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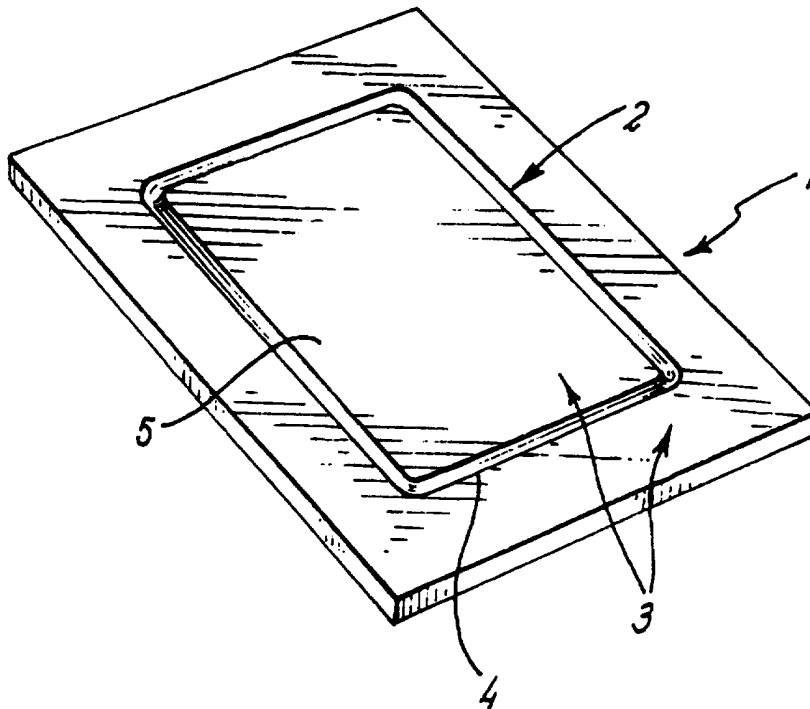
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N536 N56Y N560 N564 N567 N604 N617 N648 N653
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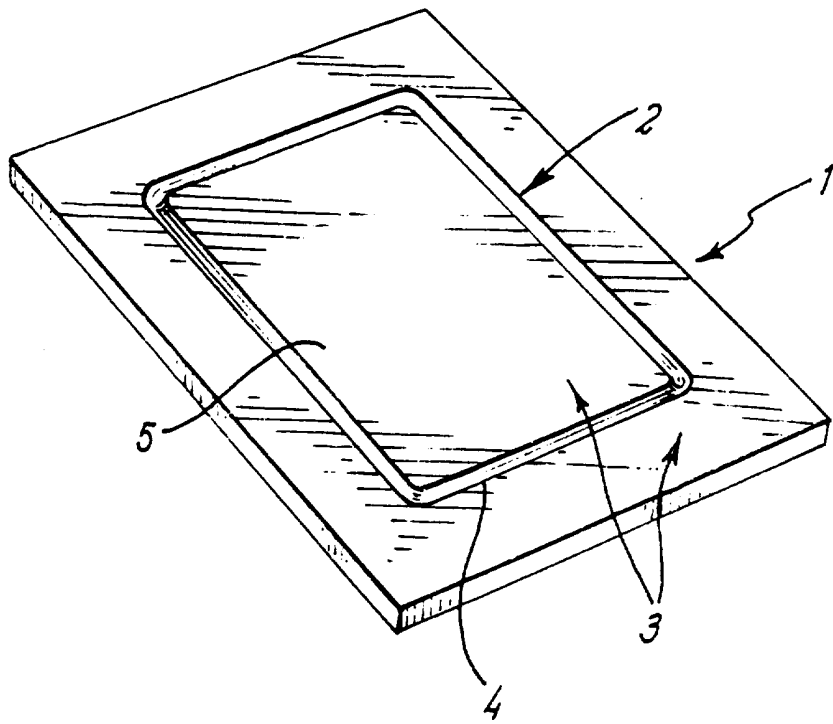
(54) Decorative surface finishes for boards and panels

(57) A board or panel such as a furniture door is provided with a decorative finish by attaching foil to the surface of a cut-away part of the board or panel . The door (1), which may be formed from medium density fibreboard (MDF) with a bonded laminate surface cover, is cut or routed to provide a groove (4) to set off a central portion (5) in relief. Masking film is applied over the door surface (2) and is then removed from the groove (4). Adhesive is applied over the film and the film is stripped away leaving glue in the groove (4). A sheet of PVC foil is applied over the door surface and is bonded by the adhesive in the groove. Excess foil overlaying the portions (3) of the door beyond the groove (4) is then cut away.



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DECORATIVE SURFACE FINISHES FOR BOARDS OR PANELS

This invention relates to the application of decorative surface finishes to boards or panels such as may be used as doors of fitted bedroom or kitchen furniture or for other purposes.

5 Medium density fibreboard (MDF) is a popular material for doors of fitted bedroom and kitchen furniture. When cut or routed it is possible to achieve a relatively smooth surface finish, unlike the case with coarse chipboard.

10 A particularly appealing decorative finish can be achieved by cutting away or routing a groove or narrow channel in an MDF panel e.g. around a central portion to set off the central portion in relief.

The panel surface may be covered with a laminate and the MDF material exposed in the routed channel may be hand painted. This can be particularly pleasing and permits use of complementary or contrasting
15 adjoining colours and textures. However the procedure is time consuming, skilled and expensive.

It is also possible to cover the entire panel surface including the routed channel with an adhered PVC foil. This is a quick and simple procedure but does not permit the same pleasing finish particularly with
20 regard to the use of different adjoining surface finishes.

An object of the present invention is to provide a simple inexpensive means of providing different adjoining surface finishes on a board or panel having a cut away portion.

According to the invention therefore there is provided a method of providing a decorative surface finish on a board or panel wherein a portion of a surface thereof is cut away relative to an adjacent portion and a finish is applied to the cut away portion different from a finish applied to the adjacent portion, characterised in that the finish is applied to the cut away portion by attachment of a foil selectively thereto.

With this method a particularly pleasing decorative effect can be obtained quickly, conveniently and relatively inexpensively.

Most preferably, the board or panel is formed from MDF although chipboard or other particle board or any other suitable kind of board or panel may be used. The finish to the adjacent portion of the surface may be provided by a protective laminate such as Melamine or any other suitable material which may have any desired colour/pattern/texture.

The foil applied to the cut away portion may be a PVC foil although any other suitable material, such as ABS or polystyrene may be used. The material may have any desired colour/pattern/texture.

The foil may be attached in position adhesively, if desired with application of vacuum or pressure and/or heat.

Adhesive may be applied to both the cut away portion and the adjacent portion and a masking or release film or agent may be first applied over the adjacent portion to prevent attachment of the adhesive thereto. The adhesive with masking or release material can then be removed from the adjacent portion prior to attachment of the foil. The masking or release

material may be removed from the cut away portion prior to application of the adhesive by cutting and stripping away, or by cutting out this portion in the panel after the masking or release material has been applied. If desired and where appropriate masking or release material may be omitted.

5 The foil may be applied over both the cut away portion and the adjacent portion and the foil overlaying but not attached to the adjacent portion may then be cut away.

 The cut away portion may comprise a routed groove or channel. This may be around a central portion or an edge region or in any other suitable
10 region or combination of regions.

 The invention will now be described further by way of example only and with reference to the accompanying drawing which is a diagrammatic perspective view of a door decorated in accordance with the method of the invention.

15 The drawing shows a panel 1 for use as a door of fitted kitchen furniture. The panel is formed from a sheet of MDF.

 An outer surface 2 of the panel is laminated with a sheet 3 of Melamine (Registered Trade Mark) or other protective material which is securely bonded to the MDF surface. This protective sheet 3 has a desired
20 coloured and/or textured and/or patterned finish.

 A groove 4 is routed around a central portion 5 of the outer surface of the panel to set off such central portion 5 in relief. The routed groove 4 which is cut through the Melamine sheet exposes a smooth surface of the

MDF panel.

The entire outer surface 2 of the panel is covered with a thin flimsy plastics masking film which is weakly adhered to the surface including both the Melamine 3 and the exposed MDF in the groove 4. This film is stripped
5 away from the MDF surface in the groove (by cutting along the edge of the groove and pulling or scraping away the film).

The entire outer surface 2 of the panel is then sprayed with glue-over the film-covered Melamine 3 and the exposed MDF in the groove 4. The glue-covered plastics film on the Melamine 3 is then stripped away leaving
10 glue only on the MDF in the groove 4.

A sheet of PVC foil is laid over the outer surface 2 of the panel and is pressed into the groove 4 with heat and pressure so as to cause the PVC to be bonded securely to the MDF with the glue in the groove 4.

The PVC foil overlaying the Melamine outside the groove 4 is stripped
15 away using a blade or scraper to sever the foil at the edge of the groove 4.

The outer surface of the panel then has a bonded PVC foil cover over the MDF surface in the groove 4. The PVC foil is selected with a desired colour/texture/pattern to give any suitable decorative effect complementing or contrasting with the decorative effect of the Melamine 3.

The decorative finish to the outer surface is achieved quickly,
20 conveniently and relatively inexpensively.

It is of course to be understood that the invention is not intended to be restricted to the details of the above embodiment which are described by

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way of example only. Thus, for example, instead of using a plastics masking film it is possible to use a sprayed or coated release agent and this may be applied before routing the groove.

Also, instead of the PVC foil any other suitable material may be used

5 such as ABS or polystyrene.

CLAIMS

1. A method of providing a decorative surface finish on a board or panel wherein a portion of a surface thereof is cut away relative to an adjacent portion and a finish is applied to the cut away portion different from a finish applied to the adjacent portion, characterised in that the finish is applied to the cut away portion by attachment of a foil selectively thereto.
2. A method according to claim 1 wherein the board or panel is formed from MDF.
3. A method according to claim 1 or 2 wherein the finish to the adjacent portion of the surface is provided by a laminate.
4. A method according to any one of claims 1-3 wherein the foil is PVC foil.
5. A method according to any one of claims 1-4 wherein the foil is attached in position adhesively.
6. A method according to claim 5 wherein adhesive is applied to both the cut away portion and the adjacent portion, and a masking or release material is first applied over the adjacent portion to prevent attachment of the adhesive thereto.
7. A method according to claim 6 wherein the masking or release material is applied to the cut away portion and is removed therefrom prior to application of the adhesive by cutting and stripping away.
8. A method according to claim 6 wherein the masking or release material is applied to the cut away portion and is removed therefrom by

cutting out this portion of the panel after the masking or release material has been applied.

- 5 9. A method according to any one of claims 1 to 8 wherein the foil is applied over both the cut away portion and the adjacent portion, and the foil overlaying but not attached to the adjacent portion is then cut away.
10. A method according to any one of claims 1 to 9 wherein the cut away portion comprises a routed groove or channel.
11. A board or panel provided with a decorative finish in accordance with the method of any one of claims 1-10.
- 10 12. A board or panel according to claim 11 in the form of a door.
13. A method according to claim 1, and a board or panel according to claim 11, substantially as hereinbefore described by way of example and with reference to the accompanying drawing.

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Claims searched: 1 to 13

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Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:
UK CI (Ed.O): B5N, B6G (GCA, GCB, GCC, GCD)
Int CI (Ed.6): A47B 96/20, B44C 3/00, 3/02, 3/10, 5/04, B32B 3/30
Other: ONLINE: WPI, CLAIMS

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB2,243,805A (Bernstein) whole document	at least 1 to 5, 9,10 and 12

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.