

Title (en)

Fuel injection valve for internal combustion engines

Title (de)

Kraftstoffeinspritzventil für Brennkraftmaschinen

Title (fr)

Soupape d'injection de carburant pour un moteur à combustion interne

Publication

**EP 1643118 B1 20080416 (DE)**

Application

**EP 05107399 A 20050811**

Priority

DE 102004048134 A 20041002

Abstract (en)

[origin: EP1643118A1] Fuel injection valve comprises a first control chamber (34) and a second control chamber (35) hydraulically connected together via a throttle (40). Preferred Features: The first and second control chambers surround a valve plunger (30). A step (32) is formed on the valve plunger with one side delimiting the first control chamber and the other side delimiting the second control chamber. The throttle is formed in the step of the valve plunger.

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); **F02M 61/182** (2013.01); **F02M 2200/46** (2013.01)

Cited by

DE102007055165A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 1643118 A1 20060405**; **EP 1643118 B1 20080416**; DE 102004048134 A1 20060406; DE 502005003719 D1 20080529

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