

Title (en)

Hydraulic gear wheel machine with axial force compensation

Title (de)

Hydraulische Zahnradmaschine mit Axialkraftkompensation

Title (fr)

Machine hydraulique à roue dentée avec compensation de la force axiale

Publication

EP 2354551 A3 20150610 (DE)

Application

EP 10015012 A 20101126

Priority

DE 102010005900 A 20100127

Abstract (en)

[origin: EP2354551A2] The machine (1) has a housing (2) in which two helical gear wheels (10, 12) and axial bearing bodies (26, 28) are accommodated. Shafts (8, 16) are accommodated in the bearing bodies, where axial force components of force, resulting from hydraulic and mechanical forces during operation of the machine, act on the gear wheels. Compensation bodies (60, 62) are arranged coaxial to the shafts for pressing the shafts with axial compensation forces (50, 51). The compensation bodies and the respective shafts are connected with each other in a torque-proof manner.

IPC 8 full level

F04C 2/16 (2006.01); **F01C 21/10** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP)

F01C 21/108 (2013.01); **F04C 2/16** (2013.01); **F04C 15/0042** (2013.01); **F04C 15/0073** (2013.01); **F04C 2240/80** (2013.01)

Citation (search report)

- [I] DE 2745646 A1 19780420 - IMO INDUSTRI AB
- [A] IT 1124357 B 19860507 - MARZOCCHI PAOLO & ADRIANO [IT]
- [A] DE 60133786 T2 20090625 - MORSELLI MARIO ANTONIO [IT]
- [A] DE 102008001573 A1 20091112 - BOSCH GMBH ROBERT [DE]

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)

EP 2354551 A2 20110810; EP 2354551 A3 20150610; EP 2354551 B1 20160504; DE 102010005900 A1 20110728

DOCDB simple family (application)

EP 10015012 A 20101126; DE 102010005900 A 20100127