

Title (en)
TURBINE ROTOR BLADE

Title (de)
TURBINENROTORSCHAUFEL

Title (fr)
PALE DE ROTOR DE TURBINE

Publication
EP 2230385 A4 20110316 (EN)

Application
EP 09701788 A 20090108

Priority
• JP 2009050160 W 20090108
• JP 2008006895 A 20080116

Abstract (en)
[origin: EP2230385A1] It is possible to easily and rapidly slot a blade root of a final (last) turbine rotor blade into a blade groove on a turbine disc even when the plan-view shape of a shroud of the turbine rotor blade is complex. A turbine rotor blade (1) that is provided with a blade root (3) that is slotted into a blade groove formed on a circumferential portion of the turbine disc to hold the whole blade, a blade portion (4) that is exposed to high-temperature gas, a platform (5) that supports this blade portion (4), a shank (6) that connects the blade root (3) and the platform (5), and a shroud (7) that extends along the circumferential direction from the end of the blade portion (4) has a cut-out portion (8) cut out to a predetermined depth, either at the leading-edge or the trailing-edge of the blade root (3), along the lengthwise direction thereof from the end of the blade root (3) to an intermediate part of the shank (6).

IPC 8 full level
F01D 5/30 (2006.01)

CPC (source: EP US)
F01D 5/225 (2013.01 - EP US); **F01D 5/3007** (2013.01 - EP US); **Y10T 29/49321** (2015.01 - EP US)

Citation (search report)
• [X] US 6030178 A 20000229 - CARUSO DAVID ALAN [US]
• [X] EP 0745756 A1 19961204 - ABB MANAGEMENT AG [CH]
• [A] US 1720729 A 19290716 - HANZLIK HENRY J
• [A] US 2006177314 A1 20060810 - YAMASHITA YUTAKA [JP], et al
• [AD] JP 2006283681 A 20061019 - HITACHI LTD
• See references of WO 2009090908A1

Cited by
EP2551460A1

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

DOCDB simple family (publication)
EP 2230385 A1 20100922; EP 2230385 A4 20110316; CN 101743380 A 20100616; CN 101743380 B 20140101; JP 4939613 B2 20120530; JP WO2009090908 A1 20110526; RU 2010104753 A 20120227; US 2011217175 A1 20110908; WO 2009090908 A1 20090723; ZA 201001031 B 20110831

DOCDB simple family (application)
EP 09701788 A 20090108; CN 200980000565 A 20090108; JP 2009050160 W 20090108; JP 2009550004 A 20090108; RU 2010104753 A 20090108; US 67349409 A 20090108; ZA 201001031 A 20100211