

Title (en)

Fuel injection valve with an injector having two needles controlled by a servo valve unit

Title (de)

Kraftstoffinjektor mit einer von einer Servoventileinheit gesteuerten Registerdüse

Title (fr)

Soupape d'injection de carburant avec un injecteur à deux aiguilles contrôlé par une unité de soupape servo.

Publication

**EP 1632676 A1 20060308 (DE)**

Application

**EP 05103815 A 20050509**

Priority

DE 102004042558 A 20040902

Abstract (en)

The fuel injector has a staged nozzle in which are controlled two axially installed nozzle needles (20,22). The injector has an inner and an outer control chamber (12,13), with one of the nozzle needles allocated to each. The two control chambers are sealed in relation to one another by a matched upper needle guide (16) of the inner nozzle needle (20), and each control chamber is individually controllable without the influence of the other control chamber.

IPC 8 full level

**F02M 45/08** (2006.01); **F02M 47/02** (2006.01)

CPC (source: EP)

**F02M 45/086** (2013.01); **F02M 47/027** (2013.01)

Citation (search report)

- [X] DE 10305508 A1 20040819 - BOSCH GMBH ROBERT [DE]
- [EX] WO 2005057003 A1 20050623 - SIEMENS AG [DE], et al
- [PX] WO 2005040594 A1 20050506 - BOSCH GMBH ROBERT [DE], et al
- [PX] WO 2004083621 A1 20040930 - SIEMENS AG [DE], et al

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 1632676 A1 20060308**; DE 102004042558 A1 20060323; DE 102004042558 B4 20071213

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