

Title (en)
Injector for fuel injection unit

Title (de)
Injektor für Kraftstoffeinspritzeinheit

Title (fr)
Injecteur pour ensemble d'injection de combustible

Publication
EP 1609979 A3 20080827 (EN)

Application
EP 05012225 A 20050607

Priority
JP 2004182252 A 20040621

Abstract (en)
[origin: EP1609979A2] An injector body (B1) is provided with a longitudinal hole (31) eccentrically to the injector body (B1) to install an actuator (3) and a hydraulic power transmission unit (4). A high-pressure fuel passage (1) is disposed in a thick wall portion formed at a side of the longitudinal hole (31). A space in the longitudinal hole (31) functions as a low-pressure fuel chamber (22) and connected to an outer leakage passage. A groove (32) is formed on an inner side wall of the hole 31 to be connected to a low-pressure fuel passage (23) to provide a low-pressure fuel passage groove (26) to discharge leakage fuel from an injection nozzle portion (103) and a control valve portion (102). It is easy to machine the groove (32) integral with the longitudinal hole (31) and to secure strength of a periphery of the high-pressure fuel passage (1).

IPC 8 full level
F02M 47/02 (2006.01); **F02M 51/06** (2006.01); **F02M 57/02** (2006.01); **F02M 59/10** (2006.01); **F02M 59/46** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)
F02M 47/025 (2013.01); **F02M 61/168** (2013.01); **F02M 63/0045** (2013.01); **F02M 2200/703** (2013.01)

Citation (search report)
• [X] WO 0153692 A2 20010726 - BOSCH GMBH ROBERT [DE], et al
• [A] EP 1388666 A1 20040211 - TOYOTA MOTOR CO LTD [JP]
• [A] DE 10160191 A1 20030626 - BOSCH GMBH ROBERT [DE]
• [A] US 4957085 A 19900918 - SVERDLIN ANATOLY [US]
• [A] DE 1815260 A1 19700709 - BOSCH GMBH ROBERT
• [A] GB 2072306 A 19810930 - BOSCH GMBH ROBERT

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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR LV MK YU

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EP 1609979 A2 20051228; **EP 1609979 A3 20080827**; **EP 1609979 B1 20101103**; CN 100390401 C 20080528; CN 1712695 A 20051228; DE 602005024481 D1 20101216; JP 2006002722 A 20060105; JP 4114641 B2 20080709

DOCDB simple family (application)
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