

Title (en)
METHOD FOR SHAPING THE BOTTOM OF HOT-FILLED CONTAINERS

Title (de)
VERFAHREN ZUR BODENAUSFORMUNG HEISSABGEFÜLLTER BEHÄLTER

Title (fr)
PROCÉDÉ DE DÉFORMATION DE CONTENANTS REMPLIS DE LIQUIDE CHAUD

Publication
EP 3419902 A1 20190102 (DE)

Application
EP 16819048 A 20161215

Priority
• DE 102016202908 A 20160225
• EP 2016081266 W 20161215

Abstract (en)
[origin: WO2017144139A1] The invention relates to a method for shaping the bottom of hot-filled containers (1), in which the bottoms (3) of the containers are forced inward as they cool from a state (6) bulged outward, in particular during cooling. The fact that the bottoms are forced inward by at least one fluid jet (4) and/or fluid pressure wave (35) means that complicated mechanisms for forcing the bottom in are unnecessary. In addition, bottom shaping can advantageously be carried out in a production area immediately following a closer.

IPC 8 full level
B65B 61/24 (2006.01); **B67C 3/04** (2006.01); **B67C 7/00** (2006.01)

CPC (source: EP US)
B65B 3/00 (2013.01 - EP US); **B65B 61/24** (2013.01 - EP US); **B65D 79/0081** (2020.05 - EP US); **B67C 3/045** (2013.01 - EP US); **B67C 3/22** (2013.01 - US); **B67C 7/0086** (2013.01 - US); **B65B 7/16** (2013.01 - EP US); **B65B 55/04** (2013.01 - EP US); **B65B 2220/24** (2013.01 - EP US); **B67C 7/00** (2013.01 - EP US); **B67C 2003/226** (2013.01 - EP US)

Citation (search report)
See references of WO 2017144139A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102016202908 A1 20170831; CN 108698727 A 20181023; CN 108698727 B 20200918; EP 3419902 A1 20190102; EP 3419902 B1 20200318; US 11453522 B2 20220927; US 2019039768 A1 20190207; WO 2017144139 A1 20170831

DOCDB simple family (application)
DE 102016202908 A 20160225; CN 201680082026 A 20161215; EP 16819048 A 20161215; EP 2016081266 W 20161215; US 201616074701 A 20161215