Title (en)

Pump stage for a high vacuum pump.

Title (de)

Pumpenstufe für eine Hochvakuumpumpe.

Title (fr)

Etage de pompage pour une pompe à vide élevé.

Publication

EP 0363503 B1 19931124 (DE)

Application

EP 88116749 A 19881010

Priority

EP 88116749 A 19881010

Abstract (en)

[origin: JPH02149798A] PURPOSE: To raise compressibility and increase suction performance when pressure at a suction side is relatively high by decreasing the tilting angle and width of radially extending webs from the suction side to a discharge side. CONSTITUTION: A web 24 has a tilting angle α of about 45 deg.. The width b1 of the web 24 is about 1/3 of a radius (r). In this case, the radius (r) is, for example, 50-60 mm. An annular surface (gas inlet surface) specified by the width b1 of the web 24 in accordance with that dimension ratio is larger than 50% of a rotor end surface. The web 24 at the discharge side has a tilting angle βof about 15 deg., and a width b2 of about 1/10 of the radius (r). Nineteen webs 24, for example, are arranged on the outer periphery of a tapered boss 23 in an equally spaced manner. Each of these webs 24 extends across an angle γrespectively. This angle is preferably 90 deg..

IPC 1-7

F04D 19/04

IPC 8 full level

F04D 19/04 (2006.01)

CPC (source: EP US)

F04D 19/046 (2013.01 - EP US)

Cited by

DE10224604A1; CN100422565C; US5553998A; DE10224604B4; US7264439B2; WO0000746A1; WO9323672A1

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