

Title (en)

A cooled turbine blade comprising the inner ribs between the cooling cavities which provide for breaking points in order to reduce thermal gradients

Title (de)

Eine gekühlte Turbinenschaufel, welche interne Verbindungsrippen zwischen den Kühlräumen beinhaltet, welche Sollbruchstellen zur Verringerung von Thermischen Spannungen aufweisen

Title (fr)

UNE AUBE DE TURBINE REFROIDIE COMPORTANT DES NERVURES INTERNES ENTRE LES CAVITÉS DE REFROIDISSEMENT COMPORTANT DES POINTS DE RUPTURE POUR RÉDUIRE LES CONTRAINTES THERMIQUES

Publication

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Application

**EP 14184930 A 20140916**

Priority

EP 14184930 A 20140916

Abstract (en)

[origin: WO2016041761A1] The invention relates to a turbine blade (1) having an internally cooled turbine blade airfoil (3) in which a hollow space (10) is divided by rib elements (11, 12) into at least one cooling duct (13) carrying a coolant, wherein in at least one of the rib elements (11, 12) means (33) are disposed for producing a separating tear (30) which extends at least partially in the longitudinal direction (29) of the at least one rib element (11, 12) .

Abstract (de)

Die Erfindung betrifft eine Turbinenschaufel (1) mit einem innengekühlten Turbinenschaufelblatt (3), in welchem ein Hohlraum (10) durch Rippenelemente (11, 12) in wenigstens einen Kühlmittel führenden Kühlkanal (13) unterteilt ist, wobei in wenigstens einem der Rippenelemente (11, 12) Mittel (33) zum Erzeugen eines sich in Längsrichtung (29) des wenigstens einen Rippenelements (11, 12) zumindest teilweise erstreckenden Teilungsrissses (30) angeordnet sind.

IPC 8 full level

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CPC (source: EP US)

**F01D 5/147** (2013.01 - EP US); **F01D 5/18** (2013.01 - EP US); **F05D 2260/20** (2013.01 - US)

Citation (search report)

- [XA] EP 1757773 A1 20070228 - SIEMENS AG [DE]
- [A] EP 1895102 A1 20080305 - SIEMENS AG [DE]
- [A] US 3973874 A 19760810 - CORSMEIER ROBERT J, et al
- [A] WO 2007012592 A1 20070201 - SIEMENS AG [DE], et al

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US10844726B2

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Designated extension state (EPC)

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DOCDB simple family (application)

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