

Title (en)

Noise optimized apparatus for injecting fuel

Title (de)

Geräuschoptimierte Einrichtung zum Einspritzen von Kraftstoff

Title (fr)

Dispositif d'injection de combustible dont le bruit est optimisé

Publication

EP 1338790 B1 20041103 (DE)

Application

EP 03002362 A 20030204

Priority

DE 10207974 A 20020225

Abstract (en)

[origin: EP1338790A1] Pump/nozzle system has a high pressure chamber (25) which is impinged upon via a pump piston (3), and a storage piston (23) held within a storage chamber (24) and impinged upon via a pressure spring arranged in a spring-holding chamber (42). A non-return throttle element (35) arranged between the high pressure chamber and the storage chamber delays the pressure drop in the storage chamber. Preferred Features: The non-return throttle element is a non-return throttle valve or non-return valve.

IPC 1-7

F02M 57/02; **F02M 61/20**; **F02M 45/08**

IPC 8 full level

F02M 45/08 (2006.01); **F02M 55/04** (2006.01); **F02M 57/02** (2006.01); **F02M 59/46** (2006.01); **F02M 61/20** (2006.01); **F02M 53/00** (2006.01); **F02M 55/00** (2006.01); **F02M 59/36** (2006.01); **F02M 61/14** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)

F02M 45/08 (2013.01 - EP US); **F02M 55/04** (2013.01 - EP US); **F02M 59/466** (2013.01 - EP US); **F02M 61/205** (2013.01 - EP US); **F02M 53/00** (2013.01 - EP US); **F02M 55/007** (2013.01 - EP US); **F02M 57/023** (2013.01 - EP US); **F02M 59/366** (2013.01 - EP US); **F02M 61/14** (2013.01 - EP US); **F02M 2200/04** (2013.01 - EP US); **F02M 2200/304** (2013.01 - EP US)

Cited by

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Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 03002362 A 20030204; DE 10207974 A 20020225; DE 50300129 T 20030204; PL 35885003 A 20030224; US 37231603 A 20030225