

Title (en)

METHOD FOR CONTROLLING THE TEMPERATURE OF A VACUUM PUMP, AND ASSOCIATED VACUUM PUMP AND INSTALLATION

Title (de)

VERFAHREN ZUR REGELUNG DER TEMPERATUR EINER VAKUUMPUMPE UND ZUGEHÖRIGE VAKUUMPUMPE UND ANLAGE

Title (fr)

PROCÉDÉ DE CONTRÔLE DE LA TEMPÉRATURE D'UNE POMPE À VIDE, POMPE À VIDE ET INSTALLATION ASSOCIÉES

Publication

EP 3867531 B1 20220601 (FR)

Application

EP 19773440 A 20190926

Priority

- FR 1859617 A 20181017
- EP 2019076111 W 20190926

Abstract (en)

[origin: WO2020078689A1] The invention relates to a method for controlling the temperature of a vacuum pump (2) of the dry type subjected to variable pumping loads, in which the temperature of the vacuum pump (2) is controlled by means of at least one cooling element (11a, 11b) coupled to the stator (5) according to a temperature setpoint and a measurement of the temperature of the stator (5), characterized in that the value of a parameter indicative of the pumping load and chosen from a current or a power drawn by the vacuum pump (2) is monitored to determine whether it is below a load threshold and, if the value of the parameter indicative of the pumping load is below the load threshold then the temperature setpoint is increased. The invention also relates to a vacuum pump of the dry type and to an installation.

IPC 8 full level

F04C 25/02 (2006.01); **F04C 23/00** (2006.01); **F04C 29/04** (2006.01)

CPC (source: EP KR US)

F04C 25/02 (2013.01 - EP KR); **F04C 29/042** (2013.01 - EP KR); **F04D 25/0666** (2013.01 - US); **F04D 27/004** (2013.01 - US); **F04C 23/001** (2013.01 - EP); **F04C 2220/12** (2013.01 - EP KR); **F04C 2240/81** (2013.01 - EP KR); **F04C 2270/01** (2013.01 - EP KR); **F04C 2270/02** (2013.01 - EP KR); **F04C 2270/075** (2013.01 - EP KR); **F04C 2270/195** (2013.01 - EP KR); **F04C 2280/02** (2013.01 - EP KR)

Citation (opposition)

Opponent : **Edwards Limited**

- JP 2014118929 A 20140630 - EBARA CORP
- US 2006269424 A1 20061130 - NORTH MICHAEL HENRY [GB]
- JP 4673011 B2 20110420

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 2020078689 A1 20200423; CN 112805472 A 20210514; CN 112805472 B 20230124; EP 3867531 A1 20210825; EP 3867531 B1 20220601; FR 3087504 A1 20200424; FR 3087504 B1 20201030; JP 2022505202 A 20220114; KR 20210074368 A 20210621; TW 202018186 A 20200516; TW I798487 B 20230411; US 2021404476 A1 20211230

DOCDB simple family (application)

EP 2019076111 W 20190926; CN 201980066007 A 20190926; EP 19773440 A 20190926; FR 1859617 A 20181017; JP 2021521152 A 20190926; KR 20217014736 A 20190926; TW 108132800 A 20190911; US 201917285679 A 20190926