

Title (en)
Sealing device for an adjustable stator vane

Title (de)
Dichtvorrichtung für eine verstellbare Statorschaufel

Title (fr)
Dispositif d'étanchéité pour une aube statorique variable

Publication
EP 175775 A3 20080723 (DE)

Application
EP 06013281 A 20060627

Priority
DE 102005040574 A 20050826

Abstract (en)
[origin: EP1757775A2] An inner stator support ring (3), carrying several stators (2), has a gas-flowed surface forming part of an imaginary sphere (9). Each stator has a spindle (10). The radius of the sphere runs from the intersection of one of spindle axes and the machine axis to one of stator support points of the gas-flowed surface. The spindle axis is angled relative to the machine axis and dependent on the aerodynamic radial difference between the entrance and exit edges of the support ring. Furthermore, the distance from the stator support points to the machine axis is smaller than the sphere radius.

IPC 8 full level
F01D 11/00 (2006.01); **F01D 17/16** (2006.01); **F02C 9/20** (2006.01)

CPC (source: EP US)
F01D 17/162 (2013.01 - EP US); **F04D 29/563** (2013.01 - EP); **F05D 2250/241** (2013.01 - EP US)

Citation (search report)
• [X] DE 2062328 A1 19710624 - ENGLISH ELECTRIC CO LTD
• [X] FR 2599785 A1 19871211 - SNECMA [FR]
• [X] DE 2948530 A1 19800619 - GEN ELECTRIC
• [X] US 4013377 A 19770322 - AMOS DAVID J
• [X] GB 1533940 A 19781129 - CATERPILLAR TRACTOR CO
• [X] US 3999883 A 19761228 - NORDENSON GARY E
• [X] US 3089679 A 19630514 - WILLI HENNY
• [X] WO 0240832 A1 20020523 - VOLVO AERO CORP [SE], et al
• [X] DE 2643607 B1 19770929 - MTU MUENCHEN GMBH [DE]

Cited by
EP2194235A1; EP2960438A1; US10450877B2; US10539024B2; EP2971596B1

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 LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 175775 A2 20070228; EP 175775 A3 20080723; DE 102005040574 A1 20070315; US 2007160463 A1 20070712

DOCDB simple family (application)
EP 06013281 A 20060627; DE 102005040574 A 20050826; US 50898006 A 20060824