

Title (en)
Fuel injector

Title (de)
Brennstoffeinspritzventil

Title (fr)
Injecteur de carburant

Publication
EP 1452729 B1 20061213 (DE)

Application
EP 03025330 A 20031104

Priority
DE 10308915 A 20030228

Abstract (en)
[origin: EP1452729A1] The device (1) has a piezoelectric, electrostrictive or magnetostrictive actuator (2) and a valve needle (12) that interacts with the actuator and a spring element (3) and has a valve closure body (13) that interacts with a valve seat surface (14). The actuator is at least partly radially enclosed over at least part of its axial length by at least one spring element whose force action moves the valve needle against the actuator's lift direction.

IPC 8 full level
F02M 61/06 (2006.01); **F02M 51/06** (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 61/166** (2013.01); **F02M 63/0057** (2013.01)

Cited by
EP2090771A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1452729 A1 20040901; EP 1452729 B1 20061213; AT E348261 T1 20070115; DE 10308915 A1 20040909; DE 50305952 D1 20070125

DOCDB simple family (application)
EP 03025330 A 20031104; AT 03025330 T 20031104; DE 10308915 A 20030228; DE 50305952 T 20031104