

Title (en)
Injection nozzle for fuel

Title (de)
Einspritzdüse für Brennstoff

Title (fr)
Buse d'injection pour carburant

Publication
EP 2025920 B1 20111109 (DE)

Application
EP 08159570 A 20080703

Priority
• EP 07113356 A 20070727
• EP 08159570 A 20080703

Abstract (en)
[origin: EP2025920A1] The spray nozzle has valve spool (14) that is provided in the longitudinal direction bore of the nozzle head (3) to open and close the nozzle hole (4.1, 4.2). The actuator (8.2, 9.2, 15) shifts time and operates the valve spool with respect to the needle valve (6). The valve seat (7) which cooperates with a needle valve in order to control the fuel supply to the needle valve arranged inside the nozzle body (2), the longitudinal direction bore (5), and the nozzle holes.

IPC 8 full level
F02M 45/08 (2006.01); **F02M 61/04** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP KR)
F02M 45/086 (2013.01 - EP); **F02M 53/043** (2013.01 - EP); **F02M 61/042** (2013.01 - EP); **F02M 61/10** (2013.01 - KR);
F02M 61/16 (2013.01 - KR); **F02M 61/18** (2013.01 - KR); **F02M 61/1806** (2013.01 - EP); **F02M 61/20** (2013.01 - EP); **F02M 63/004** (2013.01 - EP);
F02M 63/0047 (2013.01 - EP); **F02M 63/0028** (2013.01 - EP); **F02M 2200/29** (2013.01 - EP); **F02M 2200/46** (2013.01 - EP)

Cited by
CN103534474A; EP2175108A1; US7980483B2; WO2012150377A1

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 2025920 A1 20090218; **EP 2025920 B1 20111109**; AT E532960 T1 20111115; BR PI0803744 A2 20090422; CN 101354000 A 20090128;
CN 101354000 B 20120404; DK 2025920 T3 20120227; JP 2009030605 A 20090212; JP 3186787 U 20131024; KR 20090012056 A 20090202;
RU 2008130847 A 20100127; RU 2479742 C2 20130420

DOCDB simple family (application)
EP 08159570 A 20080703; AT 08159570 T 20080703; BR PI0803744 A 20080725; CN 200810144503 A 20080725; DK 08159570 T 20080703;
JP 2008191569 A 20080725; JP 2013004703 U 20130813; KR 20080061606 A 20080627; RU 2008130847 A 20080725