

Title (en)  
APPARATUS FOR CHANGING THE FLOW OF A FLOWABLE MATERIAL

Title (de)  
VORRICHTUNG ZUR VERÄNDERUNG DER STRAHLFORM VON FLIESSFÄHIGEN PRODUKTEN

Title (fr)  
DISPOSITIF POUR MODIFIER L'ÉCOULEMENT D'UN MATERIAU FLUIDE

Publication  
**EP 3052387 A1 20160810 (DE)**

Application  
**EP 14755812 A 20140826**

Priority  
• DE 102013110774 A 20130930  
• EP 2014068049 W 20140826

Abstract (en)  
[origin: WO2015043854A1] The invention relates to a device (14) for changing the jet shape of flowable products, in particular foods, comprising: an inflow region (16) for the inflow of the flowable products, an outflow region (17) for the outflow of the flowable products, and a plurality of channels (18) for conducting the flowable products, wherein each channel (18) comprises an inlet (19) associated with the inflow region (16) and an outlet (20) associated with the outflow region (17), wherein the inlets (19) jointly form an inflow surface (30), which lies in the inflow region (16) and has a width (B) and a height (H), and wherein the outlets (20) jointly form an outflow surface (32), which lies in the outflow region (17) and which has a width (B') and a height (H'). In order reduce splattering during the filling of packages having a cross-section that is not rotationally symmetrical, the outflow surface (32) according to the invention is not rotationally symmetrical.

IPC 8 full level  
**B65B 25/00** (2006.01); **B05B 1/00** (2006.01); **B05B 1/14** (2006.01); **B65B 3/04** (2006.01); **B65B 3/22** (2006.01); **B65B 39/00** (2006.01); **B65B 55/02** (2006.01); **B67C 3/26** (2006.01); **B67C 3/28** (2006.01)

CPC (source: EP US)  
**B05B 1/00** (2013.01 - EP US); **B05B 1/14** (2013.01 - EP US); **B65B 3/22** (2013.01 - EP US); **B65B 55/02** (2013.01 - EP US); **B67C 3/2608** (2013.01 - EP US); **B67C 3/281** (2013.01 - EP US); **E03C 1/08** (2013.01 - US); **B65B 2039/009** (2013.01 - EP US)

Citation (search report)  
See references of WO 2015043854A1

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)  
**WO 2015043854 A1 20150402; WO 2015043854 A9 20150625**; AU 2014327639 A1 20160331; BR 112016006529 A2 20170801; CN 105593122 A 20160518; CN 105593122 B 20180921; DE 102013110774 A1 20150402; EP 3052387 A1 20160810; EP 3052387 B1 20190213; ES 2715886 T3 20190606; JP 2016536232 A 20161124; JP 6408589 B2 20181017; MX 2016003930 A 20160617; PL 3052387 T3 20190628; RU 2016116989 A 20171110; TR 201904051 T4 20190521; US 2016236924 A1 20160818; US 9909290 B2 20180306

DOCDB simple family (application)  
**EP 2014068049 W 20140826**; AU 2014327639 A 20140826; BR 112016006529 A 20140826; CN 201480054065 A 20140826; DE 102013110774 A 20130930; EP 14755812 A 20140826; ES 14755812 T 20140826; JP 2016544739 A 20140826; MX 2016003930 A 20140826; PL 14755812 T 20140826; RU 2016116989 A 20140826; TR 201904051 T 20140826; US 201415026107 A 20140826