

Title (en)

FILM COOLING HOLE IN GAS TURBINE COMPONENTS

Title (de)

FILMKÜHLOCH IN GASTURBINEN BAUTEILEN

Title (fr)

TROU POUR FILM D'AIR DE REFROIDISSEMENT DANS DES PIÈCES DE TURBINE À GAZ

Publication

EP 3408501 A1 20181205 (DE)

Application

EP 17715064 A 20170322

Priority

- DE 102016204824 A 20160323
- EP 2017056834 W 20170322

Abstract (en)

[origin: WO2017162743A1] The invention relates to a film cooling hole (20) of gas turbine components to be cooled, having an inflow section (26) with a constant flow area, to which a diffuser section (28) with a variable flow area is connected. The aim of the invention is to provide a particularly efficient film cooling. To this end, the diffuser region (26) is simply widened in the direction perpendicular to the flow direction of the hotter medium MH.

IPC 8 full level

F01D 5/18 (2006.01)

CPC (source: EP US)

F01D 5/186 (2013.01 - EP US); **F05D 2250/324** (2013.01 - US); **F05D 2250/52** (2013.01 - US); **F05D 2260/202** (2013.01 - EP US);
F23R 2900/03042 (2013.01 - US)

Citation (search report)

See references of WO 2017162743A1

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 2017162743 A1 20170928; DE 102016204824 A1 20170928; EP 3408501 A1 20181205; EP 3408501 B1 20210317;
US 2019078443 A1 20190314

DOCDB simple family (application)

EP 2017056834 W 20170322; DE 102016204824 A 20160323; EP 17715064 A 20170322; US 201716085176 A 20170322