

Title (en)

FUEL INJECTION SYSTEM FOR DIESEL ENGINES, ESPECIALLY FOR AUTOMOTIVE DIESEL ENGINES

Publication

**EP 0012309 B1 19840509 (DE)**

Application

**EP 79104834 A 19791203**

Priority

DE 2854422 A 19781216

Abstract (en)

[origin: US4384560A] A fuel injection system is proposed for Diesel type internal combustion engines, by means of which the ignition conditions of a Diesel engine are kept optimal even during operation at high altitudes despite a reduced air charge. The system includes a fuel injection pump equipped with an injection timing adjustment apparatus which functions in accordance with rpm and a control apparatus functions in accordance with the air quantity supplied to the engine. By means of the control apparatus, a correction controlled in accordance with air pressure and therefore dependent on air quantity is superimposed on the change in the onset of the fuel supply controlled by the injection adjuster at least in accordance with rpm. When a hydraulic injection adjuster is used, the supply pressure of a control pump is increased by a correcting final control element of the control apparatus when the air quantity is decreasing in the direction toward an early adjustment of the onset of supply.

IPC 1-7

**F02D 1/18; F02M 41/12**

IPC 8 full level

**F02D 1/18** (2006.01); **F02M 41/12** (2006.01); **F02M 59/44** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP US)

**F02D 1/183** (2013.01 - EP US); **F02M 41/128** (2013.01 - EP US); **F02M 59/447** (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US)

Citation (examination)

- FR 1251243 A 19610120 - CIE CROUZET
- BUSSIEN "Automobiltechnisches Handbuch", Seite 61

Cited by

EP0080113A1; FR2516981A1; DE4128754A1; DE3430141A1; EP0436054A1; EP0076458A1; WO9012957A1

Designated contracting state (EPC)

AT DE FR GB IT

DOCDB simple family (publication)

**EP 0012309 A2 19800625; EP 0012309 A3 19800709; EP 0012309 B1 19840509;** AT E7417 T1 19840515; BR 7908187 A 19800722; DE 2854422 A1 19800703; DE 2966972 D1 19840614; JP S5584824 A 19800626; JP S63611 B2 19880107; US 4384560 A 19830524

DOCDB simple family (application)

**EP 79104834 A 19791203;** AT 79104834 T 19791203; BR 7908187 A 19791214; DE 2854422 A 19781216; DE 2966972 T 19791203; JP 16395779 A 19791217; US 10421279 A 19791217