

Title (en)  
Multiple gear pump

Title (de)  
Mehrfachzahnradpumpe

Title (fr)  
Pompe multiple à engrenages

Publication  
**EP 1598556 A1 20051123 (EN)**

Application  
**EP 05104105 A 20050517**

Priority  
US 84748304 A 20040517

Abstract (en)  
An apparatus and method for pumping fluid. The apparatus includes a first pump defined by a first housing having a first primary shaft rotatably attached to a first gear set positioned internal to the first housing. The apparatus includes a second pump defined by a second housing having a second primary shaft rotatably attached to a second gear set positioned internal to the second housing. The first and second housings being connectible to one another. A shaft quick connect mechanism is provided to couple the first and second primary shafts to one another such that when the first and second pump housings are connected, the first primary shaft rotatably drives the second primary shaft. <IMAGE>

IPC 1-7  
**F04C 11/00**; **F04C 15/00**; **F04C 2/08**

IPC 8 full level  
**F04C 2/08** (2006.01); **F04C 11/00** (2006.01); **F04C 15/00** (2006.01); **F04C 2/18** (2006.01)

CPC (source: EP US)  
**F04C 2/086** (2013.01 - EP US); **F04C 11/001** (2013.01 - EP US); **F04C 15/0073** (2013.01 - EP US); **F04C 2/18** (2013.01 - EP US); **F04C 2230/60** (2013.01 - EP US); **F04C 2240/70** (2013.01 - EP US)

Citation (search report)

- [XY] DE 3505486 A1 19850822 - KARL MARX STADT IND WERKE [DD]
- [XA] FR 2121296 A5 19720818 - MASSEY FERGUSON SERVICES NV
- [X] US 4195480 A 19800401 - BEHRENDTS BERTWIN E [US], et al
- [X] GB 1189051 A 19700422 - KARL MARX STADT IND WERKE [DE]
- [X] PATENT ABSTRACTS OF JAPAN vol. 001, no. 161 (M - 053) 20 December 1977 (1977-12-20)
- [XA] PATENT ABSTRACTS OF JAPAN vol. 2002, no. 10 10 October 2002 (2002-10-10)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 006, no. 142 (M - 146) 31 July 1982 (1982-07-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 14 22 December 1999 (1999-12-22)
- [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 289 (M - 625) 18 September 1987 (1987-09-18)

Cited by  
EP2306023A3; DE102019100589A1; RU2633727C2; EP3023642A1; FR3028572A1; EP2385290A1; CN103410726A; US10190584B2; WO2008046423A1; EP2924291B1

Designated contracting state (EPC)  
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