

Title (en)
Plastic bottle for hot filling or heat treatment

Title (de)
Kunststoffflasche zur Warmabfüllung oder Wärmebehandlung

Title (fr)
Bouteille plastique pour remplissage à chaud ou traitement thermique

Publication
EP 2025603 A1 20090218 (FR)

Application
EP 07112225 A 20070711

Priority
EP 07112225 A 20070711

Abstract (en)
The method involves filling a plastic package (1) with a hot product (5), sealing the package, and cooling the package and its contents. Coefficient of linear thermal expansion of a side wall (2) of the package is greater than specific value and the package is allowed to expand and contract as much as its contents, where the sidewall includes 70 percentage of low-density polyethylene. Pressure is generated in the package after cooling the package and its contents, where the pressure is higher than or equal to zero.

Abstract (fr)
Emballage (1) plastique comprenant une paroi latérale (2) reliée à un goulot (3) et un fond (4), ledit emballage (1) étant adapté pour contenir un produit liquide ou visqueux subissant des variations de température de plusieurs dizaines de degré, typiquement entre -20 °C et +100 °C, caractérisé par le fait que sa paroi latérale (2) a un coefficient de dilatation thermique dont la valeur est choisie de manière à ce que toute variation de volume dudit produit soit compensée par une variation du volume dudit emballage (1).

IPC 8 full level
B65D 1/02 (2006.01); **B65D 8/00** (2006.01)

CPC (source: EP US)
B65D 1/0207 (2013.01 - EP US); **B65D 11/04** (2013.01 - EP US); **B65D 11/20** (2013.01 - EP US); **B67C 3/045** (2013.01 - EP US)

Citation (search report)

- [X] DE 19502449 A1 19960801 - WELLA AG [DE]
- [X] EP 1714631 A1 20061025 - LAMPRECHT AG [CH]
- [X] US 2005262813 A1 20051201 - MICHALSKY ANDREAS [DE]
- [X] WO 02085755 A1 20021031 - GRAHAM PACKAGING CO [US]

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 MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
WO 2009007869 A2 20090115; WO 2009007869 A3 20090305; BR PI0814702 A2 20150120; CA 2692500 A1 20090115; CA 2692500 C 20150804; CN 101730646 A 20100609; CN 101730646 B 20110810; EP 2025603 A1 20090218; EP 2167390 A2 20100331; EP 2167390 B1 20150325; HK 1141499 A1 20101112; JP 2010533106 A 20101021; RU 2010103020 A 20110820; RU 2474522 C2 20130210; US 2010186352 A1 20100729; US 8567164 B2 20131029

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