

Title (en)  
NOZZLE ARRANGEMENT

Title (de)  
DÜSENANORDNUNG

Title (fr)  
ENSEMBLE BUSE

Publication  
**EP 2879805 B1 20160824 (DE)**

Application  
**EP 13753540 A 20130724**

Priority  
• DE 102012014965 A 20120730  
• DE 2013000406 W 20130724

Abstract (en)  
[origin: WO2014019563A1] The invention relates to a nozzle arrangement for atomising a fluid flow into fine particles, said fluid flow being delivered under pressure, comprising: a conical element (10) having a top face (12), a bottom face (14) and an outer face (16) that adjoins the top and the bottom face, wherein the outer face has a plurality of grooves (18a, 18b, 18c, 18d) formed therein that extend between the bottom face and the top face; and a counter-element (20) provided with an opening, the counter-element being designed to receive the conical element and having an inner face such that the grooves are at least partially covered by said inner face in order to form a plurality of channels. The channels define outlets, each of which is able to let out a jet of fluid that comes into contact with at least one other jet of fluid in a region spaced apart from the top face of the conical element, in order to atomise the fluid flow, and wherein the conical element can be moved along the axis in order to increase or decrease the effective cross-section of the nozzle arrangement.

IPC 8 full level  
**B05B 1/26** (2006.01); **B05B 1/08** (2006.01); **B05B 7/08** (2006.01); **B05B 15/02** (2006.01); **B05B 15/525** (2018.01)

CPC (source: CN EP RU US)  
**B05B 1/083** (2013.01 - CN EP US); **B05B 1/26** (2013.01 - CN EP US); **B05B 7/0892** (2013.01 - CN EP US); **B05B 15/525** (2018.01 - CN EP US); **B05B 1/14** (2013.01 - RU); **B05B 1/26** (2013.01 - RU)

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 2014019563 A1 20140206**; CA 2880592 A1 20140206; CA 2880592 C 20201201; CN 104661757 A 20150527; CN 104661757 B 20190927; DE 102012014965 A1 20140213; DK 2879805 T3 20161212; EP 2879805 A1 20150610; EP 2879805 B1 20160824; ES 2604475 T3 20170307; IN 923DEN2015 A 20150612; JP 2015528745 A 20151001; JP 6029754 B2 20161124; PL 2879805 T3 20170428; PT 2879805 T 20161130; RU 2015106810 A 20160920; RU 2635219 C2 20171109; US 10888883 B2 20210112; US 2015136876 A1 20150521

DOCDB simple family (application)  
**DE 2013000406 W 20130724**; CA 2880592 A 20130724; CN 201380049702 A 20130724; DE 102012014965 A 20120730; DK 13753540 T 20130724; EP 13753540 A 20130724; ES 13753540 T 20130724; IN 923DEN2015 A 20150205; JP 2015524636 A 20130724; PL 13753540 T 20130724; PT 13753540 T 20130724; RU 2015106810 A 20130724; US 201314392017 A 20130724