

Title (en)

FUEL INJECTOR FOR INTERNAL COMBUSTION ENGINES

Title (de)

KRAFTSTOFFINJEKTOR FÜR BRENNKRAFTMASCHINEN

Title (fr)

INJECTEUR DE CARBURANT POUR MOTEURS À COMBUSTION INTERNE

Publication

EP 2387661 B1 20121003 (DE)

Application

EP 09753107 A 20091117

Priority

- EP 2009065278 W 20091117
- DE 102009000206 A 20090114

Abstract (en)

[origin: WO2010081574A1] The invention relates to a fuel injector for internal combustion engines, having a pressure chamber (16) formed in a housing (10), in which a nozzle needle (15) is disposed having an adjustable stroke. The pressure chamber (16) is divided into a stored pressure chamber (26) away from the nozzle needle seat and a nozzle needle pressure chamber (25) near the nozzle needle seat, wherein a hydraulic throttle element (40) designed as an annular gap throttle is disposed between the stored pressure chamber (26) and the nozzle needle pressure chamber (25). At least two annular gap throttle elements (41.1 to 41.n) are disposed one after another in the fuel flow direction at the nozzle needle (15).

IPC 8 full level

F02M 47/02 (2006.01); **F02M 61/10** (2006.01); **F02M 61/12** (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01)

CPC (source: EP)

F02M 47/022 (2013.01); **F02M 61/10** (2013.01); **F02M 61/12** (2013.01); **F02M 61/161** (2013.01); **F02M 61/205** (2013.01); **F02M 2200/28** (2013.01)

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 MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

DE 102009000206 A1 20100715; CN 102282354 A 20111214; EP 2387661 A1 20111123; EP 2387661 B1 20121003; WO 2010081574 A1 20100722

DOCDB simple family (application)

DE 102009000206 A 20090114; CN 200980154653 A 20091117; EP 09753107 A 20091117; EP 2009065278 W 20091117