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(71) Applicant : **Stratford, Aloth Usher**
31A Frere Road
Vincent, East London, 4257 (SA)

(72) Inventor : **Stratford, Aloth Usher**
31A Frere Road
Vincent, East London, 4257 (SA)

(74) Representative : **Hutchins, Michael Richard et al**
FRY HEATH & SPENCE
The Old College
53 High Street
Horley Surrey RH6 7BN (GB)

(54) **Flooring system.**

(57) The invention provides a method of laying a floor which includes the steps of locating beams (10) spanning the space for the floor and then laying pre-formed tiles (12) thereon, the tiles (12) and/or the beams (10) having edge rebates (14) for engagement of the tiles (12) and beams (10).

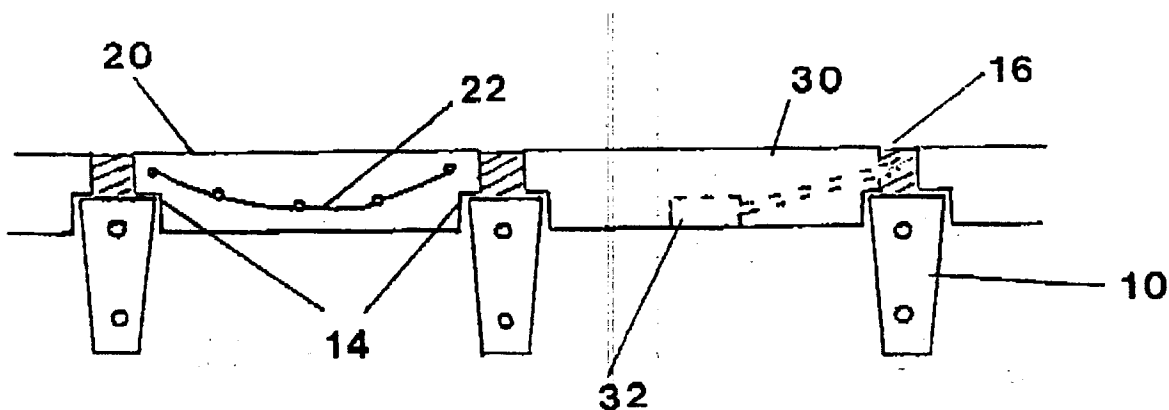


FIGURE 2

This invention relates to a flooring system.

BACKGROUND OF THE INVENTION

One of the conventional systems for laying floors in multi-floor buildings includes the steps of providing beams which span the floor space and then laying blocks thereon, followed by forming a concrete screed thereover.

Although this system is successful it does result in a non-aesthetic appearance and is expensive.

It is an object of the present invention to provide a system which is not only less expensive, but which also results in a floor of pleasing appearance. Other objects and advantages of the invention will be apparent to the person skilled in the art on reading this specification.

THE INVENTION

According to the invention a method of laying a floor includes the steps of locating beams spanning the space for the floor and then laying pre-formed tiles thereon, the tiles and/or the beams having edge rebates for engagement of the tiles and beams.

In a preferred form of the invention the tiles have edge rebates, the rebates allowing for a gap to be left between adjacent tiles so that a mortar joint may be formed between the adjacent tiles to simulate a tiled floor.

It will, however, be appreciated that the beams may have edge rebates, and in this arrangement the tiles should be higher than the rebates and the rebates should be a distance apart so that the gap left between adjacent tiles is small enough to receive a mortar joint of conventional width. It will also be appreciated that both the beams and tiles may have edge rebates.

The tiles may have an adequate depth to accommodate reinforcing mesh, rods or the like and some of the tiles may be formed with an electrical outlet cast thereinto, to provide for lighting in the room below the floor. Electric cables for the outlet are also cast into the tile and will run in the gaps between adjacent tiles to the source of electric current. The cables will be hidden when the gaps are filled with mortar.

It will be appreciated that the present invention results in a floor of excellent appearance and does not involve the use of on-site mixed concrete, thereby saving on costs and labour.

EMBODIMENT OF THE INVENTION

An embodiment of the invention is described below with reference to the accompanying drawings in which :

Figure 1 is a plan view of a portion of a floor according to the invention;

Figure 2 is a section along the line 1-1 of Figure 1; and

Figure 3 is a section along the line 2-2 of Figure 1.

In the drawings, beams 10 are located to span the space required for the floor and tiles 12 are then laid in position on the beams. The tiles have rebates 14 to engage with the beams and these rebates are arranged so that there is a gap 16 between adjacent tiles for receiving mortar for grouting purposes.

As shown in one tile 20 in Figure 2, reinforcing mesh 22 may be provided.

Also in Figure 2 (as well as in Figure 1) one tile 30 is shown which includes an electrical outlet box 32 cast thereinto. This is then available for lighting or other electrical use in the room below the floor. The box 32 has electrical leads which can be concealed in the mortar between adjacent tiles.

Other services may also be cast into the tiles, if desired but it is preferred to provide a sufficient gap 16 to accommodate electrical cables, water pipes and the like.

In Figure 3 it can be seen that the tiles abut each other at the base thereof, ensuring that the gap 16 is maintained equally on all sides of the tile. Consequently the visual impression is one of a tiled floor.

Claims

1. A method of laying a floor including the steps of locating beams spanning the space for the floor and then laying pre-formed tiles thereon, the tiles and/or the beams having edge rebates for engagement of the tiles and beams.
2. A method of laying a floor according to claim 1 in which the tiles have edge rebates, the rebates allowing for a gap to be left between adjacent tiles so that a mortar joint may be formed between the adjacent tiles to simulate a tiled floor.
3. A method of laying a floor according to either of the above claims in which the tiles have a depth adequate to accommodate reinforcing mesh rods or the like.
4. A method of laying a floor according to any of the above claims in which the tiles are formed with an electrical outlet cast thereinto.
5. A method of laying a floor according to claim 4 in which electric cables for the outlet are cast into the tile and run in the gaps between adjacent tiles to the source of electric current.
6. A method of laying a floor substantially as described with reference to the accompanying drawings.

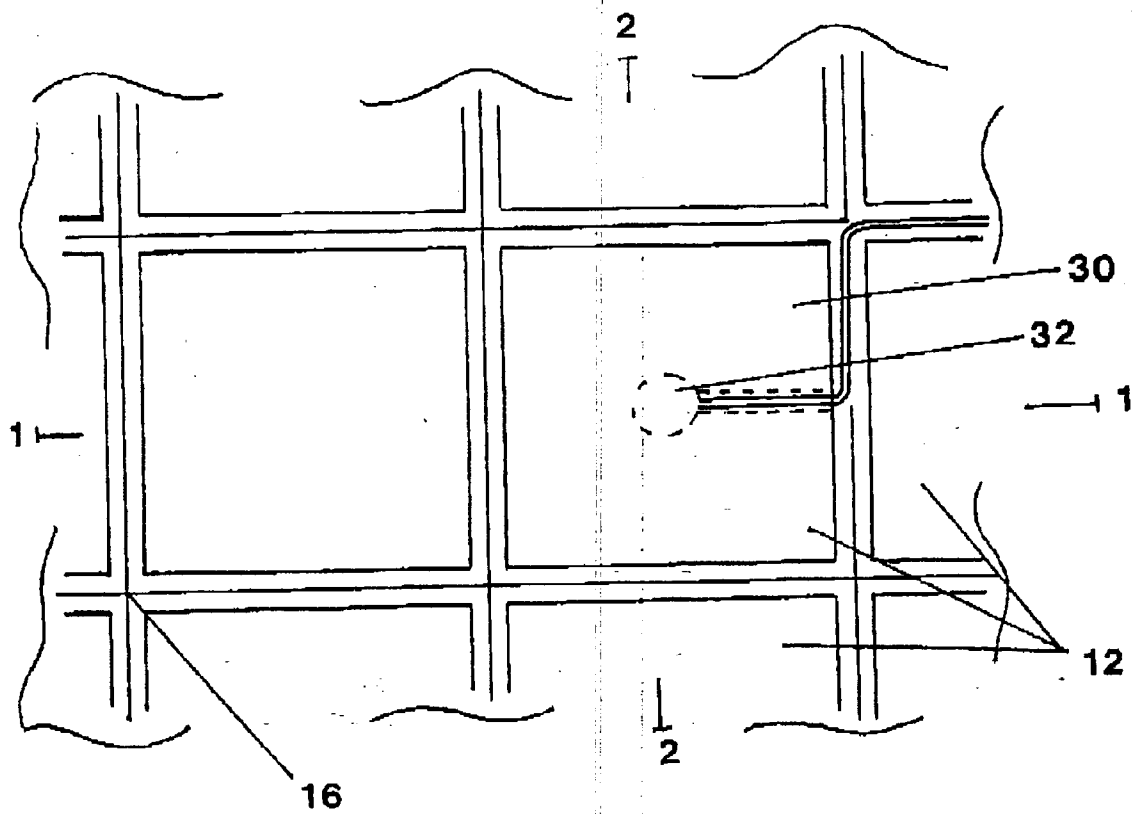


FIGURE 1

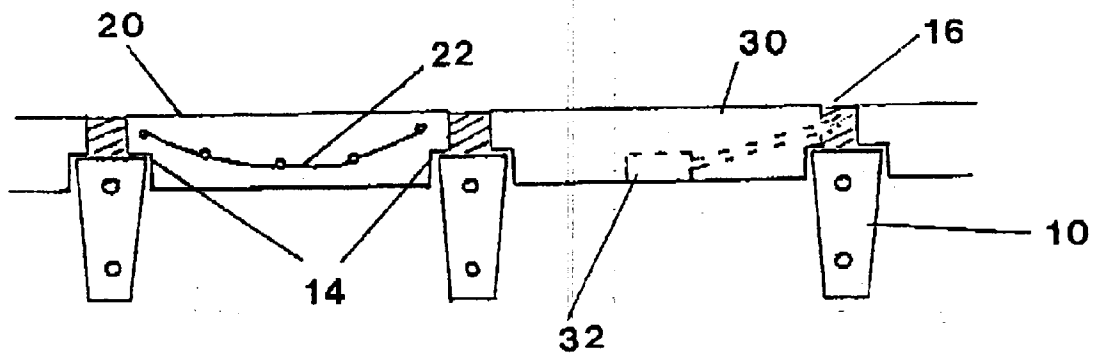


FIGURE 2

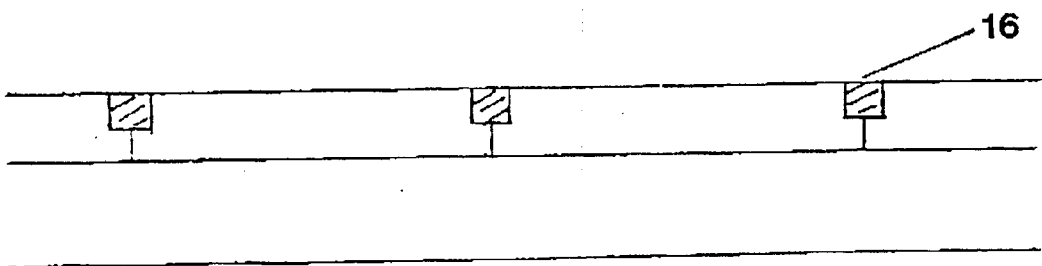


FIGURE 3



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 95 30 0186

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.6)
X Y	FR-A-1 041 199 (BODOTTI) * page 1, column 1, paragraph 2 * * page 1, column 2, paragraph 2 * * figures 1-5 *	1-3 4,5	E04B5/04 E04B5/48
Y	US-A-4 372 092 (LOPEZ) * column 2, line 62 - column 2, line 68 * * column 3, line 27 - column 3, line 34 * * column 5, line 9 - column 5, line 24 * * figure 1 *	4,5	
X	FR-A-1 487 048 (SCHRECK) * page 2, column 1, line 4 - page 2, column 1, line 6 * * figures 1-3 *	1,2	
A	GB-A-2 156 874 (REDPATH DORMAN LONG LTD) * page 1, line 64 - page 1, line 88 * * page 1, line 117 - page 1, line 124 * * page 2, line 41 - page 2, line 71 * * page 3, line 41 - page 3, line 52 * * figures 1,2 *	4,5	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			E04B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 April 1995	Examiner Hendrickx, X
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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