

Title (en)

AXIAL TURBINE WITH A MIXED RADIAL-AXIAL FIRST STAGE

Publication

EP 0355312 B1 19930210 (DE)

Application

EP 89111439 A 19890623

Priority

CH 293888 A 19880803

Abstract (en)

[origin: JPH0270905A] PURPOSE: To omit a separate auxiliary structure for force reception by blading radial flow guide vanes provided at their two ends with root plates in ring-shaped lathed recesses in a guide vane carrier, and forming the free end faces of the root plates into a spherical shape. CONSTITUTION: A radial flow guide vane 10 is engaged in a radial flow member of an inlet passage 4 with root plates 14a, 14b provided respectively at two ends thereof. The root plates are disposed in ring-shaped lathed recessed 15a, 15b respectively. Free end faces 19 of the root plates are of a spherical design so as to abut the radial member of the lathed recess. A normal play 20 is arranged between a curved outer peripheral surface 18 and a corresponding wall of the lathed recess 15. The pressure load produced thereby can be received by the vane 10 without buckling the vane 10.

IPC 1-7

F01D 9/04

IPC 8 full level

F01D 9/02 (2006.01); **F01D 9/04** (2006.01)

CPC (source: EP US)

F01D 9/048 (2013.01 - EP US)

Citation (examination)

US B563412 I5 19760224

Cited by

EP1312759A3; WO2011128179A1

Designated contracting state (EPC)

CH DE FR GB IT LI SE

DOCDB simple family (publication)

EP 0355312 A1 19900228; EP 0355312 B1 19930210; CH 676735 A5 19910228; DE 58903508 D1 19930325; JP 2996674 B2 20000111; JP H0270905 A 19900309; US 4948333 A 19900814

DOCDB simple family (application)

EP 89111439 A 19890623; CH 293888 A 19880803; DE 58903508 T 19890623; JP 19953489 A 19890802; US 37245689 A 19890628