

Title (en)
FLUID ENERGY MACHINE

Title (de)
FLUIDENERGIEMASCHINE

Title (fr)
MACHINE À ÉNERGIE FLUIDIQUE

Publication
EP 2279351 A1 20110202 (DE)

Application
EP 09738169 A 20090429

Priority

- EP 2009055168 W 20090429
- DE 102008021363 A 20080429
- DE 102008031994 A 20080707

Abstract (en)
[origin: WO2009133125A1] The invention relates to a fluid energy machine (1), in particular a compressor (45), which has a common rotor (5), which is mounted using magnetic bearings (11, 12, 13), for the flow machine (2) and the drive (3). In addition to the magnetic bearings (11, 12, 13), auxiliary bearings (15) are provided, wherein a friction bearing (21) is provided on the bottom part of said vertically oriented rotor (5) and a roller bearing (22), which provides both radial and also axial mounting, and is implemented as a ball bearing, is provided on the upper end.

IPC 8 full level
F04D 15/02 (2006.01); **F04D 27/02** (2006.01); **F04D 29/057** (2006.01); **F04D 29/058** (2006.01); **F04D 29/059** (2006.01)

CPC (source: EP US)
F04D 25/06 (2013.01 - US); **F04D 25/0686** (2013.01 - EP); **F04D 29/057** (2013.01 - EP US); **F04D 29/058** (2013.01 - EP US);
F04D 29/059 (2013.01 - EP US); **F16C 32/044** (2013.01 - EP US); **F16C 32/0442** (2013.01 - EP US); **F16C 39/02** (2013.01 - EP US);
H02K 7/09 (2013.01 - EP US); **F05D 2240/515** (2013.01 - EP US); **F16C 2360/44** (2013.01 - EP US); **H02K 7/14** (2013.01 - EP US)

Citation (search report)
See references of WO 2009133125A1

Citation (examination)

- EP 0361844 A2 19900404 - NOVA CORP OF ALBERTA [CA]
- US 5961291 A 19991005 - SAKAGAMI SEIJI [JP], et al
- US 5501583 A 19960326 - NAGAOKA TAKASHI [JP], et al

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 TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
DE 102008031994 A1 20091105; DE 102008031994 B4 20110707; BR PI0911583 A2 20160105; CN 102016322 A 20110413;
CN 102016322 B 20150909; EP 2279351 A1 20110202; RU 2449178 C1 20120427; US 2011044832 A1 20110224; US 8579608 B2 20131112;
WO 2009133125 A1 20091105

DOCDB simple family (application)
DE 102008031994 A 20080707; BR PI0911583 A 20090429; CN 200980115302 A 20090429; EP 09738169 A 20090429;
EP 2009055168 W 20090429; RU 2010148381 A 20090429; US 98998409 A 20090429