

Title (en)

GAS TURBINE OUTER CASE ACTIVE AMBIENT COOLING INCLUDING AIR EXHAUST INTO A SUB-AMBIENT REGION OF EXHAUST FLOW

Title (de)

AKTIVE UMGEBUNGSKÜHLUNG FÜR GASTURBINENAUSSENGEHÄUSE MIT ABLUFTSTROM IN EINEN UNTERBEREICH DES ABGASSTROMS

Title (fr)

REFROIDISSEMENT AMBIANT ACTIF DE CARTER EXTÉRIEUR DE TURBINE À GAZ COMPRENANT UN ÉCHAPPEMENT D'AIR DANS UNE RÉGION AYANT UNE PRESSION INFÉRIEURE À LA PRESSION AMBIANTE D'UN FLUX D'ÉCHAPPEMENT

Publication

EP 2948645 A2 20151202 (EN)

Application

EP 14702475 A 20140122

Priority

- US 201313746457 A 20130122
- EP 2014051164 W 20140122

Abstract (en)

[origin: WO2014114652A2] A gas turbine engine including an outer case extending circumferentially around the central longitudinal axis. A cooling channel is associated with the outer surface of the outer case, the cooling channel having a channel inlet and a channel outlet. An air duct is provided including an inlet end in fluid communication with the channel outlet and an outlet end in fluid communication with an exhaust gas flow from a turbine section of the gas turbine engine. An exit structure is located at the air duct outlet end, and the exit structure provides a sub-ambient pressure at the air duct outlet end to induce a flow from the air duct inlet end to the air duct outlet end.

IPC 8 full level

F01D 25/14 (2006.01); **F01D 9/06** (2006.01); **F01D 25/12** (2006.01); **F01D 25/16** (2006.01); **F01D 25/30** (2006.01)

CPC (source: EP)

F01D 9/065 (2013.01); **F01D 25/12** (2013.01); **F01D 25/145** (2013.01); **F01D 25/162** (2013.01); **F01D 25/30** (2013.01); **F05D 2240/15** (2013.01)

Citation (search report)

See references of WO 2014114652A2

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 2014114652 A2 20140731; **WO 2014114652 A3 20140918**; CN 104919143 A 20150916; EP 2948645 A2 20151202; JP 2016504527 A 20160212; RU 2015130234 A 20170303

DOCDB simple family (application)

EP 2014051164 W 20140122; CN 201480005328 A 20140122; EP 14702475 A 20140122; JP 2015553127 A 20140122; RU 2015130234 A 20140122