

Title (en)

GAS TURBINE ENGINE TIP CLEARANCE CONTROL

Title (de)

KOPFSPIELKONTROLLE FÜR GASTURBINENMOTOR

Title (fr)

COMMANDE DE JEU D'EXTRÉMITÉ DE TURBINE À GAZ

Publication

EP 2805025 A4 20151111 (EN)

Application

EP 12872268 A 20121228

Priority

- US 201161581793 P 20111230
- US 2012072133 W 20121228

Abstract (en)

[origin: WO2013141937A1] A gas turbine engine is disclosed having a thermoelectric device capable of changing a tip clearance in a turbomachinery component. In one non-limiting form the turbomachinery component is a compressor. The thermoelectric device can be used in some forms to harvest power derived from a waste heat. The tip clearance control system can include a sensor used to determine a clearance between a tip and a wall of the turbomachinery component.

IPC 8 full level

F01D 11/14 (2006.01)

CPC (source: EP US)

F01D 5/14 (2013.01 - US); **F01D 11/20** (2013.01 - EP US); **F01D 11/22** (2013.01 - EP US); **F01D 11/24** (2013.01 - EP US); **F05D 2270/44** (2013.01 - EP US)

Citation (search report)

- [X] US 2994472 A 19610801 - BOTJE JACOBUS M
- [X] US 5667358 A 19970916 - GAUL GREGORY R [US]
- [E] EP 2597274 A2 20130529 - GEN ELECTRIC [US]
- [E] EP 2664746 A2 20131120 - GEN ELECTRIC [US]
- See references of WO 2013141937A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

WO 2013141937 A1 20130926; CA 2862644 A1 20130926; CA 2862644 C 20190827; EP 2805025 A1 20141126; EP 2805025 A4 20151111; EP 2805025 B1 20180502; US 2014314567 A1 20141023

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US 2012072133 W 20121228; CA 2862644 A 20121228; EP 12872268 A 20121228; US 201414318282 A 20140627