

12

EUROPEAN PATENT APPLICATION

21 Application number: **89309049.8**

51 Int. Cl.⁵: **E 04 F 13/08**
B 44 F 1/10

22 Date of filing: **06.09.89**

30 Priority: **06.09.88 GB 8820876**

43 Date of publication of application:
14.03.90 Bulletin 90/11

84 Designated Contracting States: **DE FR IT**

71 Applicant: **Daly, James Martin**
19, Tremains Court Brackla
Bridgend Mid Glamorgan (GB)

72 Inventor: **Daly, James Martin**
19, Tremains Court Brackla
Bridgend Mid Glamorgan (GB)

74 Representative: **Austin, Hedley William et al**
Urquhart-Dykes & Lord Alexandra House 1 Alexandra
Road
Swansea West Glamorgan SA1 5ED (GB)

54 **Decorative elements.**

57 The elements comprise a substrate with an outer face having a plurality of elongate surface projections or depressions each having a faceted surface having a coating of a first colour (A) extending along the faceted surface, the latter colour being visible from some viewpoints facing the outer face, but obscured from other such viewpoints. At least a portion of the outer face is of a second colour (B) contrasting with the first colour (A) such that the second colour (B) is at least partly obscured from some viewpoints from which the faceted surface is visible and at least partly visible from some viewpoints from which the faceted surface is obscured.

The facets are formed by deformation of the substrate after application of the coating, the deformation being in register with coated areas having the first colour (A).

The elements enable a distinctive optical effect of either subtle or dramatic changes in colour, depending on the point of view. Thus, as the eye scans from one angle, a first predominant colour (A) is seen, whereas from another angle, a second predominant colour (B) is seen.



Fig. 1a

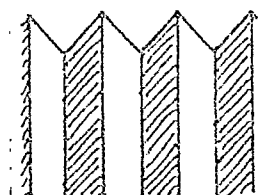


Fig. 2a

Description

Decorative Elements

The present invention is concerned with decorative elements, typically in the form of surface elements for use as internal or external architectural decoration.

According to the present invention, there is provided a decorative element comprising a substrate having an outer face comprising a plurality of elongate surface projections or depressions constituting a series of faceted surfaces which define, said faceted surfaces having thereon a coating of a first colour extending along said surface, such that said colour is visible from some viewpoints facing said outer face, but obscured from other such viewpoints, at least a portion of said outer face being of a second colour contrasting with said first colour such that said second colour is at least partly obscured from some viewpoints from which said first colour is visible and at least partly visible from some viewpoints from which said first colour is obscured, characterised in that said facets are by deformation of said substrate after application of said coating, said deformation being created in register with areas having said coating thereon.

The decorative elements according to the invention enable a distinctive optical effect of either subtle or dramatic changes in colour, depending on the point of view. Thus, as the eye scans from one angle, a first predominant colour can be seen, whereas from another angle, a second predominant colour can be seen.

Reference will now be made to the accompanying drawings, in which:

Figures 1a to 1d are sectional views of typical configurations of decorative elements according to the invention;

Figures 2a to 2d are plan views corresponding to Figures 1a to 1d; and

Figure 3 shows schematically the visual effect with a four-colour element according to the invention.

In the drawings, A represents a first colour, B a second colour, C a third colour and D a fourth colour.

In the embodiment of Figures 1a and 2a, the sectional view is a zig-zag with successive angular peaks and troughs; one face of each peak is of colour A and the other face is of colour B.

The embodiment of Figures 1b and 2b is generally similar, except that the peaks are smoothly curved. The embodiment of Figures 1c and 2c comprises, successively, a generally flat trough (colour C), an upwardly directed slope (colour D), a generally flat peak (colour A) and a downwardly directed slope (colour B). The embodiment of Figures 1d and 2d comprises immediately adjacent smoothly curved peaks (colours A and B) spaced by a generally flat trough (colour C).

The decorative element may be constructed of any of a wide range of materials, such as cardboard, plastics, wood, metal or the like, in one preferred embodiment of the invention the element is a rigid

sheet material. Such a decorative element may be used for a wide range of uses, such as packaging, signs, ceilings, wall coverings, floor covering or the like, particularly for internal decoration purposes or wall cladding. When the decorative element according to the invention is to be used for signs and the like, the faceted surface may be overprinted with, or otherwise covered with a layer of information-imparting indicia (such as the word "EXIT", "ENTRANCE", or the like). Such signs can be used for point of sale displays, in or associated with buildings or the like, or as exhibition or display panels or the like.

When the decorative element according to the invention is intended for use as wall cladding it may, for example, be a blown material or textile material as will be described in more detail below (in which case, the effect may be broadly as shown in Figure 1d) or an embossed material or flock material applied to a substrate of contrasting colour (in which case, the effect may be broadly as shown in any of Figures 1a to 1c). When the decorative element is for use as carpets, carpet tiles or the like, the relevant effects may be obtained on by sculpting or ribbing in register with pre-existing coated coloured areas.

Examples of typical methods of producing decorative elements according to the invention will now be described.

(a) Colours may be printed on to materials such as metal sheeting, card, cardboard, plastics sheeting and the surface selectively embossed in register with printed areas to create the desired selectively coloured facets with an effect broadly as shown in any of Figures 1a to 1c;

(b) Colours may be applied where desired on a (plastics) material to be blown such that when cured and blown, the appropriate facets are created to produce an effect as shown in Figure 1d;

(c) A material such as a sheet or film of aluminium, plastics, wood or glass or a laminate of these may be moulded in register with previously coloured areas, so as to produce an effect broadly as shown in any of Figures 1a to 1d.

Claims

1. A decorative element comprising a substrate having an outer face comprising a plurality of elongate surface projections or depressions constituting a series of faceted surfaces which define, said faceted surfaces having thereon a coating of a first colour extending along said surface, such that said colour is visible from some viewpoints facing said outer face, but obscured from other such viewpoints, at least a portion of said outer face being of a second colour contrasting with said first colour such that said second colour is at

least partly obscured from some viewpoints from which said first colour is visible and at least partly visible from some viewpoints from which said first colour is obscured, characterised in that said facets are created by deformation of said substrate after application of said coating, said deformation being in register with areas having said coating thereon.

2. A decorative element according to claim 1, wherein said substrate comprises a rigid sheet material.

3. A decorative element according to claim 1 or 2, which has a sectional shape transverse to said projections which comprises a zig-zag with successive angular peaks and troughs, one face of each said peak having said coating of

said first colour and the other face thereof being of said second colour.

4. A decorative element according to claim 1 or 2, in which said substrate has a sectional shape transverse to said projections which comprises a series of arcuate corrugations.

5. A decorative element according to claim 4, wherein adjacent corrugations are contiguous.

6. A decorative element according to claim 1 or 2, in which said substrate has a sectional shape transverse to said projections which comprises a series of angular castellations.

7. A decorative element according to any of claims 1 to 7, which is in the form of a wall cladding panel.

20

25

30

35

40

45

50

55

60

65

3

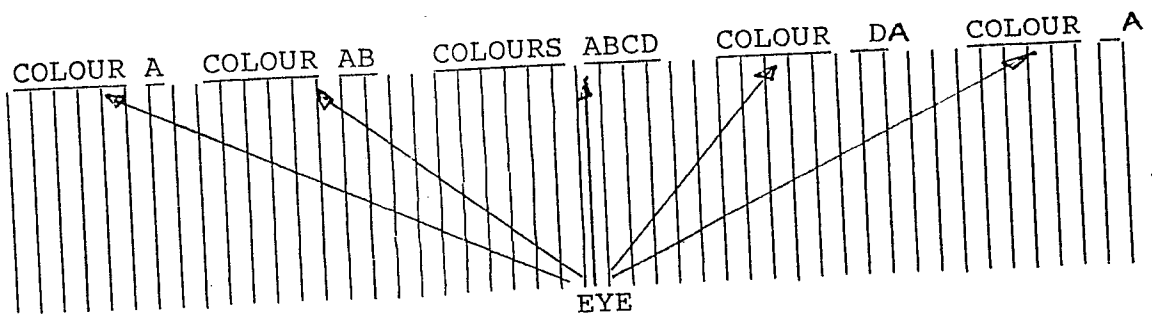
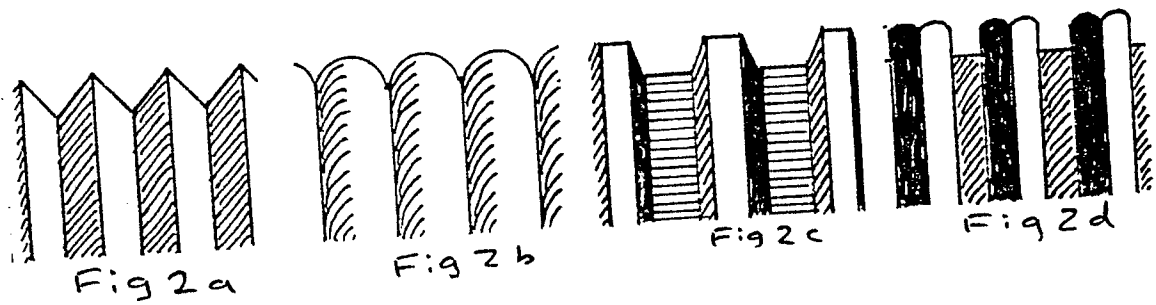
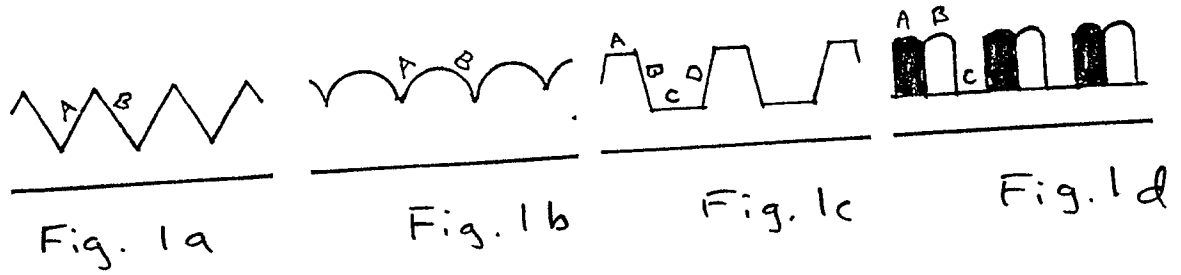


Fig. 3



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.5)
X	DE-A-1 771 453 (MEIER-MALETZ) * Page 1, lines 1-4; page 2, line 11 - page 3, line 3; page 4, line 1-3; page 6, lines 1-15; figures 1-6 *	1-6	E 04 F 13/08 B 44 F 1/10
X	---	7	
X	FR-A-2 141 523 (ZOLLER) * Page 1, lines 1-8; page 2, line 1 - page 3, line 27; figures 1-5 *	1	
A	---	2,3,6	
Y	CH-A- 283 665 (EGGSTEIN) * Page 1, line 20 - page 2, line 25; figures 1,2 *	7	
A	-----	1-5	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			E 04 F B 44 F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29-11-1989	Examiner AYITER J.
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			