

Title (en)
Vacuum pump

Title (de)
Vakuumpumpe

Title (fr)
Pompe à vide

Publication
EP 2251547 A3 20140709 (DE)

Application
EP 10004024 A 20100416

Priority
DE 102009021620 A 20090516

Abstract (en)
[origin: EP2251547A2] The pump (1) has a gas inlet (2), a gas outlet (3) and a side channel pump stage (6) that includes a rotatable blade wheel (600) with an edge. The wheel has a blade (602) with partial blades, which are arranged at an edge of the wheel. Angle between the partial blades and movement direction of the blade is smaller than 90 degrees. The blade wheel comprises another blade, and a partition wall is arranged between the blades in a direction of circumference of the blade wheel. The former blade comprises a chamfer in a rear side.

IPC 8 full level
F04D 19/04 (2006.01); **F04D 23/00** (2006.01); **F04D 29/28** (2006.01); **F04D 29/52** (2006.01)

CPC (source: EP)
F04D 17/168 (2013.01); **F04D 19/044** (2013.01); **F04D 19/046** (2013.01); **F04D 23/008** (2013.01); **F04D 29/28** (2013.01); **F04D 29/522** (2013.01)

Citation (search report)

- [X1] JP 2536571 B2 19960918
- [XAY] EP 0568069 A2 19931103 - VARIAN ASSOCIATES [US]
- [X1] JP H029992 A 19900112 - DAIKIN IND LTD
- [YA] GB 2289918 A 19951206 - COLTEC IND INC [US]
- [A] DE 19955955 A1 20010613 - SIEMENS AG [DE]

Cited by
EP2933497A3; DE102011112689B4; US10337517B2; EP3104014A1; EP2565464B1

Designated contracting state (EPC)
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)
AL BA ME RS

DOCDB simple family (publication)
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DE 102009021620 B4 20210729; JP 2010265894 A 20101125; JP 5680334 B2 20150304

DOCDB simple family (application)
EP 10004024 A 20100416; DE 102009021620 A 20090516; JP 2010109856 A 20100512