

Title (en)
FUEL INJECTION PUMP FOR INTERNAL COMBUSTION ENGINE

Title (de)
KRAFTSTOFFEINSPRITZPUMPE FÜR VERBRENNUNGSMOTOR

Title (fr)
POMPE INJECTION DE CARBURANT POUR MOTEUR COMBUSTION INTERNE

Publication
EP 1722098 A4 20100120 (EN)

Application
EP 05719961 A 20050225

Priority
• JP 2005003664 W 20050225
• JP 2004061643 A 20040305

Abstract (en)
[origin: EP1722098A1] In a fuel injection pump (1) which is constituted so as to control incoming and outgoing of fuel to a suction-and-overflow hole (8) in which an early stage control groove (10) is formed with an upper-side control edge portion (11) and a lower-side control edge portion (12) of a pump plunger (4) reciprocating in the inside of a pump plunger bushing (3), a suction-and-overflow hole (8) includes a small-diameter hole (81) having an opening surface (14) to observe the inside of the pump plunger bushing (3) and a large-diameter hole (82) which is communicated with another end (81B) of the small-diameter hole (81), and a bottom portion (10A) of the early stage control groove (10) extends in an upwardly inclined manner in the direction away from the opening surface (14), and an inner surface of a communicating end portion of the large-diameter hole (82) with the small-diameter hole (81) is formed into a spherical surface portion (82C). The high-pressure fuel which is fed to the inside of the large-diameter hole (82) can ensure a large distance between the fed high-pressure fuel and a wall surface of the large-diameter hole (82) due to a spherical surface portion (82C) of the large-diameter hole (82) thus reducing a cavitation erosion effect.

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F02M 59/26 (2006.01)

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• [Y] GB 1208635 A 19701014 - BOSCH GMBH ROBERT [DE]
• See references of WO 2005085626A1

Cited by
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