

Title (en)
Vane pump

Title (de)
Flügelzellenmaschine, insbesondere Flügelzellenpumpe

Title (fr)
Pompe à palettes

Publication
EP 0851123 B1 20030709 (DE)

Application
EP 97121017 A 19971129

Priority
• DE 19710378 A 19970313
• DE 19654831 A 19961223

Abstract (en)
[origin: US6244830B1] A vane-cell pump, has a rotor that is arranged in a lifting ring that forms at least one suction region and one pressure region. Radial slots extend over the entire width and are arranged on the circumferential surface of the rotor. Vanes are arranged in the slots in a radially movable manner, with stationary lateral limiting surfaces (lateral surfaces) that adjoin the rotor and the lateral edges of the vanes in a sealing manner. At least one of the lateral surfaces comprises a groove that extends within the range of motion of lower vane chambers and the other lateral surface comprises at least one lower vane pocket that is assigned to the suction region and connected to the pressure region within the range of motion of the lower vane chambers.

IPC 1-7
F04C 2/344

IPC 8 full level
F04C 2/344 (2006.01); **F01C 21/08** (2006.01)

CPC (source: EP US)
F01C 21/0863 (2013.01 - EP US); **F04C 2270/701** (2013.01 - EP US)

Cited by
DE102009048320A1; DE10015020A1; US8992184B2

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
US 6244830 B1 20010612; EP 0851123 A2 19980701; EP 0851123 A3 19990609; EP 0851123 B1 20030709; JP 4141522 B2 20080827; JP H10196558 A 19980731

DOCDB simple family (application)
US 99549897 A 19971222; EP 97121017 A 19971129; JP 35450697 A 19971224