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(54) **A window for installation in a roof structure and a mounting bracket for use with the window**

Fenster zum Einbau in eine Dachkonstruktion und dazugehörige Halterung

Fenêtre pour installation dans un toit et dispositif de fixation s'utilisant pour le montage

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Description

[0001] The present invention relates to a window for installation in a roof structure, comprising a frame with a top member, a bottom member and two side members mutually connected in corner joints and together forming an external limit along the outer sides of the frame, and a plurality of mounting brackets, where each mounting bracket comprises a first leg portion for connection with an associated frame member and a second leg portion essentially perpendicular to the first leg portion in the mounted position for fastening to the roof structure, and where the first leg portion comprises at least one leg section for connection with a frame member at a corner joint, where the first leg portion and the second leg portion are interconnected by means of a connecting member in such a way that the second leg portion is essentially within the external limit of the frame in a transport position of the window, while the second leg portion is essentially outside the external limit of the frame in a mounted position of the window.

[0002] A window of this type is known from US 6,629,391 B1, and comprises mounting brackets positioned at the sides of the frame members. Each bracket comprises an angular bracket member with a first and a second leg portion and a base member being connected with an outer side wall of the window defining a plane parallel to the outer side wall. The angular bracket member is connected with the base member in such a way that in a transportation position of the window the second leg portion protrudes inwards in relation to the plane, whereas in an installation position of the window the second leg portion protrudes outwards in relation to the plane.

[0003] This rearrangement of the bracket member from a transportation position to a installation position entails that the window may be delivered with mounting brackets pre-mounted on the frame to ensure correct mounting without the second leg portion of the brackets protruding from the frame of the window, which would otherwise make the window take up a disproportionate amount of space during transportation. Projecting brackets require a similarly large packaging, which is highly disadvantageous in itself. Moreover, such packaging will have a space between the outer edge of the packaging and the frame of the window corresponding to the size of the protruding part of the brackets. This will imply a risk of damage, particularly to both the packaging and the brackets, but also to other parts of the window structure during transportation of the window. These are some of the most important disadvantages of the window, known from EP 1042569 B1 which is installed in a roof structure in the way that, without prior measuring, a number, usually four, of mounting brackets are fastened to the frame of the window at a corner joint by the first leg portion and to the roof structure by the second leg portion. The use of brackets positioned at the corners of the frame is intended to ensure correct mounting of the

window.

[0004] Windows of this known type are usually delivered at the installation site with associated mounting brackets, which are not pre-mounted on the frame of the window. Therefore, an extra mounting step is required at the installation site, which takes extra time and implies a risk that the mounting brackets are mounted incorrectly on the frame and/or the roof structure or even that the brackets are lost during the process.

[0005] Therefore, it is the object of the invention to provide a window of the type mentioned in the introduction, whereby correct and simple mounting at a corner joint is ensured, while maintaining the reduced risk of damage to the window as well as the minimized packaging during transportation of the window and the reduction of the quantity of packaging material.

[0006] According to the invention, this is obtained by a window of the type described in the introduction, in which the first leg portion comprises two leg sections, and the two leg sections are interconnected by means of the said connecting member, and the sum of the angles between the connecting member and each one of the two leg sections amounts to essentially 270 degrees.

[0007] Such a window allows the mounting bracket to be pre-mounted on the frame of the window, thereby essentially simplifying the mounting process, ensuring correct installation of the window and particularly the mounting bracket, and preventing loss of the brackets.

[0008] Moreover, in such a window all the parts of the mounting bracket are within the external limit of the frame during transportation of the window so that the risk of damage to the packaging and/or the mounting bracket during transportation of the window is minimal and so that the window can be packed in a packaging corresponding in size to the external limit of the frame, thereby optimising the quantity of packaging material used.

[0009] Furthermore, such a window presents a particularly simple way of achieving secure abutment of the two leg sections against respective frame members at a corner joint.

[0010] In a preferred embodiment of the window according to the invention, the first leg portion further comprises a lower and an upper edge, and the second leg portion further comprises a lower and an upper side, and the first leg portion and the second leg portion are further interconnected by means of the connecting member in such a way that the upper side of the second leg portion faces in the opposite direction of the upper edge of the first leg portion in a transport position of the window, while the upper side of the second leg portion faces in the same direction as the upper edge of the first leg portion in a mounted position of the window. In this way, a window is provided which can be brought from a transport position to a mounted position in a particularly simple and gentle manner, especially for the mounting bracket.

[0011] In a particularly preferred embodiment of the window according to the invention, the connecting member and each of the leg sections of the first leg portion

are at an angle of 135 degrees to each other.

[0012] In a particularly preferred embodiment of the window according to the invention, the said connecting member interconnecting the first and the second leg portions is essentially perpendicular to the second leg portion, and each corner joint comprises a bevelling, the bevelling being designed for abutment with the connecting member, and the connecting member comprises at least one hole for passing through a fastening device for fastening the connecting member to the bevelling. This embodiment provides a window which allows the necessary steps for pre-assembling the window in the manufacturing phase to be made in a particularly simple way.

[0013] In a preferred embodiment of the window according to the invention, the connecting member comprises a first connecting section connected with the first leg portion and a second connecting section connected with the second leg portion, and a transition portion integrally interconnecting the first and the second connecting sections, the first and the second connecting sections being in continuation of each other in a transport position, and the first and the second connecting sections being made to overlap each other in a mounted position by swinging about a swinging axis defined by the transition portion. By such swinging, the mounting bracket can be brought from a transport position to a mounted position essentially without imparting any torque to the connecting member, thereby achieving optimum strength of the bracket in the mounted position.

[0014] In a preferred embodiment of the window according to the invention, the first connecting section and the second connecting section are of essentially the same dimensions, thereby obtaining a complete overlap of the two connecting sections in a mounted position and thus no unnecessarily protruding edges.

[0015] In a preferred embodiment of the window according to the invention, the connecting member comprises a locking member near the former's end facing away from the second leg portion in a transport position, the locking member being designed, in a mounted position, to engage with a corresponding locking member provided near the end of the connecting member adjacent to the second leg portion, thereby providing a window with optimum stability in a mounted position.

[0016] In a particularly preferred embodiment of the window according to the invention, the connecting member comprises a locking device, the locking device being connected integrally with the connecting member at the latter's end facing away from the second leg portion in a transport position, and the locking device comprising a locking member designed to engage with a corresponding locking member provided in the second leg portion in a mounted position. Thereby, the mounting bracket and the locking device can be manufactured in a particularly simple manner, e.g. by punching in one piece.

[0017] In a particularly preferred embodiment of the window according to the invention, the said locking device is essentially perpendicular to the connecting mem-

ber and extends in a plane parallel with the second leg portion, whereby the two locking members are automatically made to at least abut each other when the bracket is swung from a transport position to a mounted position.

[0018] In a further preferred embodiment of the window according to the invention, each of the two leg sections of the first leg portion comprises holes for passing through fastening members and/or a flange which is essentially perpendicular to the leg section and is designed for engagement with a corresponding groove provided in the frame of the window, whereby the fastening of the first leg portion to the frame of the window can be made in a satisfactory manner.

[0019] In a further preferred embodiment of the window according to the invention, the second leg portion comprises holes for passing through fastening members and/or engagement members designed for engagement with a corresponding mounting bracket of an adjacent window and/or at least one flap folded in a direction towards the roof structure in a mounted position.

[0020] In a further preferred embodiment of the window according to the invention, a baseplate which is essentially perpendicular to the connecting member and extends in a plane parallel with the second leg portion is provided at the end of the connecting member, whereby the mounting bracket protects the corner joint on which it is installed from external influences.

[0021] In a second aspect of the invention, a mounting bracket has been provided with features according to any one of claims 13 to 24.

[0022] Further aspects of the invention comprise a method for installing a window according to the invention by use of mounting brackets according to the invention, and use of such mounting bracket for installing a window according to the invention.

[0023] The invention will be explained in more detail below by means of a non-limiting example of an embodiment and with reference to the schematic drawings, in which

Fig. 1 shows a perspective top view of an embodiment of a window according to the invention in a transport position,

Fig. 2 shows a perspective top view of the window according to Fig. 1 in a mounted position,

Fig. 3 shows an embodiment of a mounting bracket according to the invention in a transport position,

Figs. 4A and B show an embodiment of a mounting bracket according to the invention in a mounted position, seen from two different angles, and

Fig. 5 shows another embodiment of a mounting bracket according to the invention in a transport position.

[0024] Fig. 1 shows an embodiment of a window according to the invention. The window 1 comprises a frame with a top member 2, a bottom member 3, and two side members 4 and 5 as well as a plurality of mounting brack-

ets 10. Usually, the window 1 comprises four mounting brackets 10, only one being shown in Figs. 1 and 2. The top member 2 and the bottom member 3 are connected with the side members 4 and 5 in corner joints 6, and the frame thus assembled forms an external limit along its outer sides. Each corner joint 6 preferably comprises a bevelling 7, the function of which will be described below. Fig. 1 also shows that each mounting bracket 10 comprises a first leg portion 11 and a second leg portion 12 interconnected by a connecting member 13.

[0025] The window of Fig. 1 is shown in a transport position, and it is apparent that each mounting bracket 10 in the transport position is placed so that the second leg portion 12 essentially lies within the external limit formed by the outer sides of the window frame.

[0026] Fig. 2 shows the window 1 according to Fig. 1 in a mounted position, in which the window is mounted in a roof structure (not shown). It is apparent that the mounting bracket 10 is now placed so that the second leg portion 12 essentially projects beyond the external limit formed by the outer side of the window frame so that the second leg portion 12 can be fastened to the roof structure by means of a fastening device (not shown), such as a screw.

[0027] Fig. 3 shows a mounting bracket 10 according to the invention in a preferred embodiment in a transport position, and Figs. 4A and 4B show a top and bottom view, respectively, of a corresponding bracket in a mounted position. The mounting bracket 10 comprises a first leg portion 11, a second leg portion 12 and a connecting member 13.

[0028] The mounting bracket 10 according to the invention is of the gusset type, and the first leg portion 11 therefore comprises two leg sections 11a and 11b intended for fastening to a respective frame member 2, 3, 4 or 5 adjacent to the place where the frame members are interconnected in a corner joint 6. For fastening purposes, each leg section 11a, 11b has at least one mounting hole 27 for passing through a fastening device (not shown). Each leg section 11a, 11b of the first leg portion 11 comprises a lower edge 14 and an upper edge 15 and may further, in a manner known *per se*, in connection with the lower edge 14 in the embodiment shown, comprise flanges 30 intended for engagement with corresponding grooves (not shown) provided in the frame members.

[0029] The second leg portion 12 is essentially perpendicular to the first leg portion 11 and comprises a lower side 16 and an upper side 17. The second leg member comprises mounting holes 28 for passing through fastening devices (not shown) for the purpose of fastening the second leg portion 12 to the roof structure during the installation. Further, the second leg portion 12 may in a manner known *per se* comprise a folded flap 29. In a mounted position, this flap 29 abuts the roof structure and causes a minimum distance to be maintained between the roof structure and the top or bottom member of the frame so that insulating material may be inserted

in this space. Likewise, in a manner known *per se*, the second leg portion 12 may comprise, at its outer edge, an engagement member, e.g. in the form of a projection 32 and a recess 33 intended for engagement with a corresponding engagement member on a mounting bracket of an adjacent window as in the embodiment shown.

[0030] The connecting member 13 comprises two ends 13a and 13b, the end 13a being connected to the first leg portion 11 and the end 13b being connected to the second leg portion 12. Preferably, as in the embodiment shown, the connecting member 13 and the leg portions 11 and 12, respectively, are integrally interconnected, whereby the entire mounting bracket 10 can be punched from a plate in one punching operation. Preferably, as appears from Figs. 3 and 4, the connecting section 13 and the second leg portion 12 are perpendicular to each other, while the connecting member 13 and the leg sections 11a, 11b of the first leg portion 11 are preferably at an angle of 135 degrees to each other. It will be sufficient, however, if the sum of the angles between the connecting member and the leg sections merely amounts to approximately 270 degrees. If the angle between the connecting member 13 and one or both of the leg sections 11a, 11b is thus slightly larger than 135 degrees in an embodiment, and if this is combined with the above embodiment in which the flanges 30 on the leg sections 11a, 11b are designed with a number of projections, it thus becomes possible for the projections and the complementary recesses in the grooves to function as temporary retention of the bracket until, by means of e.g. blows with a claw hammer, the installer can bring the leg sections into such an angle with the connecting member that permanent retention is provided.

[0031] The connecting member further comprises a hole 18 for passing through a fastening device (not shown), so that the mounting bracket 10 can thereby be fastened to the frame of a window, preferably to a bevelling 7 as shown on the window 1 in Figs. 1 and 2. For this purpose, the bevelling 7 is preferably provided with the same width as or a larger width than the connecting member 13 so that the connecting member 13 can abut against the bevelling 7 without protruding past the edge thereof. The hole 18 is preferably provided near the end 13a of the connecting member 13. The bevelling 7 is shown in Figs. 1 and 2 in an embodiment in which it is limited to the lower part of the height of the frame. In another embodiment, the bevelling is provided in the entire height of the frame.

[0032] In the embodiment shown, the connecting member 13 comprises two connecting sections 19 and 20 integrally interconnected with the first leg portion 11 and the second leg portion 12, respectively. The two connecting sections 19 and 20 are mutually and continuously interconnected by means of a transition portion 21. In the embodiment shown, the transition portion 21 is designed so that it comprises a central portion 21a connected to the middle of the connecting section 20 and is connected at its opposite ends 21b and 21c to the connecting section

19.

[0033] In other embodiments, the connecting member may comprise two separate connecting sections interconnected by a mechanical hinge which allows movement of the bracket from a transport position to a mounted position. Alternatively, one of the two separate connecting sections may be designed so that it can be dismounted from the remaining part of the bracket in a transport position together with the swingable leg portion of the bracket, whereupon the dismounted part of the bracket is rotated and again fastened to the remaining part of the bracket in a mounted position. In that case, the dismounting and the subsequent fastening may, e.g., be effected by means of a locking mechanism such as a snap lock, or in that one separate connecting section is designed with groove-shaped recesses extending in parallel with the plane in which the connecting section extends, and the second separate connecting member is designed with complementary projections for engagement with the recesses, which further makes it possible to adjust the bracket in height relative to the frame.

[0034] In a transport position as shown in Fig. 3, the connecting sections 19 and 20 and the transition portion 21 between them are in continuation of each other and in the same plane. In this way, the transition portion 21 in the embodiment shown defines a swinging axis around which the second leg portion 12 and the adjacent connecting section 20 are swung until the connecting sections 19 and 20 abut against each other in a mounted position as shown in Fig. 4. It thus appears from Fig. 3 that the connection described between the first leg portion 11 and the second leg portion 12 causes the second leg portion 12, in a transport position, to lie essentially within a volume area delimited outwards by a plane containing the first leg portion 11. Similarly, it appears from Fig. 4 that the swinging described above implies that the second leg portion 12 is essentially outside the volume area in a mounted position. At the same time, the said swinging implies that the upper side 17 of the second leg member 12, from facing towards the upper edge 15 of the first leg portion 11 in a transport position, faces away from the upper edge 15 of the first leg portion 11 in a mounted position, thus enabling correct mounting in and fastening to the roof structure.

[0035] The mounting bracket 10 further comprises a locking member 22 and a corresponding locking member 23. The locking member 22 is designed to engage with the corresponding locking member 23 for firm locking and further stabilisation of the mounting bracket when it is brought into a mounted position. In a preferred embodiment as illustrated in Fig. 4A, the locking member and the corresponding locking member are designed as a hole and a rivet, respectively, connected with the mounting bracket by means of a flat spring.

[0036] In the embodiment shown, the locking member 22 is provided in a locking device 24 arranged perpendicularly to the connecting member 13 and integrally with it at the end 13a in the area between the leg sections

11a, 11b, and the corresponding locking member 23 is provided in the second leg portion 12 in an area near the end 13b of the connecting member 13. The locking device 24 is preferably designed with a shape so that, when the first leg portion 11 has been fastened to the window frame, the locking device will essentially fall within such area as is cleared when a bevelling 7 is provided. In the embodiment shown, the locking device 24 is brought to abut against the second leg portion 12 by swinging of the second leg portion 12 into a mounted position so that the locking member 22 can be brought into engagement with the corresponding locking member 23, whereby the mounting bracket is firmly locked in the mounted position as shown in Fig. 4.

[0037] In another embodiment of the window according to the invention, the mounting bracket may be provided with a baseplate 35 at the end 13a of the connecting member 13 as illustrated in Fig. 5, the baseplate 35 being essentially perpendicular to the connecting member 13 and parallel with the second leg portion 12, thereby protecting the corner joint of the frame against external influences. In an embodiment in which the mounting bracket comprises such baseplate, it will further be possible to design the bracket with only one leg section or completely without leg sections 11a and 11b, respectively. In an embodiment in which the bracket is designed without leg sections and at the same time designed so that it is adjustable in height, it will further be possible to omit the baseplate 35.

[0038] In a supplementary alternative embodiment, the transition between the locking device 24 and the end 13a of the connecting member 13 may be made resilient to improve the abutment between the locking device 24 and the second leg portion 12. Such resilient design may further be supplemented by or alternatively be provided in the actual end 13a of the connecting member. This resilient design may e.g. be provided by the use of material softer than the material used for the remainder of the locking device 24 and the end 13a.

[0039] It should be noted that the above description of preferred embodiments serves only as an example, and that a worker skilled in the art will know that numerous variations are possible without deviating from the scope of the claims.

Claims

1. A window (1) for installation in a roof structure, comprising a frame with a top member (2), a bottom member (3) and two side members (4, 5) mutually connected in corner joints (6) and together forming an external limit along the outer sides of the frame members, and a plurality of mounting brackets (10), where each mounting bracket (10) comprises a first leg portion (11) for connection with an associated frame member (2, 3, 4, 5) and a second leg portion (12) essentially perpendicular to the first leg portion (11)

- in the mounted position for fastening to the roof structure, and where the first leg portion (11) comprises at least one leg section (11a, 11b) for connection with a frame member (2, 3, 4, 5) at a corner joint (6), where the first leg portion (11) and the second leg portion (12) are interconnected by means of a connecting member (13) in such a way that the second leg portion (12) is essentially within the external limit of the frame in a transport position of the window (1), while the second leg portion (12) is essentially outside the external limit of the frame in a mounted position of the window (1), **characterized in that** the first leg portion (11) comprises two leg sections (11a, 11b), and that the two leg sections (11a, 11b) are interconnected by means of the said connecting member (13), and that the sum of the angles between the connecting member (13) and each of the two leg sections (11a, 11b) amounts to essentially 270 degrees.
2. A window according to claim 1, where the first leg portion (11) further comprises a lower (14) and an upper edge (15), and the second leg portion (12) further comprises a lower (16) and an upper side (17), **characterized in that** the first leg portion (11) and the second leg portion (12) are further interconnected by means of the connecting member (13) in such a way that the upper side (17) of the second leg portion (12) faces in the opposite direction of the upper edge (15) of the first leg portion (11) in a transport position of the window, while the upper side (17) of the second leg portion (12) faces in the same direction as the upper edge (15) of the first leg portion (11) in a mounted position of the window.
 3. A window according to claim 1 or 2, **characterized in that** the connecting member (13) and each of the leg sections (11a, 11b) of the first leg portion (11) are at an angle of 135 degrees to each other.
 4. A window according to any one of claims 1 to 3, **characterized in that** the said connecting member (13) interconnecting the first leg portion (11) and the second leg portion (12) is essentially perpendicular to the second leg portion (12), that each corner joint (6) comprises a bevelling (7), the bevelling (7) being designed for abutment with the connecting member (13), and that the connecting member comprises at least one hole (18) for passing through a fastening device for fastening the connecting member to the bevelling.
 5. A window according to any one of claims 1 to 4, **characterized in that** the connecting member (13) comprises a first connecting section (19) connected with the first leg portion (11) and a second connecting section (20) connected with the second leg portion (12), and a transition portion (21) integrally interconnecting the first and the second connecting sections, the first and the second connecting sections (19, 20) being in continuation of each other in a transport position, and the first and the second connecting sections being made to overlap each other in a mounted position by swinging about a swinging axis defined by the transition portion (21).
 6. A window according to claim 5, **characterized in that** the first connecting section (19) and the second connecting section (20) are of essentially the same dimensions.
 7. A window according to any one of the preceding claims, **characterized in that** the connecting member (13) comprises a locking member (22) near the former's end (13a) facing away from the second leg portion (12) in a transport position, the locking member (22) being designed, in a mounted position, to engage with a corresponding locking member (23) provided near the end (13b) of the connecting member adjacent to the second leg portion (12).
 8. A window according to any one of claims 1 to 6, **characterized in that** the connecting member (13) comprises a locking device (24), the locking device being connected integrally with the connecting member at the latter's end (13a) facing away from the second leg portion (12) in a transport position, and the locking device (24) comprising a locking member (22) designed to engage with a corresponding locking member (23) provided in the second leg portion (12) in a mounted position.
 9. A window according to claim 8, **characterized in that** the said locking device (24) is essentially perpendicular to the connecting member (13) and extends in a plane parallel with the second leg portion (12).
 10. A window according to any one of the preceding claims, **characterized in that** each of the two leg sections (11a, 11b) of the first leg portion (11) comprises holes (27) for passing through fastening members and/or a flange (30) which is essentially perpendicular to the leg section and is designed for engagement with a corresponding groove provided in the frame of the window (1).
 11. A window according to any one of the preceding claims, **characterized in that** the second leg portion (12) comprises holes (28) for passing through fastening members and/or engagement members (32, 33) designed for engagement with a corresponding mounting bracket of an adjacent window and/or at least

one flap (29) folded in a direction towards the roof structure in a mounted position.

12. A window according to any one of the preceding claims,

characterized in that a baseplate which is essentially perpendicular to the connecting member (13) and extends in a plane parallel with the second leg portion (12) is provided at the end (13a) of the connecting member (13).

13. A mounting bracket (10) for installation of a window according to any one of the claims 1 to 12 in a roof structure, the mounting bracket comprising a first leg portion (11) and a second leg portion (12) essentially perpendicular to the first leg portion (11), where the first leg portion (11) comprises at least one leg section (11a, 11b), where the first leg portion (11) and the second leg portion (12) are interconnected by means of a connecting member (13) in such a way that the second leg portion (12), in a transport position, lies essentially within a volume area delimited outwards by a plane containing the first leg portion (11) and, in a mounted position, lies essentially outside a volume area delimited outwards by a plane containing the first leg portion (11), **characterized in that** the first leg portion (11) comprises two leg sections (11a, 11b), and that the two leg sections (11a, 11b) are interconnected by means of the said connecting member (13), and that the sum of the angles between the connecting member (13) and each of the two leg sections (11a, 11b) amounts to essentially 270 degrees.

14. A mounting bracket according to claim 13, where the first leg portion (11) further comprises a lower (14) and an upper edge (15), and the second leg portion (12) further comprises a lower (16) and an upper side (17), **characterized in that** the first leg portion (11) and the second leg portion (12) are further interconnected by means of the connecting member (13) in such a way that the upper side (17) of the second leg portion (12) faces in the opposite direction of the upper edge (15) of the first leg portion (11) in a transport position of the window, while the upper side (17) of the second leg portion (12) faces in the same direction as the upper edge (15) of the first leg portion (11) in a mounted position of the window.

15. A mounting bracket according to claim 13 or 14, **characterized in that** the connecting member (13) and each of the leg sections (11a, 11b) of the first leg portion (11) are at an angle of 135 degrees to each other.

16. A mounting bracket according to any one of claims 13 to 15, **characterized in that** the said connecting member

(13) interconnecting the first leg portion (11) and the second leg portion (12) is essentially perpendicular to the second leg portion (12), and that the connecting member comprises at least one hole (18) for passing through a fastening device for fastening of the connecting member.

17. A mounting bracket according to any one of claims 13 to 16,

characterized in that the connecting member (13) comprises a first connecting section (19) connected with the first leg portion (11) and a second connecting section (20) connected with the second leg portion (12), and a transition portion (21) integrally interconnecting the first (19) and the second (20) connecting sections, the first and the second connecting sections (19, 20) being in continuation of each other in a transport position, and the first and the second connecting sections being made to overlap each other in a mounted position by swinging about a swinging axis defined by the transition portion.

18. A mounting bracket according to claim 17, **characterized in that** the first connecting section (19) and the second connecting section (20) are of essentially the same dimensions.

19. A mounting bracket according to any one of claims 13 to 18,

characterized in that the connecting member (13) comprises a locking member (22) near the former's end (13a) facing away from the second leg portion (12) in a transport position, the locking member (22) being designed, in a mounted position, to engage with a corresponding locking member (23) provided near the end (13b) of the connecting member adjacent to the second leg portion (12).

20. A mounting bracket according to any one of claims 13 to 18,

characterized in that the connecting member (13) comprises a locking device (24), the locking device being connected integrally with the connecting member at the latter's end (13a) facing away from the second leg portion (12) in a transport position, and the locking device comprising a locking member (22) designed to engage with a corresponding locking member (23) provided in the second leg portion (12) in a mounted position.

21. A mounting bracket according to claim 20, **characterized in that** the said locking device (24) is essentially perpendicular to the connecting member (13) and extends in a plane parallel with the second leg portion (12).

22. A mounting bracket according to any one of claims 13 to 21,

characterized in that each of the two leg sections (11a, 11b) of the first leg portion (11) comprises holes (27) for passing through fastening members and/or a flange (30) which is essentially perpendicular to the leg section (11).

23. A mounting bracket according to any one of claims 13 to 22,

characterized in that the second leg portion (12) comprises holes (28) for passing through fastening members and/or engagement members (32, 33) designed for engagement with a corresponding mounting bracket of an adjacent window and/or at least one flap (29) folded in a direction towards the roof structure in a mounted position.

24. A mounting bracket according to any one of claims 13 to 23,

characterized in that a baseplate which is essentially perpendicular to the connecting member (13) and extends in a plane parallel with the second leg portion (12) is provided at the end (13a) of the connecting member (13).

25. A method for installation of a window according to one or more of claims 1 to 12, comprising the steps of providing a window according to the invention, the window comprising a plurality of mounting brackets, particularly four mounting brackets, according to one or more of claims 13 to 24 and being in a transport position, bringing the window from the transport position to a mounted position by making the second leg portion of each of the mounting brackets lie essentially outside the external limit of the frame of the window, and fastening the window to a roof structure.

26. Use of a mounting bracket according to one or more of claims 13 to 24 for installing a window according to one or more of claims 1 to 12.

27. Use of a mounting bracket according to one or more of claims 13 to 24 for protecting a corner joint of a window according to one or more of claims 1 to 12.

Patentansprüche

1. Fenster (1) zum Einbau in einen Dachaufbau umfassend einen Rahmen mit einem oberen Element (2), einem unteren Element (3) und zwei Seitenelementen (4, 5), die gegenseitig in Eckverbindungen (6) verbunden sind und zusammen eine äußere Begrenzung entlang der äußeren Seiten der Rahmenelemente bilden, und eine Vielzahl von Montierungsbeschläge (10), wobei jeder Montierungsbeschlag (10) einen ersten Schenkelbereich (11) zur Verbindung mit einem zugeordneten Rahmenelement (2, 3, 4, 5) und einen zweiten Schenkelbereich (12), der

in der montierten Stellung im Wesentlichen senkrecht zu dem ersten Schenkelbereich (11) ist, zur Befestigung an dem Dachaufbau aufweist, und wobei der erste Schenkelbereich (11) wenigstens einen Schenkelabschnitt (11a, 11b) zur Verbindung mit einem Rahmenelement (2, 3, 4, 5) an einer Eckverbindung (6) aufweist, wobei der erste Schenkelbereich (11) und der zweite Schenkelbereich (12) miteinander durch ein Verbindungselement (13) in einer solchen Weise verbunden sind, dass in einer Transportstellung des Fensters (1) der zweite Schenkelbereich (12) im Wesentlichen innerhalb der äußeren Begrenzung des Rahmens ist, während in einer montierten Stellung des Fensters (1) der zweite Schenkelbereich (12) im Wesentlichen außerhalb der äußeren Begrenzung des Rahmens ist, **dadurch gekennzeichnet, dass** der erste Schenkelbereich (11) zwei Schenkelabschnitte (11a, 11b) aufweist und dass die zwei Schenkelabschnitte (11a, 11b) miteinander durch das Verbindungselement (13) verbunden sind und dass die Summe der Winkel zwischen dem Verbindungselement (13) und jedem der zwei Schenkelabschnitte (11a, 11b) im Wesentlichen 270 Grad beträgt.

2. Fenster nach Anspruch 1, wobei der erste Schenkelbereich (11) ferner eine untere (14) und eine obere Kante (15) aufweist und der zweite Schenkelbereich (12) ferner eine untere (16) und eine obere Seite (17) aufweist, **dadurch gekennzeichnet, dass** der erste Schenkelbereich (11) und der zweite Schenkelbereich (12) ferner mit einander durch das Verbindungselement (13) in einer solchen Weise verbunden sind, dass in einer Transportstellung des Fensters die obere Seite (17) des zweiten Schenkelbereichs (12) in die entgegengesetzte Richtung der oberen Kante (15) des ersten Schenkelbereichs (11) weist, während in einer montierten Stellung des Fensters die obere Seite (17) des zweiten Schenkelbereichs (12) in dieselbe Richtung wie die obere Kante (15) des ersten Schenkelbereichs (11) weist.

3. Fenster nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** das Verbindungselement (13) und jeder der Schenkelabschnitte (11a, 11b) des ersten Schenkelbereichs (11) in einem Winkel von 135 Grad zueinander angeordnet sind.

4. Fenster nach einem der Ansprüche 1 bis 3, **dadurch gekennzeichnet, dass** das Verbindungselement (13), das den ersten Schenkelbereich (11) und den zweiten Schenkelbereich (12) verbindet, im Wesentlichen senkrecht zu dem zweiten Schenkelbereich (12) ist, dass jede Eckverbindung (6) eine Abschrägung (7) aufweist, wobei die Abschrägung (7) angepasst ist für eine Anlage des Verbindungselements (13), und dass das Verbindungselement wenigstens eine Bohrung (18) für einen Durchgang einer Befestigung aufweist.

stigungseinrichtung zum Befestigen des Verbindungselements an der Abschrägung aufweist.

5. Fenster nach einem der Ansprüche 1 bis 4, **dadurch gekennzeichnet, dass** das Verbindungselement (13) einen ersten Verbindungsabschnitt (19), der mit dem ersten Schenkelbereich (11) verbunden ist, und einen zweiten Verbindungsabschnitt (20), der mit dem zweiten Schenkelbereich (12) verbunden ist, und einen Übergangsbereich (21), der integral den ersten und den zweiten Verbindungsabschnitt miteinander verbindet, aufweist, wobei der erste und der zweite Verbindungsabschnitt (19, 20) in einer Transportstellung ineinander übergehen und wobei der erste und der zweite Verbindungsabschnitt hergestellt sind, um miteinander in einer montierten Stellung zu überlappen durch Schwenken um eine Schwenkachse, die durch den Übergangsbereich (21) gebildet ist.
6. Fenster nach Anspruch 5, **dadurch gekennzeichnet, dass** der erste Verbindungsbereich (19) und der zweite Verbindungsbereich (20) im Wesentlichen dieselben Abmessungen haben.
7. Fenster nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das Verbindungselement (13) ein Verriegelungselement (22) nahe des Endes (13a) von Ersterem aufweist, das in einer Transportstellung weg von dem zweiten Schenkelbereich (12) weist, wobei das Verriegelungselement (22) ausgestaltet ist, um in einer montierten Stellung mit einem entsprechenden Verriegelungselement (23) einzugreifen, das nahe dem Ende (13b) des Verriegelungselements benachbart zu dem zweiten Schenkelbereich (12) angeordnet ist.
8. Fenster nach einem der Ansprüche 1 bis 6, **dadurch gekennzeichnet, dass** das Verbindungselement (13) eine Verriegelungseinrichtung (24) aufweist, wobei die Verriegelungseinrichtung integral mit dem Verbindungselement an dem Ende (13a) des Letzteren verbunden ist, das in einer Transportstellung weg von dem zweiten Schenkelbereich (12) weist, und wobei die Verriegelungseinrichtung (24) ein Verriegelungselement (22) aufweist, das angepasst ist, um in einer montierten Stellung mit einem entsprechenden Verriegelungselement (23) einzugreifen, das in dem zweiten Schenkelbereich (12) vorgesehen ist.
9. Fenster nach Anspruch 8, **dadurch gekennzeichnet, dass** die Verriegelungseinrichtung (24) im Wesentlichen senkrecht zu dem Verbindungselement (13) ist und sich in einer Ebene parallel zu dem zweiten Schenkelbereich (12) erstreckt.

10. Fenster nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** jeder der zwei Schenkelabschnitte (11a, 11b) des ersten Schenkelbereichs (11) Bohrungen (27) für einen Durchgang eines Befestigungselements und/oder einen Flansches (30) aufweist, der im Wesentlichen senkrecht zu dem Schenkelabschnitt ist und angepasst ist für einen Eingriff mit einer entsprechenden Nut, die in dem Rahmen des Fensters (1) vorgesehen ist.

11. Fenster nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der zweite Schenkelbereich (12) Bohrungen (28) für einen Durchgang von Befestigungselementen und/oder Eingriffselemente (32, 33), die ausgestaltet sind, um in einer montierten Stellung mit einem entsprechenden Montierungsbeschlag eines benachbarten Fensters einzugreifen, und/oder wenigstens eine Lasche (29) aufweist, die in einer Richtung zu dem Dachaufbau gebogen ist.

12. Fenster nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** eine Grundplatte, die im Wesentlichen senkrecht zu dem Verbindungselement (13) ist und sich in einer Ebene parallel mit dem zweiten Schenkelbereich erstreckt, an dem Ende (13a) des Verbindungselements (13) vorgesehen ist.

13. Montierungsbeschlag (10) zum Einbau eines Fensters nach einem der Ansprüche 1 bis 12 in einen Dachaufbau, wobei der Montierungsbeschlag einen ersten Schenkelbereich (11) und einen zweiten Schenkelbereich (12), der im Wesentlichen senkrecht zu dem ersten Schenkelbereich (11) ist, aufweist, wobei der erste Schenkelbereich (11) wenigstens einen Schenkelabschnitt (11a, 11b) umfasst, wobei der erste Schenkelbereich (11) und der zweite Schenkelbereich (12) mittels eines Verbindungselements (13) in einer solchen Weise verbunden sind, dass in einer Transportstellung der zweite Schenkelbereich (12) im Wesentlichen in einem Volumenbereich liegt, der nach außen durch eine Ebene begrenzt ist, die den ersten Schenkelbereich (11) enthält und in einer montierten Stellung im Wesentlichen außerhalb eines Volumenbereichs liegt, der nach außen durch eine Ebene begrenzt wird, die den ersten Schenkelbereich (11) enthält, **dadurch gekennzeichnet, dass** der erste Schenkelbereich (11) zwei Schenkelabschnitte (11a, 11b) umfasst und dass die zwei Schenkelabschnitte (11a, 11b) miteinander mittels des Verbindungselements (13) verbunden sind und dass die Summe der Winkel zwischen dem Verbindungselement (13) und jedem der zwei Schenkelabschnitte (11a, 11b) im Wesentlichen 270 Grad beträgt.

14. Montierungsbeschlag nach Anspruch 13, wobei der

- erste Schenkelbereich (11) ferner eine untere (14) und eine obere Kante (15) aufweist und wobei der zweite Schenkelbereich (12) ferner eine untere (16) und eine obere Seite (17) aufweist, **dadurch gekennzeichnet, dass** der erste Schenkelbereich (11) und der zweite Schenkelbereich (12) ferner mittels des Verbindungselements (13) miteinander in einer solchen Weise verbunden sind, dass in einer Transportstellung des Fensters die obere Seite (17) des zweiten Schenkelbereichs (12) in die entgegengesetzte Richtung der oberen Kante (15) des ersten Schenkelbereichs (11) weist, während in einer montierten Stellung des Fensters die obere Seite (17) des zweiten Schenkelbereichs (12) in dieselbe Richtung wie die obere Kante (15) des ersten Schenkelbereichs (11) weist.
15. Montierungsbeschlag nach Anspruch 13 oder 14, **dadurch gekennzeichnet, dass** das Verbindungselement (13) und jeder der Schenkelabschnitte (11a, 11b) des ersten Schenkelbereichs (11) in einem Winkel von 135 Grad zueinander angeordnet sind.
16. Montierungsbeschlag nach einem der Ansprüche 13 bis 15, **dadurch gekennzeichnet, dass** das Verbindungselement (13), das den ersten Schenkelbereich (11) und den zweiten Schenkelbereich (12) miteinander verbindet, im Wesentlichen senkrecht zu dem zweiten Schenkelbereich (12) ist und dass das Verbindungselement wenigstens eine Bohrung (18) für einen Durchgang einer Befestigungseinrichtung zum Befestigen des Verbindungselements aufweist.
17. Montierungsbeschlag nach einem der Ansprüche 13 bis 16, **dadurch gekennzeichnet, dass** das Verbindungselement (13) einen ersten Verbindungsabschnitt (19), der mit dem ersten Schenkelbereich (11) verbunden ist, und einen zweiten Verbindungsabschnitt (20) aufweist, der mit dem zweiten Schenkelbereich (12) verbunden ist, und einen Übergangsbereich (21), der den ersten (19) und den zweiten (20) Verbindungsabschnitt integral miteinander verbindet, wobei der erste und der zweite Verbindungsabschnitt (19, 20) in einer Transportstellung in Verlängerung voneinander angeordnet sind und wobei der erste und der zweite Verbindungsabschnitt hergestellt sind, um in einer montierten Stellung miteinander zu überlappen durch Schwenken um eine Schwenkachse, die durch den Übergangsbereich gebildet ist.
18. Montierungsbeschlag nach Anspruch 17, **dadurch gekennzeichnet, dass** der erste Verbindungsabschnitt (19) und der zweite Verbindungsabschnitt (20) im Wesentlichen dieselben Abmessungen haben.
19. Montierungsbeschlag nach einem der Ansprüche 13 bis 18, da-durch **gekennzeichnet**, dass das Verbindungselement (13) ein Verriegelungselement (22) nahe des Endes (13a) des Ersteren, das in einer Transportstellung weg von dem zweiten Schenkelbereich (12) weist, aufweist, wobei das Verriegelungselement (22) ausgestaltet ist, um in einer montierten Stellung mit einem entsprechenden Verriegelungselement (23) einzugreifen, das nahe dem Ende (13b) des Verbindungselements benachbart zu dem zweiten Schenkelbereich (12) vorgesehen ist.
20. Montierungsbeschlag nach einem der Ansprüche 13 bis 18, **dadurch gekennzeichnet, dass** das Verbindungselement (13) eine Verriegelungseinrichtung (24) aufweist, wobei die Verriegelungseinrichtung integral mit dem Verbindungselement an dem Ende (13a) des Letzteren verbunden ist, das in einer Transportstellung weg von dem zweiten Schenkelbereich (12) weist, und die Verriegelungseinrichtung ein Verriegelungselement (22) aufweist, das angepasst ist, um in einer montierten Stellung mit einem entsprechenden Verriegelungselement (23), das an dem zweiten Schenkelbereich (12) vorgesehen ist, einzugreifen.
21. Montierungsbeschlag nach Anspruch 20, **dadurch gekennzeichnet, dass** die Verriegelungseinrichtung (24) im Wesentlichen senkrecht zu dem Verbindungselement (13) ist und sich in einer Ebene parallel mit dem zweiten Schenkelbereich (12) erstreckt.
22. Montierungsbeschlag nach einem der Ansprüche 13 bis 21, **dadurch gekennzeichnet, dass** jeder der zwei Schenkelabschnitte (11a, 11b) des ersten Schenkelbereichs (11) Bohrungen (27) für einen Durchgang von Befestigungselementen und/oder einen Flansch (30) aufweist, der im Wesentlichen senkrecht zu dem Schenkelabschnitt (11) ist.
23. Montierungsbeschlag nach einem der Ansprüche 13 bis 22, da-durch **gekennzeichnet**, dass der zweite Schenkelbereich (12) Bohrungen (28) für einen Durchgang von Befestigungselementen und/oder Eingriffselemente (32, 33), die für einen Eingriff mit einem entsprechenden Montierungsbeschlag eines benachbarten Fensters ausgestaltet sind, und/oder wenigstens eine Lasche (29) aufweist, die in einer montierten Stellung in Richtung auf den Dachaufbau gebogen ist.
24. Montierungsbeschlag nach einem der Ansprüche 13 bis 23, **dadurch gekennzeichnet, dass** eine Grundplatte, die im Wesentlichen senkrecht zu dem Verbindungselement (13) ist und sich in einer Ebene parallel zu dem zweiten Schenkelbereich (12) erstreckt, an dem Ende (13a) des Verbindungsele-

ments (13) vorgesehen ist.

25. Verfahren zum Einbau eines Fensters nach einem oder mehreren der Ansprüche 1 bis 12, umfassend die Schritte des Bereitstellens eines Fensters gemäß der Erfindung, wobei das Fenster eine Vielzahl von Montierungsbeschläge, insbesondere vier Montierungsbeschlag, nach einem oder mehreren der Ansprüche 13 bis 24 aufweist und in einer Transportstellung ist, des Überführens des Fensters von der Transportstellung in eine montierte Stellung durch Anordnen des zweiten Schenkelbereichs von jedem der Montierungsbeschläge im Wesentlichen außerhalb der äußeren Begrenzung des Rahmens des Fensters und des Befestigens des Fensters an einem Dachaufbau.
26. Verwendung eines Montierungsbeschlags nach einem oder mehreren der Ansprüche 13 bis 24 zum Einbau eines Fensters nach einem oder mehreren der Ansprüche 1 bis 12.
27. Verwendung eines Montierungsbeschlags nach einem oder mehreren der Ansprüche 13 bis 24 zum Schützen einer Eckverbindung eines Fensters nach einem oder mehreren der Ansprüche 1 bis 12.

Revendications

1. Fenêtre (1) destinée à une installation dans une structure de toit, comprenant un cadre doté d'un élément supérieur (2), d'un élément inférieur (3) et de deux éléments latéraux (4, 5) raccordés mutuellement dans des assemblages en angle (6) et constituant ensemble une limite externe le long des côtés extérieurs des éléments de cadre, et une pluralité de supports de montages (10), dans laquelle chaque support de montage (10) comporte une première partie de patte (11) permettant un raccordement avec un élément de cadre associé (2, 3, 4, 5) et une seconde partie de patte (12) essentiellement perpendiculaire à la première partie de patte (11) dans la position de montage pour être fixée à la structure de toit, et dans laquelle la première partie de patte (11) comprend au moins une section de patte (11a, 11b) permettant un raccordement avec un élément de cadre (2, 3, 4, 5) au niveau d'un assemblage en angle (6), dans laquelle la première partie de patte (11) et la seconde partie de patte (12) sont interconnectées au moyen d'un élément de raccordement (13) d'une manière telle que la seconde partie de patte (12) se trouve essentiellement à l'intérieur de la limite externe du cadre dans une position de transport de la fenêtre (1), tandis que la seconde partie de patte (12) se trouve essentiellement à l'extérieur de la limite externe du cadre dans une position montée de la fenêtre (1), **caractérisée en ce que** la pre-

mière partie de patte (11) comporte deux sections de patte (11a, 11b), et **en ce que** les deux sections de patte (11a, 11b) sont interconnectées au moyen dudit élément de raccordement (13), et **en ce que** la somme des angles formés entre l'élément de raccordement (13) et chacune des deux sections de patte (11a, 11b) s'élève à 270 degrés essentiellement.

2. Fenêtre selon la revendication 1, dans laquelle la première partie de patte (11) comprend, de plus, un bord inférieur (14) et bord supérieur (15), et la seconde partie de patte (12) comporte, de plus, un côté inférieur (16) et supérieur (17), **caractérisée en ce que** la première partie de patte (11) et la seconde partie de patte (12) sont, de plus, interconnectées au moyen de l'élément de raccordement (13) d'une manière telle que le côté supérieur (17) de la seconde partie de patte (12) regarde dans la direction opposée du bord supérieur (15) de la première partie de patte (11) dans une position de transport de la fenêtre, tandis que le côté supérieur (17) de la seconde partie de patte (12) regarde dans la même direction que le bord supérieur (15) de la première partie de patte (11) dans une position montée de la fenêtre.
3. Fenêtre selon la revendication 1 ou 2, **caractérisée en ce que** l'élément de raccordement (13) et chacune des sections de patte (11a, 11b) de la première partie de patte (11) forment un angle de 135 degrés l'un par rapport à l'autre.
4. Fenêtre selon l'une quelconque des revendications 1 à 3, **caractérisée en ce que** ledit élément de raccordement (13) interconnectant la première partie de patte (11) et la seconde partie de patte (12) est essentiellement perpendiculaire à la seconde partie de patte (12), **en ce que** chaque assemblage en angle (6) présente un chanfrein (7), le chanfrein (7) étant conçu en vue de former une butée pour l'élément de raccordement (13), et **en ce que** l'élément de raccordement comprend au moins un trou (18) pour y faire passer à travers un dispositif de fixation permettant de fixer l'élément de raccordement sur le chanfrein.
5. Fenêtre selon l'une quelconque des revendications 1 à 4, **caractérisée en ce que** l'élément de raccordement (13) comprend une première section de raccordement (19) raccordée à la première partie de patte (11) et une seconde section de raccordement (20) raccordée à la seconde section de patte (12), et une partie de transition (21) interconnectant solidement les première et seconde sections de raccordement, les première et seconde sections de raccordement (19, 20) étant en prolongement l'une de l'autre dans une position de transport, et les première

et seconde sections de raccordement étant fabriquées en vue de se chevaucher l'une l'autre dans une position montée en pivotant autour d'un axe de pivotement défini par la partie de transition (21).

6. Fenêtre selon la revendication 5, **caractérisée en ce que** la première section de raccordement (19) et la seconde section de raccordement (20) présentent essentiellement les mêmes dimensions.
7. Fenêtre selon l'une quelconque des revendications précédentes, **caractérisée en ce que** l'élément de raccordement (13) comporte un élément de verrouillage (22) à proximité de l'extrémité de l'élément précédent (13a) s'éloignant de la seconde partie de patte (12) dans une position de transport, l'élément de verrouillage (22) étant conçue, dans une position montée, pour s'engager avec un élément de verrouillage correspondant (23) prévu près de l'extrémité (13b) de l'élément de raccordement adjacent à la seconde partie de patte (12).
8. Fenêtre selon l'une quelconque des revendications 1 à 6, **caractérisée en ce que** l'élément de raccordement (13) comprend un dispositif de verrouillage (24), le dispositif de verrouillage étant raccordé solidairement à l'élément de raccordement au niveau de l'extrémité de ce dernier (13a) s'éloignant de la seconde partie de patte (12) dans une position de transport, et le dispositif de verrouillage (24) comportant un élément de verrouillage (22) conçu pour s'engager avec un élément de verrouillage correspondant (23) prévu dans la seconde partie de patte (12) dans une position montée.
9. Fenêtre selon la revendication 8, **caractérisée en ce que** ledit dispositif de verrouillage (24) est essentiellement perpendiculaire à l'élément de raccordement (13) et s'étend dans un plan parallèle à la seconde partie de patte (12).
10. Fenêtre selon l'une quelconque des revendications précédentes, **caractérisée en ce que** chacune des deux sections de patte (11a, 11b) de la première partie de patte (11) comporte des trous (27) pour y faire passer des éléments de fixation et/ou un rebord (30) qui est essentiellement perpendiculaire à la section de patte et qui est conçu pour s'engager avec une gorge correspondante prévue dans le cadre de la fenêtre (1).
11. Fenêtre selon l'une quelconque des revendications précédentes, **caractérisée en ce que** la seconde partie de patte (12) comporte des trous (28) pour y faire passer des éléments de fixation et/ou des éléments d'engagement (32, 33) conçus pour s'engager avec un support de montage correspondant d'une fenêtre adjacente et/ou d'au moins un volet

(29) plié dans une direction orientée vers la structure de toit dans une position montée.

12. Fenêtre selon l'une quelconque des revendications précédentes, **caractérisée en ce que** une plaque de base qui est essentiellement perpendiculaire à l'élément de raccordement (13) et qui s'étend dans un plan parallèle à la seconde partie de patte (12) est fournie au niveau de l'extrémité (13a) de l'élément de raccordement (13).
13. Support de montage (10) permettant l'installation d'une fenêtre selon l'une quelconque des revendications 1 à 12 dans une structure de toit, le support de montage comportant une première partie de patte (11) et une seconde partie de patte (12) essentiellement perpendiculaire à la première partie de patte (11), dans lequel la première partie de patte (11) comprend au moins une section de patte (11a, 11b), dans lequel la première section de patte (11) et la seconde partie de patte (12) sont interconnectées au moyen d'un élément de raccordement (13) d'une manière telle que la seconde partie de patte (12), dans une position de transport, repose essentiellement à l'intérieur d'une zone de volume délimitée vers l'extérieur par un plan contenant la première partie de patte (11) et, dans une position montée, repose essentiellement à l'extérieur d'une zone de volume délimitée vers l'extérieur par un plan contenant la première partie de patte (11), **caractérisée en ce que** la première partie de patte (11) comprend deux sections de patte (11a, 11b), et **en ce que** les deux sections de patte (11a, 11b) sont interconnectées au moyen dudit élément de raccordement (13), et **en ce que** la somme des angles formés entre l'élément de raccordement (13) et chacune des deux sections de patte (11a, 11b) s'élève essentiellement à 270 degrés.
14. Support de montage selon la revendication 13, dans lequel la première partie de patte (11) comporte, de plus, un bord inférieur (14) et un bord supérieur (15), et dans lequel la seconde partie de patte (12) comprend, de plus, un côté inférieur (16) et un côté supérieur (17), **caractérisé en ce que** la première partie de patte (11) et la seconde partie de patte (12) sont, de plus, interconnectées au moyen de l'élément de raccordement (13) d'une manière telle que le côté supérieur (17) de la seconde partie de patte (12) regarde dans la direction opposée du bord supérieur (15) de la première partie de patte (11) dans une position de transport de la fenêtre, alors que le côté supérieur (17) de la seconde partie de patte (12) regarde dans la même direction que le bord supérieur (15) de la première partie de patte (11) dans une position montée de la fenêtre.
15. Support de montage selon la revendication 13 ou

- 14, **caractérisé en ce que** l'élément de raccordement (13) et chacune des sections de patte (11a, 11b) de la première partie de patte (11) formant un angle de 135 degrés l'un par rapport à l'autre.
16. Support de montage selon l'une quelconque des revendications 13 à 15, **caractérisé en ce que** ledit élément de raccordement (13) interconnectant la première partie de patte (11) et la seconde partie de patte (12) est essentiellement perpendiculaire à la seconde partie de patte (12), et **en ce que** l'élément de raccordement comporte au moins un trou (18) pour y faire passer un dispositif de fixation pour une fixation de l'élément de raccordement.
17. Support de montage selon l'une quelconque des revendications 13 à 16, **caractérisé en ce que** l'élément de raccordement (13) comprend une première section de raccordement (19) raccordée à la première partie de patte (11) et une seconde section de raccordement (20) raccordée à la seconde partie de patte (12), et une partie de transition (21) interconnectant de façon solidaire la première (19) et la seconde (20) sections de raccordement, les première et seconde sections de raccordement (19, 20) se trouvant en prolongement l'une de l'autre dans une position de transport, et les première et seconde sections de raccordement étant réalisées pour se chevauchant l'une l'autre dans une position montée par le fait d'un pivotement autour d'un axe de pivotement défini par la partie de transition.
18. Support de montage selon la revendication 17, **caractérisé en ce que** la première section de raccordement (19) et la seconde section de raccordement (20) présentent essentiellement les mêmes dimensions.
19. Support de montage selon l'une quelconque des revendications 13 à 18, **caractérisé en ce que** l'élément de raccordement (13) comporte un élément de verrouillage (22) près de l'extrémité de l'élément précédent (13a) s'éloignant de la seconde partie de patte (12) dans une position de transport, l'élément de verrouillage (22) étant conçu, dans une position montée, pour s'engager avec un élément de verrouillage correspondant (23) prévu près de l'extrémité (13b) de l'élément de raccordement adjacent à la seconde partie de patte (12).
20. Support de montage selon l'une quelconque des revendications 13 à 18, **caractérisé en ce que** l'élément de raccordement (13) comporte un dispositif de verrouillage (24), le dispositif de verrouillage étant raccordé de façon intégrée avec l'élément de raccordement au niveau de l'extrémité de ce dernier (13a) s'éloignant à partir de la seconde partie de patte (12) dans une position de transport, et le dispositif de verrouillage comportant un élément de verrouillage (22) conçu pour s'engager avec un élément de verrouillage correspondant (23) prévu dans la seconde partie de patte (12) dans une position montée.
21. Support de montage selon la revendication 20, **caractérisé en ce que** ledit dispositif de verrouillage (24) est essentiellement perpendiculaire à l'élément de raccordement (13) et s'étend dans un plan parallèle à la seconde partie de patte (12).
22. Support de montage selon l'une quelconque des revendications 13 à 21, **caractérisé en ce que** chacune des deux sections de patte (11a, 11b) de la première partie de patte (11) comporte des trous (27) pour y faire passer des éléments de fixation et/ou un rebord (30) qui est essentiellement perpendiculaire à la section de patte (11).
23. Support de montage selon l'une quelconque des revendications 13 à 22, **caractérisé en ce que** la seconde partie de patte (12) comporte des trous (28) pour y faire passer des éléments de fixation et/ou des éléments d'engagement (32, 33) conçus pour s'engager avec un support de montage correspondant d'une fenêtre adjacente et/ou au moins un volet (29) plié dans une direction orientée vers la structure de toit dans une position montée.
24. Support de montage selon l'une quelconque des revendications 13 à 23, **caractérisé en ce qu'**une plaque de base qui est essentiellement perpendiculaire à l'élément de raccordement (13) et qui s'étend dans un plan parallèle à la seconde partie de patte (12) est fournie au niveau de l'extrémité (13a) de l'élément de raccordement (13).
25. Procédé permettant l'installation d'une fenêtre selon l'une ou plusieurs des revendications 1 à 12, comprenant les étapes consistant à fournir une fenêtre selon l'invention, la fenêtre comprenant une pluralité de supports de montage, particulièrement quatre supports de montage, selon une ou plusieurs des revendications 13 à 24 et étant dans une position de transport, en faisant passer la fenêtre de la position de transport à la position montée, en faisant que la seconde partie de patte de chacun des supports de montage repose essentiellement à l'extérieur de la limite externe du cadre de la fenêtre, et en fixant la fenêtre à une structure de toit.
26. Utilisation d'un support de montage selon l'une ou plusieurs des revendications 13 à 24 permettant d'installer une fenêtre selon une ou plusieurs des revendications 1 à 12.
27. Utilisation d'un support de montage selon l'une ou plusieurs des revendications 13 à 24 permettant de

protéger un assemblage en angle d'une fenêtre selon l'une ou plusieurs des revendications 1 à 12.

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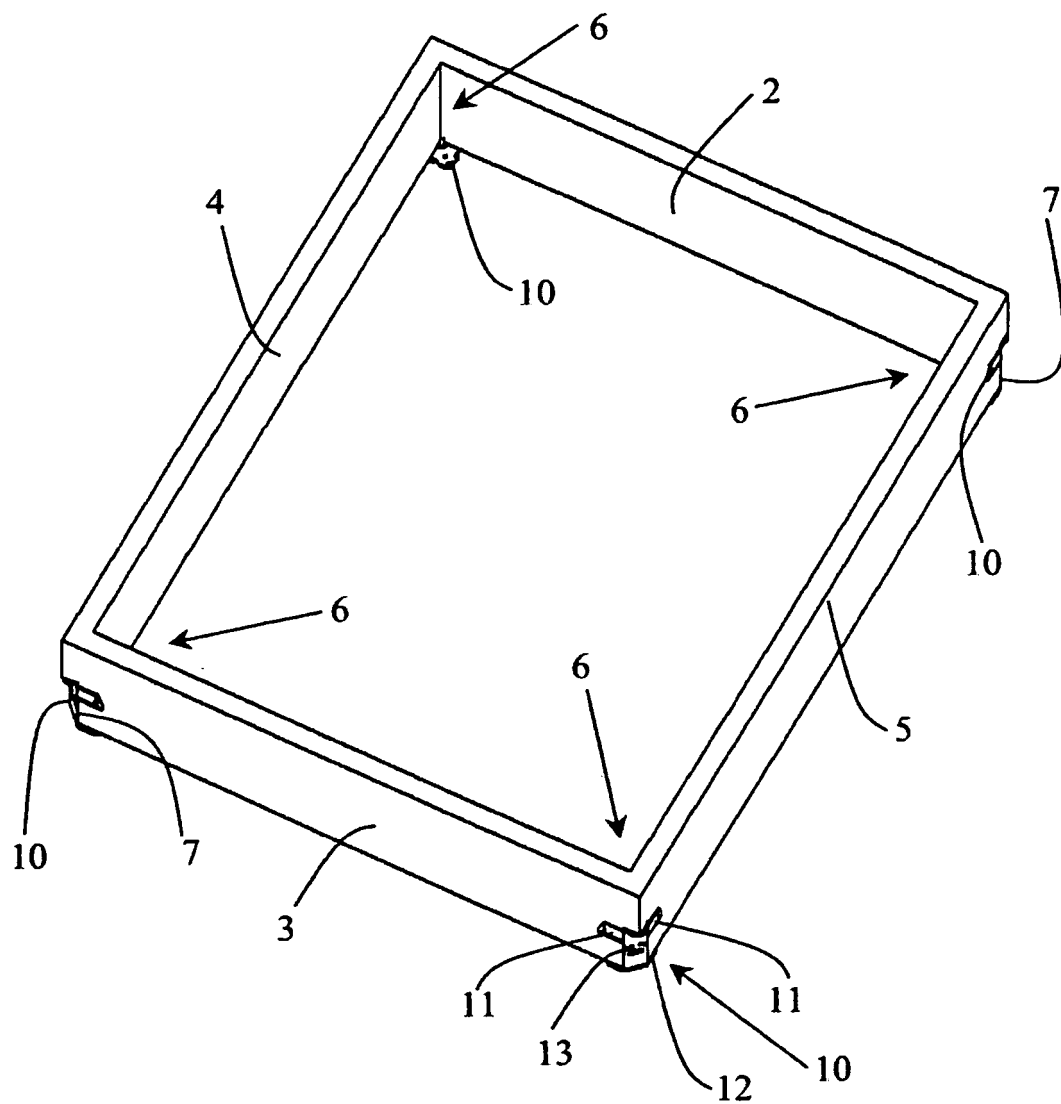


Fig. 1

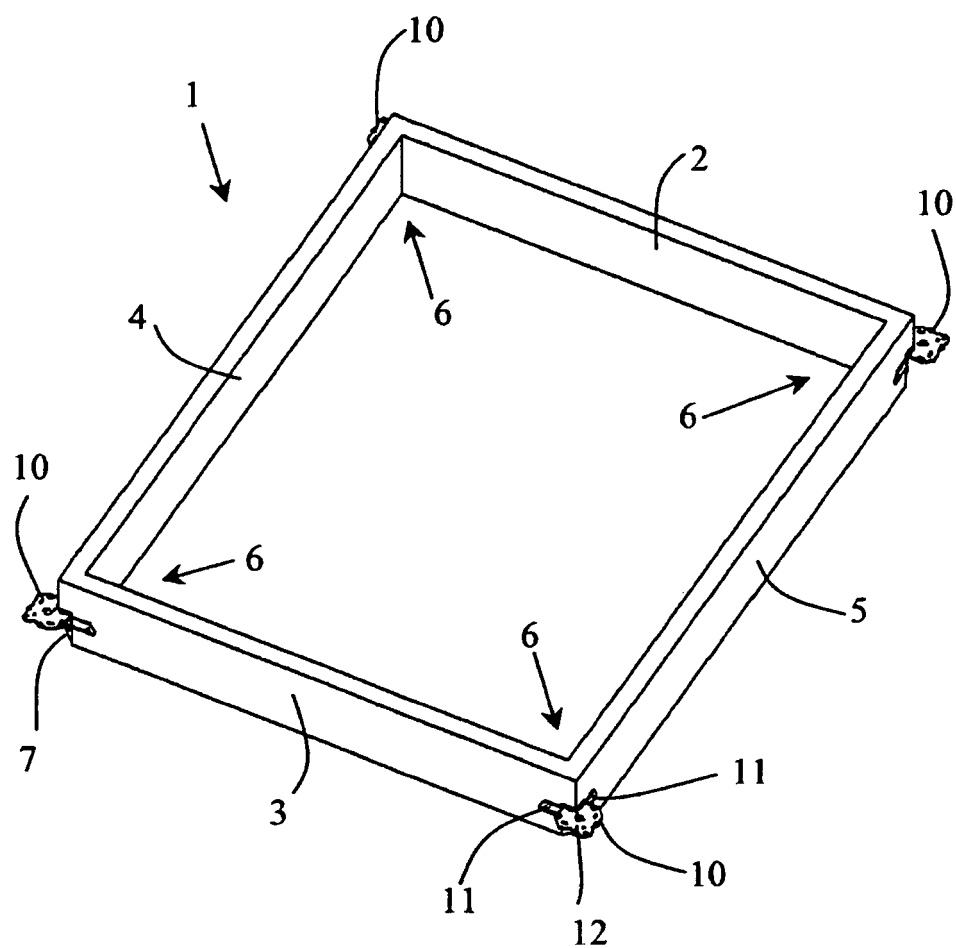


Fig. 2

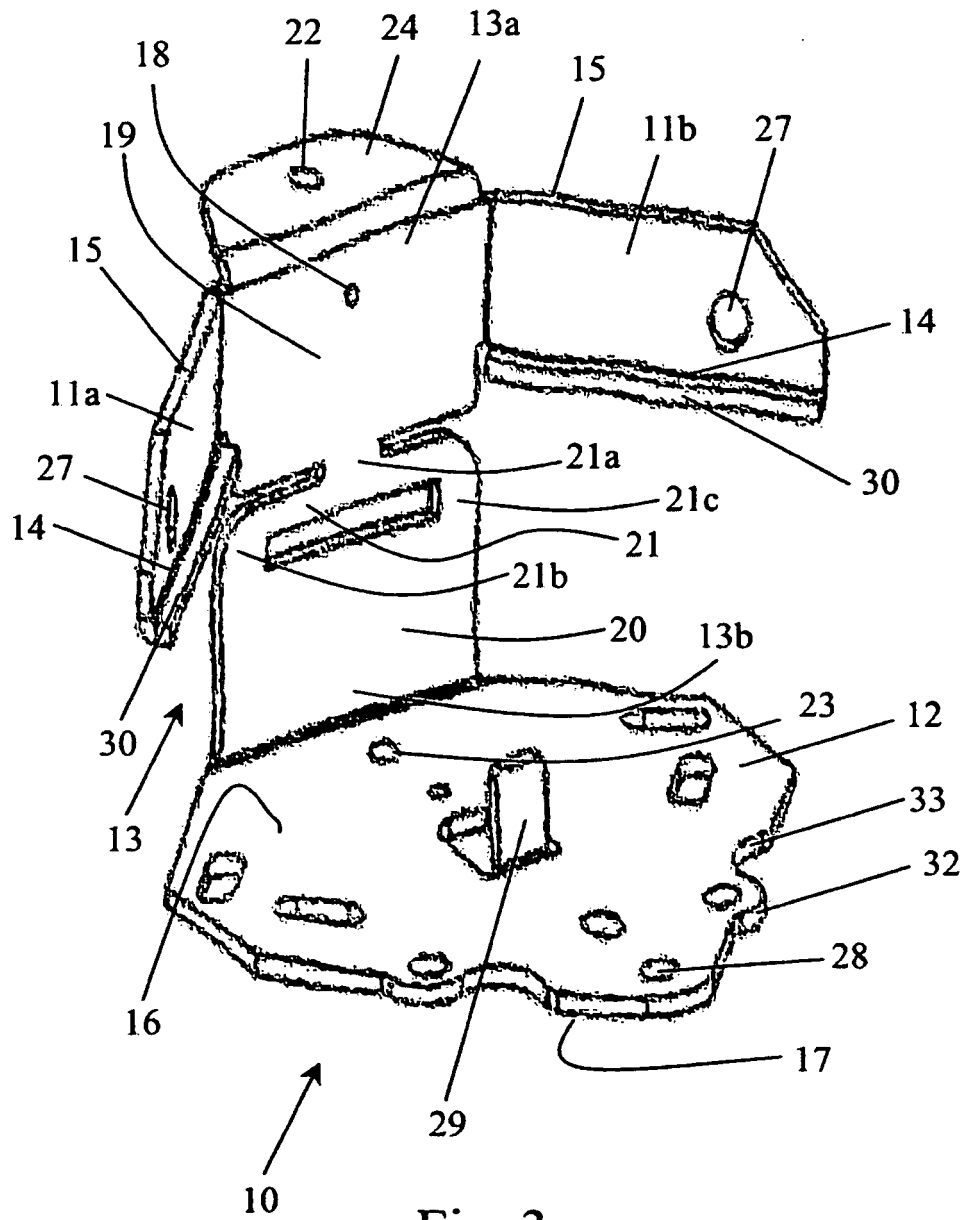


Fig. 3

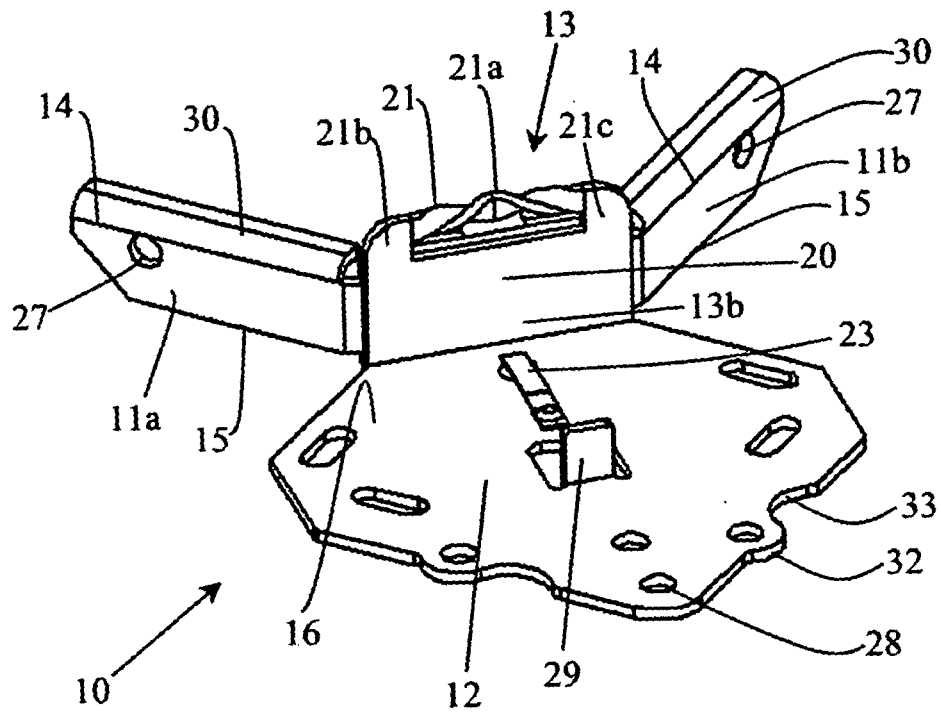


Fig. 4A

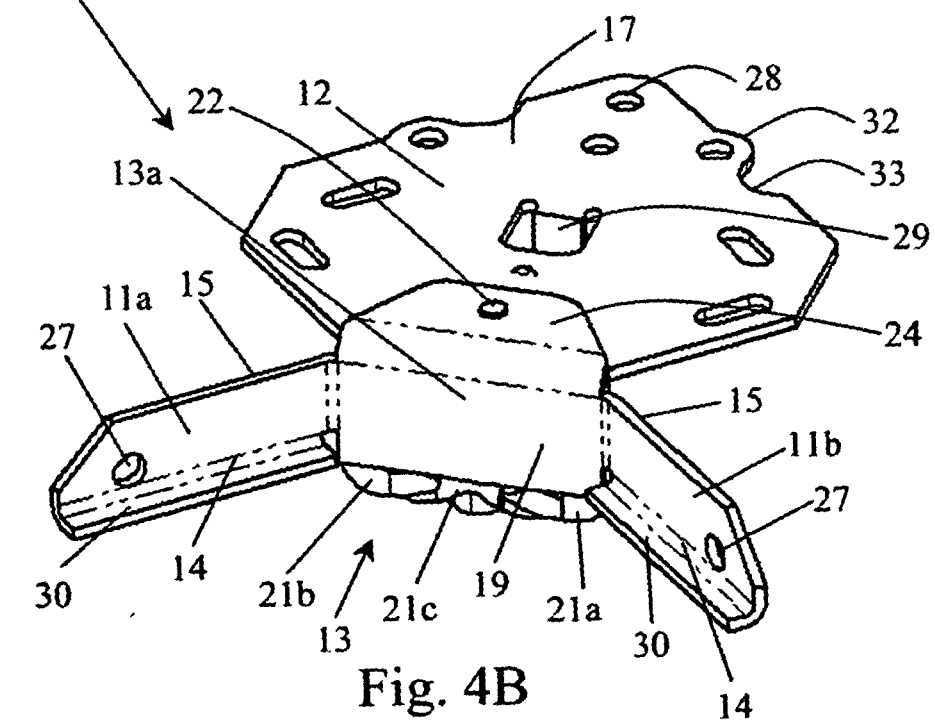


Fig. 4B

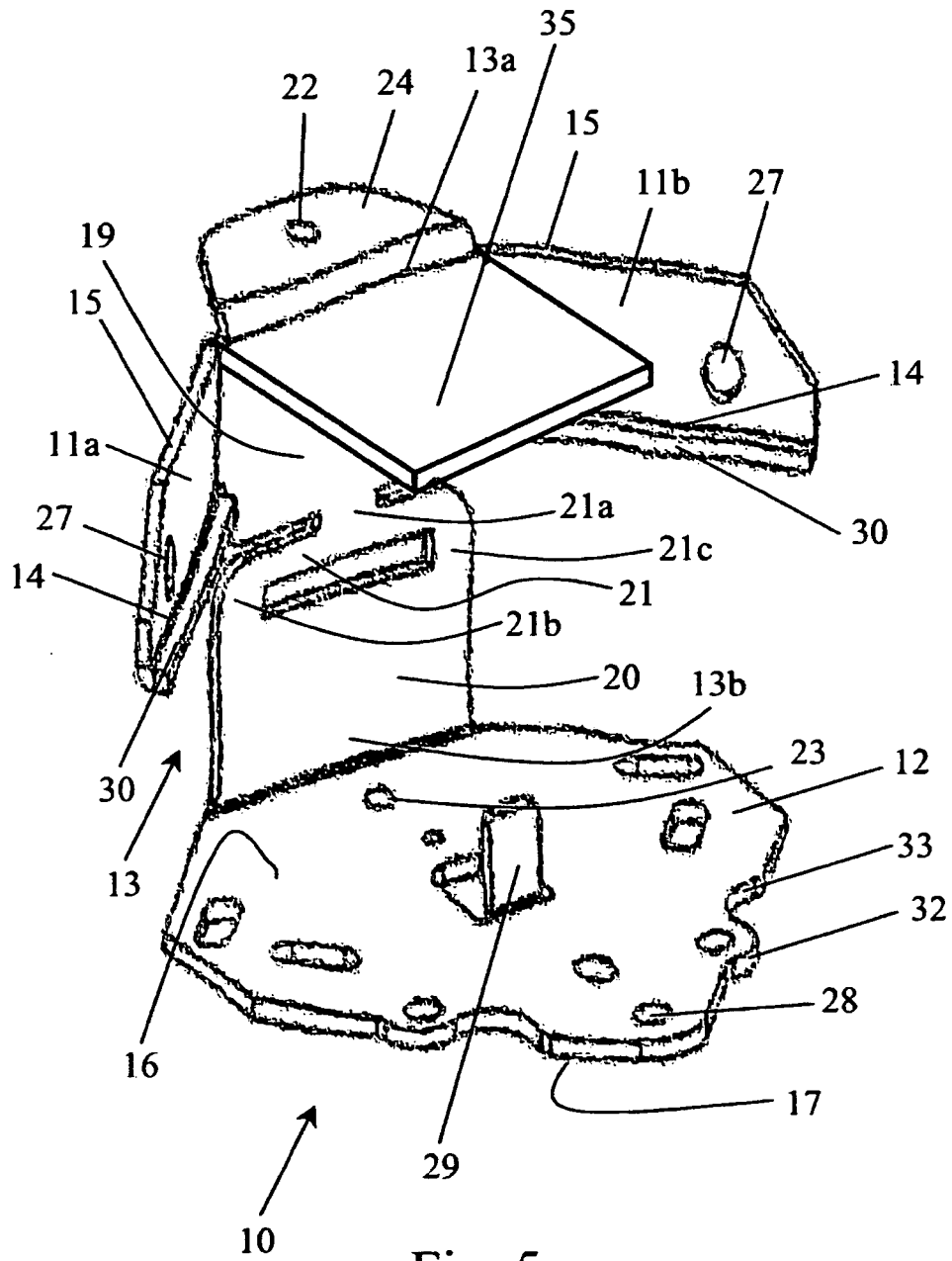


Fig. 5

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- US 6629391 B1 [0002]
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