

Title (en)  
Valve to inject fuel

Title (de)  
Ventil zum Einspritzen von Brennstoff

Title (fr)  
Soupape pour injecter du carburant

Publication  
**EP 1655483 A1 20060510 (DE)**

Application  
**EP 05109378 A 20051010**

Priority  
DE 102004053350 A 20041104

Abstract (en)  
The valve has a valve body (4) with a recess in which a valve needle (6) is movable in an axial direction. The needle together with the body forms an injection nozzle in a downstream zone. The needle in a closed position prevents a fuel from passing through the nozzle. The nozzle has a deflecting unit at a downstream end so that the fuel is deflected from taking an upstream course from the unit.

IPC 8 full level  
**F02M 61/18** (2006.01)

CPC (source: EP US)  
**F02M 61/18** (2013.01 - EP US)

Citation (search report)

- [X] WO 03038271 A1 20030508 - BOSCH GMBH ROBERT [DE], et al
- [X] GB 191403694 A 19150701 - MASCHF AUGSBURG NUERNBERG AG [DE]
- [X] US 4417694 A 19831129 - CLAXTON WILLIAM B [US], et al
- [A] GB 2080416 A 19820203 - LUCAS INDUSTRIES LTD
- [A] GB 2255802 A 19921118 - LUCAS IND PLC [GB]

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
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DE 502005001297 D1 20071004; US 2006091240 A1 20060504; US 8459574 B2 20130611

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**EP 05109378 A 20051010**; DE 102004053350 A 20041104; DE 502005001297 T 20051010; US 26497505 A 20051102