

Title (en)
FUEL INJECTION DEVICE COMPRISING A PRESSURE AMPLIFIER

Title (de)
KRAFTSTOFFEINSPRITZEINRICHTUNG MIT DRUCKVERSTÄRKER

Title (fr)
SYSTEME D'INJECTION DE CARBURANT A MULTIPLICATEUR DE PRESSION

Publication
EP 1397591 A1 20040317 (DE)

Application
EP 02745063 A 20020518

Priority

- DE 0201801 W 20020518
- DE 10126685 A 20010601

Abstract (en)
[origin: DE10126685A1] The fuel injector, for an internal combustion motor, has a pressure amplifier with a sliding piston (24) to compress the fuel from a low pressure zone into a high pressure zone to be passed to the injector. The piston stroke is controlled through the pressure difference zone in the amplifier. The structure gives a stepless increase of the inflow cross section to the pressure amplifying zone at the low pressure side or the outflow cross section from the pressure difference zone. A slit opening (26) is between the amplifier zone and the feed, to be opened and closed by the piston. A control edge (24') at the piston to set the piston up to the opening release.

IPC 1-7
F02M 47/02; **F02M 45/12**; **F02M 57/02**

IPC 8 full level
F02M 47/00 (2006.01); **F02M 45/12** (2006.01); **F02M 47/02** (2006.01); **F02M 57/02** (2006.01)

CPC (source: EP US)
F02M 45/12 (2013.01 - EP US); **F02M 47/027** (2013.01 - EP US); **F02M 57/025** (2013.01 - EP US)

Citation (search report)
See references of WO 02099268A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
DE 10126685 A1 20021219; DE 50210031 D1 20070606; EP 1397591 A1 20040317; EP 1397591 B1 20070425; JP 2004521241 A 20040715; US 2004020464 A1 20040205; US 6895935 B2 20050524; WO 02099268 A1 20021212

DOCDB simple family (application)
DE 10126685 A 20010601; DE 0201801 W 20020518; DE 50210031 T 20020518; EP 02745063 A 20020518; JP 2003502360 A 20020518; US 34321703 A 20030620