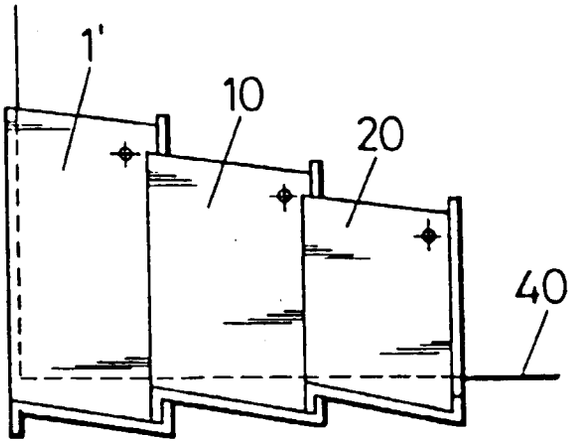


FIG.6

FIG.7

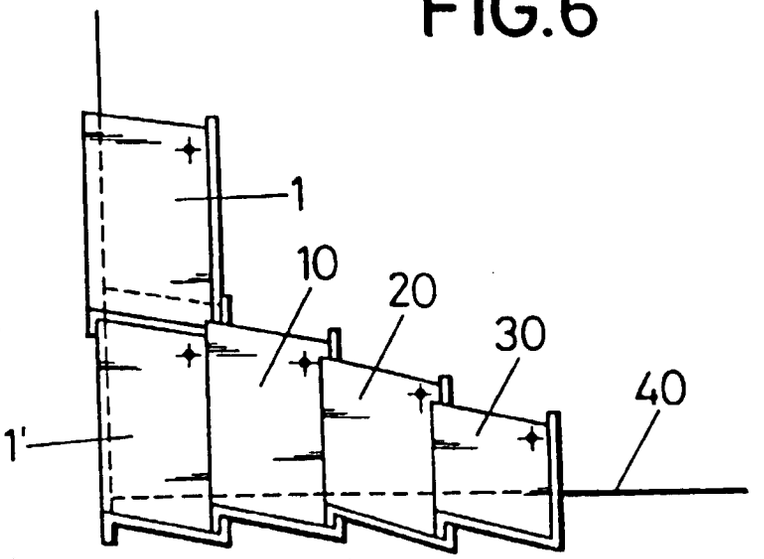
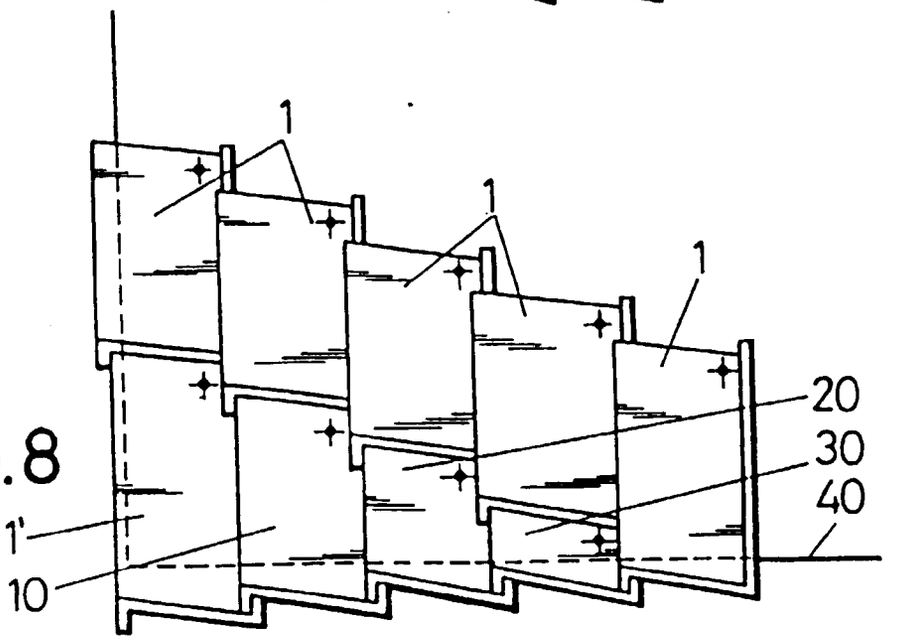


FIG.8



INTERNATIONAL SEARCH REPORT

International application No.
PCT/ES 97/00299

A. CLASSIFICATION OF SUBJECT MATTER

ICP^6: E04D 1/16

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC^6: E04D 1/02-1/22, E04D 3/04, E04D 3/26

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)

EPODOC,WPIL,PAJ,CIBEPAT

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 8338106 A (MATSUSHITA ELECTRIC WORKS) 24.12.96 abstract and figures	1
A	JP 7317221 A (NOZAWA KK) 05.12.95 abstract and figures	1
A	GB 482738 A (ARTHUR MC CAFREY) 30.03.38 see the whole document	1,3,4,5
A	US 3894376 A (SHEARER) 15.07.75 claims 5; figure 1	2-5

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
17 March 1998 (17.03.98)	18 March 1998 (18.03.98)
Name and mailing address of the ISA/ Facsimile No. S.P.T.O.	Authorized officer Telephone No.

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

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/ES 97/00299

Patent document cited in search report	Publication date	Patent familiy member(s)	Publication date
JP 8338106	24.12.96		
JP 7317221	05.12.95		
GB 482738	30.03.98		
US 3894376	15.07.75		

Form PCT/ISA/210 (patent family annex) (July 1992)