

Title (en)  
Injector of fuel regulated electronically

Title (de)  
Elektronisch geregeltes Brennstoffeinspritzventil

Title (fr)  
Buse d'injection de carburant contrôlée électroniquement

Publication  
**EP 1593842 A3 20051116 (EN)**

Application  
**EP 05076154 A 20030814**

Priority  
EP 03380193 A 20030814

Abstract (en)  
[origin: EP1507083A1] The moving components of the injectors are controlled by a stepper motor (1) which in its turn responds to pulses coming from the Electronic Control Unit (ECU) (2). <??>To achieve more cycles for each revolution of the high-pressure supply pump, the pump has two pistons (21), each of which acts three times each time the pump's spindle (22) turns, the movements of each piston being phase-shifted by 120 DEG , and each by 60 DEG with respect to the movements of the others. <??>Any over-pressure in the common rail is detected by the sensors (33), one sensor being fitted in each branch of the rail, and the sensors transmit the value to the ECU (2), which governs the movement of the solenoid valve (27), the latter in turn governing the rotation of the high-pressure pump's pistons (21). <IMAGE> <IMAGE> <IMAGE>

IPC 1-7  
**F02M 63/00**; **F02M 61/04**; **F02M 61/06**; **F02M 51/06**; **F02M 41/16**

IPC 8 full level  
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CPC (source: EP)  
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Citation (search report)  
• [XA] US 2002158155 A1 20021031 - MERTZKY WOLFGANG [DE]  
• [XA] EP 0853195 A1 19980715 - ZEXEL CORP [JP]

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**EP 1507083 A1 20050216**; EP 1593842 A2 20051109; EP 1593842 A3 20051116

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