

Title (en)
HYDRAULIC TOOTHED WHEEL MACHINE

Title (de)
HYDRAULISCHE ZAHNRADMASCHINE

Title (fr)
MACHINE HYDRAULIQUE À ENGRENAGE

Publication
EP 2406497 B1 20170111 (DE)

Application
EP 10708110 A 20100225

Priority
• EP 2010001163 W 20100225
• DE 102009012853 A 20090312

Abstract (en)
[origin: WO2010102722A2] The invention relates to a toothed wheel machine comprising a housing for receiving two meshing and especially helical-toothed wheels. Said toothed wheels are axially mounted in a sliding manner by axial surfaces between bearing bodies received in the housing, and radially by a bearing shaft received in the bearing bodies. During the operation of the toothed wheel machine, an axial component of a force resulting from the hydraulic and mechanical forces generated during operation acts on each toothed wheel in the same axial direction. A counter-force against the respective axial force component is applied to the toothed wheels and/or bearing shafts, each counter-force applying the same amount of pressure as the respective axial force component, or less than same.

IPC 8 full level
F04C 15/00 (2006.01)

CPC (source: EP US)
F04C 2/18 (2013.01 - EP US); **F04C 15/0042** (2013.01 - EP US); **F04C 2240/50** (2013.01 - EP US)

Cited by
US9366250B1

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
DE 102009012853 A1 20100916; BR PI1009517 A2 20160712; BR PI1009517 B1 20200728; CN 102348897 A 20120208; CN 102348897 B 20150128; EP 2406497 A2 20120118; EP 2406497 B1 20170111; JP 2012519798 A 20120830; JP 5535246 B2 20140702; US 2012114514 A1 20120510; US 8979518 B2 20150317; WO 2010102722 A2 20100916; WO 2010102722 A3 20110922

DOCDB simple family (application)
DE 102009012853 A 20090312; BR PI1009517 A 20100225; CN 201080011318 A 20100225; EP 10708110 A 20100225; EP 2010001163 W 20100225; JP 2011553314 A 20100225; US 201013256053 A 20100225