

Title (en)
VACUUM PUMP DAMPER

Title (de)
VAKUUMPUMPEN-DÄMPFER

Title (fr)
AMORTISSEUR POUR POMPES À VIDE

Publication
EP 2918843 B1 20201028 (DE)

Application
EP 15157292 A 20150303

Priority
DE 102014103510 A 20140314

Abstract (en)
[origin: JP2015175372A] PROBLEM TO BE SOLVED: To separate, in particular, vibration between a vacuum pump and a receiver, and also electrically separate vibration and obtain vacuum air-tightness connection by a simple and inexpensive method.SOLUTION: In a vacuum pump damper for vacuum air-tightly connecting a vacuum pump 10 and a receiver 12, a first flange 20 is connected to the vacuum pump 10 and a second flange 22 is connected to the receiver 12. At least one separation apparatus 26 is directly arranged between flange faces 24, 24' of the first and second flanges 20, 22 faced to each other. The first and second flanges 20, 22 are connected to each other by at least one fixing element 28, in particular a screw. A pre-load is applied so that both of the flanges 20, 22 are mechanically and/or electrically separated from each other in an operating state that the fixing element 28 and the flanges 20, 22 are vacuumed, and so that the separation apparatus 26 is vacuum air-tight in an assembled state that the flanges are not vacuumed.

IPC 8 full level
F04D 19/04 (2006.01); **F04D 29/08** (2006.01); **F04D 29/60** (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP)
F04D 19/04 (2013.01); **F04D 29/083** (2013.01); **F04D 29/601** (2013.01); **F04D 29/668** (2013.01)

Citation (examination)
US 2010178183 A1 20100715 - KAUFMANN STEPHAN [CH], et al

Cited by
CN113700966A; GB2552324B; CN111788397A; EP3171030A1; US11608916B2; WO2018015727A1; US11499571B2

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 2918843 A1 20150916; EP 2918843 B1 20201028; DE 102014103510 A1 20150917; DE 102014103510 B4 20160225;
JP 2015175372 A 20151005; JP 6133919 B2 20170524

DOCDB simple family (application)
EP 15157292 A 20150303; DE 102014103510 A 20140314; JP 2015050530 A 20150313