

Title (en)

DIFFUSER VANE MADE OF COMPOSITE MATERIAL FOR A GAS TURBINE ENGINE AND METHOD FOR MANUFACTURING SAME

Title (de)

AUS VERBUNDSTOFFMATERIAL HERGESTELLTE DIFFUSORSCHAUFEL FÜR EINEN GASTURBINENMOTOR UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

AUBE DE REDRESSEUR EN MATÉRIAUX COMPOSÉ POUR MOTEUR À TURBINE À GAZ ET SON PROCÉDÉ DE FABRICATION.

Publication

EP 3194151 A1 20170726 (FR)

Application

EP 15763962 A 20150820

Priority

- FR 1458020 A 20140827
- FR 2015052237 W 20150820

Abstract (en)

[origin: WO2016030613A1] The invention relates to a diffuser vane (2) for a gas turbine engine, comprising a vane assembly (4) made of a composite material having a fibrous reinforcement densified by a matrix, the fibrous reinforcement being obtained from long fibres pre-impregnated and agglomerated in the form of a mat, the vane assembly being provided on at least one leading edge with a reinforcement strip (10-1), said reinforcement strip being made of a single strip of a unidirectional fabric or a textile, or of a stack of a plurality of pre-impregnated plies of a unidirectional fabric or a textile made of carbon fibres or glass fibres, and at least one platform (6, 8) positioned at a radial end of the vane assembly, the platform being made of a composite material having a fibrous reinforcement densified by a matrix, the fibrous reinforcement being obtained from pre-impregnated long fibres. The invention also relates to a method for manufacturing such a vane.

IPC 8 full level

B29C 70/46 (2006.01); **B29C 43/18** (2006.01); **B29C 70/78** (2006.01); **B29D 99/00** (2010.01); **F01D 5/28** (2006.01); **B29L 31/08** (2006.01)

CPC (source: EP RU US)

B29C 45/0005 (2013.01 - US); **B29C 45/14** (2013.01 - RU); **B29C 45/40** (2013.01 - US); **B29C 70/46** (2013.01 - EP RU US);
B29C 70/78 (2013.01 - EP US); **B29D 99/0025** (2013.01 - EP US); **F01D 5/282** (2013.01 - EP US); **F01D 5/286** (2013.01 - EP US);
F01D 9/02 (2013.01 - EP US); **B29L 2031/08** (2013.01 - EP US); **F05D 2220/32** (2013.01 - US); **F05D 2230/20** (2013.01 - US);
F05D 2300/603 (2013.01 - US); **Y02T 50/60** (2013.01 - EP US)

Citation (search report)

See references of WO 2016030613A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2016030613 A1 20160303; BR 112017003641 A2 20171205; BR 112017003641 B1 20220322; CA 2957834 A1 20160303;
CA 2957834 C 20230328; CN 106794641 A 20170531; EP 3194151 A1 20170726; FR 3025248 A1 20160304; FR 3025248 B1 20190823;
JP 2017528641 A 20170928; RU 2017109815 A 20180927; RU 2017109815 A3 20190213; RU 2703225 C2 20191015;
US 2017254212 A1 20170907

DOCDB simple family (application)

FR 2015052237 W 20150820; BR 112017003641 A 20150820; CA 2957834 A 20150820; CN 201580045790 A 20150820;
EP 15763962 A 20150820; FR 1458020 A 20140827; JP 2017511286 A 20150820; RU 2017109815 A 20150820; US 201515506343 A 20150820