

Title (en)
TURBINE BLADE AND TURBINE

Title (de)
TURBINENSCHAUFEL UND TURBINE

Title (fr)
AUBE DE TURBINE ET TURBINE

Publication
EP 3158168 B1 20230517 (DE)

Application
EP 15756631 A 20150827

Priority
• EP 14182462 A 20140827
• EP 2015069615 W 20150827

Abstract (en)
[origin: WO2016030449A1] The invention relates to a turbine blade (1) with an internally cooled turbine blade airfoil (3), in which a hollow space (10) is divided by rib elements (11, 12) in at least one cooling channel (13) carrying a coolant (14), wherein a recess of material (29), which is arranged next to at least one rib element (11, 12) on a turbine blade airfoil wall (5), is embodied such that tensions occurring within the turbine blade airfoil (3) can be reduced in a region (28) surrounding the at least one rib element (11, 12).

IPC 8 full level
F01D 5/14 (2006.01); **F01D 5/18** (2006.01)

CPC (source: EP US)
F01D 5/147 (2013.01 - EP US); **F01D 5/18** (2013.01 - EP US); **F05D 2220/32** (2013.01 - US); **F05D 2260/94** (2013.01 - EP US); **F05D 2260/941** (2013.01 - EP US)

Citation (examination)
• US 2004094287 A1 20040520 - WANG JOHN Z [US]
• US 5296308 A 19940322 - CACCAVALE CHARLES F [US], et al

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)
EP 2990598 A1 20160302; CN 106795770 A 20170531; CN 106795770 B 20181211; EP 3158168 A1 20170426; EP 3158168 B1 20230517; US 2017234136 A1 20170817; WO 2016030449 A1 20160303

DOCDB simple family (application)
EP 14182462 A 20140827; CN 201580045956 A 20150827; EP 15756631 A 20150827; EP 2015069615 W 20150827; US 201515504361 A 20150827