(11) **EP 1 155 877 A1**

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

21.11.2001 Bulletin 2001/47

(51) Int Cl.⁷: **B44C 5/04**, A47B 96/20

(21) Application number: 01111841.1

(22) Date of filing: 16.05.2001

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

Designated Extension States:

AL LT LV MK RO SI

(30) Priority: 17.05.2000 IT PS000018

(71) Applicant: Decor Glass Di Aiudi Gabriele & C. S.N.C.
 61020 Montecchio Di S. Angelo in Lizzola (Pesaro) (IT)

(72) Inventor: Aiudi, Gabriele 61100 Pesaro (IT)

(74) Representative: Negrini, Elena Agazzani & Associati S.r.l. Via dell'Angelo Custode 11/6 40141 Bologna (IT)

(54) Coating sheet for furniture panel

(57) A coating sheet for furniture panel (1), fit for providing this latter with defined decoration, includes a transparent plate (11) having a first face to be fixed to the panel (1) and a plurality of layers (12) specularly printed on said first face for reproducing the defined decoration. The transparent plate (11) keeps visible and protected the decoration.

The decoration reproduces the shape and the size of the different portions of the panel (1) having grains oriented according to the real wooden panels.

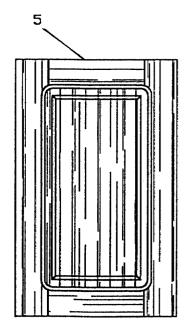


Fig.2

EP 1 155 877 A1

Description

[0001] This invention relates to a decorated coating sheet for furniture shutters, drawer panels and similar. [0002] The known coating sheet, or film, has decorations carried out on the visible surface opposite to the other surface to be fixed to the related panel. Furthermore the know sheet having wood style decoration show the wood grains having the same orientation.

[0003] The main drawback of the known coating sheet consists in that the decorations can be easily damaged by crashes or scratches or an expensive protection mean must be applied onto these decorations.

[0004] Another drawback consists in that the sheet glued on the panel has the orientation of grain not corresponding with the grain orientation of the real wood panel, which could have many wood elements having different orientations.

[0005] In order to simulate a shutter as realistic as possible, it is necessary to divide the known covering sheet in various portions to apply separately in different orientations.

[0006] The main object of the present invention is to propose a coating sheet for furniture panels having strong decorations without requiring any additional protection means.

[0007] Another object is to propose a sheet simulating a solid wood made shutter or a decorated panel as realistic as possible, without dividing the coating sheet in several parts.

[0008] The invention is now described in detail with reference to the attached drawing sheet, in which:

- figure 1 shows a front view of a raw panel to be coated with square frames and ashlar;
- figure 2 shows a front view of a coating sheet corresponding to the panel of figure 1;
- figure 3 shows a front view of a coating sheet for a curvilinear shutter;
- figure 4 shows a sectional enlarged partial view of 40 the sheet coated over the panel.

[0009] Referring to figures 1-4, numeral 1 indicates the raw panel, milled into some frame elements, vertical 2 and horizontal 3, and a protruding ashlar 4.

[0010] A coating sheet 5 includes a plate 11, having 0,1-0,4 mm thickness and made of transparent synthetic material, i.e. of the PTG type. The plate 11 has a first face to be glued to the panel 1 which is printed in a specular way with decorations or images showing the vertical 2 and horizontal 3 elements of the frame, the related junctions, the ashlars 4, the milled scores having grains oriented according to the wooden made panels.

[0011] The printed decoration, carried out for instance by means of silk-screen process, includes a plurality of printed layers 12 made of colored inks and a background layer 13 fit to be fixed to the panel 1 by means of a glue layer 14 and fit to cover the color of the panel 1.

[0012] The sheet 5 is larger than the face of the panel 1 in order to coat the side faces of the panel 1. The background layer 13 has four register marks fit for correctly positioning the sheet 5 over the panel 1 before the mutual fixing by means of a membrane press making the sheet adhesion over any lateral, concave and convex areas of the panel 1. In this way, a realistic imitation of a real solid wood shutter is obtained, using a single sheet 5.

[0013] The coating sheet 6 of figure 3 has some curvilinear shapes 7 and/or some silk-screen printed marquetry 8. The coating sheet can be carried out for panels without ashlars or flat, coated or finished or decorated panels, for kitchens, rooms or other furnishing elements.

Besides the decoration can be a multi or single colored printing.

Claims

20

30

35

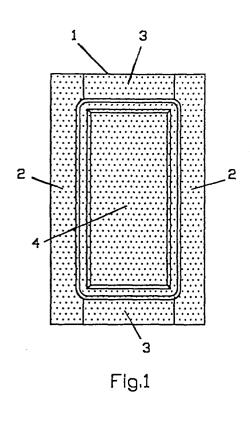
45

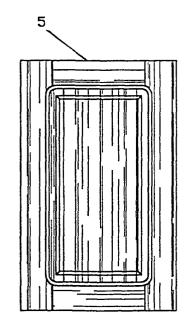
- Coating sheet for furniture panel (1), fit for providing this latter with defined decoration, said sheet (5) characterized in that includes:
 - a transparent plate (11) having a first face to be fixed to the panel (1);
 - a plurality of layers (12) specularly printed on said first face for reproducing the defined decoration;
 - the transparent plate (11) so keeping visible and protected the decoration.
- Coating sheet according to claim 1 <u>characterized</u> <u>in that</u> further includes a background layer (13) applied to the plurality of the printed layers (12).
- Coating sheet according to claim 2 <u>characterized</u> in that the background layer (13) has a glue layer (14) attached thereto for fixing the sheet (5) to the panel (1).
- 4. Coating sheet according to claim 2 <u>characterized</u> in that the background layer (13) has a plurality of register marks fit for correctly positioning the sheet (5) over the panel (1).
- Coating sheet according to claim 1 <u>characterized</u> <u>in that</u> the plate (11) has a thickness ranging from 0,1 mm to 0,4 mm and is made of PTG material.
- **6.** Coating sheet according to any of the preceding claims <u>characterized in that</u> has decoration reproducing the shape and size of the different portions of the panel (1) having grains oriented according to the real wooden panels.
- Coating sheet according to any of the preceding claims characterized in that the defined decora-

2

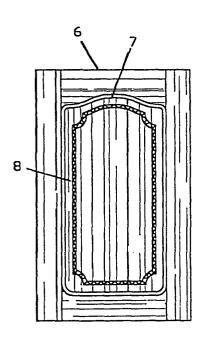
tion includes curvilinear shapes (7) and/or silk-screen printed marquetry (8).

8. Coating sheet according to any of the preceding claims <u>characterized in that</u> the sheet (5) is fixed to a flat panel (1) and has a single color decoration.





Flg.2



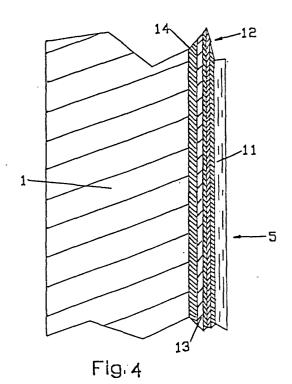


Fig.3



EUROPEAN SEARCH REPORT

Application Number EP 01 11 1841

Category	Citation of document with in- of relevant passa		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
X	DATABASE WPI Section Ch, Week 199 Derwent Publications Class A94, AN 1996-2 XP002176564 & JP 08 072202 A (NO 19 March 1996 (1996- * abstract *	9621 s Ltd., London, GB; 204397 DDA KK),	1	B44C5/04 A47B96/20
X	DATABASE WPI Section Ch, Week 200 Derwent Publications Class A93, AN 2000-3 XP002176565 & JP 2000 117903 A (25 April 2000 (2000- * abstract *	s Ltd., London, GB; 869560 (CI KASEI CO LTD),	1	
X	FR 2 780 255 A (JOGA 31 December 1999 (19 * claims *		1	TECHNICAL FIELDS SEARCHED (Int.CI.7) B44C A47B
	The present search report has be	een drawn up for all claims Date of completion of the search		Examiner
	THE HAGUE	3 September 2001	Her	rmann, J
X : parti Y : parti docu A : tech O : non-	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with anotherment of the same category nological background -written disclosure mediate document	L : document cited f	le underlying the cument, but publiste in the application or other reasons	invention shed on, or

EPO FORM 1503 03.82 (P04C01)

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

EP 01 11 1841

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-09-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 8072202 A	19-03-1996	NONE	
JP 2000117903 A	25-04-2000	NONE	
FR 2780255 A	31-12-1999	EP 1014832 A WO 0000063 A	05-07-200 06-01-200
		No. 200 - 20	

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

FORM P0459