

Title (en)  
Injector for fuel injection unit

Title (de)  
Injektor für Kraftstoffeinspritzeinheit

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

Publication  
**EP 1609979 A2 20051228 (EN)**

Application  
**EP 05012225 A 20050607**

Priority  
JP 2004182252 A 20040621

Abstract (en)  
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 1-7  
**F02M 47/02**; **F02M 57/02**; **F02M 59/10**; **F02M 59/46**

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 (applicant)  
• JP 2002257002 A 20020911 - DENSO CORP  
• US 6840466 B2 20050111 - IGASHIRA TOSHIHIKO [JP], et al  
• WO 0153692 A2 20010726 - BOSCH GMBH ROBERT [DE], et al

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US10890177B2

Designated contracting state (EPC)  
DE FR GB

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

DOCDB simple family (publication)  
**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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