Title (en)
ROTARY MACHINE AND METHOD FOR HEAT EXCHANGE IN A ROTARY MACHINE

Title (de)
ROTATIONSMASCHINE SOWIE VERFAHREN FÜR DEN WÄRMEAUSTAUSCH IN EINER ROTATIONSMASCHINE

Title (fr)
ROTATIVE ET PROCÉDÉ D'ÉCHANGE DE CHALEUR DANS UNE ROTATIVE

Publication
EP 3108145 A1 20161228 (DE)

Application
EP 15703933 A 20150202

Priority
• EP 14155716 A 20140219
• EP 2015052089 W 20150202

Abstract (en)
[origin: WO2015124414A1] The invention relates to a rotary machine for conveying a fluid, comprising a drive unit (2) for driving a shaft (5), a running wheel (31) arranged on the shaft (5) for conveying the fluid, at least one mechanical gasket (6) for sealing the shaft (5); a first and a second heat exchange system (41, 42) for cooling or for heating the mechanical gasket (6), wherein the first heat exchange system (41) has a fluid heat carrier for directly impacting the mechanical gasket (6). The second heat exchange system (42) comprises a heat exchange jacket (421), through which a fluid heat carrier can flow without direct contact with the mechanical gasket (6). The first and the second heat exchange system (41; 42) form a common heat exchange system (40), in which a common fluid heat carrier can be circulated, and an impeller (44) for circulating the fluid heat carrier in the heat exchange system (40) is provided. The invention further relates to a method for the heat exchange in a rotary machine.

IPC 8 full level
F04D 29/12 (2006.01)

CPC (source: EP KR RU US)
F04D 7/06 (2013.01 - RU); **F04D 13/08** (2013.01 - KR); **F04D 29/128** (2013.01 - EP KR US); **F04D 29/5873** (2013.01 - US); **F04D 29/588** (2013.01 - RU); F04D 7/06 (2013.01 - US); F04D 13/08 (2013.01 - US)

Citation (search report)
See references of WO 2015124414A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2015124414 A1 20150827; AU 2015221121 A1 20160721; AU 2015221121 B2 20181108; BR 112016009943 A2 20170801; BR 112016009943 B1 20220802; CA 2926371 A1 20150827; CN 105940225 A 20160914; CN 105940225 B 20190222; EP 3108145 A1 20161228; EP 3108145 B1 20191002; EP 3108145 B2 20220727; ES 2750312 T3 20200325; ES 2750312 T5 20221007; KR 20160124076 A 20161026; MX 2016010065 A 20161007; RU 2016125738 A 20180322; RU 2016125738 A3 20180918; RU 2670994 C2 20181029; SG 11201602881X A 20160530; US 10557474 B2 20200211; US 2016348687 A1 20161201

DOCDB simple family (application)
EP 2015052089 W 20150202; AU 2015221121 A 20150202; BR 112016009943 A 20150202; CA 2926371 A 20150202; CN 201580007528 A 20150202; EP 15703933 A 20150202; ES 15703933 T 20150202; KR 20167010800 A 20150202; MX 2016010065 A 20150202; RU 2016125738 A 20150202; SG 11201602881X A 20150202; US 201515116633 A 20150202