

Title (en)

Arrangement of the root ends of a variable angle row of blades

Title (de)

Anordnung der inneren Enden einer schwenkbaren Schaufelstufe

Title (fr)

Agencement d'extrémités internes d'un étage d'aubes à calage variable

Publication

EP 0780545 B1 19990506 (FR)

Application

EP 96402808 A 19961219

Priority

FR 9515122 A 19951220

Abstract (en)

[origin: EP0780545A1] The assembly consists of a coupling ring (10) which is common to all the blades (1) of the turbine stage. A threaded bush (13) receives each blade pivot shank (15), screwed into a threaded hole in the ring. Each bush and blade shank has a groove (18) designed to receive a retaining pin (16) when aligned. Each blade shank groove is annular, while each bush groove is straight and lies at a tangent to the surface of the shank. The retaining pin is hollow and made from a carbon-based composition material. The assembly also has a thrust ring (19) which surrounds the shank and fits between parallel flat surfaces (20,21) lying perpendicular to the shank, the coupling ring and blade. The inner end of each threaded bush has a polygonal head (22) for adjustment which makes contact with the surface of a circular rail (24) which is attached to the inside of the coupling ring by tongues (25).

IPC 1-7

F01D 17/16

IPC 8 full level

F01D 17/16 (2006.01)

CPC (source: EP)

F01D 17/162 (2013.01)

Cited by

EP1205638A3; FR2846384A1; FR2920492A1; JP2005299667A; EP1586744A3; FR2966530A1; FR2874977A1; US2015016984A1; US9617861B2; GB2333808A; US5921749A; GB2333808B; EP2149678A1; US8162597B2; WO9817896A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0780545 A1 19970625; EP 0780545 B1 19990506; DE 69602342 D1 19990610; DE 69602342 T2 19991104; FR 2742800 A1 19970627; FR 2742800 B1 19980116

DOCDB simple family (application)

EP 96402808 A 19961219; DE 69602342 T 19961219; FR 9515122 A 19951220