Title (en)

Bottle made of plastic material with reinforced bottom

Title (de)

Kunststoffflasche mit verstärktem Boden

Title (fr)

Bouteille en plastique avec fond renforcé

Publication

## EP 1705124 B1 20071219 (EN)

Application

# EP 06111001 A 20060313

Priority

- IT BO20050012 U 20050315
- IT BO20050036 U 20050614

Abstract (en)

[origin: EP1705124A1] During the forming stage of the bottle in the special mould parts, first linear ribs (2), in relief outwards, parallel with each other, symmetrically arranged and with a curved external profile (102), are obtained on the bottom (301), raised and with the form of a spherical cap of the bottle itself, these ribs being, for example, five in number, or in another preferably odd number, in such a way that one of these is located on the centreline of the bottom of the bottle and these ribs are oriented perpendicularly compared with the ideal vertical plane on which the crushed part (101') of the top sprue (101) of the bottle lies. During the same forming stage as that of said first ribs (2), perpendicularly to these and at least on the centreline of the bottle's bottom, at least one second rib (3) is obtained, adjacent to and aligned with the bottom sprue of the bottle itself and which is composed of a bottom part (103) in contact with the bottom of the bottle, which intersects with and is fixed to said first ribs (2) and which protrudes with short sections (103') from the outer ones of the first ribs (2) themselves, and this second rib (3) comprises on said bottom part (103) and along the entire length, a median ridge (203) with limited thickness, with stiffening and heat dispersion functions. The bottom support edge (401', 401") of the bottle itself, which is connected externally with appropriate rounding to the contiguous side wall (701', 701"), is connected internally with the raised and arched bottom (301', 301") of the bottle itself, with an inclined edge (901', 901 ") whose generatrix forms an angle ( $\pm$ ,  $\pm$ ',  $\pm$ ") between 90° and 40°, and between about 53° and 48° in particular, with the horizontal.

## IPC 8 full level

B65D 1/02 (2006.01)

#### CPC (source: EP)

B65D 1/0261 (2013.01); B65D 1/0276 (2013.01); B65D 2501/0027 (2013.01)

## Cited by

CN103562076A; CN105857815A; US9982125B2; US10017606B2; WO2015108494A1; JP2021024574A; WO2012166376A1; US9765181B2; EP2978584A1; WO2024015448A1

#### Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

## DOCDB simple family (publication)

**EP 1705124 A1 20060927; EP 1705124 B1 20071219;** AT E381491 T1 20080115; CY 1107232 T1 20121121; DE 602006000329 D1 20080131; DE 602006000329 T2 20081204; ES 2297803 T3 20080501

## DOCDB simple family (application)

EP 06111001 A 20060313; AT 06111001 T 20060313; CY 081100260 T 20080307; DE 602006000329 T 20060313; ES 06111001 T 20060313