

Title (en)

Process for manufacturing coated turbine blades

Title (de)

Verfahren zum Herstellen von beschichteten Turbinenlaufschaufeln

Title (fr)

Procédé pour la fabrication des aubes de turbine avec revêtement

Publication

EP 1985803 A1 20081029 (DE)

Application

EP 07008237 A 20070423

Priority

EP 07008237 A 20070423

Abstract (en)

The method involves coating a turbine blade (40) with a protective layer (54) and a recess is inserted in a blade vane (48) of a blade (42) of the turbine blade for adjusting the resonance frequency of the turbine blade. The recesses are introduced after coating of the turbine blade. An independent claim is also included for a blade ring for a rotor of a turbine with axial flow.

Abstract (de)

Die Erfindung betrifft ein Verfahren zum Herstellen einer beschichteten Turbinenlaufschaufel (40), wodurch deren Frequenzeigenschaft besonders einfach an die erforderlichen Randbedingungen angepasst werden kann. Hierzu ist vorgesehen, dass das Einbringen von Ausnehmungen in eine Schaufelspitze (4) des Schaufelblatts (42) der Turbinenschaufel (40) nach dem Beschichten der Turbinenlaufschaufel (40) erfolgt.

IPC 8 full level

F01D 5/16 (2006.01)

CPC (source: EP US)

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Citation (search report)

- [Y] WO 03062606 A1 20030731 - ALSTOM SWITZERLAND LTD [CH], et al
- [Y] US 4097192 A 19780627 - KULINA MARK R
- [A] JP 2000130102 A 20000509 - ISHIKAWAJIMA HARIMA HEAVY IND
- [A] EP 1640562 A1 20060329 - SIEMENS AG [DE]
- [A] EP 1752610 A2 20070214 - UNITED TECHNOLOGIES CORP [US]

Cited by

EP3187685A1; EP3456921A3; US11002293B2; US10669857B2; WO2014053185A1; WO2017114644A1; US10443411B2; US10689987B2; US10215034B2; US10995625B2; US10837459B2; US10865806B2

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Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 07008237 A 20070423; AT 08736059 T 20080410; CA 2684810 A 20080410; CN 200880012147 A 20080410; DE 502008001450 T 20080410; EP 08736059 A 20080410; EP 2008054338 W 20080410; ES 08736059 T 20080410; JP 2010504614 A 20080410; MX 2009010923 A 20080410; PL 08736059 T 20080410; RU 2009142996 A 20080410; US 59678008 A 20080410