

Title (en)

FUEL INJECTION DEVICE FOR INTERNAL COMBUSTION ENGINES

Title (de)

KRAFTSTOFFEINSPRITZVORRICHTUNG FÜR BRENNKRAFTMASCHINEN

Title (fr)

DISPOSITIF D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

Publication

EP 0960274 A1 19991201 (DE)

Application

EP 98928124 A 19980403

Priority

- DE 9800945 W 19980403
- DE 19742073 A 19970924

Abstract (en)

[origin: DE19742073A1] The system has a control valve element (23) with a high pressure operating chamber with an electrically controlled series control valve (55) for reducing the pressure and actuating the control valve element. The series control valve has a spring loaded valve element operated by a piezoelectric drive, two valve seats and an intermediate position for a main injection process

IPC 1-7

F02M 63/00; **F02M 45/04**

IPC 8 full level

F02M 51/00 (2006.01); **F02M 45/04** (2006.01); **F02M 45/08** (2006.01); **F02M 59/46** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01); **F02D 41/20** (2006.01)

CPC (source: EP KR US)

F02M 45/04 (2013.01 - EP US); **F02M 63/00** (2013.01 - KR); **F02M 63/0005** (2013.01 - EP US); **F02M 63/0007** (2013.01 - EP US); **F02M 63/0029** (2013.01 - EP US); **F02D 41/2096** (2013.01 - EP US); **F02M 2200/703** (2013.01 - EP US)

Citation (search report)

See references of WO 9915783A1

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