

Title (en)

Fuel injection circuit for an internal combustion engine with direct injection

Title (de)

Kraftstoffeinspritzkreislauf für eine Direkteinspritzbrennkraftmaschine

Title (fr)

Circuit d'injection de carburant pour un moteur à combustion interne et à injection directe

Publication

**EP 0903491 A3 19991229 (FR)**

Application

**EP 98402189 A 19980904**

Priority

FR 9711653 A 19970918

Abstract (en)

[origin: EP0903491A2] The fuel injection circuit (10) blocks the output (26) from the high pressure pump (24) until the pressure at the high pressure pump outlet has reached a set threshold. The blocking valve (30) has the outlet blocked by a needle which is closed by a spring. The valve has three chambers which equalize the pressure on the needle valve when the delivery pressure is high enough. A relief valve (36) diverts fuel away from the injectors when the pressure is too high.

IPC 1-7

**F02M 59/42**; **F02D 7/00**; **F02M 63/02**

IPC 8 full level

**F02M 59/42** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP)

**F02M 59/42** (2013.01); **F02M 63/0225** (2013.01)

Citation (search report)

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- [X] EP 0531533 A1 19930317 - NIPPON DENSO CO [JP]
- [A] DE 3128215 A1 19820401 - NISSAN MOTOR [JP]
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Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 0903491 A2 19990324**; **EP 0903491 A3 19991229**; FR 2768465 A1 19990319; FR 2768465 B1 19991029

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