

Title (en)
Vacuum pump

Title (de)
Vakuumpumpe

Title (fr)
Pompe à vide

Publication
EP 1234982 A1 20020828 (EN)

Application
EP 01830121 A 20010222

Priority
EP 01830121 A 20010222

Abstract (en)
A turbomolecular vacuum pump (5) comprises a first pumping section (1) having pumping stages with bladed rotor discs, a second pumping section (2) having pumping stages with smooth rotor discs, a third pumping section (3) having a pumping stage with a toothed rotor disc (26), and a fourth pumping section (4) of the ejector or venturi pump type. <IMAGE>

IPC 1-7
F04D 19/04; **F04D 25/16**; **F04F 5/20**

IPC 8 full level
F04D 19/04 (2006.01); **F04D 25/16** (2006.01); **F04F 5/04** (2006.01)

CPC (source: EP)
F04D 19/046 (2013.01); **F04D 25/16** (2013.01); **F04F 5/04** (2013.01)

Citation (applicant)
• EP 0445855 B1 19941026 - VARIAN SPA [IT]
• EP 0256234 A2 19880224 - HITACHI LTD [JP]

Citation (search report)
• [AD] EP 0445855 A1 19910911 - VARIAN SPA [IT]
• [AD] US 4797068 A 19890110 - HAYAKAWA TADASHI [JP], et al
• [A] US 5118251 A 19920602 - SAULGEOT CLAUDE [FR]
• [A] EP 0340685 A2 19891108 - NIPPON FERROFLUIDICS KK [JP]

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WO2004055377A1; CN100429406C; US7452191B2; FR2952683A1; CN102713299A; EP1609990A4; CN104822943A; US7762763B2; US9175688B2; WO2011061429A3; WO2014072276A1; WO2004055376A3; US7896625B2; WO2005033522A1; WO2004055378A1; JP2006509955A

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