

Title (en)  
Two-shaft vacuum pump

Title (de)  
Zweiwellige Vakuumpumpe

Title (fr)  
Pompe à vide à deux arbres

Publication  
**EP 2194276 A3 20140827 (DE)**

Application  
**EP 09014529 A 20091120**

Priority  
DE 102008060539 A 20081204

Abstract (en)  
[origin: EP2194276A2] The vacuum pump has two shafts (10,14) and two pistons (12,16) which are connected with the shafts respectively. The vacuum pump has a drive which displaces the shaft in rotation and a bearing (22,24,26,28) for rotatable support of the shaft. A releasing structure is provided between the piston and the bearing.

IPC 8 full level  
**F04C 18/12** (2006.01); **F04C 28/28** (2006.01)

CPC (source: EP)  
**F04C 18/126** (2013.01); **F04C 28/28** (2013.01); **F04C 29/0071** (2013.01); **F04C 2240/20** (2013.01)

Citation (search report)  
• [XYI] DE 3411931 A1 19850425 - AISIN SEIKI [JP]  
• [XI] EP 0209788 A2 19870128 - TOYOTA MOTOR CO LTD [JP]  
• [XI] JP S59160084 A 19840910 - NIPPON DENSO CO  
• [Y] WO 9712158 A1 19970403 - MUELLENBERG RALPH [DE]  
• [Y] DE 810419 C 19510809 - BECKER OTTO  
• [Y] US 3558246 A 19710126 - PHILIPP RUDI

Designated contracting state (EPC)  
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 SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**EP 2194276 A2 20100609; EP 2194276 A3 20140827; EP 2194276 B1 20200909**; DE 102008060539 A1 20100610

DOCDB simple family (application)  
**EP 09014529 A 20091120**; DE 102008060539 A 20081204