

Title (en)
Fuel injector

Title (de)
Brennstoffeinspritzventil

Title (fr)
Injecteur de carburant

Publication
EP 1382838 B1 20170816 (DE)

Application
EP 03012488 A 20030602

Priority
DE 10232193 A 20020716

Abstract (en)
[origin: EP1382838A2] The valve has an actuator with a piston, a lifting piston interacting with the actuator piston via a pressure medium, a valve needle interacting with the lifting piston with a valve closure body, a valve seat body and a seal seat. The actuator piston has at least one step bounding on a damping chamber spatially separate from a working chamber and shaped or arranged so that the pressure medium can flow to or from it via a choke point. The valve has a piezoelectric, electrostrictive or magnetostrictive actuator (4), an actuator piston (9), a lifting piston (15) interacting with the actuator piston via a pressure medium and working chamber (26), a valve needle (20) interacting with the lifting piston with a valve closure body (22), a valve seat body (21) and a seal seat. The actuator piston has at least one stage bounding on a damping chamber (27) spatially separate from the working chamber and shaped or arranged so that the pressure medium can flow to or from it via a choke point (30).

IPC 8 full level
F02M 47/04 (2006.01); **F02M 51/06** (2006.01); **F02M 55/04** (2006.01); **F02M 61/06** (2006.01); **F02M 61/08** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)
F02M 51/0603 (2013.01); **F02M 61/08** (2013.01); **F02M 61/167** (2013.01)

Cited by
WO2006003048A1; FR2889257A1; US7934669B2; US7784708B2; WO2006092344A1; WO2007015022A1; WO2005068820A1; WO2005111407A1; US7418949B2; WO2007124971A1; WO2005068821A1

Designated contracting state (EPC)
DE FR GB IT

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DOCDB simple family (application)
EP 03012488 A 20030602; DE 10232193 A 20020716; JP 2003196577 A 20030714