

Title (en)

INJECTION SYSTEM FOR INJECTING TWO FUELS THROUGH ONE INJECTION NOZZLE

Publication

EP 0064146 B1 19850619 (DE)

Application

EP 82102059 A 19820313

Priority

DE 3117796 A 19810506

Abstract (en)

[origin: US4465237A] An injection nozzle for injecting two different fuels sequentially into the combustion chamber of an internal combustion engine, for instance ignition fuel and main fuel, is proposed. A relief valve is arranged in the main fuel line, and this relief valve creates a relief space between two injection operations. This relief volume is then filled by the ignition fuel. The relief valve essentially includes a spring-loaded piston which is installed in the main fuel line.

IPC 1-7

F02M 43/00; **F02M 43/04**

IPC 8 full level

F02M 43/00 (2006.01); **F02M 43/04** (2006.01)

CPC (source: EP US)

F02M 43/00 (2013.01 - EP US); **F02M 43/04** (2013.01 - EP US)

Citation (examination)

- DE 2547783 A1 19760624 - FRIEDMANN & MAIER AG
- CH 305822 A 19550315 - NAT RES DEV [GB]

Cited by

US5669334A; EP0282819A3; EP0104368A1; EP3163067A1; CN106640464A; US10851753B2; EP0106183B1

Designated contracting state (EPC)

AT CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0064146 A1 19821110; **EP 0064146 B1 19850619**; AT E13931 T1 19850715; DE 3117796 A1 19821125; DE 3264208 D1 19850725; US 4465237 A 19840814

DOCDB simple family (application)

EP 82102059 A 19820313; AT 82102059 T 19820313; DE 3117796 A 19810506; DE 3264208 T 19820313; US 37491182 A 19820504