



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**05.05.2010 Bulletin 2010/18**

(51) Int Cl.:  
**A47K 3/16 (2006.01)**

(21) Application number: **09174260.1**

(22) Date of filing: **27.10.2009**

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR**  
Designated Extension States:  
**AL BA RS**

(71) Applicant: **TEUCO GUZZINI S.p.A.**  
**Montelupone (IT)**

(72) Inventor: **Guzzini, Mauro**  
**62019 Recanati (IT)**

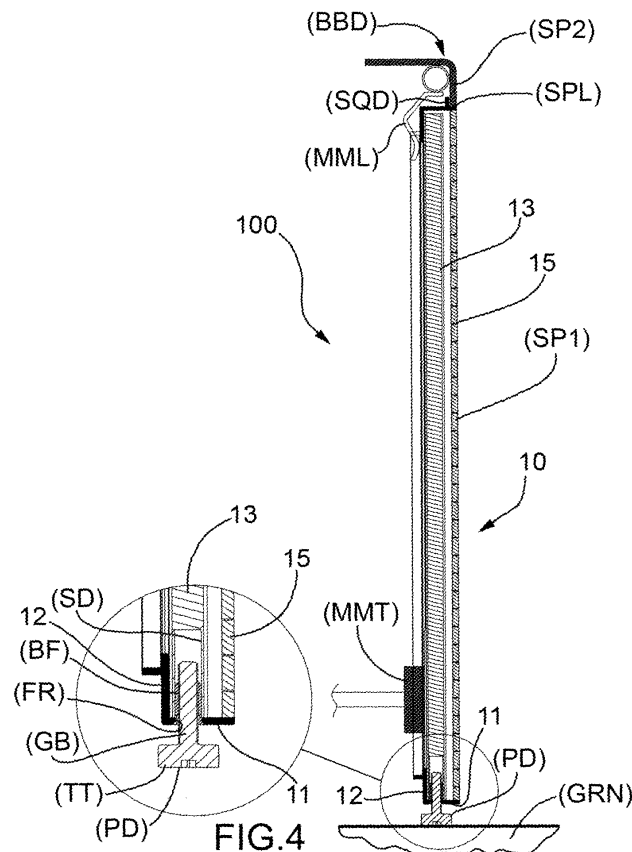
(74) Representative: **Jorio, Paolo et al**  
**Studio Torta S.r.l.**  
**Via Viotti 9**  
**10121 Torino (IT)**

(30) Priority: **28.10.2008 IT BO20080660**

(54) **Panel for covering bathtubs**

(57) A panel (10) for covering bathtubs (100), or the like. The panel comprises a support frame (11) suitable to support a plate (13) covered in turn by at least one covering element (15). Moreover, the support frame (11) has a respective top side (11B) provided with means

(SQD, SPL) such that said support frame (11) abuts against an edge (BBD) of the bathtub (100). Substantially vertical push means (PD, BF) act on said support frame (11) against the edge (BBD) of the bathtub (100) so as to ensure fastening of the panel (10) to the bathtub (100) so as to provide a side covering of said bathtub (100).



## Description

**[0001]** The present invention relates to a panel for covering bathtubs, or the like.

**[0002]** Bathtubs are currently produced using various processes of which the most frequently adopted, in view of its practical nature, is thermoforming of sheets of plastic material.

**[0003]** In another procedure, the supporting structure of the bathtub is surrounded by a plurality of polystyrene elements. The side walls of the polystyrene pallelepipiped are then covered with tiles.

**[0004]** Consequently, the covering of the bathtub (both as regards the colours that are used and the construction materials) doesn't always fits perfectly with the environment in which the bathtub is to be installed. Also, when the user decides to redecorate the walls of the bathroom (or change the covering of the walls), it is often necessary to consider the colour of the bathtub already present or, in some cases, the bathtub must be replaced with a new one better suited to the new colour scheme of the environment in which it is to be installed.

**[0005]** Therefore, the aim of the present invention is to provide a panel for covering bathtubs that is easy to install and possibly to replace, so that, where necessary, the supporting structure of the bathtub and related plumbing devices can be re-used, changing only the side covering of the bathtub.

**[0006]** Therefore, in accordance with the present invention, there is provided a panel for covering bathtubs as defined in the attached independent claims and, preferably, in any of the claims depending directly or indirectly on the aforementioned independent claims.

**[0007]** The present invention will now be described with reference to the accompanying drawings which illustrate three non-limiting embodiments thereof, in which:

- figure 1 is an exploded view of a first embodiment of the panel according to the present invention;
- figure 2 shows a vertical section of the panel of figure 1;
- figure 3 is an exploded view of a second embodiment of the panel according to the present invention;
- figure 4 shows a vertical section of the panel of figure 3, and also shows an enlargement of certain details of the panel; and
- figure 5 is an exploded view of a third embodiment of the panel according to the present invention.

**[0008]** In figure 1, designated as a whole by number 10 is a first embodiment of a panel for covering bathtubs, or the like, according to the present invention.

**[0009]** The panel 10 comprises a support frame 11 of substantially rectangular shape which, in its turn, comprises a surround 12 projecting towards the inside of said frame 11.

**[0010]** As will be seen in more detail below, during use,

a plate 13 is arranged so as to rest on the surround. Support frame 11 and related surround 12 are advantageously made of anodised aluminium elements welded together.

**[0011]** Advantageously, but not necessarily, plate 13 is made of high density polystyrene foam, preferably reinforced externally with resin and sand so that the outer surface of plate 13 is suitable for adhesion of the gluing agent of the external cover.

**[0012]** Plate 13 is glued to support frame 11 abutting on surround 12 by means, for example, of a film of silicone glue.

**[0013]** As shown in detail in figure 1, lower side 12A of surround 12 is fitted with three vertical galvanised iron brackets 14. In use, each vertical bracket 14 is subject to the action of a respective magnet (see below) which acts on this insofar as vertical bracket 14, as already indicated, is made of a ferromagnetic material (galvanised iron).

**[0014]** Panel 10 also comprises a covering layer 15 that, in the embodiment illustrated in figures 1, 2, consists of a mosaic of very small square tiles (for example with a side of between 3 mm and 10 mm). However, those skilled in the art will appreciate that covering layer 15 may consist of other materials used singly or in combination with each other. In fact, covering layer 15 may consist of ceramic tiles, marble tiles, resin elements, wood, etc.

**[0015]** In turn, lower side 11A of support frame 11 is provided with a plurality of holes (FR) (four in the case in question), each of which accommodates a respective push-fit internally threaded metal bushing (BF).

**[0016]** Moreover, each threaded bushing (BF) is fitted in a respective housing (SD) present in the lower part of the polystyrene plate 13.

**[0017]** As shown in detail in figure 2, there is a respective foot (PD) for each threaded bushing (BF).

**[0018]** The foot (PD) comprises a hexagonal polyethylene head (TT) joined to a zinc-chromed threaded shank (GB).

**[0019]** In use, the threaded shank (GB) is engaged by means of screwing with the internal threaded part of a respective bushing (BF).

**[0020]** Furthermore, as shown in figure 1, the top side 11B of support frame 11 is provided with a vertical bracket (SQD) that serves as an abutment when fitting panel 11 on a bathtub (not shown in figures 1, 2) (see below). A front horizontal portion of top side 11B, delimited by the vertical bracket (SQD), defines a shoulder (SPL).

**[0021]** Figures 3 and 4 refer to a second embodiment in which the corners (ANG1), (ANG2), (ANG3), of frame 11, of the 13, and of covering layer 15 respectively, are rounded.

**[0022]** In particular, figure 4 shows a panel 10 fitted on the side of a bathtub 100 of which only one edge (BBD) is visible. An enlargement of certain details of panel 10 is also shown in figure 4.

**[0023]** In use, the lower portion of said edge (BBD)

rests on the shoulder (SPL), while the vertical bracket (SQD) is pressed against the inner surface of said edge (BBD). In this way, outer surface (SP1) of the covering layer 15 is perfectly flush with the outer surface (SP2) of edge (BBD), guaranteeing the necessary aesthetic continuity of edge (BBD)/panel 10 assembly.

**[0024]** As also shown in figure 4, panel 10 is maintained in an erect position by the combined action of a plurality of elastic means (MML) and of a plurality of magnets (MMT).

**[0025]** To fit the panel 10 to the edge (BBD) of the bathtub 100, the following procedure is adopted:

- (a) each shank (GB) of the foot (PD) is screwed fully into the relative threaded bushing (BF);
- (b) panel 10 is inserted from the side so that the edge (BBD) is in contact with the shoulder (SPL);
- (c) at the same time, the elastic means (MML) push on the upper parts of panel 10 while the magnets (MMT) hold the lower portion of said panel 10 in position; and
- (d) once panel 10 has been correctly positioned, the feet (PD) are unscrewed; this action has the effect of blocking panel 10 through contact of the shoulder (SPL) against the lower portion of the edge (BBD); the elastic means (MML) push the upper part of panel 10 horizontally so that the bracket (SQD) adheres against the inner surface of the edge (BBD), while the magnets (MMT) contribute to maintaining the lower part of panel 10 in position.

**[0026]** The fact of having a certain number of feet (PD) that are raised independently of each other offers the advantage of correct assembly of panel 10 also in the case of any flaws in the floor (GRN), thereby obtaining excellent adherence of the shoulder (SPL) to the edge (BBD).

**[0027]** During tightening/unscrewing of the feet (PD) in/from the threaded bushings (BF), a suitably-shaped wrench (not shown) may be used, inserted by an installer on the hexagonal head (TT) of said feet (PD).

**[0028]** To disassemble and remove panel 10 from bathtub 100, the operations described in the previous points (a)-(d) must be performed in reverse.

**[0029]** In fact, to disassemble panel 10 from the rest of bathtub 100, it is sufficient to tighten the feet (PD) in the threaded bushings (BF) and disengage the shoulder (SPL) and the bracket (SQD) from the edge (BBD) of bathtub 100.

**[0030]** A further embodiment of the present invention is illustrated in figure 5, in which the corresponding elements are identified by the same numbers and codes as in figures 1-4; the covering layer is not present in this embodiment.

**[0031]** In this third embodiment, the possibility of also applying the principles of the present invention with a panel 10 that is curvilinear instead of planar is illustrated. Also in this case, a corner of panel 11 may be rounded

(as seen in the second embodiment described with reference to figures 2, 3).

**[0032]** The main advantage of the covering panel for bathtubs according to the present invention consists in the fact that it is easy to install and possibly to replace, allowing the bathtub to be aesthetically integrated with the rest of the environment in which it is installed.

**[0033]** Moreover, if the need arises, the panel according to the present invention allows the supporting structure of the bathtub and related plumbing devices to be re-used, changing only the side covering of the bathtub.

## Claims

1. Panel (10) for covering bathtubs (100) or the like; said panel (10) **characterized in that** it comprises a support frame (11) suitable to support a plate (13) covered in turn by at least one covering element (15).
2. Panel (10), according to Claim 1, **characterized in that** the support frame (11) has a respective top side (11B) provided with means (SQD, SPL) such as to be suitable to abut against an edge (BBD) of the bathtub (100).
3. Panel (10), according to any of the preceding Claims, **characterized in that** it has substantially vertical push means (PD, BF) acting on said support frame (11) against the edge (BBD) of the bathtub (100) so as to ensure the fastening of the panel (11) to the edge (BBD) to provide a side covering of the bathtub (100).
4. Panel (10), according to Claim 3, **characterized in that** said substantially vertical push means (PD, BF) are positioned at a lower side (11A) of said support frame (11).
5. Panel (10), according to any of the preceding Claims, **characterized in that** a vertical bracket (SQD) and a shoulder (SPL) are joined to the top side (11B) of said support frame (11).
6. Panel (10), according to any of the preceding Claims, **characterized in that** it has elastic means (MML) pushing said panel (10) against the inner surface of the edge (BBD) of the bathtub (100).
7. Panel (10), according to any of the preceding Claims, **characterized in that** it has rounded corners (ANG1), (ANG2), (ANG3) respectively of the frame (11), the plate (13) and the covering layer (15).
8. Panel (10) according to any of the preceding Claims, **characterized in that** the frame (11), the plate (13) and the covering layer (15) are curvilinear instead of planar.

9. Bathtub (100) **characterized in that** it comprises at least one panel (10) according to any of the preceding Claims.

5

10

15

20

25

30

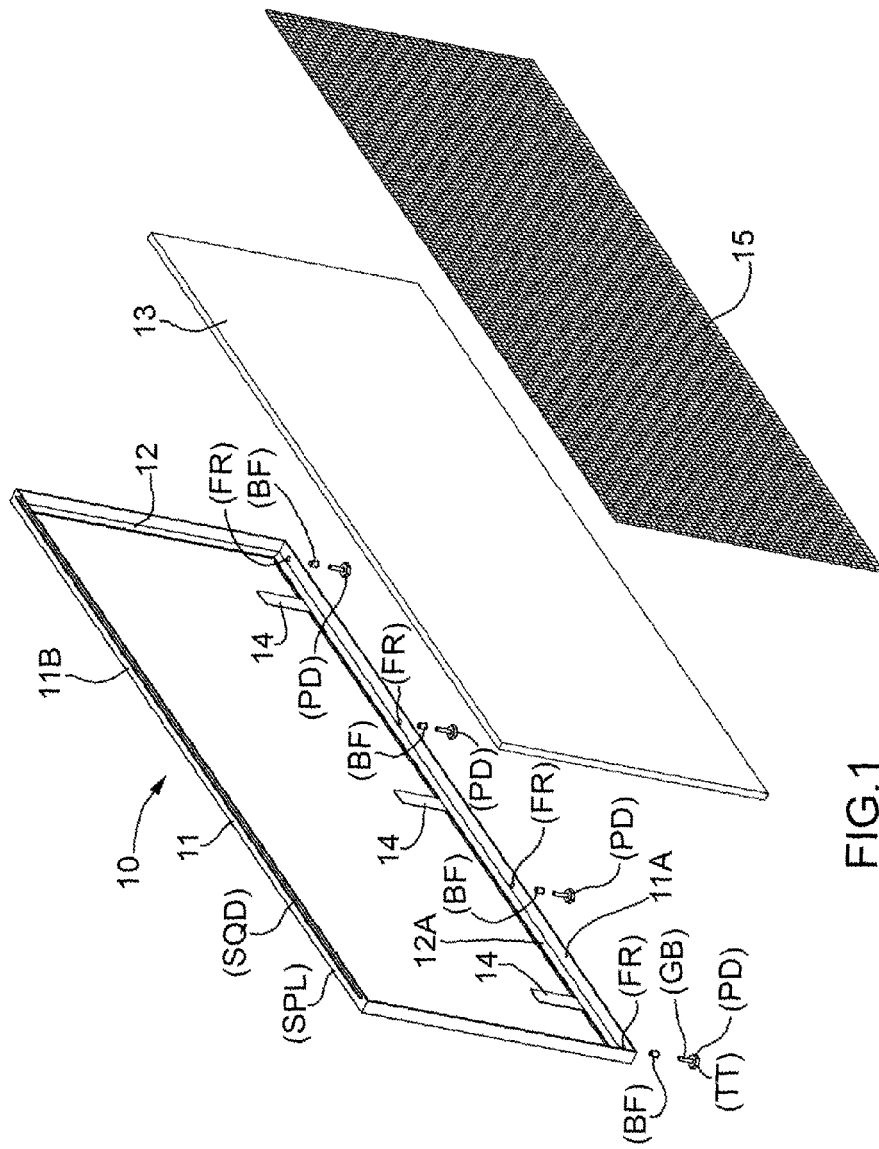
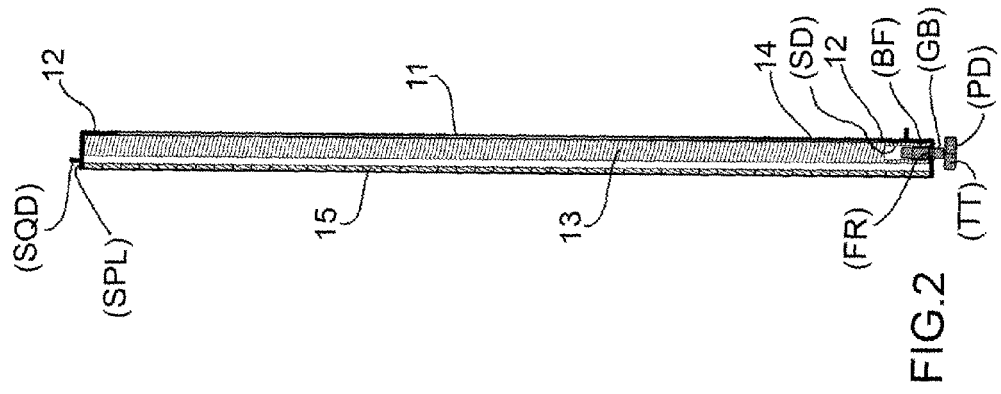
35

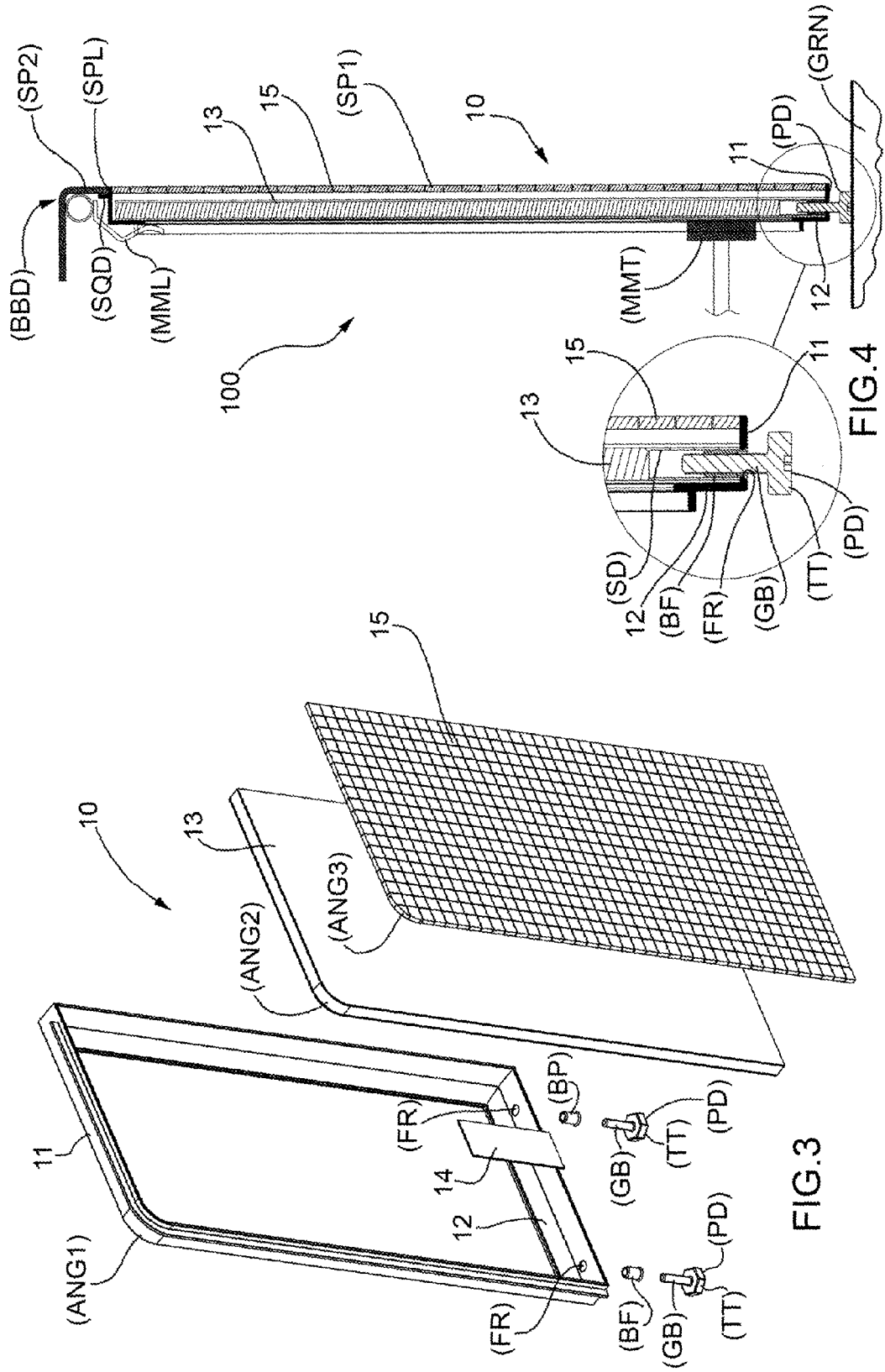
40

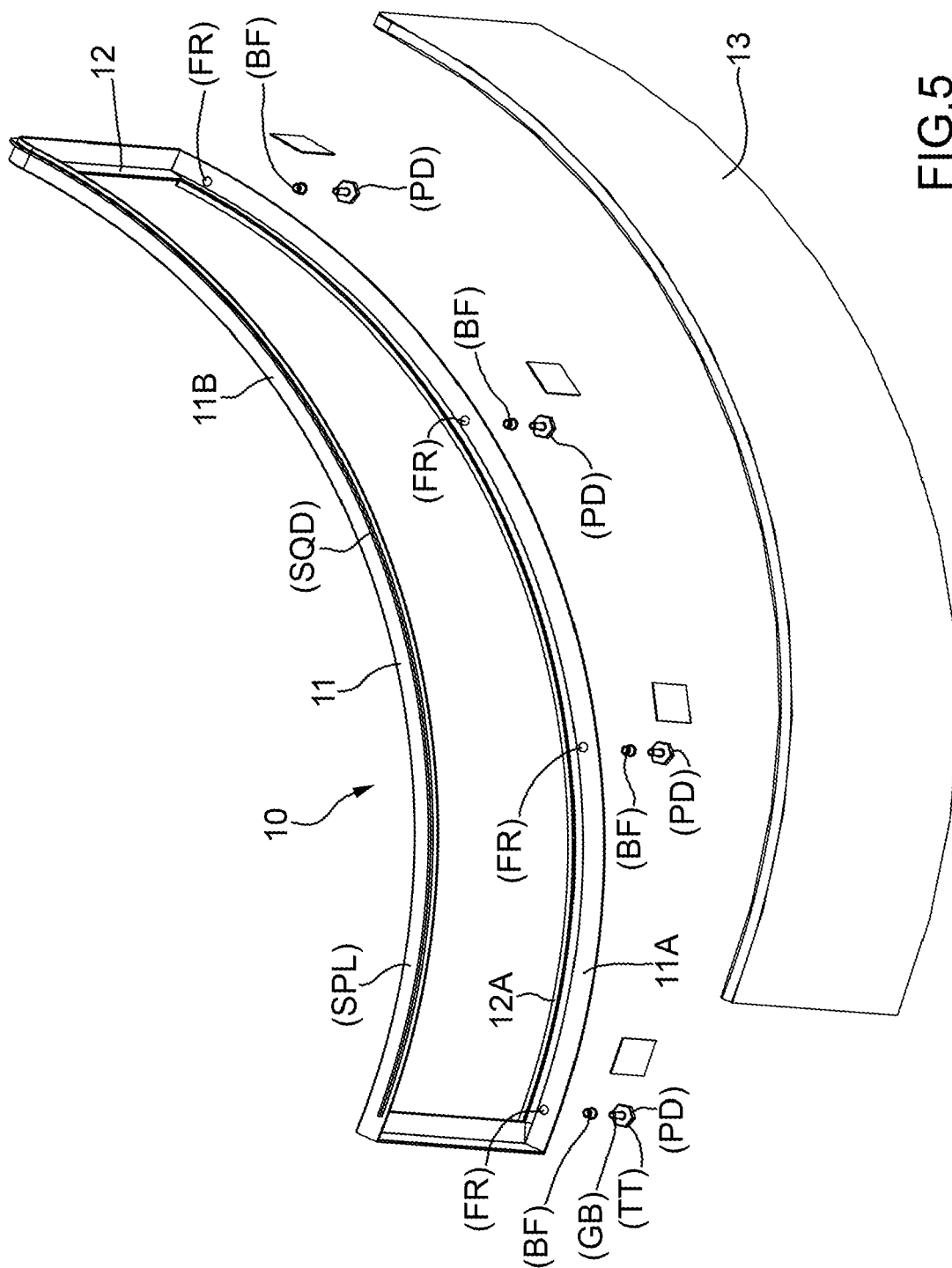
45

50

55









## EUROPEAN SEARCH REPORT

Application Number  
EP 09 17 4260

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 10 2005 058115 A1 (KALDEWEI FRANZ GMBH & CO [DE]) 6 June 2007 (2007-06-06) * page 1, paragraph 8 - page 3, paragraph 21; figures 1a,1b,1c,2a,3a,3d,4a,7 *	1-3,9	INV. A47K3/16
X	US 5 960 489 A (HANEL BERND [DE] ET AL) 5 October 1999 (1999-10-05) * column 4, lines 55-58 * * column 5, lines 14-19 * * column 11, lines 10-54; figures 1b,1c,11a,11b,12a,12b,14 *	1-2,5,9	
X	DE 33 20 617 A1 (WEDI HELMUT) 26 July 1984 (1984-07-26) * page 5, lines 19-34 * * page 7, line 22 - page 9, line 32; figures 1-3 *	1,3-4,9	
X	FR 2 529 070 A (JAMBLIN LAURETTE [FR]) 30 December 1983 (1983-12-30) * page 1, line 30 - page 4, line 28; figures 1,2,4 *	1-2,9	
X	EP 0 281 957 A (BAMBERGER GMBH & CO KG GEB [DE]) 14 September 1988 (1988-09-14) * column 3, line 38 - column 4, line 30; figures 1-3,5-8,14 *	1,8-9	A47K
Y		6	
Y	DE 20 2007 012741 U1 (SANPLAST SP Z 0 0 [PL]) 29 November 2007 (2007-11-29) * page 3, paragraph 36; figures 12,13,16 *	6	
A		1,8-9	
The present search report has been drawn up for all claims			
Place of search <b>Munich</b>		Date of completion of the search <b>3 February 2010</b>	Examiner <b>Fajarnés Jessen, A</b>
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	

 1  
EPO FORM 1503 03.82 (P04C01)

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

EP 09 17 4260

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-02-2010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 102005058115 A1	06-06-2007	NONE	
US 5960489 A	05-10-1999	NONE	
DE 3320617 A1	26-07-1984	NONE	
FR 2529070 A	30-12-1983	NONE	
EP 0281957 A	14-09-1988	DE 3707647 A1	22-09-1988
DE 202007012741 U1	29-11-2007	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82