

Title (en)  
Rotary vacuum pump

Title (de)  
Rotationsvakuumpumpe

Title (fr)  
Pompe rotative sous vide

Publication  
**EP 2196675 A2 20100616 (EN)**

Application  
**EP 09178669 A 20091210**

Priority  
• JP 2008315204 A 20081211  
• JP 2009277492 A 20091207

Abstract (en)  
The rotary vacuum pump includes a pump housing, a rotary shaft, a thrust movement restriction mechanism and a first elastic member. The pump housing has therein a pump chamber. The rotary shaft has thereon a rotor rotatably disposed in the pump chamber. When the rotor is rotated with the rotary shaft, gas in the pump chamber is pumped thereby to draw gas into the pump chamber. The thrust movement restriction mechanism is provided for allowing the rotor to displace in the pump chamber in one thrust direction due to thermal expansion thereof during the operation of the rotary vacuum pump. The first elastic member is provided for urging the rotary shaft in the other thrust direction opposite to the one thrust direction.

IPC 8 full level  
**F04C 18/12** (2006.01); **F04C 23/00** (2006.01); **F04C 25/02** (2006.01); **F04C 29/00** (2006.01)

CPC (source: EP KR US)  
**F04C 2/14** (2013.01 - KR); **F04C 18/126** (2013.01 - EP US); **F04C 18/18** (2013.01 - KR); **F04C 23/001** (2013.01 - EP US);  
**F04C 25/02** (2013.01 - EP US); **F04C 29/0021** (2013.01 - EP US)

Cited by  
RU2631579C2; CN103104437A; CN109642575A; CN116447139A; WO2013023954A3; US9476423B2; US11293435B2; WO2018041556A1

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)  
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DOCDB simple family (application)  
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