

Title (en)

Fuel injector with integrated pressure intensifier

Title (de)

Kraftstoffinjektor mit integriertem Druckverstärker

Title (fr)

Injecteur de carburant doté d'un amplificateur de pression intégré

Publication

EP 1947324 A3 20090909 (DE)

Application

EP 07124131 A 20071228

Priority

DE 102007002761 A 20070118

Abstract (en)

[origin: EP1947324A2] The fuel injector has a housing, in which an injection valve unit, a needle, a pressure boosting device and control valves are arranged. The former control valve controls a control chamber of the needle and latter control valve controls a differential pressure chamber of the boosting device. A high pressure connection is provided for supplying the fuel. The latter control valve is assigned with a low pressure chamber (61), which is hydraulically connected with a return port over an outlet bore, which has a hydraulic throttle (74,76) for discharging the control quantity of the boosting device.

IPC 8 full level

F02M 57/02 (2006.01); **F02M 55/00** (2006.01); **F02M 55/04** (2006.01); **F02M 59/34** (2006.01); **F02M 59/36** (2006.01)

CPC (source: EP)

F02M 55/002 (2013.01); **F02M 55/04** (2013.01); **F02M 57/025** (2013.01); **F02M 59/34** (2013.01); **F02M 59/366** (2013.01); **F02M 2200/04** (2013.01); **F02M 2200/28** (2013.01)

Citation (search report)

- [DXY] DE 10335340 A1 20050224 - BOSCH GMBH ROBERT [DE]
- [Y] WO 2004001265 A1 20031231 - INT ENGINE INTELLECTUAL PROP [US]
- [X] DE 10126686 A1 20021219 - BOSCH GMBH ROBERT [DE]
- [A] DE 10248625 A1 20040429 - BOSCH GMBH ROBERT [DE]
- [A] WO 03031801 A1 20030417 - BOSCH GMBH ROBERT [DE], et al

Cited by

US11713740B1; CN106194536A; US9228550B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1947324 A2 20080723; **EP 1947324 A3 20090909**; DE 102007002761 A1 20080724

DOCDB simple family (application)

EP 07124131 A 20071228; DE 102007002761 A 20070118