(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 428 196 A1**

(12) EUROPEAN PATENT APPLICATION

(21) Application number: **90202686.3**

(51) Int. Cl.5: **E06B 3/90**

(22) Date of filing: **10.10.90**

(30) Priority: **13.10.89 NL 8902540**

(43) Date of publication of application:
22.05.91 Bulletin 91/21

(84) Designated Contracting States:
BE CH DE DK ES FR GB IT LI LU NL SE

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(54) Revolving door.

(57) Revolving door comprising a housing provided with passage openings, in which housing wall parts adjoining the passage openings may be moved away with respect to the remainder of the housing to widen the passage openings in panic situations, and in which these movable housing wall parts may be slided back to aside and alongside the remainder of the housing wall.

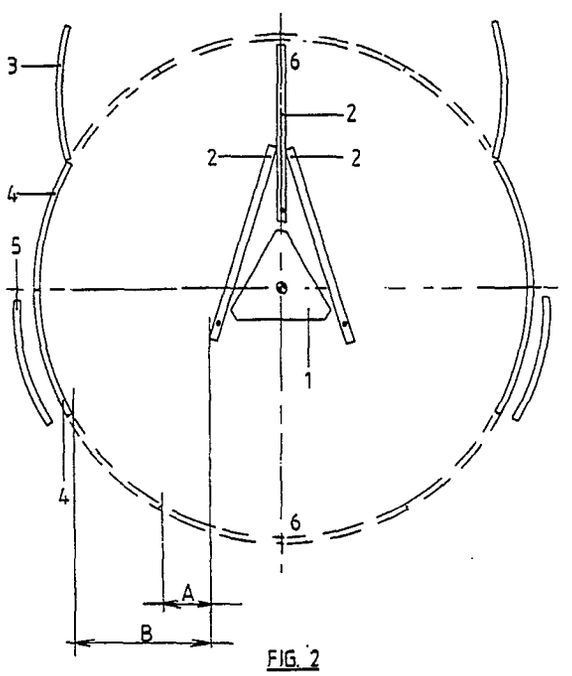

FIG. 2

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REVOLVING DOOR.

The invention relates to a revolving door uprising a passage space encompassed with the exception of two diametrically opposed passage openings by a cilindrical housing, in which door panels, bunted onto a support, are rotatable around a central axis and may be swivelled away against the support, and in which housing wall parts that adjoin the passage openings may be moved away with respect to the remainder of the housing to widen the passage openings in panic situations.

Such a revolving door is known.

With this known revolving door the housing wall parts adjoining the passage openings may be swivelled away with respect to the remainder of the housing to widen the passage opening, in a panic situation such as for instance a fire.

The housing wall parts that are swivelled away constitute more or less an angle with respect to the widened passage opening.

A drawback of the known revolving door is, that in case of a panic situation, the crowd, which moves in the direction of the opened door, may push against the swivelled away housing wall parts adjoining the passage opening, by which these housing wall parts are swivelled back, thus returning the passage opening to its original narrow passage width.

Particularly the fire-brigade considers the swivelling back of the housing wall parts adjoining the passage opening by the pushing of the panic-stricken crowd as a dangerous impediment to the fleeing crowd to getting out of the building safely and quickly.

It is an object of the invention to obviate this drawback of the known revolving door.

The revolving door acoording to the invention thereto is characterized, in that the movable wall parts at at least one passage opening may be slided back to aside and alongside the remainder of the housing.

In this manner the wall parts that are slided back do not constitute an obstacle to a crowd seized by a panic, that moves with speed to an opened revolving door, as these wall parts are not positioned anymore within the path of the fleeing crowd, but are slided back to aside and alongside the remainder of the housing.

Acoording to a further feature of the revolving door acoording to the invention, the same is provided with three door panels, comprising in pairs an angle of 120 degrees, the fixed housing wall parts each extend along an arc of 120 degrees and the passage openings each extend along an arc of 60 degrees.

Further the revolving door acoording to the invention is characterized in that at least one of the passage openings may be closed by two doors that each extend along an arc of 30 degrees, which may be slided back to aside and up to the middle of the fixed housing wall parts.

According to a further feature of the revolving door according to the invention the movable housing wall parts each extend along an arc of 30 degrees, such, that the movable housing wall parts may be completely slided back to aside and alongside the fixed housing wall parts.

The invention will be illustrated with reference to a drawing of an example of an embodiment of the invention.

Figure 1 is a schematical top view of a revolving door according to this example in the normal operating position.

Figure 2 is the same top via in a panic situation.

As is shown in Figure 1, three door panels 2 are hinged on to a central rotatable support 1, and which are oonnected to the support 1 in such a way that these can be swivelled away around axes of rotation.

The housing is provided with fixed housing wall parts 4 on which, viewed in the direction outside of the building, housing wall parts 3 are connected that may be swivelled away to the outside.

On the other end the fixed housing wall parts 4 are connected on to wall parts 5 that can be slided back to aside and alongside the fixed housing wall parts.

When a panic situation occurs, like a fire, the door panels 2, as is shown in Figure 2, are folded against each other to widen the escape passage through the revolving door, while the housing wall parts 3 located at the side of the door in the direction outside of the building are swivelled away to the outside, and the housing wall parts 5 located at the side of the door in the direction inside of the building are slided back to aside and alongside the fixed housing wall parts, and by which the passage width of the escape route through the door is increased from the value A to the value B as is shown in Figure 2.

Claims

1. Revolving door comprising a passage space encompassed, with the exception of two diametrically opposed passage openings, by a cilindrical housing, in which door panels, mounted onto a support, are rotatable around a central axis and may be swivelled away against the support, whereby housing wall parts adjoining the passage open-

ings may be moved away with respect to the remainder of the housing to widen the passage openings in panic situations, characterized in that these movable housing wall parts may be slided back to aside and alongside the remainder of the housing wall at at least one passage opening.

2. Revolving door according to claim 1, characterized in that it is provided with three door panels, in pairs comprising an angle of 120 degrees, the fixed housing wall parts each extending along an arc of 120 degrees and the passage openings each extending along an arc of 60 degrees.

3. Revolving door acoording to claim 2, characterized in that at least one of the passage openings may be closed by two doors each extending along an arc of 30 degrees, and which may be slided back to aside and up to the middle of the fixed housing wall parts.

4. Revolving door according to claim 2 or 3, characterized in that the movable housing wall parts each extend along an arc of 30 degrees, such that the movable housing wall parts may be slided back to aside and alongside the fixed housing wall parts.

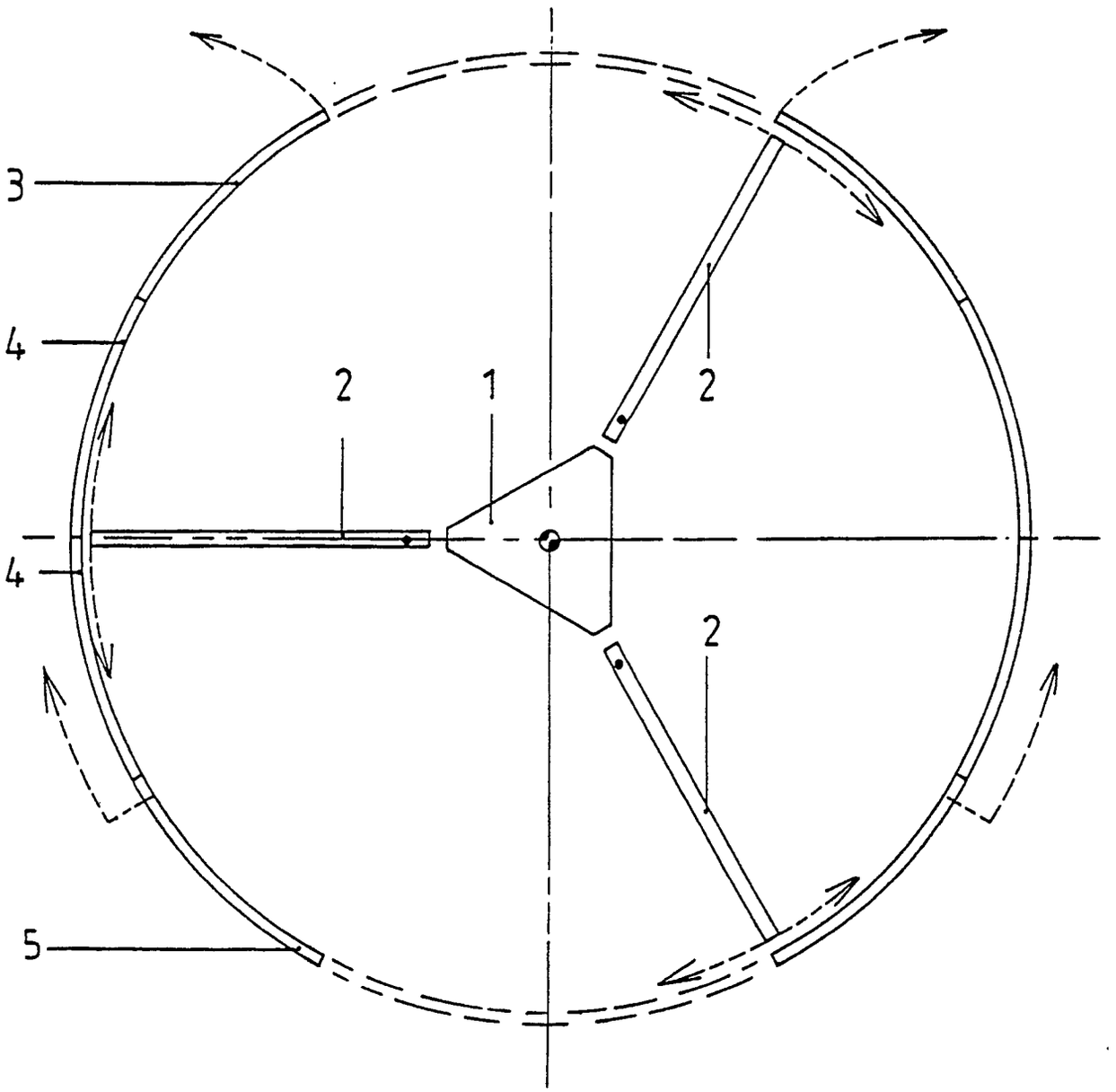

FIG. 1

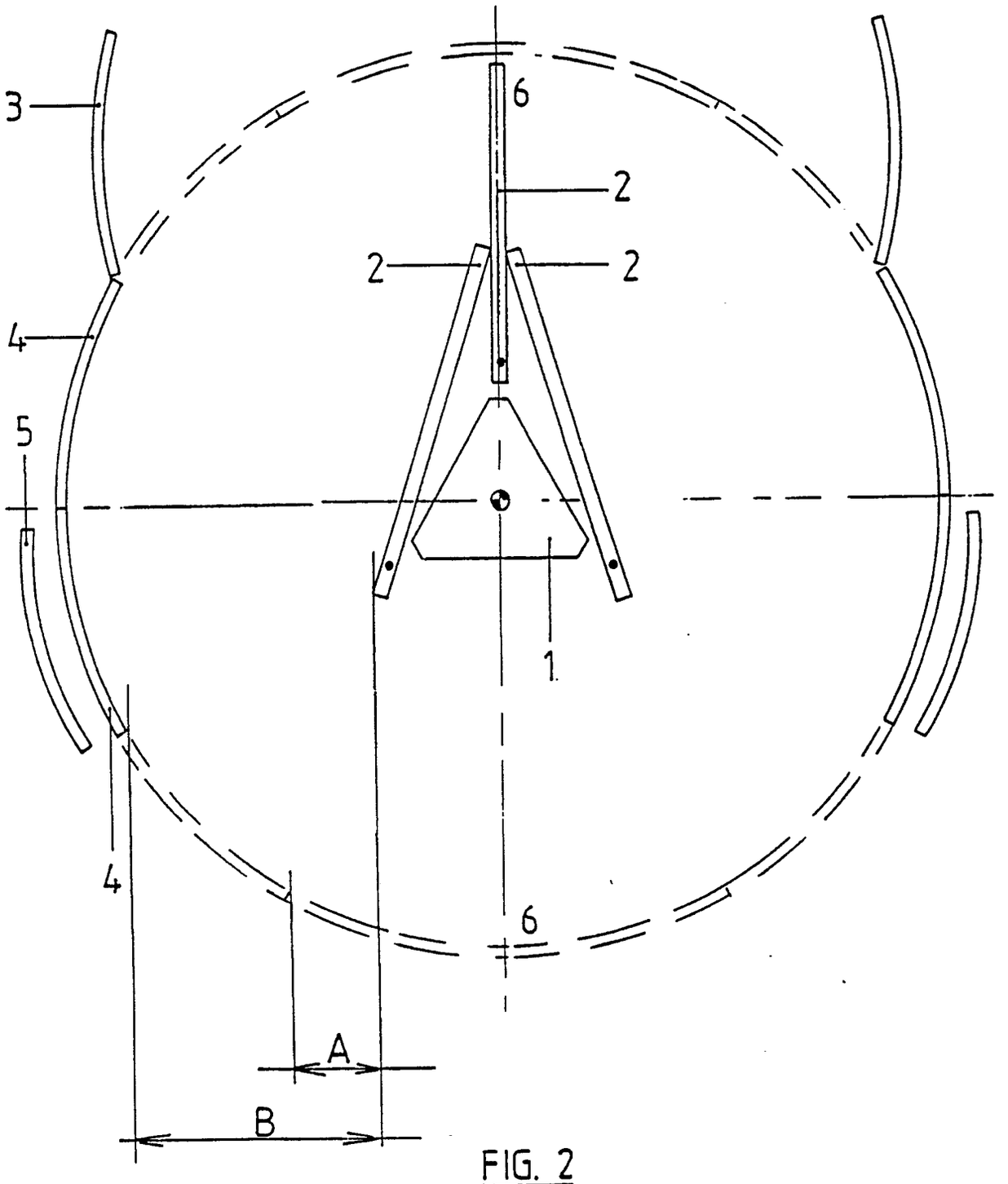

FIG. 2

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EUROPEAN SEARCH REPORT

Application Number

EP 90 20 2686

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	NL-A-8 701 287 (BOON-EDAM) * the whole document *	1-4	E 06 B 3/90
Y	GB-A-2 202 258 (NIPPON AIR BRAKE) * page 3, paragraph 2 * * page 13, paragraph 4 - page 14, paragraph 3; figure 18 *	1-4	
A	EP-A-0 296 134 (BESAM) * column 4, lines 16 - 25 *	1,3,4	
A	DE-C-2 374 12 (K.O. SLINGERVOET RAMONDT)		

TECHNICAL FIELDS SEARCHED (Int. Cl.5)
E 06 B

The present search report has been drawn up for all claims

Place of search	Date of completion of search	Examiner
The Hague	15 January 91	VERVEER D.

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone
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A: technological background
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T: theory or principle underlying the invention

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