

Title (en)

Shrouded turbine blade with contoured platform and axial dovetail

Title (de)

Turbinenlaufschaufel mit Deckband, profilierter Plattform und Axialschwalbenschwanz

Title (fr)

Aube de turbine carénée avec plateforme profilée et segment axial en queue d'aronde

Publication

EP 2423438 A2 20120229 (EN)

Application

EP 11171293 A 20110624

Priority

US 87282710 A 20100831

Abstract (en)

A turbine blade includes an airfoil having a root, a tip, a concave pressure side, and a laterally opposite convex suction side, the pressure and suction sides extending in chord between opposite leading and trailing edges; an outer platform disposed at the tip of the airfoil, the outer platform having spaced-apart lateral edges which each define an interlocking element; an inner platform with two spaced-apart curved lateral edges disposed at the root of the airfoil, the inner platform having a hot side facing the airfoil which is contoured in a non-axisymmetric shape; and a dovetail extending radially inward from the opposite side of the inner platform, wherein the dovetail is axially straight.

IPC 8 full level

F01D 5/22 (2006.01)

CPC (source: EP US)

F01D 5/143 (2013.01 - EP US); **F01D 5/145** (2013.01 - EP US); **F01D 5/3007** (2013.01 - EP US); **F05D 2240/80** (2013.01 - EP US)

Cited by

EP3225794A1; EP2963242A1; EP2938829A4; EP3219914A1; WO2015050729A1; WO2019046006A1; WO2014105102A1; US9879542B2

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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