

Title (en)

STROKE-CONTROLLED COMMON RAIL INJECTOR COMPRISING AN ACTUATOR FOR VIBRATION EXCITATION

Title (de)

HUBGESTEUERTER COMMON-RAIL-INJEKTOR MIT STELLER FÜR SCHWINGUNGSANREGUNG

Title (fr)

INJECTEUR COMMON-RAIL A COURSE COMMANDEE, PRESENTANT UN REGLEUR POUR STIMULATION DE PULSATIONS

Publication

EP 1611344 B1 20061213 (DE)

Application

EP 03753328 A 20030929

Priority

- DE 0303235 W 20030929
- DE 10313419 A 20030325

Abstract (en)

[origin: WO2004085834A1] The invention relates to a fuel injection arrangement for internal combustion engines, said arrangement comprising an accumulator for storing fuel under pressure, and at least one stroke-controlled injector which is connected to the accumulator by means of a high-pressure line for the fuel, the accumulator and the high-pressure line being part of a high-pressure system. The inventive arrangement is characterised in that a device is provided for removing fuel from the high-pressure system and for deriving fuel in a low-pressure region when the injection valve is closed, so that when fuel is removed, a vibration of the fuel is generated in the high-pressure line (14) associated with the injector (1). This enables the injection to begin only when vibration generated in the hydraulic system, between the accumulator and the injector, creates pressure on the injector which is higher than the pressure dissipated when the valve is opened.

IPC 8 full level

F02M 63/06 (2006.01); **F02M 45/12** (2006.01); **F02M 47/02** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP)

F02M 45/12 (2013.01); **F02M 47/027** (2013.01); **F02M 63/0225** (2013.01); **F02M 63/06** (2013.01)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 2004085834 A1 20041007; DE 10313419 A1 20041104; DE 50305998 D1 20070125; EP 1611344 A1 20060104; EP 1611344 B1 20061213

DOCDB simple family (application)

DE 0303235 W 20030929; DE 10313419 A 20030325; DE 50305998 T 20030929; EP 03753328 A 20030929