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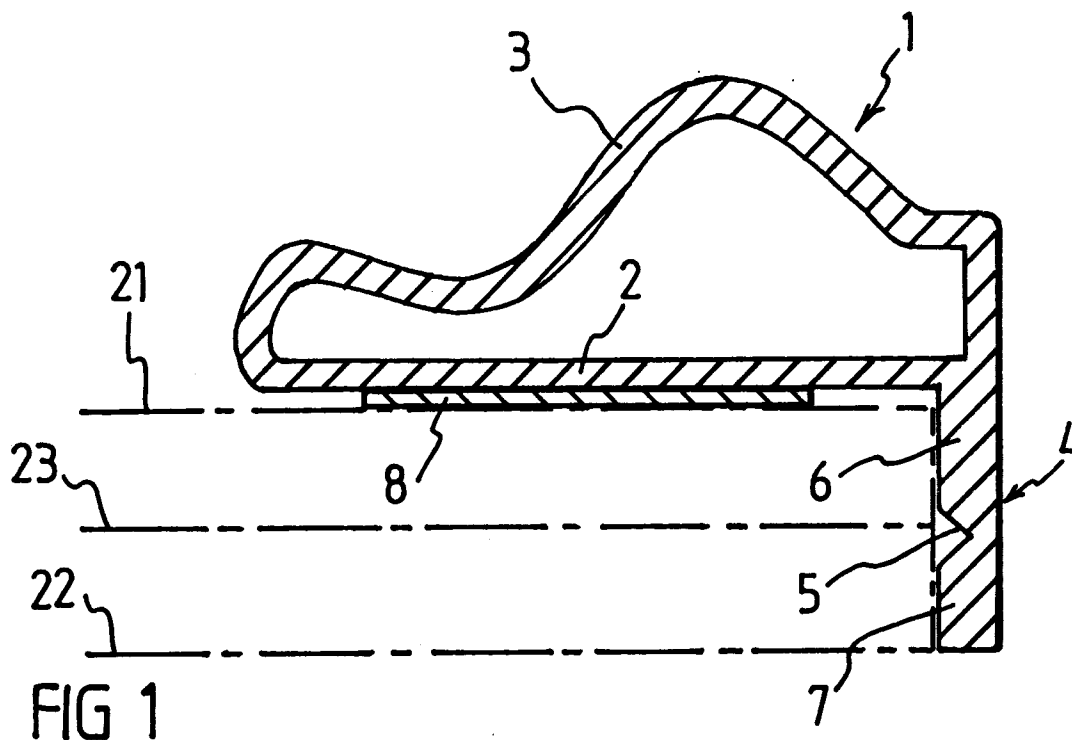
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(54) Sign framing

(57) A sheet of plastics material for use as a sign has an extruded plastics section forming a frame around its peripheral edge. The section has a hollow top part 1 and a perpendicular side wall 4. The top part 1 has a planar bottom wall 2 which is secured to the front surface

of the sheet by a stip of pressure-sensitive adhesive 8, and a profiled top wall 3. The side wall 4 covers the side face of the sheet and includes a groove 5 on its inside face forming a line of weakness for removing a section 7 allowing the section to be used with different thicknesses of sheet.



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Description

TECHNICAL FIELD OF THE INVENTION

[0001] This invention relates to the framing of signs and a framing section for use therein.

BACKGROUND

[0002] It is very common to produce signs by printing or engraving a rigid sheet of plastics material. In most cases the signs are fixed in position without any edging.

[0003] The present invention seeks to provide a new and inventive way of forming a frame around a sign.

SUMMARY OF THE INVENTION

[0004] The present invention provides a sign comprising a sheet of plastics material having a front face and a side face surrounding said front face,

characterised by a frame formed of a plastics extrusion and extending around the periphery of the sheet and which, in transverse cross section, comprises a top part which partially overlies said front face of the sheet and is secured thereto by an adhesive layer, and a side wall which covers or substantially covers the side face of the sheet.

[0005] The adhesive layer preferably comprises a strip of pressure sensitive adhesive.

[0006] The frame preferably comprises a plurality of lengths of the extrusion arranged end-to-end.

[0007] The invention also provides an extruded plastics section for forming a frame around a sheet of plastics material having a front face and a side face surrounding said front face,

characterised by a top part for partially overlying the front face of the sheet, the top part having an undersurface which is provided with a layer of pressure-sensitive adhesive for securing said section to the sheet, and a side wall which extends substantially perpendicularly from a longitudinal edge of the top part to cover or substantially cover the side face of the sheet.

[0008] The top part of the extrusion is preferably of hollow section and preferably comprises a planar bottom wall and a profiled top wall.

[0009] The side wall preferably includes at least one groove which extends longitudinally of the section and provides a dividing line for removal of a portion of said side wall. Said at least one groove is preferably formed in an inside face of said side wall which is opposed to the side face of the sheet in use.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The following description and the accompanying drawings referred to therein are included by way of non-limiting example in order to illustrate how the invention may be put into practice. In the drawings:

Figure 1 is a transverse sectional view of a framing section for use in the invention, and

Figure 2 is a front view of a sign which includes the framing section.

DETAILED DESCRIPTION OF THE DRAWINGS

[0011] Referring to Fig. 1, the framing section is formed as a plastics extrusion, of pvc or similar material. The frame includes a hollow top part 1 which, although not shown, may contain one or more internal strengthening webs which completely or partially divide the interior of the section into compartments. The top part has a planar bottom wall 2 and an opposed top wall 3 which may be formed with any curved or flat decorative profile.

[0012] A side wall 4 extends perpendicularly downwards from an edge of the bottom wall 2. The inner face of the side wall 4, which faces towards the bottom wall 2, includes a longitudinally-extending notch or groove 5 forming a line of weakness which divides the side wall into upper and lower regions 6 and 7.

[0013] The undersurface of the bottom wall 2 carries a strip of double-sided pressure-sensitive adhesive 8, one side being adhered to the wall 2 and the other side being protected prior to use by a peelable protective backing strip (not shown).

[0014] As shown in Fig. 2, the extruded section can be used to form an edging frame 10 around a plastics sheet 12 such as a sheet of solid acrylic or foamed pvc, which may be engraved or printed for use as a sign or notice. The section is cut to the required lengths which are mitred and butted together at the corners of the frame, as indicated at 14. The sections can then be adhered to the sheet by peeling the backing from the adhesive strip 8 and pressing the adhesive against the front face of the frame.

[0015] In the case of a relatively thick sign (e.g. formed of 10mm sheet) the side wall 4 of the extruded section substantially covers the side edge of the sheet, as indicated in Fig. 1 by the widely spaced pair of dashed lines 21 and 22. However, in the case of a relatively thin sheet (e.g. about 5mm) the side wall 4 is first reduced in depth by bending and breaking off the bottom section 7 or, preferably, by cutting along the groove 5 with a sharp knife. The modified section is thus suitable for covering the edge of thinner signs, as indicated by the pair of dashed lines 21 and 23.

[0016] The edging strips can be applied over the top of fixing screws which are countersunk into the front surface of the sign. The sign is therefore less easy to remove, and the fixings are neatly hidden.

[0017] The use of the extruded section has the following advantages:

- The signs are neatly framed using a material of complimentary appearance.

- A single extrusion can be used with several different thicknesses of sign so that manufacturing and stock costs are reduced.
- It is not necessary to remove saw marks etc. from the cut edges of the sheet so that the production time of the signs is increased.
- There is less risk of differential expansion or shrinkage between the sign sheet and the frame since they are formed of similar materials.
- The frame can be used to cover the sign fixings as described above.

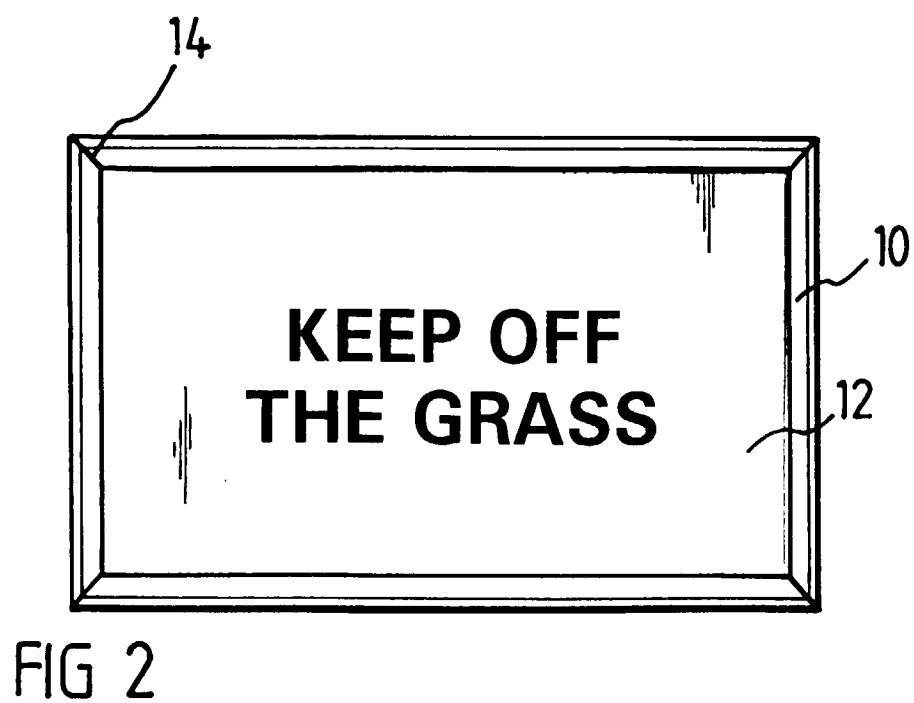
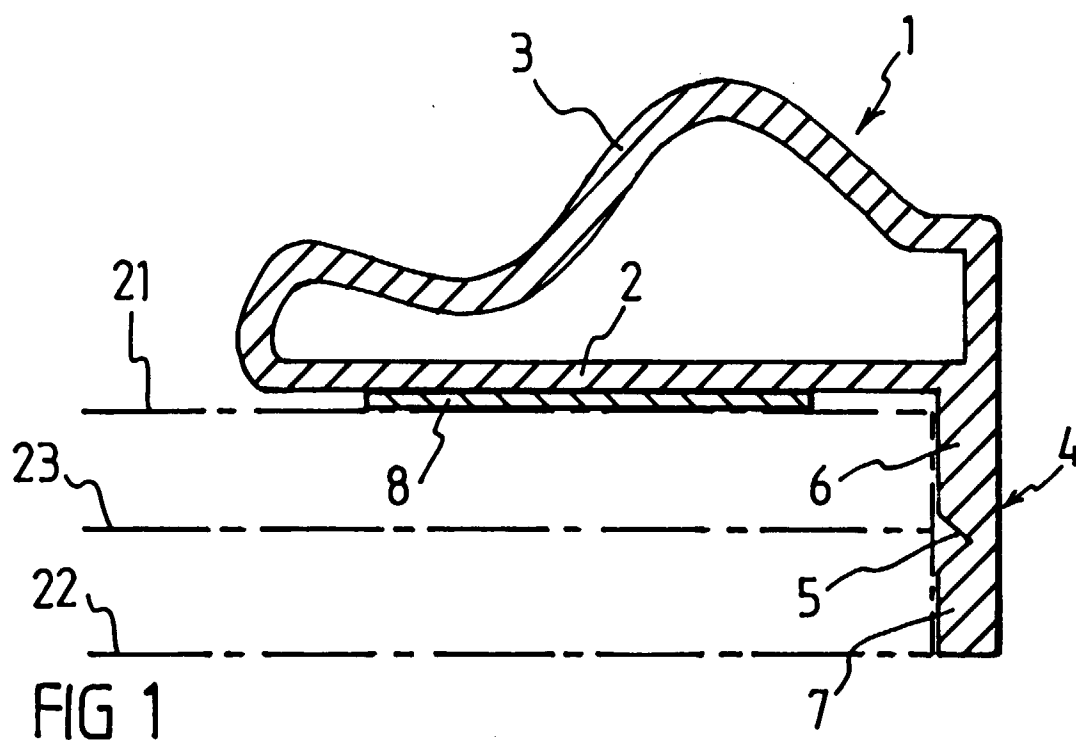
[0018] It will be appreciated that the features disclosed herein may be present in any feasible combination. Whilst the above description lays emphasis on those areas which, in combination, are believed to be new, protection is claimed for any inventive combination of the features disclosed herein.

Claims

1. A sign comprising a sheet (12) of plastics material having a front face and a side face surrounding said front face,
characterised by a frame (10) formed of a plastics extrusion and extending around the periphery of the sheet and which, in transverse cross section, comprises a top part (1) which partially overlies said front face of the sheet and is secured thereto by an adhesive layer (8), and a side wall (4) which covers or substantially covers the side face of the sheet.
2. A sign according to Claim 1, in which the adhesive layer (8) comprises a strip of pressure sensitive adhesive.
3. A sign according to Claim 1 or 2, in which the frame comprises a plurality of lengths of the extrusion arranged end-to-end.
4. A sign according to any preceding claim, in which the top part (1) is of hollow section.
5. A section according to Claim 4, in which the top part (1) comprises a planar bottom wall (2) and a profiled top wall (3).
6. An extruded plastics section for forming a frame around a sheet of plastics material (12) having a front face and a side face surrounding said front face,
characterised by a top part (1) for partially overlying the front face of the sheet, the top part

having an undersurface which is provided with a layer of pressure-sensitive adhesive (8) for securing said section to the sheet, and a side wall (4) which extends substantially perpendicularly from a longitudinal edge of the top part to cover or substantially cover the side face of the sheet.

7. A section according to Claim 6, in which said side wall (4) includes at least one groove (5) which extends longitudinally of the section and provides a dividing line for removal of a portion (7) of said side wall.
8. A section according to Claim 7, in which said at least one groove (5) is formed in an inside face of said side wall (4) which is opposed to the side face of the sheet in use.
9. A section according to any of Claims 6 to 8, in which the top part (1) is of hollow section.
10. A section according to Claim 9, in which the top part (1) comprises a planar bottom wall (2) and a profiled top wall (3).





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 6667

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	US 5 253 439 A (SHANOK VICTOR ET AL) 19 October 1993	1,2,6	G09F1/12 A47G1/06
Y	* the whole document *	3-5,9,10	
Y	US 4 827 648 A (DANIN COLIN) 9 May 1989 * abstract; claims; figures *	3-5,9,10	
A	GB 2 183 884 A (JOHN MANIFOLD REPRODUCTIONS) 10 June 1987 * the whole document *	1-10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			G09F A47G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20 January 1999	Examiner Gallo, G
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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20-01-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5253439 A	19-10-1993	NONE	
US 4827648 A	09-05-1989	AU 595903 B	12-04-1990
		AU 7593687 A	28-01-1988
		DE 3775489 A	06-02-1992
		EP 0254684 A	27-01-1988
GB 2183884 A	10-06-1987	NONE	