

Title (en)

DEVICE FOR EXTENDING THE SURGE MARGIN OF A RADIAL COMPRESSOR

Publication

EP 0348674 B1 19921216 (DE)

Application

EP 89109560 A 19890526

Priority

- CH 247888 A 19880629
- IN 485MA1989 A 19890620

Abstract (en)

[origin: JPH0242199A] PURPOSE: To stabilize impeller flow in the inlet region by forming an annular notch on a circumferential wall of an inlet duct in front of an impeller of a radial compressor, and arranging a plurality of blades in the notch via a stabilization ring. CONSTITUTION: In a radial compressor comprising a casing 1 and an impeller 2, a device for extending the operational performances of the compressor is arranged in front of the impeller 2. The device comprises a stabilizer opening 5, a stabilization ring 3 and a plurality of stabilizer blades 4. The stabilizer opening 5 extends in the radial direction with a given depth from the surface of an inlet duct 6 into the casing 1, and is formed in the axial direction in the form of an internal groove extending with a given length. The stabilization ring 3 is integrated into the stabilizer opening 5 so that the inner circumferential surface thereof is identical with the surface of the inlet duct 6. The blades 4 are placed on the outer circumference of the ring.

IPC 1-7

F04D 27/02

IPC 8 full level

F04D 29/44 (2006.01); **F04D 27/02** (2006.01)

CPC (source: EP US)

F04D 29/4213 (2013.01 - EP US); **F04D 29/685** (2013.01 - EP US); **Y10S 415/914** (2013.01 - EP US)

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Designated contracting state (EPC)

CH DE FR GB LI

DOCDB simple family (publication)

EP 0348674 A1 19900103; **EP 0348674 B1 19921216**; CH 675279 A5 19900914; IN 172509 B 19930904; JP H0242199 A 19900213; RU 1831590 C 19930730; US 4990053 A 19910205

DOCDB simple family (application)

EP 89109560 A 19890526; CH 247888 A 19880629; IN 485MA1989 A 19890620; JP 16549889 A 19890629; SU 4614322 A 19890621; US 36933189 A 19890621