



AU9217186

(12) PATENT ABRIDGMENT (11) Document No. AU-B-17186/92
(19) AUSTRALIAN PATENT OFFICE (10) Acceptance No. 643410

(Modified Examination)

(54) Title
TRIM SYSTEM FOR SUSPENSION CEILINGS

International Patent Classification(s)
(51)⁵ **E04B 009/30**

(21) Application No. : **17186/92**

(22) Application Date : **28.05.92**

(30) Priority Data

(31) Number	(32) Date	(33) Country
708975	31.05.91	US UNITED STATES OF AMERICA
819272	10.01.92	US UNITED STATES OF AMERICA

(43) Publication Date : **03.12.92**

(44) Publication Date of Accepted Application : **11.11.93**

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(57) Claim

1. A suspension ceiling trim connector for mounting trim strips on grid tee members along exposed edges of suspension ceiling grids formed of interconnected grid tee members having an upstanding central portion and panel supporting flanges extending in opposite directions from the lower edge of said central portion, said trim connector comprising a support portion adapted to be connected to said central portion and a vertically extending face portion, said face portion providing vertically spaced opposed interlocks adapted to connect with channel-shaped elongated trim strips without the use of separate fasteners, said trim connector operating to mount a channel-shaped trim strip on an adjacent grid without any exposed fasteners.

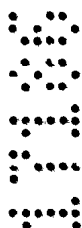
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AUSTRALIA
Patents Act 1990

P/00/011
Regulation 3.2

COMPLETE SPECIFICATION
FOR A STANDARD PATENT
ORIGINAL



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TRIM SYSTEM FOR SUSPENSION CEILINGS

The following statement is a full description of this invention, including the best method of performing it known to us:

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BACKGROUND OF INVENTION

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This invention relates generally to suspension ceilings and more particularly to a novel and improved system for providing trim along exposed edges of such suspension ceilings.

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Prior Art

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In some instances, suspension ceilings have exposed edges which require trim if a neat and finished appearance is required. For example, some suspension ceilings are provided with islands which are suspended at levels different than and usually below the adjacent ceiling surface. Such islands have exposed edges spaced from other portions of the ceiling and the walls. If such exposed edges are not trimmed in some manner, a very unfinished appearance results.

In other instances, the ceiling may be terminated at a location spaced from the wall or at a location where an adjacent wall does not exist. Here again, unless a finishing trim is provided, an unfinished edge may be visible.

In the past, exposed edges have generally been trimmed in one of two ways. One such method of trimming the edge involves the construction of a soffit-type stub wall extending down from the building structure above to the level of the ceiling edge. The suspension ceiling is then installed in the typical manner extending to such stub wall. In such method the soffit itself, which must be separately constructed and supported by the building structure, provides the trim for

1 what would be otherwise an exposed edge of the suspension
2 ceiling. In the other method a trim strip which may be, for
3 example, a channel or L-shaped strip is secured to the lower
4 face of the grid by rivets or screws. Both of these methods
5 are labor intensive and therefore costly. Further, in the
6 latter method, the rivets or screws are exposed to view and
7 therefore detract from the finished appearance of the ceiling.

8 It is also known to provide a trim strip as
9 illustrated in the United States Letters Patent No. 4,744,188
10 (assigned to the assignee of this invention). Such trim strip
11 is generally channel-shaped and provides a lower leg which
12 fits under the flange of the grid tee. The upper leg of such
13 channel is secured to the bulb of the grid tee. Such trim
14 strips can only be installed along exposed edges of the
15 ceiling where a grid tee member extends parallel to the edge
16 and cannot be installed at angles to the ceiling grid, nor at
17 locations where only the ends of grid tees exist at the
18 exposed edge. Such patent is incorporated by reference in its
19 entirety.

20 SUMMARY OF THE INVENTION

21 The present invention provides a cost efficient
22 system for mounting edge trim along exposed edges of
23 suspension ceilings. With such system, the trim is supported
24 and positioned by the ceiling grid itself, therefore it is not
25 necessary to construct separately supported structures to
26 conceal the edge of the ceiling as required in the first
27 method described above.

28 Further, the system provides a connector which
29 supports the trim from the ceiling grid without any exposed
30 fasteners so that the finished appearance of the trim is not
31 degraded by any exposed fasteners or the like.

1 Still further, the trim can be installed and
2 supported by the grid members in positions in which the trim
3 extends parallel to or at an angle with respect to the support
4 grid.

5 In a first illustrated embodiment a simple, low cost
6 connector clip is provided with a channel-shaped support
7 portion which fits over the bulb of a suspension ceiling grid
8 tee and also provides a face portion which snaps into a
9 channel-shaped trim strip. Such connector is easily installed
10 at the ends of the grid tees along the exposed edge of the
11 suspension ceiling. The completion of the trim installation
12 is accomplished by merely snapping a trim channel onto the
13 face portion. This illustrated embodiment may be used when
14 the trim strip extends perpendicular to the supporting grid
15 tee and the trim has a height substantially equal to the
16 height of the grid tee.

17 In a second embodiment, the connector clip is again
18 provided with a channel-shaped support portion which again
19 fits over the bulb of a typical grid tee. In this embodiment
20 a face portion is connected to the support portion by a
21 connection which allows the face portion to rotate relative
22 to the support portion with a pivot-type movement. Here
23 again, the face portion is structured to connect with a trim
24 strip by a simple snap in connection.

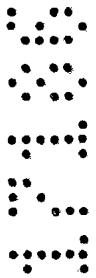
25 The face portion, because of the pivot-like
26 movement, permits this embodiment to be connected with trim
27 extending parallel to the supporting grid tees as well as at
28 angles relative thereto. In fact, with this embodiment the
29 connector can be used to connect with straight or curved trim
30 strips extending at all angles relative to the associated grid
31 tee from parallel to perpendicular. Further, with this
32 embodiment the face portion can be sized to connect with
33 narrow trim strips having a width substantial equal to the
34 height of the grid tees or with trim strips having a

substantially greater height.

A third embodiment provides a simple connector clip for connecting trim strips parallel to the supporting grid tee. This embodiment can connect with trim strips having a height substantially greater than the height of the grid tee.

- 5 These and other aspects of this invention are illustrated in the accompanying drawings and are more fully described in the following specification.

BRIEF DESCRIPTION OF THE DRAWINGS



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FIG. 1 is a view from below of a suspension ceiling having an island suspended below a main suspension ceiling and provided with trim along the edges thereof mounted in accordance with the present invention;



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FIG. 2 is a perspective view of a trim mounting clip in accordance with the first embodiment of this invention and one type of trim channel that may be mounted on such clip;

FIG. 3 is a side elevation of the trim mounted clip illustrated in FIG. 2 with the grid on which the clip is mounted illustrated in phantom;



FIG. 4 is a side elevation of the trim mounting clip of FIG. 2 with a relatively wide trim strip mounted thereon;



1 FIG. 5 is a perspective view of a second embodiment
2 trim mounting clip in which the face portion of the clip on
3 which the trim is actually mounted is pivotally connected to
4 the mounting portion allowing mounting of a trim strip which
5 extend at various angles relative to the supporting grid tee;

6 FIG. 6 illustrates the mounting clip of FIG. 5
7 mounted on a grid at a intersection between perpendicularly
8 extending grid tee members;

9 FIG. 7 illustrates the trim mounting clip of FIG.
10 5 positioned to support a trim strip extending at an angle
11 relative to the grid tee member;

12 FIG. 8 illustrates the trim strip mounting clip
13 mounted on the end of a grid tee positioned to support a trim
14 strip extending perpendicular to the grid tee;

15 FIG. 9 is a view of the trim strip mounting clip in
16 position to support a trim strip extending parallel to the
17 supporting grid tee;

18 FIG. 10 is a vertical cross section illustrating the
19 trim strip mounting clip supporting a trim strip extending
20 parallel to the grid tee and corresponds to the position
21 illustrated in FIG. 9;

22 FIG. 11 corresponds to FIG. 6 and illustrates the
23 trim strip mounting clip at an intersection and supporting the
24 trim strip extending parallel to the adjacent grid tee;

FIG. 12 is a modified embodiment of the trim strip mounting clip of FIGS. 5-11 in which a tab is provided to engage the side of the web of the supporting grid tee when the face portion is pivoted to extend parallel to such grid tee;

- 5 FIG. 12a illustrates the tab as initially formed and prior to bending, the tab to the position of FIG. 12;

FIG. 13 illustrates the manner in which a trim strip support clip can be installed with a grid tee having a boxshaped panel supporting flange structure which is open on the lower side thereof;

- 10 FIG. 14 is a view similar to FIG. 13 but illustrating the manner in which the same trim strip and support clip can be applied to a grid tee having a hat-shaped panel supporting flange;

- 15 FIG. 15 is a perspective view of another embodiment of a trim strip support clip which is formed of a single piece of sheet metal and may be used to support a trim strip extending parallel to the supporting grid tee; and

FIG. 16 is an end view of the support clip and trim strip illustrated in FIG. 15.

DETAILED DESCRIPTION OF THE DRAWINGS

- 20 FIG. 1 illustrates an island 10 positioned below the remainder of a suspension ceiling 11. The suspension ceiling is illustrated in dotted lines to emphasize the fact that the island is displaced below the surface of the ceiling.

- 25 The particular island 10, like the ceiling 11, is provided with main grid tees 12 and cross tees 13 which are connected together in the usual manner to form panel receiving openings 14. The entire island is enclosed within channel shaped trim strips which provide a finished edge for the



1 island. In this particular instance a portion of the island
2 is enclosed by straight trim strips 16, 17, 18 and 19. The
3 remainder of the island is enclosed within curved trim strips
4 21 and 22. The trim strip 21 is concavely curved and the trim
5 strip 22 is convexly curved.

6 All of these trim strips are mounted on the
7 associated main tees 12 and cross tees 13 by trim strip
8 mounting clips in accordance with the present invention. In
9 FIG. 1 such mounting clips are not visible because they are
10 hidden by the panels and the trim. Further, the mounting
11 clips do not require any exposed fasteners so the trim strips
12 form a finished border around the entire island.

13 FIGS. 2 through 4 illustrate a first embodiment of
14 a trim strip mounting clip 23 in accordance with this
15 invention. The mounting clip 23 provides a channel-shaped or
16 inverted U-shaped support portion 24 which fits over the bulb
17 26 of an associated grid tee 27. Such grid tee, like all of
18 the grid tees illustrated in the various figures, provides a
19 hollow, generally rectangular bulb 26 at the upper edge of a
20 web 28 and oppositely extending panel supporting flanges 29
21 along the lower edge of the web 28.

22 A transition portion 31 joins the support portion
23 24 to a planar face portion 32. Extending from the upper
24 surface of the transition portion 31 are three pairs of
25 locking tabs 33 which are inclined upwardly and rearwardly to
26 locking edges 34. Typically, the support portion 24 is
27 secured to the bulb 26 by a screw or rivet fastener 36 which
28 ensures that the mounting clip 23 cannot move relative to the
29 associated grid tee 27. Preferably, the support portion is
30 punched to provide an opening on the top and the side so that
31 a fastener 36 can be installed in either position. For
32 example, fasteners 36 are installed on the side of the bulb
33 when ceiling clearance prevents them from being installed on
34 the top.



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1 A channel-shaped trim strip 37 is snapped into
2 position on the mounting clip 23 and is therefore secured to
3 and supported by the associated grid tee members. Such trim
4 strip 37 provides a planar portion 38 which fits against the
5 face portion 32 of the mounting clip. A lower flange 39 fits
6 beneath the bottom edge 41 of the face portion and an upper
7 flange 42 fits back along the upper surface of the transition
8 portion 31 of the mounting clip. The upper flange 42 is
9 provided with a hem 43 which locks against one of the pair of
10 locking tabs to hold the upper flange tightly against the
11 upper end of the face portion. Similarly, the lower flange
12 is usually provided with a hem 44, however, such hem need not
13 engage the back side of the lower edge 41 of the face portion
14 32 since the engagement between the upper hem and the locking
15 edge 34 is spaced back from the face portion and produces a
16 force tending to maintain the lower end of the trim strip
17 tight against the face portion.

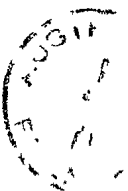
18 In FIGS. 3, 4, and some of the other FIGS.,
19 clearances are shown between the mounting clip and the various
20 portions of the trim strip for purposes of illustration.
21 However, in practice, the trim strips are dimensioned to
22 tightly engage the face portion 32 of the mounting clip, in
23 fact, an interference fit is desired so that once the trim
24 strip is snapped into its mounted position, it is tightly held
25 by the mounting clip. The lower flange 39 extends under the
26 adjacent portion of the panel supporting flanges 29. Because
27 a hem 44 is provided on the lower flange 39, all raw edges are
28 concealed.

29 FIG. 4 illustrates the manner in which a trim strip
30 37a having a height exceeding the height of the grid tee 27
31 may be mounted on a mounting clip 23. In this instance, the
32 trim strip provides a lower portion 46 which snaps onto the
33 face portion of the mounting clip 23 and an upper portion 47
34 which is rearwardly spaced and extends above the grid tee.

1 In this illustrated trim strip 37a a bead 48 is provided at
2 the lower end of the upper portion to lock with the locking
3 tabs. Here again, the mounting of the trim strip is
4 accomplished by merely snapping the trim strip onto the
5 associated mounting clip 23.

6 The mounting clip 23 can only be used at locations
7 where the trim strip must extend perpendicular to the
8 associated grid tee and the grid tee ends at an off-module
9 position. For example, such a mounting clip 23 could
10 typically be used to connect the trim portion 16 illustrated
11 in FIG. 1 to the ends of the main runners 12. Because the
12 connector 23 is formed from a single piece of sheet metal and
13 is very low in cost, its use is preferred in instances in
14 which the trim strip extends perpendicular to the grid tee and
15 is located at an off-module position.

16 FIGS. 5 through 14 illustrate variations in
17 structure and use of a second embodiment mounting clip. Such
18 mounting clip may be used to connect straight or curved trim
19 strips of various heights. Further, the mounting clip can be
20 used with trim strips which extend parallel to the supporting
21 grid tee or at angles relative to the supporting grid tee.
22 In this embodiment, all of the variations of the mounting clip
23 51 provide a support portion 52 which is again channel-shaped
24 or shaped or as an inverted "U" so as to fit down over the
25 bulb of an associated grid tee in a manner similar to the
26 support portion of the first embodiment. A pair of openings
27 50 are provided in the support portion 52 through which
28 fasteners can be installed. However, in this embodiment the
29 face portion 53 is connected to the support portion by a rivet
30 54 which permits pivotal movement of the face portion relative
31 to the support portion through a full 180°. Therefore, the
32 face portion 53 can extend perpendicular to the supporting
33 grid tee as illustrated in FIGS. 6 and 8, at an angle relative
34 to the supporting grid tee as illustrated in FIG. 7, or



1 parallel to the supporting grid tee as illustrated in FIG. 9.
2 In the variation illustrated in FIGS. 5 through 12, the face
3 portion 53 is cut out at 56 to provide a laterally extending
4 tongue 57. The tongue 57 extends rearwardly to a position in
5 which it overlays the adjacent end of the support portion and
6 is connected thereto by the rivet 54.

7 The upper end of the face portion 53 is formed with
8 a rearwardly extending flange 58 which snaps into and locks
9 with the associated trim strip 59. Similarly, the lower end
10 of the face portion 53 is provided with a rearwardly extending
11 flange 61 which snaps into and locks with the lower end of the
12 trim strip 59. Preferably, the upper flange 58 is provided
13 with a recessed, central portion 62 and a pair of upwardly
14 extending lock portions 63. With such structure, a
15 screwdriver or the like can be inserted between the upper
16 flange of an installed trim strip 59 and the recess 62 to pry
17 the upper flange of the trim strip up, clear of the locking
18 projections 63, when it is desired to remove the trim strip
19 from its mounted position.

20 The support portion is formed with an end extension
21 64 which extends beyond the channel-shaped part thereof so
22 that the mounting clip 51 can be installed at an intersection
23 as illustrated in FIGS. 6 and 11. In such instance, the
24 support portion 52 is positioned on a grid member 66 so that
25 the extension 64 extends beyond the end thereof and positions
26 the pivot fastener 54 above the bulb of the grid tee 67.
27 Further, the tongue 57 is sized so that it positions the face
28 portion 53 beyond the adjacent edge of the flange of the grid
29 70. Therefore, the trim strip 59 is properly positioned to
30 extend parallel to the grid tee 70 even though it is supported
31 by the grid tee 66 and extends perpendicular to the grid tee
32 66. In FIG. 10 however, the support portion 52 of the
33 mounting clip 51 extends parallel to the adjacent grid member
34 70 since it is mounted at a location spaced from an

1 intersection. In this mounting, the face portion 53 is
2 pivoted to a position perpendicular to the support portion 52
3 and the face portion is again properly positioned for
4 supporting a trim strip 59 parallel to the grid tee 67.

5 The length of the tongue 57 is selected so that when
6 the pivot 54 is directly over the bulb of an adjacent grid tee
7 and the face portion 53 is positioned parallel to such grid
8 tee, the face portion is properly positioned to receive the
9 trim strip. In the illustrated embodiment, the planar surface
10 is spaced from the pivot axis by a distance slightly greater
11 than the width of one of the panel supporting flanges of the
12 grid tee.

13 The mounting clip, because of the pivoted connection
14 between the face portion and the support portion, can be
15 utilized to support trim strips extending parallel to the
16 supporting grid tee and at all angles between the
17 perpendicular and parallel position. For example, the
18 mounting clip 51 can be used to connect and support any of the
19 trim strips illustrated in FIG. 1.

20 When mounting the trim strip 16 the mounting portion
21 is positioned with respect to the end of the adjacent grid
22 tees so that the trim strip 16 extends perpendicular to and
23 encloses the end of the associated grid tee in the manner
24 illustrated in FIG. 8. When supporting the angled trim strip
25 17 and 18, the face portion is pivoted with respect to the
26 support portion to properly align with such trim strips. When
27 supporting the trim strip 19, the mounting clip can be mounted
28 at intersections as illustrated in FIG. 11 or at locations
29 spaced from the intersections as illustrated in FIG. 10. When
30 supporting the curved trim strips 21 and 22, the face portion
31 is appropriately pivoted relative to the supporting grid
32 member to accommodate the particular angle at the point of
33 support. In effect, the mounting clip 51 is a universal
34 mounting clip which can be adjusted to support a trim strip



1 in substantially any orientation with respect to the
2 supporting grid tee member.

3 FIG. 12 illustrates a variation of the second
4 embodiment. In this variation a second tab 71 is bent back
5 from the face portion 72. This tab 71 is sized and positioned
6 so as to engage with the side of the web 73 of an associated
7 grid tee 74 when the face portion is pivoted to a position
8 parallel to the length of the grid tee 74. This tab provides
9 additional stability. Further, in this variation, the upper
10 flange 76 is modified to provide laterally extending locking
11 edges 77 on either side of the recess 78. This structure
12 provides a greater area of contact with the trim strip 79 than
13 the earlier described flange locking system. Here again the
14 recess permits the insertion of a screwdriver or the like when
15 removal of an installed trim strip is required.

16 As illustrated in FIG. 12a, the tab 71 is lance cut
17 from the face 71 and initially extends parallel to the face
18 portion but is on the back side thereof. When the tab use is
19 not required, it remains in its initial position. However,
20 when the tab use is required, it is merely bent back
21 perpendicular to the face portion as illustrated in FIG. 12.

22 FIGS. 13 and 14 illustrate another modified version
23 of the second embodiment mounting clip. In this modified
24 version, the trim strip is sized to have a height
25 substantially equal to the height of the associate grid tee.
26 In such instance, the face portion 53a is bent to extend
27 laterally providing a lateral flange 57a corresponding to the
28 tongue 57 of the version of FIG. 5. Such flange is connected
29 by pivot fastener 54 to the support portion 52. In this
30 instance, a locking tongue 65 is bent out from the flange 57a
31 to lock with the upper flange of a trim strip 59a.

32 The various proportions of the mounting clips are
33 selected so that the lower flange 67 of the trim strip 59 or
34 59a will extend a short distance under the lower surface of

1 the flange of a typical grid tee and also so that it will be
2 properly positioned with respect to other forms of grid tees.
3 For example, in FIG. 13, the grid tee 68 is provided with a
4 box-like lower flange which is open on the bottom side.

5 The grid tee 68 is of the type illustrated in the
6 United States Letters Patent No. 4,535,580 which patent is
7 incorporated herein by reference. Such grid tees provide gaps
8 in the lower inwardly extending lips 68a, as described in such
9 patent, so that a "miter" type joint is provided at
10 intersections. Since such gaps would be exposed on the outer
11 side where no intersecting grid tee exists, the lower flange
12 67 of the trim strip is proportioned and positioned to extend
13 into exact alignment with the inner edge of the outer lip 68a
14 as illustrated in FIG. 13. Therefore, the gaps are concealed
15 from view. The tab 71 functions to insure this precise
16 positioning of the flange 68a.

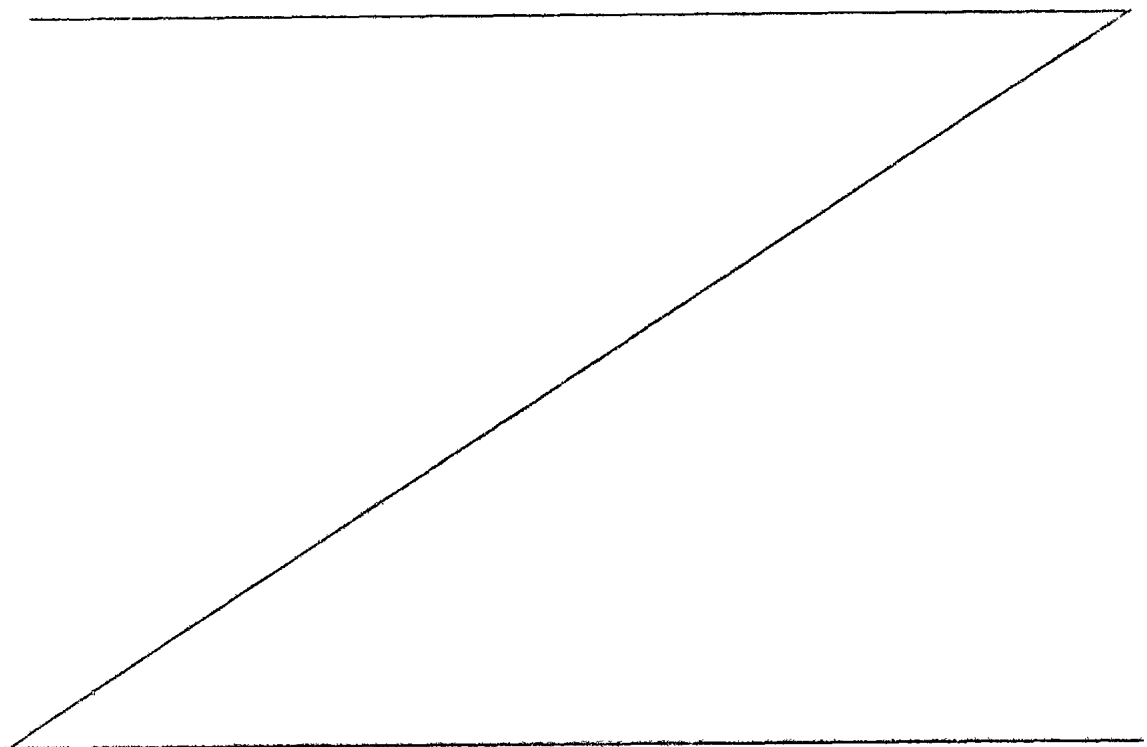
17 The same mounting clip and trim strip 59a can also
18 be used with grid tees 71 as illustrated in FIG. 14. Such
19 grid tees provide a hat-shaped flange structure having an
20 upwardly extending central channel 72. In this instance, the
21 lower flange 67 of the trim strip 59a again, extends inwardly
22 along the adjacent flange surface but terminates back from the
23 channel 72.

24 With this pivoted embodiment, the face portion can
25 be made of substantially any height to connect with and
26 support trim strips of various heights. Further, if desired,
27 the face portion can be made wider so as to function as a
28 splice plate at abutting ends of adjacent trim strips.

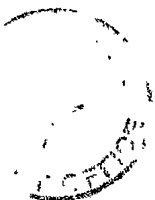
29 FIGS. 15 and 16 illustrate a third embodiment of
30 this invention. In this embodiment, the mounting clip 81 is
31 formed of a single piece of sheet metal. A pair of similar
32 legs 82 are bent back from opposite sides of the face portion
33 83 and are shaped to mate with the web 84 and bulb 86 of the
34 associated grid tee 87. Each leg 82 provides a first edge 88

which engages the side of the web 84. Above the edge 88 the legs are cut to fit around the bulb 86. Tabs 91 are bent up as illustrated in phantom in FIG. 15 to allow the mounting clip to be installed on the associated runner 87 and after the clip is positioned, the tabs 91 are bent down to engage the remote side of the bulb. Here again locking flanges 92 and 93 are provided at the upper and lower ends of the face portion to lock with a channel-shaped trim strip 94. This embodiment can only be used to connect with trim strips extending parallel to the associated grid tee but has the advantage of simplicity since the mounting clip is formed of a simple sheet metal piece bent to produce the required flanges and legs.

In each of the illustrated embodiments, the mounting clip is first mounted on the associated grid tee and the trim strip is thereafter installed by merely snapping it into the mounted position on the mounting clip. Because there are no fasteners required to connect the trim strip to the mounting clips, there are no exposed fasteners which could detract from the finished appearance of the installation. Further, because the mounting clips can be easily installed to support trim strips extending in substantially any direction relative to the associated grid tee, proper trim can be provided for edges of substantially any shape.

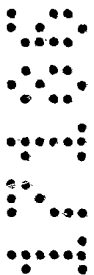


1 Although the preferred embodiments of this invention
2 have been shown and described, it should be understood that
3 various modifications and rearrangements of the parts may be
4 resorted to without departing from the scope of the invention
5 as disclosed and claimed herein.



THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A suspension ceiling trim connector for mounting trim strips on grid
tee members along exposed edges of suspension ceiling grids formed of
interconnected grid tee members having an upstanding central portion and
5 panel supporting flanges extending in opposite directions from the lower edge
of said central portion, said trim connector comprising a support portion
adapted to be connected to said central portion and a vertically extending face
portion, said face portion providing vertically spaced opposed interlocks
adapted to connect with channel-shaped elongated trim strips without the use
10 of separate fasteners, said trim connector operating to mount a channel-
shaped trim strip on an adjacent grid without any exposed fasteners.
2. A trim connector as set forth in claim 1 wherein said upstanding
portion provides a web joined to said flanges along one edge and includes a
bulb along the opposite edge of said web, and said support portion is adapted
15 to mount on said bulb.
3. A trim connector as set forth in claim 2 wherein said support portion
has an inverted "U" shape adapted to fit along the top and sides of said bulb.
4. A trim connector as set forth in claim 3 wherein said face portion has
a height substantially equal to the height of said grid tee members and is
20 adapted to lock into a channel-shaped trim strip having a height substantially
equal to the height of said grid tee members.
5. A trim connector as set forth in claim 3 wherein said face portion has
a height greater than the height of said grid tee members and is adapted to
lock into a channel-shaped trim strip having a height greater than said grid tee
25 members.
6. A trim connector as set forth in claim 3 wherein said face portion
provides a planar surface extending perpendicular to said support portion,
said trim connector being adapted to mount a trim strip on a grid member in a
position substantially perpendicular to such grid member.
7. A trim connector as set forth in claim 2 wherein said face portion



provides a planar portion adapted to mount a trim strip on a grid member in a position parallel to such grid member.

8. A trim connector as set forth in claim 7 wherein said trim connector is formed of a single piece of sheet metal bent to provide spaced and parallel
5 legs, each leg providing mounting edges structured to fit along the top and sides of the bulb of an associated grid tee member.

9. A trim connector as set forth in claim 8 wherein said edges are adapted to fit under one side of said bulb and the portions adapted to fit along the remote side of said bulb are provided by bendable tabs which are bent
10 down along the said remote side after said trim connector is positioned on a grid tee member.

10. A trim connector as set forth in claim 2 wherein said face portion is connected to said support portion for pivotal movement between positions perpendicular to said support portion and parallel to said support portion, said
15 trim connector being adapted to mount trim strips extending parallel to said grid members and at angles relative thereto.

11. A trim connector as set forth in claim 10 wherein a pivot element connects said support portion and said face portion.

12. A suspension ceiling trim connector for mounting elongated trim
20 strips on grid tee members along exposed edges of ceiling grids formed of interconnected elongated grid tee members having a central web, opposed panel supporting flanges along one edge of said web, and a stiffening bulb along the opposite edge of said web, said connector comprising a support portion adapted to be secured to said bulb, a face portion providing ends
25 adapted to lock into elongated trim strips, and a pivot connecting said support portion and face portion, said face portion being pivotally moveable relative to said support portion to align said face portion with trim strips extending in a variety of directions relative to a supporting grid tee member.

13. A trim connector as set forth in claim 12 wherein said support portion
30 has an inverted "U" shape and is sized to engage the top and sides of the bulb of an associated grid tee member.

14. A trim connector as set forth in claim 13 wherein said support portion extends from said inverted "U" shape portion permitting said end connector to be mounted at intersections of said grid members.

15. A trim connector as set forth in claim 14 wherein said face portion provides a planar portion and a lateral portion, said pivot connecting said lateral portion to said support portion.

16. A trim connector as set forth in claim 15 wherein said pivot is spaced from said planar portion by a distance at least substantially equal to the width of one of said flanges.

17. A trim connector as set forth in claim 16 wherein said planar portion has a length greater than the height of said grid tee members, and said lateral portion extends from said planar portion intermediate its ends.

18. A trim connector as set forth in claim 12 wherein said face portion provides lateral flanges at the ends thereof operable to lock into a channel-shaped trim strip.

19. A trim connector as set forth in claim 18 wherein at least one of said flanges provides a recess permitting insertion of a tool to release said one flange from a mounted trim strip when demounting of said trim strip is required.

20. A suspension ceiling comprising a grid of interconnected elongated grid tees cooperating to define panel openings, said ceiling providing an exposed edge along at least one portion thereof spaced from an adjacent wall, said grid tees including a central web, a stiffening bulb along one edge of said web and oppositely extending flanges along the opposite edge of said web, connector clips mounted on said grid at intervals along said exposed edge, said connector clips each having a support portion mounted on an adjacent bulb and a face portion, and elongated trim strips connected to said face portions without exposed fasteners, said strips providing a finished exposed trim along said exposed edges, at least some portions of said trim strips extending between adjacent connector clips at an angle relative to the grid tees on which said adjacent connector clips are mounted.

21. A suspension ceiling as set forth in claim 20 wherein at least some of said trim strips are curved.

22. A suspension ceiling as set forth in claim 20 wherein at least some of said trim strips are straight and extend parallel to adjacent grid tees.

5 23. A suspension ceiling as set forth in claim 20 wherein said support portion engages the top and opposite side walls of said adjacent bulb.

24. A suspension ceiling as set forth in claim 20 wherein said support portion and face portion are connected for relative pivotal movement.

10 Dated this 3rd day of August 1993

USG INTERIORS INC
By their Patent Attorneys,
COLLISON & CO.

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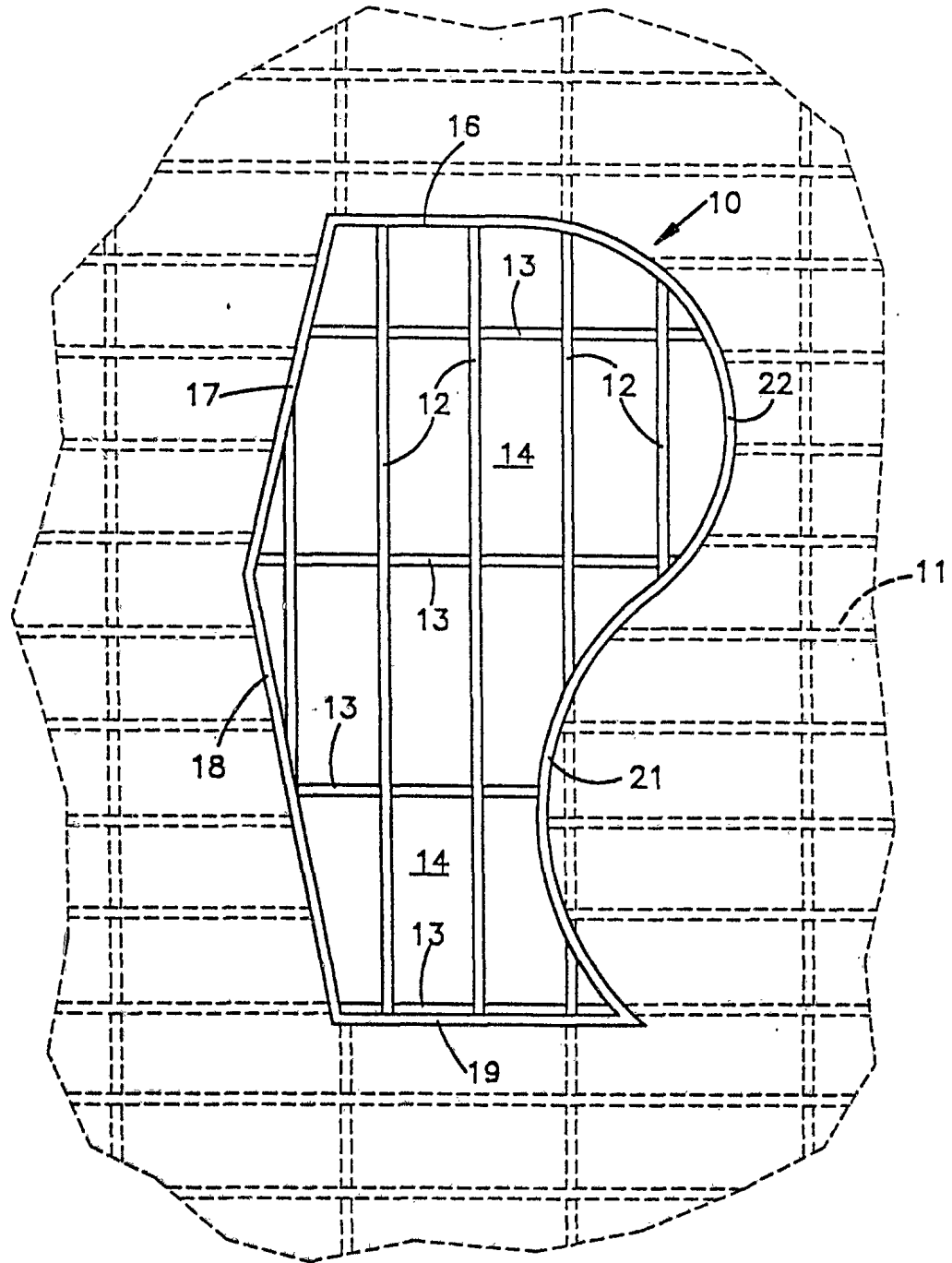



Fig.1

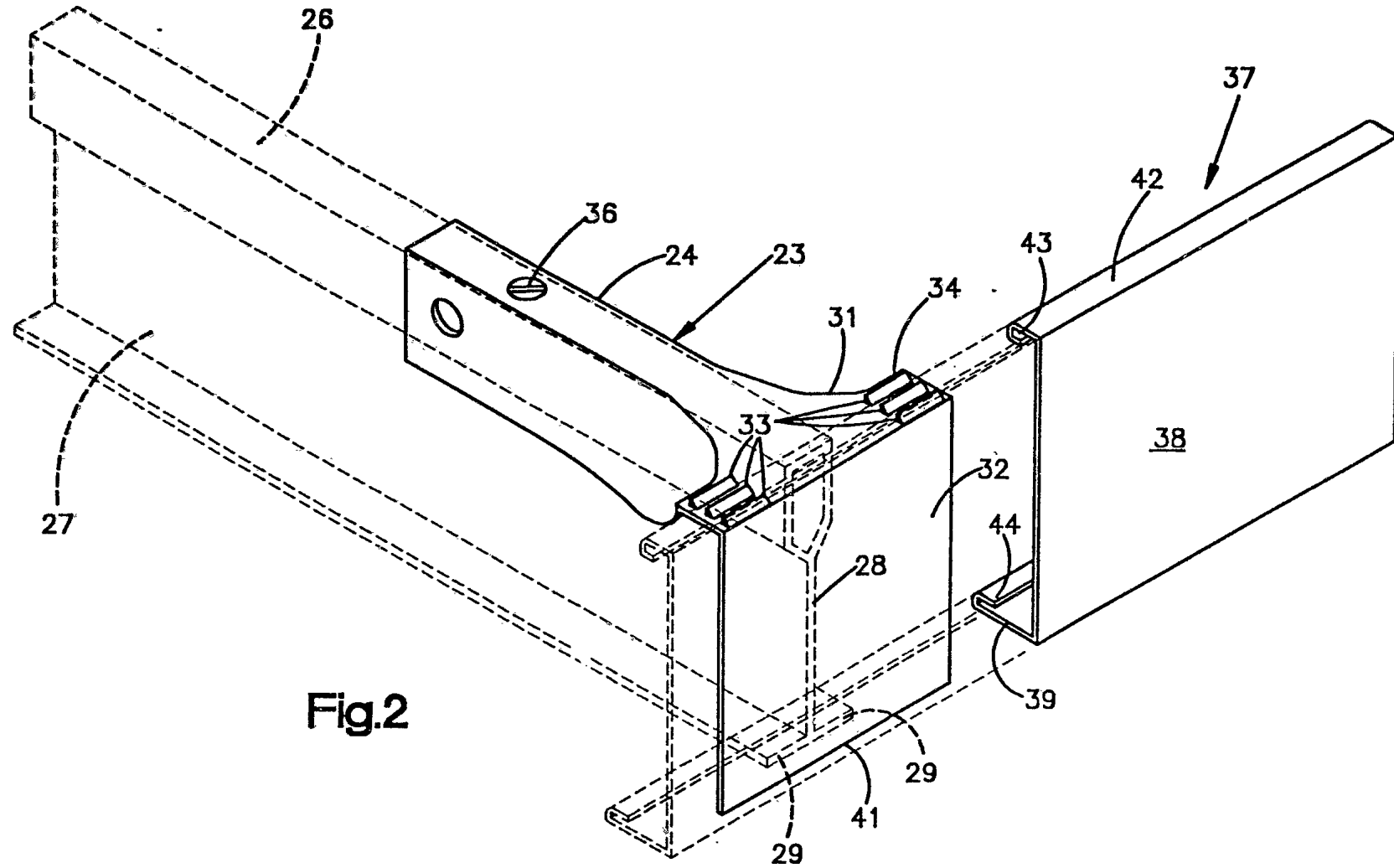
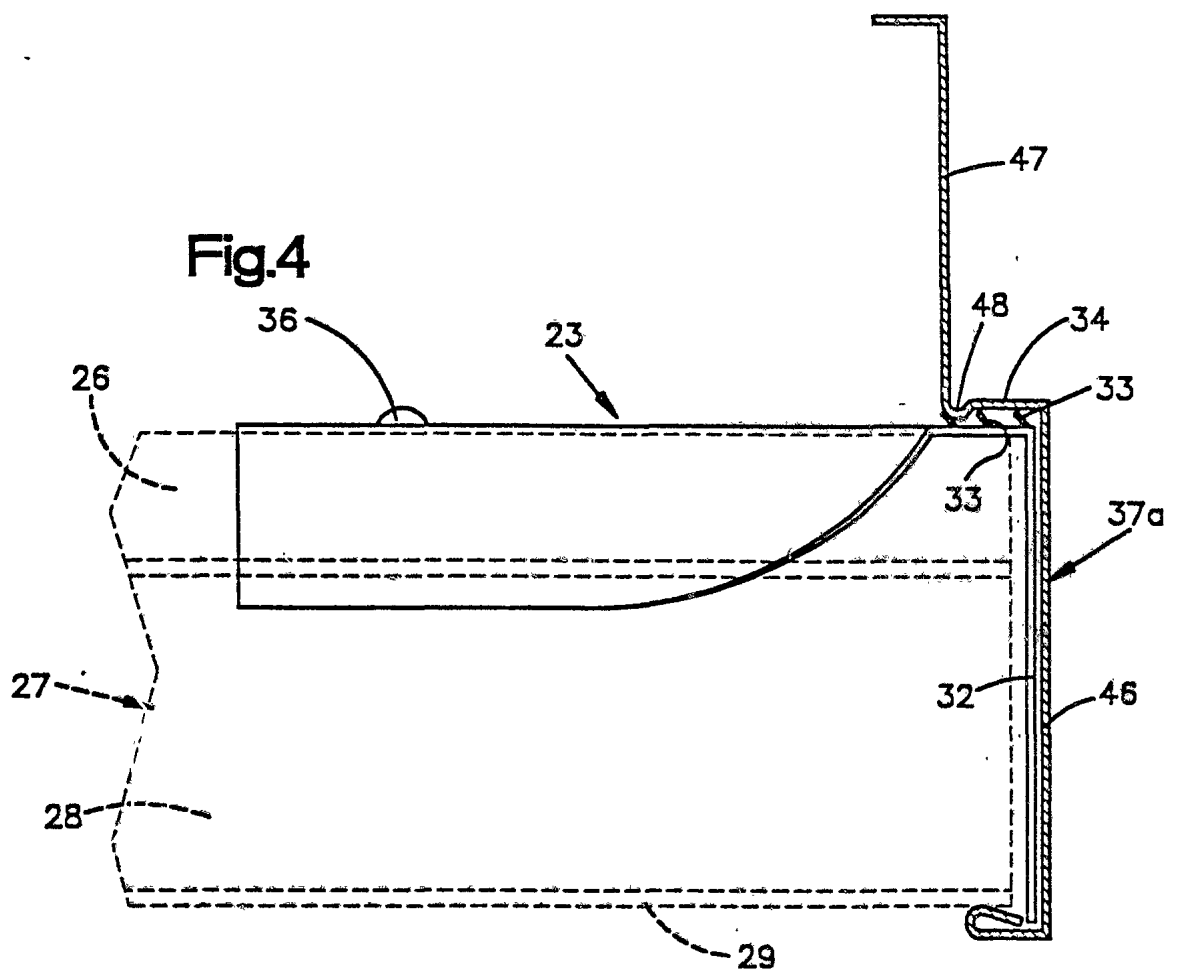
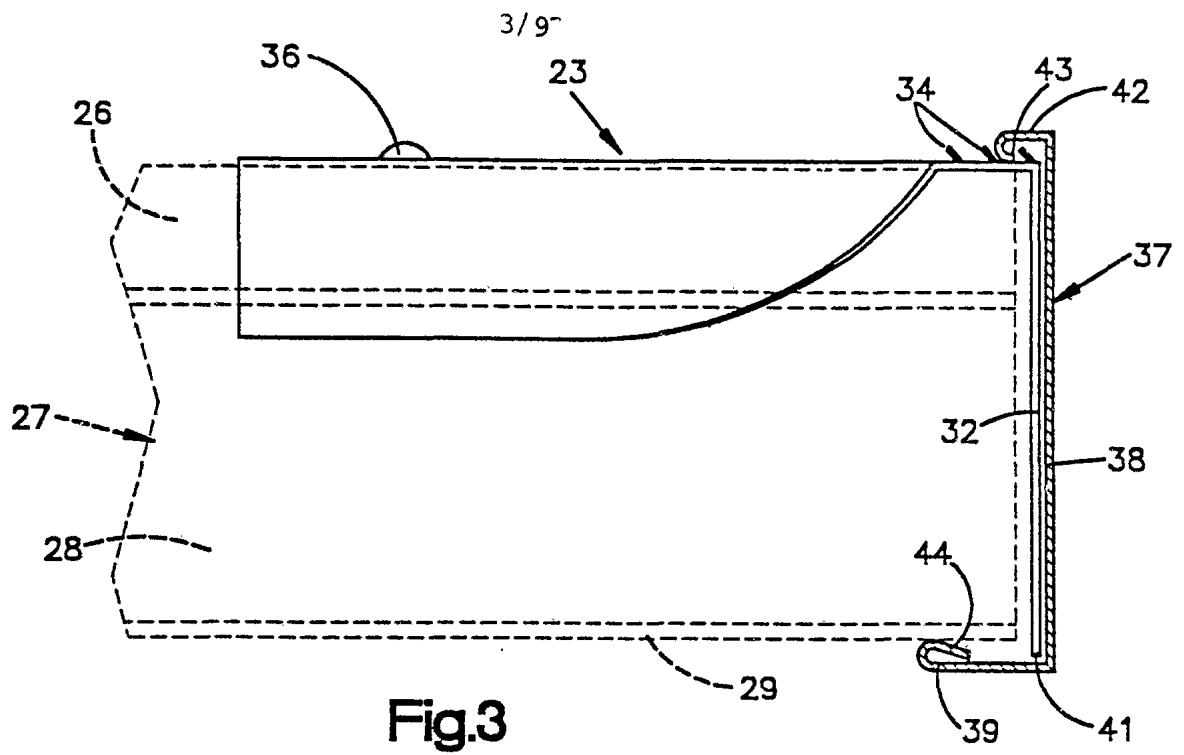


Fig.2



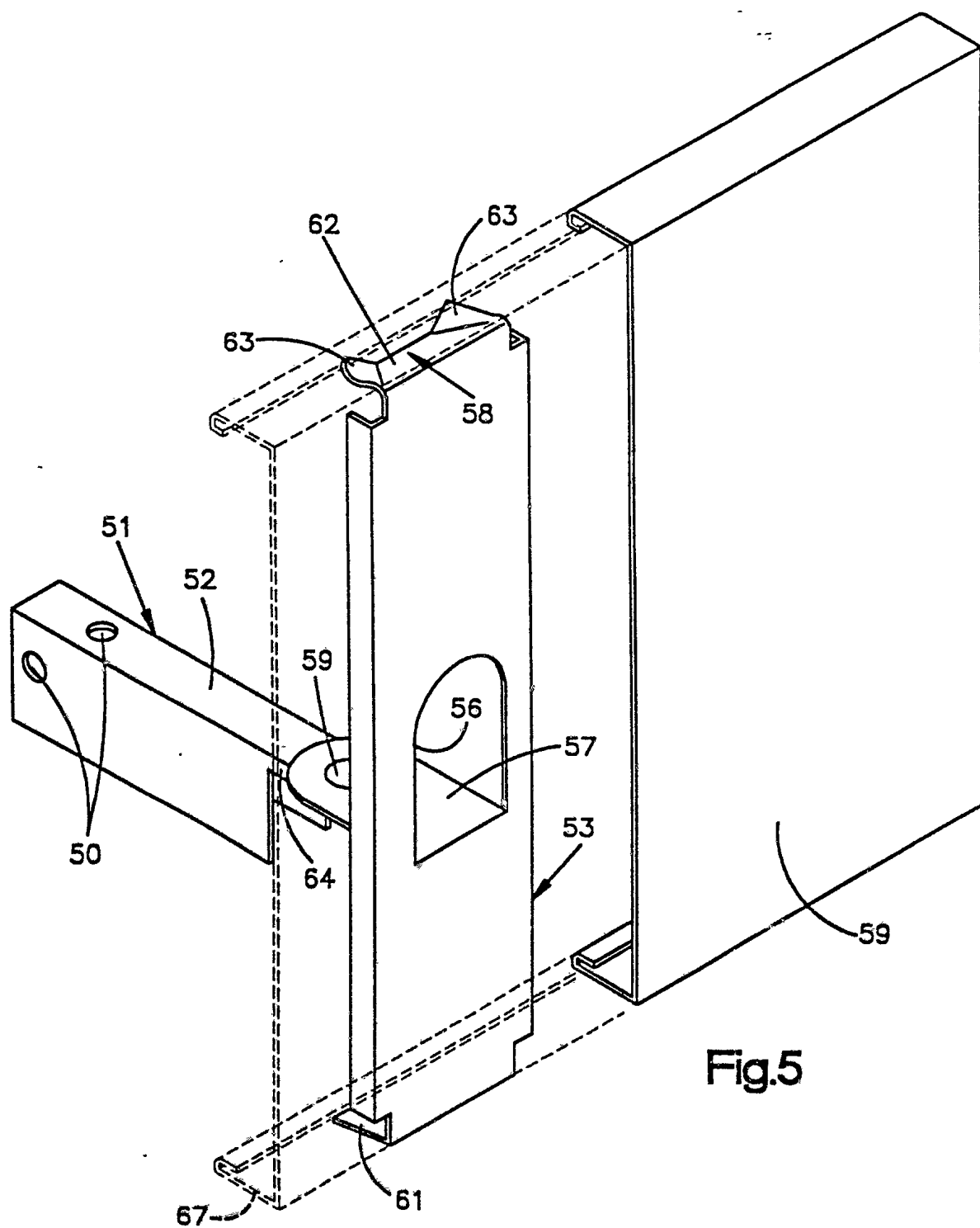
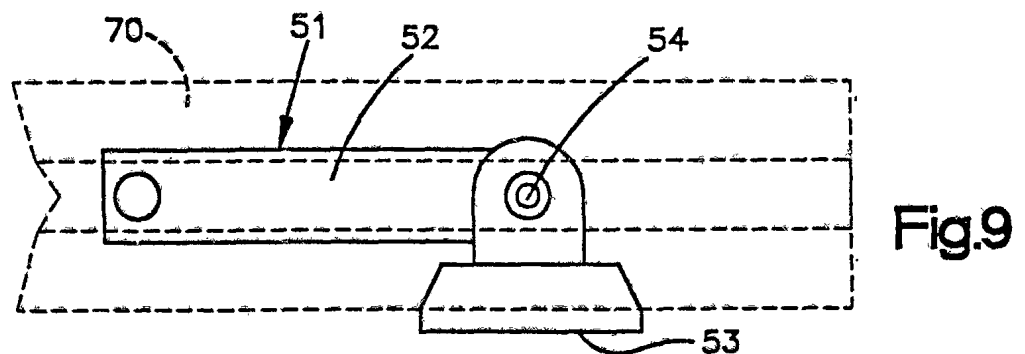
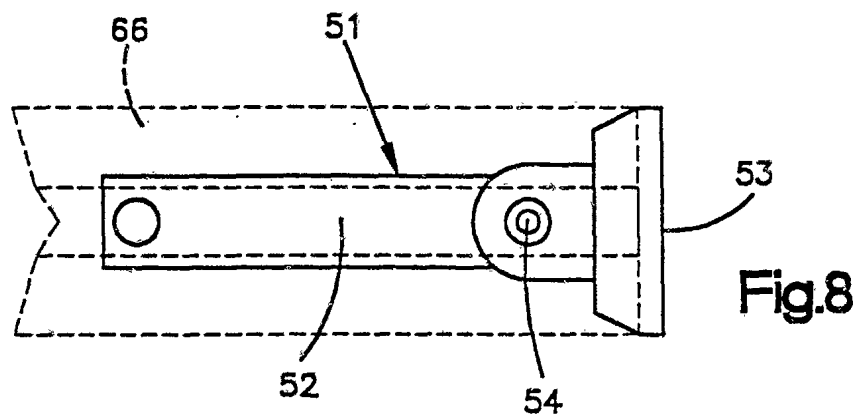
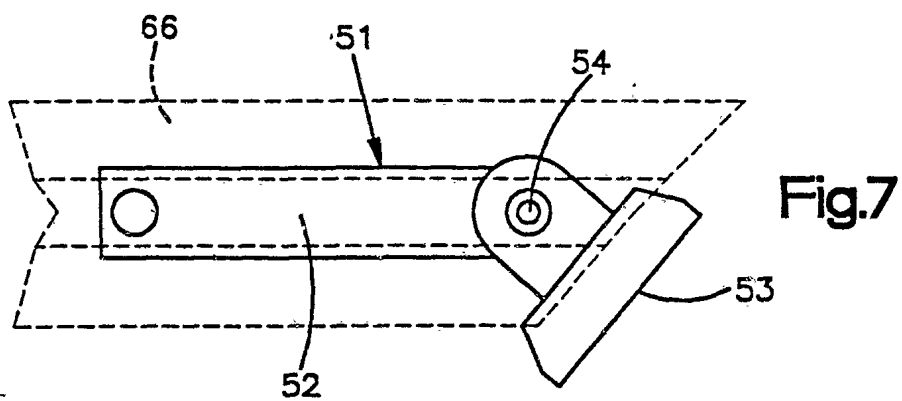
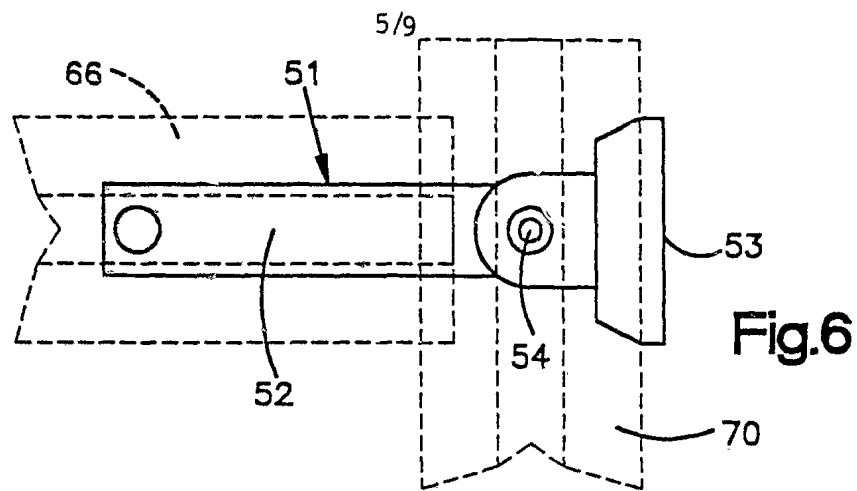
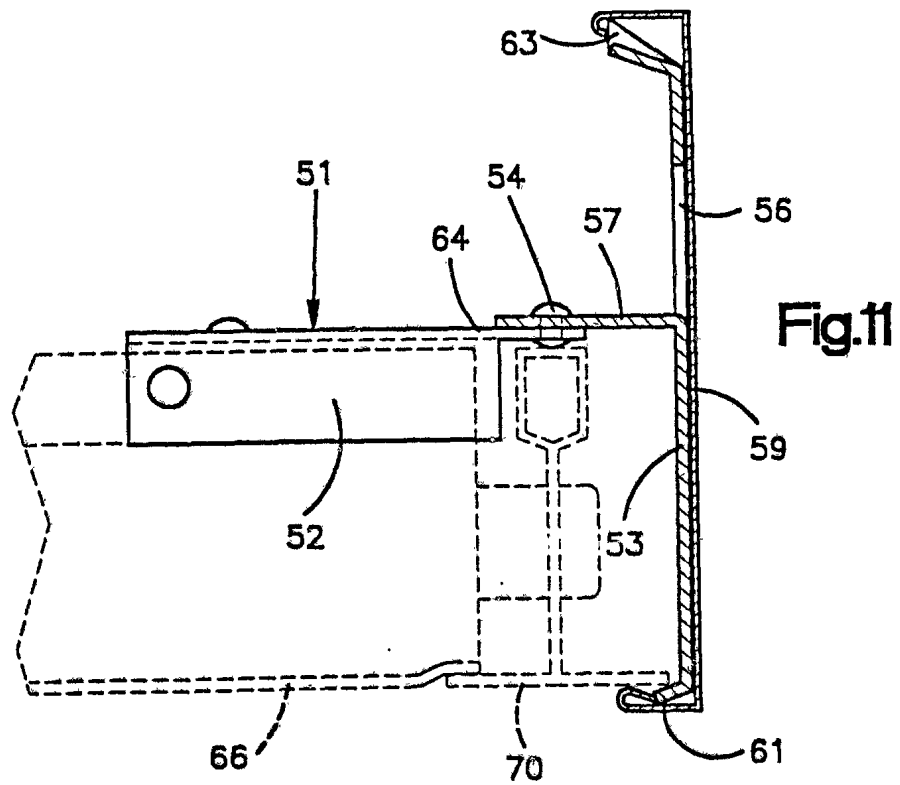
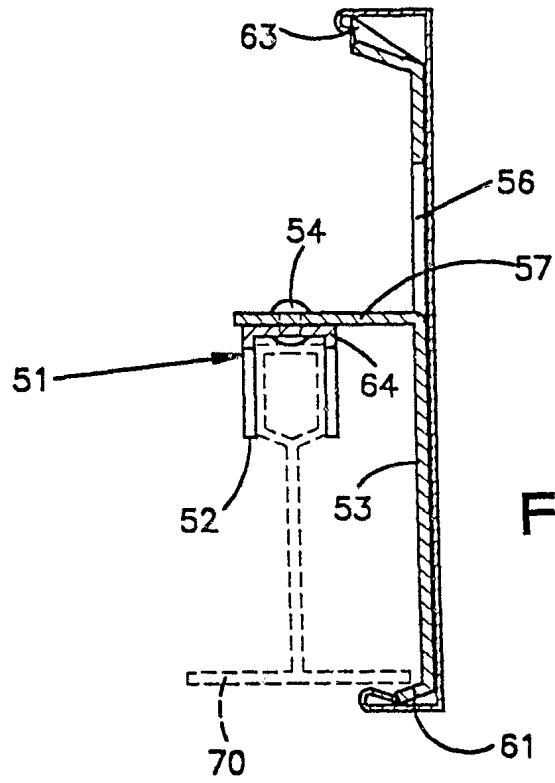


Fig.5





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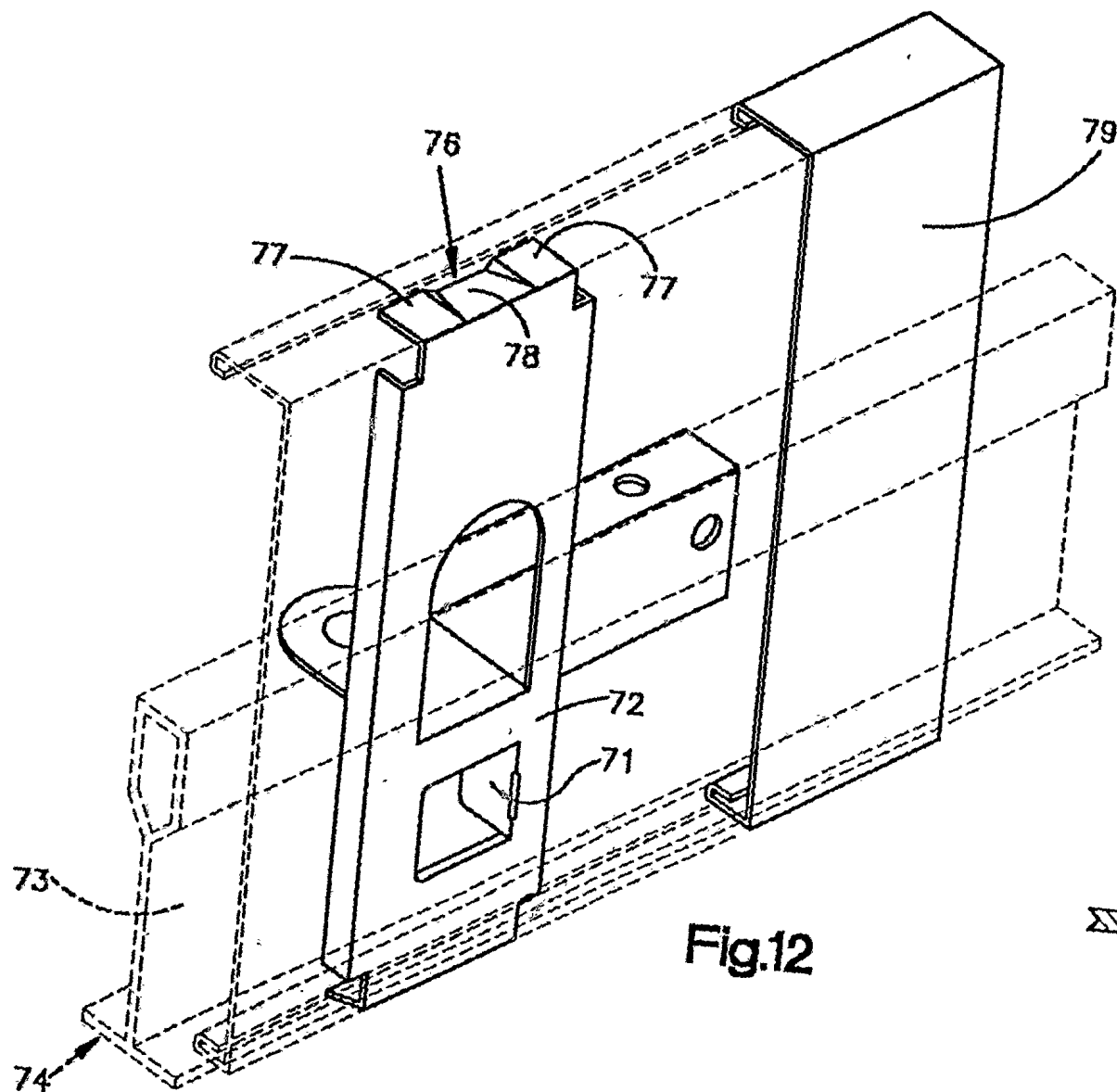


Fig.12

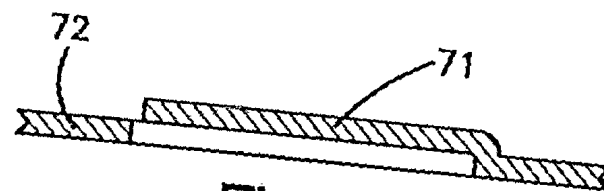
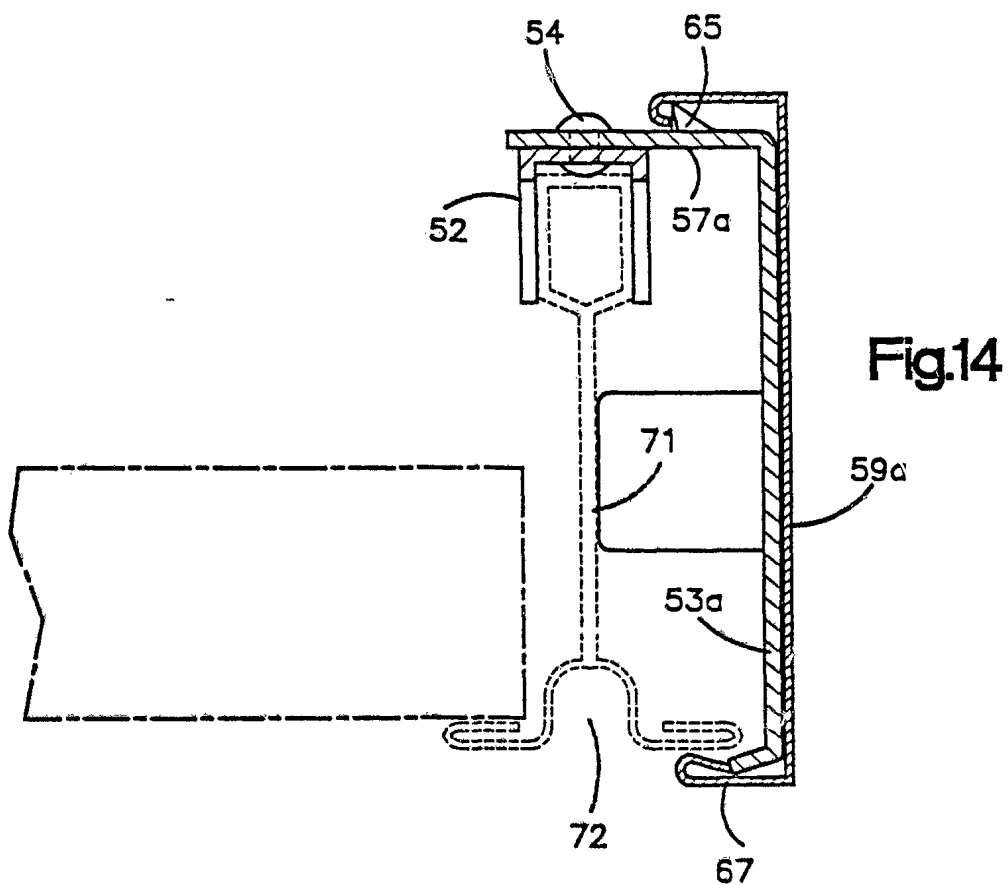
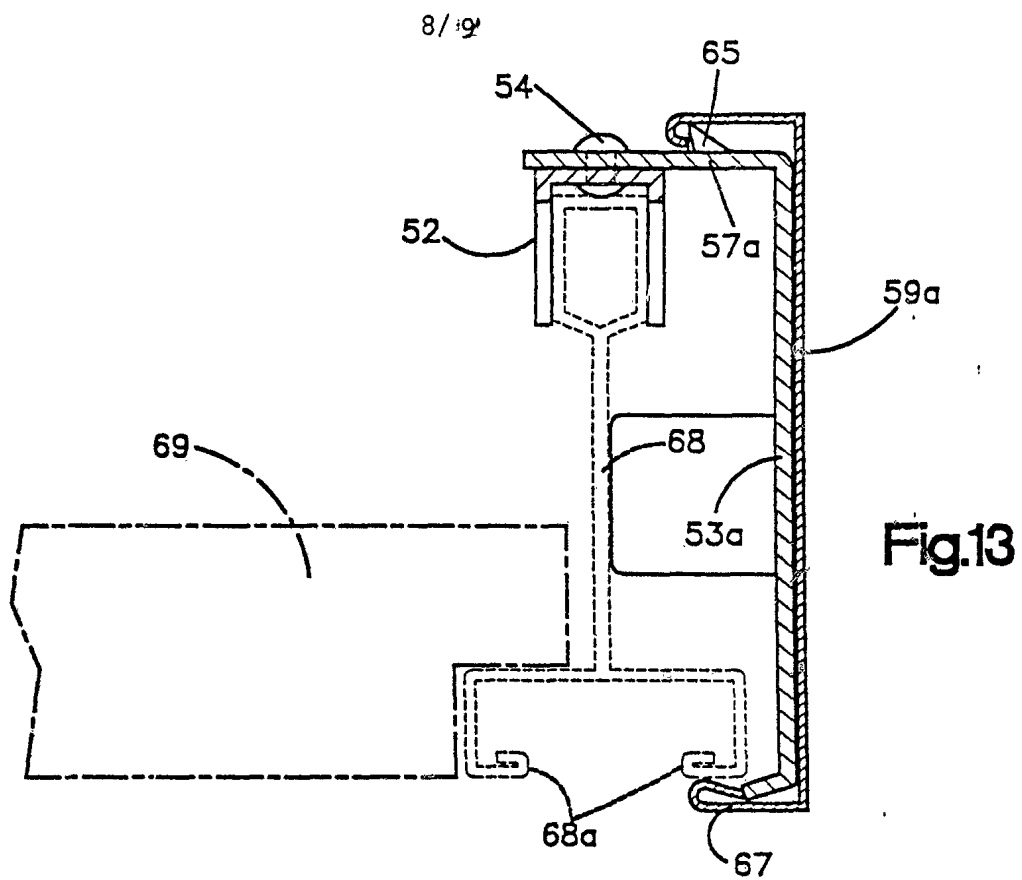


Fig.12a



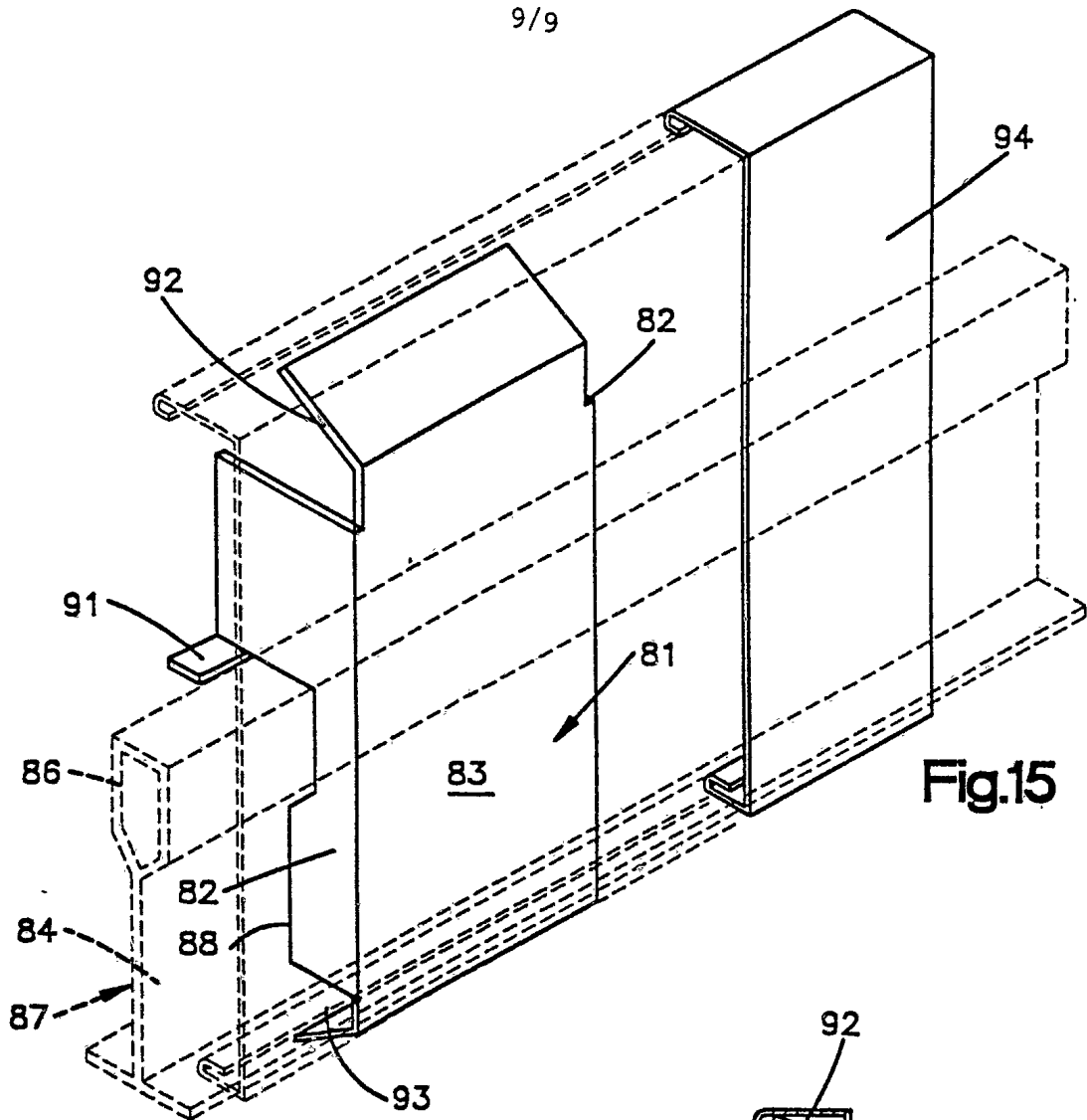


Fig.15

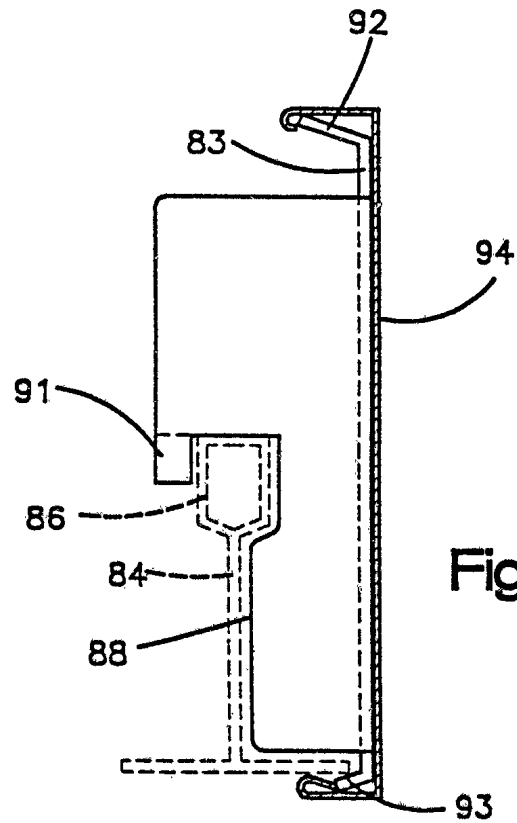


Fig.16