

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 0931215 A1 19990728 (DE)**

Application

**EP 98928123 A 19980403**

Priority

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- DE 19732802 A 19970730

Abstract (en)

[origin: DE19732802A1] The invention concerns a fuel injection device for internal combustion engines, wherein the displacement of a member closing the fuel injection valve is controlled by pressure prevailing in a control chamber (25). The pressure prevailing in said chamber is further controlled by a pilot valve (31) whereof the closure member can be actuated by a piezoelectric drive (65), the movement being transmitted via a hydraulic chamber. Said closure member comprises two sealing surfaces (37, 39) which co-operate with valve seats (36, 40), and when it passes from one valve seat to the other, a brief discharge occurs in the control chamber (25), to control a brief fuel injection. In order to obtain larger amounts of injected fuel, the pilot valve can be put in open or closed position.

IPC 1-7

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IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

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DOCDB simple family (publication)

**DE 19732802 A1 19990204**; CN 1095033 C 20021127; CN 1236417 A 19991124; DE 59807062 D1 20030306; EP 0931215 A1 19990728; EP 0931215 B1 20030129; JP 2001501272 A 20010130; KR 20000068640 A 20001125; RU 2193102 C2 20021120; US 6021760 A 20000208; WO 9906690 A1 19990211

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