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(54) Structural element in block form

(57) The invention relates to a block-shaped structural element, the external shape of which is determined by a bottom, top and four sides. At least one of the sides is provided with a slot formed in a plastic material in which sheet material can be fixed. At the opposite side the top edge can be constructed sloping downwards at an angle α (Fig. 1).

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Description

[0001] The present invention relates to a structural element in block form, the external shape of which is determined by a bottom, a top and four sides adjoining one another.

[0002] When building houses it is frequently the case that sheeting, such as iron sheet, aluminium sheet, plastic sheet or lead flashing, has to be fixed to an external wall. Such sheeting is usually used in order to obtain a watertight join/seal. For example, when extending a building with a conservatory care must be taken to ensure that where the conservatory joins the external wall it is not possible for rainwater to penetrate through said join. With chimneys and roofs as well, cases also arise where it is desired to fix sheeting in the external wall. It is customary to fix such sheeting by inserting this in a joint and fixing it with mortar. The problem is, however, that sheeting and mortar adhere poorly or with difficulty and that the joint therefore leaves something to be desired. A further problem is that the joint often first has to be ground out in order to remove set mortar already present in order to create space to insert an edge of the sheeting to be fixed.

[0003] According to a first aspect, the aim of the present invention is to provide a structural element in block form by means of which sheet material can be fixed to an external wall in a simple, efficient manner. As already indicated above, according to the invention such sheet material can be of very diverse nature and can even be thin sheet material, such as plastic film.

[0004] The abovementioned aim is achieved according to the invention by providing a structural element in block form, the external shape of which is determined by a bottom, a top and four sides adjoining one another, wherein a first of the sides is provided with a first slot that opens on said first side and extends the complete length of said first side and wherein, according to an advantageous further embodiment, the part of said first slot that is located in the structural element is delimited by a plastic material (or, in other words, wherein, according to an advantageous further embodiment, the first slot in the structural element is made in a plastic material). As a result of its essentially block-shaped form, the structural element provided according to the invention is relatively universally applicable and the dimensions of the structural element can easily be matched to the dimensions of other structural elements, usually referred to as bricks. By providing the first slot in the structural element according to the invention, said structural element can easily be incorporated in the external wall in order subsequently to insert sheet material in said first slot and to fix said material by also providing, in the first slot, fixing means, such as, possibly, a wedge, but preferably a filler that is fluid during incorporation, such as an adhesive, mastic or optionally even mortar. Another excellent fixing means can be a rubber or plastic strip that clamps the sheet material inserted in the slot after it has also been inserted in the slot. What is achieved by delimiting the first slot in the structural element by a plastic material is, in particular, that the sheet material can be fixed very well and reliably using numerous commercially available types of adhesive and types of mastic, including, in particular, adhesive and/or filler types of mastic.

[0005] According to an advantageous embodiment of the invention, a second side adjoining the first side is provided with a second slot that opens on said second side and extends the complete length of said second side. With this arrangement it is furthermore advantageous if, in this embodiment, the part of the second slot that is located in the structural element is delimited by a plastic material (or formed in a plastic material). In this way a structural element is obtained that can be used particularly well on corners of external walls, where sheet material has to be fixed to the external wall on both sides of the corner.

[0006] According to yet a further embodiment of the first aspect of the invention it is advantageous if the top has an essentially horizontal portion, if the structural element has a third side located opposite the first side and if, at the top, on the third side, the structural element is constructed such that it slopes downwards towards the horizontal part of the top. In this way it is possible for the structural element to collect moisture, in particular water, on the third side having the sloping portion and to direct said moisture to the top of said structural element so that it drains over said top. This is, for example, very useful in the case of cavity walls, where the third side will be a side facing the inside of the cavity wall and in particular will protrude somewhat into the cavity. The moisture collected by the sloping portion can optionally be drained via the set mortar that will be on the top of the structural element. However, in order to improve the drainage of this moisture it is advantageous if drainage channels are made in the top of the structural element according to the invention, one end of said drainage channels adjoining the sloping portion and the other end opening onto the first side. The drainage channels can be open at the top, in other words can be grooves made in the top of the structural element. The drainage channels can, however, also be closed at the top and open only on the first side and at the sloping portion on the third side.

[0007] In order to facilitate fixing of the structural element according to the invention by means of mortar, it is preferable according to the invention if recesses open on the underside are made in the bottom. These open recesses are then able to fill with mortar when fixing in the external wall. After this mortar has set, the structural element will then be retained by the mortar by means of the parts of the mortar engaging in the recesses. This makes it possible, in particular, to produce the structural element as such from materials which are not, or hardly, suitable for bricklaying because they are not themselves able to form an adhesive joint with mortar. Although this can be highly advantageous, it is, of course, not neces-

sary to produce the entire structural element from plastic. For the purposes of fixing the sheet material it is optionally possible to suffice with a plate-shaped or block-shaped plastic part in which the first or second slot has been made.

[0008] According to a preferred embodiment the structural element is made up of a hollow plastic body, in which the first and optionally second slot have been made, obtained by means of injection moulding and the cavity is filled with a pressure-resistant, in particular compression-resistant, material. A suitable filling material for the cavity is, for example, so-called foam glass, which is known as a thermal insulating material with high compressive strength. Foam glass is a glass insulating material. An other suitable filling material is so called "Isobet thermal insulating mortar". This "mortar" comprises grains of expanded polystyrene (EPS-grains) having a grain size of about 2-4 mm, vermiculite having a grain size of about 0-3 mm and additives. The pressure resistance of this "mortar" is larger than 3 N/mm^2 and the R-value of this "mortar" is about 0,69 W/m^2 K at 50 mm, thus, as is preferred according to the invention, smaller than 1,25 W/m^2 K at 50 mm.

[0009] The advantage of a structural element that, considered in the vertical direction, provides insulation against moisture and/or heat, such as, for example, can be obtained by producing the entire structural element from plastic or in the form of a hollow plastic body filled with a compression-resistant and preferably thermally insulating material is apparent from the following:

[0010] A known phenomenon when building houses with walls produced from material suitable for bricklaying is that moisture is able to rise up the walls or descend down the walls and thus can give rise to problems of dampness in the house. It is also a known phenomenon that when an extension is installed in contact with an external wall cold is able to enter the building and heat is able to leave the building via that external wall. This phenomenon arises in particular in the case of walls made from a brick or brick-like material suitable for bricklaying. According to the invention brick-like materials suitable for bricklaying are understood to be not only baked bricks suitable for bricklaying, hewn natural stone suitable for bricklaying or bricks made from concrete-like material, but also concrete walls cast in one piece. In broad terms, according to the invention "a brick-like material suitable for bricklaying" is understood to be not only brick-like materials but also other materials that are suitable for bricklaying using bricklaying mortar. Brick-like building materials have the characteristic that they are porous to a greater or lesser extent and thus are able to conduct moisture upwards or to conduct moisture downwards. If the external wall has become very damp, for example as a result of rainfall, such brick-like materials are able to conduct the dampness into the building. This is one of the reasons why cavity walls are often used. If the building is constructed on a damp substrate, walls built from such brick-like materials can allow the dampness from the ground to rise into the dwelling.

[0011] By making structural elements, considered in the vertical direction, thermally insulating, or at least interrupting conduction of dampness or heat in the vertical direction, or making this more difficult, the abovementioned problems are overcome.

[0012] According to a second aspect, that links to the first aspect, the aim of the invention is to provide an improved structural element that is suitable for bricklaying and that, in particular, is suitable for fixing sheeting thereto.

[0013] In accordance with the second aspect of the invention this aim is achieved by providing a structural element suitable for bricklaying, which structural element suitable for bricklaying comprises, according to the second aspect of the invention:

- a top of brick-like material suitable for bricklaying and
- a bottom of brick-like material suitable for bricklaying,

wherein a strip of a plastic material is embedded in the structural element along a first side, parallel to said top and bottom, wherein said strip extends the complete length of said side and is provided with a slot that opens on said first side and extends parallel to said top and bottom along the complete length of said first side. The embedded strip - considered in the depth direction of the slot - can very well extend over only part of the structural element. The advantages of this structural element suitable for bricklaying according to the second aspect are explained below with reference to the slot made in the plastic intermediate layer of the structural element according to the third aspect. The same applies in respect of the following particular embodiment of the structural element suitable for bricklaying according to the second aspect.

[0014] According to the second aspect of the invention, it is particularly advantageous if said strip is the edge zone of a damp-proof plastic intermediate layer located between the bottom and top layer.

[0015] According to a further advantageous embodiment of the second aspect, a plastic covering layer is provided on the second side located opposite the first side, which plastic covering layer is joined to the damp-proof plastic intermediate layer. According to yet a further advantageous embodiment this covering layer is provided at the top with an edge that drains water towards the structural element.

[0016] According to a third aspect, the aim of the present invention is to provide a structural element suitable for bricklaying that counteracts the conduction of moisture and possibly conduction of heat in the vertical direction.

[0017] In order to achieve this aim, according to the third aspect of the invention a structural element suitable

for bricklaying is provided, comprising:

- a top layer of brick-like material suitable for bricklaying,
- a bottom layer of brick-like material suitable for bricklaying, and
- a damp-proof plastic intermediate layer located between the bottom and top layer.

[0018] The structural element suitable for bricklaying obtained in this way is, as it were, a sandwich-like structural element having at least three layers. By making the top and bottom layer of a brick-like material suitable for bricklaying it is ensured that the structural element can be incorporated in a wall by bricklaying. By providing a damp-proof plastic intermediate layer between the bottom and top layer, both a thermal break (also called "thermal bridge") and a moisture barrier are provided. In this way cold is prevented from being able to pass through the structural element suitable for bricklaying according to the invention transversely to the direction in which the layers thereof extend. As a consequence of the damp-proof characteristics, moisture is also prevented from being able to pass through the structural element suitable for bricklaying in the one or the other direction transverse to the direction of the layers. A structural element suitable for bricklaying of this type can advantageously be used in various locations, such as below the soldier course in the case of cavity walls, at a vertical expansion joint in the external wall, at floor height below the skin of an interior cavity wall, below a sill of an external wall element, at a roof trim joint, as well as, in particular, also above all conservatory, glass roof and sloping roof joins to the external wall.

[0019] In an advantageous embodiment of the third aspect of the invention the first side of the structural element is provided with a slot made in the plastic intermediate layer, which slot extends parallel to the plastic intermediate layer along the complete length of said side. Such a slot enables very simple and reliable fitting of sheet material to the external wall. In the invention such sheet material is understood to be, for example, an aluminium or plastic flashing or lead flashing.

[0020] Sheeting of this type is usually fixed to an external wall by cutting a slot in the external wall, usually in the cement joints, inserting one edge of the sheet material in this slot and then fixing the sheet material to the wall by filling the remainder of the cut slot with mortar. The disadvantage of both pointing mortar and bricklaying mortar, in particular in the case of metal sheet, is that these mortars and metal sheet adhere very poorly to one another. By now making a slot in the plastic intermediate layer it becomes possible to insert the edge zone of the sheet material into said slot made in the plastic intermediate layer and then fix said edge zone by means of tried-and-tested methods, such as gluing or by means of mastic or optionally a rubber or plastic strip in said slot. Since the slot in the structural element will already have been provided prefabricated, it is no longer necessary to grind or cut a slot in the external wall on site.

[0021] In order to prevent rising or falling damp progressing past the plastic intermediate layer it is an additional advantage according to the invention if the structural element is at least partially, preferably completely, covered by a plastic covering layer on the third side located opposite the first side - which covering layer is preferably of the same material as the damp-proof plastic intermediate layer - wherein the plastic covering layer is joined to the damp-proof plastic intermediate layer. In use the covering layer is positioned on the inward-facing side of the structural element, in particular the side of the structural element that faces into the cavity.

[0022] In order to retain moisture dripping down over the inside, in particular the inner cavity side of the structural element, and ultimately to be able to conduct this moisture to the outside of the structural element, it is preferable according to the invention if the covering layer at least partially covers the third side of the top layer and if the top edge of the covering layer is constructed to drain water downwards at an angle towards the top layer. The top edge of the covering layer thus collects moisture that is trickling/dripping downwards and conducts this into the structural element - that, in view of the brick-like material in the top layer, is porous and permeable to moisture - in order to conduct it via the structural element over the top of the damp-proof plastic layer to the outside of the structural element or in this case the outside of the external wall.

[0023] In the case of the structural element according to both the second and the third aspect of the invention it is particularly advantageous if the plastic intermediate layer consists of rubber or rubber-like material. Apart from the fact that they are damp-proof to a high degree, rubber and rubber-like materials are also very effective as a thermal bridge. Within the scope of this invention, rubber or rubber-like material is certainly understood to be both synthetic and natural rubber or rubber-like material based on either synthetic or natural rubber, it being possible to use the synthetic rubber and natural rubber either independently of one another (the one or the other) or in combination.

[0024] The invention furthermore relates to the use of a structural element according to both the first and the second and the third aspect of the invention, wherein the top layer or top runs essentially horizontally. According to a particular embodiment, the structural element according to the first and/or the second and/or the third aspect is used in this context in order to obtain a thermal bridge acting in the vertical direction. According to another, further advantageous embodiment, the structural element according to the first and/or second and/or third aspect of the invention is used to fix sheet material, such as an aluminium sheet or lead flashing, to a wall.

[0025] The invention furthermore relates to a wall provided with a structural element according to the first and/or second and/or third aspect of the invention. This wall

will in particular be a cavity wall, where the structural element according to the first and/or second and/or third aspect of the invention will then be installed in the external wall.

[0026] For all aspects of the invention compression-resistant is understood to be a pressure resistance of at least 0.2 N/mm^2 and preferably of at least 0.4 N/mm^2.

[0027] The present invention is explained in more detail below with reference to a number of illustrative embodiments shown diagrammatically in the drawings.

[0028] In the drawings:

Figure 1 shows a diagrammatic, perspective view of a structural element that embodies both the first, the second and the third aspect of the invention;
Figure 2 shows a diagrammatic sectional representation of one use of the structural element according to the invention, embodying both the first, the second and the third aspect thereof;
Figure 3 shows a diagrammatic sectional representation of a further use of the structural element according to the invention, embodying all three aspects thereof;
Figure 4 shows a diagrammatic sectional representation of yet a further use of the structural element according to the invention, embodying all three aspects thereof;
Figure 5 shows a diagrammatic sectional representation of yet a further use of the structural element according to the invention, illustrating in particular the third aspect thereof;
Figure 6 shows a diagrammatic sectional representation of yet a further use of the structural element according to the invention, illustrating in particular the second aspect thereof;
Figure 7 shows a perspective view of a structural element, illustrating in particular the first aspect of the invention; and
Figure 8 shows a sectional view according to VIII-VIII in Figure 7.

[0029] Figure 1 shows a structural element indicated in its entirety by 1. The structural element 1 has a top 2, a bottom 3, a first side 12 and a third side 13 located opposite said first side 12. In this context the concepts "top" and "bottom" are related to the intended orientation of the structural element 1 when installed. If the draining top edge 9, which is still to be discussed, is not present or effectively is not needed and the covering layer 8, which is still to be discussed, is possibly not present or not needed, it is then possible for the bottom and top to be interchanged.

[0030] The structural element 1 as shown in Figure 1 is made up of a top layer 4 of brick-like material suitable for bricklaying, a bottom layer 5, likewise of brick-like material suitable for bricklaying, and, located between these, an intermediate layer 6 made of plastic and in particular a damp-proof plastic which, like the majority of plastics, inherently also has the property of interrupting conduction of cold/heat.

[0031] A slot 7 has been made in the material of the intermediate layer 6 on the first side 12. This slot 7 extends essentially parallel to the top 2 and bottom 3 over the whole of said side 12. As will be discussed in more detail below, a section, sheet (which may or may not have a set) or lead flashing 99 can be fixed in the slot 7.

[0032] A covering layer 8, made as an integral whole with the intermediate layer 6, is provided at the opposite third side 13. This covering layer 8 does not necessarily have to have been made as an integral whole with intermediate layer 6 and can also be a separate layer 8 that will then be joined to layer 6, for example by gluing. In the example shown in Figure 1 the covering layer 8 is applied to the entire third side 13. However, the covering layer 8 does not have to extend over the whole of said third side 13. In particular, the covering layer 8 does not have to extend over the third side of the bottom 3. The covering layer 8 will preferably extend at least over a portion of the third side of the top layer 4. This in no way has to be over the entire height of the third side of the top layer 4. Usually it will suffice if the covering layer 8, measured from the bottom of the top layer 4, has a height of 5 to 10 mm. The top edge 9 of the covering layer 8 runs obliquely at an angle α, draining towards the top layer 4.

[0033] In the example shown in Figure 1 the cross-section of the structural element 1, viewed parallel to the plane of the drawing, is the same throughout. However, this is not a requirement.

[0034] In connection with the ability to withstand pressure in the vertical direction, it is readily conceivable that pressure-resistant elements are present in the intermediate layer 6, which pressure-resistant elements are at one end in contact with the top layer 4 and at the other end are in contact with the bottom layer 5. This will be advantageous in particular if a relatively pressure-sensitive material, that is to say a material that is compressible under the influence of a compressive force, has been used for the intermediate layer 6.

[0035] The top layer 4 can be made of ordinary brick, but can also have been cut from a natural stone or have been shaped from a concrete mixture. The same applies for the bottom layer 5, which preferably will be of the same material and the same composition, and preferably will even have the same dimensions, as the top layer 4. The intermediate layer 6 can have been made from a compression-resistant rubber-like material. The intermediate layer 6 can have a height of approximately 10 mm, it being possible for the slot 7 to have a depth of approximately 5 mm. The height of the bottom and top layer 4 can be approximately 15 mm. The thickness of the covering layer 8 can be approximately 10 mm. The total width of the structural element in a direction parallel to the plane of the drawing transversely to the height direction can be approximately 110 mm. The length of the structural element in a direction perpendicular to the

plane of the drawing transversely to the height direction can be approximately 200 mm. The abovementioned dimensions are indicative only and in no way are intended to be limiting for the scope of the invention.

[0036] As far as the second aspect of the invention is concerned, that part of the structural element to the left of the axis 14 could be made completely of a brick-like material.

[0037] As far as the first aspect of the invention is concerned, the materials and layers from which the structural element is made up are of relatively minor importance. In the case of the first aspect of the invention the slot 7 in particular is of importance as a receptacle for sheet material.

[0038] One example of a structural element according to the first aspect of the invention is shown in particular in Figures 7 and 8. Figure 7 shows a perspective view and Figure 8 shows a cross-sectional view corresponding to the arrows VIII-VIII in Figure 7.

[0039] In Figures 7 and 8 the structural element according to the invention is indicated in its entirety by 100. This block-shaped structural element has an exterior shape determined by a bottom 103, a top 102 and four sides adjoining one another, i.e. 101, 104, 106 and 105. Here 104 is also referred to as the so-called first side, whilst 106 is also referred to as the so-called second side and 105 as the so-called third side. A so-called first slot 107 has been made in the first side 104 and a so-called second slot 108 has been made in the second side 106. A piece of sheet material 99 can be accommodated in the two slots in a manner corresponding to that in the case of the structural element 1 from Figure 1.

[0040] The top 102 runs essentially horizontally. However, a section 109 that runs downwards from the top of the third side 105 towards the top 102 of the structural element is advantageously formed on the side of the third side 105. Like the sloping portion 9 of structural element 1 from Figure 1 as well, the downward sloping section 109 is advantageous in order to collect moisture trickling downwards over the inside of a cavity wall. To facilitate drainage of moisture collected on the sloping section 109, drainage channels 110 have been made in the top 102 of the structural element 100, which drainage channels 110 extend over the entire horizontal portion of the top 102 and preferably also continue into the sloping section 109, although the latter is not absolutely necessary.

[0041] In order to be able to ensure fixing of the structural element 100 by means of mortar even when the structural element 100 has been produced from a material that does not adhere, or adheres only very poorly, to mortar, such as, for example, certain plastics and aluminium and lead, it is advantageous if the structural element 100 is also provided with recesses 111 in which mortar can be accommodated in order to form a sort of anchoring pins with a layer of mortar adjacent to them. In Figure 7 the recesses 111 are shown as having been made in the bottom 103 of the structural element 100. However, it will be clear that the recesses 111 can also have been made in other sides of the structural element 100, such as, for example, in the sides 101 and/or 106 and/or in the top 102. Furthermore, the recesses do not have to have a cylindrical shape.

[0042] A structural element 100 according to Figures 7 and 8 is shown diagrammatically in cross-section in Figure 2, which is to be discussed below. Figures 3 - 6, which are to be discussed below, each show, diagrammatically and in cross-section, a structural element essentially according to Figure 1. Insofar as this is not already clear, it is pointed out that the structural element 1 from Figure 1 can also very readily be used in the embodiment according to Figure 2, just like the structural element 100 from Figures 7 and 8 can also very readily be used in the embodiments according to Figures 3, 4, 5 and 6 instead of the structural element 100 shown diagrammatically.

[0043] With reference to, in particular, Figure 8, the structural element 100 is made by shaping a plastic casing 101, 102, 103, 104, 105, 106, with a hollow cavity and slots 107, 108 and recesses 111 and grooves 110 therein, by means of injection moulding. The hollow cavity is then filled with a compression-resistant material, such as foam glass 110, that is introduced via opening 114.

[0044] Figure 2 shows an application of the structural element 100 according to the invention just above the join of a conservatory roof 20 to the outside 21 of an external wall, the external wall being a cavity wall with an inside wall 23 and outside wall 22. The layer 24 is a layer of insulation. 25 is a ceiling or floor. Moisture dripping downwards over the inside of the outside wall 22 in accordance with arrow 26 is collected on the draining top edge 109 and directed, inter alia via the channels 110, to the top face 102 of structural element 100 according to the invention. If no channels 110 are present, or as a supplement to said channels, this moisture can be drained to the outside via the porous joint or brick located above. Dampness problems below the structural element 100 according to the invention are prevented in this way. As a consequence of the fact that the structural element 100 is damp-proof, it is completely precluded that moisture can pass from top to bottom. An aluminium flashing 27 is inserted in the slot 107 and is fixed in this slot by means of mastic, adhesive or optionally a rubber strip. In the application according to Figure 2, the structural element 100 on the one hand prevents downward vertical transport of moisture through the outside wall 22 from being able to occur, which could lead to dampness problems below the conservatory roof 20, and also prevents cold being conducted via the outside wall 22 from above the conservatory roof 20 to the wall section below the conservatory roof 20, which would result in cold in the conservatory.

[0045] Figure 3 shows an application of a structural element 1 according to the invention which essentially differs from Figure 2 only in the sense that a flat roof 28

is provided instead of a conservatory roof 20 and in that a structural element 1 is shown instead of a structural element 100. Therefore the corresponding reference numerals have also been used for corresponding components.

[0046] Figure 4 shows, in a diagrammatic cross-sectional view, part of, for example, a conservatory at ground level 35. It shows a foundation 30, a screed 33, layer of bricks 34 bearing on the foundation and a patio door 32 that can slide back and forth perpendicular to the plane of the drawing. Here the structural element 1 according to the invention is used to counteract rising damp and, secondly, to offer a practical fixing point for a piece of flashing 31 having an L-shaped cross-section. Here the flashing 31 can be inserted easily in the slot 7 of the structural element 1 according to the invention and if required fixed in place here by means of adhesive, mastic, etc. In the situation in Figure 4 it is optionally conceivable merely to insert the flashing 31 in the slot 7 and not to fix it in this slot.

[0047] Figure 5 shows a situation in which the structural element 1 according to the invention is used solely to combat rising damp. What is shown in Figure 5 can be, for example, the join of a conservatory to a building. In this figure 40 is that part of an external wall that is located below ground level, 41 is the crawl space, 42 the floor of the original building, 43 the concrete floor of the conservatory and 44 the screed thereof.

[0048] Figure 6 shows, diagrammatically in cross-section, the join of a flat roof to an external wall. Here the structural element 1 is used solely as a simple and practical fixing means for a section 45 or possibly flashing. Here the structural element 1 is provided as top layer on an outside wall 46 of a cavity wall 46, 47. The flat roof is indicated by 49.

Claims

1. Structural element in block form, the external shape of which is determined by a bottom (3, 103), a top (2, 102) and 4 sides (12, 13, 101, 104, 106, 105) adjoining one another, wherein a first of the sides (12, 104) is provided with a first slot (7, 107) that opens on said first side and extends the complete length of said first side and wherein, preferably, the part of said first slot (7, 107) that is located in the structural element is delimited by a plastic material.

2. Structural element according to Claim 1, wherein a second side (106) adjoining the first side (104) is provided with a second slot (108) that opens on said second side (106) and extends the complete length of said second side and wherein, preferably, the part of the second slot (108) that is located in the structural element is delimited by a plastic material.

3. Structural element according to one of the preceding claims, wherein the top (2, 102) has an essentially horizontal portion, wherein the structural element has a third side (13, 105) located opposite the first side and wherein, at the top, on the third side, the structural element is constructed such that it slopes (α) downwards towards the horizontal part of the top (2, 102).

4. Structural element according to Claim 3, wherein drainage channels (110) are made in the top (102), one end of said drainage channels adjoining the sloping portion (109) and the other end opening onto the first side (104).

5. Structural element (1, 100) according to one of the preceding claims, comprising at least one slab or block-shaped plastic component in which the first and/or second slot (7, 107, 108) has been made.

6. Structural element according to one of the preceding claims, wherein the entire structural element is made of plastic.

7. Structural element according to one of the preceding claims made as a hollow plastic injection moulded product, the cavity preferably being filled.

8. Use of a structural element according to one of the preceding claims, wherein the top layer or top runs essentially horizontally.

9. Use according to Claim 8 in order to obtain a thermal bridge acting in the vertical direction.

10. Use according to Claim 8 or 9 for fixing sheet material, such as an aluminium sheet or lead flashing, to a wall.

11. Wall provided with a structural element according to one of the preceding claims.

Fig 1

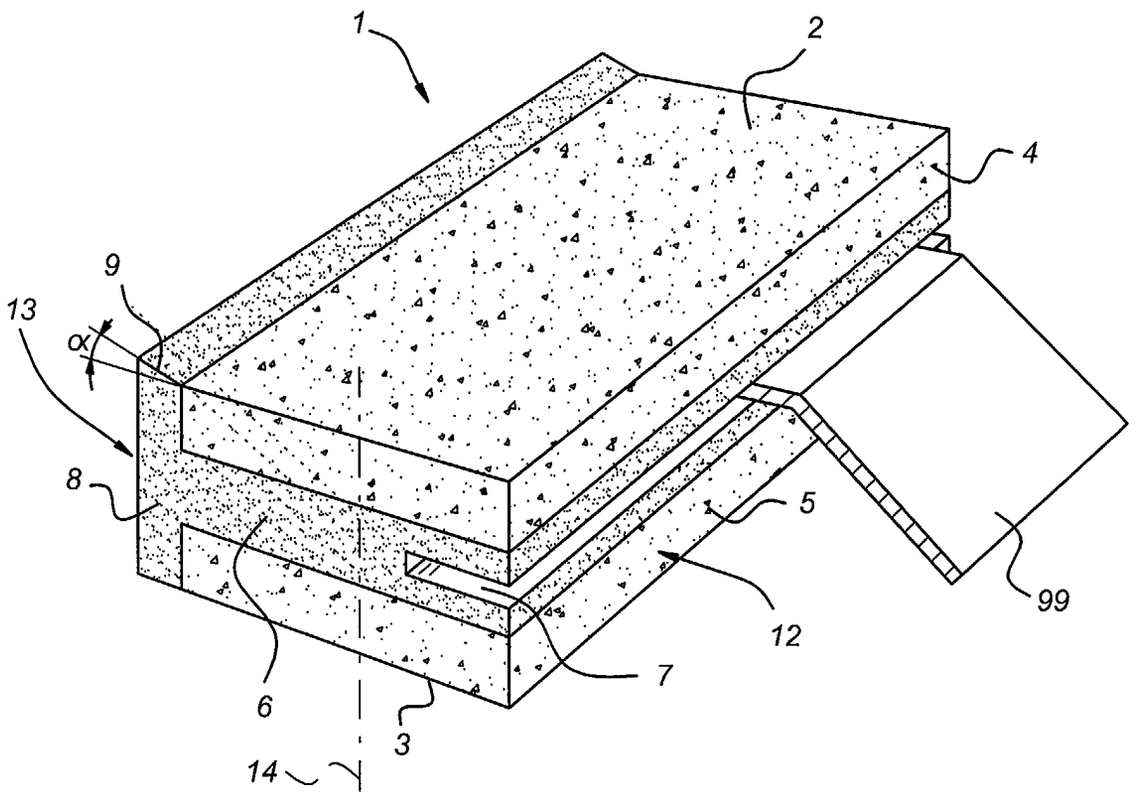

Fig 2

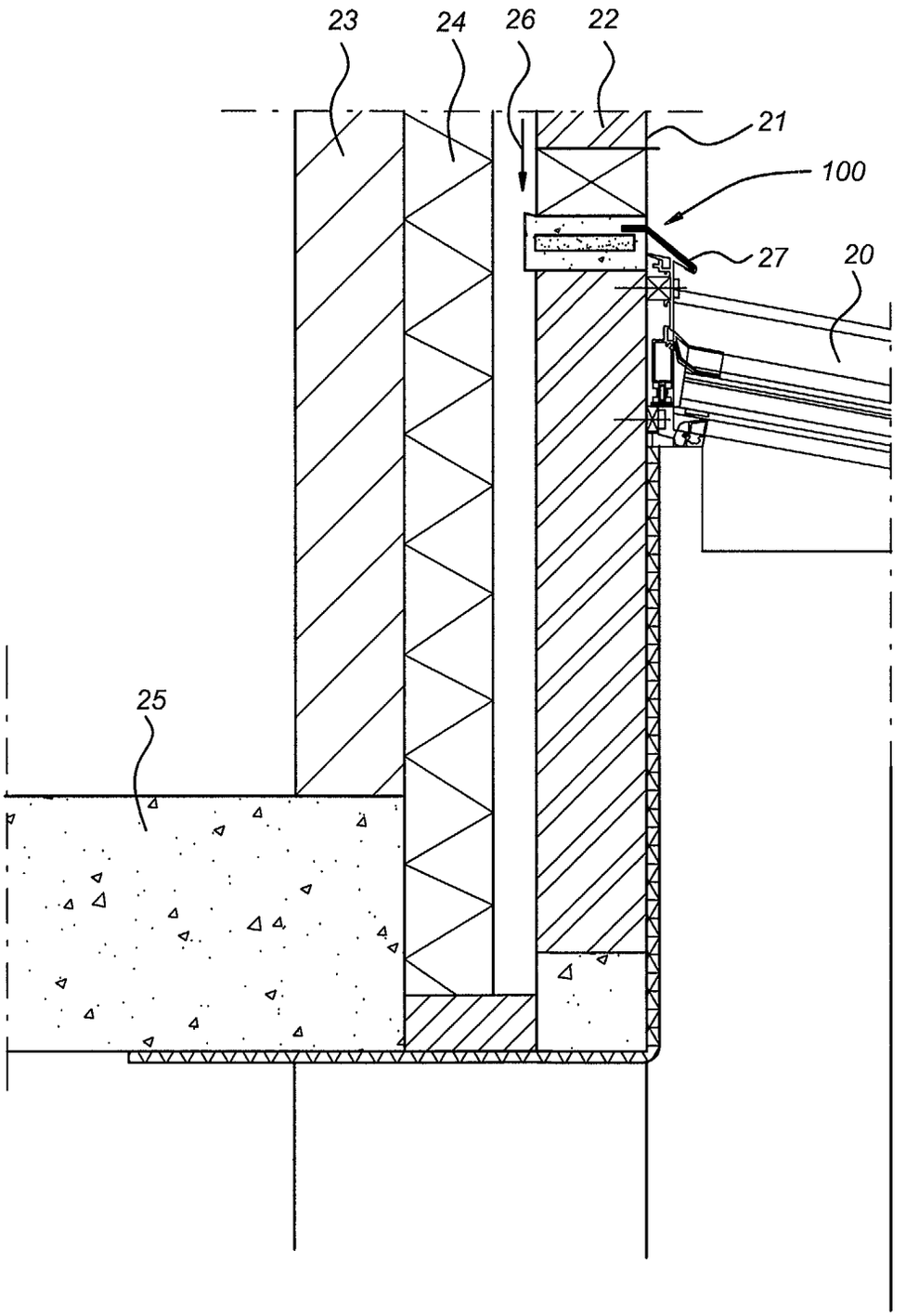

Fig 3

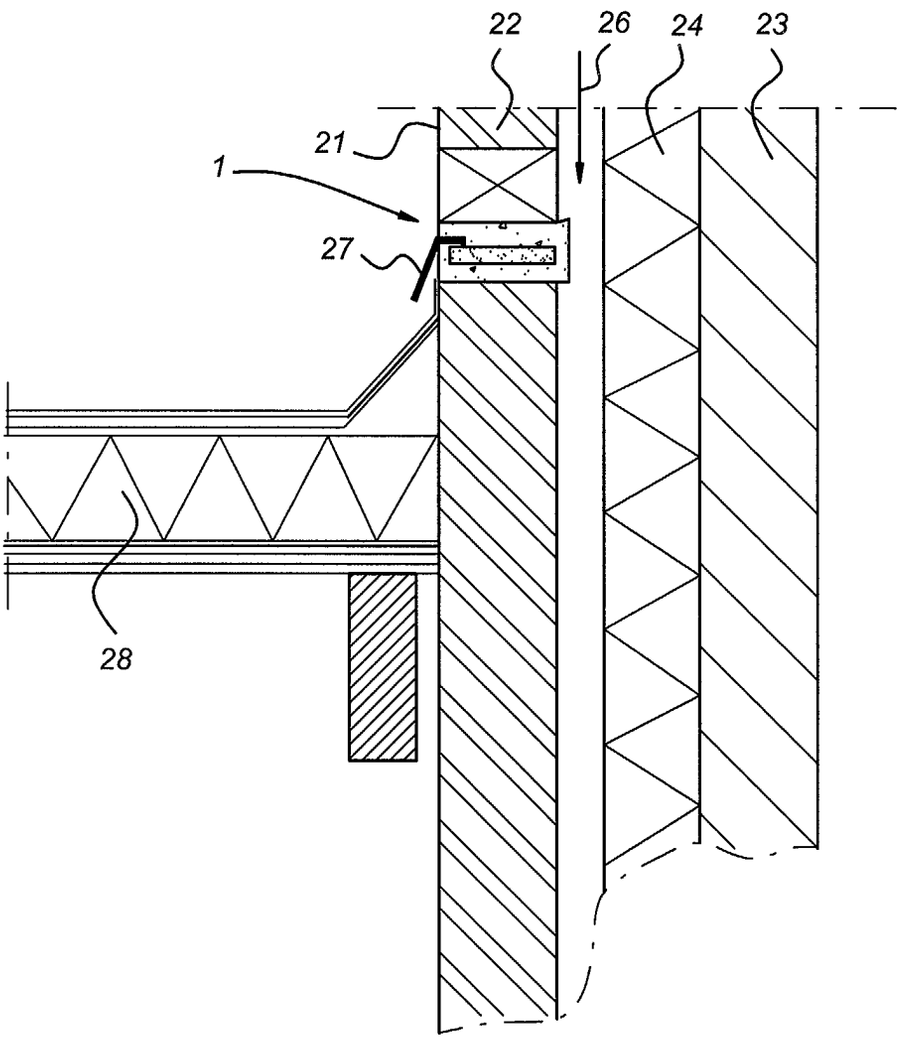

Fig 4

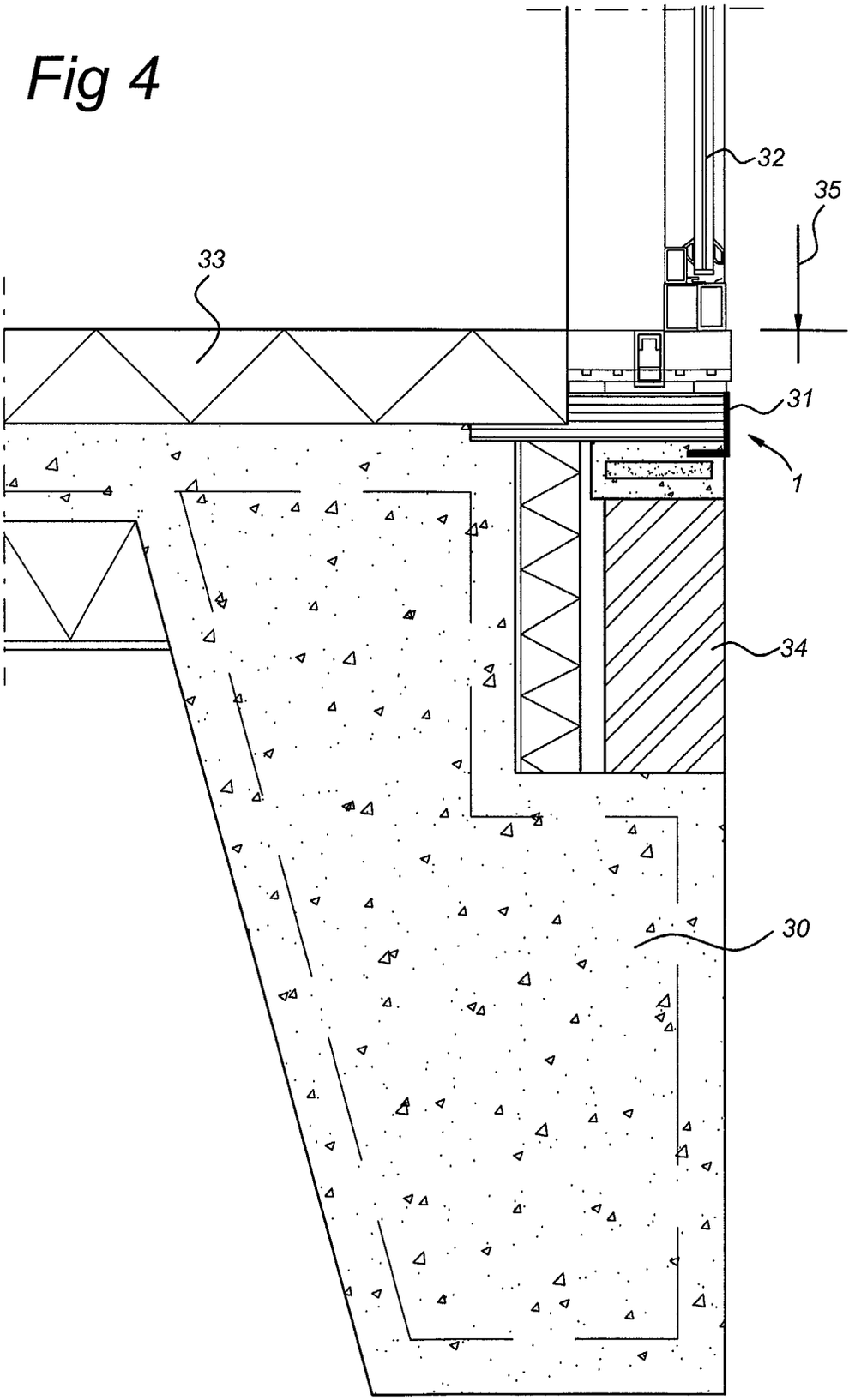

Fig 5

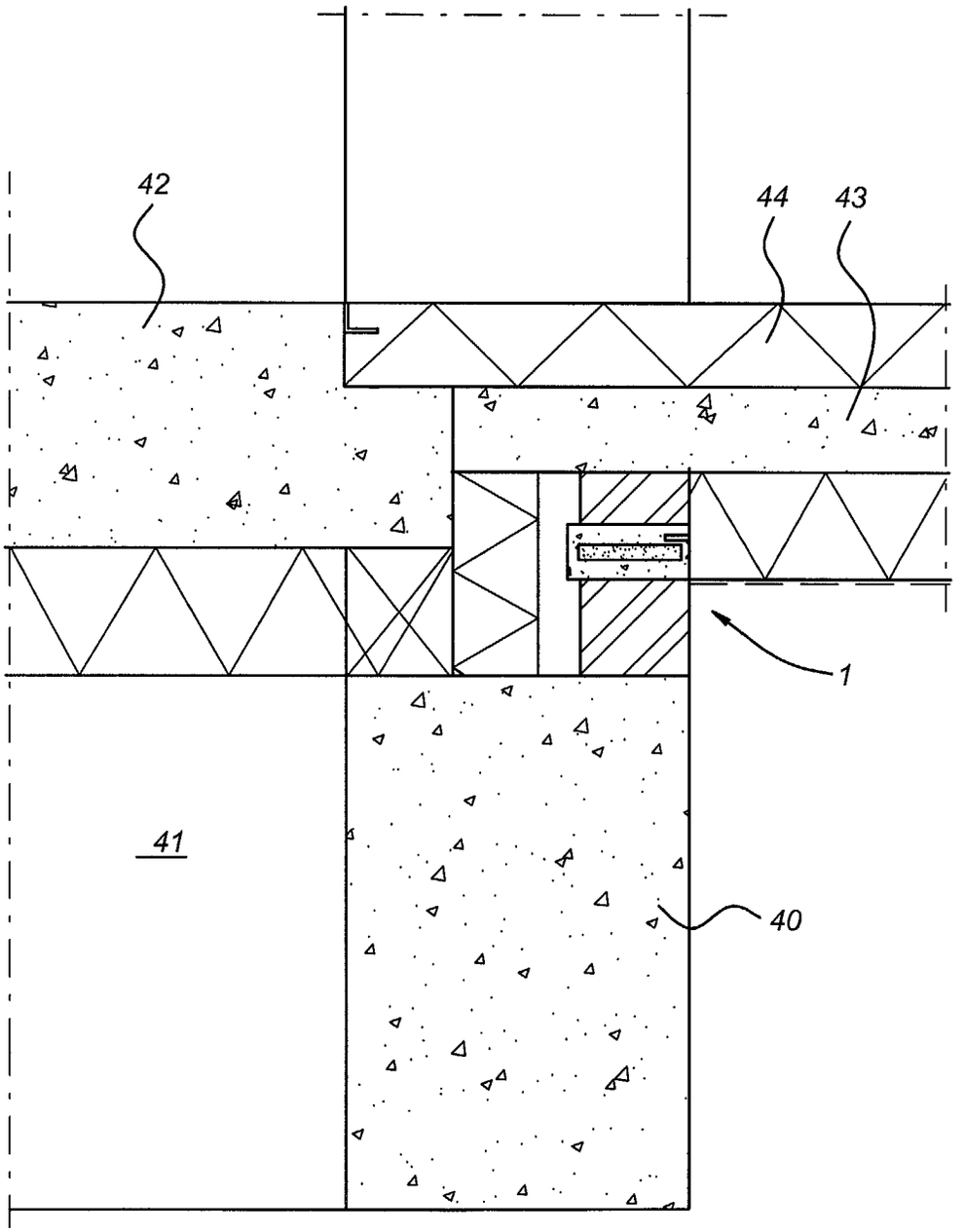

Fig 6

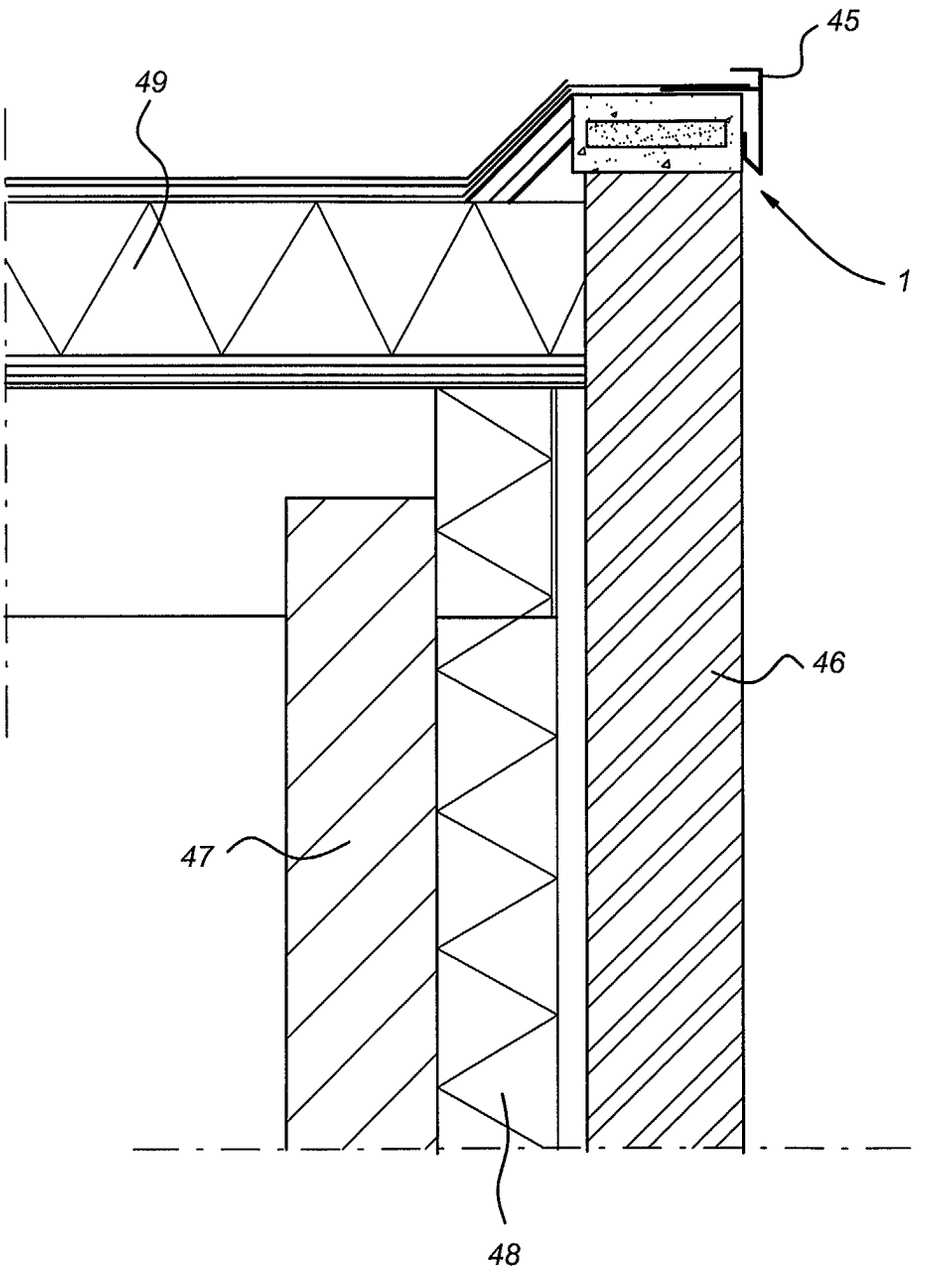

Fig 7

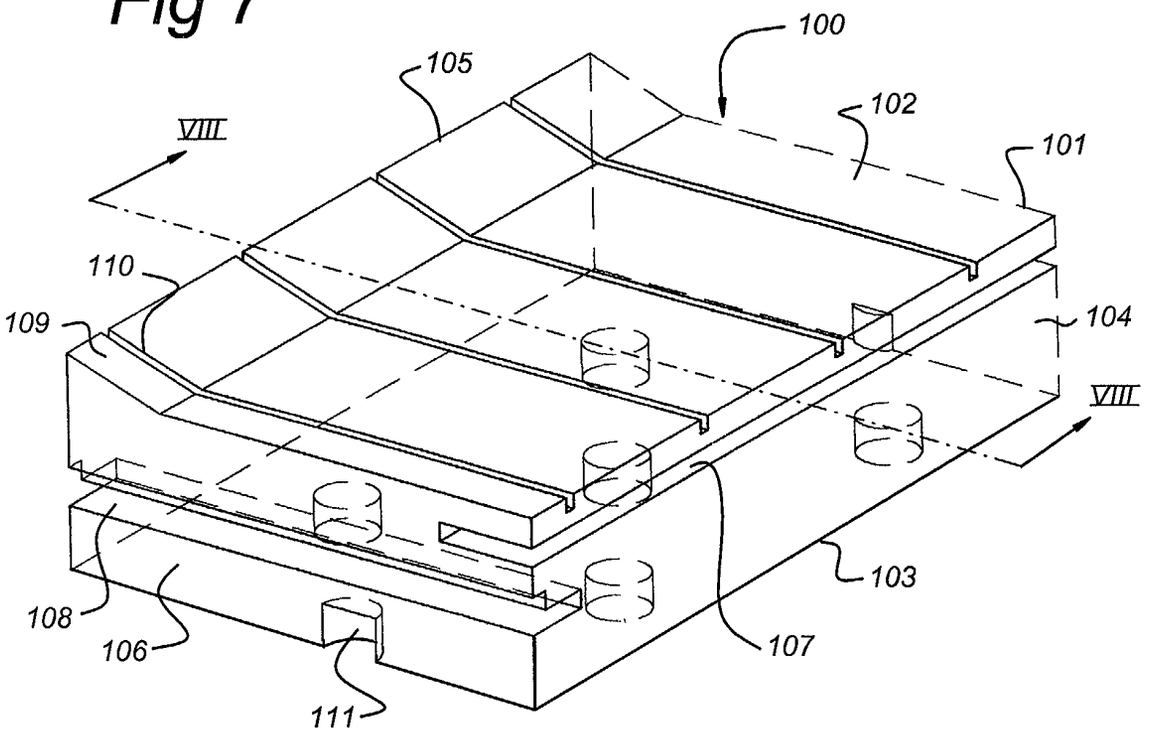
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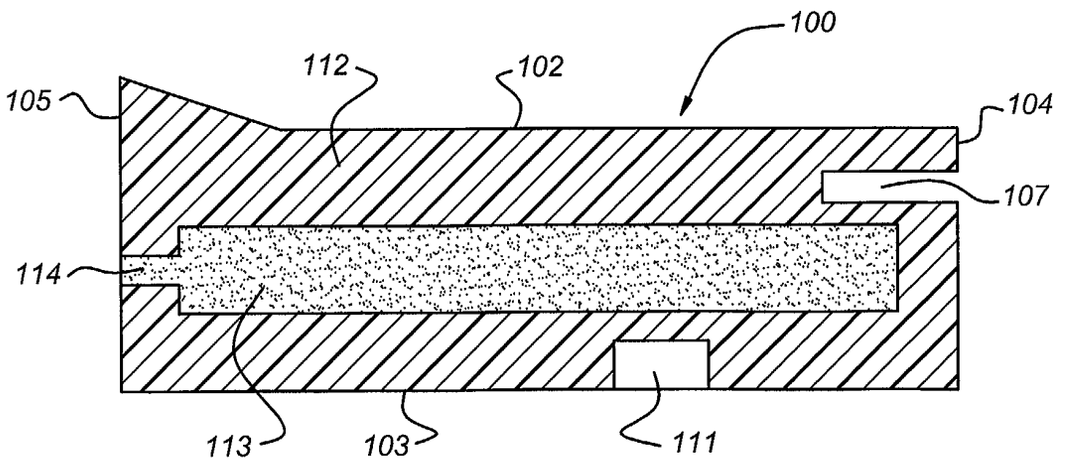
Fig 8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EUROPEAN SEARCH REPORT

Application Number
EP 02 07 6941

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	27 August 2002	Hendrickx, X

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