

Title (en)

FUEL INJECTOR AND METHOD OF ELECTRONICALLY OPERATING A FUEL INJECTOR

Publication

**EP 0014142 B2 19890621 (EN)**

Application

**EP 80400086 A 19800121**

Priority

- US 694879 A 19790125
- US 694979 A 19790125

Abstract (en)

[origin: EP0014142A1] A fuel injector (10) is provided for each cylinder of an internal combustion engine, the injector including an electronically operated control valve (146) disposed between supply passage (42) and a timing chamber (98) to control the admission of fuel into and out of the timing chamber. A primary pumping plunger (62) and a secondary plunger (90) are axially spaced within the central bore of the injection body, and a normally closed injection nozzle (14) is situated at one end of the injector body. A mechanical linkage (30) associated with the cam-shaft of the engine drives the primary pumping plunger (62) against the bias of a main spring (18). The timing chamber (98) is defined between the plungers (62, 90) and a metering chamber (128) is defined between the secondary plunger (90) and the nozzle (14). An electronic control unit responds to engine operating conditions, and delivers a timing and metering signal to the control valve (146) to close the valve and seal the timing chamber for a controlled period of time.

IPC 1-7

**F02M 59/36**; **F02M 59/20**

IPC 8 full level

**F02M 51/00** (2006.01); **F02M 57/02** (2006.01); **F02M 59/30** (2006.01); **F02M 59/32** (2006.01); **F02M 59/36** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP)

**F02M 57/024** (2013.01); **F02M 59/30** (2013.01); **F02M 59/32** (2013.01); **F02M 59/366** (2013.01); **F02B 3/06** (2013.01)

Cited by

FR2500566A1; EP0091862A1; EP0055564A1; EP0629776A1; EP0260720A3; EP0067369A3; GB2252135A; GB2252135B; EP0070222A1; EP0095026A1; EP0068924A3; CN103850846A

Designated contracting state (EPC)

AT DE FR GB IT SE

DOCDB simple family (publication)

**EP 0014142 A1 19800806**; **EP 0014142 B1 19830921**; **EP 0014142 B2 19890621**; AU 535759 B2 19840405; AU 5401479 A 19800731; BR 8000300 A 19800930; DE 3064859 D1 19831027; ES 487024 A1 19800616; SU 1135433 A3 19850115; UA 5760 A1 19941229

DOCDB simple family (application)

**EP 80400086 A 19800121**; AU 5401479 A 19791219; BR 8000300 A 19800117; DE 3064859 T 19800121; ES 487024 A 19791218; SU 2868607 A 19800117; UA 2868607 A 19800117