

Title (en)
Filling of cooled products

Title (de)
Abfüllung gekühlter Produkte

Title (fr)
Remplissage de produits réfrigérés

Publication
EP 2657180 B1 20180228 (DE)

Application
EP 13161234 A 20130327

Priority
DE 102012206716 A 20120424

Abstract (en)
[origin: EP2657180A1] The method involves cooling the product to be filled. The cooled product is then filled into a filling container. The product filled filling container is heated. The cooling and heating processes are performed by using the heat pump (4). An independent claim is included for apparatus for filling product into filling container.

IPC 8 full level
B67C 3/02 (2006.01)

CPC (source: EP US)
B67C 3/02 (2013.01 - EP US); **B67C 3/22** (2013.01 - US)

Citation (examination)

- US 4356681 A 19821102 - BARNES WILLIAM M
- JP 2011255952 A 20111222 - SUNTORY HOLDINGS LTD, et al

Cited by
WO2015071168A1

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

DOCDB simple family (publication)
EP 2657180 A1 20131030; EP 2657180 B1 20180228; CN 103382015 A 20131106; CN 103382015 B 20160323;
DE 102012206716 A1 20131024; US 2013276936 A1 20131024; US 9561946 B2 20170207

DOCDB simple family (application)
EP 13161234 A 20130327; CN 201310144196 A 20130424; DE 102012206716 A 20120424; US 201313869476 A 20130424