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(54) **BRACKET MEMBER FOR INSTALLATION OF A LINING PANEL IN A ROOF WINDOW, AND INSTALLATION SYSTEM COMPRISING A PLURALITY OF SUCH BRACKET MEMBERS**

(57) With the invention, a bracket member is provided to facilitate the connection between a roof window and a lining panel. The bracket member is formed as a substantially plane bracket base member (10) with a width (W) and height (H) and has one or more sets of longitudinal weakened portions (31, 41) to provide a first longitudinal folding line (31B) and at least one set of transverse weakened portions (30) to provide a transverse folding line (30B) extending at right angles to the first longitudinal folding line (31B) and dividing the bracket base member (10) into at least two sections to form a first bracket part

(101) and a second bracket part (102). The main portion (11A; 21A) of the respective section is formed on one side of the first longitudinal folding line (31B) and the border portion (12A, 22A) on the other side of the first longitudinal folding line (31B). A second set of longitudinal weakened portions (32, 42) to provide a second longitudinal folding line (32B) is formed substantially in parallel with and at a distance from the first longitudinal folding line (31B), and a flap portion (13A, 23A) is provided on the other side of the second longitudinal folding line (32B) relative to the main portion (11A, 21A).

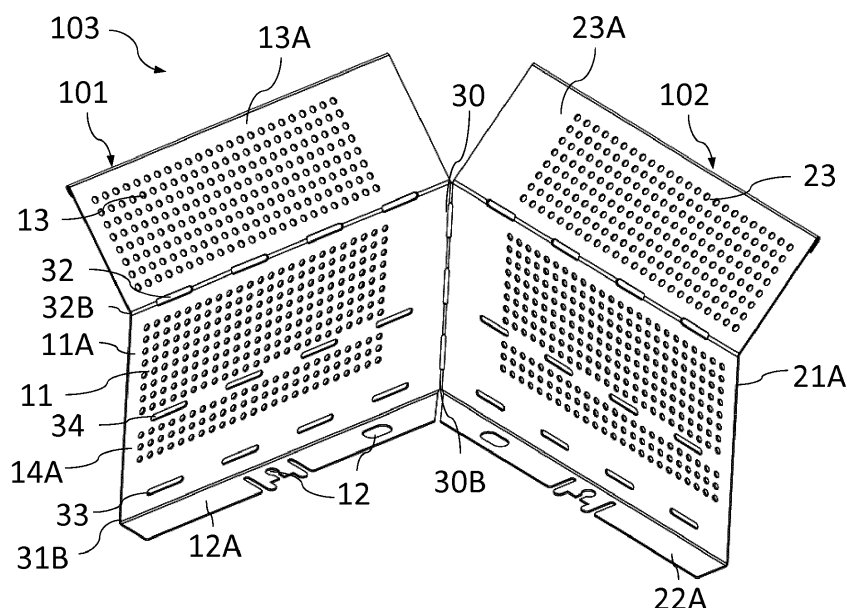


Fig. 6

Description**Technical Field**

5 **[0001]** The present invention relates to a bracket member for providing connection between a roof window and a lining panel, comprising at least a main portion having a first fastening zone configured to be connected to the lining panel and a border portion having a second fastening zone configured to be connected to the roof window. The invention furthermore relates to an installation system comprising a roof window, a lining panel and a plurality of bracket members.

10 **Background Art**

[0002] When installing windows in a façade or a roof, it is desirable to make the transition between the window frame and the inner wall of the room of the building smooth and of a pleasant appearance. The transition is most often made up of a so-called window lining having dimensions to span the distance between the inner side of the window frame to the inner wall or the loft of the room. In windows installed in a facade, i.e. substantially vertically, the lining is constituted basically of a box-shaped element having two side members, a top member and a bottom member, all being of a substantially rectangular shape and positioned at right angles to the window frame. The members are traditionally formed of panels or plates of such materials as plywood, gypsum or chipboard or foamed PVC.

15 **[0003]** In windows mounted in an inclined roof, the geometry of the lining is more complicated. Basically, the side members are positioned at right angles to the window frame, as in facade windows, but the top member is most often substantially horizontal and the bottom member substantially vertical, or the top and bottom assume other angles with the window frame. A number of grounds for this particular design exist, one being that the horizontal top member allows for an increased influx of light, another that the vertical bottom member makes it possible to access the bottom of the window and optimise the space of the room. Thus, the top member and the bottom member form an angle other than 20 90° with the window frame, and the side members have a trapezoidal shape.

[0004] The connection between the frame of the window and the window lining typically requires specially adapted fittings which need to be manufacture, stored, supplied and mounted, all of this contributing to logistic challenges.

[0005] In the prior art, a number of solutions have been proposed to facilitate the installation and reduce the amount of manual adaptation and risk of incorrect installation. Examples are shown for instance in EP 17 399 B1, EP 287 362 B1, EP 2 615 219 A1 and EP 2 860 487 A1.

30 **[0006]** Even though the devices disclosed in these documents facilitate the mounting to some extent, there is still a need for simplified and flexible manufacture and installation of lining panels in roof windows.

Summary of Invention

35 **[0007]** It is therefore the object of the invention to provide a bracket member by which the manufacture and installation of a lining panel in a roof window is facilitated.

[0008] In a first aspect, this and further objects are achieved with a bracket member of the kind mentioned in the introduction which is furthermore characterised in that the bracket member is formed as a substantially plane bracket base member with a predefined width and height comprising at least one first set of longitudinal weakened portions to provide a first longitudinal folding line and at least one set of transverse weakened portions to provide a transverse folding line extending at right angles to the first longitudinal folding line and dividing the bracket base member into at least two sections, that at least a first bracket part and a second bracket part are configured to be formed by the respective sections, and that the main portion of the respective section is formed on one side of the first longitudinal folding line and the border portion on the other side of the first longitudinal folding line.

40 **[0009]** By forming the bracket member in this way, a number of advantages are achieved. One and the same bracket base member may thus be used to provide two or more bracket parts which may either be detached from each other and utilised as two or more separate parts, or shaped into an angled bracket member fitting for instance a corner of a roof window. In turn, this reduces the number of parts that need to be manufactured, stored and supplied. The border portion is easily provided by bending the bracket base member about the first longitudinal folding line to form a perpendicular flange to fit into for instance the circumferential groove present in the interior side of the frame of most roof windows. Alternatively, the border portion may be shaped into another angle or left as is for other forms of connections to the roof window. Last but not least, in the supply condition, the bracket base member is easily fit into existing packaging of other parts of an installation system rather than requiring individual packaging. For instance, the required number of 45 bracket base members may be laid flat in the roof window packaging.

50 **[0010]** In a presently preferred embodiment at least one second set of longitudinal weakened portions to provide a second longitudinal folding line is formed substantially in parallel with and at a distance from the first longitudinal folding line, and wherein a flap portion is provided on the other side of the second longitudinal folding line relative to the main

portion. In this way, the bracket member is able to be shaped to fit also the top and the bottom of the lining panel which typically extend non-perpendicularly to the respective frame member of the roof window, but also in cases in which the lining panel has a general shape of a truncated pyramid.

[0011] The sets of weakened portions are advantageously provided as a respective series of embossings or openings, preferably in the form of oblong through-going holes, which provides for an immediately recognisable indication to the installer and which is furthermore easy to handle.

[0012] In order to ease the installation even further, the fastening zones may include a plurality of openings including perforations, holes, slits, or any combinations thereof.

[0013] In a second aspect, an installation system is provided. The installation system comprises a roof window, a lining panel and a plurality of bracket members for assisting in the installation. The bracket members include a first plurality of bracket members are formed as corner brackets in which a second section of each bracket base member has been bent substantially 90° about the transverse folding line relative to a first section, and each section of the respective bracket member has been bent substantially 90° about the first longitudinal folding line to form the border portion to extend substantially perpendicularly to the respective main portion of the bracket section, said corner brackets being connected to corners of the roof window and of the lining panel. Alternatively or additionally, a second plurality of bracket members are formed by separation of a first section from a second section of each bracket base member along the transverse folding line to form at least two bracket parts of a single bracket base member, and each bracket part has been bent substantially 90° about the first longitudinal folding line to form the border portion extending substantially perpendicularly to the respective main portion of the bracket part, said bracket parts being connected to sides, top and bottom of the roof window and the lining panel. In this way, the installation is rendered more flexible and facilitated in that bracket base members provided with the installation system form the basis of the desired combination of bracket members that the specific installation situation requires. Such requirements typically depend on the size of the roof window and lining panel. In principle, the installer is free to choose the position and configuration of the bracket members; for instance, corner brackets only at some corners, more than one bracket parts on any one of the top, bottom or sides of the roof window, only bracket parts including at the corners etc.

[0014] Other presently preferred embodiments and further advantages will be apparent from the subsequent detailed description and drawings.

Brief Description of Drawings

[0015] In the following description embodiments of the invention will be described with reference to the schematic drawings, in which

Fig. 1 is a perspective view of an installation system comprising a roof window and a lining panel with prior art fittings;

Fig. 2 is an enlarged cut-out of the installation system of Fig. 1, including also a vapour barrier collar;

Fig. 3 is a schematic cross-sectional view of the installation system of Figs 1 and 2;

Fig. 4 is a schematic plan view of a bracket base member forming part of the bracket member in an embodiment of the invention;

Fig. 5 is a view corresponding to Fig. 4 of a bracket base member forming part of the bracket member in an embodiment of the invention;

Fig. 6 is a perspective view of a bracket member in an embodiment of the invention;

Figs 7 to 9 are schematic side views of bracket members in embodiments of the invention; and

Fig. 10 is a perspective view of an alternative embodiment of the bracket member according to the invention.

Description of Embodiments

[0016] Referring initially to Figs 1 to 3, the general configuration of an installation system is shown. A roof window generally designated 1 is shown installed in an aperture 4 in an inclined inner wall 3. A lining panel generally designated 2 is shown in an assembled but not yet mounted condition. The construction and assembly of the lining panel 2 is described in more detail in Applicant's EP 2 860 487 A1, EP 2 700 780 B1 and 2 700 781 B1. A vapour barrier collar 5 is mounted in a groove 6 in the frame of the roof window, for instance as described and shown in Applicant's EP 2 2463 893 B1.

[0017] As indicated in Figs 1 to 3, prior art snap fitting parts 8' and 9' are mounted on the lining panel 2 and in the groove 6 of the frame of the roof window 1, respectively. Referring in particular to Fig. 3, the lining panel 2 is moved in the direction of arrow U, during mounting, until the snap fitting part 8' clicks into snap fitting part 9', thereby attaining the mounted condition of the installation system.

[0018] In the following, embodiments of bracket members to replace the snap fitting parts of the prior art will be described. Reference will be made to the roof window 1 including groove 6, extending circumferentially in the frame of

the roof window 1, to the lining panel 2 and to the vapour barrier collar 5 of the installation system shown in Figs 1 to 3. It is apparent that these units may form part of an installation system according to the present invention as well, either as they are shown or described, or with modifications readily accessible to the person skilled in the art.

[0019] Referring initially to Figs 4 and 5, the general configuration of a bracket member to provide connection between the roof window 1 and the lining panel 2 will be described.

[0020] From the outset, each bracket member is formed as a substantially plane bracket base member 10 with a predefined width W and height H. The dimensions of the bracket base member 10 may in principle be chosen according to specific installation conditions. Typically, the width W is in the range of 1.5 to 2.5 of the height H, here about 2. The height H will most often be chosen in the range 50 to 200 mm, preferably 100 to 150 mm, and here about 120 mm. In turn, this gives a width W of about 240 mm.

[0021] The material of the bracket base member 10 may in principle be any material fulfilling the requirements to strength, durability and handling properties. Metal materials are one example, but the bracket base member could also be made from a plastic or composite material, possibly reinforced by for instance glass fibres or metal threads. It is preferred though that the bracket base member 10 is made from a metal material such as steel, preferably having a thickness of 0.5 to 1.5 mm. A thickness of about 1 mm has proven to function well and give a suitable balance between ease of mounting conditions, including adaptation to the desired shape, and strength.

[0022] At the centre in the width dimension, in the embodiment shown, one set of transverse weakened portions 30 is provided, resulting in one transverse folding line 30B located substantially centrally in the width dimension such that the bracket base member 10 is here divided into two sections 10A, 20A of substantially equal width.

[0023] As will be described in further detail below, the respective sections 10A, 20A may form either two separate bracket parts, namely a first bracket part 101 and a second bracket part 102, or constitute sections of a corner bracket 103.

[0024] In the height dimension, one first set of longitudinal weakened portions 31, 41 is provided, thus defining a first longitudinal folding line 31B. The transverse folding line 30B extends at right angles to the first longitudinal folding line 31B such that in each of the two sections 10A, 20A, a main portion 11A, 21A and a border portion 12A, 22A are formed. It is understood that the main portion 11A, 21A of the respective section 10A, 20A is formed on one side of the first longitudinal folding line 31B and the border portion 12A, 22A on the other side of the first longitudinal folding line 31B.

[0025] The main portion 11A, 21A of the respective sections 10A, 20A has a first fastening zone 11 configured to be connected to the lining panel 2, and the border portion 12A, 22A has a second fastening zone 12 configured to be connected to the roof window 1.

[0026] Referring briefly also to Figs 6 to 9, it emerges that the border portion 12A, 22A in each bracket member, or bracket part, has been bent through substantially 90° to extend substantially perpendicularly to the main portion 12A, 22A. In a preferred variant of the invention, the border portion 12A, 22A is accommodated in the recess 6 of the frame of the roof window 1. To this end, the first set of longitudinal weakened portions 31, 41 defining the first longitudinal folding line 31B is located such that the height of the border portion 12A, 22A on the other side of the first longitudinal folding line 31B relative to the main portion 11A, 21A is in the range 10 to 15 mm, preferably 12 to 13 mm, here about 12.5 mm.

[0027] In the embodiments shown, the bracket base member 10 furthermore comprises a second set of longitudinal weakened portions 32, 42 to provide a second longitudinal folding line 32B formed substantially in parallel with and at a distance from the first longitudinal folding line 31B. In turn, this provides a flap portion 13A, 23A on the other side of the second longitudinal folding line 32B relative to the main portion 11A, 21A.

[0028] With particular reference to the description of the corner bracket 103 shown in Fig. 6, it is shown how a third and a fourth set of longitudinal weakened portions 33, 34 are present to provide third and fourth longitudinal folding lines 33B, 34B, respectively. The third and fourth longitudinal folding lines 33B, 34B extend substantially in parallel with and at a distance from the first longitudinal folding line 31B. In turn, this makes it possible to provide an offsetting portion 14A between the third and fourth folding lines 33B, 34B.

[0029] Utilisation of the offsetting portion 14A is shown in the embodiment of Fig. 9, whereas the third and fourth longitudinal folding lines 33B, 34B are indicated also in the embodiments of Figs 7 and 8, in which the offsetting portion 14A simply transitions into the main portion 11A. The difference between Figs 7 and 8 is that the flap portion 13A is present in Fig. 7, whereas it is not present in the embodiment of Fig. 8, either because it has been detached along the second longitudinal folding line 32B, or if the bracket base member 10 has been formed without such a portion.

[0030] In the alternative embodiment shown in Fig. 10, in which only differences to the embodiments of Figs 4 to 9 will be described, bracket member 110 comprises a central section 110A surrounded by a wing section 120A to the side of one transverse folding line 130B relative to the central section 110A and another wing section 140A to the opposite side of another transverse folding line 135B relative to the central section 110A. In this way, the bracket member 110 may cover an entire top, bottom or side of the roof window 1 and lining panel 2.

[0031] The sets of weakened portions 30, 31, 32, 33, 34, 41, 42 may in principle be provided in any suitable way, as long as they make it possible to bend and/or separate the individual portions of the bracket base member 10 according to the specific field of application. For instance, the weakened portions may be provided as a respective series of

embossings or openings, here in the form of oblong through-going holes 30, 31, 32, 33, 34, 41, 42.

[0032] In a corresponding manner, the fastening zones 11, 12, 13, 21, 22, 23 may be provided in any suitable manner allowing easy connection to the roof window 1 and the lining panel 2, respectively. In its simplest configuration, the fastening zones are provided of plate material through which fastening means such as screws are driven. In the presently preferred embodiments though, the fastening zones include a plurality of openings including perforations, holes, slits, or combinations thereof, as illustrated for instance in the main section 11A and the border section 12A.

[0033] In the following, embodiments of the installation system comprising a roof window 1, a lining panel 2 and a plurality of bracket members as described in the above.

[0034] In the supply condition, the installation system, the roof window 1 and the lining panel 2 are provided together with a plurality of bracket base members 10. The exact number of such bracket base members 10 depends on a number of factors, including the installation situation, the size of the window, the material and weight of the lining panel 2 etc. In most applications, four bracket base members 10 are supplied though to provide one corner bracket 103 at each corner of the roof window 1 and lining panel 2. Another two bracket base members 10 are supplied to provide four bracket parts 101 for mounting to each of the top, bottom and sides of the roof window 1 and the lining panel 2, thus totalling six bracket base members 10 in one preferred embodiment of the installation system according to the invention.

[0035] A first plurality of bracket members are thus formed as corner brackets 103 in which a second section 20A of each bracket base member 10 has been bent substantially 90° about the transverse folding line 30B relative to a first section 10A, and each section 10A, 20A of the respective bracket member 10 has been bent substantially 90° about the first longitudinal folding line 31B to form the border portion 12A, 22A to extend substantially perpendicularly to the respective main portion 11A, 21A of the bracket section 10A, 20A.

[0036] A second plurality of bracket members are thus formed by separation of a first section 10A from a second section 20A of each bracket base member 10 along the transverse folding line 30B to form at least two bracket parts 101, 102, 104 of a single bracket base member 10, and each bracket part 101, 102, 104 has been bent substantially 90° about the first longitudinal folding line 31B to form the border portion 12A, 22A extending substantially perpendicularly to the respective main portion 11A, 21A of the bracket part 101.

[0037] The installer is free to choose between the first and second pluralities of bracket members when installing the lining panel to the roof window. A typical configuration will be four corner brackets, one at a respective corner, and four bracket parts, one at each of the top, bottom and sides of the roof window and lining panel.

[0038] In the preferred embodiment of the installation system, in which each corner bracket 103 is provided with a flap portion 13A, 23A as shown in a folded condition in Fig. 6, one of the flap portions 13A, 23A, namely the one facing the top and bottom of the roof window 1 and the lining panel 2 of each corner bracket 103, is positioned at an angle relative to the respective main portion 11A, 21A. The other flap portion, 23A or 13A, whichever appropriate, remains unfolded such that the flap portions 13A and 23A are parallel with a respective top/bottom and side of the lining panel 2, cf. the configuration shown in Fig. 1.

[0039] In case the lining panel 2 comprises double panels, or panels of double thickness, it is possible to accommodate the larger thickness of the lining panel 2 by utilising the offsetting portion 14A as shown in the embodiment of Fig. 9 to provide an inclined surface between the third and fourth folding lines 33B, 34B.

[0040] In its preferred embodiment, the installation system further comprises a vapour barrier collar 5.

[0041] Once all of the bracket members, and bracket parts, 103 and 101 have been folded as described in the above and connected to the roof window 1, for instance by screwing the respective border portions 12A, 22A into the circumferential groove 6 in the frame of the roof window, either before or after the vapour barrier collar 5 has been installed, the lining panel 2 is secured to the roof window 1 by driving screws (or other fastening means) through the respective fastening zones in the main portions 11A, 21A and/or flap portions 13A, 23A and into the material of the lining panel 2. As an additional measure to provide stability in the fastening of the bracket members to lining panel 2, the installer may provide for instance wooden blocks to support the bracket members.

[0042] Dismounting of the lining panel 2 is easily carried out by simply unscrewing the fastening means and lifting the lining panel 2 out of engagement with the roof window 1.

[0043] The invention is not limited to the embodiments shown and described in the above, but various modifications and combinations may be carried out.

List of reference numerals

1	roof window	ovenlysvindue
2	lining panel	lysningspanel
3	inner wall	indervæg
4	aperture in inner wall	abning i indervæg
5	vapour barrier collar	dampspærrekrave
6	groove in frame	karmnot

(continued)

	7'	prior art fastening means	skrue (kendt teknik)
	8'	prior art snap fitting part	snapsbeslagsdel (kendt teknik)
5	9'	prior art snap fitting part	snapsbeslagsdel (kendt teknik)
	10	bracket base member	beslagsbasiselement
	11	first fastening zone	første fastgørelseszone
	12	second fastening zone	andet fastgørelseszone
	13	third fastening zone	tredje fastgørelseszone
10	21	first fastening zone, second part	første fastgørelseszone, anden del
	22	second fastening zone, second part	andet fastgørelseszone, anden del
	23	third fastening zone, second part	tredje fastgørelseszone, anden del
	30	set of transverse weakened portions	første sæt tværgående svækkelsespartier
15	31	first set of longitudinal weakened portions	første sæt langsgående svækkelsespartier
	32	second set of longitudinal weakened portions	andet sæt langsgående svækkelsespartier
	33	third set of longitudinal weakened portions	tredje sæt langsgående svækkelsespartier
	34	fourth set of longitudinal weakened portions	fjerde sæt langsgående svækkelsespartier
20	41	first set of longitudinal weakened portions, second part	første sæt langsgående svækkelsespartier, andet del
	42	second set of longitudinal weakened portions, second part	andet sæt langsgående svækkelsespartier, anden del
	10A	first section	første afsnit
25	11A	main portion	hovedparti
	12A	border portion	randparti
	13A	flap portion	flapparti
	14A	offsetting portion	forsætningsparti
	20A	second section	andet afsnit
30	21A	main portion, second part	hovedparti, anden del
	22A	border portion, second part	randparti, anden del
	23A	flap portion, second part	flapparti, anden del
	30B	transverse folding line	tværgående foldelinje
35	31B	first longitudinal folding line	første langsgående foldelinje
	32B	second longitudinal folding line	anden langsgående foldelinje
	33B	third longitudinal folding line	tredje langsgående foldelinje
	34B	fourth longitudinal folding line	fjerde langsgående foldelinje
	101	first bracket part	første beslagsdel
40	102	second bracket part	anden beslagsdel
	103	corner bracket	hjørnebeslag
	104	offsetting bracket part	forsætningsbeslagsdel
	110	extended bracket	udvidet beslag
45	110A	central section	midterdel
	111A	main portion, central part	hovedparti, midterdel
	112A	border portion, central part	randparti, midterdel
	113A	flap portion, central part	flapparti, midterdel
	120A	wing section	fløjdel
50	121A	main portion, wing section	hovedparti, fløjdel
	122A	border portion, wing section	randparti, fløjdel
	123A	flap portion, wing section	flapparti, fløjdel
	140A	wing section	fløjdel
55	141A	main portion, wing section	hovedparti, fløjdel
	142A	border portion, wing section	randparti, fløjdel
	143A	flap portion, wing section	flapparti, fløjdel
	130B	transverse folding line	tværgående foldelinje

(continued)

135B	transverse folding line	tværgående foldelinje
H	height of bracket base member	højde af beslagsbasiselement
W	width of bracket base member	bredde af beslagsbasiselement
U	arrow	pil

Claims

1. A bracket member for providing connection between a roof window (1) and a lining panel (2), comprising at least a main portion (11A) having a first fastening zone (11) configured to be connected to the lining panel (2) and a border portion (12A) having a second fastening zone (12) configured to be connected to the roof window (1),
characterised in that
the bracket member is formed as a substantially plane bracket base member (10) with a predefined width (W) and height (H) comprising at least one first set of longitudinal weakened portions (31, 41) to provide a first longitudinal folding line (31B) and at least one set of transverse weakened portions (30) to provide a transverse folding line (30B) extending at right angles to the first longitudinal folding line (31B) and dividing the bracket base member (10) into at least two sections (10A, 20A), that
at least a first bracket part (101) and a second bracket part (102) are configured to be formed by the respective sections (10A, 20A), and that
the main portion (11A; 21A) of the respective section (10A, 20A) is formed on one side of the first longitudinal folding line (31B) and the border portion (12A, 22A) on the other side of the first longitudinal folding line (31B).
2. A bracket member according to claim 1, wherein at least one second set of longitudinal weakened portions (32, 42) to provide a second longitudinal folding line (32B) is formed substantially in parallel with and at a distance from the first longitudinal folding line (31B), and wherein a flap portion (13A, 23A) is provided on the other side of the second longitudinal folding line (32B) relative to the main portion (11A, 21A).
3. A bracket member according to claim 1 or 2, wherein a third and a fourth set of longitudinal weakened portions (33, 34) to provide third and fourth longitudinal folding lines (33B, 34B), respectively, are formed substantially in parallel with and at a distance from the first longitudinal folding line (31B), and wherein an offsetting portion (14A) is provided between the third and fourth folding lines (33B, 34B).
4. A bracket member according to any one of the preceding claims, wherein the bracket member (110) comprises a central section (110A) surrounded by a wing section (120A) to the side of one transverse folding line (130B) relative to the central section (110A) and another wing section (140A) to the opposite side of another transverse folding line (135B) relative to the central section (110A).
5. A bracket member according to any one of the preceding claims, wherein the sets of weakened portions (30, 31, 32, 33, 34, 41, 42) are provided as a respective series of embossings or openings, preferably in the form of oblong through-going holes.
6. A bracket member according to any one of the preceding claims, wherein the fastening zones (11, 12, 13, 21, 22, 23) include a plurality of openings including perforations, holes, slits, or any combinations thereof.
7. A bracket member according to any one of the preceding claims, wherein the dimensions of the substantially plane bracket base member (10) are chosen such that the width (W) is in the range of 1.5 to 2.5 of the height (H), preferably about 2.
8. A bracket member according to claim 7, wherein the height (H) is in the range 50 to 200 mm, preferably 100 to 150 mm, more preferably about 120 mm.
9. A bracket member according to claim 7 or 8, wherein one set of transverse weakened portions (30) providing one transverse folding line (30B) is located substantially centrally in the width dimension such that the bracket base member (10) is divided into two sections (10A, 20A) of substantially equal width.

10. A bracket member according to any one of claims 7 to 9, wherein one first set of longitudinal weakened portions (31, 41) providing the first longitudinal folding line (31B) is located such that the height of the border portion (12A, 22A) on the other side of the first longitudinal folding line (31B) relative to the main portion (11A, 21A) is in the range 10 to 15 mm, preferably 12 to 13 mm.
11. A bracket member according to any one of the preceding claims, wherein the bracket base member (10) is made from a metal material such as steel, preferably having a thickness of 0.5 to 1.5 mm.
12. An installation system comprising a roof window (1), a lining panel (2) and a plurality of bracket members according to any one of claims 1 to 11, wherein
a first plurality of bracket members are formed as corner brackets (103) in which a second section (20A) of each bracket base member (10) has been bent substantially 90° about the transverse folding line (30B) relative to a first section (10A), and each section (10A, 20A) of the respective bracket member (10) has been bent substantially 90° about the first longitudinal folding line (31B) to form the border portion (12A, 22A) to extend substantially perpendicularly to the respective main portion (11A, 21A) of the bracket section (10A, 20A), said corner brackets (103) being connected to corners of the roof window (1) and of the lining panel (2), and/or
a second plurality of bracket members are formed by separation of a first section (10A) from a second section (20A) of each bracket base member (10) along the transverse folding line (30B) to form at least two bracket parts (101, 102, 104) of a single bracket base member (10), and each bracket part (101, 102, 104) has been bent substantially 90° about the first longitudinal folding line (31B) to form the border portion (12A, 22A) extending substantially perpendicularly to the respective main portion (11A, 21A) of the bracket part (101, 102, 104), said bracket parts (101, 102, 104) being connected to sides, top and bottom of the roof window (1) and the lining panel (2).
13. An installation system according to claim 12, wherein one corner bracket (103) is mounted to each of four corners of the roof window (1) and the lining panel (2) and one bracket part (101, 102, 104) is mounted to each of the top, bottom and sides of the roof window (1) and the lining panel (2), totalling six bracket base members (10).
14. An installation system according to claim 12 or 13, wherein a flap portion (13A, 23A) is provided on at least the corner brackets (103), and wherein the flap portion (13A, 23A) facing the top and/or bottom of the roof window (1) and the lining panel (2) is positioned at an angle relative to the respective main portion (11A, 21A).
15. An installation system according to any one of claim 12 to 14, wherein the lining panel (2) comprises double panels, or panels of double thickness, and wherein each bracket member (101, 102, 103, 104) comprises an offsetting portion (14A) providing an inclined surface between the third and fourth folding lines (33B, 34B).
16. An installation system according to any of claims 12 to 15, wherein the installation system further comprises a vapour barrier collar (5).

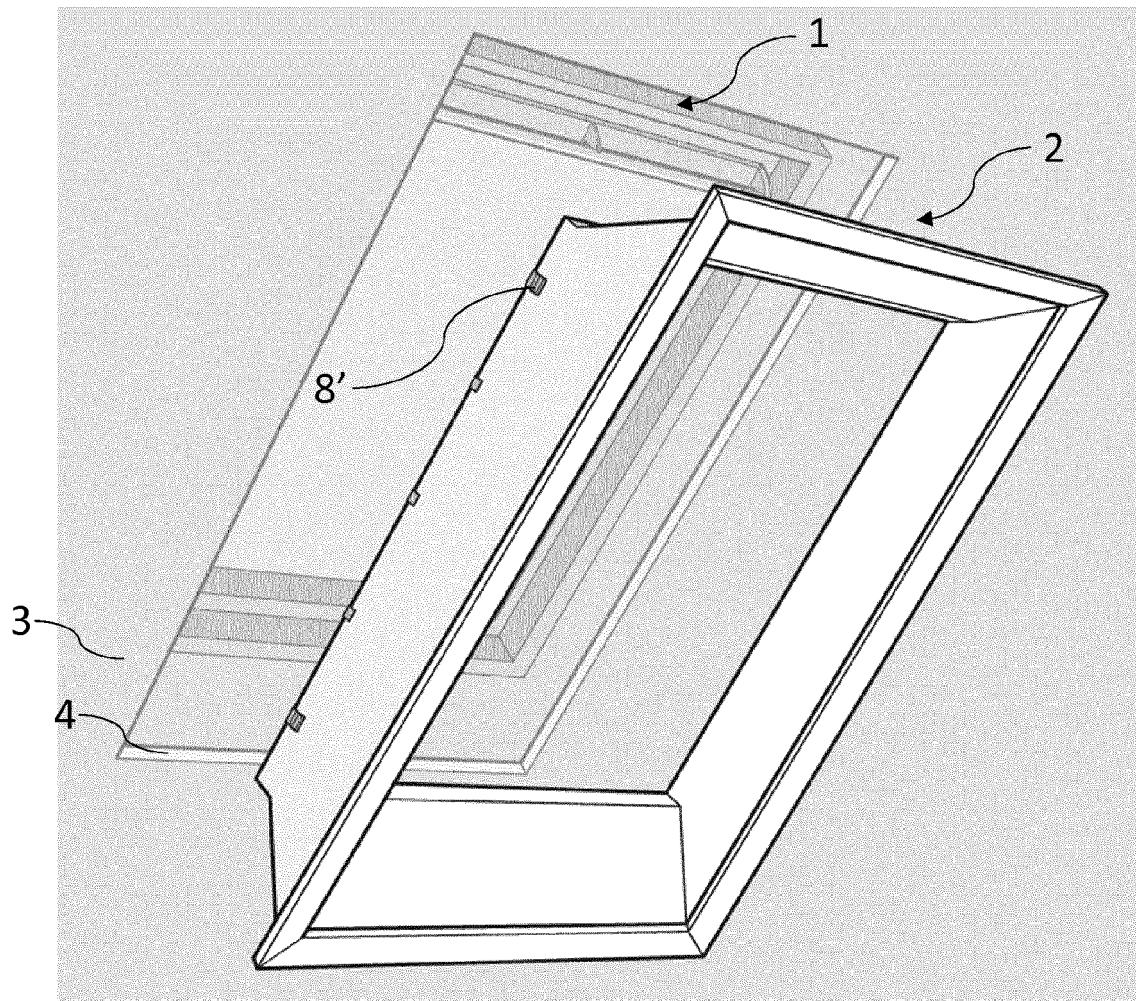


Fig. 1 (PRIOR ART)

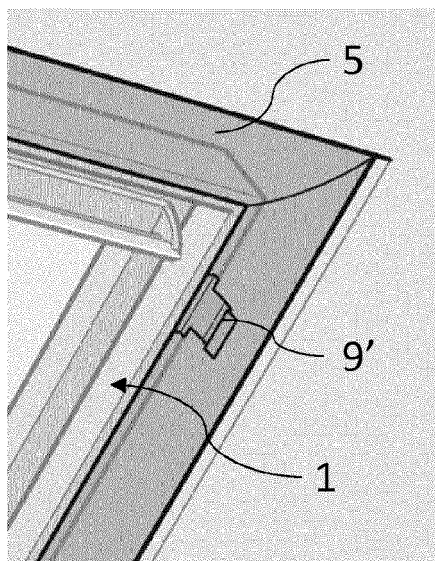


Fig. 2 (PRIOR ART)

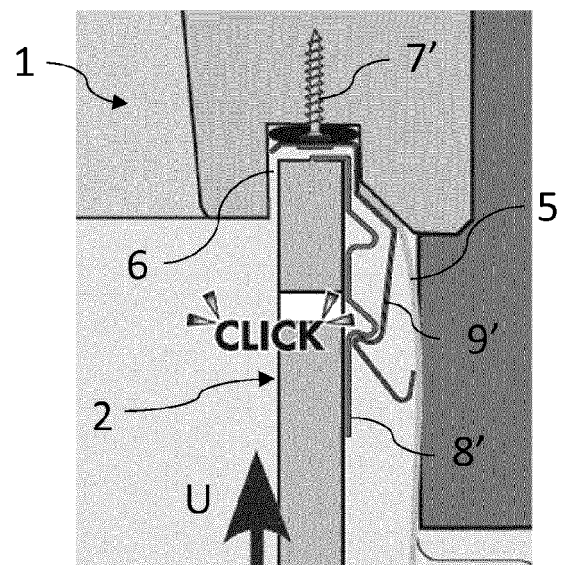


Fig. 3 (PRIOR ART)

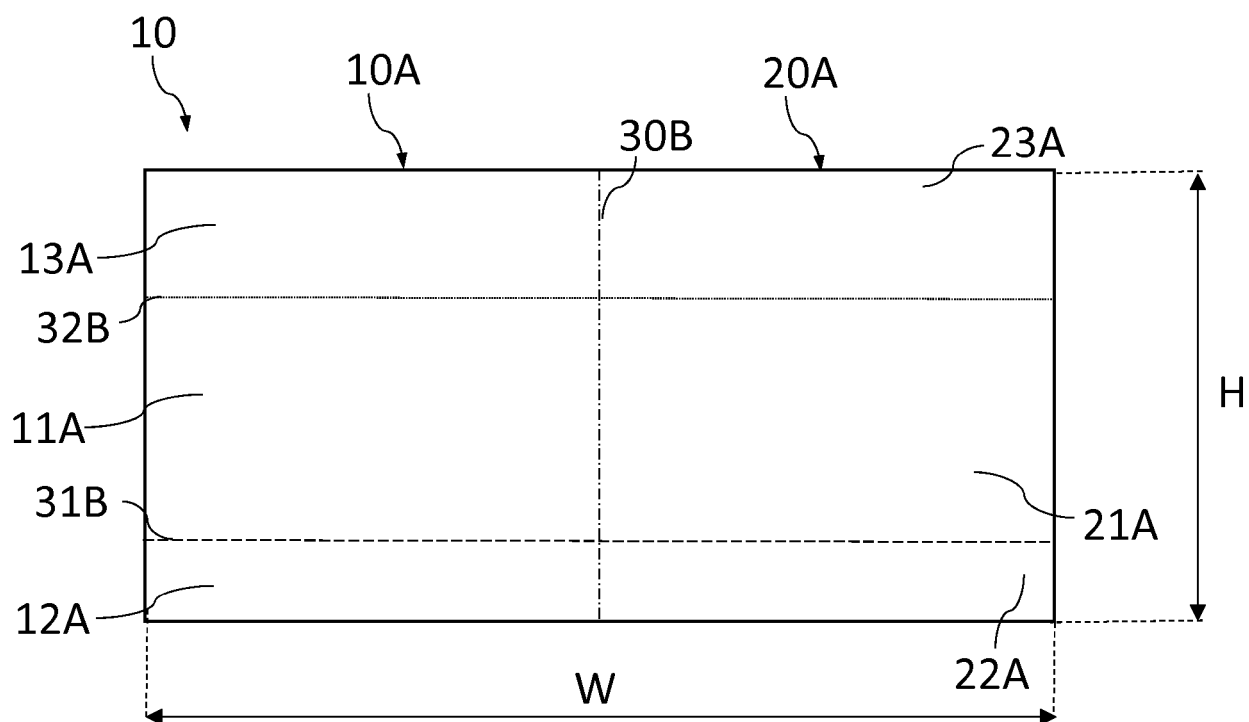


Fig. 4

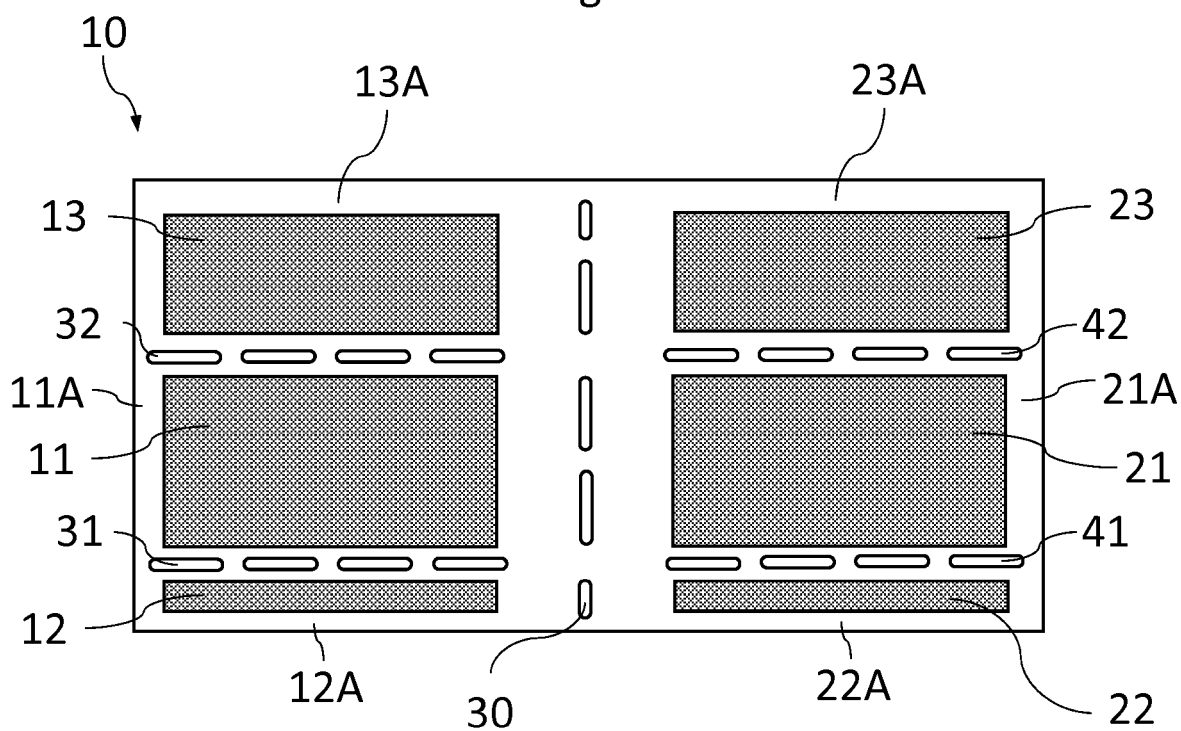


Fig. 5

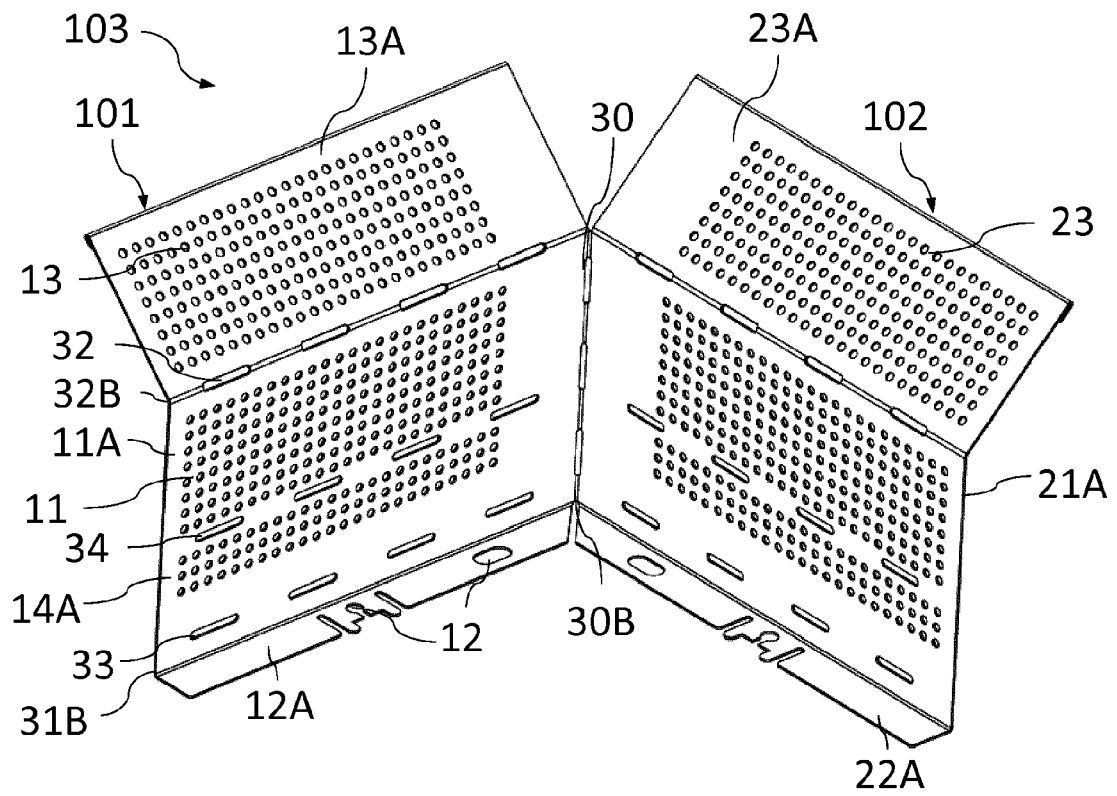


Fig. 6

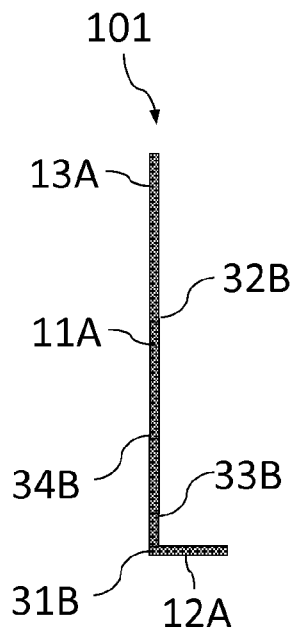


Fig. 7

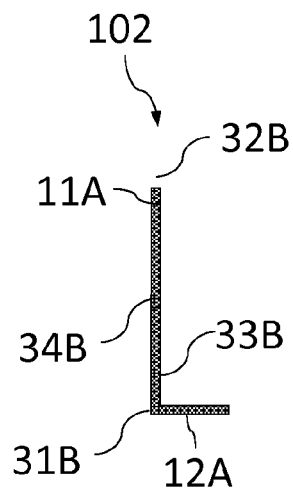


Fig. 8

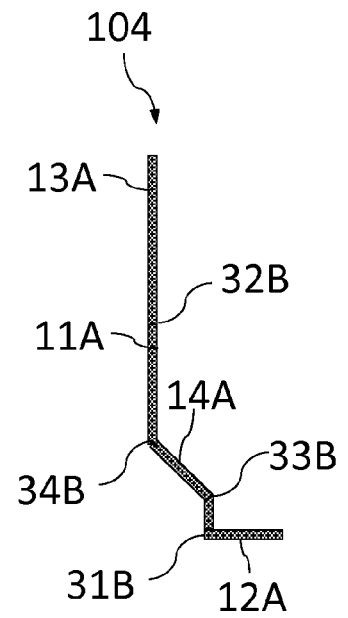


Fig. 9

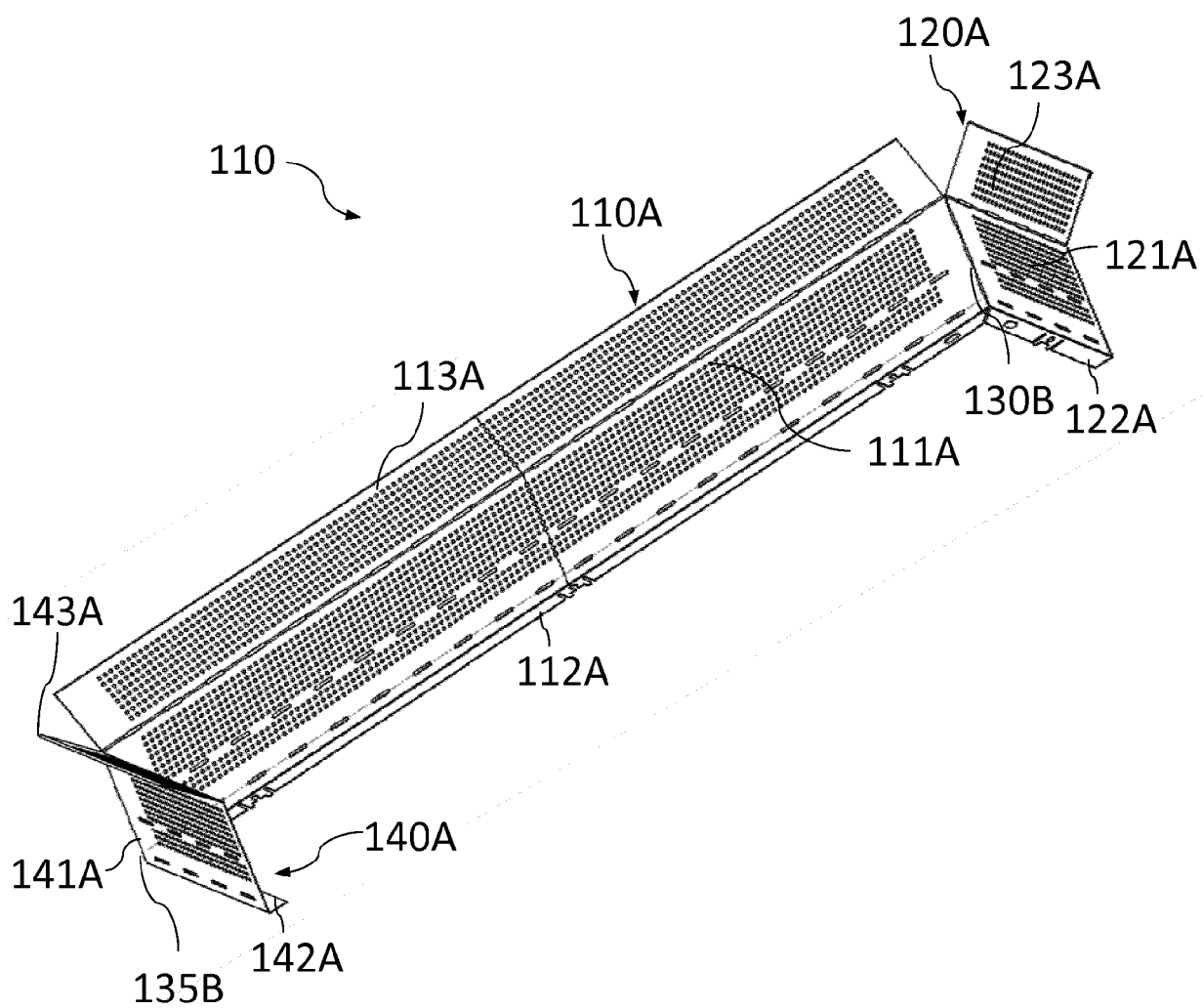


Fig. 10



EUROPEAN SEARCH REPORT

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Place of search The Hague		Date of completion of the search 4 December 2018	Examiner Leroux, Corentine
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