



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
22.04.2009 Bulletin 2009/17

(51) Int Cl.:
E04F 15/02^(2006.01)

(21) Application number: **08011118.0**

(22) Date of filing: **19.06.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

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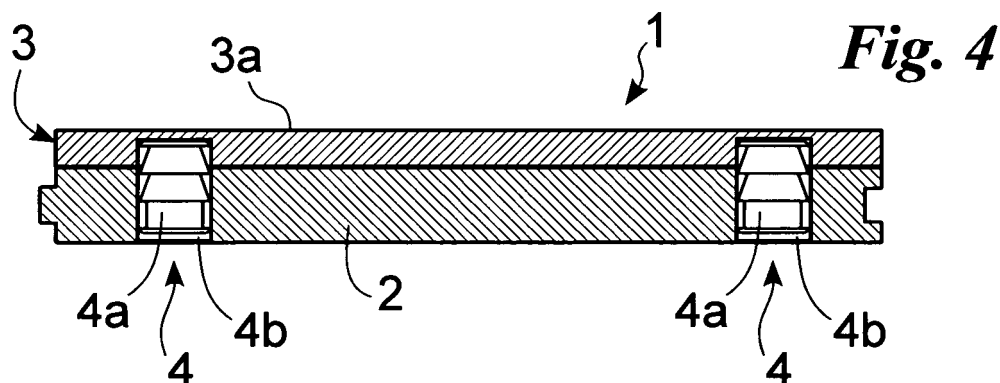
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(30) Priority: **18.10.2007 IT mi20072017**

(54) **Element for parquet type flooring**

(57) Element (1) for parquet type flooring (10) comprising: a base portion (2) extending along a prevalent extension plane; a surface portion (3) made of wood comprising a homogeneous upper surface (3a) suitable to

form the external surface of the flooring (10), the surface portion (3) having along the prevalent extension plane thereof substantially the same shape as the base portion (2), and releasable constraining means (4) suitable to connect the surface portion (3) to the base portion (2).



Description

[0001] The present invention relates to an element for parquet type flooring of the type specified in the preamble of claim 1.

[0002] There are currently known wood floorings, commonly called parquet.

[0003] They are formed of a plurality of wood flooring elements, also called strips, reciprocally assembled along the flooring surface.

[0004] Said strips are generally rectangular in shape and have basic dimensions of between 5 cm and 2 m in length and between 1 and 15 cm in width, and a depth or height of between 10 mm and 22 mm.

[0005] Moreover, these strips are generally machined along the lateral walls so that they comprise an interlocking groove along two sides and a seat suitable to house said groove along the other two sides.

[0006] Finally, said strips are constrained to the surface below by means of specific cements or adhesives, or alternatively by means of nails or the like.

[0007] Said wood floorings can be composed of different woods, high quality or not, in particular, oak, olive, walnut, teak, beech, etc.

[0008] They are generally greatly appreciated due to their high quality aesthetic appearance, due to their mechanical properties and due to their thermal properties. In fact, they allow excellent thermal insulation.

[0009] The aforesaid prior art has some important drawbacks.

[0010] In fact, wood floorings are very costly in terms of raw materials and maintenance.

[0011] Said floorings can in fact be easily ruined through contact with hard bodies, in particular boots, heels, scraping of doors or other elements.

[0012] In particular, scores or chips can form on the exposed surface of parquet type floorings.

[0013] In this case, to restore a smooth and homogeneous surface, it is necessary to laminate a portion of the flooring or to replace the strips.

[0014] In particular, the replacement operation, which can also be carried out for aesthetic purposes, is very onerous, as the single strips must be detached from the adhesive or cement, before repeating the flooring operation.

[0015] Finally, the strips are costly if made of high quality woods, having the best mechanical and thermal properties.

[0016] In this situation the technical aim of the present invention is to devise an element for parquet type flooring capable of substantially overcoming the aforesaid drawbacks.

[0017] Within the scope of said technical aim, an important object of the invention is to obtain an element for parquet type flooring with reduced maintenance costs.

[0018] A further object of the invention is to produce an element for parquet type flooring that allows the implementation of a wood flooring that is easy, inexpensive

and rapid to replace.

[0019] A further important object of the invention is to produce an element for parquet type flooring that is inexpensive and that allows the attainment of a surface made of high quality wood.

[0020] The technical aim and the objects specified are attained by an element for parquet type flooring which is characterized in that it comprises one or more of the new technical solutions described in the appended independent claims.

[0021] Preferred embodiments of the invention are shown by way of example in the accompanying drawings. In particular:

Fig. 1 shows the flooring element according to the invention;

Fig. 2 shows a first portion of the flooring element according to the invention;

Fig. 3 shows a second portion of the flooring element according to the invention;

Fig. 4 shows the normal section of the flooring element according to the invention;

Fig. 5 shows a floor produced by means of the flooring element according to the invention; and

Fig. 6 shows an exploded schematic view of a normal section of a variant of the flooring element according to the invention.

[0022] With reference to the Figures, the element for parquet type flooring according to the invention is indicated as a whole with the number **1**.

[0023] It is suitable to form a flooring **10** made of wood or the like, by means of assembling several elements **1** along a flooring surface, in a known manner

[0024] In particular, when composed as shown in Fig. 1, the element **1** has a shape similar to conventional strips for parquet flooring.

[0025] It comprises, summarily, a base portion **2** extending along a prevalent extension plane, and a surface portion **3** made of wood or the like, comprising a homogeneous upper surface **3a** suitable to form the external surface of the flooring **10** and releasable constraining means **4** suitable to connect the surface portion **3** to the base portion **2**.

[0026] In particular, the base portion **2** is suitable to be constrained to a supporting surface, on which this flooring **10** is positioned, by means of cements, adhesives or nails.

[0027] Each base portion **2** preferably comprises along two reciprocally adjacent sides a groove **5** suitable to be inserted in a specific seat **6** positioned on the two remaining sides of this base portion **2**.

[0028] This solution allows optimal reciprocal assembly of the base portions **2**, and therefore of the elements **1**, along the flooring **10**.

[0029] The base portions **2** have dimensions along their prevalent extension plane substantially identical to the dimensions used for conventional parquet strips, and

on average between 5 cm and 2 m in length and between 1 and 15 cm in width.

[0030] The height, or depth, of the base portions 2 is instead on average between 5 mm and 15 mm, and appropriately forms a portion of between 1/2 and 9/10, and preferably in the region of 2/3, of the total height or depth of the element 1.

[0031] Finally, the base portions 2 are preferably composed of plywood or another relatively low quality wood, in particular beech. Alternatively, polymer or yet other materials can be used.

[0032] Moreover, they can be composed of medium density fibreboard, technically known as MDF.

[0033] The surface portions 3 are instead preferably composed of a high quality wood, in particular oak, burl, elm, walnut, as they form the external surface of the flooring 10. They can also be composed of an MDF, preferably oak.

[0034] Alternatively, the surface portions 3 could be produced in imitation wood or the like.

[0035] The surface portions 3 also extend substantially along a prevalent extension plane and present, along said plane, substantially the same shape, i.e. the same form and the same dimensions, as the base portion 2.

[0036] Each surface portion 3 comprises a homogeneous upper surface 3a.

[0037] With the term homogeneous it is intended that there are no holes, interlocking elements or other elements on this surface 3a.

[0038] The upper surfaces 3a will therefore form a flooring 10 having a substantially homogeneous surface interrupted solely by the separation between the single flooring elements 1.

[0039] Therefore, as specified, the surface portions 3 have dimensions along their prevalent extension plane 3a substantially identical to the dimensions of the relative base portions. The height, or depth, of the surface portions 3 is instead on average between 2 mm and 10 mm, and preferably in the region of 5 mm, and appropriately forms a portion of between 1/10 and 1/2, and preferably in the region of 1/3 of the total height or depth of the element 1.

[0040] The element 1 then comprises said releasable constraining means 4 suitable to connect said surface portion to said base portion.

[0041] These releasable constraining means 4 are preferably composed of a plurality of interlocking elements 4a.

[0042] Fig. 4 shows in detail, for example, interlocking elements 4a composed of dowels made of polymer material, and in particular polyamide, presenting a cylindrical and knurled external surface.

[0043] These interlocking elements 4a are inserted in specific seats 4b included in the base portion 2 and in the lower part of the surface portion 3, so as not to affect the upper surface 3a of the latter and to allow homogeneity thereof.

[0044] In particular, the seats 4b are composed of cir-

cular holes, which are through holes in the base portion 2 and blind holes in the surface portion 3.

[0045] A plurality of interlocking elements 4a and of seats 4b are preferably provided for each flooring element 1, as shown in Fig. 3.

[0046] The interlocking elements 4a can then have different shapes and be of different types and the seats 4b are appropriately countershaped thereto.

[0047] Alternatively, the releasable constraining means 4 can be composed of adhesives, in particular vinyl adhesives, even more in particular by a D3 vinyl adhesive, or by adhesives that remain wet and do not allow the surface portion 3 to be removably constrained to the base portion 2.

[0048] In particular, in the case in which the releasable constraining means are composed of adhesives as defined above, in a preferred embodiment between the base portion 2 and the surface portion 3 at least a first intermediate sheet 5 is present, having dimensions along the prevalent extension plane substantially identical to the dimensions of said base 2 and surface 3 portions along the same plane.

[0049] Said first intermediate sheet 5 forms a weak point that produces a detachment surface between the base 2 and surface 3 portions when it is necessary to disassemble them.

[0050] The first intermediate sheet 5 is preferably composed substantially of cardboard having a grammage of between 200 g/m² and 400 g/m².

[0051] Preferably, a second intermediate sheet 6 is also present, suitable to balance the upper ply against the tensile stresses of the veneer and of the varnish.

[0052] The second intermediate sheet 6 is also preferably composed of cardboard having a grammage of between 200 g/m² and 400 g/m².

[0053] This last example of embodiment is shown in the exposal sectional view of Fig. 6.

[0054] Finally, the different types of releasable constraining means 4 can also be combined with or used in addition to one another.

[0055] Use of a flooring element 1, described above in structural terms, is the following.

[0056] A plurality of elements 1 is assembled in a conventional manner, i.e. in the same manner as strips forming a conventional parquet type flooring.

[0057] The assembled elements 1 form a flooring 10 and are fastened to the surface on which the flooring 10 is laid by means of cements, adhesives or nails.

[0058] The elements 1 can be mounted with the base 2 and surface 3 portions already joined or unjoined.

[0059] In the latter case, only the base portions 2 are assembled along the flooring 10, with the releasable constraining means 4 fitted subsequently and, lastly, the surface portions 3 are positioned.

[0060] The releasable constraining means 4 can be provided joined to the base portion 2 or to the surface portion 3.

[0061] The flooring 10 thus forms a parquet which, ex-

ternally, is of conventional type. When the surface of the flooring 10 is damaged, scored or chipped through use or when wishing to change it for aesthetic reasons, only the surface portion 3 and, if necessary, also the releasable constraining means 4, require to be replaced.

[0062] To replace the surface portions it may be necessary to use particular levering or other tools, such as screwdrivers or the like, or it may be necessary to break one or more surface portions 3 for replacement.

[0063] The invention achieves important advantages.

[0064] In fact, maintenance of the flooring 10, and in particular replacement of the surface thereof, is inexpensive and very effective.

[0065] It is in fact possible to change the entire surface portion 3 and therefore to vary the colour of the flooring 10 and to correct serious damage and the like to the surface.

[0066] Moreover, replacement is rapid, as it is no longer necessary to detach the elements 1 from the base cement or adhesive.

[0067] Moreover, the base elements 2 can be fastened to the lower surface by means of nails, screws or other elements which allow rapid and simple fastening thereof but which are not aesthetically prestigious. In fact, these nails and screws are in any case covered by the surface portions 3.

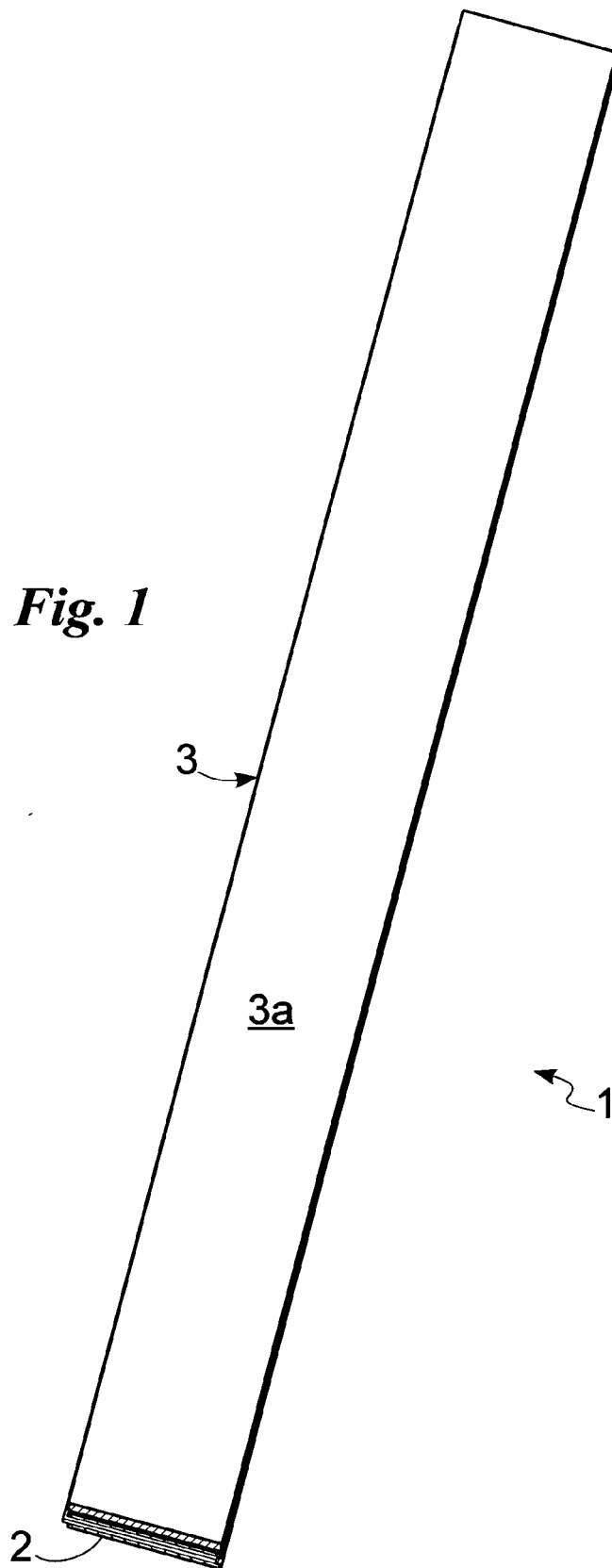
[0068] Moreover, the elements 1 are inexpensive, even if they exhibit high quality woods, as only a minor portion thereof is exposed and must be produced in high quality material, while the remaining portion can be produced with inexpensive woods, plywoods or other materials.

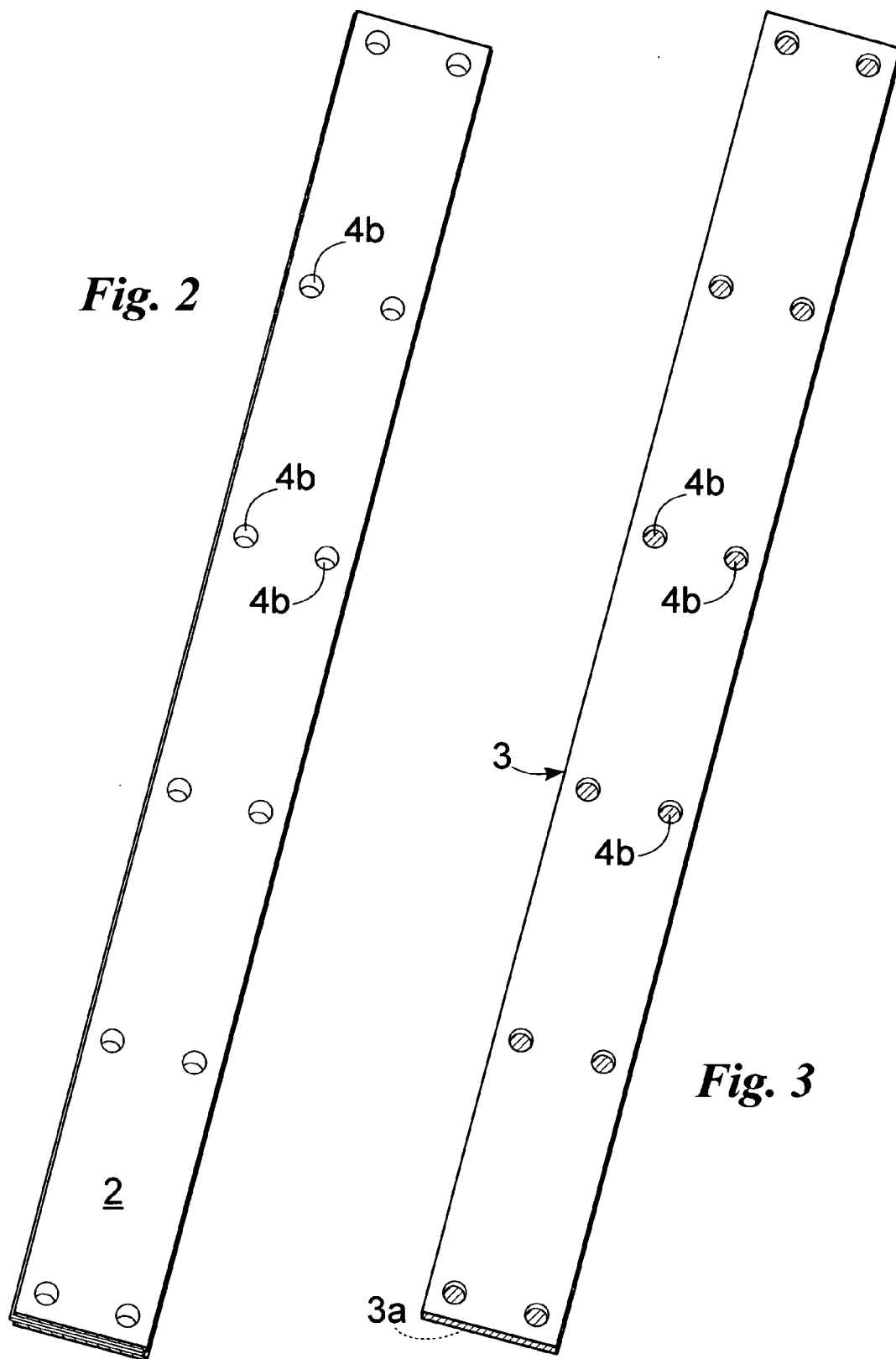
Claims

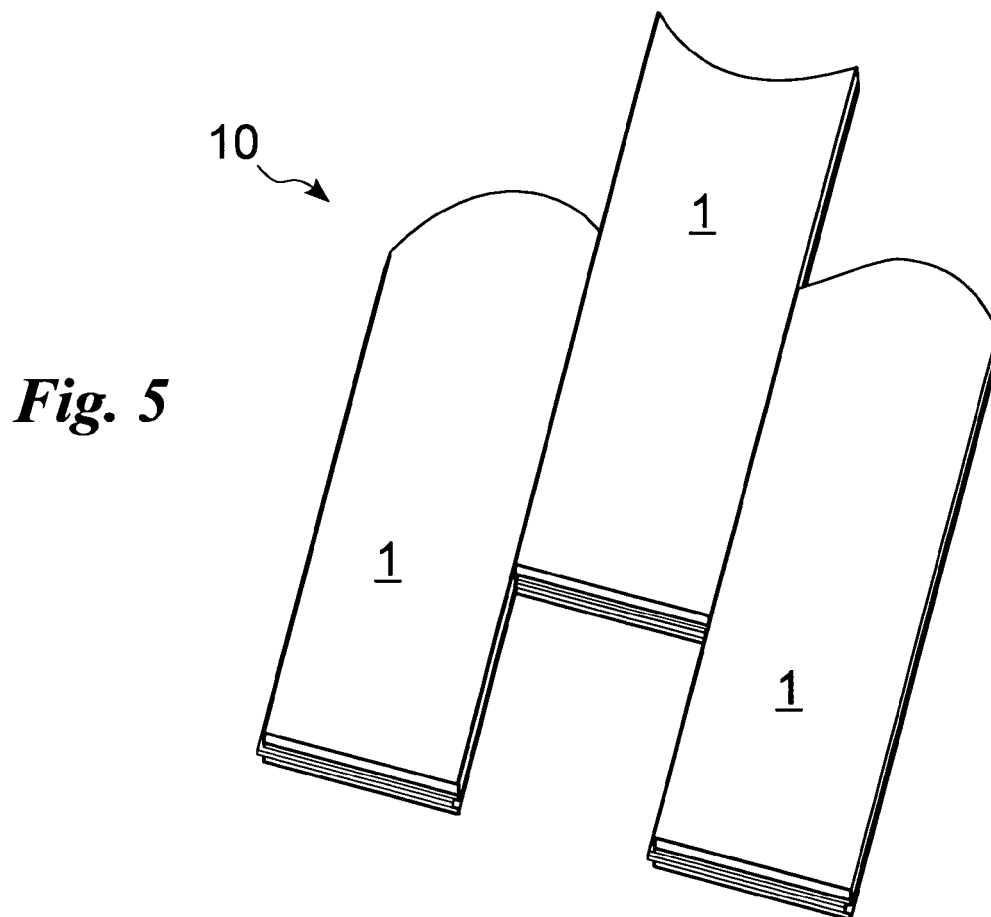
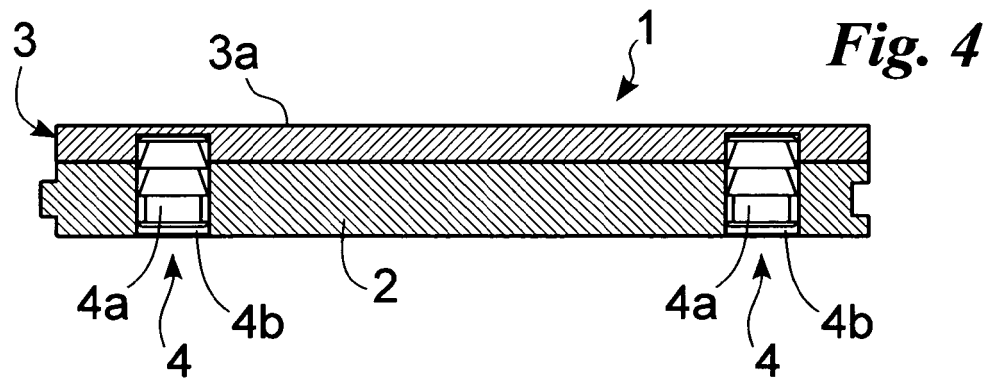
1. Element (1) for wood flooring (10) comprising a base portion (2) extending along a prevalent extension plane; a surface portion (3) made of wood, comprising a homogeneous upper surface (3a) suitable to form the external surface of said flooring (10), extending along a prevalent extension plane and having along said prevalent extension plane substantially the same shape as said base portion (2), and **characterized in that** it comprises: releasable constraining means (4) suitable to connect said surface portion (3) to said base portion (2).
2. Element according to Claim 1, wherein said releasable constraining means (4) are composed of adhesive.
3. Element according to Claim 2, wherein said releasable constraining means (4) are composed of a vinyl adhesive.
4. Element according to one or more of the preceding Claims, comprising at least a first intermediate sheet

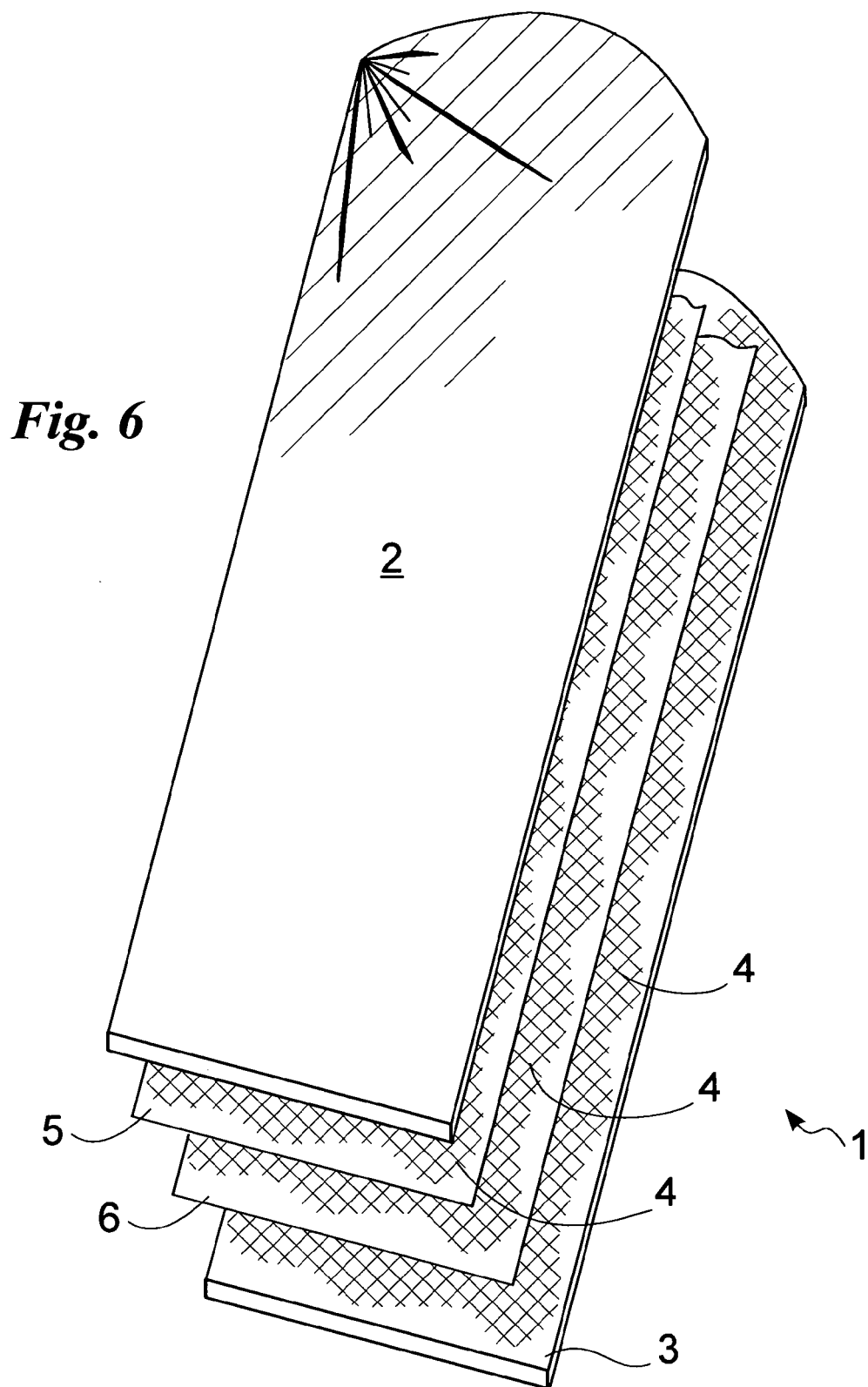
(5) between said base portion (2) and said surface portion (3) having along said prevalent extension plane substantially the same shape as said base portion (2) and said surface portion (3).

5. Element according to Claim 4, wherein said first intermediate sheet (5) is composed of cardboard having a grammage of between 200 g/m² and 400 g/m².
6. Element according to Claims 4 or 5, also comprising a second intermediate sheet (5) between said base portion (2) and said surface portion (3) having along said prevalent extension plane substantially the same shape as said base portion (2) and said surface portion (3).
7. Element according to Claim 4, wherein said first intermediate sheet (6) is composed of cardboard having a grammage of between 200 g/m² and 400 g/m².
8. Element according to one or more of the preceding Claims, wherein said releasable constraining means (4) are composed of at least one interlocking element (4a) of removable type.
9. Element according to Claim 8, wherein, said interlocking elements (4a) are composed of dowels made of polymer material and wherein said base portion (2) and the lower part of said surface portion (3) comprise seats (4b) for said interlocking elements (4a).
10. Element according to Claim 9, wherein said interlocking elements (4a) are composed of dowels presenting a cylindrical and knurled external surface suitable to be inserted in specific seats (4b) composed of circular holes, said circular holes being through holes in said base portion 2 and blind holes in said surface portion (3).











EUROPEAN SEARCH REPORT

Application Number
EP 08 01 1118

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 1 514 499 A (VAGNOLI IVANO [IT]) 16 March 2005 (2005-03-16) * figures 2c,16,20 * -----	1,4,6, 8-10	INV. E04F15/02
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 8 January 2009	Examiner Severens, Gert
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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

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