

Title (en)

VACUUM PUMP, AND METHOD FOR OPERATING A VACUUM PUMP

Title (de)

VAKUUMPUMPE SOWIE VERFAHREN ZUM BETREIBEN EINER VAKUUMPUMPE

Title (fr)

POMPE À VIDE AINSI QUE PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER UNE POMPE À VIDE

Publication

EP 3008343 A1 20160420 (DE)

Application

EP 14726958 A 20140526

Priority

- DE 102013210854 A 20130611
- EP 2014060838 W 20140526

Abstract (en)

[origin: WO2014198524A1] The invention relates to a vacuum pump, particularly a rotary vane pump, having a pump housing (10) which is arranged in a suction chamber (12). A conveying element (14, 16) is arranged in the suction chamber (12). According to the invention, there is a non-return valve (28) at an inlet (22) of the suction chamber (12). To close the non-return valve (28) in the case of prevailing low pressures in the region of the inlet (22), a fluid device (36) is arranged adjacent to a spiral spring (34). Upon deactivation of the vacuum pump, a switch piston (40) is moved to a position in which fluid flows through the feed channel (42) into the connection channel (38), so that the non-return valve (28) closes via the flowing into the inlet channel (42).

IPC 8 full level

F04C 25/02 (2006.01); **F04C 18/344** (2006.01); **F04C 28/06** (2006.01); **F04C 28/24** (2006.01); **F04C 28/28** (2006.01); **F04C 29/02** (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP)

F04C 18/3441 (2013.01); **F04C 25/02** (2013.01); **F04C 28/06** (2013.01); **F04C 28/24** (2013.01); **F04C 28/28** (2013.01); **F04C 29/02** (2013.01); **F04C 29/12** (2013.01)

Citation (search report)

See references of WO 2014198524A1

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)

DE 102013210854 A1 20141211; CN 105378284 A 20160302; CN 105378284 B 20170725; EP 3008343 A1 20160420; EP 3008343 B1 20190710; ES 2749125 T3 20200319; PL 3008343 T3 20200131; TW 201510362 A 20150316; TW I622703 B 20180501; WO 2014198524 A1 20141218

DOCDB simple family (application)

DE 102013210854 A 20130611; CN 201480033243 A 20140526; EP 14726958 A 20140526; EP 2014060838 W 20140526; ES 14726958 T 20140526; PL 14726958 T 20140526; TW 103119834 A 20140609