

Title (en)

COOLING CONCEPT FOR A TURBINE COMPONENT

Title (de)

KÜHLKONZEPT FÜR EINE TURBINENKOMPONENTE

Title (fr)

CONCEPT DE REFROIDISSEMENT D'UN COMPOSANT DE TURBINE

Publication

**EP 3514328 A1 20190724 (EN)**

Application

**EP 18152326 A 20180118**

Priority

EP 18152326 A 20180118

Abstract (en)

The present invention relates to a turbine component (12, 12a) comprising a base body (14, 14a) having at least one cavity (16) providing a flow path (18, 18a) for a cooling medium (20) and at least one wall (22, 22a) at least partially surrounding the at least one cavity (16) and wherein the at least one wall (22, 22a) has an inner surface (24) being oriented towards the at least one cavity (16) and an outer surface (26) being oriented opposed to the inner surface (24) of the at least one wall (22, 22a), wherein the at least one turbine component (12, 12a) further comprises at least one layer (28) of porous material and at least one thermal barrier coating (30), wherein the at least one layer (28) of porous material is arranged on the outer surface (26) of the at least one wall (22, 22a) of the base body (14, 14a) and the thermal barrier coating (30) is arranged at least partially on top of the at least one layer (28) of porous material. Due to this a good cooling efficiency can be provided.

IPC 8 full level

**F01D 5/18** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP)

**F01D 5/183** (2013.01); **F01D 5/288** (2013.01); **F05D 2230/90** (2013.01); **F05D 2260/202** (2013.01)

Citation (search report)

- [XAYI] DE 102015213087 A1 20170119 - SIEMENS AG [DE]
- [Y] WO 2008046386 A1 20080424 - MTU AERO ENGINES GMBH [DE], et al
- [XAY] EP 1475567 A1 20041110 - SIEMENS AG [DE]

Cited by

US11697994B2

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)

**EP 3514328 A1 20190724**; WO 2019141755 A1 20190725

DOCDB simple family (application)

**EP 18152326 A 20180118**; EP 2019051100 W 20190117