

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)
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DOCDB simple family (application)
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