Title (en)

ROTATIONAL PART FOR A TURBOMACHINE ROTOR, CORRESPONDING TURBOMACHINE ROTOR, TURBOMACHINE MODULE AND TURBOMACHINE

Title (de)

ROTATIONSTEIL FÜR EINEN ROTOR EINER STRÖMUNGSMASCHINE, ZUGEHÖRIGER ROTOR EINER STRÖMUNGSMASCHINE, MODUL EINER STRÖMUNGSMASCHINE UND STRÖMUNGSMASCHINE

Title (fr

PÍÈCE DE RÉVOLUTION POUR UN ROTOR DE TURBOMACHINE, ROTOR DE TURBOMACHINE, MODULE DE TURBOMACHINE ET TURBOMACHINE ASSOCIÉS

Publication

EP 3123001 A1 20170201 (FR)

Application

EP 15715335 A 20150311

Priority

- FR 1452474 A 20140324
- FR 2015050601 W 20150311

Abstract (en)

[origin: WO2015145016A1] The invention relates to a rotationally symmetrical part, such as a disk (24'), for a turbine engine rotor. Said part has a rotational axis (A) and comprises, on the periphery thereof, an annular row of teeth (22'), said teeth defining grooves (34', 34") therebetween for therein holding fir tree-shaped rotor blade roots (10', 10"). Each tooth comprises a first side flank (40"), comprising at least two projecting portions that are intended for holding a blade root and are separate from each other by a hollow portion, and a second side flank (40') comprising at least two projecting portions (42) that are intended for holding an adjacent blade root and are separated from each other by a hollow portion. Said at least two projecting portions of the first flank are located on circumferences (C3, C7) centered on the rotational axis of the rotationally symmetrical part, and said at least two projecting portions of the second flank are located on circumferences (C4, C8) centered on said rotational axis. Said part is characterized in that each tooth has, on substantially the entire longitudinal dimension thereof, a lack of symmetry in relation to a substantially radial median longitudinal plane (P2). At least one (C4) of said circumferences of the projecting portions of the second flank of each tooth is located between the circumferences (C3, C7) of the projecting portions of the first flank and is radially shifted from said circumferences.

IPC 8 full level

F01D 5/30 (2006.01)

CPC (source: CN EP RU US)

F01D 5/30 (2013.01 - RU); F01D 5/3007 (2013.01 - CN EP US); F05D 2250/72 (2013.01 - CN EP US); F05D 2250/73 (2013.01 - CN EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

FR 3018849 A1 20150925; FR 3018849 B1 20180316; BR 112016021652 A2 20170815; BR 112016021652 B1 20220628; CA 2943461 A1 20151001; CA 2943461 C 20220322; CN 106460530 A 20170222; CN 106460530 B 20180612; EP 3123001 A1 20170201; EP 3123001 B1 20180228; JP 2017519143 A 20170713; JP 6554482 B2 20190731; RU 2016140852 A 20180424; RU 2016140852 A3 20181018; RU 2674859 C2 20181213; US 10436043 B2 20191008; US 2017122117 A1 20170504; WO 2015145016 A1 20151001

DOCDB simple family (application)

FR 1452474 A 20140324; BR 112016021652 A 20150311; CA 2943461 A 20150311; CN 201580020493 A 20150311; EP 15715335 A 20150311; FR 2015050601 W 20150311; JP 2016558366 A 20150311; RU 2016140852 A 20150311; US 201515128095 A 20150311