

Title (en)

GAS TURBINE WITH EXTENDED TURBINE BLADE STREAM ADHESION

Title (de)

GASTURBINE MIT ERWEITERTER TURBINENSCHAUFEL-STRÖMUNGSHAFTUNG

Title (fr)

TURBINE À GAZ AVEC ADHÉSION PROLONGÉE DE COURANT D'AUBE DE TURBINE

Publication

EP 2798173 A4 20150304 (EN)

Application

EP 12871834 A 20121227

Priority

- US 201161582243 P 20111230
- US 2012071879 W 20121227

Abstract (en)

[origin: WO2013141928A1] A gas turbine may include turbine blades configured to improve stream adhesion by selectively attracting or reducing repulsion of charged particles carried by a combustion gas stream. According to an embodiment, a gas turbine may include a combustor configured to output a combustion gas stream, the combustion gas stream being controlled or driven to at least intermittently or periodically include charged particles having a first sign. For example the first sign may be positive during at least an instant. The gas turbine also includes at least one turbine configured to receive the combustion gas stream (carrying the charged particles at least intermittently or periodically). The turbine includes at least one turbine stage having turbine blades. Each turbine blade includes a repelling surface configured to be at least intermittently or periodically held or driven to a repelling voltage having a polarity the same as the charged particles having the first sign.

IPC 8 full level

F01D 5/14 (2006.01); **F01D 5/18** (2006.01)

CPC (source: EP US)

F01D 5/12 (2013.01 - US); **F01D 5/145** (2013.01 - EP US); **F01D 5/186** (2013.01 - US); **F05D 2270/172** (2013.01 - EP US); **Y02T 50/60** (2013.01 - EP US)

Citation (search report)

- [YA] US 2011203771 A1 20110825 - GOODSON DAVID [US], et al
- [Y] US 5813835 A 19980929 - CORSMEIER ROBERT J [US], et al
- [Y] US 2004101405 A1 20040527 - TURNER MARK GRAHAM [US], et al
- [A] US 2008131265 A1 20080605 - LEE CHING-PANG [US], et al
- See references of WO 2013141928A1

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)

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DOCDB simple family (application)

US 2012071879 W 20121227; EP 12871834 A 20121227; US 201213727579 A 20121226