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## (54) A shower tray

(57) It is made up of two parts, a rigid core (2) made of a polymeric material, and an outer covering (3) sur-

rounding this rigid core, and which is securely joined to this, the material of which this outer covering(3) is made being rubber.

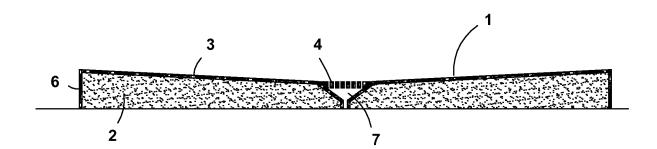


Fig. 1

EP 2 647 322 A2

#### Description

**[0001]** This invention refers to a shower tray made up of a core of filling material and a covering body made of a soft material; both the core and the covering body can be cut to allow them to fit any geometry; its cost is moderate as compared with other shower trays made in a single body, and it has a pleasant feel, as said covering body is deformable.

#### State of the art

**[0002]** Different kinds of shower trays are available. Ceramic-based shower trays have traditionally been used. These trays nevertheless involve several disadvantages:

- Their hardness: this means that the user feels uncomfortable when using them, which is why this is an undesirable quality;
- The surface: the surface of ceramic shower trays is absolutely smooth, which means that it is easy to slip on them; this can be overcome by adding adhesive elements to their surface, but the easy of accumulating residues in the joints and the permanent damp atmosphere to which these are subject makes these coverings a rather unsatisfactory solution.
- Stiffness; ceramic shower trays cannot be split up and thus cannot be adapted to any geometry. Instead any modifications necessary for the tray to be adapted have to be made in the cubicle;
- Fragility; ceramic shower trays are delicate in the event of impacts, which can make them break.

**[0003]** Another kind of shower trays are those of polymeric synthetic materials in which the tray is made in a single mould, in a single material. These trays are soft and flexible, and although they can be adapted to any required shape by cutting, they have the disadvantage that, through being soft, deformations in the surface are caused when treading close to the drain zone, which give rise to water leaks. These are also hard to fit and they are not provided with the drainage slopes required for proper channelling of the water.

**[0004]** Foamed polymer trays are also known of. Though not having the disadvantage described above of water leaks through deformation of the drainage zone, these do not offer the comfort of being soft to tread on either, as is desirable, and they cannot be adjusted by cutting on site, which makes their application very limited. As in the previous case, the drainage valve has to be held to a flexible part, and a reinforcement has to be made in the area where this is fitted in order to minimise the aforementioned adverse effects.

#### **Description of the invention**

[0005] The invention now being proposed covers a tray

for a shower which solves the above disadvantages so as to provide a shower tray with a soft surface which comprises drainage slopes and can be cut to size on site or anywhere else with no detriment to the required sealing conditions.

**[0006]** This comprises a rigid inner core, made from a polymeric material. According to a specific embodiment, the material is a resin to which mineral content is added, so as to improve its mechanical properties and reduce the cost of production. The upper surface of this core is made in such a way that this comprises a hole for the drain and the corresponding slopes tilting towards this hole.

**[0007]** A soft covering, also made of a polymeric material, such as a polyurethane rubber, is incorporated on this core. The covering is closely linked to the upper and side surfaces of the rigid core, keeping the slopes towards the drain hole, also made in the covering.

**[0008]** The height of the rigid core can be variable, depending on the installation conditions (fitted flush or superimposed, etc.) and decorative interest, and will normally be placed at from 1cm to 20cm, without meaning any limitation thereby.

**[0009]** The covering will normally be from 1 mm to 10mm thick, depending on the comfort conditions required, and an optimum thickness will normally be between 2mm and 4mm.

#### Short description of the drawings

**[0010]** In order to illustrate the following explanation, we adjoin one sheet of drawings to this descriptive report in which two figures represent the essence of this invention, and in which:

Figure 1 shows a cross-section of the shower tray according to the invention, in which the rigid core and the covering can be seen; and

Figure 2 shows a perspective view of an assembly example in which a corner of the tray has been cut away to get by a pillar, and in which the lateral edges can be seen.

# Detailed description of a form of embodiment of the invention

[0011] As has already been described, the proposed invention consists of a shower tray (1) which comprises a rigid core (2) which can be in any shape, although this will normally be square or rectangular. According to the preferential embodiment, this rigid core (2) is made up of a resin matrix, to which mineral contents are added. This rigid core (2) has a drain hole (7) made in it, to which a conventional trap or drain can be fitted.

[0012] This rigid core (2) is surrounded by a covering (3). This covering (3) is also a lateral covering (6). In the event of the shower tray (1) of the invention being for placing on top of the floor (fig. 2), this covering gives the

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tray a satisfactory visual appearance. The hole (7) is intended to have a cover (4) of a material similar to that of the covering (3), although a conventional drain can be fitted on this hole (7). Normally the material of the covering (3) will be a rubber or similar product, such as a polyurethane rubber. The covering is normally from 1 mm to 10mm thick, though this will preferably be in the range of 2mm to 4mm.

[0013] When this has to be installed in a location where there are irregularities, such as for example a pillar, a cut (5) has to be made in the shower tray (1) to adapt to the shape of this irregularity. The cut part will be integrated in the tiling or facing of the wall, for which reason this does not entail any aesthetic disadvantage. The covering materials (3) such as those of the rigid core (2) are water repellent, for which reason they are not affected by any possible damp through improper fitting.

**[0014]** The dimensions of the tray are variable as regards surface area and thickness, depending on the decorative and functional requirements in each case.

Claims

- **1.** A shower tray, **characterised by** basically being made up of two parts:
  - A rigid core (2) made of a polymeric material,
    and
  - An outer covering (3) surrounding this rigid core, and which is securely joined to this, the material of which this outer covering(3) is made being rubber.
- 2. A shower tray, according to claim 1, **characterised** in **that** the rigid core (2) is made up of a resin core with mineral content.
- 3. A shower tray, according to either of claims 1 to 2, characterised in that the rigid core (2) has a drain hole (7) made in it, to which a conventional trap or drain can be fitted.
- **4.** A shower tray, according to any of claims 1 to 3, characterised in that the outer covering (3) is also a lateral covering (6).
- **5.** A shower tray, according to any of claims 1 to 4, **characterised in that** the material used for the covering(3) is a polyurethane rubber.
- 6. A shower tray, according to claim 3 or any of claims 4 to 5, insofar as these depend on claim 3, characterised in that the hole (7) has a cover (4) made of a material similar to the one of the covering (3),
- 7. A shower tray, according to any of claims 1 to 6, characterised in that the thickness of the covering

- (3) is from 1 mm to 10mm.
- 8. A shower tray, according to claim 7, **characterised** in that the covering (3) is normally from 2mm to 4mm thick.
- **9.** A shower tray, according to any of claims 1 to 8, **characterised in that** the materials of the outer covering (3) and the rigid core (2) are water-repellent.
- 10. A shower tray, according to any of claims 1 to 9, characterised in that the materials used for the outer covering (3) and the rigid core (2) are able to be cut.

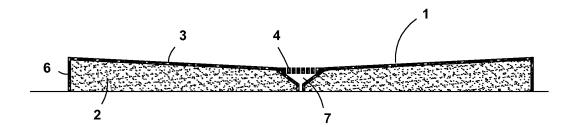


Fig. 1

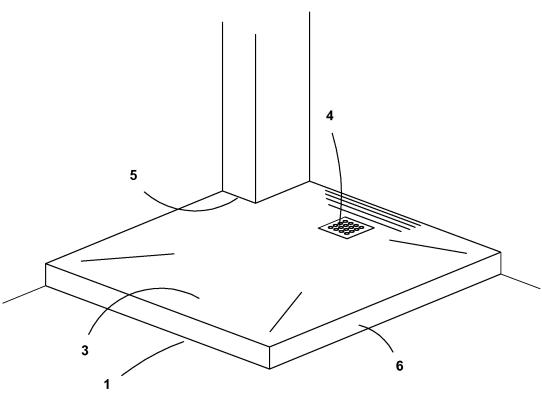


Fig. 2