

Title (en)
ROTOR DISK BLADE FOR TURBOMACHINE, TURBOMACHINE ROTOR DISK, TURBOMACHINE AND METHOD OF ASSEMBLY OF PLATES ONTO A BLADE FOOT

Title (de)
ROTORSCHLEIBENSCHAUDEL FÜR TURBOMASCHINE, TURBOMASCHINEN-ROTORSCHLEIBE, TURBOMASCHINE UND VERFAHREN ZUR MONTAGE VON PLATTEN AUF EINEN SCHAUDELFUSS

Title (fr)
AUBE DE DISQUE DE ROTOR POUR TURBOMACHINE, DISQUE DE ROTOR DE TURBOMACHINE, TURBOMACHINE ET PROCÉDÉ D'ASSEMBLAGE DE PLAQUES SUR UN PIED D'AUBE

Publication
EP 3004554 B1 20221228 (FR)

Application
EP 14731728 A 20140526

Priority
• FR 1354797 A 20130528
• FR 2014051231 W 20140526

Abstract (en)
[origin: WO2014191670A1] A rotor disc blade (10) for a turbomachine made from composite material comprising a fibrous reinforcement obtained by multilayer weaving of yarns and densified by a matrix. The blade (10) comprises a portion that forms the airfoil (12) and the blade root (14) forming a single part, the blade root (14) having two substantially planar opposing side flanks (22, 24) that are formed in the respective extensions of the pressure (12a) and suction (12b) surfaces of the airfoil (10). The blade root (14) is gripped between two metal plates (26, 28) fixed against the side flanks (22, 24) of the blade root by a screw (30) and a nut (40) passing through the plates (26, 28) and the blade root (14). The screw (30) comprises a head (31) bearing on one (26) of the two plates. The nut (40) comprises a head (41) bearing on the other plate (28). The screw and the nut (30, 40) apply, to the metal plates (26, 28), a minimum clamping force capable of taking up, by friction between the metal plates (26, 28) and the side flanks (22, 24) of the blade root (14), a predefined centrifugal force applied to the blade (10).

IPC 8 full level
F01D 5/14 (2006.01); **F01D 5/28** (2006.01); **F01D 5/30** (2006.01)

CPC (source: EP US)
F01D 5/147 (2013.01 - EP US); **F01D 5/282** (2013.01 - EP US); **F01D 5/3007** (2013.01 - EP US); **F01D 5/3015** (2013.01 - US); **F05D 2250/232** (2013.01 - EP US); **F05D 2250/294** (2013.01 - EP US); **F05D 2250/61** (2013.01 - EP US); **F05D 2260/37** (2013.01 - 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

DOCDB simple family (publication)
WO 2014191670 A1 20141204; CA 2913030 A1 20141204; CA 2913030 C 20211109; EP 3004554 A1 20160413; EP 3004554 B1 20221228; FR 3006368 A1 20141205; FR 3006368 B1 20150703; US 10132171 B2 20181120; US 2016108744 A1 20160421

DOCDB simple family (application)
FR 2014051231 W 20140526; CA 2913030 A 20140526; EP 14731728 A 20140526; FR 1354797 A 20130528; US 201414893744 A 20140526