

Title (en)

Bottle of thermoplastic material and method for the manufacture and filing of same

Title (de)

Flasche aus thermoplastischem Material, Verfahren zur Herstellung und Verfahren zum Füllen

Title (fr)

Bouteille en matériau thermoplastique, procédé pour sa fabrication et méthode pour son remplissage

Publication

EP 1147990 A2 20011024 (EN)

Application

EP 01500075 A 20010326

Priority

ES 200000946 A 20000412

Abstract (en)

The bottle is of a single-piece and comprises a main body (2) with a hermetically closing part (6) delimited by a weakening (7) of the material adjacent to the periphery of the mouth. The bottom part is constituted by a sheet of a thermoplastic material joined to the bottle body by thermowelding. The bottle is closed with a screw-on-cap (8), or a top (12), which are joined to the closing part (6) by means of an adhesive or glue (11). <??>The method comprises the stages of feeding a thermoplastic laminate to a thermoforming machine; heating the laminate to a predetermined temperature; inserting a preformed punch (17) into a negative mould (18) of the bottle (1), situated in inverted position, with the laminate (16) interposed between the punch and the mould; conforming the body (2) of the bottle by means of pressure or pneumatic vacuum; forming the weakening (7) and the closing part (6) by means of a punch (19); filling the bottle with the product (22) to be contained therein, by the upper opening (20) which will later be the bottom part of the bottle; and thermal weld a laminate (21) of thermoplastic material to the periphery of the said upper opening, determining the bottom part or base and the bottle, being therefore, finished and hermetically sealed. <IMAGE>

IPC 1-7

B65D 8/02

IPC 8 full level

B65D 1/02 (2006.01); **B65D 8/02** (2006.01); **B65D 39/00** (2006.01); **B65D 41/04** (2006.01); **B65D 51/22** (2006.01); **B65D 67/02** (2006.01); **B65D 85/30** (2006.01)

CPC (source: EP ES US)

B65D 1/0238 (2013.01 - EP ES US); **B65D 11/04** (2013.01 - EP ES US); **B65D 17/06** (2013.01 - EP ES US); **B65D 41/0435** (2013.01 - EP ES US); **B65D 51/228** (2013.01 - EP US); **B65D 2251/0015** (2013.01 - EP US); **B65D 2251/0071** (2013.01 - EP US)

Cited by

EP2177452A1; EP2390202A1; JP2010528948A; EP2000417A1; RU2468976C2; JP2013252904A; EP2000418A1; US8910811B2; WO2005080203A1; WO2008148823A1; WO2008034733A1; US8393484B2; WO2007063120A1; WO2008148824A1; EP2508432B1; JP2009517296A

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1147990 A2 20011024; **EP 1147990 A3 20031015**; BR 0101260 A 20011113; ES 2195678 A1 20031201; ES 2195678 B1 20050216; MX PA01003260 A 20050411; US 2002027122 A1 20020307

DOCDB simple family (application)

EP 01500075 A 20010326; BR 0101260 A 20010330; ES 200000946 A 20000412; MX PA01003260 A 20010329; US 82415001 A 20010403