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(54) **BOTTOM FOR WASHBASINS AND SINKS IN GENERAL**

(57) A bottom (1) for washbasins and sinks in general, comprising a main body (2) which is substantially planar in shape and is provided with a hole (3) for the coupling by insertion of a drain or the like; the main body

(2) comprises a perimetric rim (4) which protrudes in a direction which is normal with respect to its planar extension on the side intended to engage the walls of a basin (5).

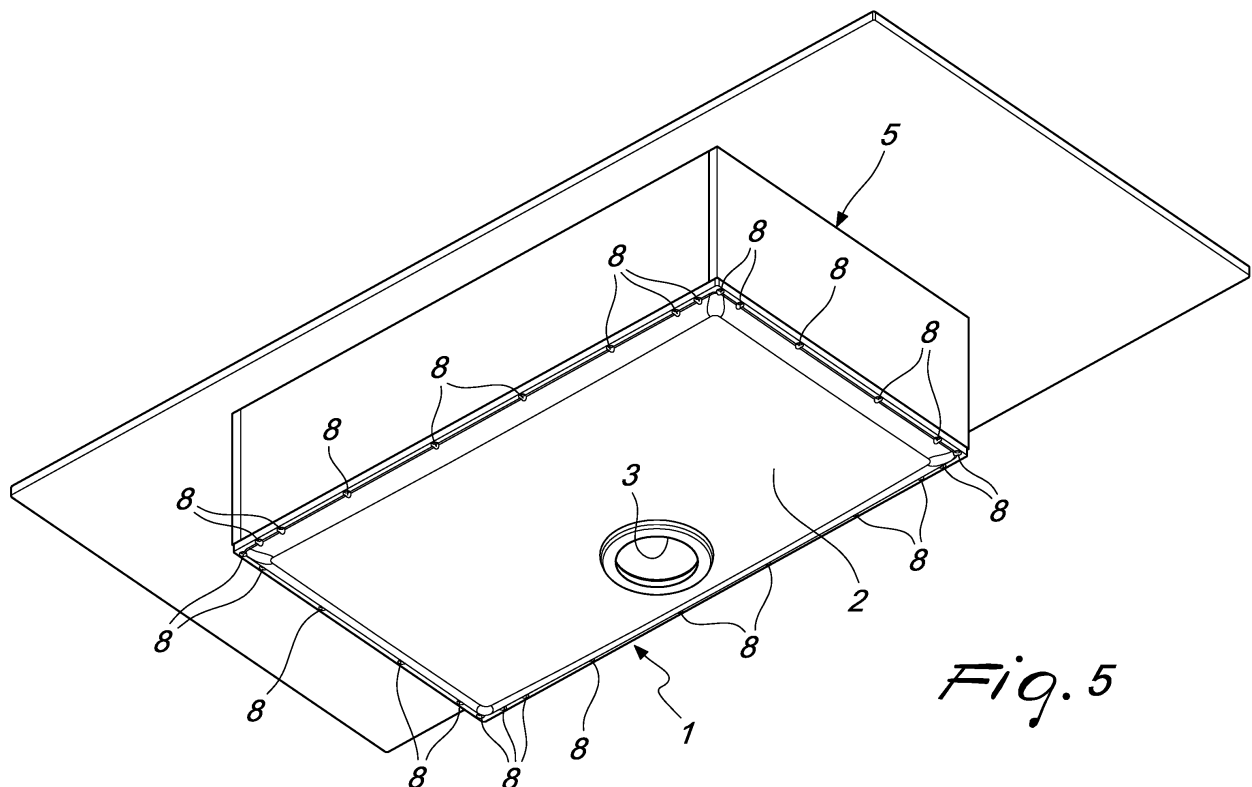


Fig. 5

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Description

[0001] The present invention relates to a bottom for washbasins and sinks in general.

[0002] In the sector of furnishings for kitchens, the use is known of generally colored surfaces with material effects.

[0003] The use therefore of composite materials has a strategic role in these market tendencies.

[0004] An important area in which numerous aesthetic solutions compete (veined surfaces with a marbled effect, dimpled surfaces that evoke granite etc.) is the kitchen worktop, which can be made of many materials and with various technologies: laminated chipboard, high-pressure compact laminate (HPL), solid surface, porcelain stoneware and more besides.

[0005] The search for such leading-edge aesthetic/chromatic solutions has come to affect the sink area as well, so much so that many makers/converters of the above mentioned materials have developed solutions for providing sink basins made of the same material as the worktop.

[0006] What is obtained therefore is what is known as a reconstituted stone sink, produced by machining using a numerically controlled machine on slabs of kitchen worktops resulting in the various faces of the basin which are then glued together in order to obtain the desired parallelepiped shape.

[0007] However, these solutions exhibit the drawback that the materials used for kitchen worktops are unsuitable for providing the bottom of the basin.

[0008] In fact, it is at this point that the greatest stresses during daily use occur: thermal shock, dry heat, impacts, scratches etc.

[0009] In order to overcome this drawback, the converters/installers of such solutions have developed systems that involve the artisan provision of a bottom made of metal (in general stainless steel) which can be glued onto the bottom of the reconstituted stone basin.

[0010] In the end, the vertical walls are still provided using the same material as the worktop while a flat bed of metal provided by cutting and folding is glued on the bottom, and acts as the basin bottom.

[0011] Such conventional bottoms are however not devoid of drawbacks, among which is the fact that, since it has a substantially flat geometry, debris and dirt can become lodged in the coupling edge between the bottom and the walls of the basin if they are not cleaned carefully, and in any case they can only be cleaned with great difficulty.

[0012] Therefore the entire functional and ergonomic user experience, and even the hygiene of the entire basin, is compromised.

[0013] A further drawback of such conventional bottoms consists in that the aesthetic aspect of the basin is compromised.

[0014] In fact, the walls of the reconstituted stone basin and the kitchen worktop, with separate material and chro-

matic finishes, clash aesthetically with the steel (or in general metal) surfaces of the basin bottom, while not forgetting the lesser functionality of steel in terms of resistance to scratches and surface impacts.

[0015] The aim of the present invention consists in providing a bottom for reconstituted stone basins that overcomes the above mentioned limitations and drawbacks.

[0016] Within this aim, an object of the present invention consists in providing a bottom for reconstituted stone basins that is capable of offering the widest guarantees of reliability and safety in use.

[0017] Another object of the present invention consists in providing a bottom for reconstituted stone basins that can be provided with technologies that are known per se and which therefore is low-cost.

[0018] This aim and these and other objects which will become more apparent hereinafter are achieved by a bottom for washbasins and sinks in general, comprising a main body which is substantially planar in shape and is provided with a hole for the coupling by insertion of a drain or the like, characterized in that said main body comprises a perimetric rim which protrudes in a direction which is normal with respect to its planar extension on the side intended to engage the walls of a basin.

[0019] Further characteristics and advantages of the invention will become more apparent from the detailed description of a preferred, but not exclusive, embodiment of a bottom for washbasins and sinks in general, illustrated by way of non-limiting example with the aid of the accompanying drawings wherein:

- Figure 1 is a perspective view of a bottom for washbasins and sinks in general, according to the present invention;
- Figure 2 is a plan view from above of the bottom shown in Figure 1;
- Figure 3 is a plan view from below of the bottom shown in Figures 1 and 2;
- Figure 4 is a perspective view from above of a reconstituted stone basin provided with the bottom shown in the previous figures, according to the present invention;
- Figure 5 is a perspective view from below of the basin shown in Figure 4;
- Figure 6 is an enlarged-scale detail of the basin shown in Figure 5.

[0020] With particular reference to the figures, the bottom for washbasins and sinks in general, according to the present invention, is generally designated with the reference numeral 1 and comprises a main body 2 which is substantially planar in shape and is provided with a hole 3 for the coupling by insertion of a drain or the like.

[0021] According to the invention, the main body 2 comprises a perimetric rim 4 which protrudes in a direction which is normal with respect to its planar extension on the side intended to engage the walls of a basin 5.

[0022] In more detail, there is a perimetric radiused

surface 6 defined between the perimetric rim 4 and the planar part of the main body 2 so as to render the bottom 1 free from corner edges where dirt and debris could build up.

[0023] Advantageously, the perimetric rim 4 has at least one groove 7, with a closed extension that extends along the entire perimeter of the main body 2, which is defined by the side intended to engage with the walls of the basin 5 so as to accommodate the correct quantity of an adhesive and/or sealing material, for example mastic, which is interposed between the bottom 1 and the walls of the basin 5.

[0024] Moreover, the bottom 1 is provided with a plurality of perimetric dead holes 8 which are defined on the side opposite to the side intended to engage with the walls of the basin 5 in order to define guide points for the insertion of screw means adapted to fix the bottom 1 to the walls of the basin 5.

[0025] Advantageously, the perimetric dead holes 8 are of the flared type so as to accommodate the adhesive and/or sealing material, for example mastic, so as to cover the screw means so as to ensure their sealing.

[0026] The bottom 1 described up to this point can be made of a composite material by means of GPS (Granitek Production System) technology, using shell molds for acrylic-based thermosetting composites.

[0027] In practice it has been found that the bottom for washbasins and sinks in general, according to the present invention, achieves the intended aim and objects, in that it makes it possible to not have corner edges where dirt and debris can build up.

[0028] In fact, having a radiused surface along the entire internal perimeter of the lower edge of the basin bottom, with a perfect panel/bottom coupling, facilitates cleaning and prevents any gap, thus considerably improving the user experience.

[0029] Another advantage of the bottom according to the present invention consists in that the arrangements of the perimetric dead holes and of the groove, for receiving the adhesive and/or sealing material, which are obtained directly in the mold, considerably facilitate the step of mounting the basin bottom, which is provided using a fully industrialized production process that also improves the tolerances and the dimensional stability of the end product.

[0030] Another advantage of the bottom according to the present invention consists in that it is made of a material that lends itself perfectly for intensive use in the kitchen, in particular in the basin of the sink, without forgetting the fact that the composite material makes it possible to obtain optimal aesthetic couplings by virtue of the multiplicity of colorings that can be provided.

[0031] The bottom for washbasins and sinks in general thus conceived is susceptible of numerous modifications and variations all of which are within the scope of the appended claims.

[0032] Moreover, all the details may be substituted by other, technically equivalent elements.

[0033] In practice the materials employed, provided they are compatible with the specific use, and the contingent dimensions and shapes, may be any according to requirements and to the state of the art.

[0034] The disclosures in Italian Patent Application No. 102021000025508 from which this application claims priority are incorporated herein by reference.

[0035] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A bottom (1) for washbasins and sinks in general, comprising a main body (2) which is substantially planar in shape and is provided with a hole (3) for the coupling by insertion of a drain or the like, **characterized in that** said main body (2) comprises a perimetric rim (4) which protrudes in a direction which is normal with respect to its planar extension on the side intended to engage the walls of a basin (5).
2. The bottom (1) according to claim 1, **characterized in that** it comprises a perimetric radiused surface (6) defined between said perimetric rim (4) and the planar part of said main body (2) so as to render said bottom (1) free from corner edges.
3. The bottom (1) according to claim 1 or 2, **characterized in that** said perimetric rim (4) has at least one groove (7), which is defined by said side intended to engage said walls of said basin (5) so as to accommodate the correct quantity of an adhesive and/or sealing material interposed between said bottom (1) and said walls of said basin (5).
4. The bottom (1) according to claim 3, **characterized in that** said at least one groove (7) has a closed extension which extends along the entire perimeter of said main body (2).
5. The bottom (1) according to one or more of the preceding claims, **characterized in that** it is provided with a plurality of perimetric dead holes (8) which are defined on the side opposite with respect to said side intended to engage said walls of said basin (5) in order to define guide points for the insertion of screw means adapted to fix said bottom (1) to said walls of said basin (5).
6. The bottom (1) according to one or more of the preceding claims, **characterized in that** said perimetric

dead holes (8) are of the flared type so as to accommodate said adhesive and/or sealing material so as to cover said screw means so as to ensure their sealing.

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7. The bottom (1) according to one or more of the preceding claims, **characterized in that** it is made of a composite material by means of GPS (Granitek Production System) technology, using shell molds for acrylic-based thermosetting composites.

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8. A basin (5) for washbasins or sinks in general, **characterized in that** it comprises a bottom (1) according to one or more of the preceding claims.

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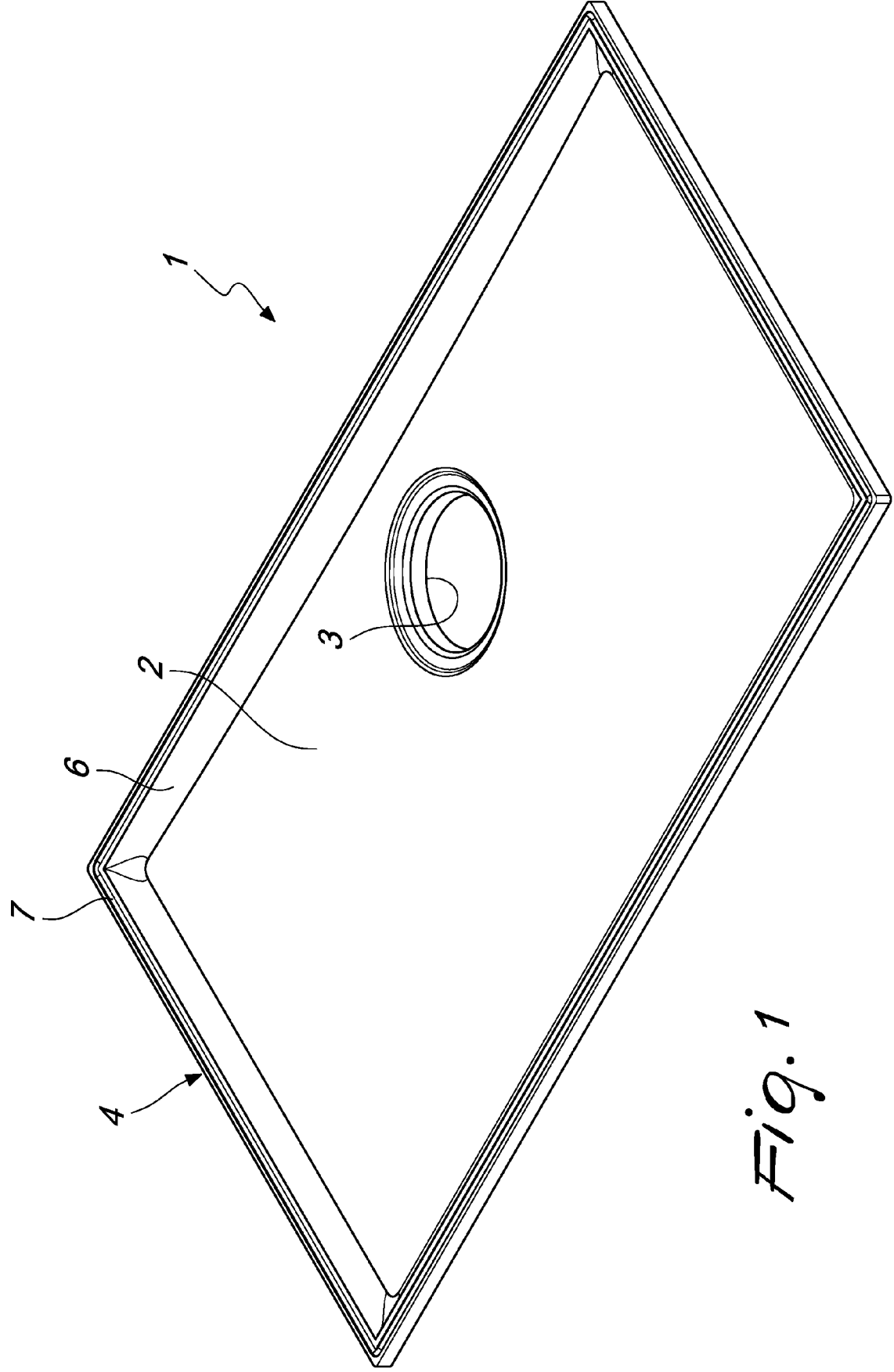


Fig. 1

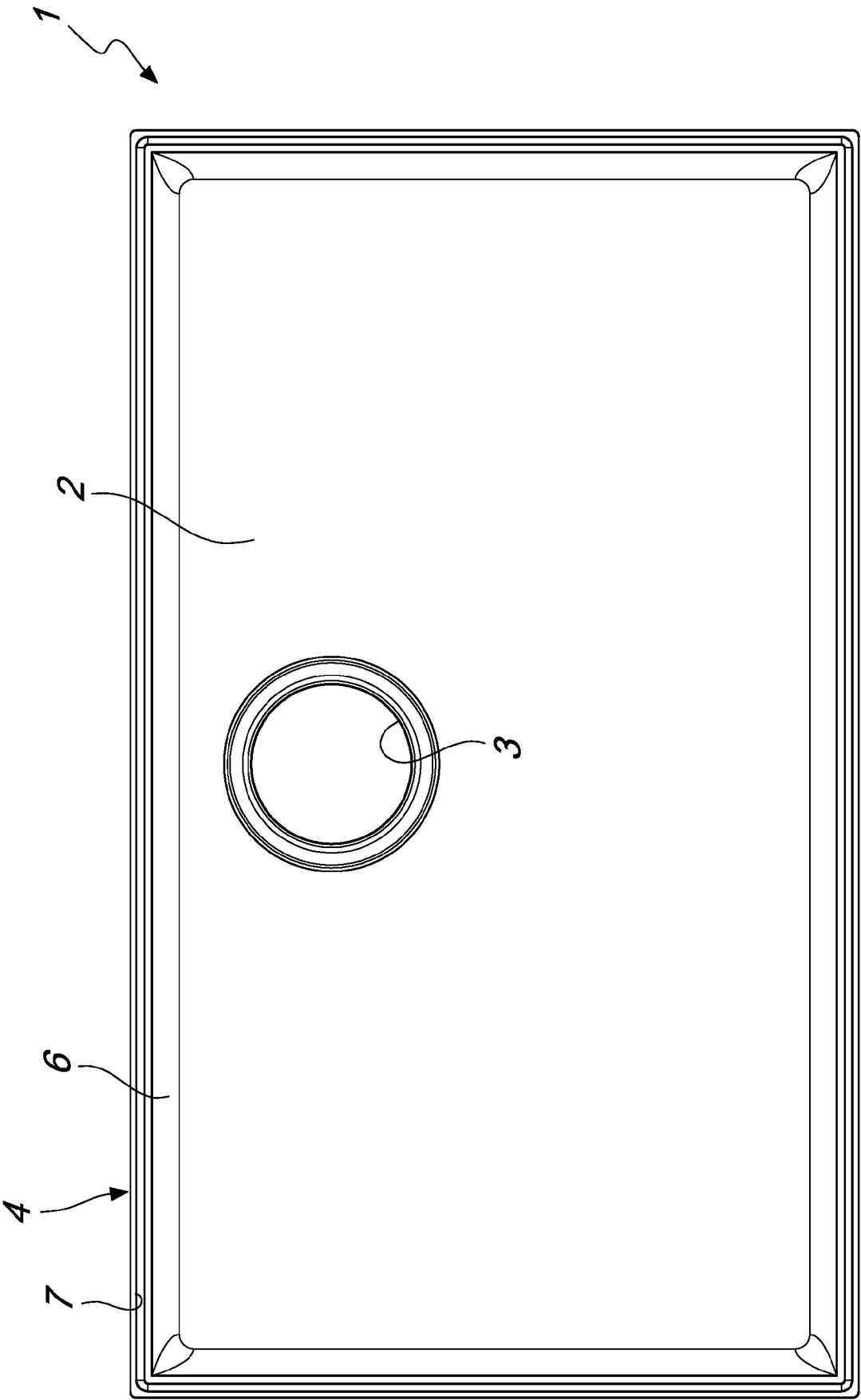


Fig. 2

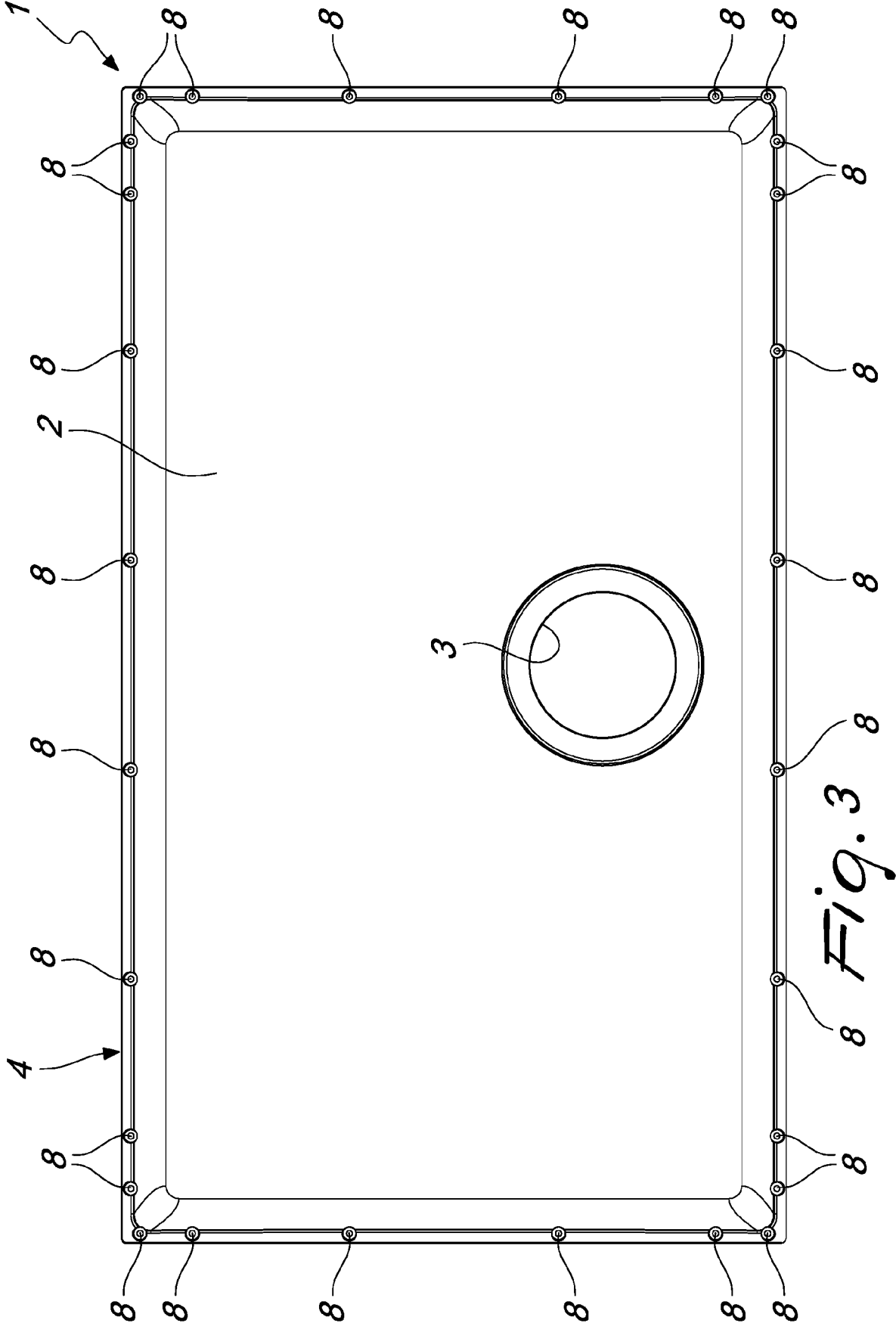


Fig. 3

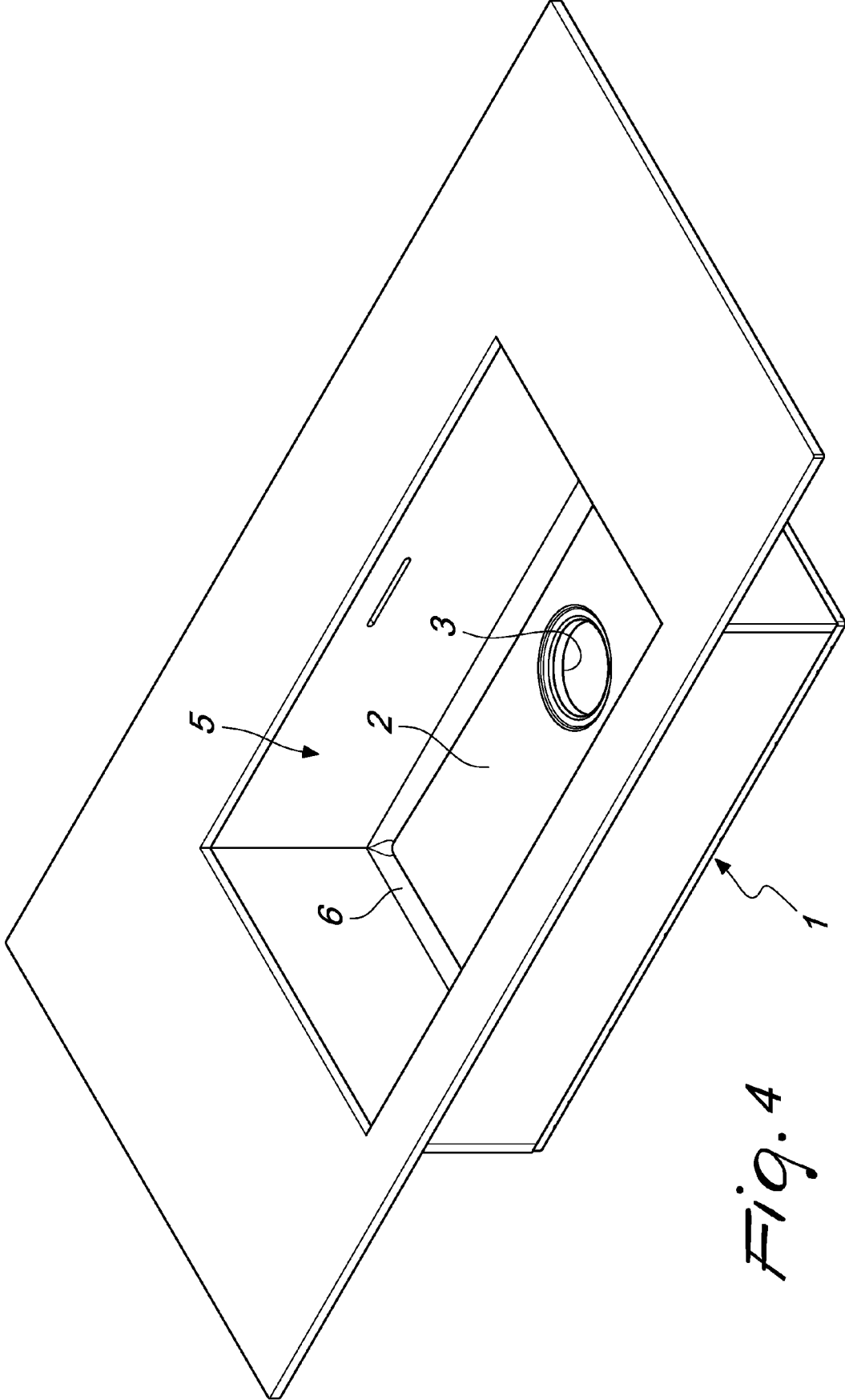


Fig. 4

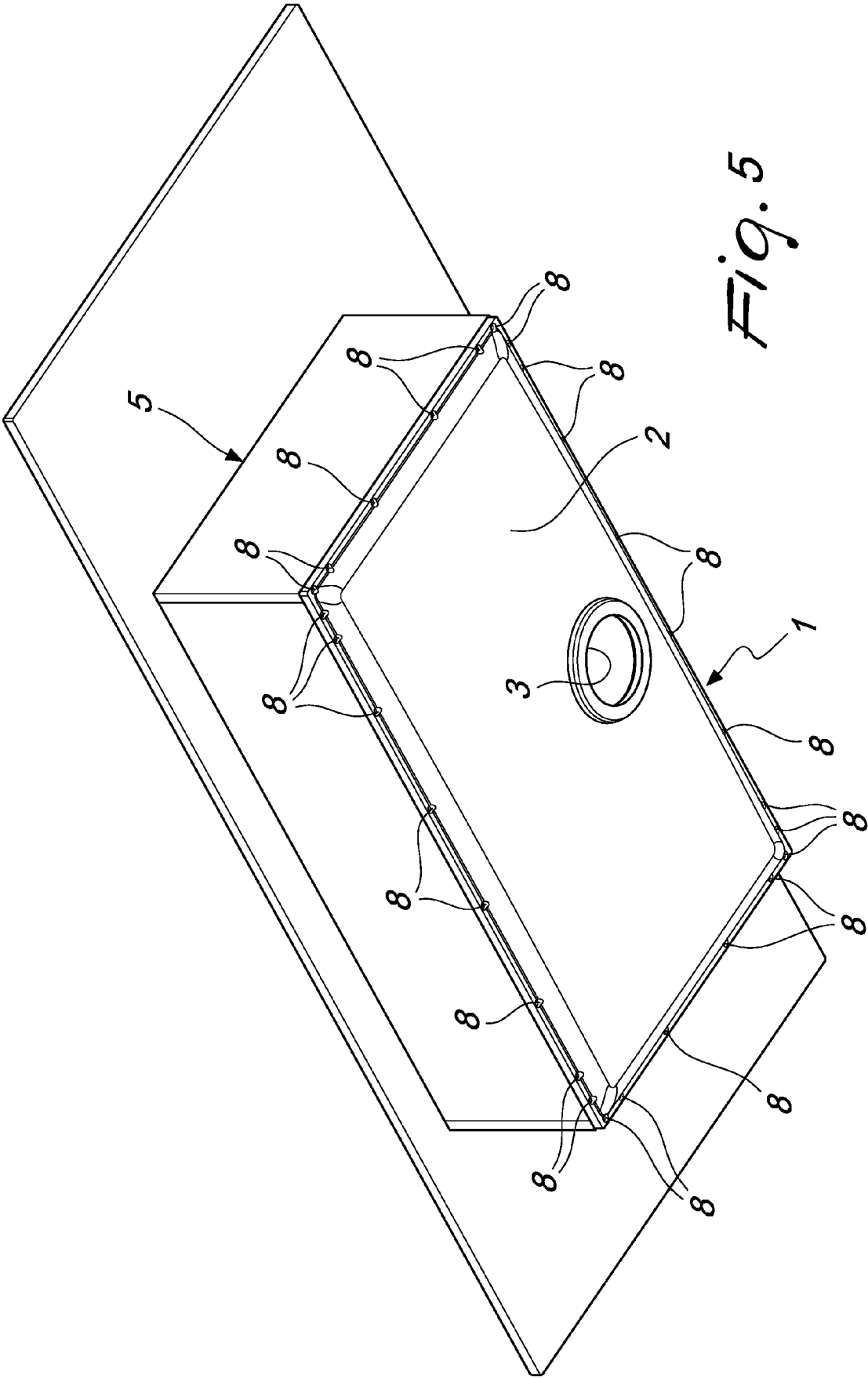


Fig. 5

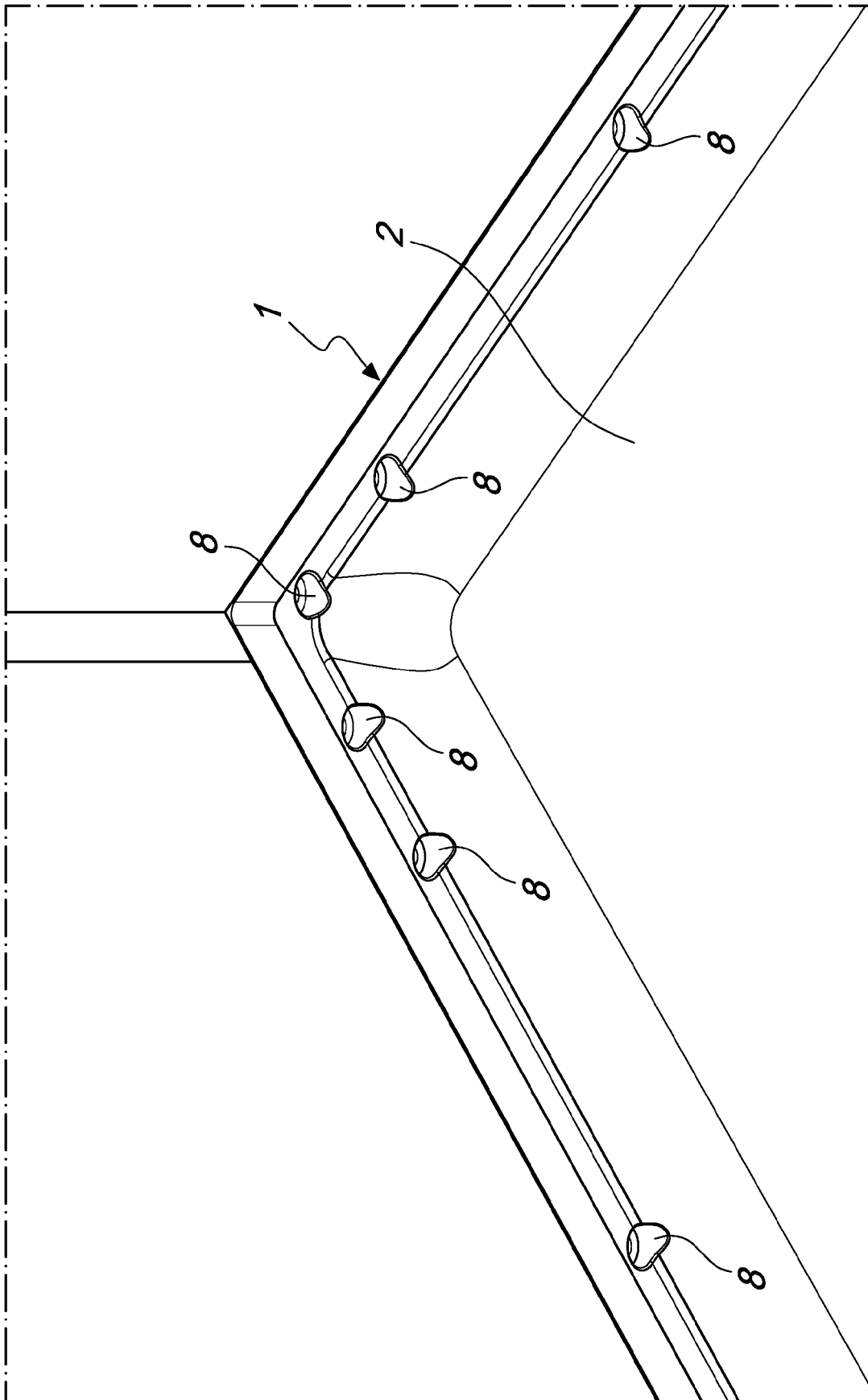


Fig. 6



EUROPEAN SEARCH REPORT

Application Number

EP 22 18 3275

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 35 44 744 A1 (SCHOCK & CO GMBH [DE]) 25 June 1987 (1987-06-25) * figures 1,5 * -----	1-8	INV. A47K1/06 A47J47/20 E03C1/186
X	US 4 316 433 A (HEBERT KENNETH B) 23 February 1982 (1982-02-23) * claims 13,23; figures 1-4 * -----	1-8	
			TECHNICAL FIELDS SEARCHED (IPC)
			A47K A47J E03C
The present search report has been drawn up for all claims			

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EPO FORM 1503 03.82 (P04C01)

Place of search	Date of completion of the search	Examiner
The Hague	24 November 2022	Boyer, Olivier
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		

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

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5 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
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24-11-2022

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 3544744 A1	25-06-1987	DE 3544744 A1	25-06-1987
		JP S62211433 A	17-09-1987

US 4316433 A	23-02-1982	NONE	

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- IT 102021000025508 [0034]