

Title (en)
LOW COST GEAR FUEL PUMP

Title (de)
KOSTENGÜNSTIGE ZAHNRAD-KRAFTSTOFFPUMPE

Title (fr)
POMPE A CARBURANT A ENGRENAGE DE FAIBLE COUT

Publication
EP 1718865 A4 20101020 (EN)

Application
EP 05722970 A 20050214

Priority
• US 2005004412 W 20050214
• US 54458204 P 20040213

Abstract (en)
[origin: WO2005079302A2] The present invention is directed to a gear pump having a housing with an interior pumping chamber and an inlet to and outlet from the chamber, the outlet being spaced from the inlet. A pair of rotating gears is located in the chamber, the gears including teeth which mesh during gear rotation. The gears are preferably powder metal construction and fixedly secured on a shaft having an axis of rotation. A pair of one-piece bearings is located in the chamber and journal one of first and second end portions of each shaft. The one-piece bearings provide precise alignment of the first and second end portions of the shafts and maintain the shafts in parallel relation.

IPC 8 full level
F03C 2/00 (2006.01); **F04C 2/08** (2006.01); **F04C 2/18** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP US)
F04C 2/086 (2013.01 - EP US); **F04C 2/18** (2013.01 - EP US); **F04C 15/0073** (2013.01 - EP US); **F04C 2230/22** (2013.01 - EP US);
F04C 2240/52 (2013.01 - EP US)

Citation (search report)
• [XI] JP 2002174184 A 20020621 - KOYO SEIKO CO
• [I] US 5403173 A 19950404 - JOY THEODORE J [US]
• [I] US 5417556 A 19950523 - WADDLETON DAVID [CA]
• [IA] US 6390793 B1 20020521 - SWEET ROBERT S [US], et al
• [XA] DE 3615830 A1 19861120 - BARMAG BARMER MASCHF [DE]
• [A] JP H01170782 A 19890705 - KAYABA INDUSTRY CO LTD
• [A] US 2299192 A 19421020 - HERMAN TORMYN
• [A] JP S57110602 A 19820709 - KYOWA GOUKIN KK
• [A] US 5538355 A 19960723 - BURR STEPHEN M [US]
• [A] US 3499390 A 19700310 - PRIJATEL EDWARD A
• See references of WO 2005079302A2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 2005079302 A2 20050901; WO 2005079302 A3 20060608; EP 1718865 A2 20061108; EP 1718865 A4 20101020;
JP 2007522384 A 20070809; US 2008240968 A1 20081002

DOCDB simple family (application)
US 2005004412 W 20050214; EP 05722970 A 20050214; JP 2006553275 A 20050214; US 58936105 A 20050214