

Title (en)

VANE-TYPE MACHINE AND METHOD OF UTILIZING WASTE HEAT WHILE USING VANE-TYPE MACHINES

Title (de)

FLÜGELZELLENMASCHINE UND VERFAHREN ZUR ABWÄRMENUTZUNG UNTER VERWENDUNG VON FLÜGELZELLENMASCHINEN

Title (fr)

MACHINE À CELLULES ROTATIVES ET PROCÉDÉ D'UTILISATION DE LA CHALEUR DÉGAGÉE PAR L'UTILISATION DE MACHINES À CELLULES ROTATIVES& xA;

Publication

**EP 1954917 A1 20080813 (DE)**

Application

**EP 05820489 A 20051129**

Priority

IB 2005053958 W 20051129

Abstract (en)

[origin: WO2007063357A1] The invention relates to a vane-type machine (100). The housing (101) has a largely cylindrical space for accommodating the vane cells (102 - 113) and an inlet opening (114) and an outlet opening (115). A shaft (116) is eccentrically arranged in the housing. A first and a second guide plate (117) arranged largely parallel to one another are provided on the shaft. Slides (119 - 129) displaceable largely radially to the shaft (116) in the direction of the inner wall (118) of the housing (101) are guided by the guide plates, wherein a vane cell (102 - 113) is formed with the participation of two respective adjacent slides (119, 120; 120, 121; ...) of the adjacent region of the inner wall (118) of the housing and the volume of the vane cells in the region of the inlet opening (114) differs from the volume of the vane cells in the region of the outlet opening (115). To increase the speed of the shaft (116) and the temperature of the medium used and thus to increase the efficiency, it is proposed that the slides (119 - 129) preferably be lubricated by pressure oil and that they be radially and axially guided by a guideway (130), and that the guideway be fixed with respect to the housing (101) and likewise preferably lubricated by pressure oil.

IPC 8 full level

**F01C 1/344** (2006.01); **F01C 11/00** (2006.01); **F01C 21/10** (2006.01); **F03C 99/00** (2010.01); **F04C 29/02** (2006.01)

CPC (source: EP KR US)

**F01C 1/344** (2013.01 - KR); **F01C 1/3441** (2013.01 - EP US); **F01C 11/00** (2013.01 - KR); **F01C 11/004** (2013.01 - EP US);  
**F01C 11/008** (2013.01 - EP US); **F01C 21/0836** (2013.01 - EP US); **F01C 21/10** (2013.01 - KR); **F01C 21/108** (2013.01 - EP US);  
**F04C 29/02** (2013.01 - KR); **F04C 29/02** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)

See references of WO 2007063357A1

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 NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2007063357 A1 20070607**; CA 2630601 A1 20070607; CA 2630601 C 20110215; CN 101316985 A 20081203; CN 101316985 B 20101215;  
EP 1954917 A1 20080813; JP 2009517580 A 20090430; JP 4730974 B2 20110720; KR 101061450 B1 20110902; KR 20080078828 A 20080828;  
US 2009028735 A1 20090129; US 8225607 B2 20120724

DOCDB simple family (application)

**IB 2005053958 W 20051129**; CA 2630601 A 20051129; CN 200580052173 A 20051129; EP 05820489 A 20051129; JP 2008541836 A 20051129;  
KR 20087014042 A 20051129; US 9538908 A 20081001