

Title (en)

ROTOR ASSEMBLY FOR ROTARY COMPRESSOR

Title (de)

ROTORANORDNUNG FÜR KREISKOLBENVERDICHTER

Title (fr)

ENSEMBLE ROTOR POUR COMPRESSEUR ROTATIF

Publication

EP 2297464 A1 20110323 (EN)

Application

EP 08783246 A 20080723

Priority

- CA 2008001332 W 20080723
- US 7140208 P 20080428

Abstract (en)

[origin: WO2009132412A1] A traditional compressor unit of the sealed type suffers in that a failure of either the motor or the compressor require both to be discarded. Provided is a compressor (1) having a rotor assembly (3) within which a rotor (24) is rotated on an eccentric shaft (28) in a sealed chamber (23). Two or more intake ports (32, 33) are provided that open into the sealed chamber (23) and two or more exhaust ports (34, 35) are provided with one way valves (38), to permit compressed gas to exit the sealed chamber (23). The geometry of the rotor (24) and sealed chamber (23) and eccentric drive (28) are such that apices of the rotor (24) remain in contact with a peripheral wall (22) of the sealed chamber (23) as the rotor (24) rotates and apex seals (36) are provided on the apices of the rotor (24) to prevent leakage of the gas around the apices of the rotor (24). In a preferred embodiment the rotor (24) is a multi-lobed rotor orbiting within a trochoidal chamber (23).

IPC 8 full level

F04C 27/00 (2006.01); **F04C 15/06** (2006.01); **F25B 31/02** (2006.01)

CPC (source: EP US)

F04C 18/0207 (2013.01 - EP US); **F04C 18/22** (2013.01 - EP US); **F04C 23/008** (2013.01 - US); **F04C 27/001** (2013.01 - EP US);
F04C 29/0064 (2013.01 - EP US); **F25B 1/04** (2013.01 - EP US)

Citation (search report)

See references of WO 2009132412A1

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

WO 2009132412 A1 20091105; CA 2636006 A1 20090326; CA 2636006 C 20100914; CN 102076972 A 20110525; EP 2297464 A1 20110323;
US 2011262291 A1 20111027; US 2015152867 A1 20150604; US 2018291898 A1 20181011

DOCDB simple family (application)

CA 2008001332 W 20080723; CA 2636006 A 20080723; CN 200880130192 A 20080723; EP 08783246 A 20080723;
US 201514616210 A 20150206; US 201816006566 A 20180612; US 99011508 A 20080723