

Title (en)

THREE-GEAR PUMP SYSTEM FOR LOW VISCOSITY FLUIDS

Title (de)

DREI-GETRIEBE-PUMPENSYSTEM FÜR NIEDRIGVISKOSE FLÜSSIGKEITEN

Title (fr)

SYSTÈME DE POMPE À TROIS ROUES DENTÉES POUR FLUIDES À FAIBLE VISCOSITÉ

Publication

EP 3114350 A1 20170111 (EN)

Application

EP 15707497 A 20150219

Priority

- US 201461949414 P 20140307
- US 2015016530 W 20150219

Abstract (en)

[origin: WO2015134194A1] A three-gear pump system (30) includes a housing and a three-gear configuration (30) within the housing that pumps fluid from a fluid inlet to a fluid outlet. The three-gear configuration (30) includes a center drive gear (32), a first driven gear (34) and a second driven gear (36) positioned on opposite sides of the drive gear (32). The driven gears (34,36) are radially supported within the housing by a bearing structure (48,50) for rotation of the driven gears about respective axes. The drive gear (32) is free to float radially relative to the driven gears (34,36). The bearing structure may include a plurality of sleeve bearings or ball bearings that radially support the gear shafts (40,42) of the driven gears (34,36). The drive gear (32) may have a larger diameter and a greater number of gear teeth as compared to the driven gears (34,36).

IPC 8 full level

F04C 2/14 (2006.01); **F04C 2/20** (2006.01)

CPC (source: EP)

F04C 2/14 (2013.01); **F04C 2/20** (2013.01); **F04C 2240/50** (2013.01)

Citation (search report)

See references of WO 2015134194A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2015134194 A1 20150911; EP 3114350 A1 20170111; EP 3114350 B1 20210630

DOCDB simple family (application)

US 2015016530 W 20150219; EP 15707497 A 20150219