

Title (en)  
INJECTION VALVE WITH CONTROL VALVE

Title (de)  
EINSPRITZVENTIL MIT STEUERVENTIL

Title (fr)  
SOUPAPE D'INJECTION A VANNE DE CONTROLE

Publication  
**EP 0970305 A1 20000112 (DE)**

Application  
**EP 98966221 A 19981218**

Priority  
• DE 9803746 W 19981218  
• DE 19757656 A 19971223

Abstract (en)  
[origin: WO9934111A1] The invention relates to an injection valve with a control valve which has a control chamber (1) in which a closing member (10) is arranged which is pushed against a corresponding sealing seat (25) by the fuel pressure in the control chamber (1). The closing member (10) forms part of a rod (11) extending through an outlet hole (5) and connected to a spring seat (13). The spring seat (13) is pretensed by a pressure spring (14) against the housing (36) in such a way that the closing member (10) is pushed against a sealing seat (25) assigned to it. The closing member (10) can be lifted off the sealing seat (25) via an actuating piston (12) which contacts the spring seat (13).

IPC 1-7  
**F02M 47/02**

IPC 8 full level  
**F02M 47/02** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)  
**F02M 47/027** (2013.01 - EP US); **F02M 2200/21** (2013.01 - EP US)

Citation (search report)  
See references of WO 9934111A1

Cited by  
WO2006029917A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**WO 9934111 A1 19990708**; DE 59808465 D1 20030626; EP 0970305 A1 20000112; EP 0970305 B1 20030521; US 6168132 B1 20010102

DOCDB simple family (application)  
**DE 9803746 W 19981218**; DE 59808465 T 19981218; EP 98966221 A 19981218; US 37921999 A 19990823