



⑫

EUROPEAN PATENT SPECIFICATION

④⑤ Date of publication of patent specification :
29.12.93 Bulletin 93/52

⑤① Int. Cl.⁵ : **E04D 13/15**

②① Application number : **91200432.2**

②② Date of filing : **28.02.91**

⑤④ **Eaves section assembly.**

③⑩ Priority : **15.03.90 NL 9000595**

⑦③ Proprietor : **ALPROKON PROMOTIE EN
ONTWIKKELING B.V.**
14, Lageweg
NL-4328 RT Burgh-Haamstede (NL)

④③ Date of publication of application :
18.09.91 Bulletin 91/38

⑦② Inventor : **Van Herpen, Frederik Cornelis**
14, Lageweg
NL-4328 RT Burgh-Haamstede (NL)

④⑤ Publication of the grant of the patent :
29.12.93 Bulletin 93/52

⑧④ Designated Contracting States :
AT BE CH DE FR GB LI LU NL

⑦④ Representative : **Timmers, Cornelis Herman
Johannes et al**
EXTERPATENT B.V. P.O. Box 3241
NL-2280 GE Rijswijk (NL)

⑤⑥ References cited :
DE-A- 2 913 618
DE-A- 3 520 640
NL-A- 8 301 857
NL-A- 8 702 662

EP 0 446 983 B1

Note : Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid (Art. 99(1) European patent convention).

Description

The invention relates to an eaves section assembly such as is described in the preamble to the main claim.

Such an eaves section assembly is known per se from NL-A-8702662. In the case of this known eaves section assembly the expansion joint present between the two bottom sections is covered by a covering sheet made of a thin sheet material which is clamped by the flanged end edge around the adjacent end edges of the bottom sections and is forced with its other end, flanged to a U-shape, into the nesting space determined by the L-shaped rib.

A condition for such a method of sealing is that the two bottom sections between which the space must be sealed lie exactly in line, which hardly ever occurs in practice. Even then, rainwater can gain access through capillary action between the covering section and the bottom section, one result of which is wet patches on the outside wall. Besides, the covering sheet is found in practice to be difficult to fit, and during fitting is found to damage the top surface of the bottom section, which is generally finished with a surface coating. After fitting, removal - for example for inspection purposes - is not possible without damaging the bottom sections.

The object of the invention is to eliminate these disadvantages, and this is achieved according to the invention with the measures described in the characterizing part of the main claim.

For fitting of the covering section designed according to the invention, all that is needed is to compress the resilient, compressible material on the bottom side thereof onto the body part of the bottom section and slide the cross rib of the covering section into the nesting space until the two locking ribs have passed each other; when the covering section is then released, it springs by itself into the desired end position without damage to the bottom section having occurred, and this locked end position is achieved even if the bottom sections are not exactly in line with one another.

Removal of the covering section is possible at any time by carrying out the operations for fitting thereof in the reverse order.

The resilient compressible material primarily ensures locking and the taking up of tolerances, but also prevents damage during fitting and on expansion of the bottom section, and furthermore provides a seal against the penetration of rainwater.

A preferred embodiment of the eaves section assembly is described claim 2.

It is observed that both DE-A-3520640 and NL-A-8702662 disclose the use of compressible material in an eaves section assembly, but for a quite different purpose and in a different configuration, only to prevent the ingress of water.

The invention is explained with reference to the drawing, in which:

Figure 1 is a cross-section through a part of eaves with the bottom section part according to the invention;

Figure 2 is a cross-section through the covering section with resilient material to be placed thereon;

Figure 3 is a cross-section of these parts during placing of the covering section on the bottom section;

Figure 4 is a cross-section of the complete eaves section assembly;

Figure 5 is a perspective drawing, partially in cross-section, of this complete section assembly.

The section assembly according to the invention, indicated in the figures in its entirety by the reference number 2, comprises a bottom section 4 and a covering section 6 to be placed thereon.

The bottom section 4 comprises a body part 8 with two supporting ribs 10, 12 going out from the bottom side thereof, which body part 8 bears at the front side a protective strip 14 which is provided with supporting ribs 16, 18 by means of which the protective strip 14 rests against the raised edge 20 of the roof 22 with the roof covering 24 fitted thereon. The protective strip 14 extends past the body part 8 into a part 14a which merges into an end edge 26, so that in fact an L-shaped rib 28 goes out from the body part 8. This produces a nesting space 30 with height h_1 above the body part 8.

An auxiliary rib 32 with end edge 34 goes out from the supporting rib 10, which edge - like the end edges of the ribs 10 and 12 - rests on the roof covering 24 when the section 4 is fitted.

Under the auxiliary rib 32 is compressible material 36 which is compressed on fitting of the section after tightening of the fixing screws 38 thereof (see Figure 5).

The body part 8 projects over a short distance past the rib 10 and ends in a downward directed locking rib 40 with hooked end 42. The purpose of this will be explained later.

On fitting of the bottom sections on the eaves (see Figure 5) an expansion joint 44 must remain free between two adjacent sections 4a, 4b. In order to prevent water penetration, this joint must be covered, and the covering section 6, of which Figure 2 shows a cross-section, serves this purpose. This covering section 6 comprises a sheet-shaped part 46 having at the first end 48 a cross rib 50 and at the second end 52 a flanged end edge 54 which is formed by an edge 46a forming an obtuse angle with the sheet part 46 and a rib 60 with a hooked end 62 going out near the end thereof.

Resilient, compressible material 64 is provided on the bottom face of the sheet part 46, preferably in the form of elongated strips. The thickness of this ma-

terial is such that the distance h2 between the bottom side of this material and the top end of the rib 50 is greater than the height h1 inside the nesting space 30.

Figures 3 and 4 show how the covering section 6 is fitted on the bottom section 4: the rib 50 of the covering section 6 is taken into the nesting space 30 while the resilient elastic material 64 is being compressed, and the bottom side of the rib 60 is pressed against the top surface of the auxiliary rib 32. In this case the points of the hooks 62 and 42 are clear of each other, as shown in Figure 3. The covering rib 6 is then pressed into the position shown in Figure 4, and the rib 6 is then released: through the resilience of the resilient material 64, the covering section 6 comes up and is securely anchored to the bottom section 4.

Removal of the covering section is possible at any time by carrying out the operations described above in the reverse order.

It is clear that there are no limits for the length of the covering section 6, so that the section assembly can also be made in the form of a so-called "double trim", where the bottom sections are thus covered over their entire length with a covering section.

Claims

1. Eave section assembly having section parts for mounting in alignment with each other at the eave of a roof, each with a body part (8) supported by means of ribs (10, 12) destined to rest upon the roof surface (22), and a protective strip (14) provided at right angles to the front end edge intended to extend parallel to the wall surface at said eave, and having near said first end edge, extending away from the roof surface, an L-shaped rib (28), while above two adjacent section parts a covering section (6) covering the space between them is fitted, with at the first end thereof a first cross rib (50) fitting inside the space (30) determined by the body part (8) and the L-shaped rib (28) and at the second end (54) thereof a flange facing in the opposite direction to said cross rib (50), **characterized in that** the first cross rib (50) fits with ample play inside the space (30) determined by the body part and the L-shaped rib, that near the second end edge (40) of the body part (8) a short locking rib (42) is provided extending downwardly from the body part (8) and thus in a direction opposite to the direction of the body part of the L-shaped rib (28) and running in the lengthwise direction of the second, which rib (42) is intended to grip behind a second locking rib (62) projecting upwards from the flanged end edge (54) of the covering section (6), and that the surface of the covering section (6)

facing the body part (8) is provided with resilient, compressible material (64).

5 2. Eaves section assembly according to claim 1, **characterized in that** the compressible material (64) on the covering section is fitted in the form of elongated strips.

10

Patentansprüche

15 1. Dachkantenprofilanordnung mit Profilteilen zum Montieren in Ausrichtung aufeinander an der Dachkante eines Dachs, wobei jedes mit einem Aufbauteil (8), das mit Hilfe von Rippen (10, 12) abgestützt wird, die dazu bestimmt sind, auf der Dachoberfläche (22) aufzusitzen, und einem Schutzstreifen (14) versehen ist, der rechtwinklig zu der vorderen Endkante vorgesehen ist, sich parallel zu der Wandfläche dieser Dachkante ausdehnen soll, und nahe der ersten Endkante eine L-förmige Rippe (28) aufweist, die sich weg von der Dachoberfläche erstreckt, während oberhalb von zwei benachbarten Profilteilen ein Abdeckprofil (6) angebracht ist, das den zwischen ihnen bestehenden Raum abdeckt, wobei an dem ersten Ende davon eine erste Querrippe (50) in den Raum (30) paßt, der von dem Aufbauteil (8) und der L-förmigen Rippe (28) bestimmt wird, und an dem zweiten Ende (54) davon ein Flansch in der entgegengesetzten Richtung der Querrippe (50) gegenüberliegt, **dadurch gekennzeichnet**, daß die erste Querrippe (50) mit reichlich Spielraum in den Raum (30) paßt, der von dem Aufbauteil und der L-förmigen Rippe bestimmt wird, daß nahe der zweiten Endkante (40) des Aufbauteils (8) eine kurze Halterippe (42) vorgesehen ist, die sich nach unten ausgehend von dem Aufbauteil (8) und somit in einer Richtung erstreckt, die der Richtung des Aufbauteils der L-förmigen Rippe (28) entgegengesetzt ist und in der Längsrichtung der zweiten verläuft, wobei diese Rippe (42) vorgesehen ist, um eine zweite Halterippe (62) zu hintergreifen, die ausgehend von der mit einem Flansch versehenen Endkante (54) des Abdeckprofils (6) nach oben vorsteht, und daß die Fläche des Abdeckprofils (6), die dem Aufbauteil (8) gegenüberliegt, mit einem elastischen, kompressiblen Material (64) versehen ist.

50 2. Dachkantenprofilanordnung nach Anspruch 1, **dadurch gekennzeichnet**, daß das kompressible Material (64) an dem Abdeckprofil in der Form von länglichen Streifen angebracht ist.

55

Revendications

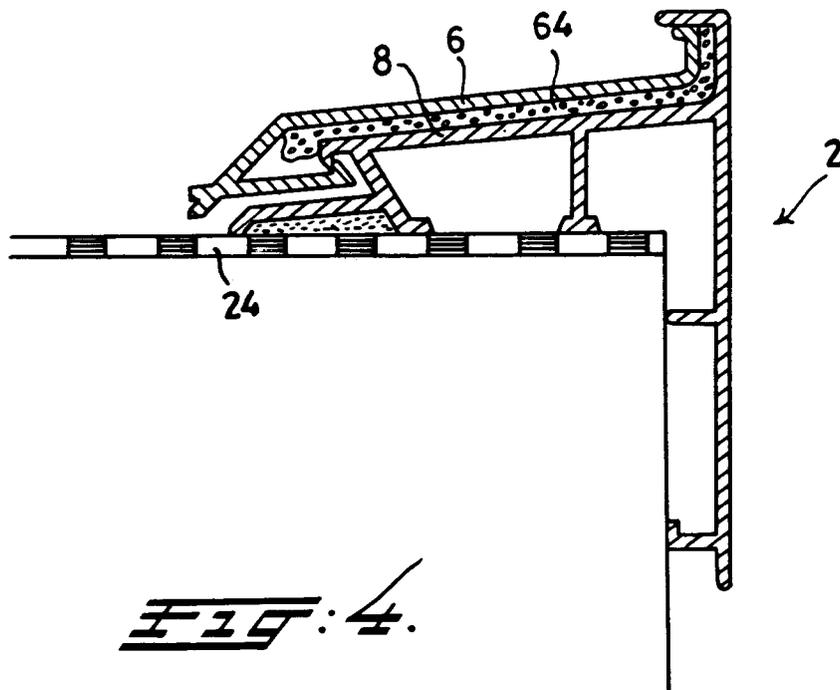
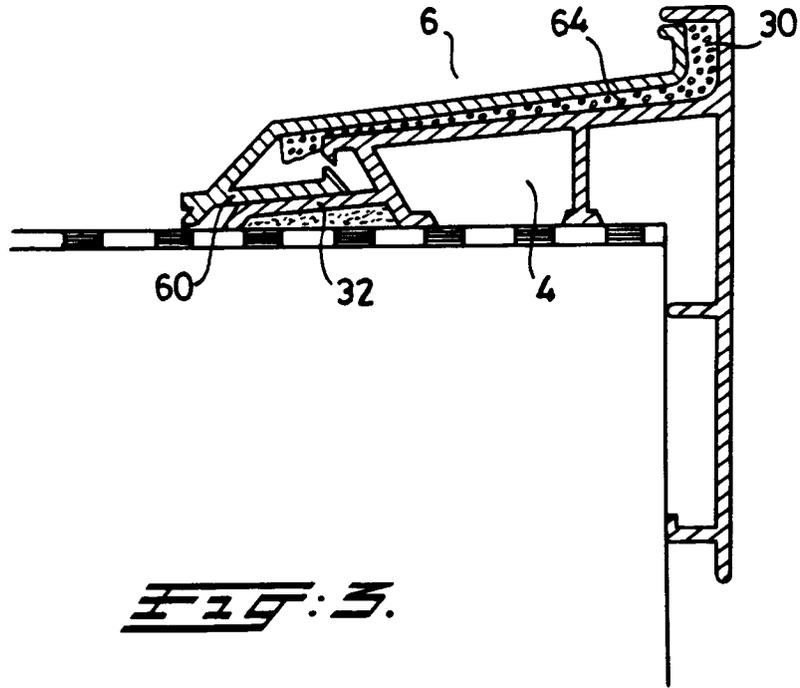
1. Arrangement de profilé d'avant-toit constitué de profilés se montant en alignement réciproque à l'avancée d'un toit, chacun ayant une âme (8) supportée au moyen de nervures (10, 12) destinées à reposer sur la surface du toit (22), et une bande protectrice (14) disposée perpendiculairement par rapport au bord d'extrémité frontale de façon à s'étendre parallèlement à la surface du mur au niveau dudit avant-toit, et ayant près dudit premier bord d'extrémité une nervure en forme de L (28) s'étendant à distance de la surface du toit, tandis qu'au-dessus de deux profilés contigus est monté un profilé de recouvrement (6) couvrant l'espace qui les sépare, avec à sa première extrémité une première nervure transversale (50) se montant à l'intérieur de l'espace (30) déterminé par l'âme (8) et la nervure en L (28), et à sa deuxième extrémité (54) une aile dirigée dans la direction opposée à ladite nervure transversale (50), caractérisé en ce que la première nervure transversale (50) se monte avec un jeu important dans l'espace (30) déterminé par l'âme et la nervure en L, en ce que près du deuxième bord d'extrémité (40) de l'âme (8) est prévue une courte nervure de verrouillage (42) s'étendant vers le bas par rapport à ladite âme (8) et ainsi dans une direction opposée à celle de l'âme de la nervure en L (28) et selon la direction longitudinale du deuxième bord d'extrémité, ladite nervure (42) étant prévue pour s'accrocher derrière une deuxième nervure de verrouillage (62) en saillie vers le haut par rapport au bord d'extrémité (54) du profilé de recouvrement (6), et en ce que la surface du profilé de recouvrement (6) disposée en regard de l'âme (8) est pourvue d'un matériau élastique compressible (64).

5
10
15
20
25
30
35
40
2. Arrangement de profilé d'avant-toit selon la revendication 1, caractérisé en ce que le matériau compressible (64) du profilé de recouvrement se présente sous forme de bandes allongées.

45

50

55



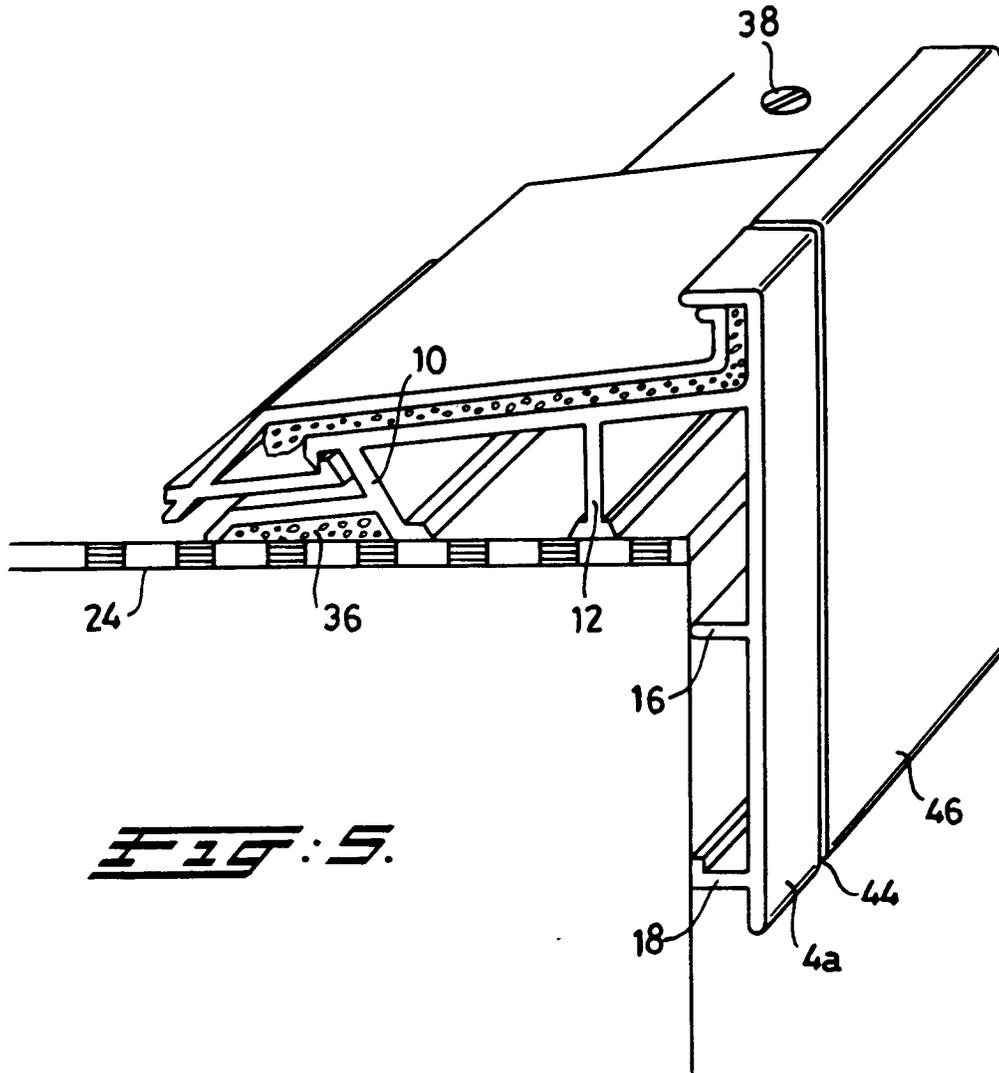


FIG. 5.