

Title (en)
Rotor blade for an axial flow turbomachine

Title (de)
Laufschaufel für eine axial durchströmbare Turbomaschine

Title (fr)
Aube de rotor pour une turbomachine à flux axial

Publication
EP 2282010 A1 20110209 (DE)

Application
EP 09008226 A 20090623

Priority
EP 09008226 A 20090623

Abstract (en)
The blade (10) has a platform (14) with a dovetail-shaped blade base (16) that includes two opposing side walls (20, 22). The walls diverge from the Platform to a blade base lower side (18). A longitudinal axis of the rotor blade is arranged perpendicular to a platform surface in a region of a connection between a curved shovel blade (12) and the platform. The walls are curved along an extension between the platform and the lower side in same direction, such that blade base-center line (24) is curved in corresponding direction and is centrally arranged between the walls.

Abstract (de)
Die Erfindung betrifft eine Laufschaufel (10) für eine axial durchströmbare Turbomaschine, vorzugsweise Turbine, bei der zur Verringerung der mechanischen Belastung im Schaufelfuß (16) und der diesen haltenden Wände (30, 32) eines Rotors die zwei einander gegenüberliegenden Seitenwände (20, 22) des Schaufelfußes (16) entlang ihrer Erstreckung zwischen Plattform (14) und Schaufelfußunterseite (18) stetig gewölbt sind.

IPC 8 full level
F01D 5/30 (2006.01)

CPC (source: EP US)
F01D 5/3007 (2013.01 - EP US)

Citation (search report)

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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 TR

Designated extension state (EPC)
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DOCDB simple family (publication)
WO 2010149555 A1 20101229; CN 102459819 A 20120516; CN 102459819 B 20141022; EP 2282010 A1 20110209; EP 2446118 A1 20120502; EP 2446118 B1 20130501; JP 2012530871 A 20121206; JP 5443601 B2 20140319; US 2012093654 A1 20120419; US 8951016 B2 20150210

DOCDB simple family (application)
EP 2010058508 W 20100617; CN 201080028162 A 20100617; EP 09008226 A 20090623; EP 10725691 A 20100617; JP 2012516650 A 20100617; US 201013378453 A 20100617