

Title (en)

BLADE ARRANGEMENT OF A GAS TURBINE

Title (de)

SCHAUFELANORDNUNG EINER GASTURBINE

Title (fr)

DISPOSITIF D'AUBES D'UNE TURBINE À GAZ

Publication

EP 2313615 A1 20110427 (DE)

Application

EP 09781705 A 20090811

Priority

- EP 2009060387 W 20090811
- CH 12852008 A 20080815

Abstract (en)

[origin: WO2010018174A1] The invention relates to the blade arrangement (30) of a gas turbine with at least one blade (11), which protrudes in the radial direction into a hot gas channel (13) arranged concentrically in relation to an axis (16) and ends in a blade tip (27), which lies opposite, with a clearance (25), a heat shield (12) bounding the hot gas channel (13), wherein the blade (11) and the heat shield (12) are movable in relation to each other in the circumferential direction, and the blade tip (27) and the heat shield (12) are covered with layers (22, 23, 24) that make it possible for the blade tip (27) to grind into the heat shield (12) in a specifically intended manner. With such a blade arrangement, a reduction in the clearance by allowing grinding-in is achieved in a simplified way by the heat shield (12) having an exterior abradable layer of a porous thermal barrier coating (23), and by the blade tip (27) being provided with a homogeneous metallic covering layer (24).

IPC 8 full level

F01D 11/12 (2006.01)

CPC (source: EP US)

F01D 5/288 (2013.01 - US); **F01D 11/122** (2013.01 - EP US); **F01D 11/14** (2013.01 - US)

Citation (search report)

See references of WO 2010018174A1

Cited by

DE102017207238A1; US11274560B2

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2010018174 A1 20100218; CH 699312 A1 20100215; EP 2313615 A1 20110427; EP 2313615 B1 20160323; EP 2313615 B2 20230927;
US 2011171039 A1 20110714

DOCDB simple family (application)

EP 2009060387 W 20090811; CH 12852008 A 20080815; EP 09781705 A 20090811; US 201113024545 A 20110210