



EUROPEAN PATENT APPLICATION

Application number : **91303145.6**

Int. Cl.⁵ : **A62B 3/00**

Date of filing : **10.04.91**

Priority : **24.04.90 FI 902060**
05.06.90 FI 902811

Date of publication of application :
30.10.91 Bulletin 91/44

Designated Contracting States :
DE DK FR GB SE

Applicant : **Ehrnrooth, Carl Axel**
Römala
SF-02820 Esbo (FI)

Inventor : **Ehrnrooth, Carl Axel**
Römala
SF-02820 Esbo (FI)

Representative : **Jennings, Nigel Robin et al**
KILBURN & STRODE 30 John Street
London WC1N 2DD (GB)

Guide member.

In Greek mythology, Theseus was guided out from the labyrinth by means of a thread handed to him by Ariadne. Today, Ariadne's thread is substituted in various ways, for instance by railings, mouldings, painted tapes or similar guide members placed along and onto walls and pathways. The original thread as such did not provide information about the right direction of motion, nor did its variants. The present invention has eliminated this drawback by providing a longitudinal tactile guide member (1) with a plurality of formations (2) disposed on its longitudinal surface and pointing in its one longitudinal direction for continuous detection of the right direction of motion along the path. The formations (2) may consists of protrusions, elements or recesses providing different tactile sensations in the two longitudinal directions of the guide member. The guide member constitutes simultaneously a fixed structural element (3,11) in the room.

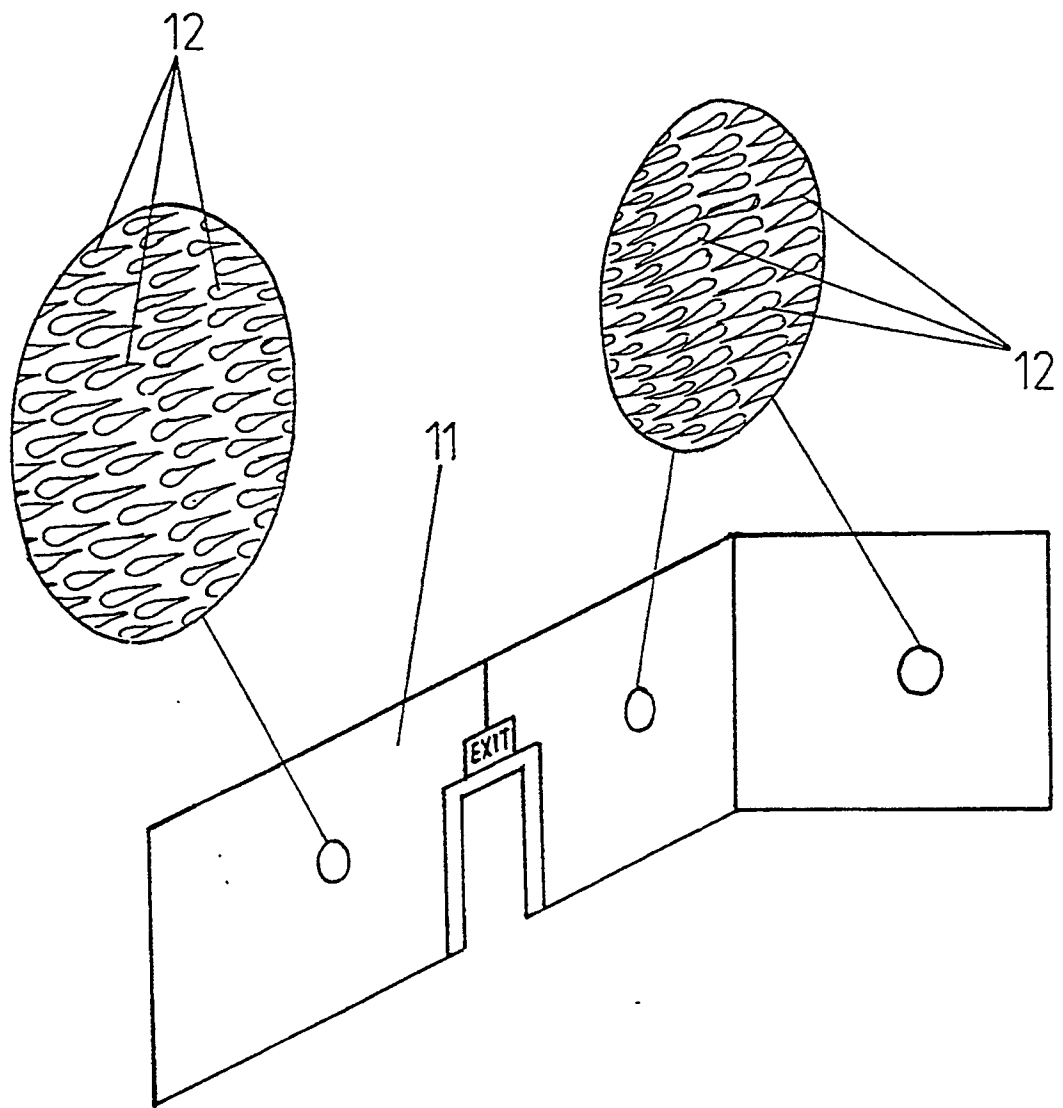


Fig. 9

The present invention relates to a longitudinal tactile guide member having a plurality of formations disposed on its longitudinal surface and pointing in the one longitudinal direction, for continuous detection of the correct direction of motion along a path in a room.

The patent specification GB 2 147 726 discloses a toothed strip to be applied onto the walls and similar of a room. Such a construction has the drawback of requiring separate production and adhesion steps.

The present invention has the purpose of eliminating the drawback mentioned above by achieving a guide member that is easy to produce and to install, which provides information about the desired direction of motion when guiding is not possible by vision or auditory sense.

The guide member is characterized by forming simultaneously an ordinary and/or a fixed constructional element of the room.

According to one embodiment of the invention, these formations consist of a plurality of protrusions disposed along the guide member, which preferably incline, slope or bend in the one longitudinal direction of the guide member, most preferably in the direction that coincides with the correct direction of motion along the path.

The protrusions may be elastic, superposed elements, such as fibres, scales or patches, which, when rubbed "the wrong way" rise and multiply friction compared to rubbing "the right way". The protrusions may also consist of fixed notches or patterns inclining or sloping in the longitudinal direction of the guide member.

The formations disposed along the longitudinal surface of the guide member and pointing in its one longitudinal direction may, according to another essential embodiment, consist of recesses for continuous detection of the desired path direction. In this case, the recesses are preferably such that when being touched, they generate less friction in the desired direction of motion and more friction in the undesired direction of motion. For instance, they may have the shape of asymmetrical notches, cavities or grooves.

The formations may also consist of a plurality of successively disposed elements or parts.

According to one embodiment, the guide member is a wall or a wall surface, e.g. a wallpaper, in which the surface towards the room is provided with the above formations. Catastrophic situations tend to create panic and crowds, making it hard to find guiding tapes or threads. In such a situation, a guiding wall surface is generally easier to find and guides a great number of people at the same time. A guiding wallpaper is easily achieved, for instance by posing a hide-like wallpaper with the fibre hair directed towards the exit.

Further, the guide member may act as a hand railing, a balustrade or a moulding. In these cases, the

surface is provided with the above formations. Hand railings are provided in staircases, where passers-by naturally get into contact with them. Thus, they provide essential information about the floor position of the (emergency) exit.

The invention is described in further detail in figures 1-10, showing various embodiments of the guide member according to the present invention.

Figure 1 shows a planar guide member 1, which may be for instance a wall surface like a wallpaper, in which the surface towards the room is equipped with hair or fibre-like protrusions 12.

Figure 2 shows a planar guide member 11 offering the same application options as in figure 1. However, the surface in figure 2 is coated with overlapping scales 32, which when rubbed provide a different friction in the two longitudinal directions. Figure 3 shows a planar guide member 11 offering application options identical to figures 1 and 2. However, in figure 3 the surface is coated with rectangular patches 42, which are attached to the rectangular side oriented towards the one longitudinal direction of the guide member 11.

Figure 4 shows a guide member having the shape of a hand rail or a banisters 3, which are equipped with fibres 12 oriented in the one longitudinal direction.

Figures 5 and 6 show surfaces 11 having fixed protrusions of different shapes 52 and 62. Figures 7 and 8 show analogue surfaces 11 having directed cavities 72 and 82.

Figure 9 shows the application of a guide member according to the present invention for locating an emergency exit. The entire wall (21) has been coated with a planar guide member 11, in which the fibres 12, enlarged in detail in the two upper ovals, have been directed towards the emergency exit. Thus, a security zone is provided by merely posing wallpapers or wall sheets with the fibres directed towards the emergency exit.

In figure 10, the entire wall forms the said guide member 11. A number of bricks (92) has been inserted in the wall, which is a normal brick wall 11, so as to indicate the exit direction.

Claims

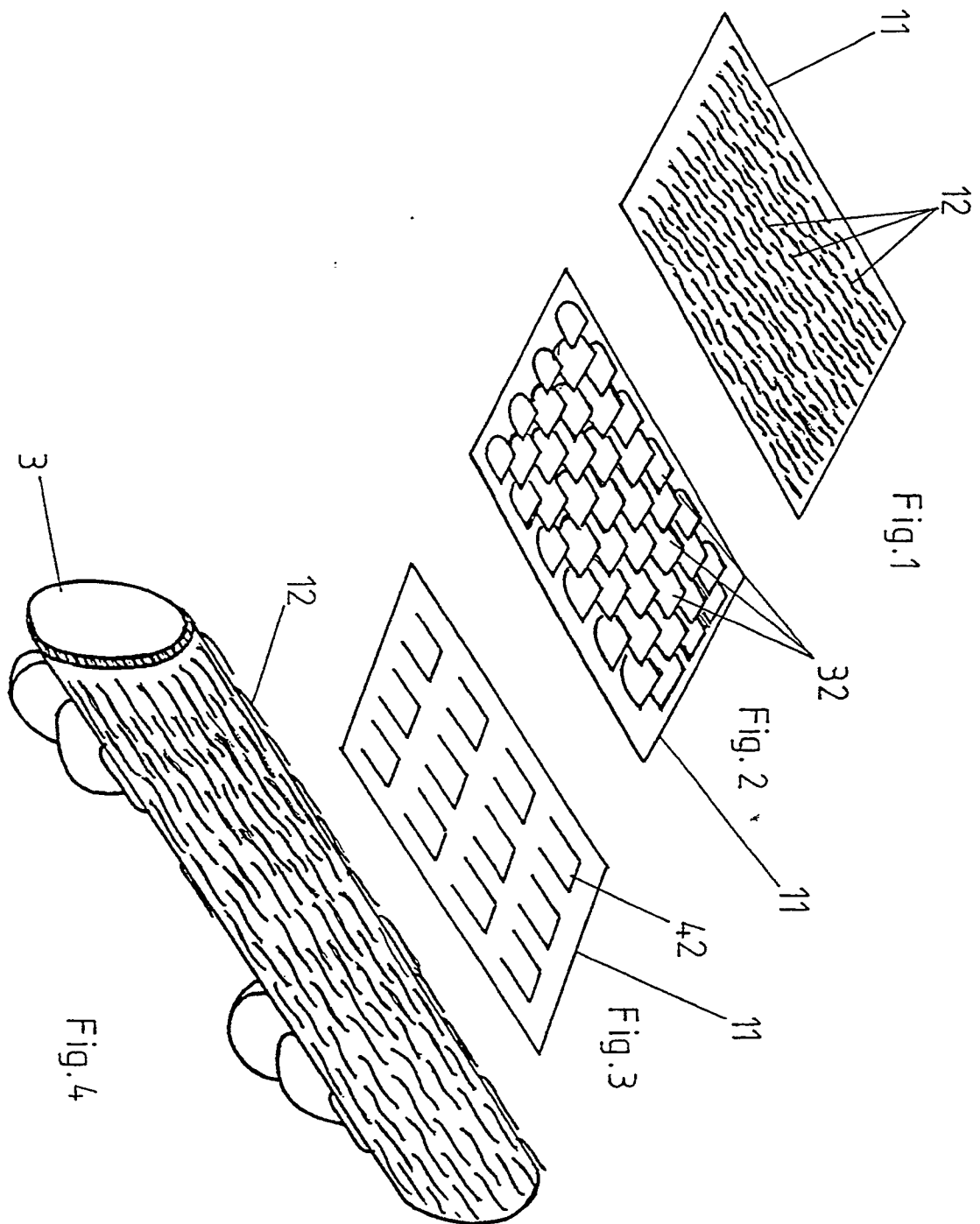
1. A longitudinal tactile guide member (3, 11) provided with a plurality of formations (12, 32, 42, 52, 62, 72, 82) disposed on its longitudinal surface and pointing in its one longitudinal direction for continuous detection of the right direction of motion along a path in a room, characterized in that it acts simultaneously as an ordinary and/or a fixed constructional element (3, 11) of the room.
2. A guide member according to claim 1, characterized in that the directed formations are protrusions (12, 32, 42, 52, 62).

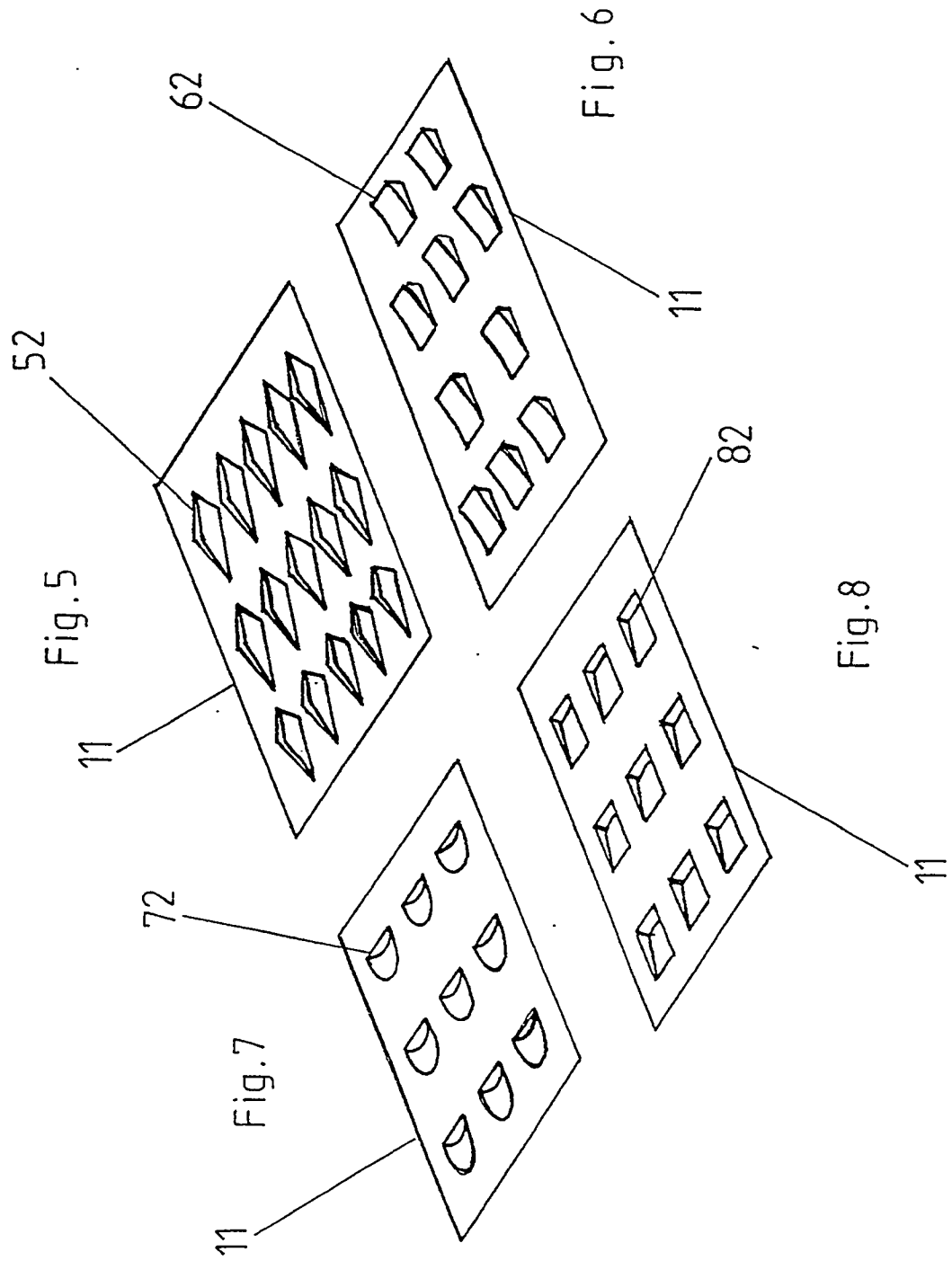
3. A guide member according to claim 2, characterized in that the protrusions (12, 32, 42, 52, 62) incline, slope or bend in the one longitudinal direction of the guide member, preferably in the direction that coincides with the right direction of motion along the path. 5
4. A guide member according to claim 2 or 3, characterized in that the protrusions are fibres (12). 10
5. A guide member according to claim 2 or 3, characterized in that the protrusions are scales (32) or patches (42). 15
6. A guide member according to claim 1, characterized in that the formations are recesses (72, 82). 20
7. A guide member according to any of claims 1-3 or 6, characterized in that the formations consist of inflexible notches, grooves, patterns or cavities (52, 62, 72, 82) inclining or sloping in the one longitudinal direction of the guide member. 25
8. A guide member according to any of claims 1-3, characterized in that the formations consist of a plurality of consecutive elements or parts (92). 30
9. A guide member according to any of claims 1-8, characterized of being a wall construction (11), for instance a bare wall or a wallpaper provided with said formations. 35
10. A guide member according to any of claims 1-8, characterized in being a hand railing or banisters (3) provided with said formations (12) on its surface. 40
11. A guide member according to any of claims 1-8, characterized in being a moulding provided with said formations on its surface. 45

45

50

55





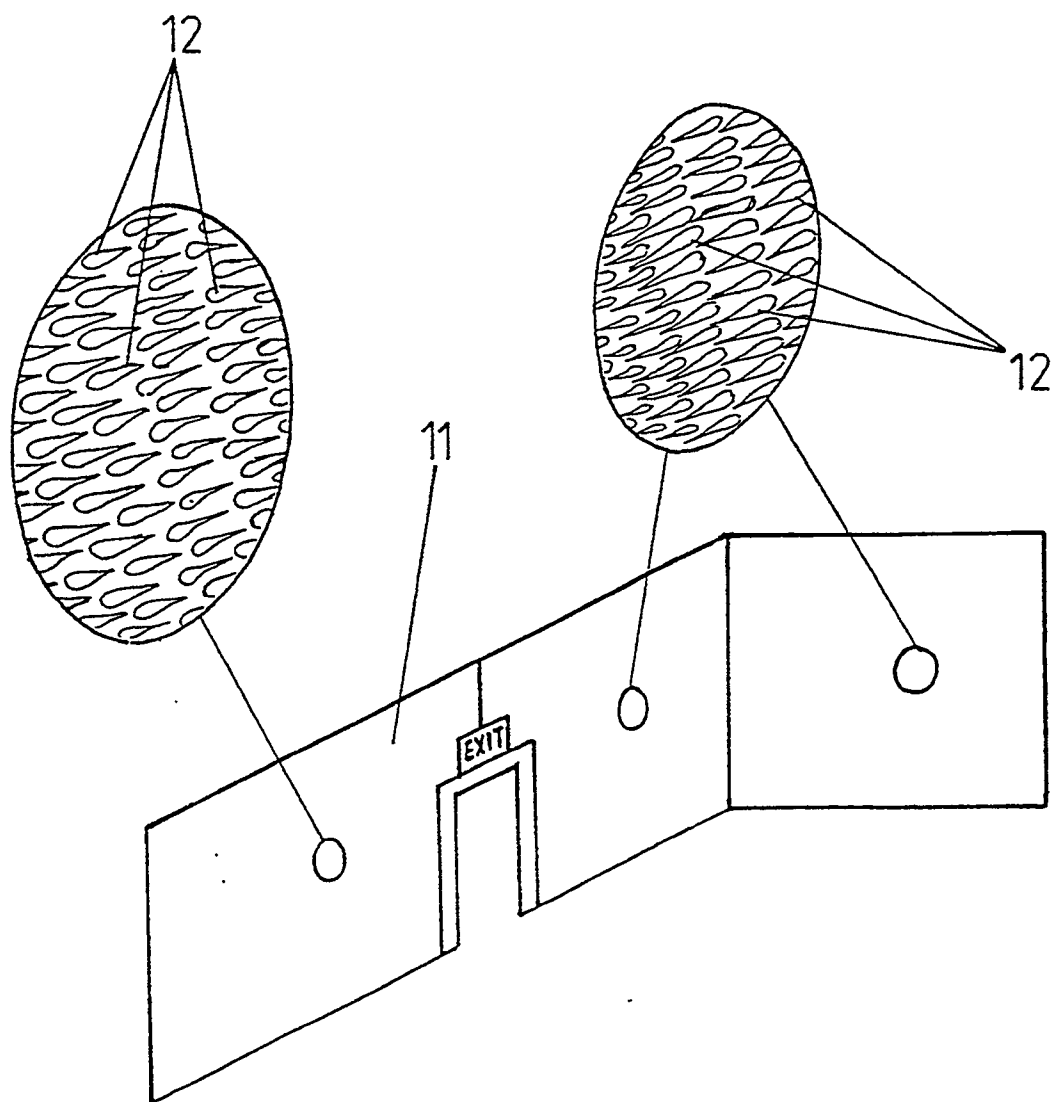


Fig. 9

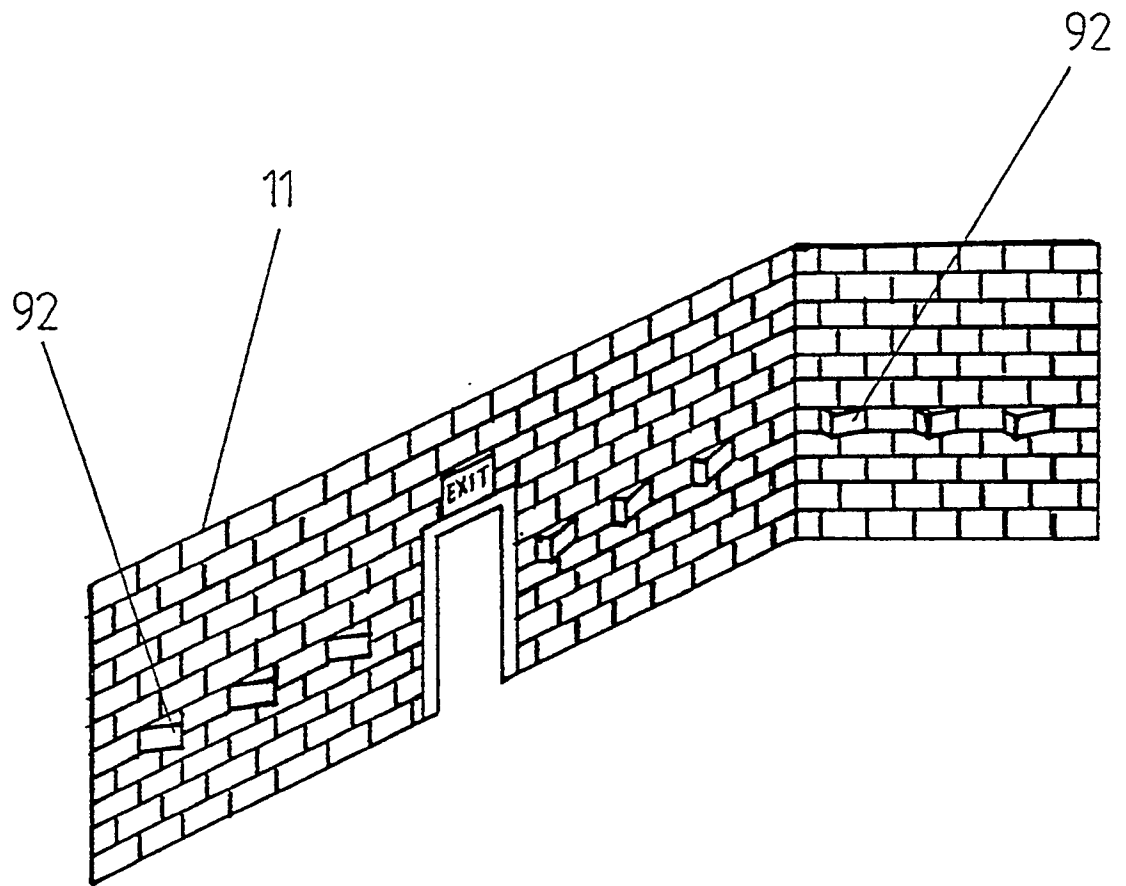


Fig. 10



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 91 30 3145

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.5)
Y	US-A-3 408 025 (DAVIS) * figures 1-4; claims 1,2; column 2, lines 21-44 *	1	A 62 B 3/00
A	----	2-4, 11	
Y	US-A-4 179 160 (SABO) * claim 1; figures 1,5; column 2, lines 15-17 *	1	
A	----	10	
A	US-A-4 385 586 (SCHRIEVER) * claims 1,2; figures 1,10 *	1	
D,A	GB-A-2 147 726 (FRASER-WILSON) * claim 1 *	1	
P,A	GB-A-2 224 154 (KEEN et al.) * claim 1; figures 1-3 *	1	
			TECHNICAL FIELDS SEARCHED (Int. CL.5)
			A 62 B
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 18-07-1991	Examiner KANAL P K
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 01.82 (P0401)