

Title (en)
VACUUM PUMP

Title (de)
VAKUUMPUMPE

Title (fr)
POMPE À VIDE

Publication
EP 3315782 A1 20180502 (EN)

Application
EP 16382487 A 20161025

Priority
EP 16382487 A 20161025

Abstract (en)
The invention provides a vacuum pump (1) for lowering pressure in a device (120), the vacuum pump (1) comprising a vacuum chamber (2), a rotor (3) comprising slots (31), vanes (4, 41, 42), a fluid inlet (5), a primary fluid outlet (61) and a secondary fluid outlet (62). A volume of the chamber wall defined by a first virtual outlet vane (601) in contact with the first secondary outlet point (621) and a second virtual outlet vane (602) which is subsequent to the first virtual outlet vane (601) is at least the 66% of a volume of the chamber wall defined by a third virtual outlet vane (603) in contact with the second primary outlet point (612) and a fourth virtual outlet vane (604) which is preceding to the third virtual outlet vane (603). The primary fluid outlet (61) comprises primary blocking means (71) adapted for sealing the fluid communication between the primary fluid outlet (61) and the first outside fluid zone (100) if the pressure in the primary fluid outlet (61) is lower than a first predetermined value.

IPC 8 full level
F04C 18/344 (2006.01); **F04C 25/02** (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP)
F04C 18/3442 (2013.01); **F04C 25/02** (2013.01); **F04C 29/126** (2013.01); **F04C 2220/10** (2013.01)

Citation (search report)
• [X] WO 2015104930 A1 20150716 - CALSONIC KANSEI CORP [JP]
• [X] EP 2857687 A1 20150408 - CALSONIC KANSEI CORP [JP]
• [X] US 2014286807 A1 20140925 - SEKIYA SHIN [JP], et al

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)
EP 3315782 A1 20180502; CN 109072924 A 20181221; CN 109072924 B 20210622; EP 3532731 A1 20190904; EP 3532731 B1 20200819; ES 2832676 T3 20210610; WO 2018077859 A1 20180503

DOCDB simple family (application)
EP 16382487 A 20161025; CN 201780005929 A 20171024; EP 17787196 A 20171024; EP 2017077133 W 20171024; ES 17787196 T 20171024