

Title (en)  
ELECTROMAGNETICALLY ACTUATED FUEL INJECTOR

Publication  
**EP 0188702 B1 19891025 (DE)**

Application  
**EP 85115127 A 19851128**

Priority  
DE 3502087 A 19850123

Abstract (en)  
[origin: EP0188702A1] 1. Electromagnetically operable fuel injection valve for injection systems of internal-combustion engines, with a valve housing (1), a plug (4), which is arranged in a valve bore and has a conical circumferential-surface section (15) as metering element, a soft-iron core (11), which is arranged within the valve housing (1) and bears a fixed magnet winding, and an armature, which is coaxial with the latter and opposite it, forming an air gap, and is firmly connected to a control element, controlling the through-flow, the plug (4) being held by an holding member (3), which is arranged in the valve bore, is independent of the closing element and is in contact via a spacer ring (6) with a stop (7) on the outlet side, characterized in that the holding member (3), which forms a unit with the plug (4), is arranged axially displaceably in the valve bore (2) and the plug (4), with the circumferential-surface section (15) widening conically in flow direction, determines with the outlet opening (14) the metering crosssection, in that the stop (7) is arranged detachably on the valve housing (1) and in that the axial position of the holding member (3) can be fixed by the thickness of the spacer ring (6), the spacer ring being interchangeable for other spacer rings of different thickness but the same diameter of the outlet opening (14).

IPC 1-7  
**F02M 51/08**; **F02M 61/18**

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 51/08** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)  
**F02M 51/0639** (2013.01); **F02M 51/08** (2019.01); **F02M 61/06** (2013.01); **F02M 61/18** (2013.01)

Citation (examination)  
• DE 894789 C 19531029 - DAIMLER BENZ AG  
• PATENT ABSTRACTS OF JAPAN vol. 007, no. 153 (M - 226) 5 July 1983 (1983-07-05)

Cited by  
EP0223018A3

Designated contracting state (EPC)  
AT DE FR GB IT NL SE

DOCDB simple family (publication)  
**EP 0188702 A1 19860730**; **EP 0188702 B1 19891025**; AT E47618 T1 19891115; DE 3502087 A1 19860724; DE 3573944 D1 19891130

DOCDB simple family (application)  
**EP 85115127 A 19851128**; AT 85115127 T 19851128; DE 3502087 A 19850123; DE 3573944 T 19851128