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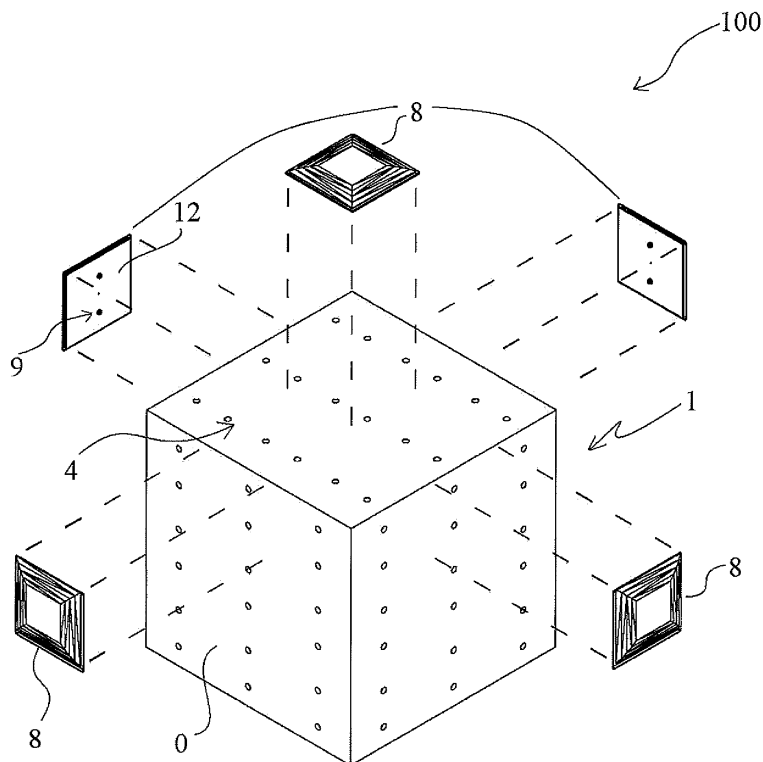
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(54) **Piece of furniture particularly adaptable**

(57) The present invention refers to a piece of furniture (100) comprising a main body (1) covered with at least one component part (8) that is reversibly applicable on to the outer surface (O) of said main body, **charac-**

**terized in that** said outer surface (O) is provided with first engagement means (4) adapted to cooperate with second engagement means (9) provided on a first face (12) of said at least one component part.



**FIG. 8A**

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## Description

### Field of the Invention

[0001] The present invention refers to a piece of furniture, such as in particular a pouf comprising decorative elements enabling the same pouf to be personalized according to needs or preferences.

### Background of the Invention

[0002] Largely known since many years now are such pieces of furniture, such as poufs, which are available in a variety of shapes, designs and colours. Poufs, as they are currently available on the market, are generally comprised of a main body, which is usually made of a soft material, and an outer covering made of variously processed cloth, leather or imitation leather, as well as other kinds of woven and non-woven fabrics.

[0003] Alternatively, poufs can also be found on the market, the main body of which is formed of a rigid material, such as wooden or plastic panels, which is then upholstered with a soft cushioning layer that is in turn covered using the above-cited covering materials.

[0004] Pieces of furniture of the above-noted kind, although fully effective in complying with requirements of various kind and nature since a long time now, do anyway allow for just a limited versatility as far as a personalization thereof is concerned, basically due to them lacking any adequate capability of being practically modified in their both functional and aesthetical design in order to meet particular requirements or preferences. In fact, to just cite an example, a pouf covered with a covering of such a delicate material as leather, will only be able to be modified into a pouf covered with a covering of a either scratch-resistant or stain-resistant material by having the covering fully replaced or, in certain cases, by having the pouf itself replaced in its entirety.

[0005] In addition, should the main body of a pouf be desirably upholstered with the use of softer or harder padding, the need invariably arises for the entire pouf to be practically replaced. It therefore ensues that poufs - along with the majority of the other furniture adjuncts, on the other hand - while being currently available in a variety of shapes, designs and decorations, still represent a static, poorly versatile element being quite limited in the specific utilization scope thereof.

### Summary of the Invention

[0006] The main object of the present invention therefore lies in providing a piece of furniture of the above-cited kind, which is highly versatile, functional, aesthetically personalizable, and dynamic in its specific utilization scope.

[0007] This problem is solved by a piece of furniture of the above-cited kind, which is comprised of component parts that have been specially investigated and designed

so as to be able to allow a wide variety of functional and aesthetical needs and requirements to be most conveniently, easily and practically complied with.

[0008] According to the present invention, this aim is therefore reached in a piece of furniture of the above-cited kind incorporating such features and characteristics as recited in the appended claims.

### Brief Description of the Drawings

[0009] Further features and the advantages of the piece of furniture according to the present invention will become apparent and be more readily understood from the description of some exemplary embodiments that is given below by way of non-limiting example with reference to the accompanying drawings, in which:

- Figure 1 is a plan view of the main body of a piece of furniture according to the present invention, as viewed in the non-assembled state thereof;
- Figure 2 is a perspective view of the main body shown in Figure 1, as viewed in the assembled state thereof, along with a detail view of a particular item;
- Figure 3A is a perspective view of a detail of the body shown in Figure 1;
- Figure 3B is a side cross-sectional view of the detail illustrated in Figure 3A;
- Figure 4A is a plan view of a first element of a component part of the piece of furniture according to the present invention;
- Figure 4B is a perspective view of the component part illustrated in Figure 4A;
- Figure 4C is a cross-sectional view of the element shown in Figure 4A, as viewed along the line IV-IV;
- Figure 5A is a plan view of a second element of a component part of the piece of furniture according to the present invention;
- Figure 5B is a perspective view of the component part illustrated in Figure 5A;
- Figure 5C is a cross-sectional view of the second element shown in Figure 5A, as viewed along the line V-V;
- Figure 6A is a plan view of a third element of a component part of the piece of furniture according to the present invention;
- Figure 6B is a side view of the third element illustrated in Figure 6A;

- Figure 7A is a side cross-sectional and exploded view of a component part of the piece of furniture with a covering;
- Figure 7B is a side view of the component part shown in Figure 7A, as viewed in the assembled state thereof;
- Figure 8A is a perspective view of a piece of furniture, with the component parts thereof shown in an exploded configuration thereof;
- Figure 8B is a perspective view of the piece of furniture, as shown in the assembled state thereof;
- Figure 9 is a perspective view of a piece of furniture according to a modified embodiment of the present invention;
- Figure 10 is a perspective view of a piece of furniture according to a further modified embodiment of the present invention

### Detailed Description of the Invention

**[0010]** The basic idea, which the present invention is founded on, lies in devising a piece of furniture provided with modular and easily interchangeable elements to modify the surface structure in a quick and simple manner in accordance with particular requirements or preferences.

**[0011]** Accordingly, a piece of furniture has been devised, which comprises a main central body covered with at least one component part that is reversibly applicable to the outer surface of said main body.

**[0012]** In particular, as illustrated in Figure 1, the main body - as generally indicated at 1 - may be represented by a set of panels 2 that are capable of being reversibly assembled with each other so as to form a single three-dimensional, preferably cube-shaped structure, as this is best illustrated in Figure 2.

**[0013]** The panels 2 may be square-shaped, be provided in the number of six of them, and are joined to each other with the aid of connecting means so as to form a kind of cross. In this manner, they can be easily folded to form the above-noted cube-shaped structure. This joining method used to assemble the panels into a cube is generally termed as "folding" in the technical parlance. This folding process is carried out on specially provided machinery, and is based on cutting the panels by means of blades or tools that may take a variety of inclinations at the points that are then due to be folded (if the final joint is due to form a right angle - as this occurs in the case of the cube being discussed by way of example - such cutting will be performed with a tool oriented at 90°). Prior to processing, the starting panel, which may be made of a variety of materials, such as for instance medium-density fibreboard (MDF), chipboard, plywood, and

the like, must be coated with a film, which may be of a laminate, PVC or other material, which will then perform as the above-mentioned connecting means due to hold the various panels forming as a result of the cutting operation joined to each other, since the tool does not sever such film, actually, but rather carves a slight incision onto it, which will then enable the panels to be folded and joined to each other to form the faces of the cube. The folded panels are joined to each other through the application, in the cuts made for folding, of proper glues or adhesives adapted to withstand the rather severe mechanical forces and stresses that may be applied onto the finished products, thereby preventing the cube from opening apart accidentally.

**[0014]** Anyway, the actual kind of folding shall not be considered as being binding, since use can for instance be made of also individual panels to be coupled to each other by means of snap-fitting, quick-release or other kinds of connecting means. For example, use can be made of hinges of a conventional kind, such as hinges of the kind formed of two plate-shaped wings to be attached to the mutually opposing sides of two adjacent panels and capable of rotating relative to each other about a common hinge pin.

**[0015]** In addition, each free side of the panels may be provided with further possibly reversible connection means (not shown) that are adapted to mutually engage when the panels 2 are folded onto each other, so as to keep them firmly joined in contact with each other, thereby preventing the cube from opening apart accidentally. The connection means may be simply represented by glues, as possibly assisted by screws, or linking systems of a conventional kind based on a slot-and-hook coupling, elements based on the coupling of shapes, such as snap-fitting or quick-release fasteners, Velcro-type fastening means, automatic snap-on buttons.

**[0016]** On the other hand, the main body 1 may be in a rectangular shape, a frustoconical or frustopyramidal shape, a rounded shape, or any other shape as desired. Most obviously, the panels 2 will be adapted to form the desired shape and, especially in the case of particular shapes, the panels may be single and reproduce the entire shape of the main body.

**[0017]** The panels 2 themselves may be produced starting from traditional wooden materials, such as MDF, chipboard, plywood, in a laminate form or lacquered. Alternatively, especially if the related component part is to be desirably lightened, they may be made of plastics in the form of individual separate pieces to be connected with each other in any of a variety of manners largely known as such to those skilled in the art, such as for instance with the use of the afore-cited connecting means.

**[0018]** Advantageously, the panels 2 are provided with first engagement means 4 adapted to cooperate with second engagement means positioned on the component parts of the inventive piece of furniture, as this shall be described in greater detail further on.

**[0019]** In particular, said first engagement means 4 (Figures 1 and 2) comprise bores 5 provided in the face O of the panels 2, which is oriented to face outwards when the piece of furniture is in the assembled state thereof. On the bottom thereof, these bores 5 can preferably accommodate a magnetic element 7 that is so made as to be able to fit with such bottom in a matching manner (Figure 2). Furthermore, the bores 5 can be engaged by a seat 6, which is on the one side adapted to keep said magnetic element 7 firmly in position and, on the other side, is adapted to receive said second engagement means provided on the component parts of the inventive piece of furniture, wherein said second engagement means are in turn provided with a further magnetic element cooperating with the afore-cited magnetic element to keep the component parts firmly adhering against the panels, as this shall be described in greater detail further on.

**[0020]** In Figures 3A and 3B, the above-mentioned seat 6 is preferably represented by a hollow cylinder in the form of a cap, featuring a flared free rim 61 and an outer side wall 62 provided with ribs 63 acting as anchoring means against the side walls of the bores 5 as they interfere therewith. This seat 6 also performs so as to both protect and aesthetically complete, i.e. beautify the bores 5 themselves.

**[0021]** As noted hereinbefore, the inventive piece of furniture comprises at least one component part 8 (Figures 7A and 7B) that is reversibly applicable on to the outer surface O of said main body 1.

**[0022]** Such component part 8 comprises second engagement means 9 that are adapted to cooperate with the afore-mentioned first engagement means 4 to retain said component part against the surface O of the panels 2 of the main body 1 in a reversible manner.

**[0023]** Advantageously, as shown in Figures 4A-to-4C and 7A said second engagement means 9 comprise a seat 10 adapted to accommodate a magnetic element 11 and retain it thereinside, e.g. by gluing, interference fit. When so positioned in the seat 10, this magnetic element 11 enables the component part 8 to be attached to and adhere against the surface O of a panel 2 by interacting with the magnetic element 7 accommodated in the bore 4 of said panels.

**[0024]** In addition, the seat 10 is such as to protrude from a first face 12 of said component part 8 to be able to engage the corresponding seat 6 in the bore 5 of the panels 2. As a result, the seats 10 and 6 advantageously perform to both act as locator or centering means for the exact application of the component parts 8 on to the panels 2, and as fastening means for attaching said component parts to the panels through the reversible interaction of said magnetic elements 7 and 11.

**[0025]** Preferably, the component part 8 comprises a first element 13, a second element 14, a third element 15, and a covering 16.

**[0026]** As illustrated in Figures 4A to 4C, the first element 13 is represented by a board having preferably a

generally square shape and provided with a first face 12, from which there protrude the seats 10, and a second face 17, from which there on the contrary protrude anchoring means 18, such as for instance snap-fitting elastic elements or the like, for attachment to said second element 14. These elastic means may be represented by tab-like protuberances having a flexible stem and a head provided with a ramp-shaped undercut tooth, as this is best illustrated in Figure 4C. Preferably, the peripheral outer edge 19 is so shaped as to be slightly sloping towards said second face 17.

**[0027]** As illustrated in Figures 5A to 5C, the second element 14 is in turn represented by a board having a generally square shape and is substantially complementary to the above-described first element 13. Accordingly, this second element 14 has a first face 20, on which there are provided anchoring means 21 adapted to receive the anchoring means 18 of the first element 13. In particular, these anchoring means are represented by bores that are adapted to be engaged by the above-described elastic elements snap-fitting thereinto. A second face 22 of such second element is substantially smooth and such as to be able to receive the cushioning layer 15 thereonto. Finally, a peripheral edge 23 is provided to protrude from the first face 20 so as to be able to mate with the peripheral edge 19 of the first element 13.

**[0028]** It should be noticed that the first element 13 and the second element 14 may be made of plastics, wood or metal, so as to best comply with particular needs or preferences.

**[0029]** The third element 15 (Figures 6A and 6B) consists of a conventional padding of the kind that is usually employed to upholster furniture pieces such as poufs, armchairs, sofas. Preferably, this padding or upholstering material is selected from the group including foamed polyurethane or cellular polyurethane foam, cotton, wool, non-woven fabric fibres. In addition, such padding may be selected in any suitable shape and thickness, such as in the shape of a frustum of a pyramid with a square base (Figures 6A and 6B), and may be applied onto the second face 22 of the second element 14 by means of glues, Velcro-type or other attachment system enabling it to be either permanently or removably fixed thereto.

**[0030]** Preferably, through both the first element 13 and the second element 14 there extends a through-bore 24 enabling air to be vented whenever a pressure is exerted onto the padded piece of furniture.

**[0031]** The covering 16 (Figures 7A and 7B) may be a cloth of any either woven or non-woven fabrics, leather, imitation leather, or the like, in any of a variety of colours, designs and decoration patterns. In particular, the covering is put on the padding so as to protrude and close also over the peripheral edge 23 of the second element 14, thereby forming a single piece to be applied on to the first element 13.

**[0032]** Alternatively, the covering may be eliminated in the case that a padding is selected, which is itself directly decorated with appropriate colours and/or designs

and/or inscriptions.

**[0033]** Furthermore, the materials used to make the various component parts enable the actual function of the piece of furniture to be selected as desired. In other words, if the piece of furniture has to be desirably converted into a pouf to simply lay the feet thereupon, all it takes is selecting a component part, i.e. a covering and a padding, which is appropriately soft and comfortable. On the other hand, if the piece of furniture has to be placed and used outdoors use will on the contrary be made of a more rigid, impermeable covering. Should the piece of furniture be then required to perform as a table, this can be obtained by replacing the various removable component parts used on or forming the surface to be converted with an plate of glass, wood or other material.

**[0034]** In addition, the main body may be used as a container, e.g. by having a panel connected to the body so as to be able to be closed and opened in the way of a conventional door.

**[0035]** Furthermore, when associated to other bodies of a similar kind, the main body 1 enables seats or other pieces of furniture of a modular design to be formed, thereby conferring modularity and versatility properties to the final product.

**[0036]** One of the afore-mentioned panels 2 may also be provided with feet 3 for it to rest on the floor or, alternatively, it can be provided with castors to enable the associated piece of furniture to be conveniently moved about.

**[0037]** The component parts 8 may be applied and attached to the main body using attachment means differing from the ones that have been described afore, such as for instance Velcro, automatic snap buttons, snap-fit elements. These same means may be provided for coupling the first element 13 and the second element 14 of the same component parts, and they can be variously used even in combination with the afore-cited magnetic elements.

**[0038]** Fully apparent from the above description is the ability of the piece of furniture according to the present invention to prove particularly advantageous thanks to the removable system of component parts that ensures full versatility and functionality in use and construction, modularity, and practical possibility for the piece of furniture to be continuously aesthetically renewed.

**[0039]** In fact, as this is best illustrated in Figures 8A and 8B, providing a main body that is specially adapted to enable the component parts to be applied in a reversible manner thereto allows - among other things - the piece of furniture to be personalized in accordance with individual preferences or particular needs and requirements, wherein this can furthermore be also achieved by solely and simply changing the arrangement of the various component parts on the same structure. So as described, the component parts themselves can be easily applied on to the main body so as to cover it with one or several decorating elements, thereby creating fantasy designs.

**[0040]** In other words, the inventive piece of furniture can be defined as "seat of the thousand-and-one shapes" thanks to the multiplicity of forms, shapes, decoration and colour patterns that it can take, actually. Basically, the seat is in the shape of a cube and its structure is made of wood. However, any other construction material can be used, as long as it proves suitable in view of the final use or application of the piece of furniture. The padding used to cushion the structure is of non-deformable polyurethane foam, wherein even softer materials can anyway be used to such purpose whenever this is considered appropriate. The covering of the seat consists of a cover that may be of any of a number of different fabrics, covered by squares that may be of the same or a different material and attachable thereto by means of Velcro fastening arrangements provided on both covering elements. The squares themselves can be variously sized and either one, four, nine or sixteen of them may be required to cover a single face of the cube; further to being made of any of a variety of fabrics, such squares may be provided in a variety of different colours, patterns and designs. Anyway, it is the use of the above-cited Velcro-type attachment means that characterizes the seat, actually, since the squares can be detached, be changed in position and re-arranged into a number of different patterns, or be replaced with other squares to one's own liking, thereby creating original and personalized elements. In addition, the Velcro-type attachment means provided on the outer covering enable several cubes to be variously assembled with each other, thereby obtaining a variety of seat combinations.

**[0041]** The piece of furniture of the present invention may for example be a pouf, a nightstand, a sofa, a bookcase, a dresser, a table, a wall-mount cabinet. As illustrated in Figures 9 and 10, the piece of furniture 101 is a pouf made up by several individual pieces 100 of the afore-described kind. The forms and shapes shown in the Figures are illustrated to just represent exemplary embodiments that may be modified into a number of different arrangements and patterns according to personal preferences or particular requirements.

**[0042]** Therefore, it can at this point be most readily appreciated that the piece of furniture according to the present invention is fully effective in solving and doing away with all afore-noted drawbacks and problems associated with the prior art, while adding a number of major advantages. In any case, the inventive piece of furniture shall obviously not be understood as being limited to the above-described embodiments, since it is fully apparent to those skilled in the art that various improvements and modifications may be introduced or added without departing from the scope of the present invention as defined in the appended claims.

## Claims

1. Piece of furniture (100) comprising a main body (1)

covered with at least one component part (8) that is reversibly applicable on to the outer surface (O) of said main body, **characterized in that** said outer surface (O) is provided with first engagement means (4) adapted to cooperate with second engagement means (9) provided on a first face (12) of said at least one component part.

2. Piece of furniture (100) according to claim 1, wherein said main body (1) comprises a set of panels (2) that are capable of being reversibly assembled with each other to thereby form a single three-dimensional structure. 10
3. Piece of furniture (100) according to claim 2, wherein said panels (2) are connected to each other in a cross-shaped arrangement with the aid of connection means provided along the sides at which the panels are in contact with each other, said connection means enabling the panels to fold onto each other so as to form said single solid structure. 15 20
4. Piece of furniture (100) according to claim 2 or 3, wherein each free side of said panels (2) is provided with further possibly reversible connection means that are adapted to mutually engage when the panels are folded onto each other, so as to keep them firmly joined in contact with each other. 25
5. Piece of furniture (100) according to any of the claims 1 to 4, wherein said first engagement means (4) and said second engagement means (9) comprise Velcro-type fastening means, automatic snap-on buttons, linking systems based on the coupling of shapes, snap-fitting fasteners. 30 35
6. Piece of furniture (100) according to claim 5, wherein said first engagement means (4) comprise bores (5) provided in the face (O) of the panels 2, which is oriented outwards when the piece of furniture is in the assembled state thereof. 40
7. Piece of furniture (100) according to claim 6, wherein said bores (5) accommodate a magnetic element (7) on the bottom thereof. 45
8. Piece of furniture (100) according to claim 7, wherein said bores (5) are engaged by a seat (6), which is on the one side adapted to keep said magnetic element (7) firmly in position and, on the other side, is adapted to receive said second engagement means (9). 50
9. Piece of furniture (100) according to any of the claims 1 to 8, wherein said second engagement means (9) comprise a seat (10) adapted to accommodate a magnetic element (11). 55

10. Piece of furniture (100) according to claim 9, wherein said seat (10) is such as to protrude from a first face (12) of said component part (8) to engage the corresponding seat (6) in the bore (5) of the panels (2).

11. Piece of furniture (100) according to any of the claims 1 to 10, wherein said component part (8) comprises a first element (13), a second element (14), a third element (15), and a covering (16).

12. Piece of furniture (100) according to claim 11, wherein said first element (13) is a board provided with a first face (12), from which there protrude said seats (10), and a second face (17), from which there on the contrary protrude anchoring means (18) for attachment to said second element (14); said second element (14) is in turn represented by a board being generally shaped so as to be substantially complementary to the first element (13) with a first face (20), on which there are provided anchoring means (21) adapted to receive the anchoring means (18) of the first element (13), and a second face (22); said third element (15) consists of a padding adapted to be accommodated on said second face (22) of said second element (14); and the covering (16) is a cloth of any either woven or non-woven fabrics, leather, imitation leather.

13. Piece of furniture (100) according to any of the claims 1 to 12, wherein said main body (1) is a container comprising a panel (2) provided so as to enable said main body to be closed and opened therewith.

14. Piece of furniture (100) according to any of the claims 1 to 13, wherein comprising castors enabling it to be conveniently moved about.

15. Piece of furniture (100) according to any of the claims 1 to 14, wherein said piece of furniture is a pouf, a nightstand, a sofa, a bookcase, a chest of drawers, a dresser, a table, a wall-mount cabinet.

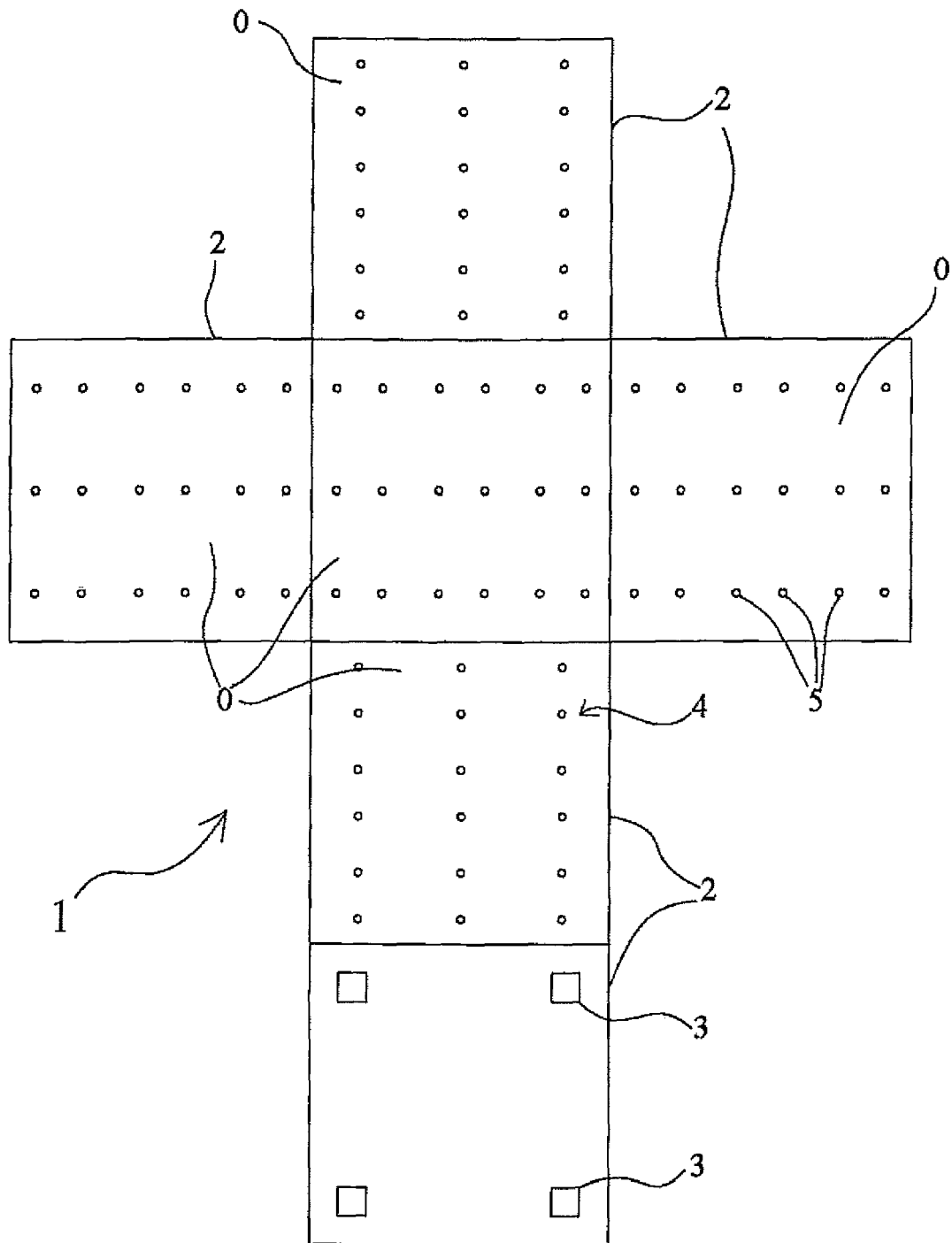


FIG. 1

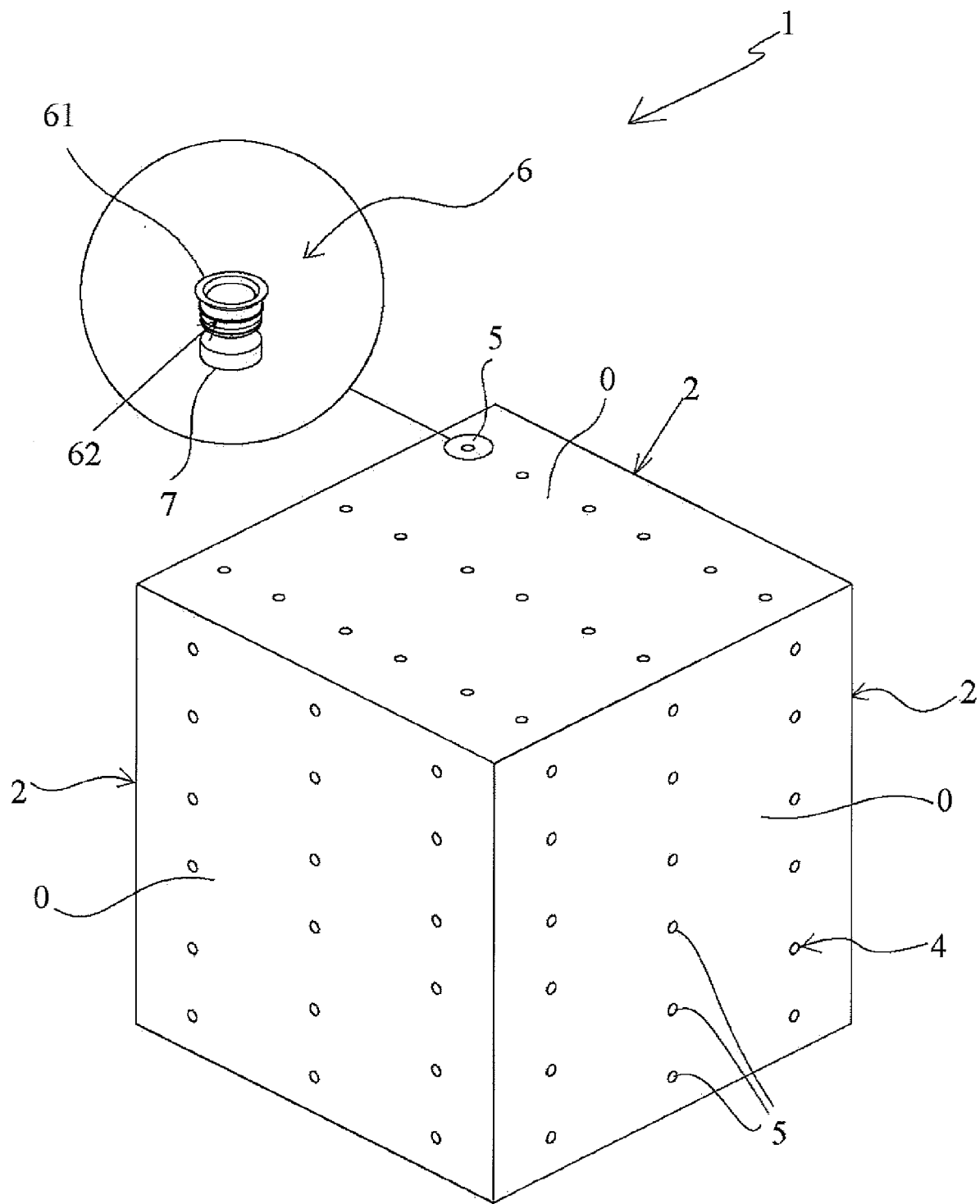


FIG. 2



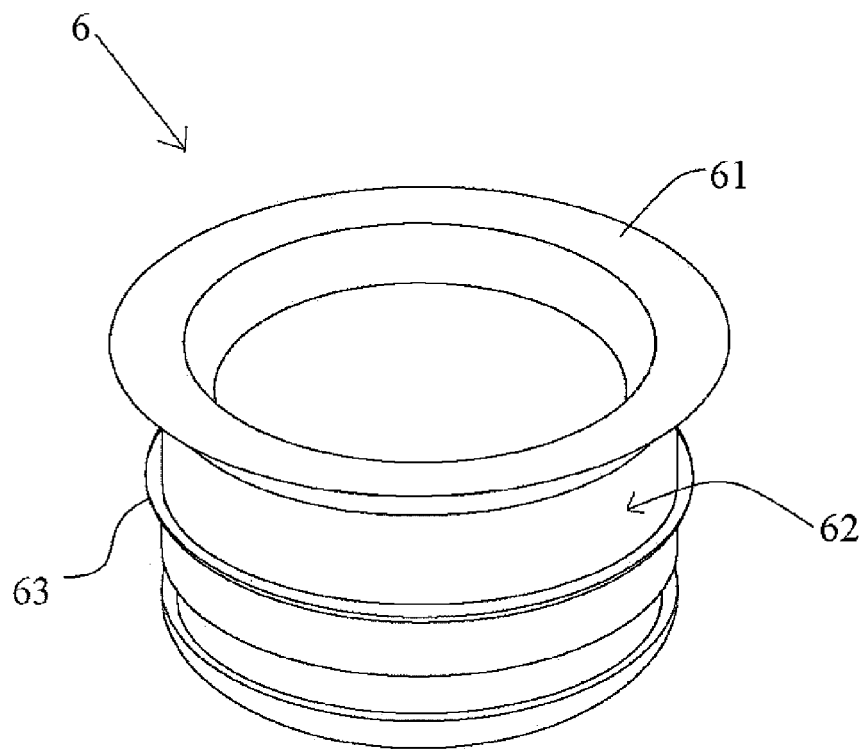


FIG. 3A

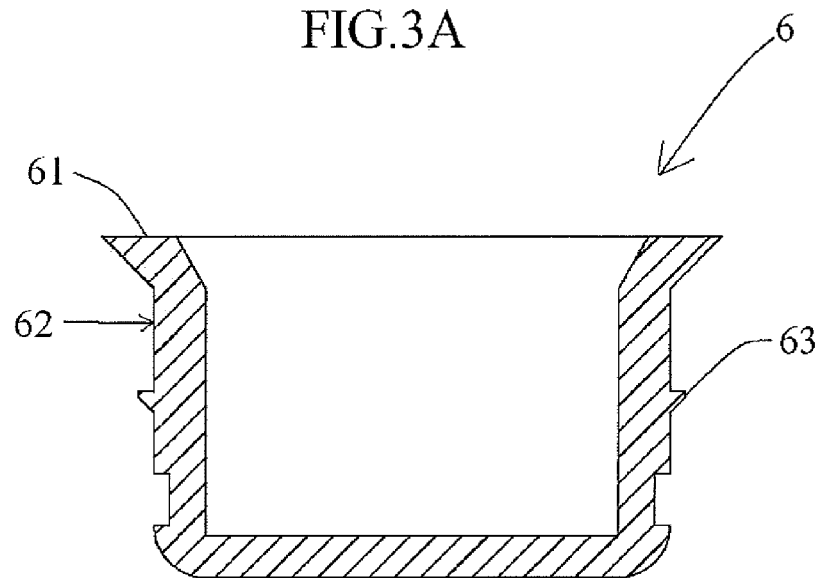


FIG. 3B

FIG. 4B

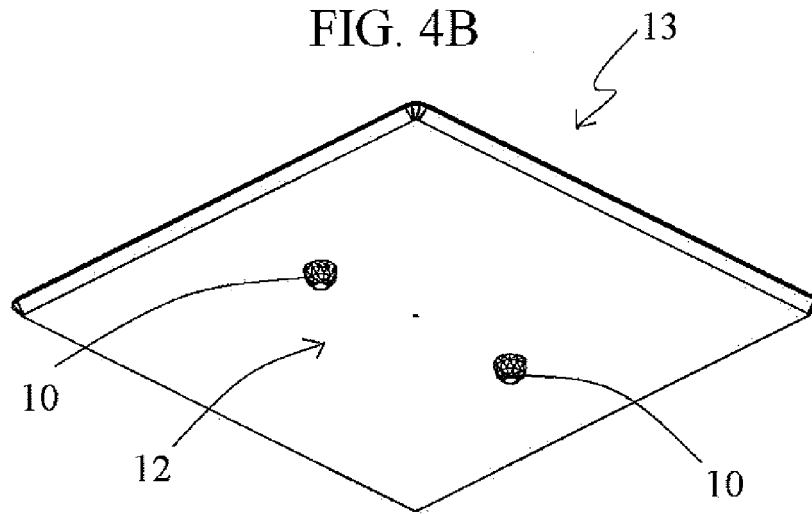


FIG. 4A

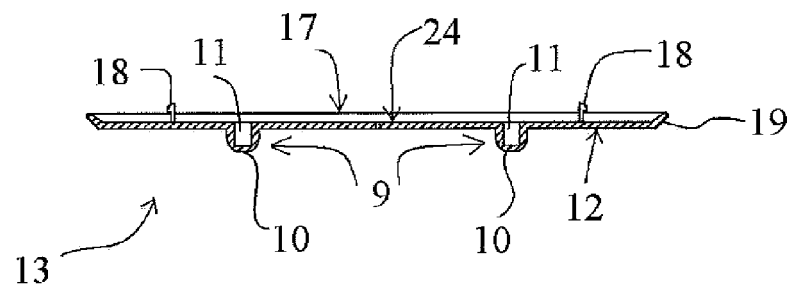
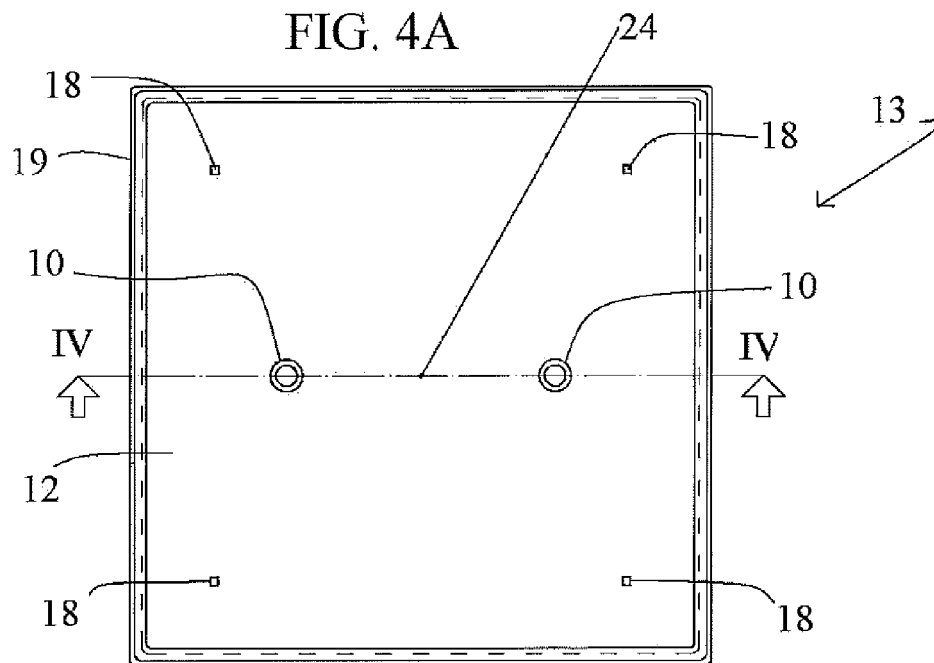


FIG. 4C

FIG. 5B

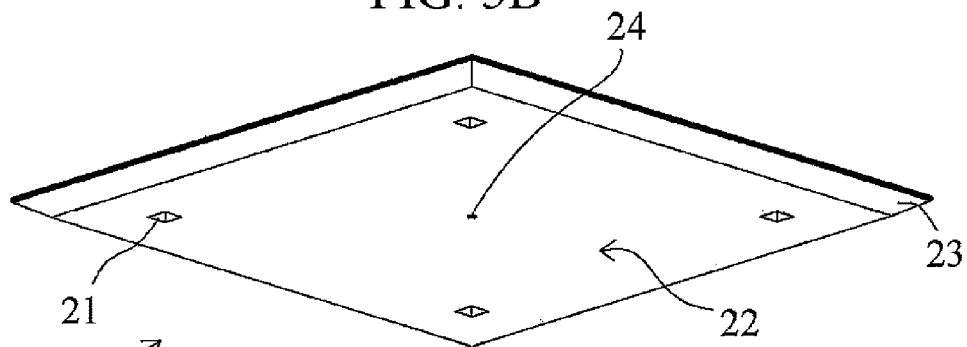


FIG. 5A

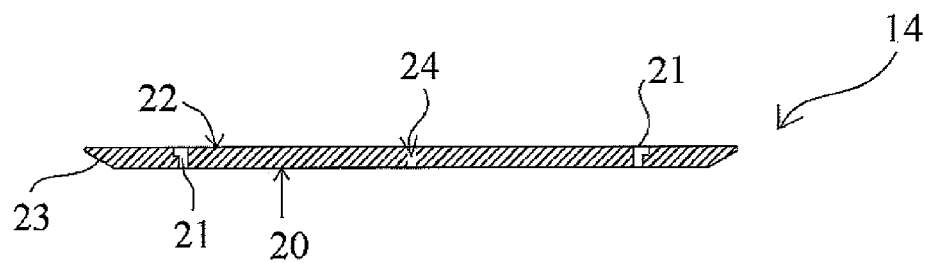
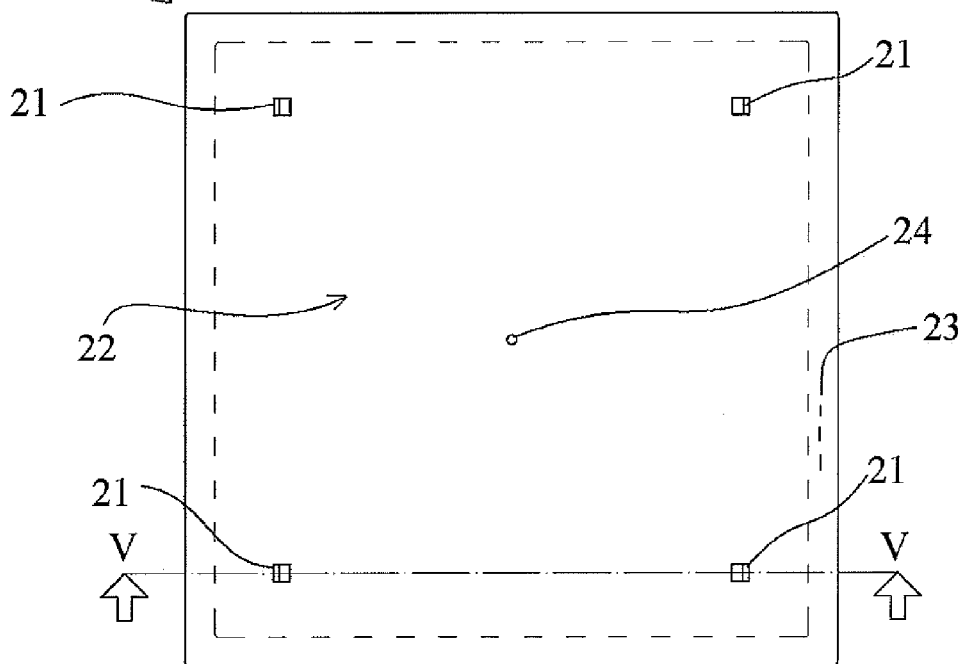


FIG. 5C

FIG. 6A

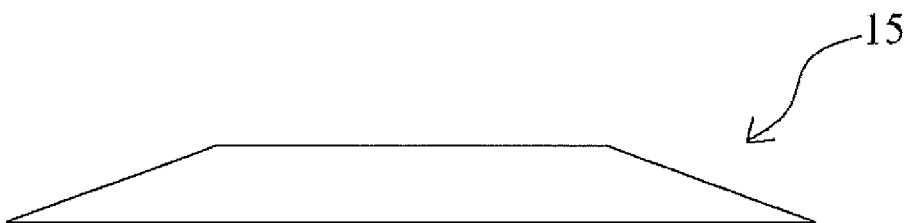
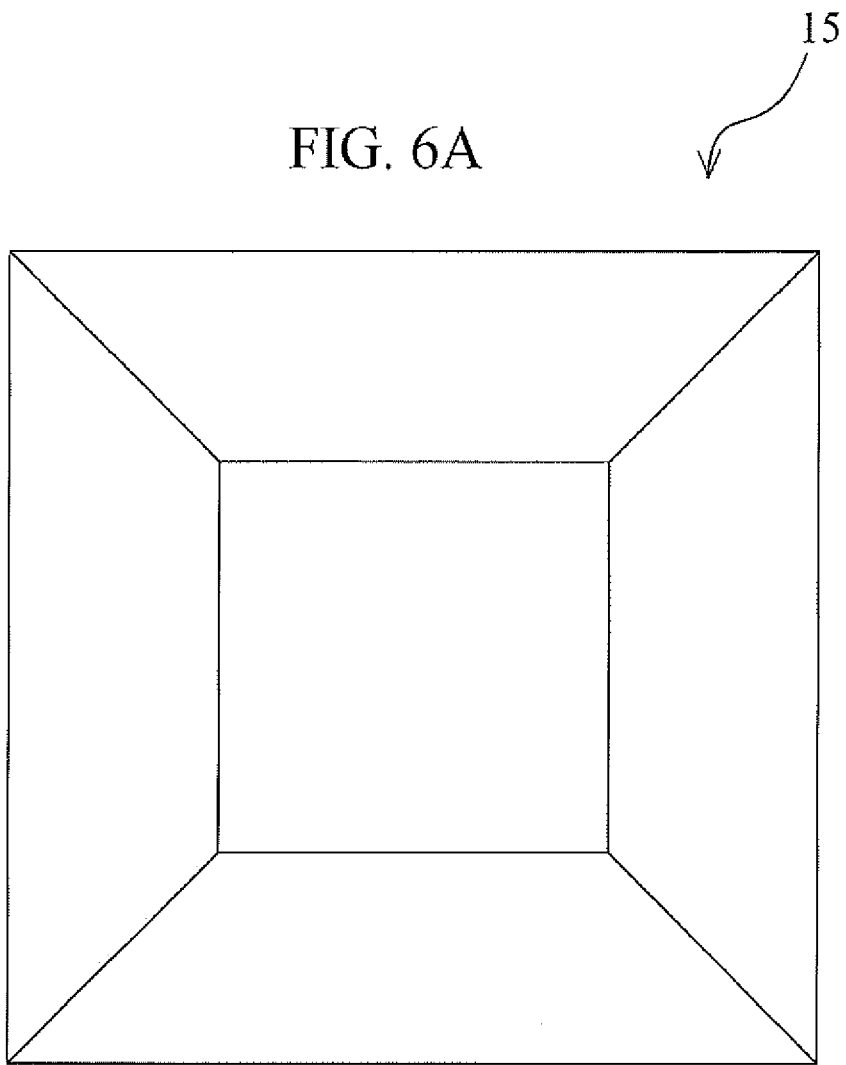


FIG. 6B

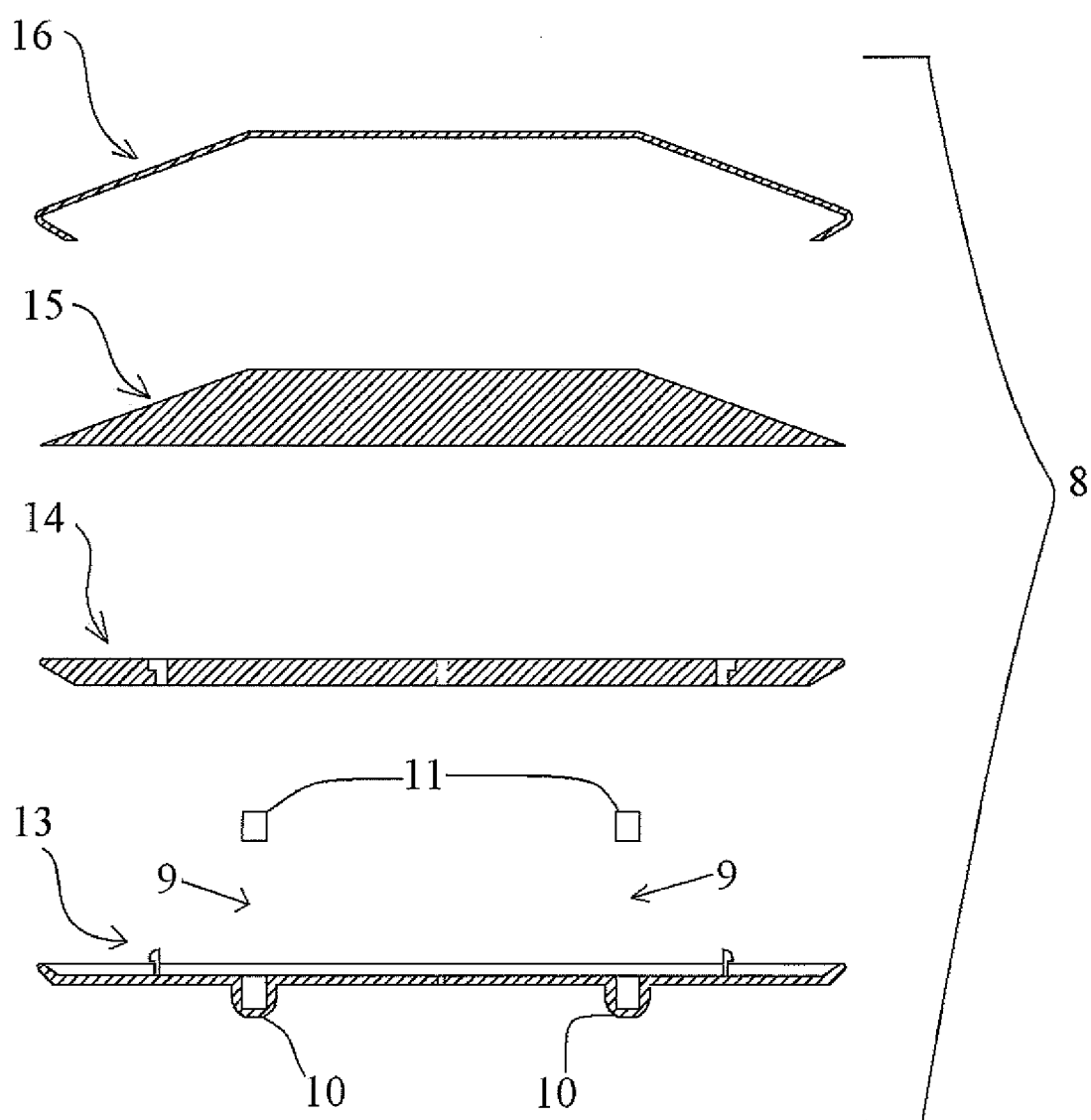


FIG. 7A

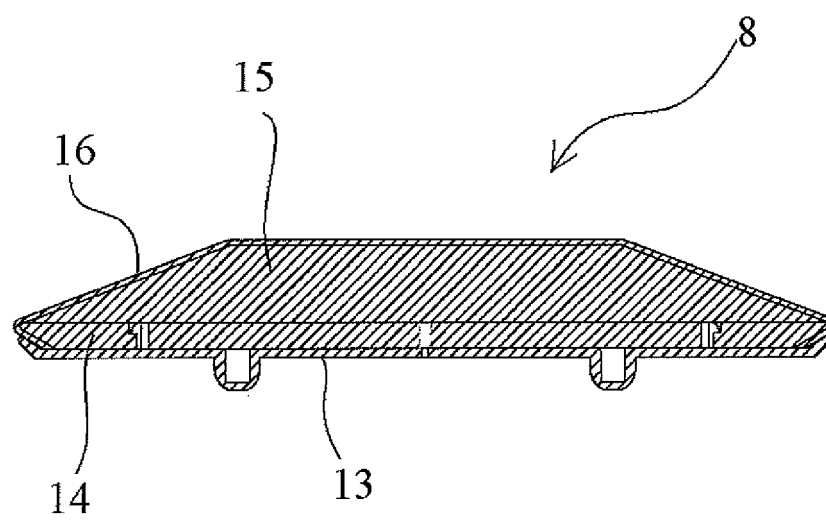


FIG. 7B

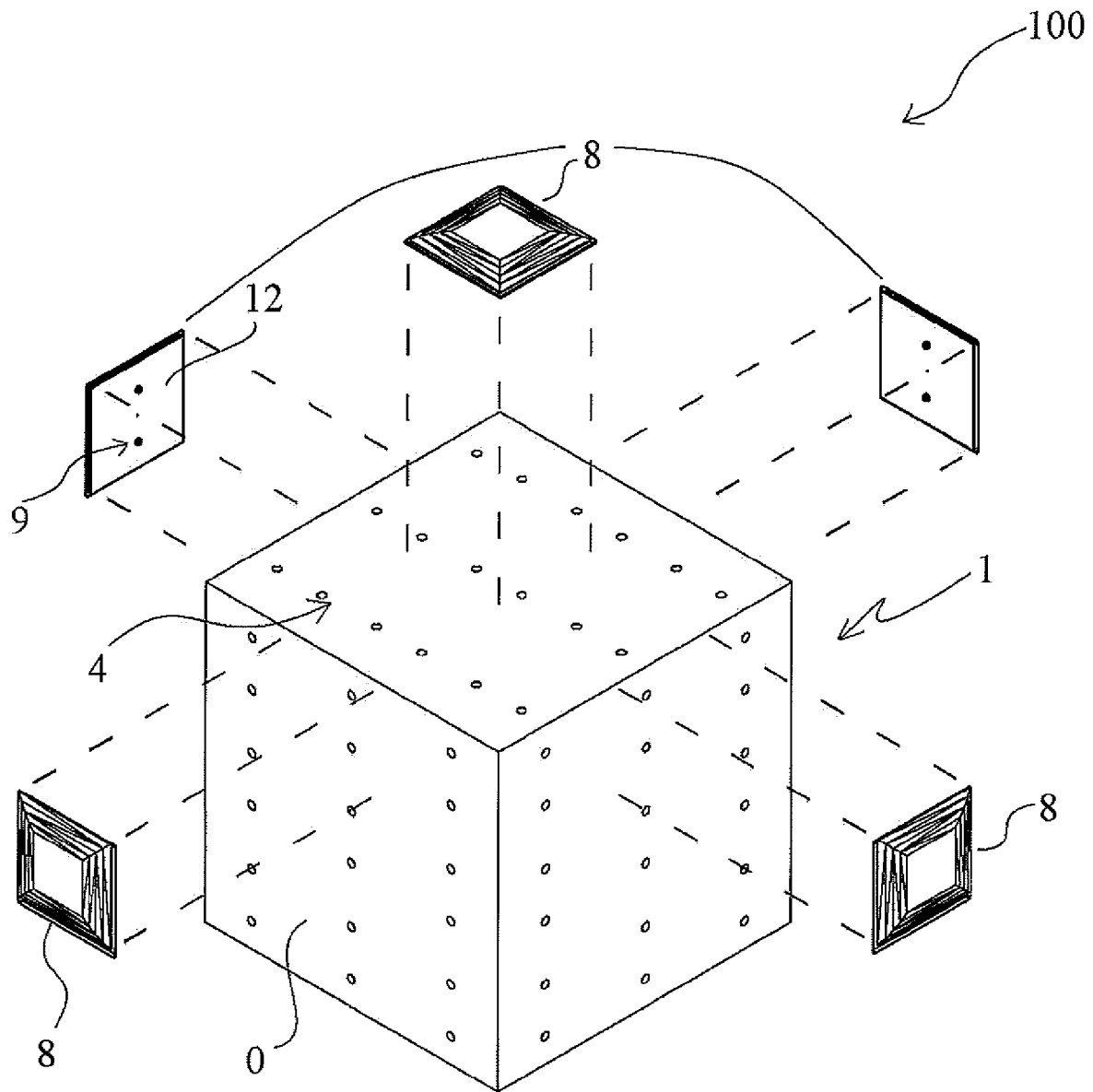


FIG. 8A

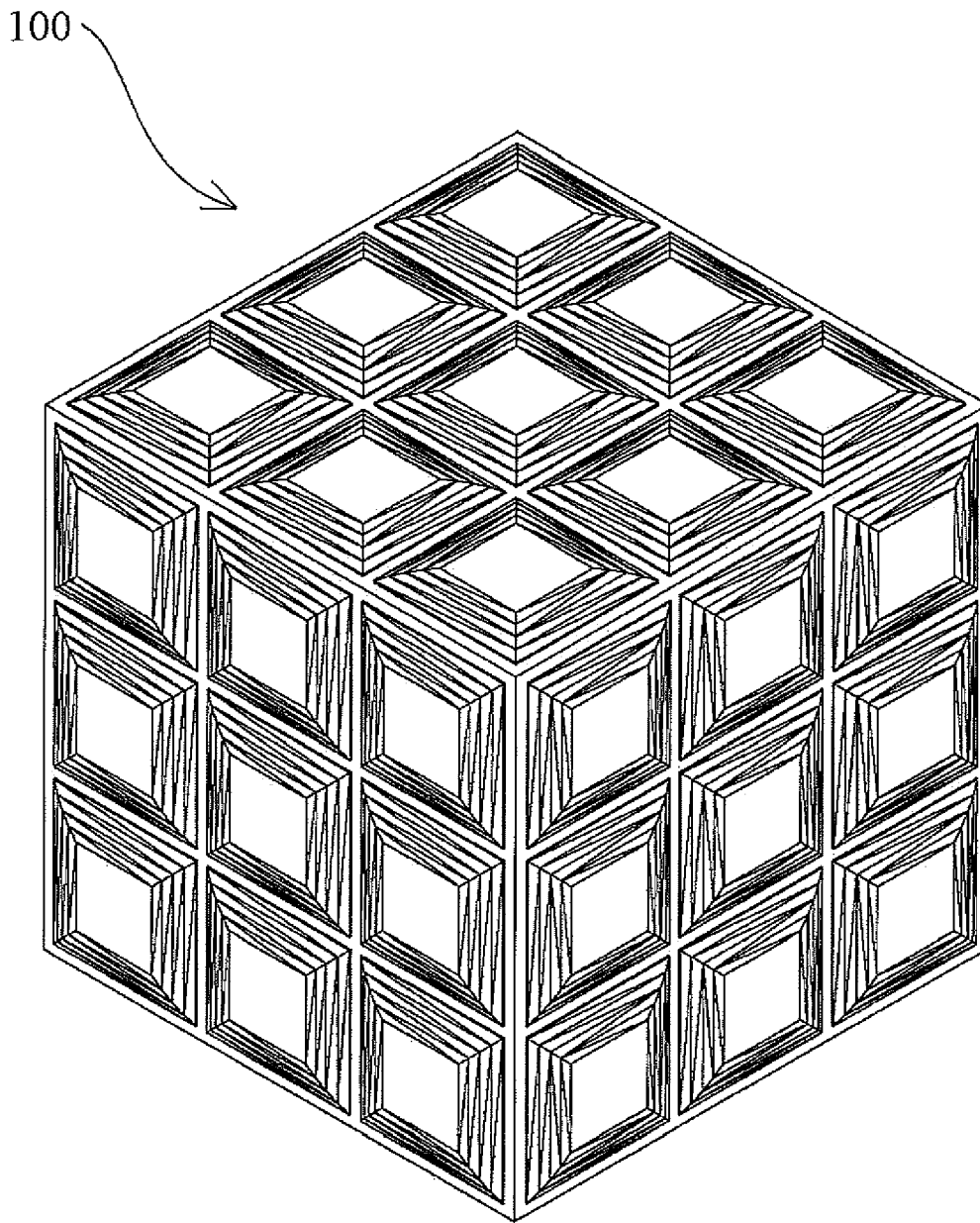


FIG. 8B



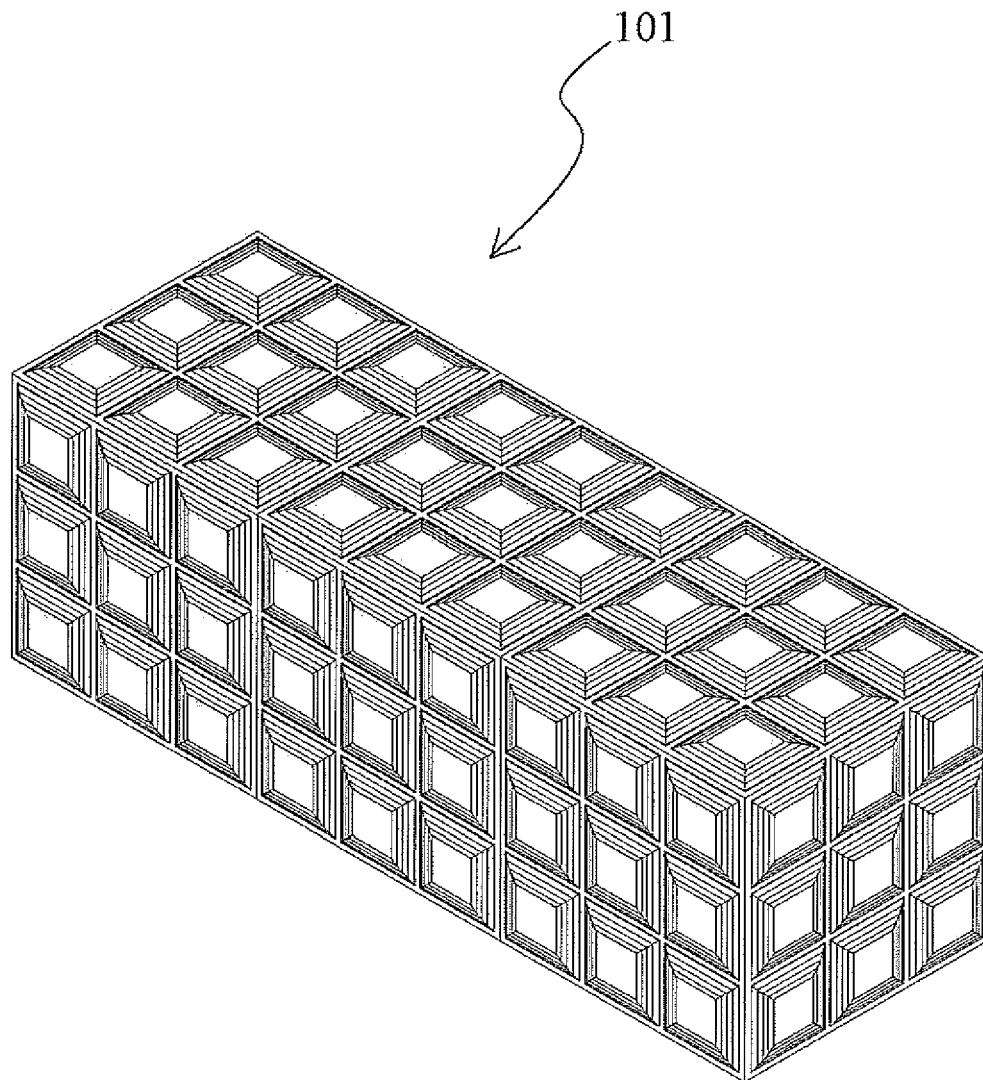


FIG. 9

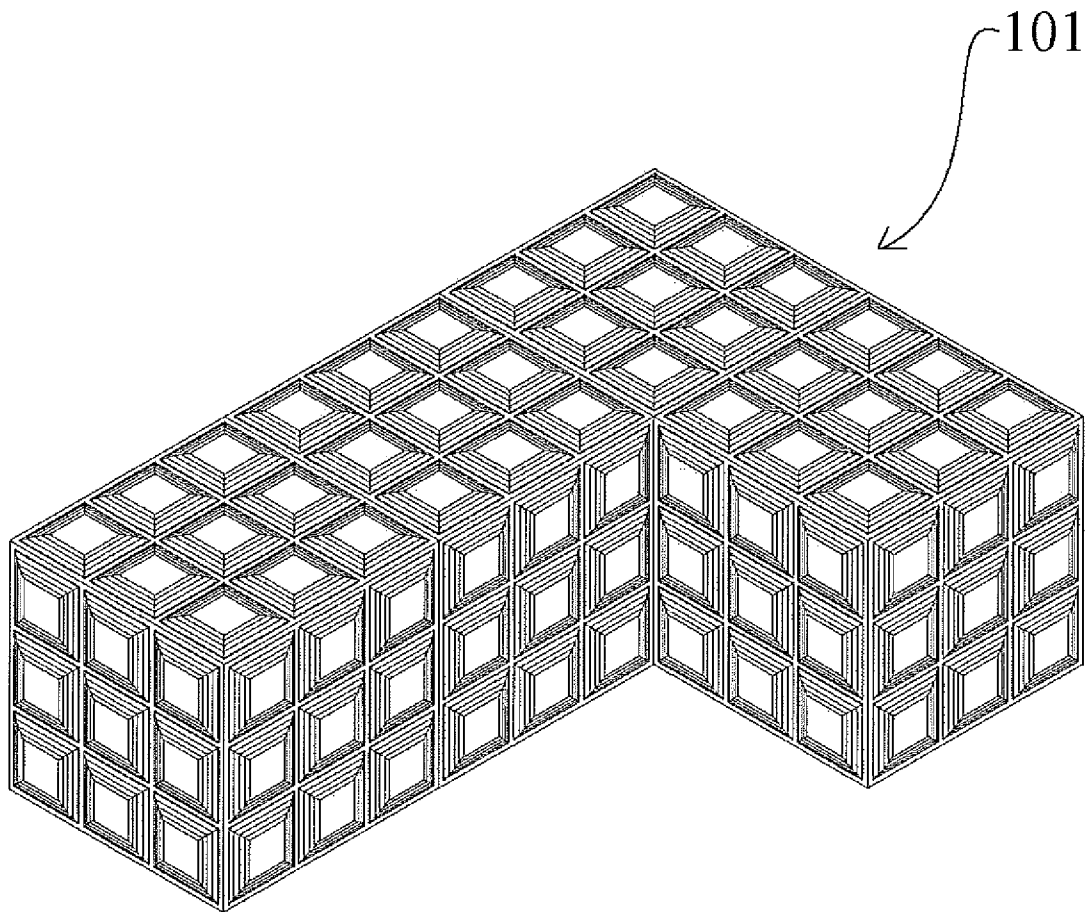


FIG. 10