

Title (en)

GAS TURBINE BLADE WITH TIP SECTIONS ANGLED TOWARDS THE PRESSURE SURFACE AND WITH COOLING CHANNELS

Title (de)

GASTURBINENSCHAUFEL MIT ZUR DRUCKSEITE GENEIGTEM KOPF UND MIT KÜHLKANÄLEN

Title (fr)

AUBE DE TURBINE À GAZ À DÉCALAGE VERS L'INTRADOS DES SECTIONS DE TÊTE ET À CANAUX DE REFROIDISSEMENT

Publication

EP 2780551 B1 20160601 (FR)

Application

EP 12795525 A 20121113

Priority

- FR 1160465 A 20111117
- FR 2012052604 W 20121113

Abstract (en)

[origin: WO2013072610A1] The invention relates to a hollow vane (110) comprising a blade extending in a longitudinal direction (R-R'), a root and a head, an internal cooling passage (24) and an open cavity delimited by a bottom wall (26) and a flange (28'), and cooling channels (132) connecting said internal cooling passage (24) and the lower surface (16), said cooling channels being inclined with respect to the lower surface (16a), the stack of sections of blade of the vane at the flange (28') of the vane head being offset towards the lower surface (16a). Characteristically, the wall of the lower surface (16) of the blade has a projecting portion (161) and said cooling channels (132) are arranged in said projecting portion (161) such that they open on the end face (161b) of said projecting portion (161).

IPC 8 full level

F01D 5/20 (2006.01); **F01D 5/14** (2006.01); **F01D 5/18** (2006.01)

CPC (source: EP RU US)

F01D 5/141 (2013.01 - EP US); **F01D 5/186** (2013.01 - US); **F01D 5/187** (2013.01 - EP US); **F01D 5/20** (2013.01 - EP US); **F01D 5/18** (2013.01 - RU US); **F01D 5/20** (2013.01 - RU)

Cited by

EP3216983A1; US11136892B2; US11365638B2

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 2013072610 A1 20130523; BR 112014011838 A2 20170509; BR 112014011838 B1 20211109; CA 2854890 A1 20130523; CA 2854890 C 20190212; CN 103958834 A 20140730; CN 103958834 B 20160824; EP 2780551 A1 20140924; EP 2780551 B1 20160601; FR 2982903 A1 20130524; FR 2982903 B1 20140221; JP 2014533794 A 20141215; JP 6073351 B2 20170201; RU 2014124709 A 20151227; RU 2617633 C2 20170425; US 2014322028 A1 20141030; US 9605545 B2 20170328

DOCDB simple family (application)

FR 2012052604 W 20121113; BR 112014011838 A 20121113; CA 2854890 A 20121113; CN 201280056817 A 20121113; EP 12795525 A 20121113; FR 1160465 A 20111117; JP 2014541733 A 20121113; RU 2014124709 A 20121113; US 201214358851 A 20121113