

Title (en)

DUAL ALLOY TURBINE BLADE MANUFACTURED BY METAL SPRAY ADDITIVE MANUFACTURING

Title (de)

DURCH GENERATIVE METALLSPRÜHFERTIGUNG HERGESTELLTE DOPPELLEGIERUNGSTURBINENSCHAUFEL

Title (fr)

AUBE DE TURBINE À DOUBLE ALLIAGE FABRIQUÉE PAR FABRICATION ADDITIVE DE PULVÉRISATION MÉTALLIQUE

Publication

EP 3572623 A1 20191127 (EN)

Application

EP 18174258 A 20180525

Priority

EP 18174258 A 20180525

Abstract (en)

There is provided a method of manufacturing a turbine blade comprising an aerofoil portion and a root portion, the method comprising the steps of:(a) providing a cast component of a first alloy composition comprising a cast aerofoil portion and a cast root portion;(b) applying a second alloy composition to the surface of the cast root portion to provide an oversized root portion; and(c) shaping the oversized root portion.

IPC 8 full level

F01D 5/30 (2006.01); **C23C 24/08** (2006.01); **C23C 28/02** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP)

C23C 4/08 (2013.01); **C23C 4/18** (2013.01); **C23C 24/04** (2013.01); **F01D 5/288** (2013.01); **F01D 5/3007** (2013.01); **F01D 5/3092** (2013.01); **F05D 2230/211** (2013.01); **F05D 2230/312** (2013.01); **F05D 2300/175** (2013.01); **F05D 2300/606** (2013.01)

Citation (search report)

- [XYI] EP 3075880 A1 20161005 - SIEMENS AG [DE]
- [Y] EP 0367958 A1 19900516 - ALLIED SIGNAL INC [US]
- [Y] WO 2007140805 A1 20071213 - SIEMENS AG [DE], et al
- [A] WO 0017490 A2 20000330 - ARNOLD JAMES E [US]
- [A] EP 2876185 A1 20150527 - SIEMENS AG [DE]

Cited by

EP4389924A1; US11898986B2; WO2024132348A1; US11935662B2; US11662300B2

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 3572623 A1 20191127

DOCDB simple family (application)

EP 18174258 A 20180525