

Title (en)
LIQUID RING VACUUM PUMP WITH CAVITATION REGULATION

Title (de)
FLÜSSIGKEITSRING-VAKUUMPUMPE MIT KAVITATIONSREGELUNG

Title (fr)
POMPE À VIDE À ANNEAU LIQUIDE POURVUE D'UN RÉGLAGE DE CAVITATION

Publication
EP 2791511 A2 20141022 (DE)

Application
EP 12799568 A 20121212

Priority

- EP 11193012 A 20111212
- EP 2012075254 W 20121212
- EP 12799568 A 20121212

Abstract (en)
[origin: WO2013087708A2] The invention relates to a method for operating a liquid ring vacuum pump in which vibration measurements of the pump are taken and compared with a prescribed cavitation threshold (26). In addition, a measurement representing the liquid content in the gas to be conveyed is taken. This measurement is compared with a prescribed threshold. The rotational speed of the liquid ring vacuum pump is reduced if the prescribed cavitation threshold (26) has been exceeded and the liquid content is less than the prescribed threshold. The rotational speed is increased if the prescribed cavitation threshold has been exceeded and the liquid content is greater than the prescribed threshold. The invention also relates to a liquid ring vacuum pump designed for implementing the method. Due to the regulation depending on the oscillations of the pump in accordance with the invention, the pump can be operated near the cavitation boundary without any risk of damage.

IPC 8 full level
F04C 19/00 (2006.01); **F04C 28/08** (2006.01); **F04C 28/28** (2006.01)

CPC (source: EP US)
F04C 19/00 (2013.01 - EP US); **F04C 19/004** (2013.01 - US); **F04C 25/02** (2013.01 - EP US); **F04C 28/08** (2013.01 - EP US); **F04C 28/28** (2013.01 - EP US); **F04C 2220/10** (2013.01 - US); **F04C 2240/81** (2013.01 - EP US); **F04C 2270/05** (2013.01 - US); **F04C 2270/12** (2013.01 - EP US); **F04C 2270/125** (2013.01 - US); **F04C 2270/44** (2013.01 - US); **F04C 2270/86** (2013.01 - EP US)

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

DOCDB simple family (publication)
WO 2013087708 A2 20130620; WO 2013087708 A3 20140320; BR 112014014150 A2 20170613; BR 112014014150 A8 20170613; BR 112014014150 B1 20211130; CN 104066994 A 20140924; CN 104066994 B 20160921; EP 2791511 A2 20141022; EP 2791511 B1 20160914; JP 2015502486 A 20150122; JP 5657846 B1 20150121; MX 2014007011 A 20150114; MX 348628 B 20170622; US 2014377084 A1 20141225; US 9169838 B2 20151027

DOCDB simple family (application)
EP 2012075254 W 20121212; BR 112014014150 A 20121212; CN 201280061046 A 20121212; EP 12799568 A 20121212; JP 2014546491 A 20121212; MX 2014007011 A 20121212; US 201214364083 A 20121212