

Title (en)  
Turbo molecular pump

Title (de)  
Turbomolekularpumpe

Title (fr)  
Pompe à vide turbo-moléculaire

Publication  
**EP 1288502 B1 20100317 (DE)**

Application  
**EP 02017820 A 20020808**

Priority  
DE 10142567 A 20010830

Abstract (en)  
[origin: EP1288502A2] The turbine has a housing (1) with rotor (12) and stator plates (14), which have blades on support rings (16,18). The stator plate (20) facing the higher pressure area is connected with its support ring (22) to a housing component (24). The component and the stator plate each have a cooling water channel, or the housing component may have a heater, and it is thermally insulated relative to the rest of the housing.

IPC 8 full level  
**F04D 19/04** (2006.01); **F04D 29/54** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP US)  
**F04D 19/042** (2013.01 - EP US); **F04D 29/584** (2013.01 - EP US); **F04D 29/5853** (2013.01 - EP); **F05D 2260/607** (2013.01 - EP)

Cited by  
US10954962B2; CN105358835A; EP3029328A4; EP3608545A1

Designated contracting state (EPC)  
CH DE FR GB IT LI NL

DOCDB simple family (publication)  
**EP 1288502 A2 20030305; EP 1288502 A3 20031029; EP 1288502 B1 20100317**; DE 10142567 A1 20030320; DE 50214282 D1 20100429; JP 2003083282 A 20030319; JP 4262457 B2 20090513; US 2003044270 A1 20030306; US 6824357 B2 20041130

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**EP 02017820 A 20020808**; DE 10142567 A 20010830; DE 50214282 T 20020808; JP 2002238025 A 20020819; US 22967902 A 20020827