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#### (54) Electric household appliance

(57) An electric household appliance has a substantially parallelepiped-shaped casing (2) having a substantially horizontal top wall (6) defined by a panel (7) of plastic

material, and by two cover films (14, 15) applied to a top face (9) and a bottom face (10), respectively, of the panel (7).

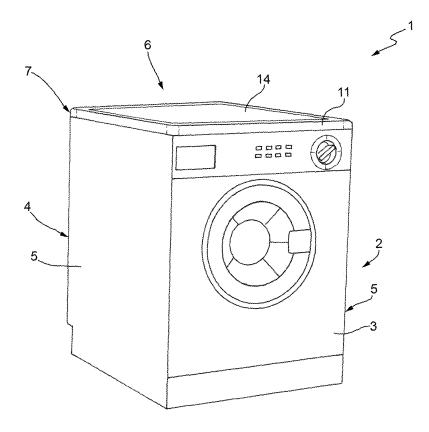


FIG.1

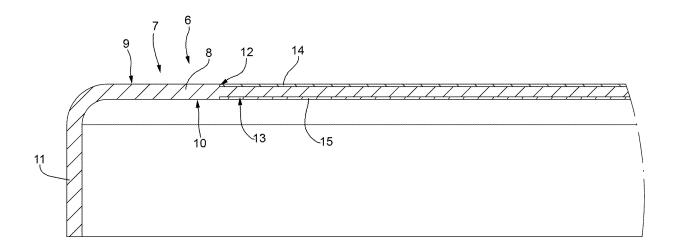


FIG.2

**[0001]** The present invention relates to an electric household appliance.

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**[0002]** More specifically, the present invention relates to an electric household appliance of the type comprising a substantially parallelepiped-shaped casing having a top wall normally used by the user as a supporting and/or work surface.

**[0003]** The top walls of known electric household appliances of the above type are normally of two types.

**[0004]** A first is made of molded plastic material, is of relatively low rigidity, and therefore has obvious structural limitations as a supporting and/or work surface.

**[0005]** The second type comprises a fiberboard central panel; and a plastic outer rim normally made in two parts which are fitted about the central panel in respective operations and using respective assembly tools.

**[0006]** It is an object of the present invention to provide an electric household appliance designed to eliminate the above drawbacks, and which is cheap and easy to produce.

**[0007]** According to the present invention, there is provided an electric household appliance as claimed in the accompanying Claims.

**[0008]** A non-limiting embodiment of the present invention will be described by way of example with reference to the accompanying drawings, in which:

Figure 1 shows a schematic view in perspective of a preferred embodiment of the electric household appliance according to the present invention;

Figure 2 shows a cross section of part of the electric household appliance in Figure 1;

Figure 3 shows an exploded view in perspective of the Figure 2 part.

**[0009]** Number 1 in Figure 1 indicates as a whole an electric household appliance defined, in the example shown, by a washing machine comprising a substantially parallelepiped-shaped casing 2, in turn comprising a substantially vertical front wall 3 and a substantially vertical rear wall 4 parallel to each other, two substantially vertical lateral walls 5 perpendicular to walls 3 and 4, and a substantially horizontal top wall 6 perpendicular to walls 3, 4 and 5.

**[0010]** As shown in Figure 2, wall 6 comprises a panel 7, which is substantially cup-shaped with its concavity facing downwards, is made of molded, preferably injection-molded, plastic, and in turn comprises a flat central portion 8 bounded vertically by a substantially horizontal top face 9 and a substantially horizontal bottom face 10 parallel to each other; and an annular lateral edge 11 which extends about portion 8, is connected to portion 8 with a given radius of curvature, and is formed in one piece with portion 8.

**[0011]** Portion 8 has a top cavity 12 and an opposite bottom cavity 13, which are substantially rectangular and

open outwards at top face 9 and bottom face 10 respectively.

**[0012]** Cavities 12 and 13 respectively house a top cover film 14 and a bottom cover film 15, which are substantially as thick as the depth of respective cavities 12, 13, and therefore substantially coplanar with respective faces 9, 10.

**[0013]** In a variation not shown, cavities 12, 13 are eliminated, and films 14, 15 are applied directly to faces 9, 10.

[0014] Films 14, 15 may be applied directly to panel 7 when molding panel 7, or may be glued to panel 7 later. [0015] Films 14, 15 provide for a relatively high degree of rigidity of wall 6, thus reducing the weight and thickness of panel 7, while at the same time increasing the space available inside casing 2.

**[0016]** Using a film 15 of fireproof material enables any electric and/or electronic parts to be located close to wall 6, and using a film 14 of metal, e.g. aluminium or stainless steel, provides for improving the appearance of wall 6 and, hence, of washing machine 1.

**[0017]** Film 14 may also be made of a thermoplastic material, a thermosetting resin, a composite material, or a laminate comprising at least two layers.

**Claims** 

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- 1. An electric household appliance comprising a substantially parallelepiped-shaped casing (2) having a substantially horizontal top wall (6) comprising a panel (7) of plastic material; and **characterized in that** the top wall (6) also comprises a top cover film (14) and a bottom cover film (15) applied to a top face (9) and a bottom face (10), respectively, of said panel (7).
- 2. An electric household appliance as claimed in Claim 1, wherein the panel (7) comprises a substantially flat central portion (8) bounded by said top face and said bottom face (9, 10); and an annular lateral edge (11) which extends about the central portion (8), is connected to the central portion (8), and is formed in one piece with the central portion (8).
- 3. An electric household appliance as claimed in Claim 1 or 2, wherein the panel (7) has a top cavity (12) and a bottom cavity (13) for housing the top cover film (14) and bottom cover film (15) respectively; the top and bottom cover films (14, 15) being substantially coplanar with the respective top and bottom faces (9, 10).
- 4. An electric household appliance as claimed in any one of the foregoing Claims, wherein the bottom cover film (15) is made of fireproof material.
- 5. An electric household appliance as claimed in any

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one of the foregoing Claims, wherein the top cover film (14) is made of metal.

- **6.** An electric household appliance as claimed in any one of Claims 1 to 4, wherein the top cover film (14) is made of a thermoplastic material.
- 7. An electric household appliance as claimed in any one of Claims 1 to 4, wherein the top cover film (14) is made of a thermosetting resin.
- **8.** An electric household appliance as claimed in any one of Claims 1 to 4, wherein the top cover film (14) is made of a composite material.
- 9. An electric household appliance as claimed in any one of Claims 1 to 4, wherein the top cover film (14) is a laminate comprising at least two layers.
- **10.** An electric household appliance as claimed in any one of the foregoing Claims, wherein the top and bottom cover films (14, 15) are glued to said panel (7).
- 11. An electric household appliance as claimed in any one of Claims 1 to 9, wherein the top and bottom cover films (14, 15) are applied to said panel (7) when molding the panel (7).

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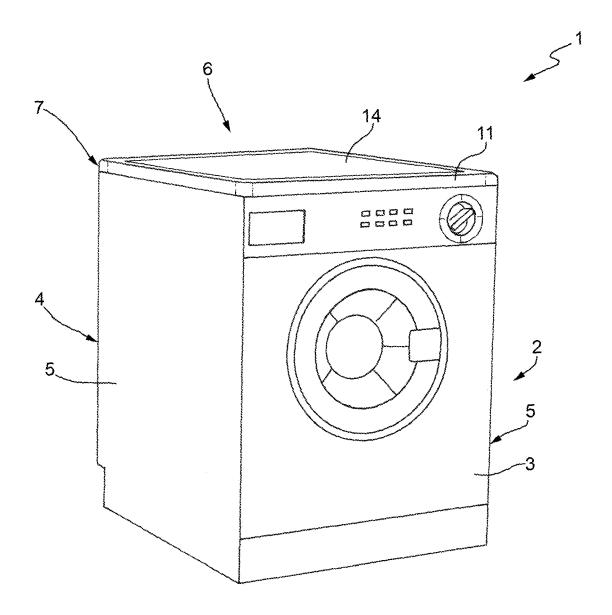
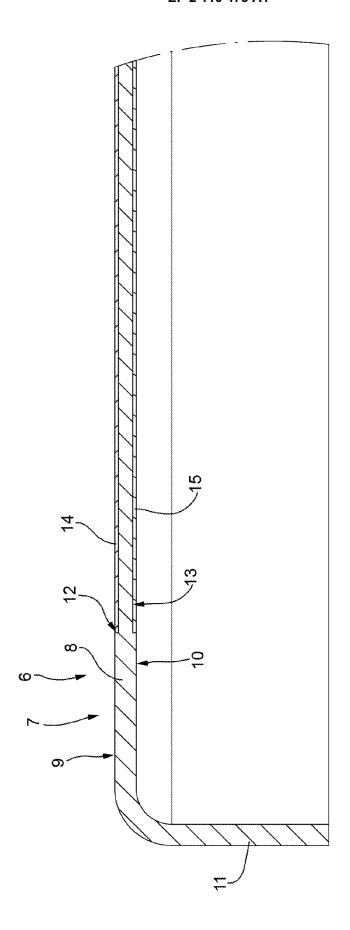
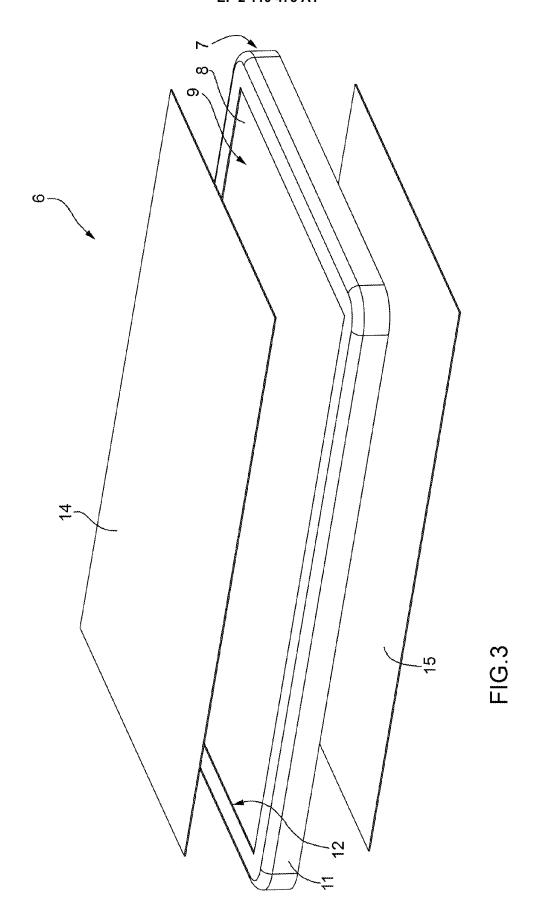


FIG.1



**FIG.2** 





# **EUROPEAN SEARCH REPORT**

Application Number EP 08 15 4665

	DOCUMENTS CONSID	ERED TO BE RELEVANT	,	
Category	Citation of document with ir of relevant passa	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 044 705 A (NEL 3 September 1991 (1 * column 1, line 17 * column 6, line 9 * column 6, line 40 * column 14, line 5	991-09-03) - line 20 * - line 26 *	1,4-8,10	INV. D06F39/12 A47L15/42
A	[ES]) 28 June 2006	SONAL & ORIGINAL S L (2006-06-28) line 29; figures 1-3 *	1-11	
A	DE 101 01 217 A1 (M 18 July 2002 (2002- * paragraph [0024];	07-18)	1-11	
A	& CO KG [DE]) 12 Ju	OMA POLYTEC DE]; BIMA SYSTEME GMBH ne 1997 (1997-06-12) - column 3, line 3;	1-11	TECHNICAL FIELDS SEARCHED (IPC) D06F A47L
	The present search report has I	peen drawn up for all claims  Date of completion of the search		Examiner
	Munich	16 September 2008	8 Wes	termayer, Wilhelm
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone cularly relevant if combined with another ment of the same category nological background written disclosure mediate document	T : theory or principle E : earlier patent doc after the filing dat D : document cited in L : document cited fo	e underlying the ir nument, but publis e n the application or other reasons	nvention hed on, or

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

EP 08 15 4665

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.

16-09-2008

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