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(54) Improved fascia assembly

(57) An improved assembly for mounting a fascia (60,87,115,121) to a structure such as a building. The improved assembly includes an elongate rail element (10,22,40,67,96,117) for fixing to the structure, the rail element having fastening means (18,24,25,44,100,101) distributed along its length. The assembly also includes a plurality of bracket elements (45,69,105,119), each bracket element having means (49,73,73a,104) for co-operating with the fastening means to effect securement of each bracket element to the rail element and further having means (47a,47b,71a,71b) for engaging the fascia. The improved assembly may also include an elongate fascia panel (60,87,115,121) for mounting to the structure via the engaging means. A concealed gutter (50,76,106) may be supported intermediate the rail element and the engaging means.

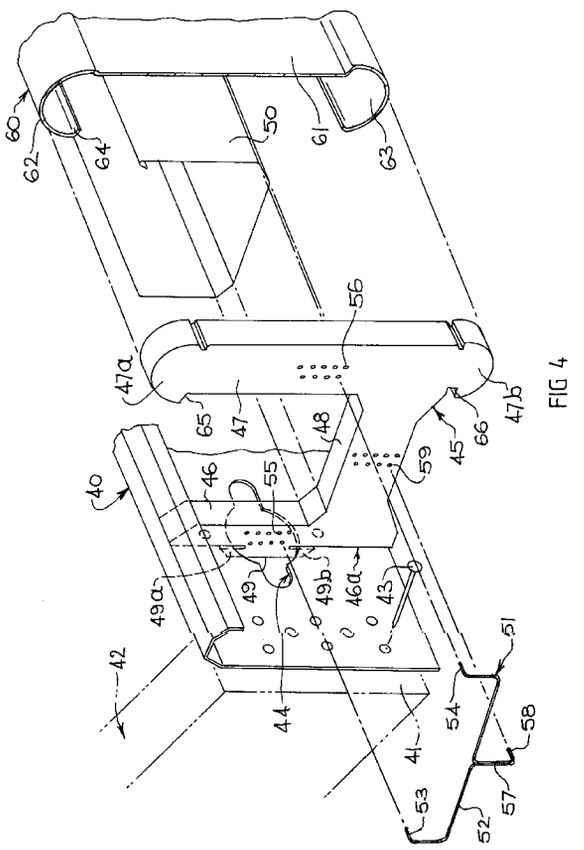

FIG 4

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Description

The present invention relates to a roofing structure for a building or the like and more particularly relates to an improved fascia assembly and to means for fixing the fascia assembly to the roofing structure.

A conventional roofing structure for a building includes a plurality of rafter beams for supporting a roof covering such as tiles. A fascia board or panel is typically positioned along the ends of the rafter beams and an eaves soffit panel extends between the fascia board/panel and the exterior wall of the building. The gutter is then attached to the exterior surface of the fascia board/panel so that rainwater flowing from the roof covering can be directed to a stormwater drain. In the case of a gable roof structure a barge board/panel is typically attached to an outer rafter beam. The outer rafter beam usually extends beyond the gable wall of the building and is typically attached to an end rafter beam via cantilever rafters or so called out ridges.

Problems have been encountered with the fitting of prior art fascias such as fascia panels of the kind disclosed in AU646940. The prior art panels incorporate a plurality of mounting brackets which are secured individually to respective rafter beams of a roofing structure. It can be a difficult and time consuming exercise to secure the mounting brackets to individual rafter beams uniformly and in a straight line. Typically a chalk line is used to mark positions of the mounting brackets. However, this can be difficult to keep straight in practice particularly when conditions are less than ideal, such as on a windy day. Non-uniform fixing of the mounting brackets causes undulations in the fascia panel which is attached to the mounting brackets. This is not only unacceptable from a cosmetic point of view, but also creates hills and valleys in the gutter which is attached to the fascia panel, giving rise to various problems including poor drainage and premature deterioration of the gutter and/or fascia panel.

It is an object of the present invention to provide an improved assembly for mounting a fascia to a building or to at least provide the public with a choice.

According to the present invention there is provided an improved assembly for mounting a fascia to a structure such as a building or the like, said assembly including:

an elongate rail element for fixing to said structure, said rail element having fastening means distributed along its length; and

a plurality of bracket elements, each bracket element having means for cooperating with said fastening means to effect securement of said each bracket element to said rail element and further having means for engaging said fascia. The assembly may include an elongate fascia panel for mounting to said structure via said engaging means.

Where the structure includes a gable roof, reference herein to a fascia panel may include reference to a barge panel, and reference to rafter beams may include reference to cantilever beams or out ridges.

The rail element may include a first substantially planar portion. The first portion may extend substantially vertically when secured to a roof structure. The rail element may include a second portion extending at an angle relative to said first portion for supporting a roof covering such as tiles. The rail element may include a third portion extending at an angle relative to the second portion for directing rainwater to a gutter associated with the roof structure. The second and third portions may be substantially planar. In some embodiments the second and third portions may be integrated. The second and third portions may be upwardly convex or substantially convex for supporting the roof covering and for directing rainwater to the gutter.

The rail element preferably is formed from galvanized metal strip. The rail element may be roll formed or extruded on site in continuous lengths. However, the rail element may also be formed from other suitable materials and may be stamped or otherwise worked into a desired shape. The gauge of the rail element may be chosen according to the application. The gauge of the rail element may be relatively heavy where it is to be secured to a roof structure having relatively wide spacings between rafter beams. In one form the rail element may be 1.4 mm gauge where the rafter beams are spaced on 600mm centres. Where the rafter beams are spaced on 450mm or 900mm centres, the rail element may be 1.2mm or 1.6mm gauge respectively.

The rail element may be fixed to ends of rafter beams or it may be mounted directly to the face of a solid surface such as a timber beam or brick wall. The rail element may be fixed in any suitable manner and by any suitable fixing means such as by means such as nails, bolts, screws or the like. The rail element may include preformed openings therein for receiving the fixing means. The openings may be preformed in groups or gangs. The groups or gangs of openings may be spaced apart to facilitate fixing of the rail element to rafter beams which are spaced on 450mm, 600mm or 900mm centres. In one form the groups or gangs of openings may be spaced apart on 450mm centres to facilitate fixing the rail element to rafter beams which are spaced on 450mm or 900mm centres. In another form the groups or gangs of openings may be spaced apart on 600mm centres to facilitate fixing the rail element to rafter beams which are spaced on 600mm centres. In a still further form, the above mentioned groups or gangs of openings may be superimposed to facilitate fixing the rail element to rafter beams which are spaced on 450mm, 600mm or 900mm respectively. In the latter case it will be appreciated that the pattern of groups or gangs of openings will repeat every 1800mm.

The groups or gangs of openings may be formed in the first portion of the rail element in any suitable manner and by any suitable means such as by means of drilling, punching or the like.

The bracket fastening means may be distributed

along the length of the rail element. Where the rail element is to be secured to the ends of rafter beams, the fastening means may be provided along the first portion of the rail element. The locations of the fastening means along the length of the first portion may define the positions of and distances between successive bracket elements which may be secured to the rail element.

Each fastening means may include a fastening aperture or apertures for receiving the cooperating means of a bracket element. The cooperating means of the bracket element may include a key like formation or formations on the bracket element suitable for coupling with a respective fastening aperture or apertures in the rail element. The coupling between the fastening and cooperating means may conveniently be provided in the form of an 'insert and turn' arrangement. The profile of the cooperating means may be such that it may be inserted into and removed from a fastening aperture(s) only when it adopts a predetermined angular orientation relative to the fastening aperture(s), but cannot be removed from the fastening aperture(s) after it is turned wherein it adopts a different angular orientation relative to the fastening aperture(s).

In one form each fastening aperture may include a keyhole formation. The keyholes may be formed in the first portion of the rail element in any suitable manner and by any suitable means such as by means of drilling, punching, stamping or the like. The keyholes may be spaced on 850mm centres along the first portion of the rail element. The keyholes preferably are spaced along the length of the rail element intermediate the above-mentioned groups or gangs of openings.

In one form each keyhole formation may include a slot like portion superimposed over a substantially circular portion. The slot like portion may be longer than the diameter of the circular portion. In another form each keyhole may include a pair of diametrically opposed semi annular portions and a short slot like portion attached to each semi annular portion. The semi annular portions may be formed about a common centre.

The cooperating means may be formed on each bracket element in any suitable manner and by any suitable means. The cooperating means may be formed separately from and attached to the bracket element or it may be formed integrally with the bracket element. Where the fastening apertures includes keyholes, the or each cooperating means may include a keylike formation for mating with a respective keyhole such as by means an "insert and turn" coupling or arrangement as described above. The keylike formation may include a stem portion and a pair of blade portions projecting therefrom. The profile of the stem portion may substantially match the circular portion of the keyhole formation. The profile of the blade portions may substantially match the slot like portion of the keyhole formation.

The blade portions may be interrupted adjacent the bracket element to allow the bracket element and keylike formation to be turned or rotated after insertion of the latter into a keyhole.

Where the fastening aperture includes a pair of semi annular portions with attached short slot like portions, the cooperating means may include corresponding pairs of key like formations.

According to a still further form of the present invention each fastening aperture may be elongate and may have a relatively long dimension and a relatively short dimension such as substantially rectangular. The or each cooperating means may include a correspondingly shaped projection such as substantially rectangular prism and may have corresponding long and short dimensions. The cross-sectional profile of the substantially rectangular prism may substantially match the shape of the substantially rectangular fastening aperture. The rectangular prism may include a region which is undercut in the direction of its long dimensions inwardly towards its central axis. The extent of the undercut region of each bracket element may be such so as to leave a connecting part, the dimensions and strength of which should be at least sufficient to collectively carry the weight of the fascia panel and/or gutter assembly.

The undercut region and the previously mentioned interruption in the blade portions may be located in a portion of the bracket element which abuts the rail element. The depth of the undercut region or interruption in the blade portion preferably is no greater than the thickness or gauge of the rail element. The depth of the undercut region or interruption may be a little less than the thickness or gauge of the rail element so as to promote a tighter fit between the fastening and cooperating means. Tighter fit between the fastening and cooperating means may also be provided by including one or more lugs projecting into the mentioned interruption or the undercut region.

Where the rail element is to be mounted directly to the face of a solid surface such as a brick wall or timber beam, an alternative means for fastening the bracket elements may be provided. In one form the fastening means may be provided by turning the longitudinal edges of the rail element away from the face of the solid surface such that they at least partly overlie the first planar portion of the rail element. The turned edges of the rail element may be formed in any suitable manner and by any suitable means such as by means of roll forming, continuous extrusion or the like. The upper edge of the rail element may be substantially upwardly convex or substantially convex, as described on page 4 herein, for supporting the roof covering and for directing rainwater to the gutter. The lower edge of the rail element may be similarly formed and may have a similar shape in cross section to the upper edge of the rail element or it may have a different shape. In one form the rail element may be substantially C shaped in cross section.

Where the means for fastening the bracket element is modified as described in the preceding paragraph, the cooperating means formed on each bracket element may be modified to facilitate securement of each bracket

element to the rail element. In one form the cooperating means may be shaped to key between the turned edges of the rail element. The cooperating means may be a key like formation not unlike that described in the first paragraph on page 6 herein and wherein the long dimension of the rectangular prism is sufficient to fit snugly between the turned edges of the rail element. Alternatively the cooperating means may comprise the entire rear portion of the bracket which abuts the rail element. Where the bracket element is in the shape of a 'H' or a 'U', the cooperating means may comprise one leg of the 'H' or of the 'U'.

The means for engaging the fascia panel provided on each bracket element may include one or more formations over which said fascia panel may engage. The fascia panel may be retained by being located over the engaging formations in a resiliently snap fitting fashion although alternative means of retaining the fascia panel are within the scope of the present invention. For example, the fascia panel may be retained by means of screws, rivets or a bonding agent. In one form each bracket element may include upper and lower engaging formations for engaging upper and lower ends or portions respectively of the fascia panel. Each engaging formation may be in the form of a knob. One knob formation may be directed generally upwardly for engaging an upper end or portion of the fascia panel. The other knob formation may be directed generally downwardly for engaging a lower end or portion of the fascia panel. Each knob may include an outwardly convex portion and a base portion. The base portion may be narrowed relative to the convex portion to provide a recess to assist retaining the fascia panel.

The upper and lower engaging formations may be joined to each other and to the cooperating means of the bracket element in any suitable manner and by any suitable means. The two engaging formations may be joined to each other via a first web portion. The first web portion may be joined to the cooperating means via a second web portion.

In one form each bracket element may be substantially in the shape of a 'H' with one leg of the H representing the first web portion and the horizontal link between the legs of the 'H' representing the second web portion. The other leg of the H represents a portion of the bracket element which abuts the rail element. The cooperating means of the bracket element may be attached to or formed integrally with the portion of the bracket element which abuts the rail element.

In another form each bracket element may be substantially in the shape of a 'U' with one leg of the U representing the first web portion and the bight of the U representing the second web portion. As in the above example, the other leg of the U may represent the portion of the bracket element which abuts the rail element.

In the latter example the first web portion may be sufficiently spaced from the rail abutting portion to receive or cradle a concealed gutter therebetween. The gutter may be of conventional form and may rest directly on the second web portion. Alternatively the gutter may be positioned away from the second web portion such as raised therefrom via a suitable riser element or elements. To facilitate imparting a run off to the gutter, the position of the riser element(s) may be adjustable vertically relative to the bracket element such as relative to the second web portion.

An advantage of being able to adjust the position of the gutter such as its height relative to the bracket elements is that the bracket elements and fascia panel may be run substantially or truly horizontal with gutter run off being adjustable substantially independent of the position and/or orientation of the bracket elements and/or fascia panel.

Each bracket element may include means for locating a soffit panel. The soffit panel locating means may include a recess for receiving the soffit panel. In one form the soffit panel locating means may be adjacent the lower fascia panel engaging formation or means. The soffit panel may locate directly into the receiving recess or it may locate into the lower end or portion of the fascia panel, which lower end or portion may in turn locate into the soffit panel receiving recess.

The bracket elements may be formed in any suitable manner and by any suitable means. In one form each bracket element may be molded integrally in any suitable material such as impact resistant ABS plastics, aluminum or the like. In another form the bracket elements may be extruded continuously from any suitable material such as plastics, aluminum, etc. and cut into individual bracket slices as required. In one form the extruded material may be cut into bracket slices approximately 15mm thick.

The fascia panel may include a major surface portion. The major surface portion may extend substantially in a vertical plane when secured to a structure. In some embodiments the major surface portion may be installed at an angle relative to the vertical plane. This may be achieved by orienting the first web portion of each bracket element at a desired angle relative to the vertical plane. The major surface portion may be substantially planar. The major surface portion may include decorative ribbing and/or other features or embellishments embossed or otherwise formed therein. The ribbing and/or other features may also act to enhance torsional rigidity of the fascia panel.

The abovementioned upper and lower ends or portions of the fascia panel may be formed integrally with the major surface portion thereof or they may be formed separately therefrom and attached thereto in any suitable manner and by any suitable means. In one form the upper and lower ends or portions may be formed by turning the longitudinal edges of the major surface portion so as to conform to and substantially overlie the engaging formations of the bracket elements. In another form the upper and lower ends or portions of the fascia panel may be attached to the major surface portion via an in-

terfitting bead and recess or similar arrangement. The major portion may have a beaded end and the upper/lower portion may have a corresponding recess for receiving the beaded end or vice versa. The upper and lower ends or portions may include or consist of outwardly convex portions.

The fascia panel may be formed from any suitable material and by any suitable means. The fascia panel preferably is formed from a resilient material and the engaging means of the bracket elements arranged so that the fascia panel can be snap fitted into position over the engaging means. The fascia panel may be roll formed or continuously extruded on site. The fascia panel may be formed from and finished with materials generally used for guttering such as galvanized steel, colorbond aluminum, powder coated Zincalum, etc.

The major portion of the fascia panel may be formed from the same material as the upper and lower ends or portions or it may be formed from a different material. For example, the major portion may be formed from rolled steel and the upper and lower portions may be formed from extruded aluminium.

Preferred embodiments of the present invention will now be described with reference to the accompanying drawings wherein:-

Fig. 1 shows one form of rail element according to the present invention;

Fig. 2 shows a further form of rail element according to the present invention;

Fig. 3 shows the manner of attaching the rail element to a typical roofing structure;

Fig. 4 shows one form of fascia and gutter assembly according to the present invention;

Figs. 5, 5A and 5B show in cross section a further form of fascia and gutter assembly according to the present invention;

Fig. 6 shows in cross section a further form of fascia and gutter assembly according to the present invention; and

Fig. 7 shows in cross section one form of fascia assembly according to the present invention.

Referring to Fig. 1, rail element 10 comprises roll formed galvanized metal strip and includes a first portion 11, a second portion 12 extending at an angle relative to first portion 11 and a third portion 13 extending at an angle relative to second portion 12. The first and second portions and second and third portions are interconnected via intermediate portions 14 and 15 respectively. However, in some embodiments intermediate portions 14 and 15 may be omitted. The height A of first portion 11 is approximately 120mm. First portion 11 includes preformed openings 16 as shown to facilitate fixing thereof to the ends 41 of rafter beams 42 (a representative of which is shown in Fig. 4) via nails 17 or screws. Openings 16 are grouped in gangs. The spacing B between gangs of openings 16 is 450mm or 600mm to facilitate fixing of rail element 10 to rafter beams 42 which are spaced on 450mm/900mm or 600mm centres respectively.

First portion 11 includes fastening means in the form of keyholes 18 for receiving cooperating formations on respective bracket elements. Each keyhole 18 includes a circular portion 19 and a slot portion 20. The spacing C between fastening keyholes 18 is approximately 850mm.

Further apertures 21 are provided adjacent each keyhole 18 for locating the bracket elements. Each bracket element includes projections or lugs which locate into apertures 21 when they are correctly oriented with respect to rail element 10.

The distance D associated with second portion 12 is approximately 20mm for supporting the perimetric roof tiles or other coverings. Second and third portions 12, 13 and intermediate portions 14, 15 are arranged and dimensioned to direct rain water to a gutter (not shown) associated with the roof structure.

Fig. 2 shows a rail element 22 suitable for fixing directly to the face of a solid surface and includes a modified form of fastening means. Rail element 22 includes a first portion 23 and upper and lower fastening portions 24, 25. Fastening portions 24, 25 are formed by turning the longitudinal edges of the rail element on itself so that stop portions 26, 27 overlie first portion 23. Fastening portions 24, 25 are adapted to receive cooperating formations on respective bracket elements between stop portions 26, 27 and first portion 23. Fastening portion 24 is substantially upwardly concave and additionally performs a function similar to that described with reference to portions 12-15 in Fig.1 i.e., it directs rain water to a gutter associated with the roof structure. Openings 28 perform a function similar to that described with reference to openings 16 in Fig.1.

Fig. 3 shows rail elements 30, 31, 32 fixed to the side and gable of a roofing structure. Side rail element 30 is fixed to the ends of rafter beams 33 and gable rail elements 31, 32 are fixed to cantilever beams 34 via nails or the like. In this embodiment each rail element 30-32 is of the kind shown in Fig. 1.

Fig. 4 shows a perspective view of a fascia and gutter assembly according to the present invention. The assembly includes a rail element 40 fixed to end 41 of rafter beam 42 via nails 43. Rail element 40 includes a keyhole 44 which secures bracket element 45 thereto. Keyhole 44 includes a circular portion and a slot portion not unlike circular portion 19 and slot portion 20 in Fig. 1. Bracket element 45 comprises a 15mm thick slice cut from a length of extruded plastics or aluminium. Alternatively bracket element 45 may be injection molded. Bracket el-

ement 45 is generally U-shaped in cross section and includes a rear leg portion 46, a front leg portion 47 and a connecting web portion 48. Rear leg portion 46 includes a key formation 49 integrally formed with rail abutting rear surface 46a thereof. Bracket element 45 is secured to rail element 40 by rotating it to a horizontal position wherein the free arms 49a, 49b of key formation 49 are received into the slot portion of keyhole 44 in rail element 40. Bracket element 45 is then rotated 90° whereupon arms 49a, 49b move to the positions shown in Fig. 4.

A conventional gutter 50 is adapted to nest between leg portions 46, 47 of bracket element 45. Gutter 50 rests on a riser element 51. Riser element 51 includes a bow shaped upper part 52 with horizontal arms 53, 54 each of which engages in one of opposing holes 55, 56 formed in leg portions 46, 47 respectively. Riser element 51 includes a U-shaped lower part 57 with arm 58 which engages in one of holes 59 formed in web portion 48 of bracket element 45. The height of gutter 50 relative to bracket element 45 and rail element 40 may be adjusted by positioning riser element 51 in holes 55, 56, 59 as required.

A fascia panel 60 is adapted to engage leg portion 47 of bracket element 45. Fascia panel 60 includes major surface portion 61 and upper and lower portions 62, 63 respectively. Upper portion 62 is outwardly concave and includes an inwardly turned lip portion 64. Leg portion 47 includes an outwardly convex upper knob 47a with a shoulder 65. Upper portion 62 is formed from a resilient material and fits over upper knob 47a such that lip portion 64 of upper portion 62 engages over shoulder 65 of knob 47a. Upper portion 62 is retained in place by virtue of it resilience whereby upper portion 62 is distorted outwardly as lip portion 64 rides over shoulder 65 and then returns substantially to its undistorted state over knob 47a.

Lower portion 63 of fascia panel 60 is adapted to engage over lower knob 47b of leg portion 47 is a similar manner. Lower knob 47b of leg portion 47 includes a recess 66 for performing a function similar to that described with reference to shoulder 65. In addition recess 66 is adapted to receive a soffit panel (not shown) therein.

Fig. 5 shows in cross section rail element 67 fixed to rafter beam 68. Also shown in cross section is bracket element 69 secured to rail element 67. Bracket element 69 comprises a 15mm thick slice cut from a length of extruded aluminium. Bracket element 69 is generally U-shaped in cross section and includes a rear leg portion 70, a front leg portion 71 and a connecting web portion 72. Rear leg portion 70 includes a pair of L-shaped formations 73, 73a integrally formed with rail abutting rear surface 69a thereof. Bracket element 69 is secured to rail element 67 by locating the free ends of L-shaped formations 73, 73a into slot portion 74 associated with keyhole 75 in rail element 67 (refer Fig. 5A). Bracket element 69 is then rotated 90° to a vertical position as shown in Fig. 5 whereupon L-shaped formations 73, 73a engage rail element 67.

A conventional or substantially conventional gutter 76 nests between leg portions 70, 71 of bracket element 69. Gutter 76 rests on a riser element 77. Riser element 77 includes a bow shaped upper part 78 with arms 79, 80 each of which engages in one of opposing slots 81, 82 formed in leg portions 70, 71 respectively. Riser element 77 includes a U-shaped lower part 83. The bight 84 of lower part 83 rests on a plate element 85 inserted into one of slots 86 formed in web portion 72 of bracket element 69. The height of gutter 76 relative to bracket element 68 and rail element 67 may be adjusted by locating riser element 77 in slots 81, 82, 86 as required.

Also shown in cross section is fascia panel 87 engaged over leg portion 71 of bracket element 69. Fascia panel 87 includes major surface portion 88 and upper and lower portions 89, 90 respectively. As shown more clearly in Fig. 5B upper portion 89 is outwardly concave. Upper portion 89 includes an inwardly turned lip portion 91. Leg portion 71 includes an outwardly convex top end 71a with a shoulder 92. Upper portion 89 is formed from a resilient material and is fitted over top end 71a such that lip portion 91 of upper portion 89 engages over shoulder 92 of top end 71a. Upper portion 89 is retained in place by virtue of it resilience whereby upper portion 89 is distorted outwardly as lip portion 91 rides over shoulder 92 and then returns substantially to its undistorted state over top end 71a.

Major surface portion 88 of fascia panel 87 includes a beaded edge 93. Beaded edge 93 is captured in a corresponding recess 93a formed in upper portion 89.

Lower portion 90 of fascia panel 87 is retained over lower end 71b of leg portion 71 is a similar manner and will not be described in detail. Lower end 71 b of leg portion 71 includes a recess 94 for performing a function similar to that described with reference to shoulder 92. In addition recess 94 is adapted to receive soffit panel 95 therein.

Lower portion 90 is joined to fascia panel 87 via a beaded edge and recess similar to that described with reference to beaded edge 93 and recess 93a.

Fig. 6 shows in cross section rail element 96 fixed to the face of a timber beam 97 via screws 98. Rail element 96 includes a major portion 99 and upper and lower fastening portions 100, 101 respectively formed by turning the longitudinal edges of rail element 96 on itself so that stop portions 102, 103 overlie major portion 99. Rear leg portion 104 of bracket element 105 is received behind stop portions 102, 103 thereby effecting securement of bracket element 105 to rail element 96. A gutter 106 rests on web portion 107 between rear leg portion 104 and front leg portion 108 of bracket element 105. Gutter 106 may be raised above the upper level of web 107 by means of raiser element 109. Raiser element 109 is shown received in respective ones of apertures 110, 111, 112 formed in rear leg 104, web 107 and front leg 108 respectively of bracket element 105. Adjustment of gutter height is achieved by repositioning raiser element 109 into apertures 110-112 as appropriate. A perforated leaf strainer 113 is supported on ridges 106a-106b formed

on sidewalls of gutter 106.

Fascia panel 115 is engaged over front leg portion 108. Fascia panel 115 includes a major portion 116 formed integrally with upper and lower portions 116a, 116b. Major portion 116 includes a plurality of longitudinal ribs to improve aesthetic appearance and enhance torsional rigidity thereof.

Bracket element 104 is injection molded from a high impact resistant plastics material. Gutter 106, strainer 113 and fascia panel 115 are roll formed from aluminium. Riser element 108 is formed from galvanized wire by bending. The shape of riser element 108 is similar to that of element 51 described with reference to Fig. 4.

Fig. 7 shows in cross section rail element 117 fixed to cantilever beam 118. Also shown in cross section is bracket element 119 secured to rail element 117. Bracket element 119 is formed and secured to rail element 117 in a manner similar to that described with reference to bracket element 69 and rail element 67 in Fig. 5.

Bracket element 119 in Fig. 7 differs from bracket element 69 in Fig. 5 inter alia in that the horizontal web portion 120 is shorter because it is not required to cradle a concealed gutter. Fascia panel 121 differs from fascia panel 87 in Fig. 5 in that major portion 122 thereof is formed integrally with upper and lower portions 122a, 122b. A plurality of longitudinal ribs is formed in major portion 122 to improve the aesthetic appearance and enhance torsional rigidity thereof.

A top piece 123 including a barge gutter 124 and top gable dry capping 125 are secured over upper portion 122a as shown. Barge gutter 124 rests on gable batten 126. Top piece 123 provides a run off for water from peripheral gable tile 127.

Bracket element 119 is molded from a high impact resistant plastics material.

Finally, it is to be understood that various alterations, modifications and/or additions may be introduced into the constructions and arrangements of parts previously described without departing from the spirit or ambit of the invention.

Claims

1. An improved assembly for mounting a fascia (60,87,115,121) to a structure such as a building or the like, said assembly including:

   an elongate rail element (10,22,40,67,96,117) for fixing to said structure, said rail element having fastening means (18,24,25,44,100,101) distributed along its length; and

   a plurality of bracket elements (45,69,105,119), each bracket element having means (49,73,73a,104) for cooperating with said fastening means to effect securement of said each bracket element to said rail element, and further having means (47a,47b,71a,71b) for engaging said fascia.

2. An improved assembly according to claim 1 including an elongate fascia panel (60,87,115,121) for mounting to said structure via said engaging means.

3. An improved assembly according to claim 1 or 2 wherein each bracket element includes means (51,109) for supporting a gutter (50,76,106) intermediate said rail element and said fascia engaging means.

4. An improved assembly according to any one of the preceding claims wherein said rail element (10) includes a first substantially planar portion (11) and a second portion (12) extending from said first portion for supporting a roof covering.

5. An improved assembly according to claim 4 wherein said rail element includes a third portion (13) extending from said second portion for directing rainwater to a gutter associated with said structure.

6. An improved assembly according to any one of the preceding claims wherein said fastening means includes a plurality of apertures (18,44) distributed along said rail element.

7. An improved assembly according to claim 6 wherein each aperture comprises a keyhole (18) having a slot like portion (20) superimposed over a substantially circular portion (19).

8. An improved assembly according to any one of the preceding claims wherein said rail element includes gangs of openings (16,28) to facilitate fixing of said rail element to said structure.

9. An improved assembly according to claim 8 wherein said gangs of openings are spaced in a pattern which repeats substantially each 1.8 metres.

10. An improved assembly according to any one of the preceding claims wherein each bracket element (45) includes first leg portion (46) for abutting said rail element (40), a second leg portion (47) spaced from said first leg portion and a web portion (48) connecting said leg portions.

11. An improved assembly according to claim 10 wherein said first leg portion (46) includes said means (49) for cooperating with said fastening means (44).

12. An improved assembly according to claim 6 wherein said cooperating means include a keylike formation (49) suitable for inserting into one of said plurality of apertures (44) when said keylike formation adopts a predetermined orientation relative to said one of said plurality of apertures.

13. An improved assembly according to claim 12 wherein said keylike formation is arranged such that it cannot be removed from said one of said plurality of apertures when said keylike formation adopts an orientation relative to said one of said plurality of aperture other than said predetermined orientation.

14. An improved assembly according to claim 12 wherein said keylike formation has a profile which substantially matches one of said plurality of apertures and includes a region which is undercut towards its central axis so as to leave a part connecting to said first leg portion.

15. An improved assembly according to claim 10 wherein said second leg portion (47) includes said fascia engaging means (47a,47b).

16. An improved assembly according to claim 2 wherein said fascia panel (87) includes a major portion (88) and upper (89) and lower (90) portions attached to said major portion via respective interfitting beads (93) and recesses (93a).

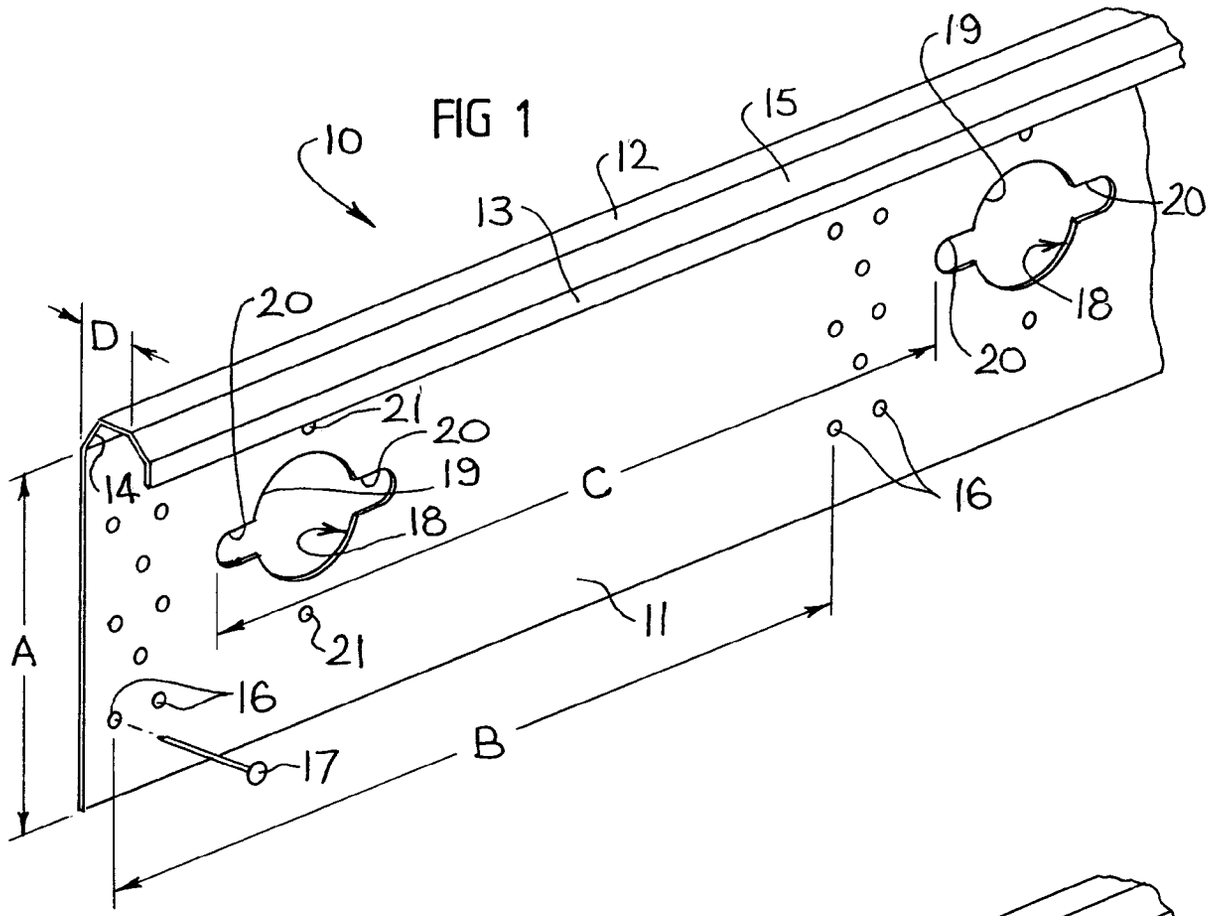
17. An improved assembly according to claim 16 wherein said fascia engaging means includes upper (71a) and lower (71b) knob formations for engaging said upper (89) and lower (90) portions respectively of said fascia panel (87).

18. An improved assembly to any one of the preceding claims wherein each bracket element includes means (94) for receiving a soffit panel (95).

19. An improved assembly according to any one of claims 1 to 5 wherein said fastening means includes longitudinal edges (26,27,102,103) of said rail element (22,96), said edges being turned so that they at least partly overlie a portion (23) of said rail element (22).

20. An improved assembly according to claim 19 wherein said cooperating means include a formation (104) shaped to key between said turned edges (102,103).

FIG 1


10
12
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D
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19
18
14
C
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18
20
A
21
11
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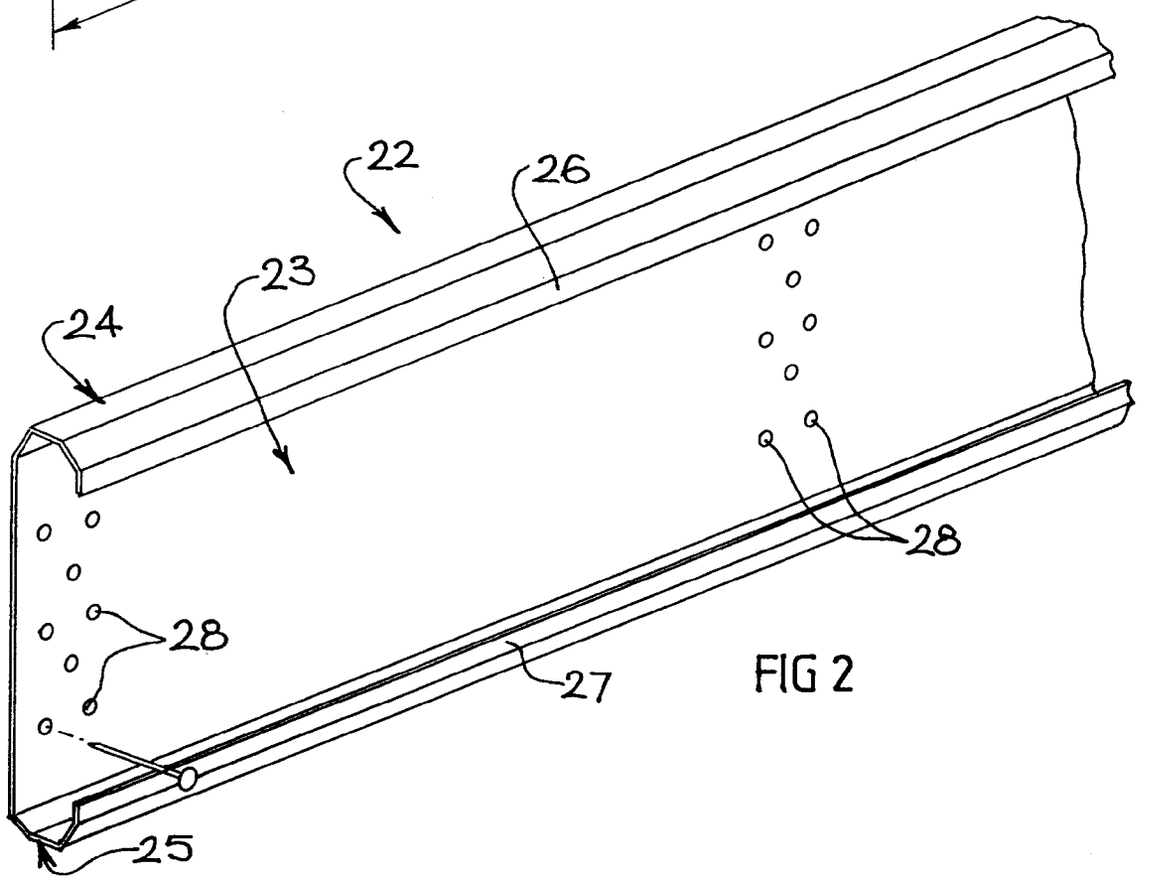
17
B


22
26
23
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25

FIG 2

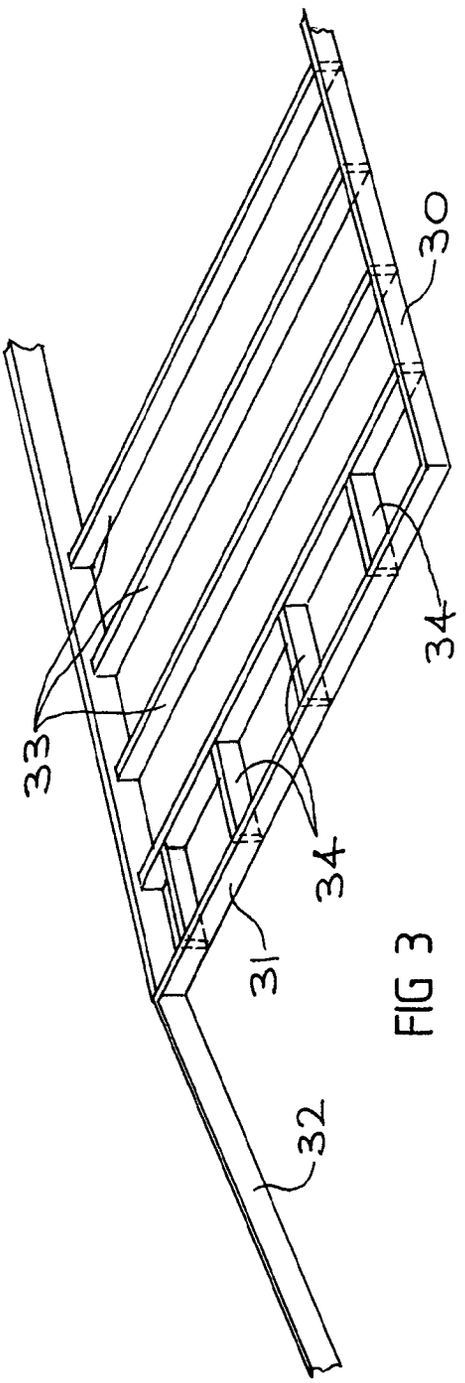

FIG 3

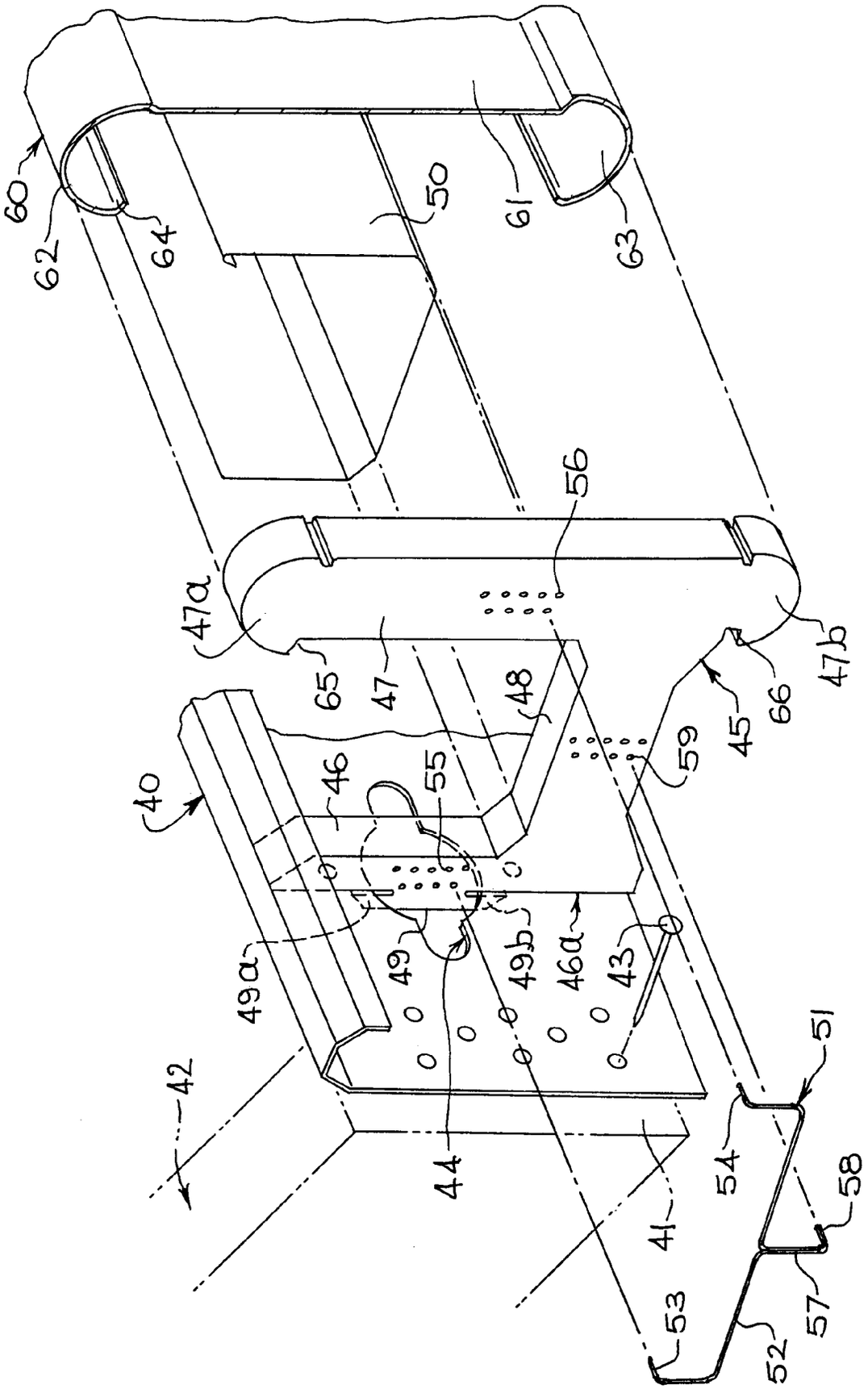
60
62
64
50
61
63
56
47a
65
47
48
47b
66
45
59
40
46
55
49a
49
49b
46a
43
42
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FIG 4

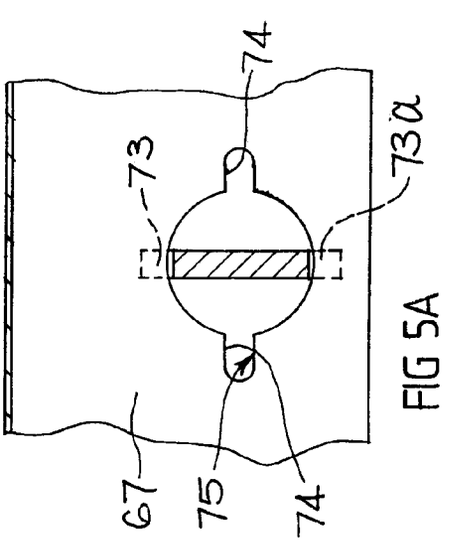

FIG 5A

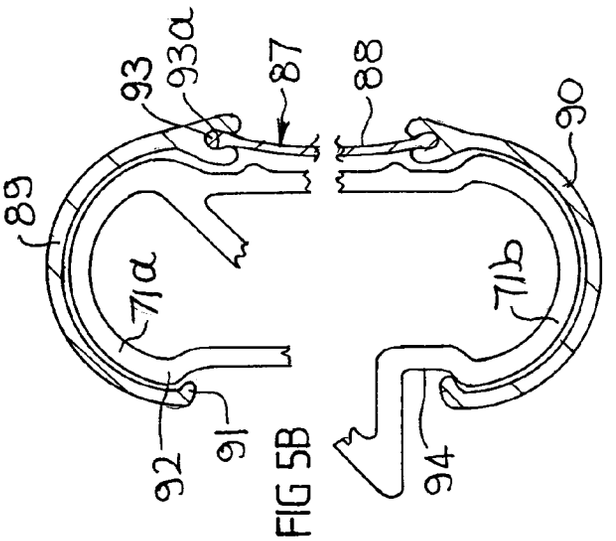

FIG 5B

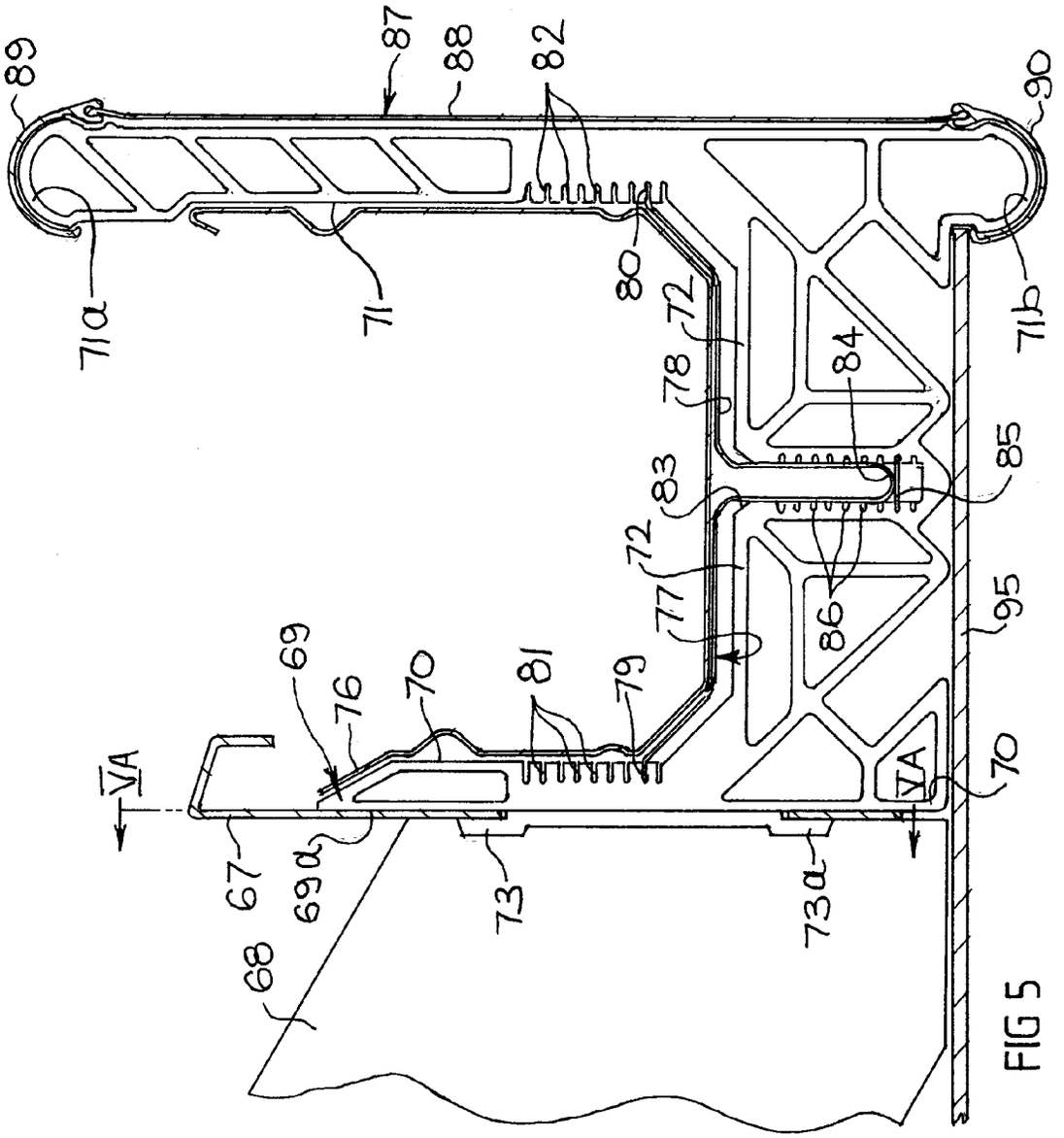

FIG 5

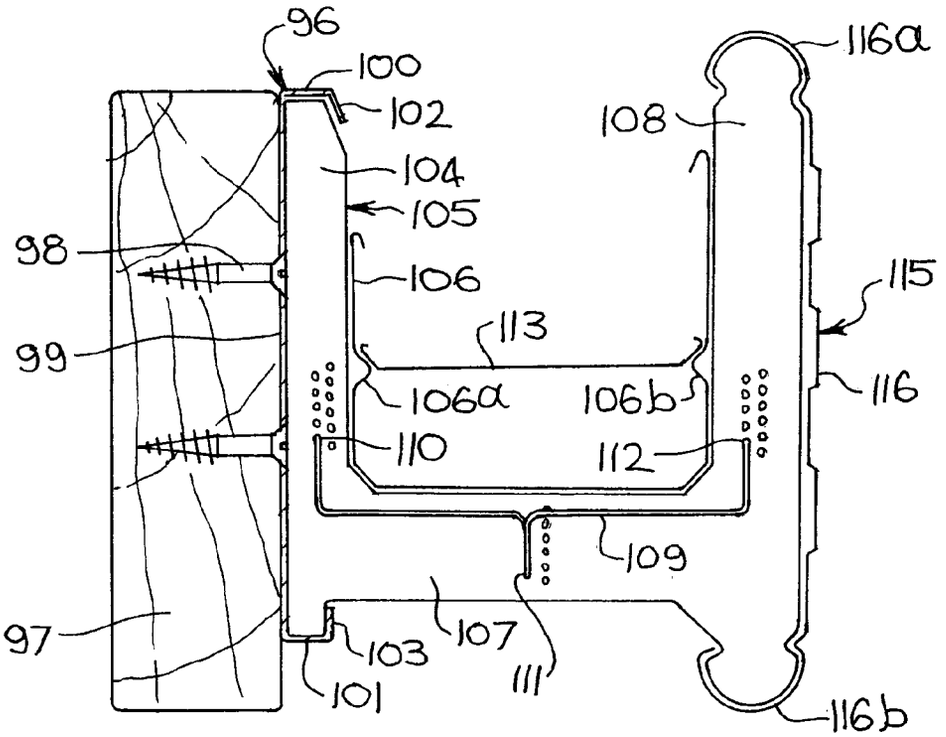
96
100
102
104
105
98
106
99
113
106a
106b
110
112
109
97
103
107
101
111
108
116a
115
116
116b

FIG 6

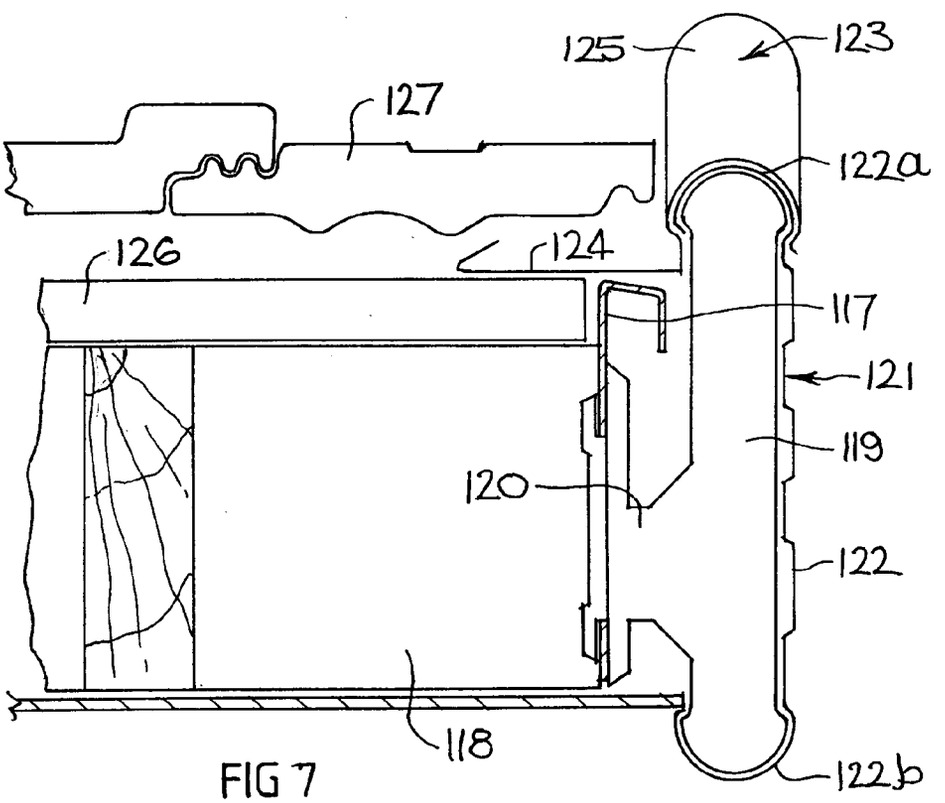
125
123
127
122a
126
124
117
121
119
120
122
118
122b

FIG 7

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 95 30 4601

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	DE-U-92 12 750 (KIRCHHAMMER)	1,2,4, 10,11, 15,16, 19,20	E04D13/158 E04D13/072
Y	* page 8, line 23 - page 9, line 23 *	3,6,8, 17,18	
A	* page 18, line 27 - page 19, line 19 * * figures 1,214-17 *	5	
Y	US-A-4 128 974 (TAYLOR)	3	
A	* column 2, line 24 - column 2, line 42 * * column 2, line 50 - column 2, line 66 * * column 4, line 3 - column 4, line 17 * * figures 1-3 *	5	
Y	CA-A-953 477 (SEEBACK) * page 2, line 30 - page 3, line 22 * * figures 1,2 *	6,8	
Y	DE-A-40 11 524 (FLECK) * column 3, line 11 - column 3, line 23 * * figures 1,2 *	17	
Y	US-A-4 262 459 (HALLAM) * column 3, line 3 - column 3, line 7 * * column 3, line 22 - column 3, line 24 * * figures 1-3 *	18	
A	US-A-4 674 407 (SEUBERT ET AL.) * claim 1; figures 1-3 *	7,12-14	

TECHNICAL FIELDS SEARCHED (Int.Cl.6)
E04D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	27 September 1995	Hendrickx, X

CATEGORY OF CITED DOCUMENTS

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