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(54) **Method for sealing a joint between two adjacent roof covering sections**

(57) The invention provides a method for sealing a joint between two adjoining sections of roof covering, comprising the steps of applying the back of an adhering strip to the joint or in the vicinity of the joint, applying a covering strip to the adhering strip, connecting the covering strip to the adhering strip and connecting those parts of the covering strip which lie outside the adhering strips to both sections of roof covering. In this way, it is possible to seal a joint between two sections of roof covering in a simple manner, since initially only one or if necessary two adhering strips are applied, the positioning of which is not particularly accurate, following which the covering strip can be positioned and with it being necessary to ensure that the covering strip extends over the joint to be covered and the adhering strip which has already been applied.

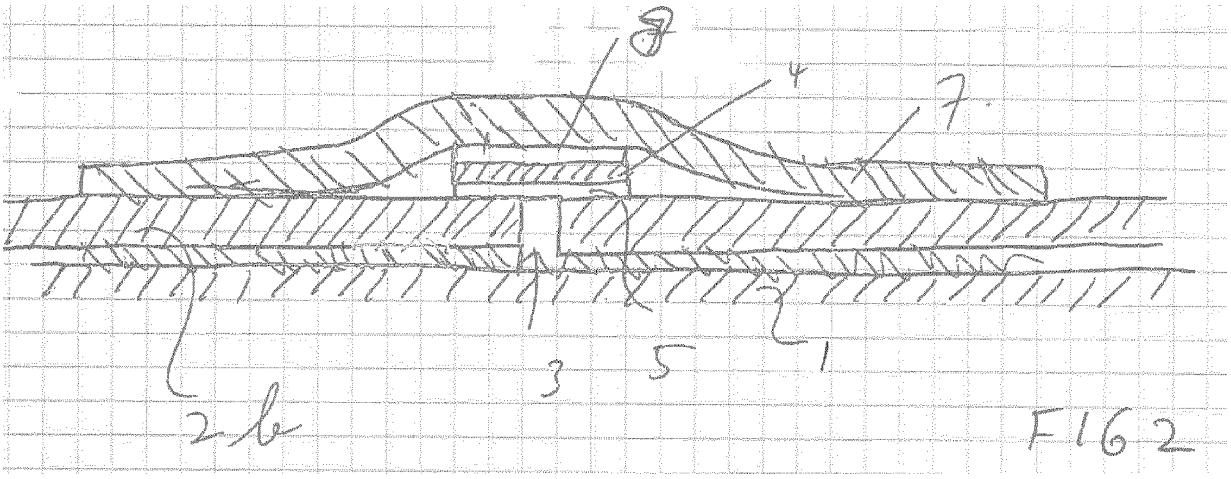

FIG 2

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Description

[0001] The invention relates to a method for sealing a joint between two adjoining sections of roof covering and the materials to be used for this purpose.

[0002] A roof covering is usually in the form of adjoining sections of roof covering, such as sections of bituminous material. It is also possible to use plastics having suitable properties, usually in laminated form. Sections of roof covering are usually arranged with an overlap in order for the sections of roof covering to adjoin one another in an effective, water-tight manner. If the underside of the sections of roof covering is provided with adhering material, it is usually difficult to connect the overlapping parts to one another in a water-tight manner. In order to avoid this drawback, the sections of roof covering are arranged so that they butt against one another, in other words without an overlap, so that joints remain between the sections of roof covering, which joints need to be covered in order to obtain a water-tight roof. This relates in particular, but not exclusively, to horizontal roofs.

[0003] The invention provides a method for sealing a joint between two adjoining sections of roof covering, comprising the steps of applying the back of a first adhering strip to the joint or in the vicinity of the joint, said first adhering strip being wider than the joint, applying a covering strip to the joint, creating a connection between the covering strip and the adhering strip and connecting those parts of the covering strip which lie outside the adhering strips to both sections of roof covering.

[0004] In this way, it is possible to seal a joint between two sections of roof covering in a simple manner, since initially only one or if necessary two adhering strips are applied, the positioning of which is not particularly accurate. A trolley may be used for this purpose. The covering strip can then be positioned, with it being necessary to ensure that the covering strip extends over the joint to be covered and the adhering strip which has already been applied, this placing equally low demands on the accuracy and with it also being possible to use a trolley. The covering strip is preferably connected to the adhering strip during positioning. Finally, the covering strip must be connected to the sections of roof covering in a water-tight manner.

[0005] The invention also provides an adhering strip to be applied in the vicinity of a joint between two sections of roof covering, said adhering strip being configured to be adhered to a covering strip to be placed on the adhering strip, wherein at least one side of the adhering strip is provided with an adhesive layer and the other side of the adhering strip is provided with an adhering layer.

[0006] Although the use of gluing or melting to fix the adhering strip is not precluded, it is preferred to connect the adhering strip to at least one of the two adjoining sections of roof covering by means of an adhesive layer applied to its back.

[0007] It is possible for the first adhering strip to be wider than the joint. In such a situation, the first adhering strip may extend over the joint, but it is also possible for the first adhering strip to be narrower than the joint and for it to be inevitably connected to only a single section of roof covering.

[0008] When connecting the covering strip to the sections of roof covering, the material is usually heated in order to melt it. In order to prevent the molten material from passing through the joint into the area underneath the sections of roof covering, which is undesirable in many cases, it is preferred for the adhering strip to be provided with a heat-resistant strip which is wider than the joint and for the adhesive layer to be applied to the heat-resistant strip.

[0009] Said adhering strip is preferably, but not necessarily, made of fibreglass.

[0010] In order to be able to apply the covering strip in a simple manner, it is preferred to apply the covering strip to the joint by bringing an adhering layer on the adhering strip into engagement with an adhering layer on the underside of the covering strip.

[0011] However, it is not precluded for the covering strip to be applied to the adhering strip by adhering the underside of the covering strip to an additional adhesive layer on the adhering strip. For this purpose, the underside of the covering strip must be provided with an adhering layer and the top of the adhering strip must be provided with a similar adhering layer.

[0012] This embodiment also provides an adhering strip, with the adhering layer being formed by an additional adhesive layer.

[0013] An effective, water-tight sealing of the joint is ensured if the covering strip is connected to the sections of roof covering by heating at least part of the covering strip to melting point.

[0014] This embodiment also provides a covering strip which is at least partially made of material which melts on heating, such as bitumen.

[0015] In order to position the first adhering strip on the joint and bring it into contact with both sections of roof covering on either side of the joint without excessive fitting and measuring work, it is preferred for the first adhering strip to be applied to the joint from a trolley which is guided through the joint and comprises a stock roll.

[0016] In order to correct the position of a covering strip which has been applied at an angle, it is preferred, after at least partially applying the covering strip to the joint, for the covering strip to be at least partially removed and then reapplied to the joint in a better position and then connected to both sections of roof covering.

[0017] The invention further relates to a combination of an adhering strip of the type mentioned above and a covering strip of the type mentioned above.

[0018] Preferably, the adhering layer of the adhering strip is provided with hooks and the adhering layer of the covering layer is provided with loops, although the reverse is also possible.

[0019] The invention will be explained below with reference to the attached figures, in which:

Figure 1: shows a cross-sectional view of a joint between sections of roof covering to which a first adhering strip has been applied;
Figure 2: shows a view which corresponds to Figure 1, in which a covering strip has been applied;
Figure 3: shows a view which corresponds to Figures 1 and 2, in which the covering strip is fastened to both sections of roof covering;
Figure 4: shows a view which corresponds to Figure 3, in which two first adhering strips are used;
Figure 5 shows a view which corresponds to Figure 3, in which the connection between the adhering strip and the covering strip is formed by an adhesive layer.

[0020] Figure 1 shows a roof surface 1 on which two sections of roof covering 2a, 2b are fastened in any desired way. In this case use is made, in particular but not exclusively, of the techniques described in NL-A-2006456. The connection between the sections of roof covering and the substrate is represented by means of a box 10. A joint 3 is formed between both sections of roof covering 2a, 2b. In order to cover the joint 3, a first adhering strip 4 is applied by means of an adhesive layer 5 applied to the back of the adhering strip 4, said adhesive layer 5 adhering to both sections of roof covering 2a, 2b. The top of the adhering strip 4 is provided with a strip of hook-and-loop material in the form of material 6 provided with hooks.

[0021] Subsequently, as illustrated in Figure 2, a covering strip 7 is applied, the underside of which is provided with a second adhering strip 8 extending along its length. This covering strip is provided with hook-and-loop material 9 provided with loops. In the situation illustrated in Figure 2, the first and the second adhering strips 4 and 8 are brought into engagement with one another, while the parts of the covering strip 7 protruding beyond the second adhering strip 8 are situated loosely on the relevant sections of roof covering 2a, 2b.

[0022] Finally, the parts of the covering strip 7 situated on the sections of roof covering 2a, 2b are adhered to the relevant sections of roof covering by means of heating, such as by a hot-air generator. The resulting situation is illustrated in Figure 3.

[0023] Furthermore, Figure 4 shows the situation in which a first adhering strip 4a or 4b, respectively, is adhered to each of the sections of roof covering 2a, 2b by means of the adhesive layer 5a, 5b applied to the underside of the adhering strips. The use of two adhering strips 4a, 4b obviates the requirement for the adhering strip 4 to extend over both sections of roof covering 2a, 2b, since such a strip 4a, 4b is already present on each of the sections of roof covering 2a, 2b. In this case, the second adhering strip 8 on the underside of the covering strip 7 does need to be wide enough to extend over both adhering strips.

[0024] However, since it is also possible to form a connection by melting the covering strip 7 onto the sections of roof covering 2a, 2b, it is even possible for a single first adhering strip 4 to be sufficient, said first adhering strip 4 extending on only one side of the joint 3 between the sections of roof covering 2 and being connected to only one of the sections of roof covering.

[0025] Finally, Figure 5 shows an embodiment in which use is not made of an adhering material in the form of Velcro, as is the case in the embodiments described above, but of an additional adhesive layer 10 which is applied to the adhering strip 4 instead of the adhering layer 6. In this embodiment, there is no need to apply an adhering layer 8 to the underside of the covering strip 7, which simplifies the production and therefore reduces the cost of the covering strip 7.

[0026] All embodiments which use a single adhering strip extending over the joint between the sections of roof covering also have the advantage that the adhering strip already forms a water-tight covering for the joint, provided that the adhering strip is impermeable to water. This provides an at least temporarily water-tight cover for the joint, so that it is possible to allow some time to pass between applying the adhering strip and the covering strip.

[0027] With regard to the above, it is provisionally assumed that the strips of adhering material extend over the entire length of the strips in question. However, it is also possible for pieces of adhering strip to be applied to the covering strip only at intervals, with it also being possible for the joint to be initially provided with loose pieces of adhering strip or for a, for example adhesive, carrier which extends in the longitudinal direction of a joint to be applied to the joint, said carrier being provided at an interval from the pieces of adhering strip.

Claims

1. Method for sealing a joint between two adjoining sections of roof covering, comprising the following steps:

   - applying the back of an adhering strip to the joint or in the vicinity of the joint, said adhering strip being wider than the joint;
   - applying a covering strip to the joint, and creating a connection between the covering strip and the adhering strip; and
   - connecting those parts of the covering strip which lie outside the adhering strips to both sections of roof covering.

2. Method according to Claim 1, **characterized in that** the adhering strip is connected by means of an adhesive layer applied to its back to at least one of the two adjoining sections of roof covering.

3. Method according to Claim 1 or 2, **characterized in that** the covering strip is applied to the joint by bringing an adhering layer on the adhering strip into engagement with an adhering layer on the underside of the covering strip.

4. Method according to Claim 1 or 2, **characterized in that** the covering strip is applied to the joint by adhering the underside of the covering strip to an additional adhesive layer on the adhering strip.

5. Method according to one of the preceding claims, **characterized in that** the covering strip is connected to the sections of roof covering by heating at least part of the covering strip to melting point.

6. Method according to one of the preceding claims, **characterized in that** the adhering strip is applied to the joint from a trolley which is guided through the joint and comprises a stock roll.

7. Method according to one of the preceding claims, **characterized in that**, after at least partially applying the covering strip to the joint, the covering strip is at least partially removed and is then reapplied to the joint in a better position and is then connected to both sections of roof covering.

8. Adhering strip to be applied in the vicinity of a joint between two sections of roof covering, said adhering strip being configured to be adhered to a covering strip to be placed on the adhering strip, **characterized in that** one side of the adhering strip is provided with an adhesive layer and the opposite side of the adhering strip is provided with an adhering layer.

9. Adhering strip according to Claim 8, **characterized in that** the adhering strip is wider than the joint.

10. Adhering strip according to Claim 8 or 9, **characterized in that** the adhering strip is provided with a heat-resistant strip which is wider than the joint, and **in that** the adhesive layer is applied to the heat-resistant strip.

11. Adhering strip according to Claim 8, 9 or 10, **characterized in that** the adhering layer is formed by an additional adhesive layer.

12. Covering strip to be applied to a joint between two sections of roof covering and to be connected in a water-tight manner to both sections of roof covering, **characterized in that** the covering strip is at least partially made of material which melts on heating, such as bitumen.

13. Covering strip according to Claim 12, **characterized in that** the underside of the covering strip is provided with an adhering layer which is configured to engage with the adhering layer applied to the adhering strip.

14. Combination of an adhering strip according to one of Claims 8-11 and a covering strip according to Claim 12 or 13.

15. Combination according to Claim 14, **characterized in that** the adhering layer of the adhering strip is provided with hooks, and **in that** the adhering layer of the covering strip is provided with loops.

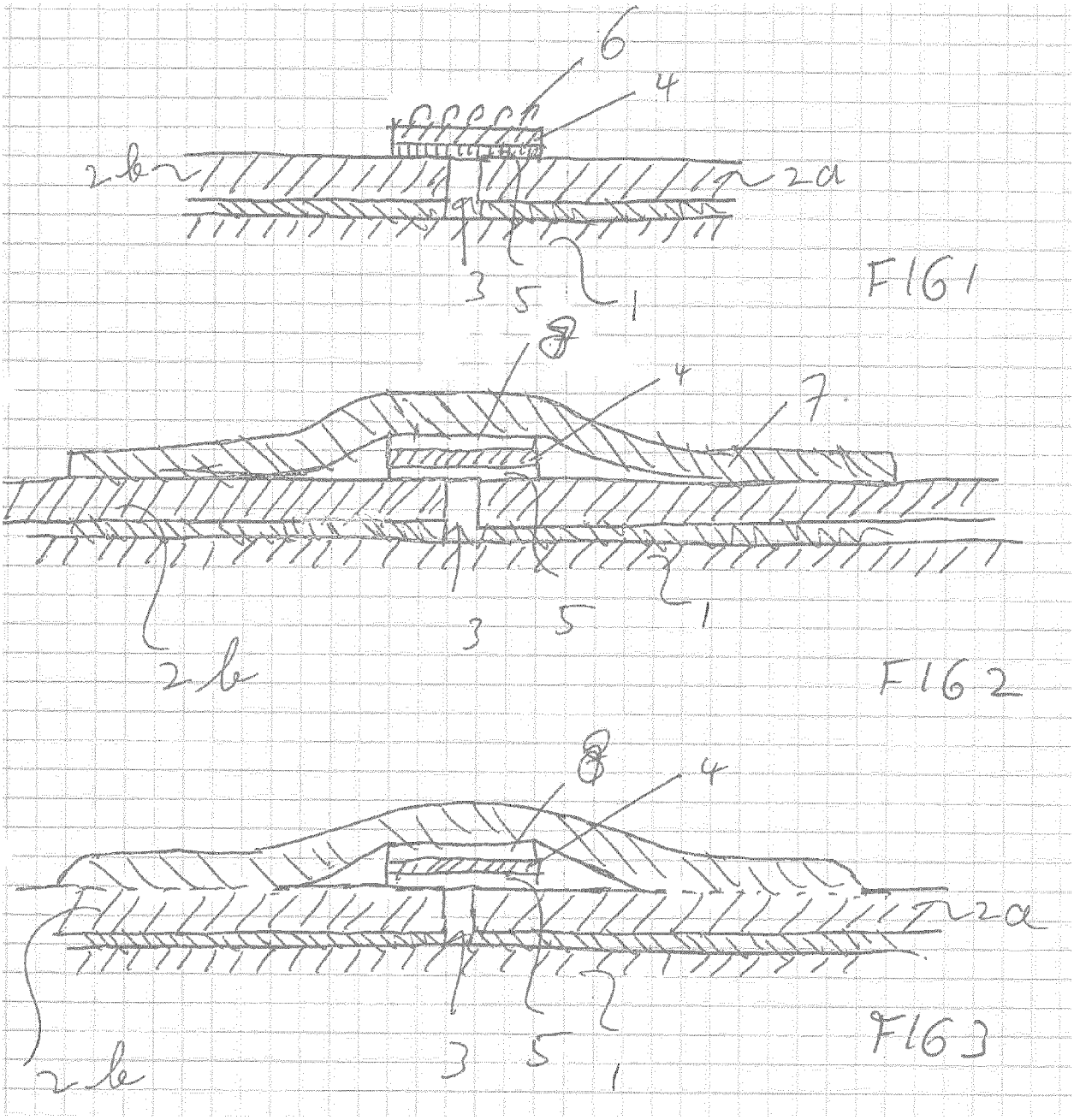

FIG1

FIG2

FIG3

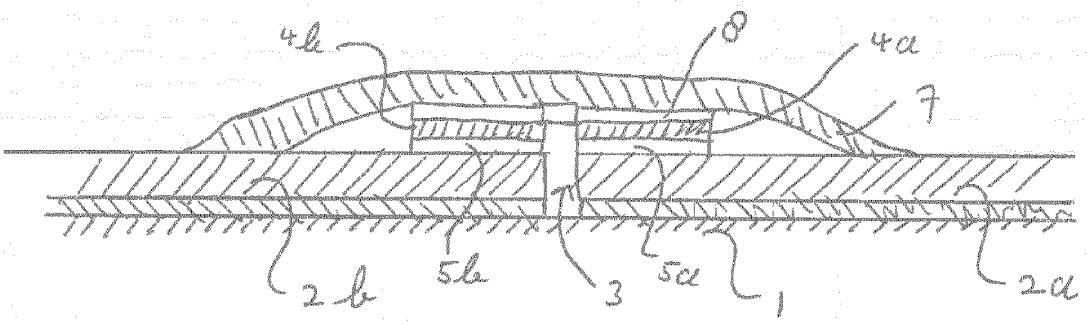

FIG. 4.

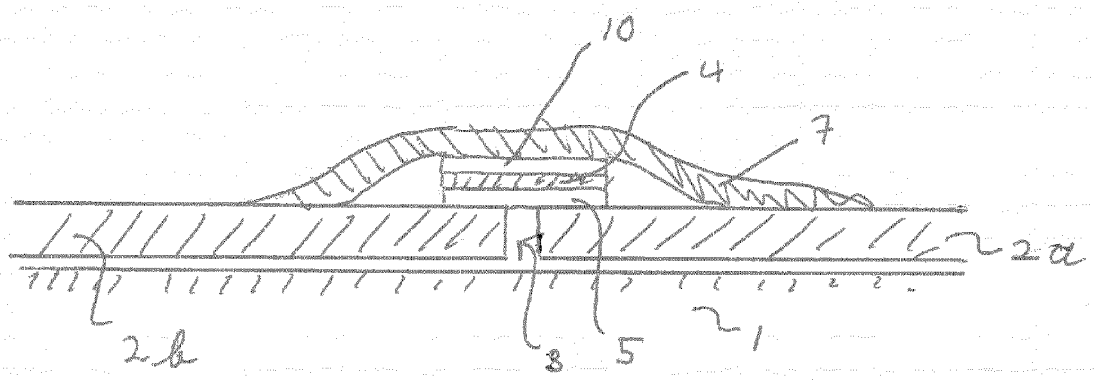

FIG. 5.

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EUROPEAN SEARCH REPORT

Application Number
EP 14 16 0960

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	JP 2010 275773 A (TOYOTA HOME KK; TOYOTA MOTOR CORP) 9 December 2010 (2010-12-09) * abstract; figures 1-3d * * paragraphs [0030], [0046] *	1-12,14	INV. E04D5/14 B29C65/00 B29C65/50
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Y	* column 1, line 60 - line 63; figures *	1-7,14	
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TECHNICAL FIELDS SEARCHED (IPC)

E04D
B29C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	13 June 2014	Demeester, Jan

CATEGORY OF CITED DOCUMENTS

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 14 16 0960

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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