

Title (en)

Flow machine for gas compression.

Title (de)

Strömungsmaschine zur Gasverdichtung.

Title (fr)

Machine à courant pour la compression d'un gaz.

Publication

EP 0567874 B1 19950906 (DE)

Application

EP 93106279 A 19930417

Priority

- DE 4213765 A 19920427
- DE 4230770 A 19920915

Abstract (en)

[origin: EP0567874A1] A flow machine (fluid kinetic machine) is demonstrated and described which has a centrifugal compressor having radial blades (4) and feeding a side-channel compressor which is arranged at its perimeter and has forward-curved blades (5). In order to increase the efficiency it is provided that, in the case of the machine being designed as a gas compression machine, the forward-curved blades (5) and the radial blades (4) have opposite curvatures in each case, that the forward-curved blades (5) and the radial blades (4) in their transition zones (23) have a curvature point of inflection, and that the blades (4, 5) in the transition zone (23) are inclined, by an angle (b) of equal magnitude and less than 30 DEG , e.g. of 15 DEG , with respect to the circumferential tangent (T) at the transition zone (23). <IMAGE>

IPC 1-7

F04D 25/16; **F04D 23/00**

IPC 8 full level

F04D 5/00 (2006.01); **F04D 17/02** (2006.01); **F04D 23/00** (2006.01); **F04D 25/16** (2006.01)

CPC (source: EP US)

F04D 17/10 (2013.01 - EP US); **F04D 23/008** (2013.01 - EP US); **F04D 25/16** (2013.01 - EP US)

Cited by

EP0791751A1; US5779433A; GB2289918A; GB2289918B; US6422808B1

Designated contracting state (EPC)

CH DE ES FR GB IT LI

DOCDB simple family (publication)

EP 0567874 A1 19931103; **EP 0567874 B1 19950906**; JP 3342914 B2 20021111; JP H0610880 A 19940121; US 5364228 A 19941115

DOCDB simple family (application)

EP 93106279 A 19930417; JP 10063993 A 19930427; US 5268793 A 19930427