

Title (en)

Flow stabilisation system for radial compressor

Title (de)

Strömungsstabilisierungssystem für Kreiselverdichter

Title (fr)

Système de stabilisation de courant pour compresseur radial

Publication

EP 1710442 A1 20061011 (DE)

Application

EP 05405278 A 20050404

Priority

EP 05405278 A 20050404

Abstract (en)

The device has a conical, Coanda structure formed with an injection opening (51) through which air is injected in tangential direction towards the flow channel (42) between the rotor blades (11) of a compressor and guide vanes (21) of a diffuser. Another opening (52) is formed on the compressor stator wall (32) of the device at the downstream side of the injection opening. The other opening is connected to the injection opening via a formed channel (44). The other opening is formed at the downstream side of the guide vanes of the diffuser. An independent claim is included for the exhaust turbocharger including the radial compressor.

IPC 8 full level

F04D 29/44 (2006.01); **F04D 27/02** (2006.01); **F04D 29/68** (2006.01)

CPC (source: EP KR US)

F04D 27/02 (2013.01 - KR); **F04D 29/44** (2013.01 - KR); **F04D 29/444** (2013.01 - EP US); **F04D 29/68** (2013.01 - KR);
F04D 29/684 (2013.01 - EP US); F04D 27/0238 (2013.01 - EP US); F05D 2250/52 (2013.01 - EP US); Y10S 415/914 (2013.01 - EP US)

Citation (applicant)

US 2052869 A 19360901 - HENRI COANDA

Citation (search report)

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- [Y] FR 963540 A 19500717
- [A] EP 0280205 A2 19880831 - KLOECKNER HUMBOLDT DEUTZ AG [DE]
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- [A] DE 1096536 B 19610105 - RHEINISCHE MASCHINEN UND APP G
- [A] GB 775784 A 19570529 - BLACKBURN & GEN AIRCRAFT LTD

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EP2103811A3; CN104822948A; EP2955387A4

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1710442 A1 20061011; CN 100529427 C 20090819; CN 101180468 A 20080514; EP 1866545 A1 20071219; EP 1866545 B1 20150617;
JP 2008534858 A 20080828; JP 4819872 B2 20111124; KR 101265814 B1 20130520; KR 20070113323 A 20071128;
RU 2007140869 A 20090520; RU 2389907 C2 20100520; US 2008038112 A1 20080214; US 7648331 B2 20100119;
WO 2006105678 A1 20061012

DOCDB simple family (application)

EP 05405278 A 20050404; CH 2006000171 W 20060322; CN 200680017828 A 20060322; EP 06705411 A 20060322;
JP 2008504596 A 20060322; KR 20077025533 A 20060322; RU 2007140869 A 20060322; US 86583707 A 20071002