

Title (en)
PUMPS

Title (de)
PUMPE

Title (fr)
POMPE

Publication
EP 1756426 B1 20170405 (DE)

Application
EP 05746325 A 20050430

Priority
• DE 2005000800 W 20050430
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Abstract (en)
[origin: WO2005108791A1] Pumps, in particular, sliding-vane pumps, roller cell pumps, or gear pumps, comprising a rotating assembly, with, amongst other things, a rotor (1) with radially-sliding vanes (43), rollers or gears and a driveshaft (17). The rotor (1) or a gearwheel are connected to the driveshaft by a toothing on the driveshaft and on the rotor or gearwheel for rotational drive.

IPC 8 full level
F04C 15/00 (2006.01); **F16D 1/08** (2006.01)

CPC (source: EP US)
F04C 15/0076 (2013.01 - EP US); **F04C 2/10** (2013.01 - EP US); **F04C 2/344** (2013.01 - EP US); **Y10T 403/7009** (2015.01 - EP US); **Y10T 403/7035** (2015.01 - EP US)

Citation (examination)
• DE 2849994 A1 19790523 - EATON CORP
• US 3606598 A 19710920 - ALBERS KENNETH A
• DE 10235279 A1 20040219 - ZAHNRADFABRIK FRIEDRICHSHAFEN [DE]
• AUGUST SCHALITZ: "KUPPLUNGS-ATLAS", 1 January 1969, A.G.T - VERLAG GEORG THUM, Ludwigsburg, pages: 9

Citation (opposition)
Opponent : Bernhard Ganahl
• WO 2005108791 A1 20051117 - LUK FAHRZEUG HYDRAULIK [DE], et al
• EP 1196699 B1 20030212 - ZAHNRADFABRIK FRIEDRICHSHAFEN [DE]
• DE 10235279 A1 20040219 - ZAHNRADFABRIK FRIEDRICHSHAFEN [DE]
• DE 2146972 A1 19730405 - TRW INC
• US 3862814 A 19750128 - SWEDBERG NILS EINAR
• DE 2849994 A1 19790523 - EATON CORP
• DE 3780158 T2 19930225 - PEIJI SHEN [CN]
• US 3606598 A 19710920 - ALBERS KENNETH A
• DE 1063036 B 19590806 - JABSCO PUMP CO
• DE 19957886 A1 20000720 - BOSCH BRAKING SYSTEMS CO [JP]
• DEUTSCHE NORM: "Zahnwellen-verbindungen mit evolventenflanken", DEUTSCHE NORM DIN 5480, October 1991 (1991-10-01), pages 1 - 5, XP055452713
• AUGUST SCHALITZ: "Kupplungsatlas", 1969, article "Zahnkupplungen", pages: 9, XP055277047
• FRANZ. G. KOLLMANN: "Welle-Nabe-Verbindungen, Konstruktionsbücher", vol. 3, 1984, article "Welle-Nabe-Verbindungen, Konstruktionsbücher", pages: 135, XP055277060
• KÖHLER ET AL.: "Maschinenteile Teil 1, 3", 1992, Stuttgart, pages: 223 und 224, XP055277067
• ZAHNRÄDER, 1932, Berlin, pages 55
• WIKIPEDIA AUSDRUCK ZAHNRÄDER, pages 2

Cited by
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DOCDB simple family (application)
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