Title (en)

A system for cooling a hot gas path component, corresponding gas turbine combustor and cooling method

Title (de)

Kühlsystem zum Kühlen einer Heißgaskomponente, zugehörige Gasturbinenbrennkammer und Kühlverfahren

Title (fr)

Système de refroidissement d'un composant de gaz chaud, chambre de combustion de turbine à gaz et procédé de refroidissement associés

Publication

EP 2730748 A2 20140514 (EN)

Application

EP 13192280 A 20131111

Priority

US 201213674255 A 20121112

Abstract (en)

A system for cooling a hot gas path component for a combustor generally includes an impingement sleeve 74 that circumferentially surrounds an outer surface of the hot gas path component. A first cooling chamber is defined between the impingement sleeve 74 and a first portion of the outer surface 82 of the hot gas path component. A second cooling chamber is disposed downstream from the first cooling chamber. The second cooling chamber is defined between the impingement sleeve 74 and a second portion of the outer surface 90 of hot gas path component. An inlet 96 extends through the impingement sleeve 75 so as to define a first flow path into the first cooling chamber. An outlet 104 defines a second flow path between the first cooling chamber and the second cooling chamber. Corresponding gas turbine combustor and cooling method are also provided.

IPC 8 full level

F01D 9/02 (2006.01); **F01D 25/12** (2006.01)

CPC (source: EP US)

F01D 9/023 (2013.01 - EP US); **F01D 25/12** (2013.01 - EP US); **F23R 3/002** (2013.01 - US); F05D 2240/35 (2013.01 - EP US); F05D 2260/201 (2013.01 - EP US); F05D 2260/205 (2013.01 - EP US)

Cited by

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Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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