

Title (en)
Fuel injection system for internal combustion engine

Title (de)
Kraftstoffeinspritzeinrichtung für eine Brennkraftmaschine

Title (fr)
Dispositif d'injection de carburant pour un moteur à combustion interne

Publication
EP 1357285 A3 20040922 (DE)

Application
EP 03004641 A 20030303

Priority
DE 10218021 A 20020423

Abstract (en)
[origin: EP1357285A2] The device has a high pressure pump, a storage device connected to injectors, a delivery pump and a clock valve fuel dosing device opened and closed under pulse width control. The fuel quantity fed to the high pressure pump suction side is proportional to the valve's opening duration and the pulse width modulation frequency is adjusted preferably in synchronism with the high pressure pump revolution rate or a multiple of the revolution rate. The device has a high pressure pump (14) feeding fuel under high pressure to a storage device (16) connected to injectors (20), a delivery pump (12) feeding fuel to the high pressure pump from a tank (10), a fuel dosing device controlled by a controller to set the fuel feed rate to the suction side of the high pressure pump. The dosing device is a clock valve opened and closed under pulse width control. The fuel quantity fed to the suction side of the high pressure pump is proportional to the valve's opening duration and the pulse width modulation frequency is adjusted preferably in synchronism with the high pressure pump revolution rate or a multiple of the revolution rate.

IPC 1-7
F02M 63/02; F02M 59/36; F02M 59/06; F02D 41/38

IPC 8 full level
F02M 37/00 (2006.01); **F02D 41/38** (2006.01); **F02M 47/00** (2006.01); **F02M 51/02** (2006.01); **F02M 59/06** (2006.01); **F02M 59/36** (2006.01);
F02M 63/02 (2006.01); **F02M 69/00** (2006.01)

CPC (source: EP US)
F02D 41/3845 (2013.01 - EP US); **F02M 59/366** (2013.01 - EP US); **F02M 59/466** (2013.01 - EP US); **F02D 2041/2027** (2013.01 - EP US);
F02M 59/06 (2013.01 - EP US); **F02M 59/08** (2013.01 - EP US); **F02M 59/102** (2013.01 - EP US); **F02M 63/0225** (2013.01 - EP US)

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WO2015007446A1; US7699040B2; US9739209B2

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 1357285 A2 20031029; EP 1357285 A3 20040922; DE 10218021 A1 20031106; JP 2003314394 A 20031106; US 2004016830 A1 20040129;
US 6976473 B2 20051220

DOCDB simple family (application)
EP 03004641 A 20030303; DE 10218021 A 20020423; JP 2003117262 A 20030422; US 42076603 A 20030423