

Title (en)
FLUID PRODUCT DISPENSER

Title (de)
SPENDER FÜR EIN FLÜSSIGES PRODUKT

Title (fr)
DISTRIBUTEUR DE PRODUIT FLUIDE

Publication
EP 3548185 B1 20220928 (FR)

Application
EP 17821972 A 20171201

Priority
• FR 1661845 A 20161202
• FR 2017053344 W 20171201

Abstract (en)
[origin: WO2018100321A1] Head for dispensing fluid material. Head for dispensing fluid material (T) comprising a spraying wall (26) perforated with a network of holes (O) through which the pressurised fluid material passes so as to be sprayed in fine droplets, characterised in that the network of holes (O) comprises at least two rows of holes (O), with the holes (O) of the same row having a substantially identical hole size, and with the holes (O) of different rows having different hole sizes, such that a row of holes (O) generates a spray of fine droplets with a distribution of droplet sizes defining a first Gaussian distribution, while another row of holes (O) generates a spray of fine droplets with a distribution of droplet sizes defining a second Gaussian distribution, which is staggered with respect to the first Gaussian distribution, thus producing a complex spray with at least two separate Gaussian distributions.

IPC 8 full level
B05B 1/14 (2006.01); **B05B 1/18** (2006.01); **B05B 7/08** (2006.01); **B05B 11/00** (2006.01); **B65D 83/14** (2006.01); **B65D 83/28** (2006.01)

CPC (source: CN EP US)
B05B 1/14 (2013.01 - EP US); **B05B 1/185** (2013.01 - EP); **B05B 1/26** (2013.01 - US); **B05B 7/0892** (2013.01 - US); **B05B 11/10** (2023.01 - US); **B05B 11/1042** (2023.01 - US); **B21D 5/002** (2013.01 - CN); **B21D 5/01** (2013.01 - CN); **B21D 28/26** (2013.01 - CN); **B21D 37/10** (2013.01 - CN); **B65D 83/28** (2013.01 - EP); **B65D 83/753** (2013.01 - EP US); **B05B 7/0892** (2013.01 - EP); **B05B 11/10** (2023.01 - EP); **B05B 11/1023** (2023.01 - EP)

Citation (examination)
• WO 2016036228 A1 20160310 - KANG SUNGIL [KR]
• WO 2016099158 A1 20160623 - KANG SUNGIL [KR]

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)
WO 2018100321 A1 20180607; BR 112019010499 A2 20190917; BR 112019010499 B1 20220920; BR 112020009538 A2 20201103; BR 112020009538 B1 20230214; BR 112020009539 A2 20201103; BR 112020009539 B1 20230214; BR 112020009541 A2 20201103; BR 112020009541 B1 20230214; CN 110035830 A 20190719; CN 111432938 A 20200717; CN 111432938 B 20220830; CN 111432939 A 20200717; CN 111432939 B 20220524; CN 111655381 A 20200911; CN 114904961 A 20220816; EP 3548185 A1 20191009; EP 3548185 B1 20220928; ES 2929990 T3 20221205; ES 2953811 T3 20231116; FR 3059573 A1 20180608; FR 3059573 B1 20190125; FR 3074429 A1 20190607; FR 3074429 B1 20221209; FR 3074430 A1 20190607; FR 3074430 B1 20240705; FR 3074431 A1 20190607; FR 3074431 B1 20210709; FR 3074432 A1 20190607; FR 3074432 B1 20240329; JP 2019536626 A 20191219; JP 7094286 B2 20220701; US 11633747 B2 20230425; US 2019388910 A1 20191226; US 2020391229 A1 20201217

DOCDB simple family (application)
FR 2017053344 W 20171201; BR 112019010499 A 20171201; BR 112020009538 A 20181130; BR 112020009539 A 20181130; BR 112020009541 A 20181130; CN 201780074176 A 20171201; CN 201880077414 A 20181130; CN 201880077745 A 20181130; CN 201880077756 A 20181130; CN 202210510181 A 20181130; EP 17821972 A 20171201; ES 17821972 T 20171201; ES 18833264 T 20181130; FR 1661845 A 20161202; FR 1852072 A 20180309; FR 1852079 A 20180309; FR 1852083 A 20180309; FR 1852087 A 20180309; JP 2019529632 A 20171201; US 201716465272 A 20171201; US 201816764232 A 20181130