



(51) International Patent Classification:
B65D 85/68 (2006.01)

(21) International Application Number:
PCT/EP2009/067984

(22) International Filing Date:
29 December 2009 (29.12.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
U200900047 30 December 2008 (30.12.2008) ES

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: PACKAGING FOR HOME ELECTRICAL APPLIANCE

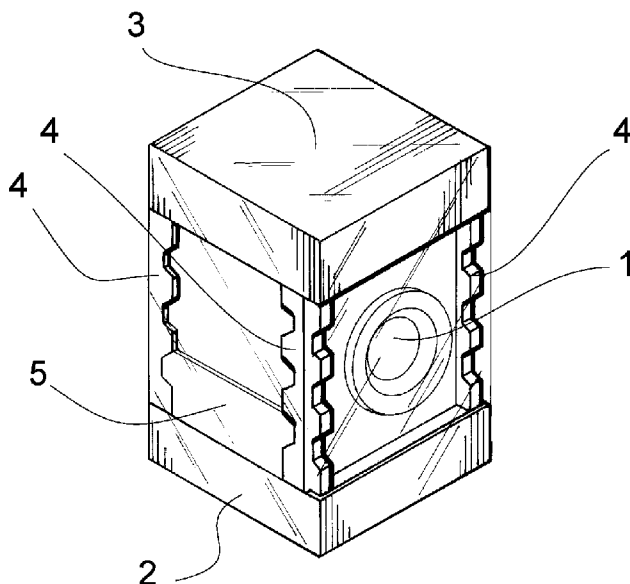


FIG.1

(57) Abstract: The invention relates to a packaging for a home electrical appliance (1) such as a washing machine (1), dishwasher (1) or the like, comprising a base (2) on which the appliance (1) is placed, a cover (3) that is placed on top of the appliance (1) and four vertical edge protectors (4) that cover at least part of each of four edges of the appliance (1), wherein the packaging furthermore comprises two side protectors 5 that cover at least part of the sides of the appliance (1).





ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, **Published:**

MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM,

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,

ML, MR, NE, SN, TD, TG).

— *with international search report (Art. 21(3))*

5 **PACKAGING FOR HOME ELECTRICAL APPLIANCE**

The present invention relates to the field of packaging for home electrical appliances such as washing machines, dishwashers and the like that includes a base on which the appliance is placed, a cover that is placed on top of the appliance and four vertical edge protectors that cover at least part of the four edges of the appliance.

10 Packaging for conventional home electrical appliances includes a base, on which the appliance is placed, a cover that is placed on the top of the appliance, and four vertical edge protectors that cover the four edges of the appliance from the base to the cover. The ensemble is shrink-wrapped with a heat-shrink plastic to prevent movement of the pieces that constitute it.

15 For the transport of home electrical appliances, and more specifically for that of washing machines, mechanical pallets are used that grasp the appliance by pressing against two sides. These pallets are slightly inclined in the form of a V to grasp the appliance better. With this type of packaging, there are some problems with breakage of the machines when they are picked up with lift blades. The edge protectors are normally
20 of cardboard or EPS.

The object of the invention is to provide packaging for a home electrical appliance that is safer and more reliable for the transport of the appliance and to avoid possible damage from handling by machines with side blades.

25 The object is achieved by means of packaging for a home electrical appliance such as a washing machine, dishwasher or the like that is constituted from a base on which the appliance is placed, a cover that is placed on top of the appliance, and four vertical edge protectors that cover at least part of the four edges of the appliance, where the packaging also includes two side protectors that cover at least part of two sides of the appliance.

30 Said solution decreases breakage of the vertical edge protectors because it increases the surface area where the blades exert force. Possible damage to the home electrical appliance is avoided in this way. Moreover, the number of pieces of packaging is decreased so that the complexity of manufacturing the packaging is decreased, as is assembly time.

35 In another embodiment, the side protectors form one piece with two vertical edge protectors, thus reducing the number of pieces. Instead of four vertical edge protectors,

- 5 only two side protectors are provided, with a consequent improvement in assembly time and a savings in costs.

Moreover, the vertical edge protectors extend from the base to the cover with their ends inserted into the base and/or cover. Such an arrangement is simple to assemble over the appliance.

- 10 The side protectors cover part of the sides of the appliance starting from the base. Thus it is not necessary to cover the entire side of the appliance, only the portion that suffers the most during transport. To reduce the material still further and facilitate assembly, the vertical edge protectors extend up to the height of the side protector.

- 15 The side protectors have handles for grasping the packaged home electrical appliance by hand. These facilitate handling of the ensemble during transport. The material for the base, the vertical edge protectors, the cover and the side protectors is preferably EPS, although other materials made of pressed paper or cardboard are also good.

- 20 Other advantages are brought out in the following description of the figures contained in the attached drawing. One embodiment of the present invention is shown in the figures. The figures, the description and the claims contain combinations of numerous characteristics. One skilled in the art could advantageously also consider the characteristics individually and recombine them in other reasonable combinations.

In the drawing, there is shown:

- 25 Figure 1. a perspective view of a home electrical appliance packaged,
Figure 2. a schematic cutaway view of a home electrical appliance package,
Figure 3. a perspective view of packaging pieces, and,
Figure 4. two vertical edge protectors joined as one piece with a side protector.

- 30 Figure 1 shows home electrical appliance 1 packaged according to the invention, with base 2 covered by a cardboard top. Cover 3 is placed on top of appliance 1. Each edge of appliance 1 is covered by vertical edge protectors 4. Between two vertical edge protectors 4 is arranged side protector 5 that protects the side of appliance 1 up to approximately half its height.

- 35 Figure 2 schematically shows a home electrical appliance packaged according to the invention, with part of the packaging having been cut away to see base 2, cover 3 and

5 vertical edge protectors 4 that join the base to the cover. Side protectors 5 are also cut away. Pallets 7 of the transport machine are shown to illustrate the place where the appliance is normally grasped and where vertical edge protectors 4 are usually damaged. With the placement of the side protectors, the force exerted by the pallet is distributed and the occurrence of damage is reduced.

10 Figure 3 shows several packaging pieces according to the invention: cover 3 and base 2. Two pieces are inserted into the base. Each piece is formed from two short vertical edge protectors 4 and one side protector 5. The side protector has a transport handle 6.

15 Figure 4 shows a piece combined from two vertical edge protectors 4 with one side protector 5 joining them together as one piece. The side protector has two transport handles 6.

5

CLAIMS

1. A packaging for a home electrical appliance (1) such as a washing machine (1), dishwasher (1) or the like, comprising a base (2) on which the appliance (1) is placed, a cover (3) that is placed on top of the appliance (1) and four vertical edge protectors (4) that cover at least part of each of four edges of the appliance (1),
10 wherein
the packaging furthermore comprises two side protectors (5) that cover at least part of the sides of the appliance (1).
2. The packaging for a home electrical appliance according to Claim 1, wherein the side
15 protectors (5) form one piece with two vertical edge protectors (4).
3. The packaging for a home electrical appliance as recited in one of the preceding claims, wherein the vertical edge protectors (4) extend from the base (2) to the cover (3) with their ends inserted into the base and/or cover.
4. The packaging for a home electrical appliance as recited in one of the preceding
20 claims, wherein the side protectors (5) cover part of the sides of the appliance (1) starting from the base (2).
5. The packaging for a home electrical appliance according to claim 4, wherein the vertical edge protectors (4) extend up to the height of the side protector (5).
6. The packaging for a home electrical appliance as recited in one of the preceding
25 claims, wherein the side protectors (5) have handles (6) for grasping the packaged home electrical appliance by hand.
7. The packaging for a home electrical appliance as recited in one of the preceding claims, wherein the material of the base, edge protectors, cover and side protectors is EPS.

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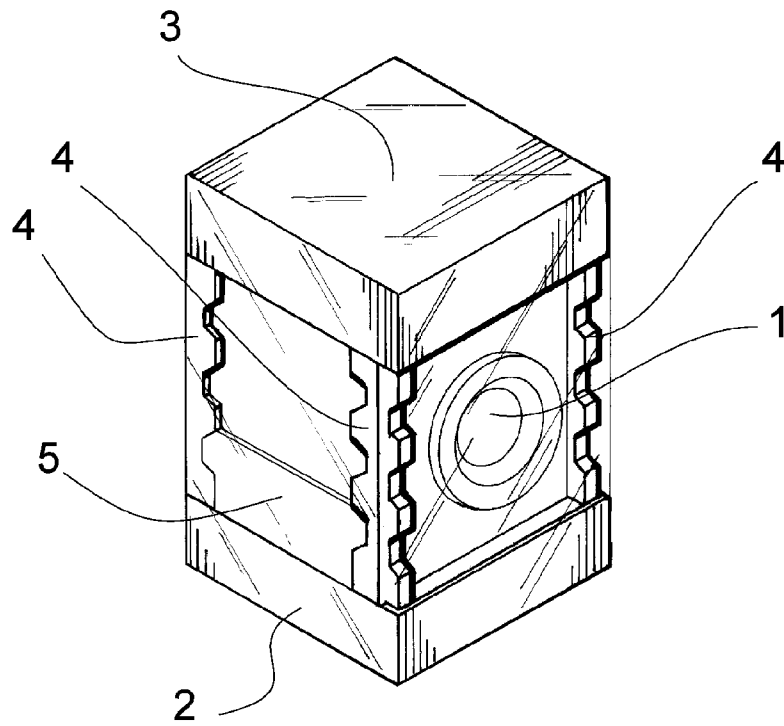


FIG.1

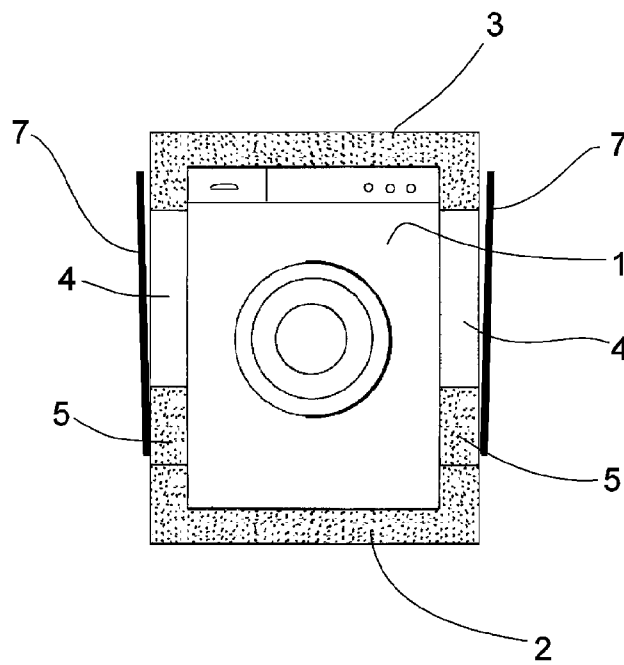


FIG.2

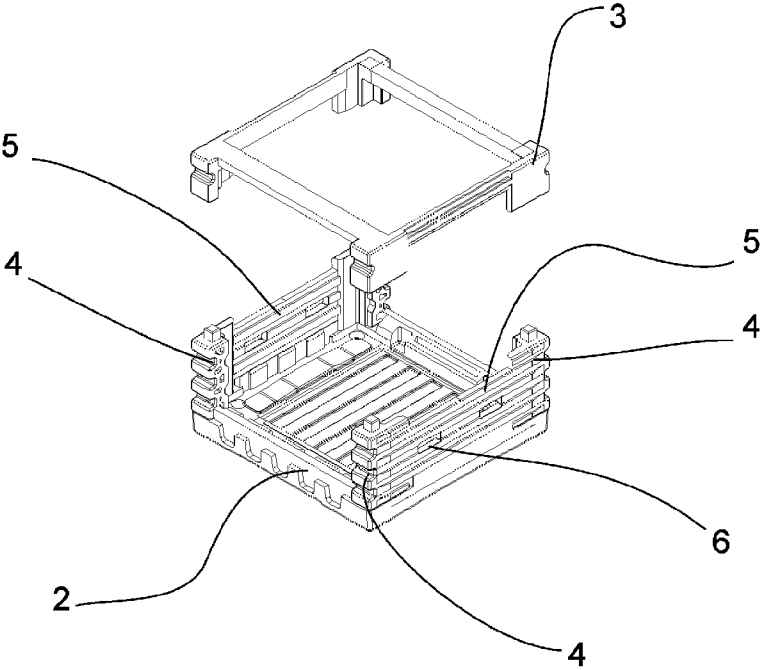


FIG.3

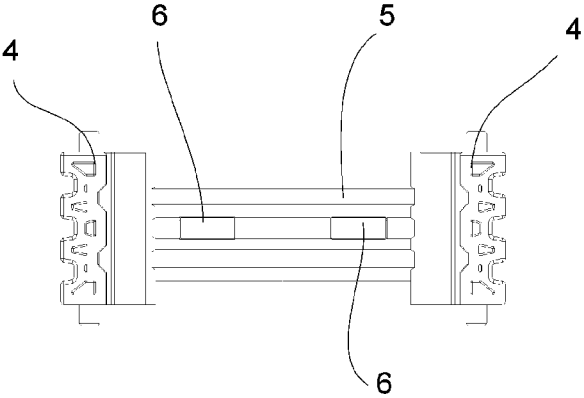


FIG.4

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2009/067984

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65D85/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/20301 A1 (MARZANO FORM DI MARZANO ANNA [IT]; BESTETTI LUIGI [IT]) 13 April 2000 (2000-04-13) page 1, line 25 - line 26 page 5, line 29 - page 6, line 24; figure 1	1-5,7
X	DE 41 12 725 A1 (BOSCH SIEMENS HAUSGERAETE [DE]) 22 October 1992 (1992-10-22) column 4, line 12 - line 65; figures 4-6	1-2,4-6
X	DE 92 01 608 U1 (GEFINEX) 23 April 1992 (1992-04-23) page 2, line 17 - line 25; figure 1	1-6
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

23 March 2010

Date of mailing of the international search report

09/04/2010

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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2009/067984

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 44 14 813 A1 (DREPHARM GMBH LAAGE [DE]) 2 November 1995 (1995-11-02) column 2, line 21 - line 25 column 5, line 42 - column 6, line 62; figure 1 -----	1-6
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2009/067984

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