

Title (en)

Filling nozzle for liquid or pasty filling material, metering device comprising a filling nozzle and use of the filling nozzle

Title (de)

Fülldüse für flüssiges oder pastöses Füllgut, Dosiereinrichtung mit einer Fülldüse und Verwendung der Fülldüse

Title (fr)

Tuyère de remplissage pour un produit de remplissage liquide ou pâteux, dispositif de dosage doté d'une tuyère de remplissage et utilisation de la tuyère de remplissage

Publication

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Application

EP 14186018 A 20140923

Priority

DE 102013220007 A 20131002

IPC 8 full level

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CPC (source: EP)

B65B 25/001 (2013.01); **B67C 3/2608** (2013.01); **B65B 3/04** (2013.01); **B65B 2039/009** (2013.01); **B65B 2210/08** (2013.01); **B67C 2003/2671** (2013.01)

Citation (examination)

WO 2015043854 A1 20150402 - SIG TECHNOLOGY AG [CH]

Citation (opposition)

Opponent : KHS GmbH

- JP 2010030613 A 20100212 - SEIKO CORP
- US 5909846 A 19990608 - SASAKI MASANORI [JP]
- US 2650551 A 19530901 - ECKELS JOHN F, et al
- WO 2015043854 A1 20150402 - SIG TECHNOLOGY AG [CH]
- WO 2015043853 A1 20150402 - SIG TECHNOLOGY AG [CH]
- FR 2905121 A1 20080229 - PACK REALISATIONS SA [FR]
- EP 0919472 A1 19990602 - SASIB PROCESSING & SEAMING MAC [IT]
- FR 2511971 A1 19830304 - JAGENBERG WERKE AG [DE]

Designated contracting state (EPC)

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EP 2857319 A1 20150408; **EP 2857319 B1 20170906**; **EP 2857319 B2 20201202**; DE 102013220007 A1 20150402

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