

Title (en)

Accumulator fuel injection apparatus for internal combustion engine

Title (de)

Speicherkraftstoffeinspritzvorrichtung für Verbrennungsmotor

Title (fr)

Dispositif d'injection de combustible à accumulation pour moteur à combustion interne

Publication

**EP 0844385 A1 19980527 (EN)**

Application

**EP 97120502 A 19971121**

Priority

- JP 31047096 A 19961121
- JP 31332896 A 19961125

Abstract (en)

An accumulator fuel injection apparatus for an internal combustion engine is provided which includes a solenoid-operated fuel injector (1). The fuel injector (1) includes a solenoid valve (20) and a needle valve (220). The solenoid valve (20) establishes and blocks fluid communication between a pressure control chamber (30) supplied with fuel pressure from a fuel inlet (70) and a drain passage (69) formed in a valve body (91) to change fuel pressure within the pressure control chamber (30), thereby bringing the needle valve (220) into engagement with and disengagement from a spray hole (101a). The fuel injector (1) also has a first orifice disc (210) and a second orifice disc (211) installed within the valve body (91). The first orifice disc (210) has formed therein a first orifice (66) which provides a first flow resistance to fuel flowing from the fuel inlet (70) into the pressure control chamber (30). Similarly, the second orifice disc (211) has formed therein a second orifice (67) which provides a second flow resistance smaller than the first flow resistance to the fuel flowing out of the pressure control chamber (30) into the drain passage (69). The second orifice (211) disc is disposed on the first orifice disc (210) so that thicknesswise directions thereof coincide with each other. <IMAGE>

IPC 1-7

**F02M 47/02**

IPC 8 full level

**F02D 41/38** (2006.01); **F02M 47/02** (2006.01); **F02M 55/00** (2006.01); **F02M 59/46** (2006.01)

CPC (source: EP)

**F02D 41/3827** (2013.01); **F02M 47/027** (2013.01); **F02M 55/002** (2013.01); **F02M 63/0017** (2013.01); **F02M 63/0036** (2013.01); **F02M 63/0071** (2013.01); **F02M 2200/16** (2013.01); **F02M 2200/28** (2013.01)

Citation (applicant)

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- [XP] PATENT ABSTRACTS OF JAPAN vol. 097, no. 010 31 October 1997 (1997-10-31)

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Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0844385 A1 19980527**; **EP 0844385 B1 20030305**; DE 69719461 D1 20030410; DE 69719461 T2 20040115

DOCDB simple family (application)

**EP 97120502 A 19971121**; DE 69719461 T 19971121