

Title (en)
INJECTOR WITH AN AXIAL PRESSURE-COMPENSATING CONTROL VALVE

Title (de)
INJEKTOR MIT AXIAL-DRUCKAUSGEGLICHTENEM STEUERVENTIL

Title (fr)
INJECTEUR AVEC UNE SOUPAPE DE COMMANDE À COMPENSATION DE PRESSION AXIALE

Publication
EP 2102486 A1 20090923 (DE)

Application
EP 07802985 A 20070829

Priority
• EP 2007058968 W 20070829
• DE 102006050163 A 20061025

Abstract (en)
[origin: US2010071665A1] The invention relates to an injector for injecting fuel into combustion chambers. According to the invention, a valve piston of a control valve is provided with low pressure on both faces thereof. The valve piston is arranged in a valve chamber hydraulically connected to a control chamber and is guided inside a sleeve received in the valve chamber. The valve chamber contains a spring supported on one end against the sleeve and on the other end on the valve piston such that the spring presses the valve piston onto a valve seat and the sleeve onto an opposing bottom surface. The valve piston diameter inside the sleeve corresponds to the effective valve piston diameter at the valve seat.

IPC 8 full level
F02M 47/02 (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)
F02M 47/027 (2013.01 - EP US); **F02M 55/002** (2013.01 - EP US); **F02M 63/0015** (2013.01 - EP US); **F02M 63/0031** (2013.01 - EP US); **F02M 63/0026** (2013.01 - EP US); **F02M 63/004** (2013.01 - EP US); **F02M 63/0043** (2013.01 - EP US)

Citation (search report)
See references of WO 2008049669A1

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

DOCDB simple family (publication)
US 2010071665 A1 20100325; **US 8113176 B2 20120214**; AT E487874 T1 20101115; BR PI0717354 A2 20140121; BR PI0717354 B1 20190409; CN 101529081 A 20090909; CN 101529081 B 20110907; DE 102006050163 A1 20080430; DE 502007005634 D1 20101223; EP 2102486 A1 20090923; EP 2102486 B1 20101110; JP 2010507746 A 20100311; WO 2008049669 A1 20080502

DOCDB simple family (application)
US 44732207 A 20070829; AT 07802985 T 20070829; BR PI0717354 A 20070829; CN 200780040032 A 20070829; DE 102006050163 A 20061025; DE 502007005634 T 20070829; EP 07802985 A 20070829; EP 2007058968 W 20070829; JP 2009533762 A 20070829