Title (en)

APPARATUS FOR METERING AN INJECTED FUEL QUANTITY IN A FUEL-INJECTION ENGINE

Publication

EP 0037296 B1 19861112 (FR)

Application

EP 81400339 A 19810305

Priority

- FR 8007158 A 19800331
- FR 8012401 A 19800604

Abstract (en)

[origin: EP0037296A2] 1. A device for injecting fuel into a heat engine, comprising a distributing injection pump (1-5; 40-43; 101, 106) connected to a low-pressure fuel source and including, on one hand, a part constituting a pump proper comprising a discharge chamber (14; 47; 112) and a device (18-21; 62-64; 134) for regulating the quantity of fuel to be injected, and, on the other hand, a part constituting a distributor toward a plurality of injectors, and a device for measuring the quantity of fuel injected, of the type comprising a shuttle member (25; 52; 118) movable in a bore (24; 51; 117) provided in a fixed part of the injection pump and a sensor (37; 65; 121) responsive to the displacements of this shuttle member (25; 52; 118), characterised in that the bore (24; 51; 117) of the measuring device comprises a first end (24a; 51a; 116) hydraulically connected to the discharge chamber (14; 47; 112) of the part constituting a pump, at least during the discharge stage of this part constituting a pump, and an opposite end (24b; 51b; 124) solely and successively connected through the part constituting a distributor, on one hand, to the low-pressure fuel source and, on the other hand, to the injectors, the shuttle member being biased by a spring (26; 53; 123) toward said first end of the bore to its initial position.

IPC 1-7

F02M 59/32; F02M 41/12; F02M 41/06; F02M 41/14

IPC 8 full level

F02M 41/06 (2006.01); F02M 41/12 (2006.01); F02M 59/32 (2006.01)

CPC (source: EP)

F02M 41/063 (2013.01); F02M 41/123 (2013.01); F02M 59/32 (2013.01); F02M 2200/24 (2013.01)

Cited by

DE19516686A1; GB2178800A; FR2585775A1; US4690108A; GB2178800B; WO2006042789A1; EP0094640B1

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

EP 0037296 A2 19811007; EP 0037296 A3 19811111; EP 0037296 B1 19861112; DE 3175608 D1 19870102

DOCDB simple family (application)

EP 81400339 A 19810305; DE 3175608 T 19810305