

Title (en)

ROTOR COOLING FOR DRY-RUNNING TWIN-SHAFT VACUUM PUMPS OR COMPRESSORS

Title (de)

ROTORKÜHLUNG FÜR TROCKEN LAUFENDE ZWEIWELLEN-VAKUUMPUMPEN BZW. -VERDICHTER

Title (fr)

REFROIDISSEMENT DE ROTOR POUR POMPES À VIDE OU COMPRESSEURS À DEUX ARBRES FONCTIONNANT À SEC

Publication

EP 2052158 A1 20090429 (DE)

Application

EP 07786670 A 20070813

Priority

- EP 2007007150 W 20070813
- DE 102006038419 A 20060817

Abstract (en)

[origin: WO2008019815A1] In a dry-running twin-shaft vacuum pump or compressor having two parallel shafts and positive-displacement rotors (2, 3; 17, 18; 23, 24) which are arranged on said shafts and which are located in a working space and which are synchronized in the ratio 1:1, for example mechanically by means of a transmission or electronically by means of one drive motor per rotor shaft, and which have an intake opening (1) on their suction side and at least one outlet opening (16) on their pressure side, the arrangement is configured such that each shaft (4, 5) of the positive-displacement rotors has an axially running cavity which extends at least over a partial length of the shaft, in which cavity in each case at least one heat tube (8, 9) is arranged in such a way that the compression heat from the positive-displacement rotors is dissipated out of the working space via the shafts, and is if appropriate conducted to an adjoining sealing space, and outside the working space, is dissipated out of the machine by heat dissipation means.

IPC 8 full level

F04C 18/16 (2006.01); **F04C 29/04** (2006.01)

CPC (source: EP)

F04C 29/04 (2013.01); **F04C 18/123** (2013.01); **F04C 18/16** (2013.01); **F04C 2220/12** (2013.01)

Citation (search report)

See references of WO 2008019815A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

DE 102006038419 A1 20080221; EP 2052158 A1 20090429; WO 2008019815 A1 20080221

DOCDB simple family (application)

DE 102006038419 A 20060817; EP 07786670 A 20070813; EP 2007007150 W 20070813