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(54) **Ornamental element for decorating objects and method for making such an ornamental element**

Zierelement zur Dekoration von Objekten und Verfahren zur Herstellung solch eines Zierelements

Élément ornemental pour décorer des objets et procédé pour la fabrication d'un tel élément ornemental

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EP 2 546 072 B1

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Description

[0001] This invention relates to an ornamental element for decorating objects and a method for making such an ornamental element. In particular, the ornamental element comprises at least one decorative body which has its own dimensions in space. Preferably, the term decorative body refers to a precious stone, a precious metal, a body imitating a precious stone and/or precious metal (for example "rhinestones" or sequins), etc.

[0002] Moreover, this invention is preferably intended to be used in the sector of application of rhinestones to portions of clothing (such as the clothing worn by ice skaters, ballet dancers, etc), to the wheels of skates, etc. However, this invention could be used for decorating any type of object.

[0003] At present, the ornamental elements used comprise at least one decorative body having a visible portion (with a pleasant appearance) and a connecting portion which is opposite to the visible portion.

[0004] A first prior art technique, used for "cold gluing", involves applying a glue on the connecting portion of the decorative body. Then the cold gluing involves placing the decorative body in contact with a surface of the object in such a way that the connecting portion makes contact with the object itself.

[0005] That first prior art technique has several disadvantages.

[0006] Indeed, the glue must be applied to the connecting portion of the decorative body just a few moments before carrying out the gluing operation, otherwise the glue solidifies and so loses its capacity to grip.

[0007] Moreover, once the decorative body, with glue applied to it, has made contact with the object, it must be held still in position (often using suitable stabilising weights) until the glue has solidified completely. Therefore, in such a situation time is wasted due to the fact that it is necessary to wait until a predetermined time has elapsed (usually 5 to 10 minutes) in order to complete the gluing operation.

[0008] Moreover, in cold gluing, once the decorative body has had the glue applied to it and has been positioned in contact with the object, it can no longer be moved, since that would create a trail of glue on the surface of the object. Therefore, before placing the decorative body in contact with the object, it is necessary to calculate the precise position where the decorative body must go in such a way as to perform precision positioning of the decorative body.

[0009] In addition, with the cold gluing technique one decorative body at a time is glued onto the object. In fact, it is necessary to wait until a first decorative body has been glued on (wait until the glue has solidified) before proceeding with the gluing of a second decorative body. Therefore, gluing all of the decorative bodies to the object to be decorated inevitably means wasting time.

[0010] In this regard, document US6472039 discloses an applique for application to a body part, which com-

prises a thin flexible film having an array of decorative stones or gems adhesively secured on the upper surface and wherein the bottom surface of said applique has a self-adhesive layer.

[0011] To overcome those disadvantages, and in particular to overcome the waiting for completion of gluing, a second prior art technique is used which involves placing a solid glue which can be heat-activated on the connecting portion of the decorative body. That prior art technique is used to perform "hot-melt gluing".

[0012] In that case, at the moment of gluing, the glue is activated by hot pressing of the decorative body on the surface of the object in such a way as to glue the decorative body to the object. Precisely, hot pressing allows the glue to penetrate between the irregularities of the surface of the object and, therefore, to guarantee a strong bond between the decorative body and the object.

[0013] Advantageously, compared with the first prior art technique, the second prior art technique forms a decorative body equipped with adhesive substances which can only be activated at the moment of gluing. Therefore, to perform hot-melt gluing it is not necessary to wait for any period of time, since the gluing is instantaneous.

[0014] Moreover, the second prior art technique allows the operations for positioning the decorative body and gluing to be carried out at different times (even months apart).

[0015] In fact, it is possible, initially, to position the decorative bodies on the surface of the object and, at a later stage, to glue them to the object by hot pressing.

[0016] However, even this prior art technique has several disadvantages.

[0017] In fact, to activate the solid glue on the decorative bodies it is necessary to perform hot pressing of the decorative bodies on the object. However, it is not always possible to heat some objects, such as the outer surface of an electronic device (for example a mobile phone).

[0018] Moreover, the hot-melt gluing technique is not effective on smooth surfaces such as smooth glass, plastic, etc., since the glue cannot penetrate and therefore grip them.

[0019] In this regard, document DE202008010254 discloses a carrier material consisting of a polyurethane adhesive film on which strass crystal stones and Swarovski stones are bonded.

[0020] In this situation the aim of this invention is to provide an ornamental element for decorating objects which overcomes the above-mentioned disadvantages.

[0021] In particular, the aim of this invention is to provide an ornamental element for decorating objects which can be rapidly glued on any type of object to be decorated.

[0022] The aims indicated are substantially achieved by an ornamental element for decorating objects and by a method for making such an ornamental element as described in the appended claims.

[0023] Further features and the advantages of this invention are more apparent from the detailed description of several preferred, but not exclusive embodiments of

an ornamental element for decorating objects and a method for making such an ornamental element, illustrated in the accompanying drawings, in which:

- Figure 1 is a side view of step of preparing an ornamental element for decorating objects;
- Figure 2 is an axonometric view of a detail of the ornamental element illustrated in Figure 1;
- Figure 3 is a side view of a step of assembly of the ornamental element of Figure 1;
- Figure 4 is an axonometric view of a step of cutting the assembled ornamental element of Figure 3; and
- Figure 5 is an enlarged side view of a part of the ornamental element applied to an object;
- Figure 6 is a top view of a connecting membrane 14 of an ornamental element;
- Figure 7 is a front view of two ornamental elements applied to an object; and
- Figure 8 is a front view of an alternative embodiment of an ornamental element applied to an object.

[0024] With reference to the accompanying drawings, the numeral 1 denotes in its entirety an ornamental element for decorating objects 100 according to this invention.

[0025] In particular, ornamental element 1 for decorating objects 100 comprises at least one decorative body 2 comprising a visible portion 3 and a connecting portion 4 which is opposite to the visible portion. Preferably, the decorative body 2 is a precious stone or an imitation precious stone.

[0026] In addition, the visible portion 3 is preferably a faceted dome with a pleasant appearance. Moreover, the connecting portion 4 preferably comprises a flat surface 4a (Figure 1).

[0027] In accordance with this invention, the ornamental element 1 comprises a supporting sheet 5 comprising a first surface 6 connected to the connecting portion 4 of the decorative body 2 and a second surface 7 which is opposite to the first surface 6 (Figure 4).

[0028] In detail, the connecting portion 4 of the decorative body 2 is connected to the first surface 6 of the supporting sheet 5 in such a way that the decorative body 2 forms a single body with the supporting sheet 5. In further detail, between the connecting portion 4 and the supporting sheet 5 there is glue 8 (shown as dots in Figure 5) for keeping the decorative body 2 connected to the supporting sheet 5.

[0029] The ornamental element 1 comprises a layer of glue 8 (applied by means of hot-melt gluing, as described in more detail below) interposed between the connecting portion 4 and the first surface 6 of the supporting sheet 5 for keeping the decorative body 2 connected to the supporting sheet 5. Moreover, the first surface 6 of the supporting sheet 5 comprises irregularities 9. Preferably, said irregularities 9 comprise projections and recesses (Figure 5) at the first surface 6 of the supporting sheet 5.

[0030] In other words, the first surface 6 of the support-

ing sheet 5 is irregular.

[0031] In the preferred embodiment, the thickness of the supporting sheet 5 is around several tenths of a millimetre.

[0032] Consequently, the irregularities 9 preferably measure around several hundredths of a millimetre.

[0033] The irregularities 9 of the first surface 6 of the supporting sheet 5 are at least partly embedded in the glue 8 in such a way as to increase the grip of the glue 8 on the supporting sheet 5.

[0034] In other words, the glue 8 is present in the recesses and covers the projections of the first surface 6 of the supporting sheet 5. Advantageously, the glue 8 clinging to the irregularities 9 creates a strong connection between the supporting sheet 5 and the decorative body 2.

[0035] The supporting sheet 5 is made of flexible material. The supporting sheet 5 is a fabric and is at least partly made of polyester.

[0036] In an alternative non-claimed example, the supporting sheet 5 is made of plastic material.

[0037] If the supporting sheet 5 is made of fabric, the irregularities 9 are formed by the set of threads of the fabric. Therefore, in that case, the hot-melt glue penetrates the threads of the fabric, gripping them.

[0038] If the supporting sheet 5 is made of plastic material, the irregularities 9 are made by means of lacquering and/or painting (as is also indicated below) the first surface 6.

[0039] In addition, the ornamental element 1 which is the subject matter of this invention comprises adhesive substances 10 positioned on the second surface 7 of the supporting sheet 5 so that the ornamental element 1 can be glued to the object 100 to be decorated. In particular, the adhesive substances 10 positioned on the second surface 7 of the supporting sheet 5 are sensitive to pressure. In that way, to glue the supporting sheet 5 to an object 100 the supporting sheet 5 can simply be pressed, preferably manually, against the object 100 to be decorated.

[0040] Even more particularly, the second surface 7 together with the adhesive substances 10 applied on it forms a self-adhesive surface.

[0041] Precisely, the type of adhesive substances 10 applied on the supporting sheet 5 depends on the type of object 100 to be decorated (for example, if the object 100 to be decorated is glass, plastic, human skin, clothing, etc.).

[0042] Preferably, the adhesive substances 10 are of the permanent type. In other words, the adhesive substances 10 maintain their adhesive effect permanently (that term refers to the fact that the adhesive substances 10 maintain their adhesive effect for several years).

[0043] Therefore, the ornamental element 1 is advantageously removable from the object 100 to be decorated on which it was previously glued and can be reused for further gluing operations. In other words, it is possible to glue the ornamental element 1 to an object 100 to be

decorated, remove the ornamental element 1 without the adhesive substances 10 losing their effectiveness, and glue the ornamental element 1 on other objects 100.

[0044] In particular, the intensity of the effectiveness of the adhesive substances 10 may be predetermined based on the quantity of specific adhesion inhibitors (for example cross-linking) and/or adhesion accelerators (tackifiers) present in the adhesive substances 10.

[0045] For example, a first type of adhesive substances 10 which can be used in this invention comprises acrylic adhesives in a solvent solution which are particularly resistant to moisture and high temperatures (up to 170° Centigrade). A second type of adhesive substances 10 which can be used in this invention comprises natural rubber-based adhesives which have a high initial adhesiveness and are particularly effective on surfaces (of the object to be decorated 100) with irregularities, such as fabrics. A third type of adhesive substances 10 which can be used in this invention comprises silicone adhesives which are effective on any type of surface of the object 100 to be decorated, are resistant to extremely high temperatures (even above 250° Centigrade) and to moisture.

[0046] In another alternative embodiment, the adhesive substances 10 positioned on the second surface 7 of the supporting sheet 5 comprise hot-melt glue substances. In this case, to glue the ornamental element 1 to the object 100, the supporting sheet 5 must be heated (for example using a hot iron). In that way, the gluing of the ornamental element 1 to the object 100 is made even longer lasting.

[0047] In another alternative embodiment, the adhesive substances 10 comprise a glue for skin in such a way that the ornamental element 1 can be stuck to the skin of a user. In that case, the adhesive substances 10 are of the type commonly used for medical adhesives.

[0048] Moreover, the ornamental element 1 comprises a removable covering film 11 (Figure 5) positioned in contact with the second surface 7 of the supporting sheet 5. In particular, the covering film 11 comprises a smooth face 12, which in practice is facing towards the second surface 7 of the supporting sheet 5 for covering and protecting the adhesive substances 10 at least until the moment when the ornamental element 1 is glued to an object 100 to be decorated.

[0049] Said smooth face 12 of the covering film 11 does not have irregularities, at least measuring several tenths of a millimetre, so as to prevent the adhesive substances 10 from gripping the covering film 11. Moreover, the smooth face 12 of the covering film 11 is treated with detaching agents to allow removal of the covering film 11 from the supporting sheet 5.

[0050] Advantageously, the covering film 11 entirely covers the second surface 7 of the supporting sheet 5. Said covering film 11 is completely removed at the moment of gluing the ornamental element 1 to the object 100 to be decorated (as described in more detail below).

[0051] In the preferred embodiment, the ornamental

element 1 comprises a plurality of decorative bodies 2 which are connected to the same supporting sheet 5. Preferably, said decorative bodies 2 are positioned along a design path P for forming an ornamental shape (for example the outline of a heart, of a flower, etc.).

[0052] Moreover, the supporting sheet 5 is delimited by a perimetric edge 13 which at least partly surrounds a decorative body 2 and is at least partly adjacent to it.

[0053] In the preferred embodiment in which the ornamental element 1 comprises a plurality of decorative bodies 2, the perimetric edge 13 of the supporting sheet 5 is positioned at least at part of a marginal border of the decorative bodies formed by the set of connecting portions 4 of the decorative bodies 2. Precisely, the supporting sheet 5 comprises a band 18 of supporting sheet which is between the perimetric edge 13 of the supporting sheet and each decorative body 2.

[0054] In a first embodiment, the width of the band 18 of supporting sheet 5, measured parallel with the supporting sheet, is less than one millimetre, in such a way that the supporting sheet 5, as seen by a user, blends into the decorative bodies 2 connected to it.

[0055] In a second embodiment, the width of the band 18 of supporting sheet 5, measured parallel with the supporting sheet, is greater than one millimetre in such a way as to give the decorative element 1 some strength.

[0056] In both cases, the first surface 6 of the supporting sheet 5 is preferably decorated with colours and/or designs. In detail, the first surface 6 of the supporting sheet 5 is decorated with decorations which at least partly continue the colouring and/or design of the visible portion 3 of the decorative bodies 2. In that way, the presence of the supporting sheet 5 is advantageously camouflaged with the decorative bodies 2.

[0057] In more detail, the first surface 6 of the supporting sheet 5 is preferably decorated by means of printing and/or xerography.

[0058] It should also be noticed that the perimetric edge 13 of the supporting sheet 5 is at least partly shaped to match the marginal border formed by the set of connecting portions 4 of the decorative bodies 2.

[0059] Consequently, when the decorative bodies 2 are positioned along the design path P to form the outline of an ornamental shape, the supporting sheet 5 is formed by a supporting strip extending along the design path P.

[0060] In particular, in the case in which the decorative bodies 2 are positioned along a closed design path P (for example a circle), the perimetric edge 13 of the supporting strip has a perimetric edge 13a inside the path P and a perimetric edge 13b outside the path P (Figure 7). In that case, the inner perimetric edge 13a and the outer perimetric edge 13b are positioned at least at part of the marginal border of the decorative bodies 2.

[0061] In addition, the ornamental element 1 comprises a removable adhesive connecting membrane 14 comprising an adhesive face 15 which is operatively in contact with the visible portion 3 of each decorative body 2 to prevent deformations of the supporting strip (Figure 6).

[0062] In other words, the connecting membrane 14 gives the ornamental element 1 compactness especially if the supporting sheet 5 is formed by a supporting strip extending along the design path P. In fact, in that case, the connecting membrane 14 keeps the decorative bodies 2 in position, preventing breakage or deformation of the supporting sheet 5. In yet other words, the connecting membrane 14 increases the resistance to torsion of the supporting sheet 5.

[0063] Advantageously, the connecting membrane 14 is transparent in such a way as to allow an operator to view the place where the supporting sheet 5 is positioned on the object 100 to be decorated.

[0064] It should be noticed that the connecting membrane 14 is removed once gluing of the supporting sheet 5 to the object 100 to be decorated is complete.

[0065] In an alternative embodiment, when the decorative bodies 2 are positioned along a closed design path P (for example, to form a circle) the perimetric edge 13 of the supporting sheet 2 comprises only the perimetric edge 13b outside the path P. In other words, the supporting sheet 2 covers the inner area formed by the ornamental shape delineated by the set of decorative bodies 2. In yet other words, the first surface 6 of the supporting sheet 2 forms an inner region 19 between the decorative bodies 2 (Figure 8).

[0066] Said inner region 19 of the supporting sheet is advantageously decorated with colours and designs similar to the decorative bodies in such a way as to create a predetermined optical effect.

[0067] This invention also relates 100 to a method for making an ornamental element 1 for decorating objects 100.

[0068] In particular, said method comprises a first step (Figure 1) of preparing at least one decorative body 2 and a supporting sheet 5 (Figure 2) of the type previously described.

[0069] The method comprises preparing a plurality of decorative bodies 2 and then positioning said decorative bodies 2 along a predetermined design path P. In that way, it is possible to position the decorative bodies 2 according to the design path P for defining a predetermined ornamental shape (a circle, a heart, etc.).

[0070] The positioning of the decorative bodies 2 according to the predetermined design path P may be manual or may be performed with the aid of a ready-formed base surface (commonly known as a "template"). The base surface comprises a plurality of cavities, each for a respective decorative body 2, together defining the predetermined ornamental shape.

[0071] Preferably, each decorative body 2 is inserted in a respective cavity in such a way that the set of decorative bodies 2 takes on the predetermined ornamental shape (a circle, a heart, etc.) defined by the cavities of the base surface. In particular, each decorative body 2 inserted in the respective cavity has the connecting portion 4 in contact with the base surface and the visible portion 3 in view. Then, to pick up each decorative body

2 from the base surface a pickup membrane 16 is used, having an adhesive surface 17 (Figure 1). In practice, the adhesive surface 17 of the pickup membrane 16 is placed in contact with the visible portion 3 of each decorative body 2 in such a way that it grips the decorative bodies 2. In other words, the pickup membrane 16 allows the decorative bodies 2 to be picked up from the base surface and the positioning of each decorative body 2 relative to the others to be maintained.

[0072] Regarding the supporting sheet 5, the method comprises applying the adhesive substances 10 to the second surface 7 of the supporting sheet 5 in such a way as to make the second surface 7 adhesive. Preferably, the adhesive substances 10 to be placed on the second surface 7 of the supporting sheet 5 comprise permanent and/or semi-permanent adhesive substances 10.

[0073] Therefore, as already indicated, the ornamental element 1 can advantageously be removed from the object 100 to be decorated on which it was previously glued and can again be glued on an object 100. In fact, the permanent and/or semi-permanent adhesive substances 10 maintain their adhesive properties for a long time.

[0074] In addition, the method according to this invention comprises, after the step of applying adhesive substances 10 to the second surface 7 of the supporting sheet 5, the performance of a step of protecting the second surface 7 of the supporting sheet 5 with a covering film 11. In that way, the covering film 11 prevents the adhesive substances 10 from becoming dirty with dust or other substances which could reduce the adhesive effects of the adhesive substances 10.

[0075] Once the supporting sheet has been prepared 5, the method comprises connecting the connecting portion 4 of the decorative body 2 on the first surface 6 of the supporting sheet 5 in such a way as to obtain a single body comprising the decorative body 2 and the supporting sheet 5.

[0076] In the preferred case in which a plurality of decorative bodies 2 is prepared, the connecting portion 4 of each decorative body 2 is connected to a single supporting sheet 5 in such a way as to obtain a single body comprising the decorative bodies 2 and the supporting sheet 5.

[0077] It should be noticed that the step of preparing at least one decorative body 2 precedes the step of connecting the connecting portion 4 of the decorative body 2 on the first surface 6 of the supporting sheet 5.

[0078] The step of connecting the connecting portion 4 of the decorative body 2 on the first surface 6 of the supporting sheet 5 is carried out by means of hot-melt gluing (Figure 3). The hot-melt gluing in turn comprises a first sub-step of pressing the decorative body 2 on the supporting sheet 5 and a second sub-step of heating the decorative body 2 and the supporting sheet 5.

[0079] Preferably, the sub-steps of pressing the decorative body 2 on the supporting sheet 5 and of heating the decorative body 2 are carried out simultaneously.

[0080] Preferably, the step of preparing the decorative

body 2 comprises placing solid glue which can be activated by heat on the connecting portion 4 of the decorative body 2 in such a way that the subsequent hot-melt gluing step activates the solid heat-activatable glue of each decorative body 2.

[0081] In the preferred embodiment illustrated, for example, in Figure 3, the hot-melt gluing step is carried out using a heated press 101.

[0082] Preferably, the step of applying adhesive substances 10 on the second surface 7 of the supporting sheet 5 is carried out before the step of connecting the decorative body 2 on the supporting sheet 5.

[0083] It should be noticed that the adhesive substances 10 are prepared so that they withstand the heat generated during hot-melt gluing. Specifically, the heat generated by the heated press 101 is between 100° Centigrade and 200° Centigrade. In other words, the adhesive substances 10 are preferably prepared so that they can withstand a temperature of between 100° Centigrade and 200° Centigrade. In yet other words, the adhesive properties of the adhesive substances 10 are not altered at least for temperatures of less than 200° Centigrade. Advantageously, in the preferred case in which a plurality of decorative bodies 2 are prepared, the pickup membrane 16 allows the decorative bodies to be transported from the base surface to the supporting sheet 5, maintaining the position of the decorative bodies relative to each other.

[0084] Therefore, to carry out the hot-melt gluing, the pickup membrane 16 is placed close to the supporting sheet 5 in such a way that the decorative bodies 2 are interposed between the pickup membrane 16 and the supporting sheet 5.

[0085] Then the heated press 101 acts directly on the pickup membrane 16, gluing the decorative bodies 2 on the supporting sheet 5. Once the decorative bodies 2 have been glued to the supporting sheet 5, the pickup membrane 16 is removed.

[0086] Moreover, the step of preparing the supporting sheet 5 comprises creating irregularities 9 (projections and recesses) on the first surface 6 of the supporting sheet 5 so as to increase the grip during gluing of the connecting portion 4 of the decorative body 2 onto the supporting sheet 5. In particular, in the case in which the supporting sheet 5 is made of fabric, it is not necessary to carry out the step of creating irregularities 9, since the first surface 6 of the supporting sheet 5, being made up of threads, already has irregularities 9.

[0087] If the supporting sheet 5 is made of plastic material, the step of creating irregularities on the first surface 6 of the supporting sheet 5 comprises a sub-step of lacquering the first surface 6 and/or a sub-step of painting the first surface 6.

[0088] Once the hot-melt gluing of at least one decorative body 2 onto the supporting sheet 5 has been performed, a step of cutting the supporting sheet 5 around at least part of the decorative body 2 is performed. Precisely, the step of cutting the supporting sheet 5 is carried

out at the marginal border of the decorative body 2.

[0089] If a plurality of decorative bodies 2 is prepared, the step of cutting the supporting sheet 5 is carried out around the set of decorative bodies 2 (Figure 4). In particular, the supporting sheet 5 is cut at least at part of the marginal border of the decorative bodies 2 in such a way that the perimetric edge 13 of the supporting sheet at least partly follows the ornamental shape defined by the arrangement of the decorative bodies 2 (Figure 7). In particular, in a first embodiment, the cutting step comprises cutting the supporting sheet 2 at the border of the decorative bodies 2 in such a way as to leave around them a band 18 of supporting sheet 5 whose width (measured parallel with the supporting sheet 5) is less than one millimetre.

[0090] In a second embodiment, the cutting step comprises cutting the supporting sheet 5 close to the border of the decorative bodies 2 in such a way as to leave around them a band 18 of supporting sheet 2 whose width (measured parallel with the supporting sheet 5) is greater than one millimetre.

[0091] In both embodiments the method comprises a step of decorating the first surface 6 of the supporting sheet 5. Advantageously, the step of decorating the first surface 6 of the supporting sheet 5 comprises camouflaging the first surface 6 of the supporting sheet 5 with the decorative bodies 2.

[0092] Moreover, if the decorative bodies 2 are arranged along a closed design path P (for example to form a circle) the cutting step may only affect the outer perimetric edge 13b (Figure 8), or only the inner perimetric edge 13a, or both of the perimetric edges 13 (outer perimetric edge 13b and inner perimetric edge 13a - Figure 7).

[0093] The step of cutting the supporting sheet 5 is carried out by means of a laser or ultrasonic cut in such a way as to increase the precision of the cut.

[0094] After cutting, the method for making the ornamental element 1 comprises applying the connecting membrane 14 (previously mentioned) for maintaining the decorative bodies 2 in position and to avoid breaking the supporting sheet 5.

[0095] In that way, the connecting membrane 14 allows the ornamental shape formed by the set of decorative bodies 2 to be maintained.

[0096] This invention also relates 100 to a method for gluing an ornamental element 1 on an object 100 to be decorated.

[0097] Said method comprises first a step of preparing an ornamental element 1 of the type described above. Moreover, the method for gluing an ornamental element 1 on an object 100 to be decorated comprises a step of positioning the supporting sheet 5 on the object 100 to be decorated in such a way that the second surface 7 makes contact with the object 100 to be decorated.

[0098] In the preferred embodiment of the ornamental element 1, before positioning the supporting sheet 5 on the object 100 to be decorated, the covering film 11 must

be removed from the first surface 6 of the supporting sheet 5.

[0099] Therefore, after placing the second surface 7 of the supporting sheet 5 in contact with the object 100 to be decorated, the method comprises pressing the ornamental element 1 onto the object 100 to be decorated in such a way as to promote gluing of the ornamental element 1 onto the object 100.

[0100] Once the supporting sheet 5 has been glued onto the object 100 to be decorated, the connecting membrane 14 can be removed.

[0101] This invention fulfils the preset aims.

[0102] In fact, the ornamental element for decorating objects can be glued on any type of object to be decorated because the gluing of the ornamental element on the object to be decorated occurs thanks to the adhesive substances positioned on the second surface of the supporting sheet (without the need to heat the object).

[0103] Moreover, the ornamental element for decorating objects can be rapidly glued to the object to be decorated thanks to the effectiveness of the adhesive substances positioned on the second surface of the supporting sheet.

[0104] In addition, the ornamental element allows the creation of a single decorative design (formed by the set of decorative bodies) thanks to the presence of the supporting sheet on which the decorative bodies are connected.

[0105] Finally, thanks to the presence of permanent adhesive substances, the ornamental element for decorating objects can be easily removed from the object to be decorated on which it was previously glued and can be glued again to an object to be decorated (which may be the same object or a different object).

[0106] It should also be noticed that this invention is relatively easy to produce and that even the cost linked to implementation of the invention is not very high.

Claims

1. An ornamental element (1) for decorating objects (100) comprising:

a plurality of decorative bodies (2) each comprising a visible portion (3) and a connecting portion (4) which is opposite to the visible portion; a supporting sheet (5) made of flexible material and comprising a first surface (6) connected to the connecting portion (4) of the decorative bodies (2) in such a way that the decorative bodies (2) form a single body with the supporting sheet (5), and a second surface (7) which is opposite to the first surface (6), the decorative bodies (2) being connected to the supporting sheet (5) by means of glue (8); adhesive substances (10) positioned on the second surface (7) of the supporting sheet (5) so

that the ornamental element (1) can be glued to the object (100) to be decorated, **characterised in that** the supporting sheet (5) is a fabric and it is at least partly made of polyester.

2. The ornamental element (1) according to claim 1, **characterised in that** the first surface (6) of the supporting sheet (5) comprises irregularities (9) which are at least partly embedded in the glue in such a way as to increase the grip of the glue on the supporting sheet (5), said irregularities being formed by the set of threads of the fabric.
3. The ornamental element (1) according to any of the foregoing claims, **characterised in that** it comprises a removable covering film (11) positioned in contact with the second surface (7) of the supporting sheet (5).
4. The ornamental element (1) according to claim 1, **characterised in that** the decorative bodies (2) are positioned along a design path (P) for forming an ornamental shape; the supporting sheet (5) being formed by a supporting strip extending along the design path (P).
5. The ornamental element (1) according to claim 4, **characterised in that** it comprises a removable adhesive connecting membrane (14) comprising an adhesive face (15) which is operatively in contact with the visible portion (3) of each decorative body (2) for preventing deformations of the supporting strip.
6. The ornamental element (1) according to claim 5, **characterised in that** said connecting membrane (14) is transparent.
7. The ornamental element (1) according to any of the foregoing claims, **characterised in that** the supporting sheet (5) is delimited by a perimetric edge (13); the perimetric edge (13) at least partly surrounding the decorative body (2) and being at least partly adjacent to the decorative body.
8. The ornamental element (1) according to claim 1, **characterised in that** the adhesive substances (10) positioned on the second surface (7) of the supporting sheet (5) comprise the permanent and/or semi-permanent type.
9. A method for making an ornamental element (1) for decorating objects (100), comprising the following operating steps:
 - preparing a plurality of decorative bodies (2) comprising a visible portion (3), and a connecting portion (4) which is opposite to the visible portion;

- preparing a supporting sheet made of flexible material (5) comprising a first surface (6) and a second surface (7) which is opposite to the first surface, said supporting sheet (5) being a fabric and being at least partly made of polyester; 5
 - applying adhesive substances (10) on the second surface (7) of the supporting sheet (5) in such a way as to make the second surface (7) adhesive; 10
 - connecting the connecting portion (4) of the decorative body (2) on the first surface (6) of the supporting sheet (5) by means of hot-melt gluing, in such a way as to obtain a single body comprising the decorative body (2) and the supporting sheet (5), 15
 - cutting the supporting sheet (5) at marginal border of the decorative bodies (2) in such a way that perimetric edge (13) of the supporting sheet follows the ornamental shape defined by the arrangement of the decorative bodies (2), said cutting step being a laser cutting. 20
10. The method according to claim 9, **characterised in that** the step of preparing the decorative body (2) comprises placing solid glue which can be activated by heat on the connecting portion (4) of the decorative body (2); the hot-melt gluing step being carried out by hot pressing the decorative body (2) on the supporting sheet (5). 25
11. The method according to any of the claims from 9 to 10, **characterised in that** the adhesive substances (10) to be placed on the second surface (7) of the supporting sheet (5) comprise permanent and/or semi-permanent adhesive substances (10). 30
12. The method according to any of the claims from 9 to 11, **characterised in that** it further comprises, after the step of cutting the supporting sheet (5), the step of applying a connecting membrane (14) for maintaining the decorative bodies (2) in position and to avoid breaking the supporting sheet (5). 40
13. A method for gluing an ornamental element (1) on an object (100) to be decorated comprising the following operating steps: 45
- preparing an ornamental element (1) according to any of the claims from 1 to 9;
 - positioning the supporting sheet (5) on the object (100) to be decorated in such a way that the second surface (7) makes contact with the object (100) to be decorated; 50
 - pressing the ornamental element (1) onto the object (100) to be decorated. 55

Patentansprüche

1. Zierelement (1) zum Dekorieren von Objekten (100), umfassend:
 - eine Mehrzahl dekorativer Körper (2), die jeweils einen sichtbaren Abschnitt (3) und einen Verbindungsabschnitt (4) umfassen, der gegenüber dem sichtbaren Abschnitt ist;
 - eine Trägerbahn (5) aus einem flexiblen Material, die eine erste Fläche (6), die mit dem Verbindungsabschnitt (4) der dekorativen Körper (2) verbunden ist, derart, dass die dekorativen Körper (2) zusammen mit der Trägerbahn (5) einen einzelnen Körper bilden, und eine zweite Fläche (7) umfasst, die gegenüber der ersten Fläche (6) ist, wobei die dekorativen Körper (2) mittels Klebstoff (8) mit der Trägerbahn (5) verbunden sind;
 - Haftsubstanzen (10), die an der zweiten Fläche (7) der Trägerbahn (5) angeordnet sind, derart, dass das Zierelement (1) an das zu dekorierende Objekt (100) geklebt werden kann, **dadurch gekennzeichnet, dass** die Trägerbahn (5) ein Gewebe ist und wenigstens teilweise aus Polyester hergestellt ist.
2. Zierelement (1) nach Anspruch 1, **dadurch gekennzeichnet, dass** die erste Fläche (6) der Trägerbahn (5) Unregelmäßigkeiten (9) umfasst, die wenigstens teilweise in dem Klebstoff eingebettet sind, derart, dass der Halt des Klebers an der Trägerbahn (5) erhöht wird, wobei die Unregelmäßigkeiten durch einen Satz von Fäden in dem Gewebe gebildet werden.
3. Zierelement (1) nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** es eine ablösbare Deckfolie (11) umfasst, die in Kontakt mit der zweiten Fläche (7) der Trägerbahn (5) angeordnet ist.
4. Zierelement (1) nach Anspruch 1, **dadurch gekennzeichnet, dass** die dekorativen Körper (2) entlang einem Musterweg (P) zum Bilden einer Zierform angeordnet sind; wobei die Trägerbahn (5) durch einen Trägerstreifen gebildet ist, der sich am Musterweg (P) entlang erstreckt.
5. Zierelement (1) nach Anspruch 4, **dadurch gekennzeichnet, dass** es eine ablösbare Haftverbindungsmembran (14) umfasst, die eine Haftfläche (15) umfasst, die in wirksamem Kontakt mit dem sichtbaren Abschnitt (3) der einzelnen dekorativen Körper (2) steht, um Verformungen des Trägerstreifens zu verhindern.
6. Zierelement (1) nach Anspruch 5, **dadurch gekennzeichnet,**

zeichnet, dass die Verbindungsmembran (14) transparent ist.

7. Zierelement (1) nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** die Trägerbahn (5) von einer Umfangskante (13) begrenzt wird; wobei die Umfangskante (13) den dekorativen Körper (2) wenigstens teilweise umgibt und wenigstens teilweise zu dem dekorativen Körper benachbart ist.

8. Zierelement (1) nach Anspruch 1, **dadurch gekennzeichnet, dass** die Haftsubstanzen (10), die an der zweiten Fläche (7) der Trägerbahn (5) angeordnet sind, den permanenten und/oder semipermanenten Typ umfassen.

9. Verfahren zum Herstellen eines Zierelements (1) zum Dekorieren von Objekten (100), folgende Ausführungsschritte umfassend:

- Vorbereiten einer Mehrzahl dekorativer Körper (2), die einen sichtbaren Abschnitt (3) und einen Verbindungsabschnitt (4) umfassen, der gegenüber dem sichtbaren Abschnitt ist;

- Vorbereiten einer Trägerbahn (5) aus einem flexiblen Material, die eine erste Fläche (6) und eine zweite Fläche (7) umfasst, die gegenüber der ersten Fläche ist, wobei die Trägerbahn (5) ein Gewebe ist und wenigstens teilweise aus Polyester hergestellt wird;

- Auftragen von Haftsubstanzen (10) auf die zweite Fläche (7) der Trägerbahn (5), derart, dass die zweite Fläche (7) haftend wird;

- Verbinden des Verbindungsabschnitts (4) des dekorativen Körpers (2) an der ersten Fläche (6) der Trägerbahn (5) mittels Heißschmelzen, derart, dass ein einzelner Körper erlangt wird, der den dekorativen Körper (2) und die Trägerbahn (5) umfasst,

- Schneiden der Trägerbahn (5) am Rand der dekorativen Körper (2), derart, dass eine Umfangskante (13) der Trägerbahn der Zierform folgt, die von der Anordnung der dekorativen Körper (2) gebildet wird, wobei der Schneideschritt ein Laserschneiden ist.

10. Verfahren nach Anspruch 9, **dadurch gekennzeichnet, dass** der Schritt des Vorbereitens des dekorativen Körpers ein Anordnen von festem Klebstoff, der wärmeaktivierbar ist, auf dem Verbindungsabschnitt (4) des dekorativen Körpers (2) umfasst; wobei der Schritt des Heißschmelzens durch Heißpressen des dekorativen Körpers (2) auf die Trägerbahn (5) ausgeführt wird.

11. Verfahren nach einem der Ansprüche 9 bis 10, **dadurch gekennzeichnet, dass** die Haftsubstanzen

(10), die auf der zweiten Fläche (7) der Trägerbahn (5) angeordnet werden, permanente und/oder semipermanente Haftsubstanzen (10) umfassen.

12. Verfahren nach einem der Ansprüche 9 bis 10, **dadurch gekennzeichnet, dass** es ferner nach dem Schritt des Schneidens der Trägerbahn (5) den Schritt des Aufbringens einer Verbindungsmembran (14) umfasst, um die dekorativen Körper (2) in ihrer Position zu halten und ein Zerbrechen der Trägerbahn (5) zu verhindern.

13. Verfahren zum Kleben eines Zierelements (1) auf ein zu dekorierendes Objekt (100), folgende Ausführungsschritte umfassend:

- Vorbereiten eines Zierelements (1) nach einem der Ansprüche 1 bis 9;

- Anordnen der Trägerbahn (5) auf dem zu dekorierenden Objekt (100), derart, dass die zweite Fläche (7) mit dem zu dekorierenden Objekt (100) in Kontakt gelangt;

- Pressen des Zierelements (1) auf das zu dekorierende Objekt (100).

Revendications

1. Un élément ornemental (1) pour décorer des objets (100) comprenant :

une pluralité de corps décoratifs (2) comprenant chacun une portion visible (3) et une portion de jonction (4) qui est opposée à la portion visible ; une feuille de support (5) réalisée en matériau flexible et comprenant une première surface (6) jointe à la portion de jonction (4) des corps décoratifs (2) de manière à ce que lesdits corps décoratifs (2) forment un corps unique avec la feuille de support (5), et une deuxième surface (7) qui est opposée à la première surface (6), les corps décoratifs (2) étant joints à la feuille de support (5) au moyen de colle (8) ;

des substances adhésives (10) appliquées sur la deuxième surface (7) de la feuille de support (5) de manière à ce que l'élément ornemental (1) puisse être collé sur l'objet (100) à décorer, **caractérisé en ce que** la feuille de support (5) est un tissu et qu'elle est au moins partiellement réalisée en polyester.

2. L'élément ornemental (1) selon la revendication 1, **caractérisé en ce que** la première surface (6) de la feuille de support (5) comprend des irrégularités (9) qui sont au moins partiellement noyées dans la colle de manière à augmenter la prise de la colle sur la feuille de support (5), lesdites irrégularités étant formées par l'ensemble de fils du tissu.

3. L'élément ornemental (1) selon l'une quelconque des revendications précédentes, **caractérisé en ce qu'il** comprend une pellicule de couverture amovible (11) placée en contact avec la deuxième surface (7) de la feuille de support (5). 5
4. L'élément ornemental (1) selon la revendication 1, **caractérisé en ce que** les corps décoratifs (2) sont positionnés le long d'un parcours de design (P) pour former une forme ornementale ; la feuille de support (5) étant formée par une bande de support s'étendant le long du parcours de design (P). 10
5. L'élément ornemental (1) selon la revendication 4, **caractérisé en ce qu'il** comprend une membrane de jonction adhésive (14), amovible, comprenant une face adhésive (15) qui est opérationnellement en contact avec la portion visible (3) de chaque corps décoratif (2) pour empêcher des déformations de la bande de support. 15 20
6. L'élément ornemental (1) selon la revendication 5, **caractérisé en ce que** ladite membrane de jonction (14) est transparente. 25
7. L'élément ornemental (1) selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la feuille de support (5) est délimitée par un bord périmétrique (13) ; ledit bord périmétrique (13) entourant au moins partiellement le corps décoratif (2) et étant au moins partiellement adjacent à ce même corps décoratif. 30
8. L'élément ornemental (1) selon la revendication 1, **caractérisé en ce que** les substances adhésives (10) appliquées sur la deuxième surface (7) de la feuille de support (5) sont du type permanent et/ou semi-permanent. 35
9. Un procédé pour la fabrication d'un élément ornemental (1) pour décorer des objets (100), comprenant les phases opérationnelles suivantes : 40
 - préparer une pluralité de corps décoratifs (2) comprenant une portion visible (3), et une portion de jonction (4) qui est opposée à la portion visible ; 45
 - préparer une feuille de support (5), réalisée en matériau flexible, comprenant une première surface (6) et une deuxième surface (7) qui est opposée à la première surface, ladite feuille de support (5) étant un tissu et étant au moins partiellement réalisée en polyester ; 50
 - appliquer des substances adhésives (10) sur la deuxième surface (7) de la feuille de support (5) de manière à rendre ladite deuxième surface (7) adhésive ; 55
 - joindre la portion de jonction (4) du corps décoratif (2) sur la première surface (6) de la feuille de support (5) par collage à chaud, de manière à obtenir un corps unique comprenant le corps décoratif (2) et la feuille de support (5),
 - découper la feuille de support (5) au niveau du bord marginal des corps décoratifs (2) de manière à ce qu'un bord périmétrique (13) de la feuille de support suive la forme ornementale définie par l'agencement des corps décoratifs (2), ladite phase de découpe étant une découpe par laser.
10. Le procédé selon la revendication 9, **caractérisé en ce que** la phase de préparation du corps décoratif (2) comprend l'application de colle solide thermoactivable sur la portion de jonction (4) du corps décoratif (2) ; la phase de collage à chaud étant effectuée par pression à chaud du corps décoratif (2) sur la feuille de support (5) .
11. Le procédé selon l'une quelconque des revendications de 9 à 10, **caractérisé en ce que** les substances adhésives (10) devant être appliquées sur la deuxième surface (7) de la feuille de support (5) comprennent des substances adhésives (10) permanentes et/ou semi-permanentes.
12. Le procédé selon l'une quelconque des revendications de 9 à 11, **caractérisé en ce qu'il** comprend en outre, après la phase de découpe de la feuille de support (5), la phase d'application d'une membrane de jonction (14) pour maintenir les corps décoratifs (2) en position et pour éviter de rompre la feuille de support (5).
13. Un procédé pour coller un élément ornemental (1) sur un objet (100) à décorer, comprenant les phases opérationnelles suivantes :
 - préparer un élément ornemental (1) selon l'une quelconque des revendications de 1 à 9 ;
 - positionner la feuille de support (5) sur l'objet (100) à décorer de manière à ce que la deuxième surface (7) soit en contact avec l'objet (100) à décorer ;
 - presser l'élément ornemental (1) sur l'objet (100) à décorer.

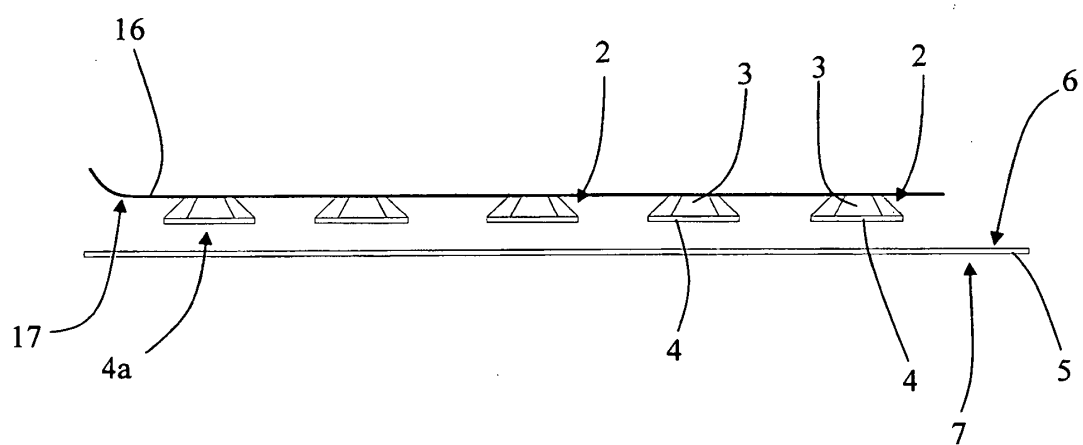


Fig. 1

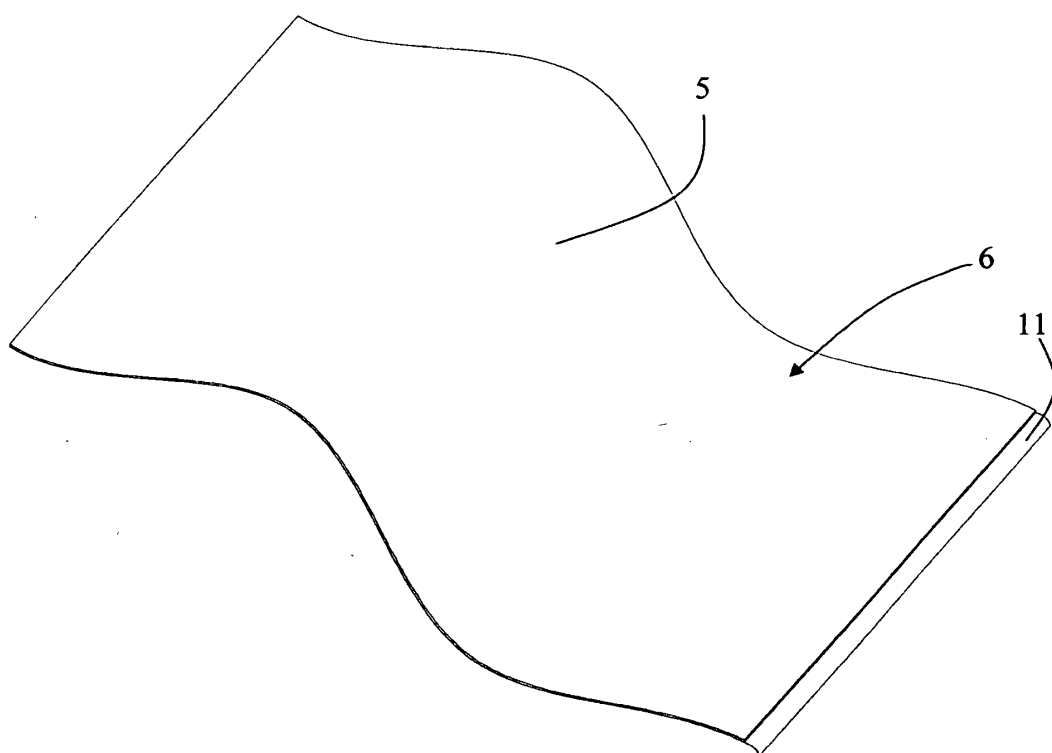


Fig. 2

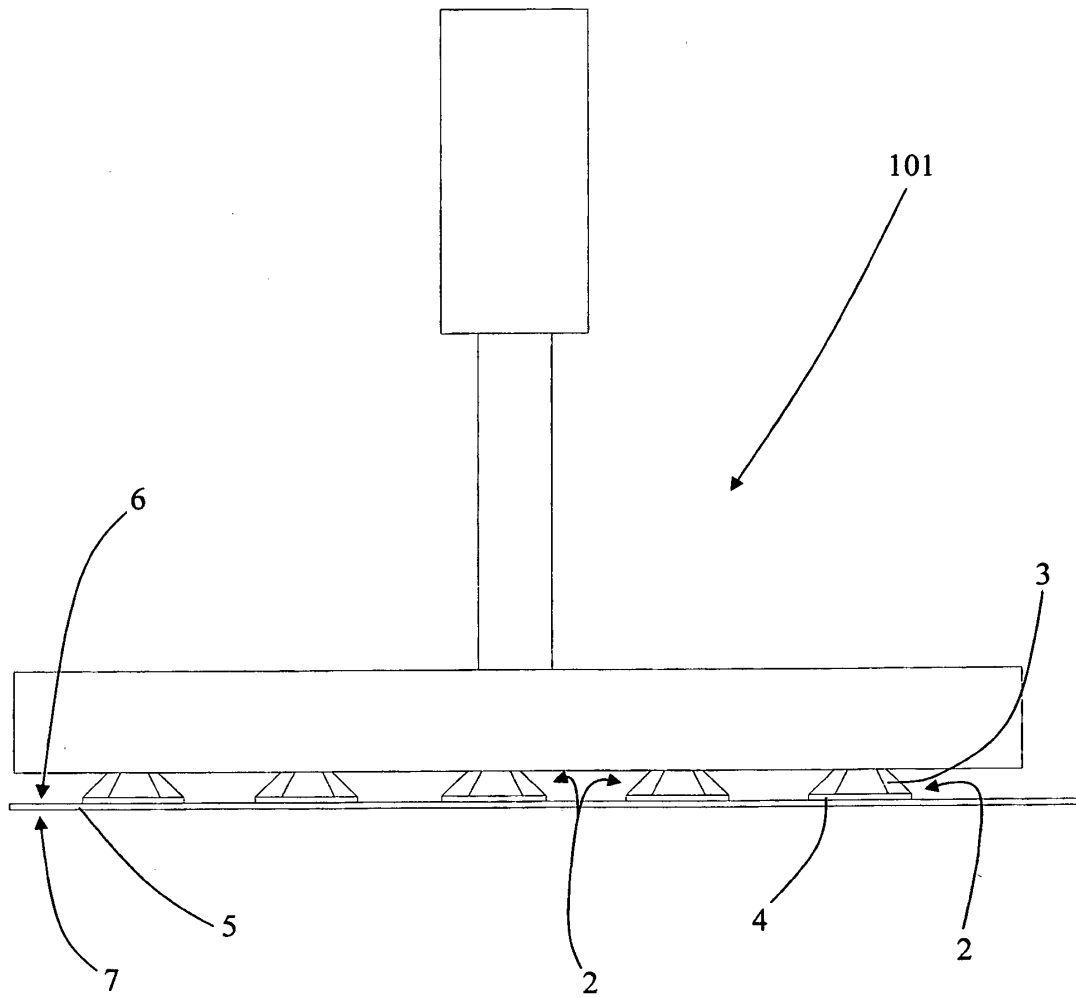


Fig. 3

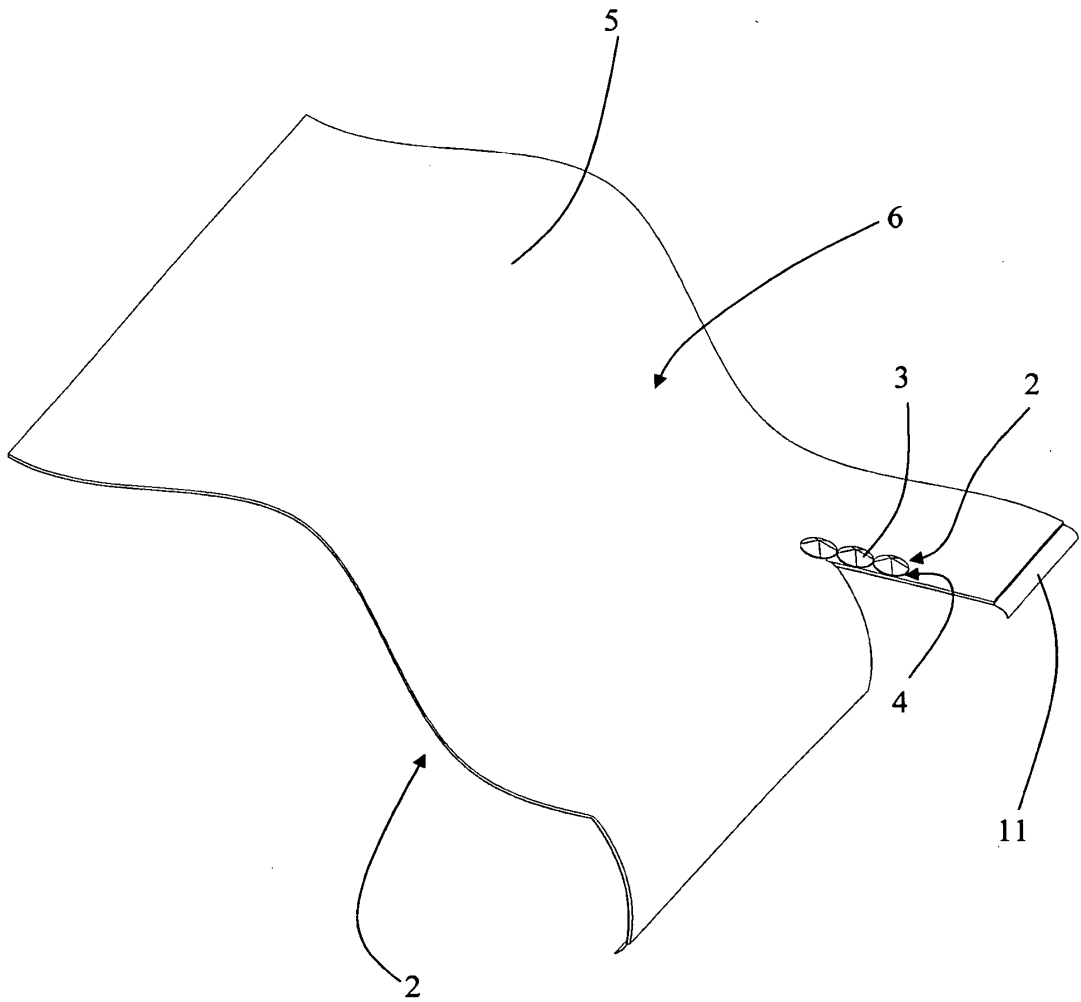


Fig. 4

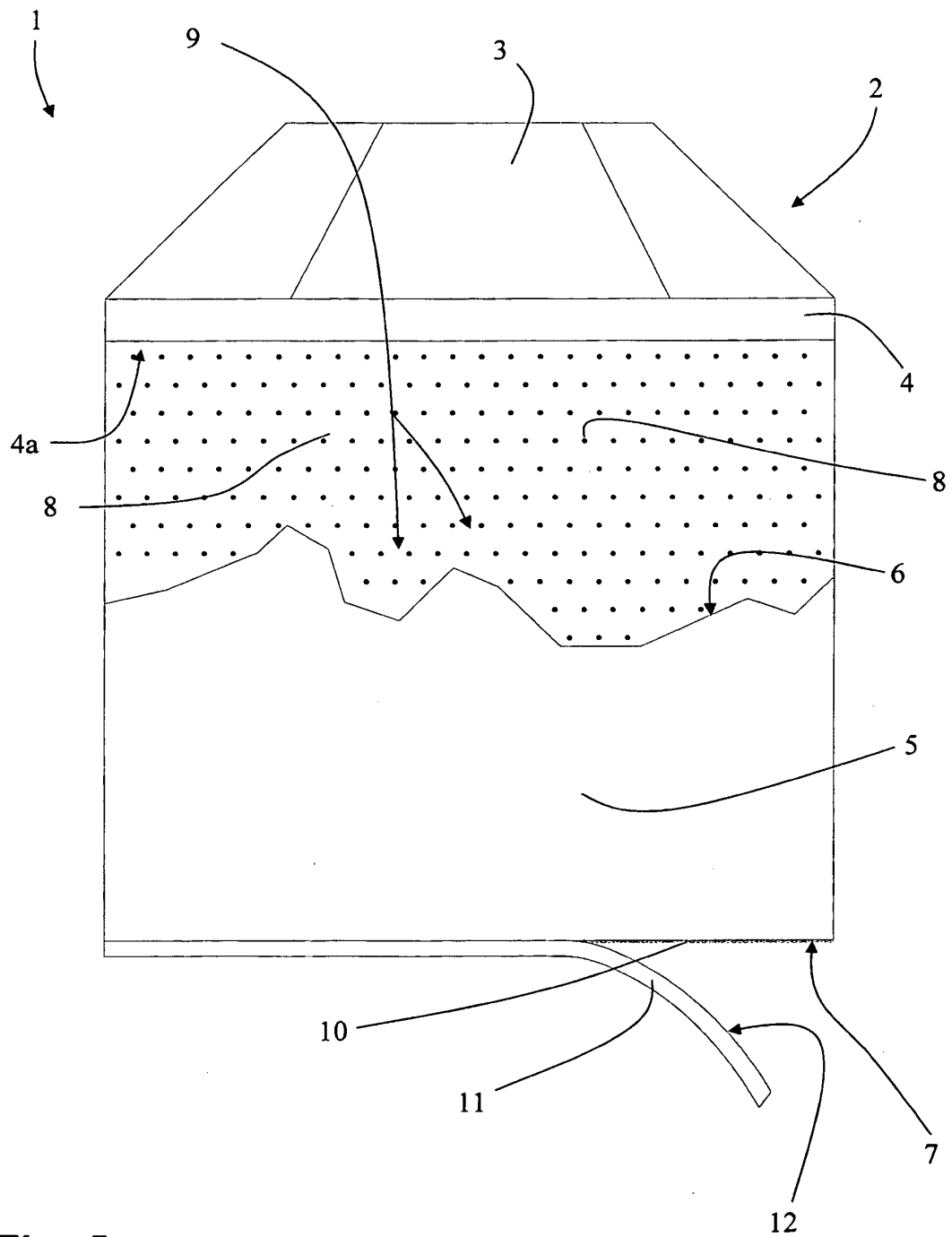


Fig. 5

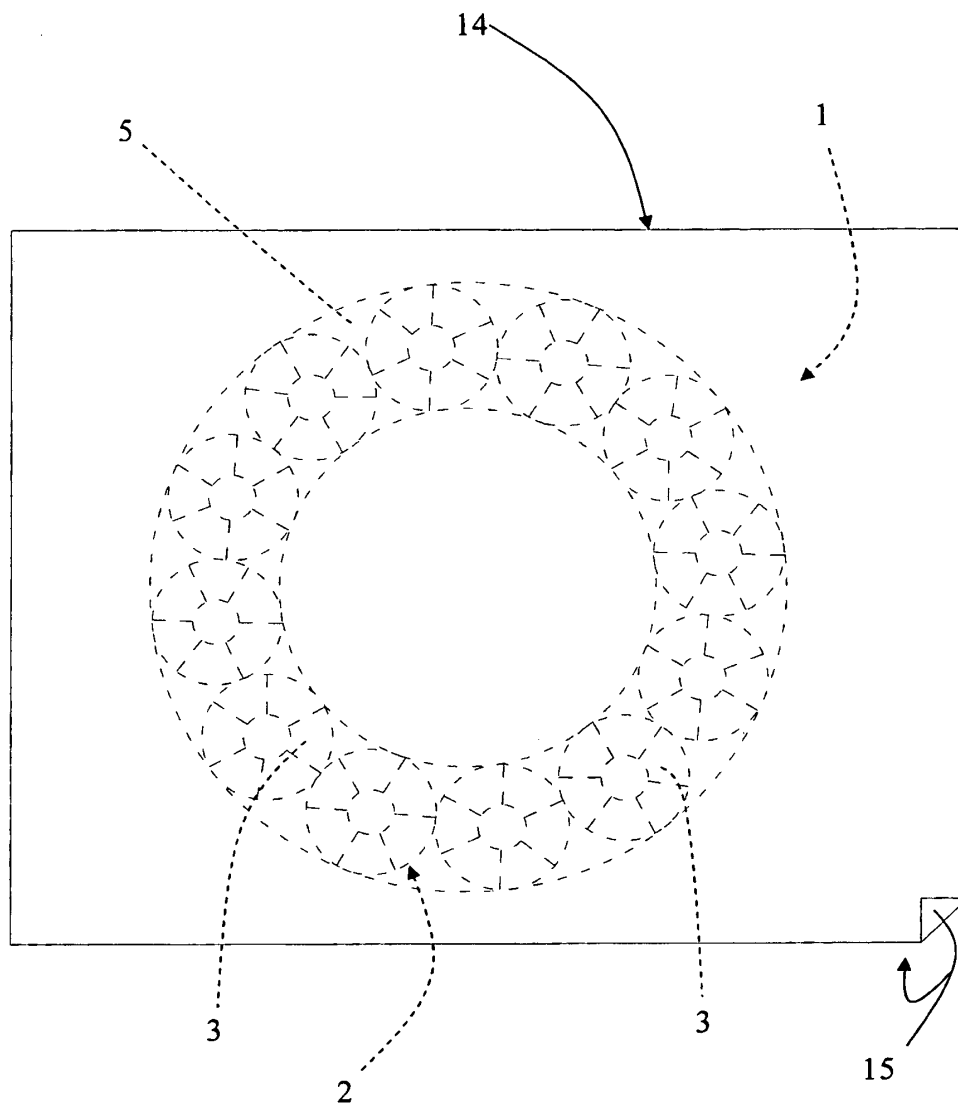


Fig. 6

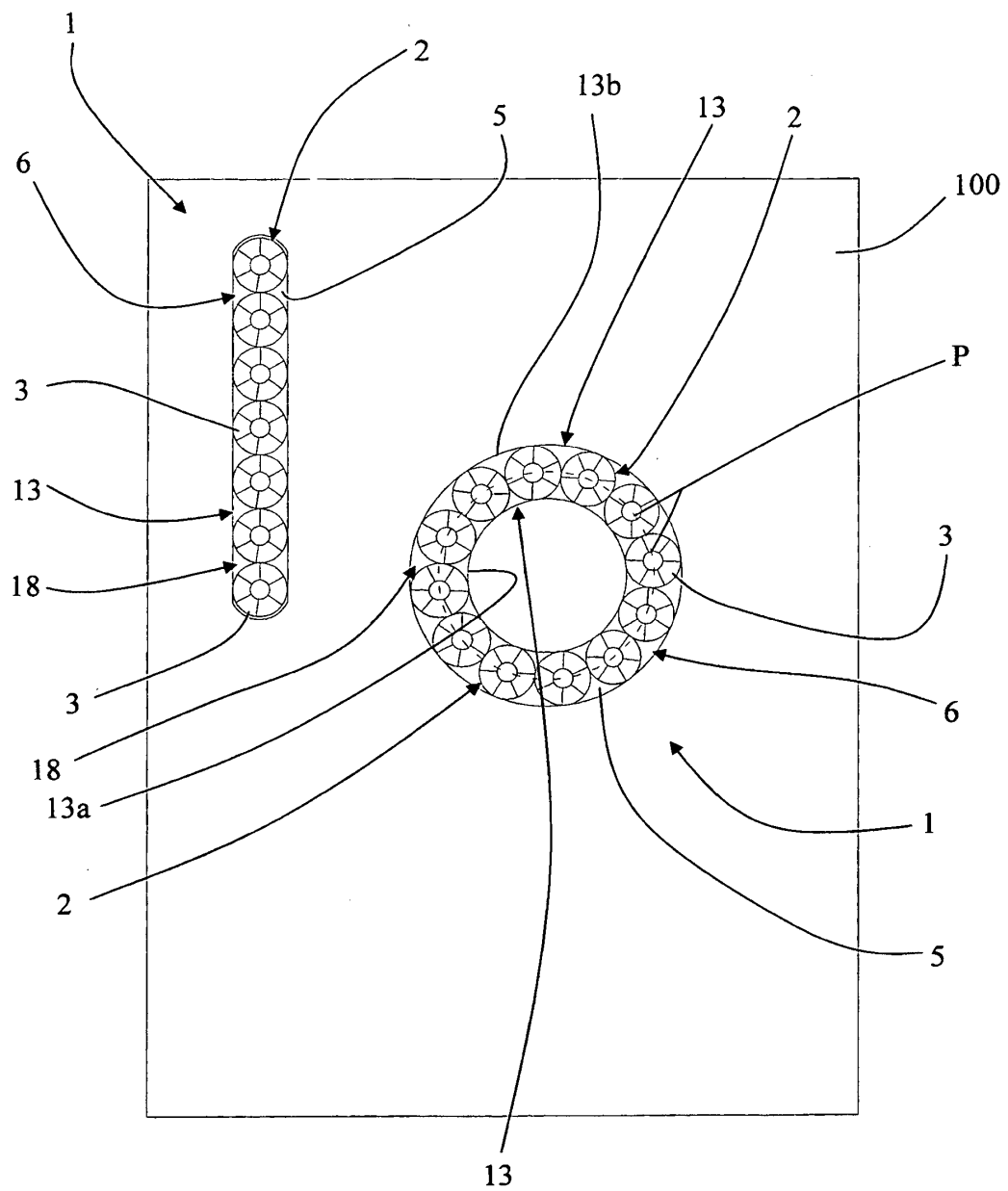


Fig. 7

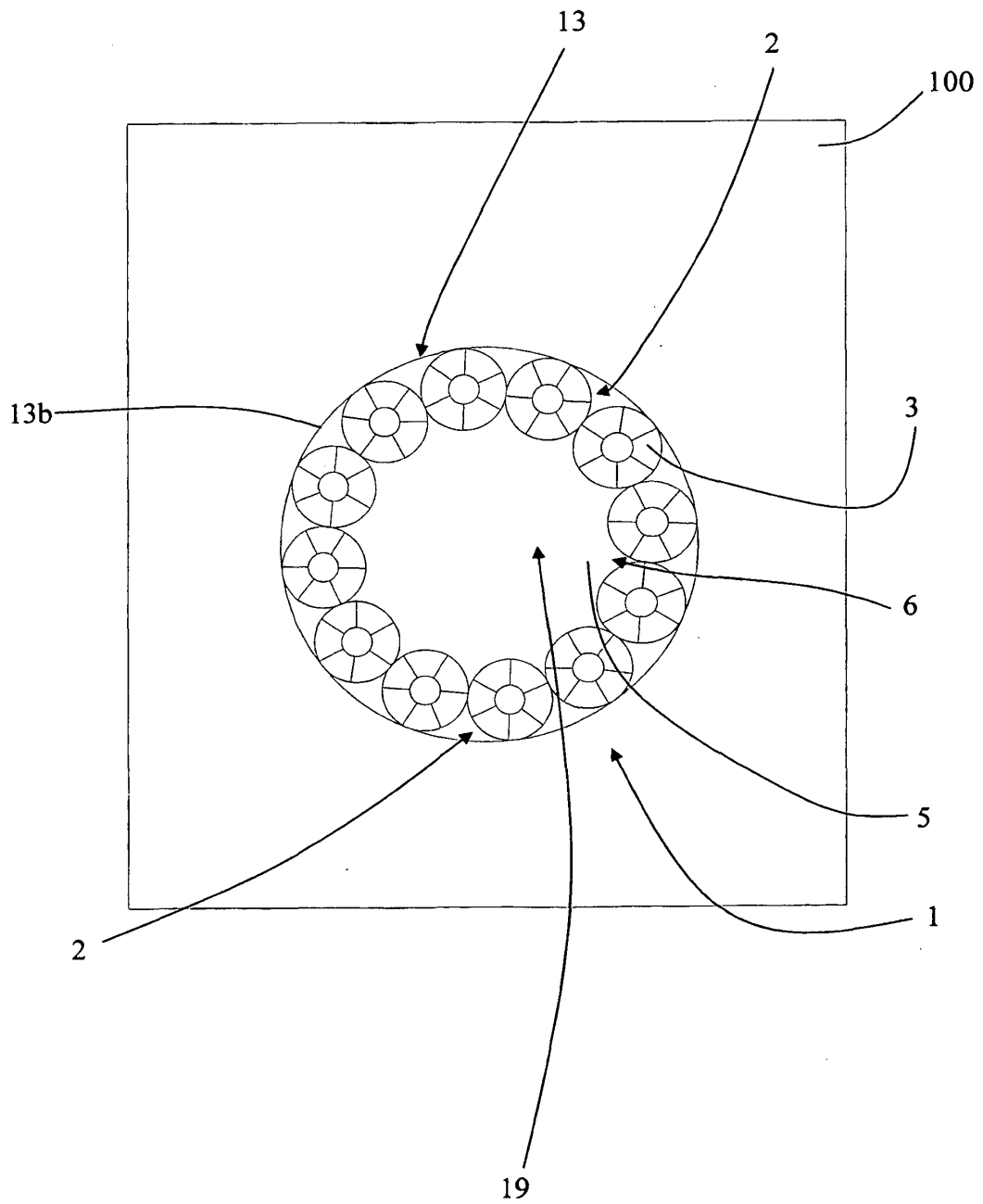


Fig. 8

REFERENCES CITED IN THE DESCRIPTION

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