

Title (en)
High pressure fuel pump

Title (de)
Hochdruck-Kraftstoffpumpe

Title (fr)
Pompe à combustible à haute pression

Publication
EP 1657438 A1 20060517 (EN)

Application
EP 05022826 A 20051019

Priority

- JP 2004331599 A 20041116
- JP 2005240970 A 20050823

Abstract (en)
An oil seal (70) is engaged with a small diameter portion (43) of a plunger (40). Thus, even when a diameter of a large diameter portion (42) of the plunger (40) and a diameter of the cylinder (36) are increased, a modification of a design of the oil seal (70), which is engaged with the small diameter portion (43), is not required.

IPC 8 full level
F04B 1/04 (2006.01); **F04B 53/04** (2006.01); **F04B 53/16** (2006.01)

CPC (source: EP US)
F04B 1/0408 (2013.01 - EP US); **F04B 1/0448** (2013.01 - EP US); **F04B 53/04** (2013.01 - EP US); **F04B 53/164** (2013.01 - EP US)

Citation (applicant)

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- US 2003103853 A1 20030605 - ASAYAMA KAZUHIRO [JP], et al
- JP H0868370 A 19960312 - NIPPON DENSO CO
- US 5567134 A 19961022 - INOUE HIROSHI [JP]
- JP H0116475 A

Citation (search report)

- [XA] EP 1275845 A2 20030115 - BOSCH GMBH ROBERT [DE]
- [XA] EP 1275848 A1 20030115 - BOSCH GMBH ROBERT [DE]
- [DA] US 5567134 A 19961022 - INOUE HIROSHI [JP]
- [XA] PATENT ABSTRACTS OF JAPAN vol. 009, no. 114 (M - 380) 18 May 1985 (1985-05-18)

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Designated contracting state (EPC)
DE FR GB

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US 2006104843 A1 20060518

DOCDB simple family (application)
EP 05022826 A 20051019; DE 602005009908 T 20051019; JP 2005240970 A 20050823; US 27426805 A 20051116