

Title (en)  
Flow straightener for fuel injector

Title (de)  
Flüssigkeitsgleichrichtvorrichtung für ein Brennstoffeinspritzventil

Title (fr)  
Dispositif de redressement d'écoulement pour un injecteur de carburant

Publication  
**EP 0750110 A1 19961227 (EN)**

Application  
**EP 96109658 A 19960617**

Priority  
US 49315195 A 19950621

Abstract (en)  
A fuel injection valve for fuel injection systems of internal combustion engines straightens fuel flow, thereby providing an improved flow pattern. The injection valve comprises an armature movable in a first direction and a second direction for causing a needle valve (38) to contact and separate from a seat assembly (30). The injection valve further comprises a fuel metering device (34) for affecting fuel flow. Finally, the injection valve comprises an insert element (42) for straightening fuel flow. The insert element (42) is located in a passageway between the seat assembly and the fuel metering device for decoupling the turbulence in the seat assembly area from the metering and targeting of the metering device. <IMAGE>

IPC 1-7  
**F02M 61/16**; **F02M 61/18**

IPC 8 full level  
**F02M 51/08** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)  
**F02M 51/08** (2019.01); **F02M 61/16** (2013.01); **F02M 61/1853** (2013.01)

Citation (search report)

- [XY] US 4421278 A 19831220 - KIENZLE WOLFGANG [DE], et al
- [A] GB 1153605 A 19690529 - CUPLER JOHN ADWIN II [US]
- [A] US 4981266 A 19910101 - AICHELE KARL [DE], et al
- [Y] PATENT ABSTRACTS OF JAPAN vol. 11, no. 188 (M - 599) 17 June 1987 (1987-06-17)
- [A] PATENT ABSTRACTS OF JAPAN vol. 10, no. 286 (M - 521) 27 September 1986 (1986-09-27)
- [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 264 (M - 423) 22 October 1985 (1985-10-22)

Cited by  
WO9804828A1; US6330981B1; WO0052328A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0750110 A1 19961227**; JP H0914080 A 19970114

DOCDB simple family (application)  
**EP 96109658 A 19960617**; JP 18128596 A 19960621