

Title (en)
INJECTION VALVE

Title (de)
EINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION

Publication
EP 0783625 A1 19970716 (DE)

Application
EP 95931910 A 19950922

Priority
• DE 9501317 W 19950922
• DE 4434892 A 19940929

Abstract (en)
[origin: DE4434892A1] The invention concerns an injection valve comprising a high-pressure feed (32), a low-pressure return (35), a valve needle (16), an injection needle (5) and a spring arrangement which pretensions the injection needle (5) in the direction of its nozzle seat. The construction of the valve is such that the injection sequence is adaptable. To this end, the spring arrangement is formed by two pressure springs (25, 11) which are arranged in succession and can be controlled in succession via a drive arrangement (28). The invention can be used in internal combustion engines.

IPC 1-7
F02M 47/02; **F02M 45/08**

IPC 8 full level
F02M 45/08 (2006.01); **F02M 47/02** (2006.01); **F02M 59/46** (2006.01)

CPC (source: EP)
F02M 45/083 (2013.01); **F02M 47/027** (2013.01); **F02M 63/0015** (2013.01); **F02M 63/0045** (2013.01)

Citation (search report)
See references of WO 9610129A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 4434892 A1 19960411; EP 0783625 A1 19970716; WO 9610129 A1 19960404

DOCDB simple family (application)
DE 4434892 A 19940929; DE 9501317 W 19950922; EP 95931910 A 19950922