

Title (en)
SHRINKING PROCESS FOR PRODUCING SOLID, TRANSPORTABLE AND PRINTABLE CONTAINERS AND DEVICE FOR CARRYING OUT SAID SHRINKING PROCESS

Title (de)
SCHRUMPFPROZESS ZUR HERSTELLUNG VON FESTEN, TRANSPORTFÄHIGEN UND BEDRUCKBAREN GEBINDEN UND VORRICHTUNG ZUR DURCHFÜHRUNG EINES DERARTIGEN SCHRUMPFPROZESSES

Title (fr)
PROCEDE DE RETRACTION POUR PRODUIRE DES EMBALLAGES SOLIDES TRANSPORTABLES ET IMPRIMABLES ET DISPOSITIF PERMETTANT DE METTRE EN OEUVRE CE PROCEDE

Publication
EP 1957371 B1 20090506 (DE)

Application
EP 06753186 A 20060519

Priority

- DE 2006000870 W 20060519
- DE 102005059295 A 20051209

Abstract (en)
[origin: WO2007065385A1] The invention relates to a shrinking process for producing solid, transportable and printable containers, especially bottle containers with a height/width ratio of > 1 and containing heat-sensitive filling substances. The shrinking process comprises the steps of covering the containers to be packaged with a film in such a manner as to produce an overlapping section of the film ends on the bottom surface, heating them by heat transfer or convection, thereby fusing together the free ends in the area of overlap, and then finally heating the containers in a shrinking oven, the container so produced being stabilized by the shrinking process. The incoming hot air is first locally limited to the bottom surface of the container in order to form a peripheral shell in the area of the bottle bottoms and the shape of the container is stabilized while the container is continuously transported during stabilization. The hot air directed onto the bottom area of the container in a bundle of discretely distributed gas jets is discharged and returned after a locally limited heat transfer with the film. More hot gas is directed laterally onto the continuously transported container at an increased lateral blow speed in order to complete the shrinking process.

IPC 8 full level
B65B 53/06 (2006.01)

CPC (source: BR EP US)
B65B 53/063 (2013.01 - BR EP US); **B65B 63/08** (2013.01 - BR); **B65B 2220/24** (2013.01 - EP US); **B65D 71/08** (2013.01 - BR)

Cited by
DE202009005047U1

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)
WO 2007065385 A1 20070614; AT E430697 T1 20090515; BR PI0619593 A2 201111004; BR PI0619593 A8 20171024; BR PI0619593 B1 20181009; CN 101356094 A 20090128; CN 101356094 B 201111130; DE 502006003687 D1 20090618; EP 1957371 A1 20080820; EP 1957371 B1 20090506; JP 2009518239 A 20090507; JP 5064410 B2 20121031; PL 1957371 T3 20091030; US 2009013649 A1 20090115; US 7946100 B2 20110524

DOCDB simple family (application)
DE 2006000870 W 20060519; AT 06753186 T 20060519; BR PI0619593 A 20060519; CN 200680050742 A 20060519; DE 502006003687 T 20060519; EP 06753186 A 20060519; JP 2008542585 A 20060519; PL 06753186 T 20060519; US 9672406 A 20060519