

Title (en)
INJECTION DEVICE FOR INJECTING A FLUID

Title (de)
EINSPRITZVORRICHTUNG ZUR EINSPRITZUNG EINES FLUIDS

Title (fr)
DISPOSITIF D'INJECTION SERVANT À L'INJECTION D'UN FLUIDE

Publication
EP 2710242 A1 20140326 (DE)

Application
EP 12722722 A 20120518

Priority
• DE 102011102170 A 20110520
• EP 2012059256 W 20120518

Abstract (en)
[origin: WO2012159986A1] Injection device (1) for injecting a fluid into an exhaust-gas treatment device (15), having an injector (2) which is positioned in an injector holder (3), wherein the injector (2) has a feed opening (4) and a component (5) of the injector holder (3) extends into the feed opening (4). An injection device (1) of this type is suitable, in particular, for feeding urea/water solution into the exhaust-gas treatment device (15) of a motor vehicle. The component (5) is preferably rigid in the longitudinal direction (23) and can be compressed in the radial direction (24) by way of a deformable rubber shell, in order to compensate for the volumetric expansion of the solution if it freezes.

IPC 8 full level
F01N 3/20 (2006.01)

CPC (source: EP KR RU US)
F01N 3/20 (2013.01 - KR); **F01N 3/2066** (2013.01 - EP RU US); **F01N 3/24** (2013.01 - RU US); **F01N 2610/02** (2013.01 - EP US); **F01N 2610/11** (2013.01 - EP US); **F01N 2610/1446** (2013.01 - EP US); **F01N 2610/1453** (2013.01 - EP US); **F01N 2610/1466** (2013.01 - EP US); **F01N 2610/1486** (2013.01 - EP US); **F02M 61/14** (2013.01 - EP US); **Y02A 50/20** (2018.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

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 102011102170 A1 20121122; **DE 102011102170 B4 20240606**; CN 103620174 A 20140305; CN 103620174 B 20160427; EP 2710242 A1 20140326; JP 2014519572 A 20140814; JP 6067000 B2 20170125; KR 101503206 B1 20150316; KR 20130140871 A 20131224; RU 2013156471 A 20150627; RU 2606721 C2 20170110; US 2014075923 A1 20140320; US 9334780 B2 20160510; WO 2012159986 A1 20121129

DOCDB simple family (application)
DE 102011102170 A 20110520; CN 201280024391 A 20120518; EP 12722722 A 20120518; EP 2012059256 W 20120518; JP 2014510822 A 20120518; KR 20137029733 A 20120518; RU 2013156471 A 20120518; US 201314084694 A 20131120