

Title (en)

LONG LIFE TELESCOPING GEAR PUMPS AND MOTORS

Title (de)

AUSZIEHBARE GETRIEBEPUMPEN UND MOTOREN VON LANGER HALTBARKEIT

Title (fr)

POMPES ET MOTEURS À ENGRENAGES TÉLESCOPIQUES À LONGUE DURÉE DE VIE

Publication

**EP 2059672 A4 20140514 (EN)**

Application

**EP 07814743 A 20070907**

Priority

- US 2007077852 W 20070907
- US 82498106 P 20060908

Abstract (en)

[origin: WO2008031012A2] A telescoping gear pump comprises a bolt, a Bellville washer, a wear plate, a seal housing, a seal spring, a spur gear including a wear lobe, a seal ring and a case drain path, a shaft, a ring gear including a wear lobe, seal ring, and a case drain path, seal, a bolt assembly including a Bellville washer and bolt, and a pressure plate. The assembly provides pressure to a fluid to maintain a seal within a telescoping pump/motor during operation. The wear lobe reduces wear while maintaining fluid pressure.

IPC 8 full level

**F03C 2/00** (2006.01); **F03C 4/00** (2006.01); **F04C 2/00** (2006.01); **F04C 27/00** (2006.01)

CPC (source: EP)

**F04C 2/101** (2013.01); **F04C 2/102** (2013.01); **F04C 14/185** (2013.01)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2008031012A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2008031012 A2 20080313; WO 2008031012 A3 20080904;** BR PI0716188 A2 20131112; CN 101535633 A 20090916;  
CN 101535633 B 20130529; EP 2059672 A2 20090520; EP 2059672 A4 20140514; JP 2010502895 A 20100128

DOCDB simple family (application)

**US 2007077852 W 20070907;** BR PI0716188 A 20070907; CN 200780041071 A 20070907; EP 07814743 A 20070907;  
JP 2009527578 A 20070907