

Title (en)
FUEL INJECTOR COMPRISING A DIRECT MULTI-STAGE INJECTION VALVE MEMBER CONTROL SYSTEM

Title (de)
KRAFTSTOFFINJEKTOR MIT DIREKTER MEHRSTUFIGER EINSPRITZVENTILGLIEDANSTEUERUNG

Title (fr)
INJECTEUR DE CARBURANT A COMMANDE POLYETAGEE DIRECTE DE L'ELEMENT DE SOUPAPE D'INJECTION

Publication
EP 1771651 A1 20070411 (DE)

Application
EP 05749972 A 20050513

Priority
• EP 2005052201 W 20050513
• DE 102004035280 A 20040721

Abstract (en)
[origin: WO2006008200A1] The injection relates to a fuel injector comprising an injection valve member (6) for injecting fuel into the combustion chamber of a self-igniting internal combustion engine. Said injection valve member (6) can be directly controlled by means of an actuator (39). Said actuator directly actuates a pressure exchanger (12) by which means the pressure in a control region (25) acting on the injection valve member (6) can be influenced. The pressure exchanger (12) comprises a first piston (13) and a second piston (14) that are coupled by means of a driving element (20) that can be displaced inside a recess (19) between a first abutment side (21) and a second abutment side (22).

IPC 8 full level
F02M 51/06 (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP US)
F02M 51/0603 (2013.01 - EP US); **F02M 61/167** (2013.01 - EP US); **F02M 2200/703** (2013.01 - EP US); **F02M 2200/708** (2013.01 - EP US)

Citation (search report)
See references of WO 2006008200A1

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2006008200 A1 20060126; AT E445096 T1 20091015; DE 102004035280 A1 20060316; DE 502005008285 D1 20091119; EP 1771651 A1 20070411; EP 1771651 B1 20091007; JP 2008506888 A 20080306; US 2008093483 A1 20080424

DOCDB simple family (application)
EP 2005052201 W 20050513; AT 05749972 T 20050513; DE 102004035280 A 20040721; DE 502005008285 T 20050513; EP 05749972 A 20050513; JP 2007521926 A 20050513; US 63297305 A 20050513