

Title (en)  
Turbo molecular pump

Title (de)  
Turbomolekularpumpe

Title (fr)  
Pompe turbomoléculaire

Publication  
**EP 1498612 A3 20110914 (DE)**

Application  
**EP 04014174 A 20040617**

Priority  
DE 10331932 A 20030715

Abstract (en)  
[origin: EP1498612A2] The turbomolecular pump has rotor and stator discs (14,16) arranged to alternate and interacting to create a pumping effect. The stator discs are spaced apart by distance rings (18,19) which are designed so that they form a fixed connection with the respective adjacent ring so that they undertake in their entirety the fixing and centering of the stator discs. The fixed connection between the distance rings is created by a screw thread or clip lock fastening .

IPC 8 full level  
**F04D 19/04** (2006.01); **F04D 29/54** (2006.01)

CPC (source: EP US)  
**F04D 19/042** (2013.01 - EP US); **F04D 29/542** (2013.01 - EP US)

Citation (search report)

- [X] US 2001016160 A1 20010823 - IKEGAMI TETSUMA [JP], et al
- [X] JP H04330397 A 19921118 - FUJITSU LTD
- [X] DE 2523390 B1 19760513 - PFEIFFER VAKUUMTECHNIK [DE]

Cited by  
WO2009089958A1; DE102007048703A1; EP1918588A3; US8562293B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL HR LT LV MK

DOCDB simple family (publication)  
**EP 1498612 A2 20050119; EP 1498612 A3 20110914; EP 1498612 B1 20150729**; DE 10331932 A1 20050203; DE 10331932 B4 20170824; JP 2005036798 A 20050210; US 2005013710 A1 20050120; US 7278822 B2 20071009

DOCDB simple family (application)  
**EP 04014174 A 20040617**; DE 10331932 A 20030715; JP 2004164365 A 20040602; US 89073004 A 20040714