

Title (en)  
VAPOUR-JET VACUUM PUMP

Publication  
**EP 0476157 A4 19920819 (DE)**

Application  
**EP 91907455 A 19910313**

Priority  
SU 4802157 A 19900314

Abstract (en)  
[origin: WO9114102A1] A vapour-jet vacuum pump comprises a vertically mounted hermetic casing (1) with a flange (2) for connection to the cavity to be evacuated and with a discharge sleeve (3). At the lower part of the casing (1) is mounted a bath (6) filled with a working liquid and provided with a heater (7). In the casing (1) is mounted, along its longitudinal axis, a vapour conduit pipe (4) with nozzles (5) for working liquid vapour discharge spaced along its height. A hydroseal (8) providing for the flow of the condensate into the bath (6) is located in the zone where the base of the vapour conduit (4) is mounted on the casing (1). A cooling system for the casing (1) consists of a tube (9) spirally wound around its walls and provided with connecting pipes (10) for the inlet and outlet of a cooling agent. A part of the wall of the casing (1) is formed by stiffening ribs consisting of concave sections (11) in the spirally wound tube (9) area oriented along the winding direction and contacting with the tubes (9) located in them, and having essentially the same curvature as the external radius of the tube (9), and with conical sections conjugating with the concave sections and narrowing in the direction of the vapour jets coming from the nozzles (5).

IPC 1-7  
**F04F 9/00**

IPC 8 full level  
**F04F 9/00** (2006.01)

CPC (source: EP)  
**F04F 9/00** (2013.01)

Citation (search report)  
• [A] WO 7900957 A1 19791115 - VARIAN ASSOCIATES [US]  
• [A] PATENT ABSTRACTS OF JAPAN vol. 8, no. 64 (M-285)(1501) 27. März 1984 & JP-A-58 214 700 ( NICHIDEN VARIAN ) 13. Dezember 1983  
• See references of WO 9114102A1

Cited by  
CN101858327A; US8172548B2; WO2006045634A1

Designated contracting state (EPC)  
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**WO 9114102 A1 19910919**; EP 0476157 A1 19920325; EP 0476157 A4 19920819; SU 1742526 A1 19920623

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