

Title (en)  
ELECTROMAGNETIC PILOT VALVE

Publication  
**EP 0440758 B1 19921230 (DE)**

Application  
**EP 90910556 A 19900726**

Priority  
DE 3928613 A 19890830

Abstract (en)  
[origin: WO9103641A1] An electromagnetic pilot valve to control the flow of a fluid line, especially for fuel injection pumps, has a valve member (22) on a valve needle (21) which co-operates with a valve seat (23). The valve needle (21) is connected to an armature (29) of an electromagnet (25), where the armature (29) runs in air and is sealed against the fluid-conveying region of the valve in order to achieve high switching speeds. To damp as far as possible the recoil vibration occurring when the valve closes and which could cause it to open again, the connection between the armature (29) and the valve needle (21) takes the form of an elastic coupling (expanding rod 38) so arranged that, after the impact of the valve member (22) on the valve seat (23) on the closure of the valve, the armature (29) and the valve needle (21) vibrate in counter-phase.

IPC 1-7  
**F02M 51/04**; **F02M 59/46**; **F16F 7/00**; **F16K 31/02**

IPC 8 full level  
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CPC (source: EP KR US)  
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Cited by  
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Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**DE 3928613 A1 19910307**; DE 59000698 D1 19930211; EP 0440758 A1 19910814; EP 0440758 B1 19921230; JP 2825649 B2 19981118; JP H04501593 A 19920319; KR 0167111 B1 19981215; KR 920701658 A 19920812; US 5123626 A 19920623; WO 9103641 A1 19910321

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