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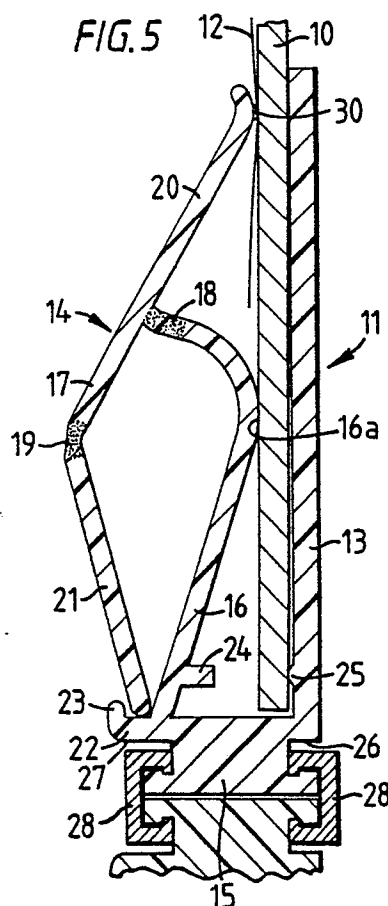
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54 **Resilient edging strip and display panel.**

57 An edging strip for a display panel (10) comprises a channel-shaped rail (11) having two side elements (13, 14) joined by a base (15). The side elements are adapted to receive and grip an edge of the display panel and at least one of the side elements has an inner portion (16) adjacent the base and an outer portion (17) joined to the inner portion by a resilient web. The outer portion of each side element incorporates a resilient hinge portion intermediate its length and a substantially rigid free end extending beyond the inner portion. The outer portion can be snapped from a closed position in which the free end bears against the display panel to an open position in which the free end extends away from an is spaced from the display panel.



RESILIENT EDGING STRIP AND DISPLAY PANEL

The present invention relates to a resilient edging strip for a panel which is designed to be quickly and easily attached to the edge of the panel in a secure manner and which in one embodiment of the invention enables flexible sheet material to be quickly and easily attached to and removed from the panel for display purposes.

It is well known to display advertising material on panels at a point of sale location, for instance indoors in a shop, or out of doors at a garage or filling station. In many cases it is desirable to change the nature of the advertising material at frequent intervals. If this entails replacing the complete display panel, it can involve considerable cost, particularly if the display panel is for use out of doors and is designed to withstand weather conditions. It is therefore desirable to provide a durable, permanent display panel onto which sheets of replaceable advertising material can be quickly and easily attached and removed. Hitherto, this has been done by using an adhesive which involves problems in both securely attaching the sheet material and enable it to be removed relatively easily, or by fastening members or studs which may not be secure and which again involve considerable labour in both attaching and removing the sheet material.

In order to overcome some of these problems it has been proposed in U.K. Patent No. 2010673 of Segerstad to provide a strip assembly comprising a main strip adapted to grip the edge of a display panel and two flap strips which are pivotally hinged to the main strip. The main strip and the flap strips have co-operating locking elements enabling the flap strips to be locked in a position in which they can clamp a sheet of display material against the panel. We have found that this known type of strip assembly has a limited application because it can only accommodate a relatively small range of panel thicknesses. It is also necessary to form the terminal portions of the flap strips from a different and more resilient material than the main part of the flap strips in order to achieve the required gripping characteristics. This makes the manufacture of the components relatively costly. A further disadvantage is that the flap strips can only accommodate the sheet material and cannot in addition clamp a protective sheet of glass or transparent plastics on the panel.

It is therefore an object of the present invention to provide an edging strip for a display panel which is unitary in its structure and therefore economic to manufacture and assemble, which can be used with a wide range of panel thickness and which enables flexible sheet material and a protective

sheet of plastics or the like to be quickly and easily attached to or removed from the panel.

The edging strip of the present invention is not limited to use as an edging display panel. For instance it may be used to provide a protective edging for glass panels, such as the panels used in a double glazing window system. It may also be conveniently used as an edging strip for pictures, mirrors or the like.

Accordingly, the present invention provides a one piece edging strip for a panel, the edging strip being channel shaped and having two side walls joined by a base, the side walls being adapted to receive and grip an edge of the panel, at least one of the side walls comprising an inner portion adjacent the base joined to an outer portion, characterised in that the outer portion is snap engageable from an open position in which it is bowed concavely so that its free end is spaced from the adjacent face of the panel and a closed position in which it is bowed concavely so that its free end is clamped against the adjacent face of the panel.

The present invention also provides a panel having edging strips as defined in the preceding paragraph attached to the edges of the panel whereby the end flaps of the side walls of the edging strips can be snapped from a position in which the end flaps are clamped against a surface of the panel into a position in which they extend away from and are spaced from the panel to enable sheet material to be attached to and removed from the panel.

The present invention will now be described in detail with reference to the accompanying drawings in which:

Figure 1 is a plan view of a part of a panel and edging strip according to the present invention;

Figure 2 is a section through the edging strip shown in Figure 1;

Figure 3 is a perspective view of the edging strip;

Figure 4 is a section through the panel and edging strip of Figure 1 showing the edging strip in the open position;

Figure 5 is a section similar to Figure 3 but showing the edging strip in the closed position clamping a sheet of material against the panel;

Figure 6 is a section through a modification of the edging strip of Figures 2 to 4, and

Figure 7 shows a hinge for linking two of the edging strips of Figures 2 to 4 together.

In the drawings, a display panel is indicated generally at 10 and an edging strip for the display panel 10 is indicated generally at 11. The panel 10 may be formed from any suitable material such as

fibre board or plastics so as to be sufficiently rigid to act as a support for flexible sheet material such as a poster 12 which may carry, by way of example, advertising or sales information.

The edging strip 11 is generally channel shaped so as to comprise two similar side walls 13 and 14 joined by a substantially rigid base 15. The side wall 13 is substantially flat and the side wall 14 comprises an inner portion 16 and an outer portion 17. The inner portion 16 extends towards the opposite wall 13 and is then curved away from the wall 13 to form an elbow 16a. The end of the inner portion beyond the elbow 16a is joined to the outer portion 17 by a resilient web 18 which is formed from a different and more resilient material than the remainder of the inner portion, which is relatively rigid.

The outer portion 17 incorporates a resilient hinge 19 running its full length and intermediate its breadth, a substantially rigid end flap 20 extending beyond the inner portion 16 and a rearwardly extending arm 21 which is joined to the end flap 20 by the resilient hinge 19. The base 15 is formed with an extension 22 having a raised lip 23 which forms a hook adapted to releasably retain the outer end of the arm 21, as shown best in Figure 5.

The inner face of the inner portion 16 of the side wall 14 is formed with a projecting rib 24 and the opposite, substantially flat side wall 13 is formed with a longitudinally extending protuberance 25 which faces the rib 24. The rib 24 and protuberance 25 are provided to locate a corner piece (not shown) for forming a mitred coner joint between two adjacent edging strips 11 at the corner of a display panel.

The base 15 is formed with two lengthwise extending side slots 26 and 27, enabling the strip 11 to be quickly and easily attached back to back to a similar edging strip, as shown in Figure 5 with the aid of clips 28, or as shown in Figure 7 with the aid of a flexible hinge 29.

In use, the edging strip 11 is applied to an edge of the panel 10 by sliding the panel between the side wall 13 and the inner portion 16 of the side wall 14, so that it is gripped firmly between the elbow 16a and the wall 13. The free end of the arm portion 21 of the side wall 14 is then snap engaged over the lip 23 into the position shown in Figure 4 in which the substantially rigid flap 20 at the free end of the outer portion 17 extends outwardly away from the panel 10. The sheet of flexible material 12 can then be placed against a surface of the panel 10. The end flap 20 of the outer portion 16 is then pressed inwardly so that it snaps from the position shown in Figure 4 to the position shown in Figure 5 in which it clamps the flexible sheet 12 against the panel 10. As the end flap 20 is moved towards the panel 10, the resilient hinge 19 is compressed and

moved outwardly. As the hinge 19 passes through its dead centre, the end flap 20 is snapped against the panel 10 to exert a firm clamping action on the sheet 12.

If the outer portion 17 is now pressed inwardly by applying pressure in the area of the hinge 19, the end flap 20 is rotated outwardly away from the panel. As this rotation occurs, a snap action is achieved and the end flap 20 of the outer portion is snaps into its open position until it is moved inwardly again.

The end flap 20 at the free end of the outer portion is provided with a longitudinally extending protuberance 30 formed from a relatively soft plastics material to provide an adequate grip on the sheet material 12 in the closed position.

The display panel 10 will preferably have an edging strip attached along each side of the panel so that the panel is completely trimmed and finished by the edging strip. Posters can then be attached to a face of the panel by snapping the end flap of each strip away from the panel, laying the poster in place and then manually snapping each end flap of the outer portion of the edging strip back against the face of the panel.

If it is necessary or desirable to protect the posters or other flexible sheet material on the panel 10, a protective sheet of glass or clear plastics can be inserted on top of the poster and clamped in position by the edging strips.

The edging strip 11 is formed as a single unitary plastics moulding which makes it economic to manufacture and to assemble. Preferably, the flexible web 18 and the flexible hinge 19 are formed from a relatively soft polyvinyl chloride or polypropylene and the remainder of the edging strip formed from more rigid polyvinyl chloride.

In an alternative embodiment of the invention, which is shown in Figure 6, an edging strip is indicated generally at 40 which is similar in all respects to the edging strip 11 except that both side walls 41 and 42 are similar in all respects to the side wall 14 of the edging strip 11. In use, when the edging strip 40 is attached to an edge of a panel, posters or similar sheet material can be attached to both faces of the panel 10 in a similar manner. In all other respects the edging strip 40 is similar to the edging strip 11 and is used in a similar manner to clamp posters or other similar sheet material to the opposite faces of a panel 10.

As can be seen best from Figure 5, clips 28 can be used to attach two of the edging strips together in a relatively rigid and secure manner.

Alternatively, and as shown in Figure 7, a single clip 29 having a flexible hinge portion and which can be used so as to join two of the strips together in such a manner that they can be positioned at any required angle to one another.

Claims

1. A one piece edging strip for a panel, the edging strip being channel shaped and having two side walls joined by a base, the side walls being adapted to receive and grip an edge of the panel, at least one of the side walls comprising an inner portion adjacent the base joined to an outer portion, characterised in that the outer portion is snap engagable from an open position in which it is bowed concavely so that its free end is spaced from the adjacent face of the panel and a closed position in which it is bowed concavely so that its free end is clamped against the adjacent face of the panel.

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2. An edging strip as claimed in Claim 1, characterised in that the inner portion is joined to the outer portion by a resilient web of material which extends the length of the edging strip and allows the inner portion to flex relative to the outer portion.

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3. An edging strip as claimed in Claim 1 or Claim 2, characterised in that the outer portion comprises an flap at its free end and a rearwardly extending arm the end of which is releasably engagable and lockable adjacent the base of the edging strip, whereby the rearwardly extending arm acts as a spring to snap engage the end flap between the open and closed positions.

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4. An edging strip as claimed in any preceding claim, characterised in that the rearwardly extending arm is releasably connected to and constrained by a hook element adjacent the base.

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5. An edging strip as claimed in any preceding claim, characterised in that the other side wall is substantially flat.

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6. An edging strip as claimed in any of Claims 1 to 4 characterised in that the side walls are similar.

7. An edging strip as claimed in any preceding claim characterised in that the edging strip is formed as a one piece unitary plastics moulding.

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8. An edging strip as claimed in any preceding claim, characterised in that the resilient web of the or each side wall is formed from a more resilient plastics material than the remainder of the strip.

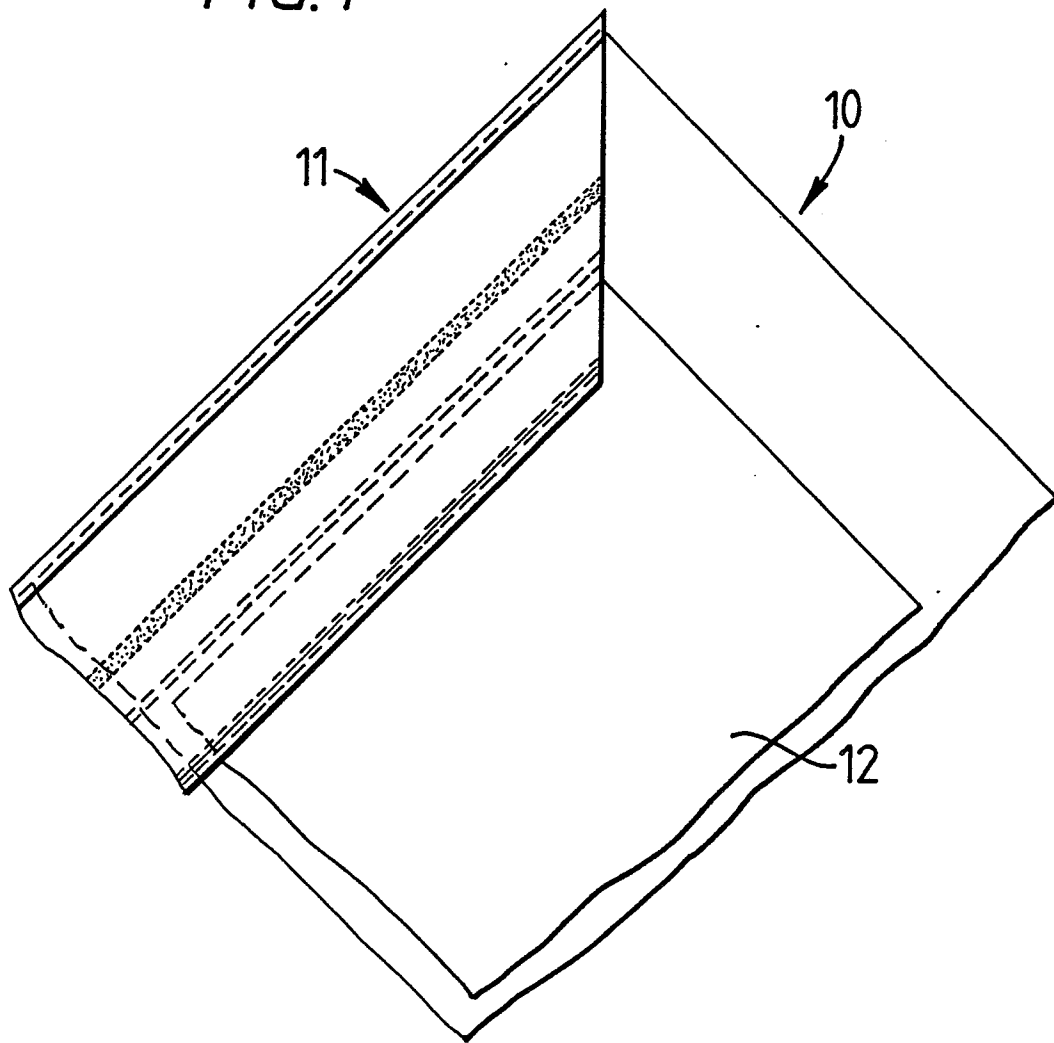
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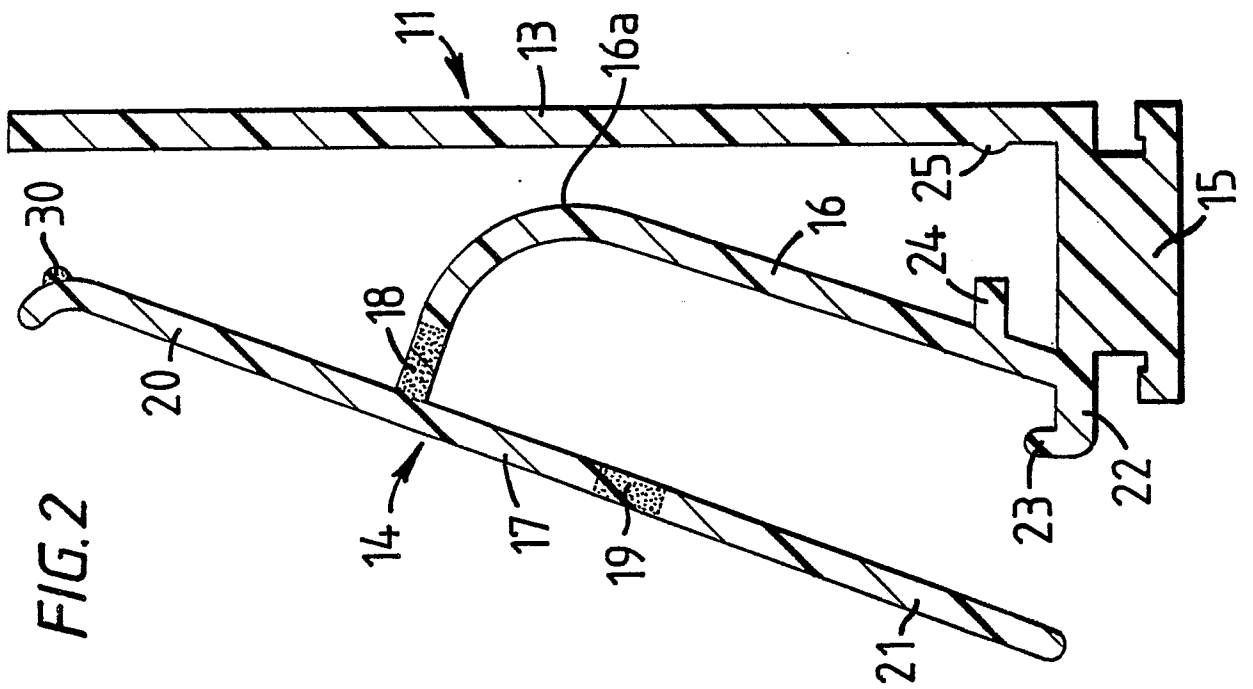
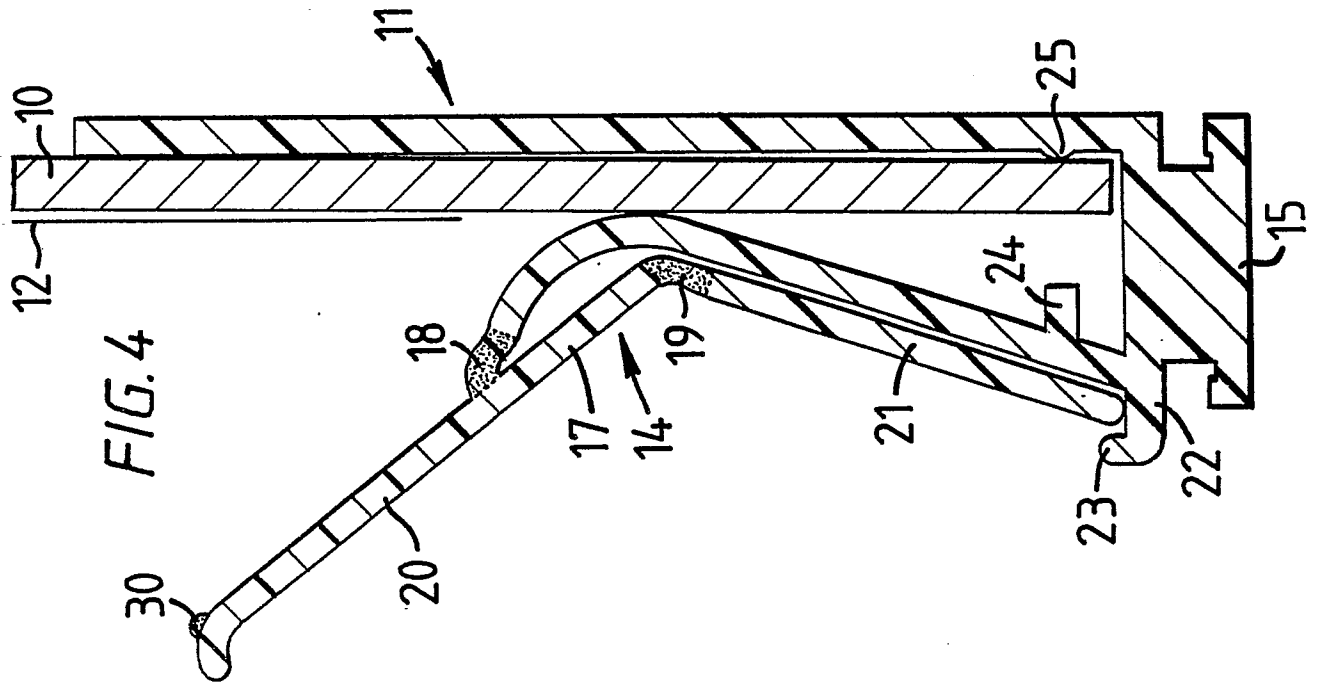
9. A panel having edging strips each as claimed in any preceding claim attached to the edges of the panel whereby the end flaps of the side walls of the edging strips can be snapped from a position in which the end flaps are clamped against a surface of the panel into a position in which they extend away from and are spaced from the panel to enable sheet material to be attached to and removed from the panel.

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FIG. 1





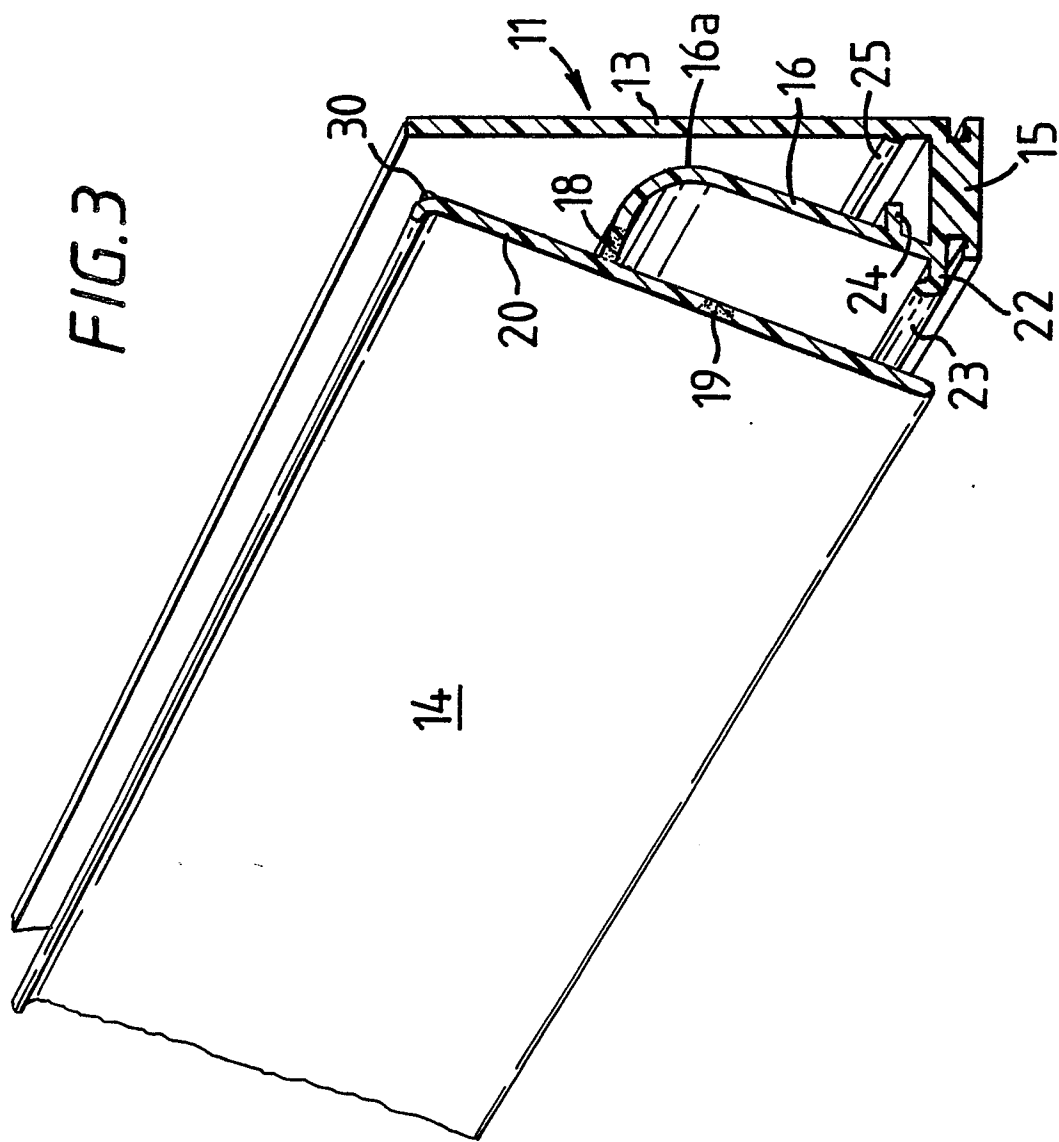


FIG. 5

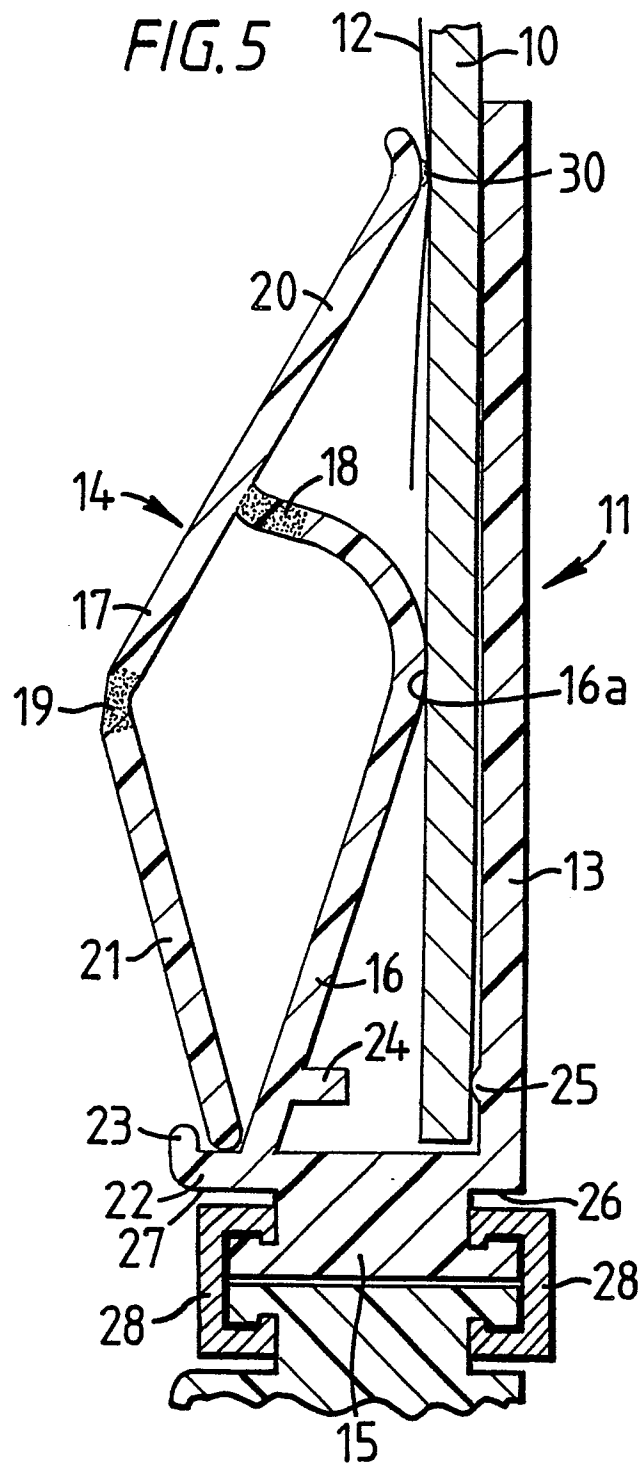


FIG. 6

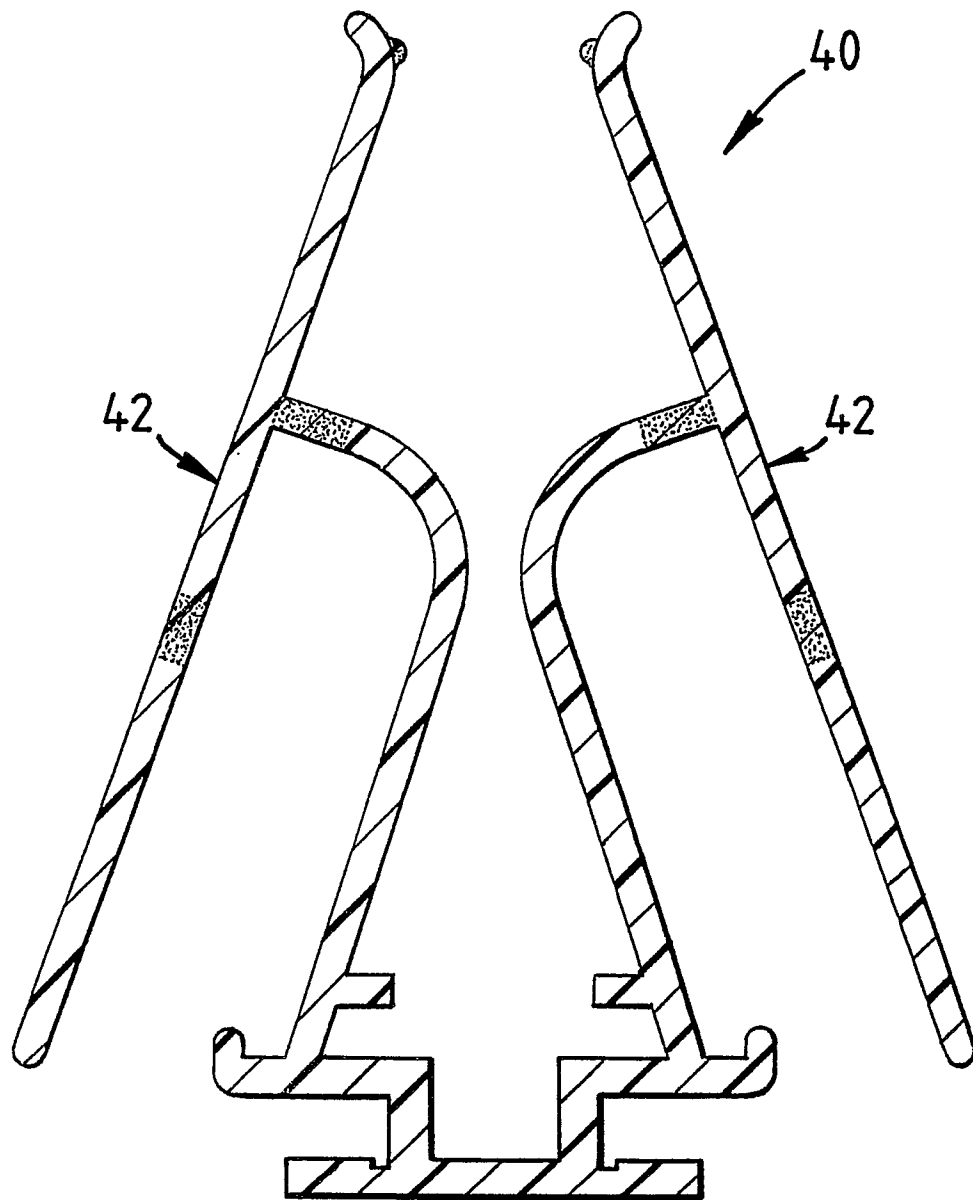
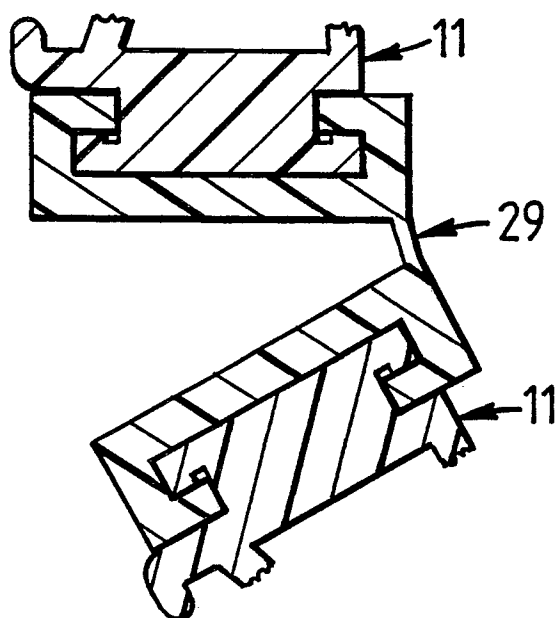


FIG. 7





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.4)																
A	FR-A-2 533 728 (MARKETING DISPLAYS, INC.) * Page 2, line 6 - page 3, line 10; page 7, line 33 - page 10, line 36; claims 1-4,7-8,24; figures 1-2A,5-10,12,20-20A * ---	1-5,7-8 ,9	G 09 F 15/00 G 09 F 1/12 A 47 G 1/06																
A	EP-A-0 217 500 (GRAPHIC FORMING LTD) * Claim 1; page 2, lines 3-23; page 6, line 21 - page 8, line 8; figures 1-6 * -----	1,6																	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)																
			G 09 F A 47 G																
The present search report has been drawn up for all claims																			
Place of search THE HAGUE		Date of completion of the search 26-09-1988	Examiner FRANSEN L.J.L.																
<table border="0"><tr><td>CATEGORY OF CITED DOCUMENTS</td><td>T : theory or principle underlying the invention</td></tr><tr><td>X : particularly relevant if taken alone</td><td>E : earlier patent document, but published on, or</td></tr><tr><td>Y : particularly relevant if combined with another</td><td>after the filing date</td></tr><tr><td>document of the same category</td><td>D : document cited in the application</td></tr><tr><td>A : technological background</td><td>L : document cited for other reasons</td></tr><tr><td>O : non-written disclosure</td><td>-----</td></tr><tr><td>P : intermediate document</td><td>& : member of the same patent family, corresponding</td></tr><tr><td></td><td>document</td></tr></table>				CATEGORY OF CITED DOCUMENTS	T : theory or principle underlying the invention	X : particularly relevant if taken alone	E : earlier patent document, but published on, or	Y : particularly relevant if combined with another	after the filing date	document of the same category	D : document cited in the application	A : technological background	L : document cited for other reasons	O : non-written disclosure	-----	P : intermediate document	& : member of the same patent family, corresponding		document
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