

Title (en)

SCREW-ROTOR MACHINE, ENERGY-CONVERSION SYSTEM AND METHOD FOR ENERGY CONVERSION

Title (de)

SCHRAUBENROTORMASCHINE, ENERGIEUMWANDLUNGSSYSTEM UND VERFAHREN ZUR ENERGIEUMWANDLUNG

Title (fr)

MACHINE À ROTOR À VIS, SYSTÈME DE CONVERSION D'ÉNERGIE ET PROCÉDÉ DE CONVERSION D'ÉNERGIE

Publication

**EP 2142803 A1 20100113 (EN)**

Application

**EP 08724313 A 20080331**

Priority

- SE 2008050367 W 20080331
- SE 0700819 A 20070402

Abstract (en)

[origin: WO2008121070A1] The present invention relates to a screw-rotor machine (1) having two screw rotors (102) and a housing (101) having an Inlet opening (114) and an outlet opening (113). The rotors (102) are provided with axle journals (104) mounted in bearings (108). The bearing (106) is oil lubricated and arranged in a bearing chamber (105). This communicates with the working space (115) of the machine via a gap seal (107). According to the invention, the bearing chamber (105) further communicates with an oil supply conduit (111) and a drainage conduit (108). The latter is connected with a pressure that is lower than the lowest pressure in the working space (115) when it is open to the outlet. The invention also relates to an energy-conversion system having an expander, a condenser, a pump and an evaporator, in that connection, the expander is made as the expander according to the present invention. Furthermore, the invention relates to a method for energy conversion where such an expander is utilized.

IPC 8 full level

**F01C 1/16** (2006.01); **F01C 21/04** (2006.01); **F04C 18/16** (2006.01); **F04C 29/02** (2006.01); **F25B 1/047** (2006.01); **F25B 9/06** (2006.01)

CPC (source: EP SE)

**F01C 1/16** (2013.01 - EP); **F01C 21/04** (2013.01 - EP SE); **F01K 25/10** (2013.01 - EP); **F04C 18/16** (2013.01 - SE); **F04C 29/021** (2013.01 - EP); **F04C 29/025** (2013.01 - EP); **F04C 2240/50** (2013.01 - EP)

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

DOCDB simple family (publication)

**WO 2008121070 A1 20081009**; AU 2008233326 A1 20081009; AU 2008233326 B2 20120308; EP 2142803 A1 20100113; EP 2142803 A4 20140709; EP 2142803 B1 20180704; RU 2009140309 A 20110510; RU 2453731 C2 20120620; SE 0700819 L 20081003; SE 531038 C2 20081125

DOCDB simple family (application)

**SE 2008050367 W 20080331**; AU 2008233326 A 20080331; EP 08724313 A 20080331; RU 2009140309 A 20080331; SE 0700819 A 20070402