

Title (en)
Variable guide vane mechanism

Title (de)
Leitvorrichtung für Schaufelverstellung

Title (fr)
Dispositif d'actionnement des aubes de guidage variables

Publication
EP 2080871 A1 20090722 (DE)

Application
EP 08150265 A 20080115

Priority
EP 08150265 A 20080115

Abstract (en)
The device has fastening units (50) for fastening support rings (40) of a guiding device at a gas outlet housing (20). The support rings include bearing points (46) for receiving guide vane-shafts (42). The bearing points are radially arranged within a radius (r1), and the fastening units are radially arranged beyond a radius (r2), where the former radius is smaller than the latter radius. Rotatable guide vanes (41) are unevenly distributed along a circumference of the guiding device, where the guide vanes are in different distances to each other.

Abstract (de)
Die Befestigung für den Anbau der Leitvorrichtung (40) am Gasaustrittsgehäuse (20) wird in dem Bereich radial ausserhalb der Leitschaufeln (41, 42) positioniert. Damit kann die Umfangsposition der Leitschaufeln innerhalb der vorgegebenen Winkel frei gewählt werden. Es entstehen keine Kollisionen zwischen den Leitschaufeln (41, 42) und den Befestigungsmitteln (50).

IPC 8 full level
F01D 17/16 (2006.01)

CPC (source: EP US)
F01D 17/162 (2013.01 - EP US); **F04D 29/563** (2013.01 - EP US); **F05D 2220/40** (2013.01 - EP US)

Citation (applicant)
R. H. KEMP; M. H. HIRSCHBERG; W. C. MORGAN: "Theoretical and Experimental Analysis of the Reduction of Rotor Blade Vibration in Turbomachinery Through the use of Modified Stator Vane Spacing", NACA TECHNICAL NOTE, 1958, pages 4374

Citation (search report)
• [X] US 3542484 A 19701124 - MASON GEORGE W
• [A] DE 10013335 A1 20010920 - ABB TURBO SYSTEMS AG BADEN [CH]

Cited by
EP2781695A1; US8506233B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2080871 A1 20090722; CN 101910566 A 20101208; EP 2229508 A1 20100922; JP 2011510207 A 20110331; JP 5123400 B2 20130123;
KR 101265927 B1 20130520; KR 20100095642 A 20100831; US 2010278651 A1 20101104; US 8251647 B2 20120828;
WO 2009090149 A1 20090723

DOCDB simple family (application)
EP 08150265 A 20080115; CN 200980102772 A 20090112; EP 09701799 A 20090112; EP 2009050258 W 20090112;
JP 2010542606 A 20090112; KR 20107016534 A 20090112; US 83540110 A 20100713