

Title (en)
AXIAL PISTON HIGH PRESSURE COMPRESSOR/PUMP

Title (de)
AXIALKOLBEN-HOCHDRUCKKOMPRESSOR/-PUMPE

Title (fr)
COMPRESSEUR/POMPE HAUTE PRESSION À PISTON AXIAL

Publication
EP 2788623 A4 20151007 (EN)

Application
EP 12856356 A 20121206

Priority
• US 201161567884 P 20111207
• US 2012068191 W 20121206

Abstract (en)
[origin: WO2013086151A1] An axial machine having a wedge that drives a plurality of pistons and a retainer plate for maintaining the slipper shoes in contact with the wedge. A center positioning mechanism for the retainer plate in which the slipper shoes placed on the wedge have a portion extending through a respective hole in the retainer plate, with each of the slipper shoes engaging a point on the side of its respective hole to restrain the retainer plate from movement parallel to the planar angular surface of the wedge. Also described is an oil separation system for removing oil from the gas to be compressed such that the removed oil drains into the oil sump. An oil lubrication system has a cavity around the drive shaft to receive oil from the sump, and disburse the oil through a passageway to discharge ports in the wedge to disburse oil on the planar angular surface of the wedge.

IPC 8 full level
F04B 27/08 (2006.01); **F03C 1/28** (2006.01); **F04B 1/12** (2006.01); **F04B 27/10** (2006.01); **F04B 39/02** (2006.01)

CPC (source: EP US)
F03C 1/0605 (2013.01 - EP US); **F04B 1/126** (2013.01 - EP US); **F04B 27/0839** (2013.01 - EP US); **F04B 27/0882** (2013.01 - EP US); **F04B 27/109** (2013.01 - EP US); **F04B 39/0223** (2013.01 - EP US)

Citation (search report)
• [X1] US 7367259 B2 20080506 - BECK JOSEF [DE]
• [X1] US 5862704 A 19990126 - SELJESTAD GREGORY A [US]
• [X1] WO 0068571 A1 20001116 - VALENTIN INGO [US]
• [X1] GB 1523693 A 19780906 - EATON CORP
• [X1] GB 994262 A 19650602 - HAROLD GEORGE ORAM
• See references of WO 2013086151A1

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

DOCDB simple family (publication)
WO 2013086151 A1 20130613; BR 112014013732 A2 20170613; BR 112014013732 A8 20170613; CN 104011382 A 20140827; CN 104011382 B 20170308; EP 2788623 A1 20141015; EP 2788623 A4 20151007; JP 2015504997 A 20150216; KR 20140100956 A 20140818; US 2014328702 A1 20141106

DOCDB simple family (application)
US 2012068191 W 20121206; BR 112014013732 A 20121206; CN 201280060348 A 20121206; EP 12856356 A 20121206; JP 2014546065 A 20121206; KR 20147015633 A 20121206; US 201214362448 A 20121206