

Title (en)

High-pressure piston pump for feeding fuel to an internal combustion engine

Title (de)

Hochdruck-Kolbenpumpe für die Brennstoffeinspritzung einer Brennkraftmaschine

Title (fr)

Pompe à piston pour haute pression pour injecter du carburant dans un moteur à combustion interne

Publication

**EP 1878918 A1 20080116 (EN)**

Application

**EP 06425486 A 20060714**

Priority

EP 06425486 A 20060714

Abstract (en)

A high-pressure piston pump for feeding fuel to an internal combustion engine, in particular a diesel engine, is provided with a pump housing (2); at least a piston (6) reciprocated in a cylinder (3); a roller (12) for reciprocating the piston (6); and a fuel suction valve (7) to selectively let in low-pressure fuel from a fuel feeding duct (4) in the cylinder (3) and isolate the cylinder (3) from the fuel feeding duct (4) when the piston (6) is in the compression stage; the suction valve (7) having a valve plate (21) and a valve shutter (22), which cyclically impacts on the valve plate (21) and is made of a material selected in the group of the cemented carbides.

IPC 8 full level

**F04B 1/04** (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP)

**F04B 1/0452** (2013.01); **F04B 53/108** (2013.01); **F05C 2203/0813** (2013.01); **F05C 2203/0821** (2013.01)

Citation (search report)

- [Y] WO 2004040128 A1 20040513 - BOSCH GMBH ROBERT [DE], et al
- [Y] WO 9627687 A1 19960912 - KENNAMETAL INC [US]
- [Y] DE 10302043 A1 20040519 - BOSCH GMBH ROBERT [DE]
- [Y] US 6327946 B1 20011211 - FELTER PAUL ALLEN [US], et al
- [A] DE 9308058 U1 19930819 - HEWLETT PACKARD GMBH [DE]
- [A] WO 0125505 A1 20010412 - SANDVIK AB [SE]
- [A] WO 03098042 A1 20031127 - KENNAMETAL INC [US]
- [A] US 2005175490 A1 20050811 - SETO TAKESHI [JP], et al

Cited by

CN115199604A; CN110578684A

Designated contracting state (EPC)

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Designated extension state (EPC)

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