

Title (en)

LOCALIZED REPAIR OF SUPERALLOY COMPONENT

Title (de)

LOKALEN REPARATUR VON SUPERLEGIERUNGSKOMPONENTEN

Title (fr)

RÉPARATION LOCALISÉE D'UN COMPOSANT DE SUPERALLIAGE

Publication

**EP 2950974 A1 20151209 (EN)**

Application

**EP 14704269 A 20140131**

Priority

- US 201313755098 A 20130131
- US 201313956431 A 20130801
- US 2014014123 W 20140131

Abstract (en)

[origin: WO2014121060A1] A method comprising: removing a gas turbine vane (140) from service; removing a damaged portion (144) of the component to reveal a repair surface; covering the repair surface with a powdered superalloy material; applying an energy beam to the powder to melt selected portions of the powder to form a patterned first layer of superalloy material (116') joined to the repair surface; covering at least a portion of the first layer of superalloy material with an additional amount of powdered superalloy material; applying the energy beam to the additional amount of powdered superalloy material to form a second layer of superalloy material joined to the first layer; repeating the covering and applying steps until layers of superalloy material form a new portion of the component to replace the damaged portion; and returning the vane (140) to service. The damaged portion may belong to a honeycomb structure (148).

IPC 8 full level

**B23P 6/00** (2006.01); **B23K 26/34** (2014.01); **B23P 6/04** (2006.01); **F01D 5/00** (2006.01)

CPC (source: EP)

**B23K 26/342** (2015.10); **B23P 6/007** (2013.01); **F01D 5/005** (2013.01); **F01D 11/127** (2013.01); **B23K 2101/001** (2018.07); **Y02T 50/60** (2013.01)

Citation (search report)

See references of WO 2014121060A1

Cited by

US10583490B2

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

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