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EUROPEAN PATENT APPLICATION

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⑤④ Heat reflecting panel.

⑤⑦ There is disclosed an elongated rectangular sheet which is longitudinally flexible and which has at least one bright reflecting surface and magnet means connected to the sheet at one end thereof, to enable it to be secured to hang downwardly behind a central heating radiator.

HEAT REFLECTING PANEL

This invention concerns a heat reflecting panel of the kind (hereinafter termed 'of the kind referred to') intended to be located between a central heating radiator and a wall behind such radiator in order to reduce heat losses through the wall.

It is known that provision of a reflecting material behind a central heating radiator serves to reflect heat back into the room, thus reducing loss of heat through the fabric of the building located behind the radiator and making welcome savings in these times of rapidly rising energy costs.

Many people use aluminium foil for this purpose, but such has the disadvantage that it is difficult to instal, largely because it is flimsy and easily torn as it is manoeuvred into the generally confined space behind the radiator which is also usually obstructed by mounting brackets for the radiator. In any event, after installation the foil is inevitably crumpled and unsightly.

It is an object of the present invention to provide a heat reflecting panel which can be installed easily by the householder and which presents a neat and workmanlike appearance.

According to the present invention, there is provided a heat reflecting panel of the kind referred to comprising an elongated rectangular metallic sheet which has

5 a bright reflecting surface on at least one of its sides, the sheet being longitudinally flexible and further comprising a magnet secured thereto at one end thereof by which the panel may be secured to an upper part of a central heating radiator to hang therebehind with said bright

10 surface directed towards the radiator.

The invention will be further apparent from the following description, with reference to the figures of the accompanying drawing, which show, by way of example only,

15 one form of heat reflecting panel embodying the invention.

Of the drawings:-

Fig. 1 shows an elevation of the panel;

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Fig. 2 shows a cross-section through the panel on the line II-II of Fig. 1;

and Fig. 3 shows how the panel is installed behind a

25 central heating radiator.

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Referring now to the drawings, it will be seen that the panel comprises an elongated rectangular sheet 10 which may typically have a width of ten centimetres or so and one of a variety of lengths approximately equal to the height of
5 standard central heating radiators.

The sheet 10 is of metal and has a bright reflecting surface on at least one of its faces. The sheet may be of stainless steel or aluminium alloy for example.
10 It is capable of being flexed along its length but has cranked edge portions 11 and 12 to give some stiffness and to improve its appearance and to aid recovery after flexing.

Adjacent one end of the sheet 10, a magnet 13 is
15 secured on the centre line of the sheet to protrude from the concave face of the sheet which is bright.

In use, the panel is introduced into the space behind a central heating radiator, its flexibility greatly
20 facilitating this and enabling, for example, it to be fed down behind the radiator R from above by bending it through the space between the radiator R and a radiator shelf S (see Fig. 3). The sheet is secured to hang downwardly behind the radiator by engaging the magnet 13 with an upper part of
25 the radiator. Generally a plurality of panels will be positioned in this way in side-by-side relationship so as to extend over the entire width of the radiator.

To minimise heat conduction from the radiator R to the panel, it is preferred that the magnet 13 be secured to the panel by some thermally insulating means or that the magnet itself be constituted by a thermally insulating material.

The intention is always that the whole extent of the panel is spaced from the radiator and insulated therefrom so that the panel remains cool.

It will be appreciated that it is not intended to limit the invention to the above example only, many variations, such as might readily occur to one skilled in the art, being possible without departing from the scope thereof.

Thus, for example, although the panels are particularly suitable for use with modern pressed steel radiators (having upper and lower manifolds which are thicker than the main body of the radiator) they may be used with older cast iron radiators by securing a steel strip to the top of the radiator or to the wall behind the radiator and to which the magnets 13 may be attached. If the panels are to hang from a strip secured to the wall the magnet is secured to protrude from the convex face of the panel.

CLAIMS

5 1. A heat reflecting panel of the kind referred
to comprising an elongated rectangular sheet which has a
bright reflecting surface on at least one of its sides
and which is longitudinally flexible, and a magnet
secured to said sheet at one end thereof by which the
10 panel may be secured to an upper part of a central
heating radiator to hang therebehind with said bright
surface directed to the radiator.

 2. A panel according to claim 1, wherein said
15 sheet is of stainless steel.

 3. A panel according to claim 1, wherein said
sheet is of aluminium alloy.

20 4. A panel according to any preceding claim,
wherein the longitudinal edge portions of the sheet are
angled relative to the main body of the sheet to give
some stiffness without destroying the longitudinal
flexibility of the sheet.

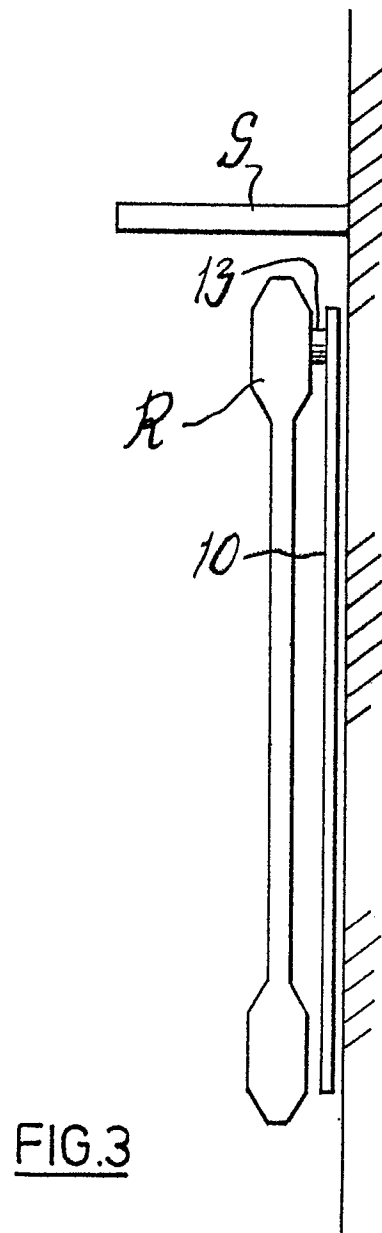
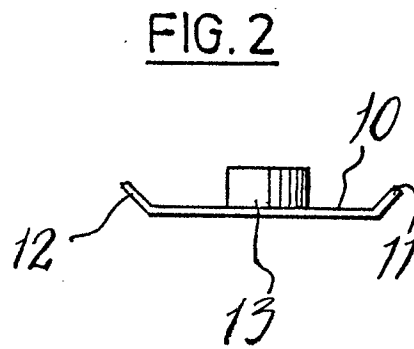
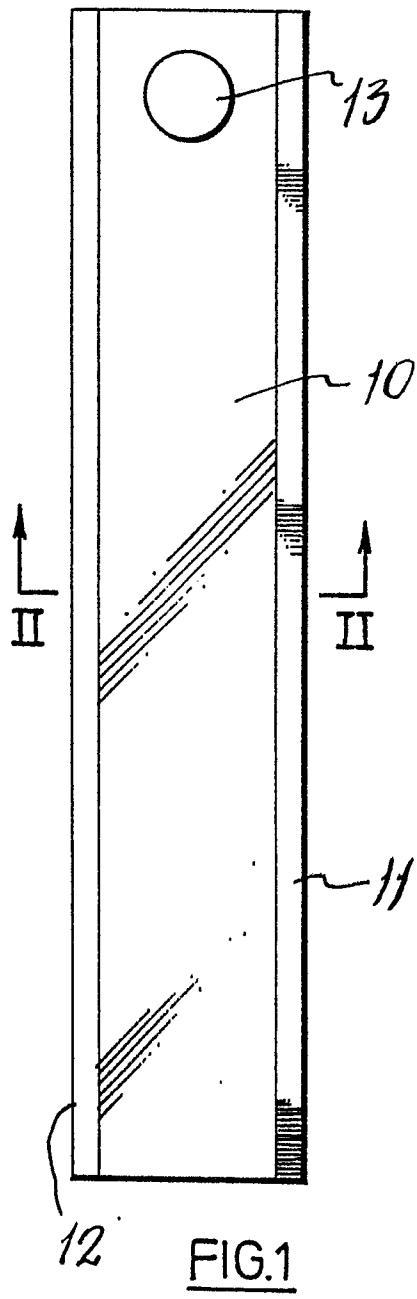
5. A panel according to any preceding claim,
wherein said magnet is secured on the centre line of the
sheet and on a face of the sheet which has a bright
5 reflecting surface.

6. A panel according to any preceding claim,
wherein said magnet is in the form of a circular disc.

10 7. A panel according to any preceding claim,
wherein said magnet is connected to the sheet by
thermally insulating means.

15 8. A panel according to any preceding claim,
wherein said magnet is of a material of low thermal
conductivity.

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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. ³)
Y	NL-A-7 601 308 (VERBOOM) * Claims 1,6; figures 1,2 *	1	F 24 D 19/06
Y	DE-U-7 004 517 (ANM) * Claim 1; figures *	1	
A	DE-U-1 980 918 (WITTIG) * Claim 1; figures *	1	
A	US-A-1 659 897 (SCHOENFELD) * Page 1, lines 61-65 *	2	
A	GB-A-1 019 826 (WILSON) * Page 1, lines 84-88 *	3	
A	FR-A-2 371 643 (ALUMINIUM SUISSE) * Figure 2, pos. 2 *	4	TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
A	FR-A- 750 055 (VITRY) * Page 1, line 58 - page 2, line 2; figure 2 *	4	F 24 D F 24 C G 09 B
A	FR-A-1 273 166 (MULLICA) * Page 1, column 2, line 41 - page 2, column 1, line 4; figure 2 *	6	
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22-06-1983	Examiner COMEL E.
CATEGORY OF CITED DOCUMENTS			
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		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	



DOCUMENTS CONSIDERED TO BE RELEVANT			Page 2												
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)												
A	DE-A-2 820 319 (STAUDACHER) * Page 6, lines 19-21 *	7,8													
A	BE-A- 822 573 (RAIKEM)														
A	US-A-3 894 527 (ICKES) * Column 1, lines 51-58; figures 1,2 *	1													
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)												
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