

Title (en)

METHOD AND DEVICE FOR VENTING A VACUUM CHAMBER

Title (de)

VERFAHREN UND VORRICHTUNG ZUM FLUTEN EINER VAKUUMKAMMER

Title (fr)

PROCÉDÉ ET DISPOSITIF D'ADMISSION POUR UNE CHAMBRE À VIDE

Publication

EP 2960520 B1 20200701 (DE)

Application

EP 15174043 A 20150626

Priority

DE 102014109005 A 20140626

Abstract (en)

[origin: JP2016008612A] PROBLEM TO BE SOLVED: To provide a method and apparatus capable of performing a fast pouring of gas into a vacuum chamber without being hindered by a rotor of a vacuum pump connected to the vacuum chamber still being rotated even though already been shut off that can be attained as easily as possible even under a relative large volume of the vacuum chamber.SOLUTION: This invention relates to a method for feeding air into a vacuum chamber 14 connected to a vacuum pump 12, in particular, a turbo molecular pump in which gas is also fed to the vacuum pump (12) including one rotor and one stator in simultaneous with feeding of gas into the vacuum chamber 14, the gas feeding operation is carried out just after each of the pump rotors is shut off and a rate of feeding gas is increased during each of the gas feeding processes just after the pressure at the vacuum pump 12 reaches a pre-settable limit value.

IPC 8 full level

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

CPC (source: EP)

F04D 19/042 (2013.01); **F04D 27/0215** (2013.01); **F04D 27/0223** (2013.01); **F04D 27/0292** (2013.01)

Citation (examination)

EP 2466145 A2 20120620 - PFEIFFER VACUUM GMBH [DE]

Cited by

CN109804190A; GB2552958B; EP3339651A1; JP2018105300A; EP4033516A1; US11149736B2; WO2018033697A1; US11929238B2

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 2960520 A1 20151230; **EP 2960520 B1 20200701**; DE 102014109005 A1 20151231; JP 2016008612 A 20160118

DOCDB simple family (application)

EP 15174043 A 20150626; DE 102014109005 A 20140626; JP 2015126241 A 20150624