

Title (en)

Turbine blade, in particular final stage rotor blade of a steam turbine, with an erosion protection component

Title (de)

Turbinenschaufel, insbesondere Endstufenlaufschaufel für eine Dampfturbine, mit einem Erosionsschutzbauteil

Title (fr)

Aube de turbine, notamment aube du dernier étage d'une turbine à vapeur, comprenant un élément de protection contre l'érosion

Publication

EP 2743455 A3 20180117 (DE)

Application

EP 13194984 A 20131129

Priority

DE 102012223220 A 20121214

Abstract (en)

[origin: EP2743455A2] The blade (1) has an erosion protection component (2) provided in the blade. A firmly bonded connection is secured at the blade. A positive connection is fixed with a form closure element (3) by pins or needles, which are engaged with a composite material. A single-piece is formed in the closure element and the erosion protection component. The erosion protection component is formed from a hard metal, titanium or ceramic. An independent claim is also included for a method for manufacturing a turbine blade.

IPC 8 full level

F01D 5/28 (2006.01)

CPC (source: EP)

F01D 5/282 (2013.01); **F01D 5/286** (2013.01); **F05D 2220/31** (2013.01); **F05D 2220/3215** (2013.01); **F05D 2260/30** (2013.01); **F05D 2300/603** (2013.01)

Citation (search report)

- [X] GB 2288441 A 19951018 - MTU MUENCHEN GMBH [DE]
- [X] EP 2483526 A1 20120808 - SIEMENS AG [DE]
- [X] US 4006999 A 19770208 - BRANTLEY JAMES W, et al
- [X] US 5174024 A 19921229 - STERRETT TERRY L [CH]

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2743455 A2 20140618; EP 2743455 A3 20180117; DE 102012223220 A1 20140618

DOCDB simple family (application)

EP 13194984 A 20131129; DE 102012223220 A 20121214