

Title (en)

SPRAY SYSTEM AND METHOD FOR SPRAYING A SECONDARY FLUID INTO A PRIMARY FLUID

Title (de)

SPRÜHSYSTEM UND VERFAHREN ZUM EINSPRÜHEN EINES SEKUNDÄREN FLUIDS IN EIN PRIMÄRES FLUID

Title (fr)

SYSTÈME DE PULVÉRISATION ET PROCÉDÉ POUR PULVÉRISER UN FLUIDE SECONDAIRE DANS UN FLUIDE PRIMAIRE

Publication

EP 2555858 A1 20130213 (DE)

Application

EP 11713276 A 20110408

Priority

- DE 102010014580 A 20100409
- EP 2011055521 W 20110408

Abstract (en)

[origin: WO2011124686A1] The invention relates to a spray system for spraying a secondary fluid (5) into a primary fluid (1), wherein the secondary fluid (5) is gaseous or liquid or contains fine particulate solids which are to be dispersed in the primary fluid (1). The spray system comprises at least one central nozzle (6) for the primary fluid and at least one nozzle for spraying the secondary fluid(6), wherein a housing (3) of the nozzle has a tubular design and the central nozzle (6) is provided with a central passage for the primary fluid (1), wherein the passage, as seen looking in the flow direction, comprises a convergent inlet region (7), a constriction (8) and a divergent outlet part (9), wherein at least one outlet opening for the secondary fluid (5) is arranged on the downstream end (4) of the nozzle housing (3) and wherein at least one outlet opening is designed and arranged to generate a spray jet (12) of the secondary fluid (5) that surrounds the primary fluid (1) exiting the central passage in a substantially ring-shaped manner.

IPC 8 full level

B01F 3/04 (2006.01); **B01F 5/04** (2006.01); **B01F 15/00** (2006.01); **B05B 7/08** (2006.01); **B05B 15/52** (2018.01); **B08B 5/02** (2006.01);
F04F 5/04 (2006.01); **F04F 5/46** (2006.01)

CPC (source: EP US)

B01F 23/2132 (2022.01 - EP US); **B01F 25/311** (2022.01 - EP US); **B01F 25/312** (2022.01 - EP US); **B01F 25/3121** (2022.01 - EP US);
B01F 25/31243 (2022.01 - EP US); **B01F 35/1453** (2022.01 - EP US); **B05B 7/00** (2013.01 - US); **B05B 15/52** (2018.01 - EP US);
B08B 5/02 (2013.01 - EP US); **F04F 5/04** (2013.01 - EP US); **F04F 5/462** (2013.01 - EP US); **F04F 5/463** (2013.01 - EP US);
F04F 5/466 (2013.01 - EP US); **B05B 7/0075** (2013.01 - EP US); **B05B 7/062** (2013.01 - EP US); **B05B 7/065** (2013.01 - EP US);
B05B 7/066 (2013.01 - EP US)

Citation (search report)

See references of WO 2011124686A1

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)

DE 102010014580 A1 20111013; CN 102834168 A 20121219; DE 202011110485 U1 20140417; EP 2555858 A1 20130213;
US 2013068852 A1 20130321; WO 2011124686 A1 20111013

DOCDB simple family (application)

DE 102010014580 A 20100409; CN 201180018184 A 20110408; DE 202011110485 U 20110408; EP 11713276 A 20110408;
EP 2011055521 W 20110408; US 201113639980 A 20110408