

Title (en)

Fuel injection system for a combustion engine

Title (de)

Kraftstoffeinspritzeinrichtung für eine Brennkraftmaschine

Title (fr)

Système d'injection de carburant pour un moteur à combustion

Publication

EP 1310668 A3 20041215 (DE)

Application

EP 02022362 A 20021008

Priority

DE 10155406 A 20011110

Abstract (en)

[origin: EP1310668A2] The device has a control piston (50) in a control pressure chamber (52) connected to an injection valve element (28) dividing the control pressure chamber into two sub-volumes connected together via a choke point. With a second control valve (70) closed, if the control pressure chamber is separated from a relief chamber (24) a lower force acts on the control piston in an injection valve element (28) closing direction than if the valve is open.

IPC 1-7

F02M 57/02; **F02M 45/04**; **F02M 45/12**; **F02M 47/02**; **F02M 59/36**

IPC 8 full level

F02M 45/02 (2006.01); **F02M 45/04** (2006.01); **F02M 45/12** (2006.01); **F02M 47/02** (2006.01); **F02M 57/02** (2006.01); **F02M 59/36** (2006.01)

CPC (source: EP US)

F02M 45/02 (2013.01 - EP US); **F02M 45/04** (2013.01 - EP US); **F02M 45/12** (2013.01 - EP US); **F02M 47/027** (2013.01 - EP US); **F02M 57/02** (2013.01 - EP US); **F02M 59/366** (2013.01 - EP US); **F02M 61/205** (2013.01 - EP US)

Citation (search report)

- [A] EP 0905719 A2 19990331 - LUCAS IND PLC [GB], et al
- [A] EP 1081373 A2 20010307 - DELPHI TECH INC [US]
- [A] EP 1098087 A1 20010509 - DELPHI TECH INC [US]
- [DA] EP 0987431 A2 20000322 - LUCAS INDUSTRIES LTD [GB]
- [A] EP 0262539 A1 19880406 - GANSER HYDROMAG [CH]
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CN105247200A; US10100795B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

EP 1310668 A2 20030514; **EP 1310668 A3 20041215**; **EP 1310668 B1 20060920**; DE 10155406 A1 20030522; DE 50208195 D1 20061102; US 2003111051 A1 20030619; US 6779741 B2 20040824

DOCDB simple family (application)

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