

Title (en)  
Side channel pumping stage

Title (de)  
Seitenkanalpumpstufe

Title (fr)  
Etage d' une pompe à canal latéral

Publication  
**EP 1541871 A3 20110914 (DE)**

Application  
**EP 04027043 A 20041113**

Priority  
DE 10357546 A 20031210

Abstract (en)  
[origin: EP1541871A2] The side channel pump stage has pump-active structures fitted to shaft-mounted rotor elements (12) on both sides and consist of blades (16,18) projecting in the axial direction on at least one side and installed on one or more concentric rings. The blades of the rotor elements engage in one or more concentric channels (22a,24a,22b,24b) formed in stator elements (14a,14b). Gas inlet openings are separated from gas outlet openings by barriers. An independent claim is included for a method for the manufacture of rotor elements of a side channel pump stage entailing the drilling of holes (15), with the desired radius of the blades, in concentric protrusions which extend from the rotor disc in the axial direction.

IPC 8 full level  
**F04D 23/00** (2006.01); **F04D 17/16** (2006.01)

CPC (source: EP)  
**F04D 17/168** (2013.01); **F04D 23/008** (2013.01)

Citation (search report)  
• [X] EP 0805275 A2 19971105 - BOC GROUP PLC [GB]  
• [X] JP H01267390 A 19891025 - DAIKIN IND LTD

Cited by  
EP3088743A1; WO2014067704A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL HR LT LV MK YU

DOCDB simple family (publication)  
**EP 1541871 A2 20050615; EP 1541871 A3 20110914; EP 1541871 B1 20150805**; DE 10357546 A1 20050707

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**EP 04027043 A 20041113**; DE 10357546 A 20031210