

Title (en)

METHOD FOR PUMPING IN A SYSTEM OF VACUUM PUMPS AND SYSTEM OF VACUUM PUMPS

Title (de)

VERFAHREN ZUM PUMPEN IN EINEM SYSTEM AUS VAKUUMPUMPEN UND SYSTEM AUS VAKUUMPUMPEN

Title (fr)

MÉTHODE DE POMPAGE DANS UN SYSTÈME DE POMPES À VIDE ET SYSTÈME DE POMPES À VIDE

Publication

EP 3123030 A1 20170201 (FR)

Application

EP 14715334 A 20140407

Priority

- EP 2014055822 W 20140324
- EP 2014056938 W 20140407

Abstract (en)

[origin: WO2015144254A1] A pumping system and method comprising: a dry primary screw vacuum pump (3) having a gas inlet orifice (2) connected to a vacuum chamber (1) and a gas outlet orifice (4) that opens into a duct (5) before leading into the gas outlet (8) of the pumping system (SP), a non-return valve (6) positioned in the duct (5) between the gas outlet orifice (4) and the gas outlet (8), and an ejector (7) connected in parallel to the non-return valve (6). The dry primary screw vacuum pump (3) is started up in order to pump the gases contained in the vacuum chamber (1) through the gas outlet orifice (4). Simultaneously, the ejector (7) is supplied with pump fluid, and the ejector (7) continues to be supplied with pump fluid for the entire time that the dry primary screw vacuum pump (3) pumps the gases contained in the vacuum chamber (1) and/or for the entire time that the dry primary screw vacuum pump (3) maintains a defined pressure in the vacuum chamber (1).

IPC 8 full level

F04C 18/16 (2006.01); **F04C 25/02** (2006.01); **F04C 28/06** (2006.01)

CPC (source: EP KR RU US)

F04C 18/16 (2013.01 - EP KR RU US); **F04C 23/005** (2013.01 - EP KR US); **F04C 25/02** (2013.01 - EP KR RU US); **F04C 28/06** (2013.01 - EP KR US); **F04C 28/065** (2013.01 - RU US); **F04F 5/20** (2013.01 - EP KR US); **F04F 5/52** (2013.01 - US); **F04F 5/54** (2013.01 - EP KR US); **F04C 2210/221** (2013.01 - US); **F04C 2210/225** (2013.01 - US); **F04C 2220/12** (2013.01 - EP KR US); **F04C 2220/30** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2015144254A1

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)

WO 2015144254 A1 20151001; AU 2014388058 A1 20161013; AU 2014388058 B2 20190221; BR 112016021735 A2 20210908; BR 112016021735 B1 20220705; CA 2943315 A1 20151001; CA 2943315 C 20210921; CN 106232992 A 20161214; DK 3123030 T3 20191014; EP 3123030 A1 20170201; EP 3123030 B1 20190807; ES 2752762 T3 20200406; JP 2017519141 A 20170713; JP 6445041 B2 20181226; KR 102190221 B1 20201214; KR 20160137596 A 20161130; PL 3123030 T3 20200331; PT 3123030 T 20191025; RU 2016141339 A 20180424; RU 2660698 C2 20180709; TW 201600723 A 20160101; TW I651471 B 20190221; US 10260502 B2 20190416; US 2017089339 A1 20170330

DOCDB simple family (application)

EP 2014056938 W 20140407; AU 2014388058 A 20140407; BR 112016021735 A 20140407; CA 2943315 A 20140407; CN 201480077526 A 20140407; DK 14715334 T 20140407; EP 14715334 A 20140407; ES 14715334 T 20140407; JP 2016557278 A 20140407; KR 20167029509 A 20140407; PL 14715334 T 20140407; PT 14715334 T 20140407; RU 2016141339 A 20140407; TW 104108952 A 20150320; US 201415126875 A 20140407