

Title (en)

Method to inject fuel intermittently in the combustion chamber of a internal combustion engine and device for carrying out this method.

Title (de)

Verfahren zum intermittierenden Einspritzen von Brennstoff in den Brennraum einer Brennkraftmaschine, sowie Vorrichtung zur Durchführung dieses Verfahrens.

Title (fr)

Procédé d'injection intermittente de carburant dans la chambre de combustion d'un moteur à combustion interne et dispositit pour la mise en oeuvre de ce procédé.

Publication

EP 0432403 B1 19940112 (DE)

Application

EP 90119504 A 19901011

Priority

DE 3937917 A 19891115

Abstract (en)

[origin: EP0432403A1] Efforts to improve the exhaust gas values and the noise behaviour of diesel engines are aimed at controlling the heating behaviour. According to the invention this is achieved in that the nozzle needle (4) of the injection nozzle itself functions as control element for the feeding of fuel to the pressure chamber of the nozzle body, so that the nozzle needle (4) is energised for high frequency opening and closing at short intervals. Together with the high fuel pressure this results in a good droplet spectrum which leads to a homogenous fuel-air mixture. The breakdown of the ignition into small pulses by relatively simple design means leads to an extension of the heating curve which has positive effects on the NOx content. <IMAGE>

IPC 1-7

F02M 45/10

IPC 8 full level

F02M 45/10 (2006.01); **F02M 61/10** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP US)

F02M 45/10 (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US)

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

DE 3937917 A1 19910516; DE 59004225 D1 19940224; EP 0432403 A1 19910619; EP 0432403 B1 19940112; JP H03175147 A 19910730; US 5167370 A 19921201

DOCDB simple family (application)

DE 3937917 A 19891115; DE 59004225 T 19901011; EP 90119504 A 19901011; JP 30732090 A 19901115; US 61327090 A 19901114