

Title (en)

TURBINE BLADE ASSEMBLY COMPRISING A SEALING ELEMENT MADE OF ADHESIVE MATERIAL

Title (de)

TURBINENSCHAUFELANORDNUNG MIT EINEM AUS HAFTENDEM MATERIAL HERGESTELLTEN DICHTUNGSELEMENT

Title (fr)

ENSEMble D'AUBE DE TURBINE COMPRENANT UN ELEMENT D'ETANCHEITE CONSTITUE D'UN MATERIAU ADHESIF

Publication

EP 3447248 A1 20190227 (EN)

Application

EP 17187088 A 20170821

Priority

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Abstract (en)

A turbine blade assembly includes a first and a second blade root of a first and a second turbine blade inserted adjoining to each other, into a rim section of a rotor disc thereby defining a common cavity between a first and a second non-aerofoil sections of the turbine blades. A sealing element is located inside the common cavity, adhered to an inner surface of the common cavity. The sealing element extends between the first and the second non-aerofoil sections to at least partially fill the common cavity. The sealing element includes an adhesive material, or is formed solely from the adhesive material. The sealing element seals the gap between the non-aerofoil sections and consequently protects the non-aerofoil sections, particularly the shanks of the turbine blades and the rim section of the rotor disc, from the harmful effects of the hot working gases.

IPC 8 full level

F01D 11/00 (2006.01); **F01D 5/22** (2006.01)

CPC (source: EP)

F01D 5/22 (2013.01); **F01D 11/006** (2013.01); **F01D 11/008** (2013.01); **F05D 2240/55** (2013.01)

Citation (applicant)

- WO 2009053169 A1 20090430 - SIEMENS AG [DE], et al
- WO 2008046684 A1 20080424 - SIEMENS AG [DE], et al

Citation (search report)

- [XY] WO 2007063128 A1 20070607 - SIEMENS AG [DE], et al
- [XY] US 4111603 A 19780905 - STAHL WILLIAM F
- [Y] WO 2009126191 A2 20091015 - SIEMENS ENERGY INC [US], et al
- [Y] US 2008199307 A1 20080821 - KELLER DOUGLAS A [US]
- [A] EP 2055898 A2 20090506 - UNITED TECHNOLOGIES CORP [US]

Designated contracting state (EPC)

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Designated extension state (EPC)

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