

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]
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- [X] EP 1128069 A2 20010829 - PFEIFFER VACUUM GMBH [DE]
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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)
DE 102009035812 A1 20110203; EP 2295813 A2 20110316; EP 2295813 A3 20150819; EP 2295813 B1 20190918; JP 2011033027 A 20110217

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DE 102009035812 A 20090801; EP 10007376 A 20100716; JP 2010167827 A 20100727