

Title (en)

METHOD FOR OPERATING A VACUUM PUMP

Title (de)

VERFAHREN ZUM BETREIBEN EINER VAKUUMPUMPE

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UNE POMPE À VIDE

Publication

EP 3832141 B1 20230104 (DE)

Application

EP 20205911 A 20201105

Priority

EP 20205911 A 20201105

Abstract (en)

[origin: JP2022075494A] To provide a method for operating a vacuum pump, configured such that abrasion for a safety bearing is as small as possible.SOLUTION: The setting of an operation set value for a vacuum pump is prepared, and the setting of the operation set value includes at least one operation state of the vacuum pump, which should be achieved during a trouble event. Furthermore, when the trouble event is detected, and during the trouble event, a rotor is separated from a space region set to a stator, and abrasion occurs to a safety bearing. on the basis of the detected trouble event, an increased amount of abrasion for a safety bearing 215 is estimated, and the increased amount of abrasion is added to a variable for the total abrasion of the safety bearing 215. on the basis of the setting of the operation set value for the vacuum pump 111, and on the basis of the total abrasion of the safety bearing 215, it is finally determined whether means for stabilizing the rotor 149 is performed.SELECTED DRAWING: Figure 3

IPC 8 full level

F04D 27/02 (2006.01); **F04D 19/04** (2006.01); **F04D 27/00** (2006.01); **F04D 29/058** (2006.01)

CPC (source: EP)

F04D 19/04 (2013.01); **F04D 27/001** (2013.01); **F04D 27/0292** (2013.01); **F04D 29/058** (2013.01)

Cited by

EP4328468A3; EP4137699A1

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)

EP 3832141 A1 20210609; **EP 3832141 B1 20230104**; JP 2022075494 A 20220518; JP 7209054 B2 20230119

DOCDB simple family (application)

EP 20205911 A 20201105; JP 2021127232 A 20210803