

Title (en)
VACUUM PUMP

Title (de)
VAKUUMPUMPE

Title (fr)
POMPE À VIDE

Publication
EP 3049676 A1 20160803 (DE)

Application
EP 14761870 A 20140911

Priority
• DE 202013008470 U 20130924
• EP 2014069344 W 20140911

Abstract (en)
[origin: WO2015043962A1] The invention relates to a vacuum pump comprising a rotor shaft (10), which bears one or more rotor elements (20, 22). The rotor shaft (10) is driven by an electrical driving device (30). A stator device (24) is arranged between the rotor elements (20, 22). The rotor shaft (10) is supported by bearings (32). The highly heat-generating components such as the driving device (30) and the stator device (24) are connected to a second housing part (28) in particular by means of a support part (36). Heat-sensitive components such as the bearing (32) are supported by means of a separate first housing part (34). The two housing parts can be kept at different temperatures, for example by means of separate cooling devices. Thus, the operating temperature of the in particular pressure-side bearing (32) can be reduced, and therefore the service life can be extended.

IPC 8 full level
F04D 19/04 (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP US)
F04D 19/04 (2013.01 - EP US); **F04D 19/042** (2013.01 - US); **F04D 25/06** (2013.01 - EP US); **F04D 29/056** (2013.01 - US);
F04D 29/522 (2013.01 - US); **F04D 29/5806** (2013.01 - EP US); **F04D 29/584** (2013.01 - EP US); **F04D 29/5853** (2013.01 - EP US);
F04D 29/056 (2013.01 - EP)

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 202013008470 U1 20150108; EP 3049676 A1 20160803; EP 3049676 B1 20190710; EP 3049676 B2 20241002; US 10221864 B2 20190305;
US 2016298649 A1 20161013; WO 2015043962 A1 20150402

DOCDB simple family (application)
DE 202013008470 U 20130924; EP 14761870 A 20140911; EP 2014069344 W 20140911; US 201515022448 A 20150402