

Title (en)  
Turbomolecular pump rotor

Title (de)  
Turbomolekularpumpenrotor

Title (fr)  
Rotor de pompe turbo-moléculaire

Publication  
**EP 2295813 A3 20150819 (DE)**

Application  
**EP 10007376 A 20100716**

Priority  
DE 102009035812 A 20090801

Abstract (en)  
[origin: JP2011033027A] <P>PROBLEM TO BE SOLVED: To avoid risks that a rotor body is destroyed and energy accumulated therein is rapidly discharged to a housing, so-called an explosion. <P>SOLUTION: A shaft supports a first rotor structure 101, and the first rotor structure includes a rotor blade ring 119 and a blade 123. Moreover, the first rotor structure 101 supports a rotor sleeve 124 and includes a recess 130. The recess 130 extends in an axial direction and a radial direction to form a hollow space. A size of a fragment is reduced and a destruction process is extended while including the recess extending in the axial direction and existing at a radial direction inside, namely the recess extending in the radial direction from a symmetric rotation axis line so as to from the hollow space. <P>COPYRIGHT: (C)2011,JPO&INPIT

IPC 8 full level  
**F04D 19/04** (2006.01); **F04D 27/00** (2006.01)

CPC (source: EP)  
**F04D 19/042** (2013.01); **F04D 29/321** (2013.01)

Citation (search report)

- [X] JP 2002081397 A 20020322 - EBARA CORP
- [X] DE 102007048703 A1 20090416 - OERLIKON LEYBOLD VACUUM GMBH [DE]
- [XPA] EP 2088325 A2 20090812 - EBARA CORP [JP]
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- [X] DE 202005019644 U1 20070426 - LEYBOLD VAKUUM GMBH [DE]
- [XA] DE 602004008089 T2 20080417 - EDWARDS LTD [GB]
- [X] EP 1128069 A2 20010829 - PFEIFFER VACUUM GMBH [DE]
- [X] DE 1950328 A1 19710401 - SIEMENS AG

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 SE SI SK SM TR

Designated extension state (EPC)  
BA ME RS

DOCDB simple family (publication)  
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**DE 102009035812 A 20090801**; EP 10007376 A 20100716; JP 2010167827 A 20100727