

Title (en)
FUEL INJECTION DEVICE

Title (de)
KRAFTSTOFFEINSPRITZEINRICHTUNG

Title (fr)
DISPOSITIF D'INJECTION DE CARBURANT

Publication
EP 1809895 A1 20070725 (DE)

Application
EP 05803292 A 20051019

Priority
• EP 2005055350 W 20051019
• DE 102004053422 A 20041105

Abstract (en)
[origin: US2008121735A1] An apparatus for injecting fuel into an internal combustion engine having a fuel injector acted on with highly pressurized fuel actuated by means of a metering valve device that is able to control the pressure in a pressure booster control chamber so that in a pressure booster pressure chamber delimited by a pressure booster piston which can be filled via a check valve with high-pressure fuel and communicates with an injection valve member pressure chamber, the pressure booster piston increases the pressure, causing an injection valve member for injecting fuel to open. To assure a correct injection quantity even if an abrupt pressure drop occurs in the high-pressure fuel source, the pressure booster piston is situated and designed so that if a pressure drop occurs in the high-pressure fuel source, then starting from its neutral position, the pressure booster piston has the capacity to execute a pressure compensation movement by means of which the pressure in the pressure booster pressure chamber is adapted to the pressure of the high-pressure fuel source.

IPC 8 full level
F02M 57/02 (2006.01); **F02M 59/36** (2006.01)

CPC (source: EP US)
F02M 57/025 (2013.01 - EP US); **F02M 57/026** (2013.01 - EP US); **F02M 59/366** (2013.01 - EP US); **F02M 2200/306** (2013.01 - EP US); **F02M 2200/50** (2013.01 - EP US)

Citation (search report)
See references of WO 2006048375A1

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US 2008121735 A1 20080529; **US 7926736 B2 20110419**; AT E528500 T1 20111015; DE 102004053422 A1 20060511; EP 1809895 A1 20070725; EP 1809895 B1 20111012; JP 2008519202 A 20080605; WO 2006048375 A1 20060511

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