

Title (en)

Cooling nozzle with valve

Title (de)

Kühlungseinspritzdüse mit einer Klappe

Title (fr)

Gicleur de refroidissement à clapet

Publication

EP 1980729 B1 20100127 (FR)

Application

EP 08152694 A 20080313

Priority

FR 0753892 A 20070316

Abstract (en)

[origin: EP1980729A1] The sprayer has a valve e.g. piston (2), cooperating with a main seat and a return spring (3), where the seat is formed in mass of a sprayer body (1) by a shoulder in an axial through-passage (12). A tubular guide liner (4) in the passage has a downstream liner section (4c) fixed in a downstream retaining section (1c) of the body beyond a radial outlet passage. An upstream section (4b) of the liner terminates in an upstream end (4a) that is axially set back from the seat towards downstream to define an annular fluid passage between the seat and a peripheral space.

IPC 8 full level

F01P 3/08 (2006.01); **F01P 3/10** (2006.01)

CPC (source: EP KR US)

F01M 1/08 (2013.01 - KR); **F01P 3/08** (2013.01 - EP KR US); **F01P 3/10** (2013.01 - EP US); **Y10T 137/7929** (2015.04 - EP US)

Cited by

FR3103244A1; CN101865015A; FR3067437A1; EP2816206A1; FR3007455A1; WO2021094690A1; US11473484B2; US9476344B2; WO2018229413A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1980729 A1 20081015; EP 1980729 B1 20100127; AT E456735 T1 20100215; CN 101265833 A 20080917; CN 101265833 B 20120425; DE 602008000594 D1 20100318; FR 2913723 A1 20080919; FR 2913723 B1 20090612; JP 2008232145 A 20081002; JP 4629119 B2 20110209; KR 101001849 B1 20101217; KR 20080084724 A 20080919; US 2008223318 A1 20080918; US 7559296 B2 20090714

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EP 08152694 A 20080313; AT 08152694 T 20080313; CN 200810086072 A 20080314; DE 602008000594 T 20080313; FR 0753892 A 20070316; JP 2008065640 A 20080314; KR 20080023818 A 20080314; US 4785408 A 20080313