

Title (en)

GAS TURBINE HAVING AN IMPROVED COOLING ARCHITECTURE

Title (de)

GASTURBINE MIT VERBESSERTER KÜHLARCHITEKTUR

Title (fr)

TURBINE À GAZ À ARCHITECTURE DE REFROIDISSEMENT AMÉLIORÉE

Publication

EP 2242915 B1 20180613 (DE)

Application

EP 09713405 A 20090216

Priority

- EP 2009051763 W 20090216
- CH 2442008 A 20080220

Abstract (en)

[origin: WO2009103671A1] A thermal machine, in particular a gas turbine, comprises a hot gas duct that is externally delimited by a shell (21). A cooling duct (20) formed by the shell (21) and a cooling jacket (19) that externally surrounds the shell (21) is designed on the external side of the shell (21) in order for a cooling medium, especially cooling air (24), to have a convective cooling effect. In order to extend the service life of such a machine, the cooling jacket (19) has corresponding local deflections (26) in the conduction of the cooling medium flow such that local irregularities in the thermal stress on the shell (21) or in the cooling medium flow within the cooling duct (20) are compensated.

IPC 8 full level

F02C 7/18 (2006.01); **F01D 9/02** (2006.01)

CPC (source: EP US)

F01D 9/023 (2013.01 - EP US); **F01D 25/12** (2013.01 - EP US); **F05D 2260/201** (2013.01 - EP US); **F05D 2260/221** (2013.01 - EP US);
F05D 2260/2212 (2013.01 - EP US); **F05D 2260/2214** (2013.01 - EP US); **F05D 2260/22141** (2013.01 - EP US);
F23R 2900/03045 (2013.01 - EP US)

Designated contracting state (EPC)

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 SE SI SK TR

DOCDB simple family (publication)

WO 2009103671 A1 20090827; AU 2009216788 A1 20090827; AU 2009216788 B2 20140925; EP 2242915 A1 20101027;
EP 2242915 B1 20180613; MY 154620 A 20150715; US 2011110761 A1 20110512; US 8413449 B2 20130409

DOCDB simple family (application)

EP 2009051763 W 20090216; AU 2009216788 A 20090216; EP 09713405 A 20090216; MY PI20103908 A 20090216; US 85717110 A 20100816