

Title (en)

Gas turbine combustion chamber with starter film for cooling the combustion chamber wall

Title (de)

Gasturbinenbrennkammer mit Starterfilm zur Kühlung der Brennkammerwand

Title (fr)

Chambre de combustion d'une turbine à gaz dotée d'un dispositif de démarrage pour un film de refroidissement de la paroi de la chambre de combustion

Publication

**EP 2275743 A3 20171206 (DE)**

Application

**EP 10005467 A 20100526**

Priority

DE 102009033592 A 20090717

Abstract (en)

[origin: EP2275743A2] The chamber has a starter film for cooling a combustion chamber wall (4). A combustion chamber head is limited towards a combustion chamber by a heat shield (5), where cooling air is introduced in to the head. A base plate (2) is arranged at a distance from the heat shield and includes openings (6) in a rim area for passing the cooling air. Center axes (17) of the openings are inclined at a shallow angle ( $\alpha$ ) relative to the combustion chamber wall. A cooling airflow (3) is conducted via the openings in a direction of flow onto a deflection area.

IPC 8 full level

**F23R 3/06** (2006.01); **F23R 3/10** (2006.01)

CPC (source: EP US)

**F23R 3/06** (2013.01 - EP US); **F23R 3/10** (2013.01 - EP); **F23R 2900/03042** (2013.01 - EP US)

Citation (search report)

- [XY] US 2008104962 A1 20080508 - PATEL BHAWAN B [CA], et al
- [YD] DE 4427222 A1 19960208 - BMW ROLLS ROYCE GMBH [DE]
- [Y] US 5329761 A 19940719 - ABLETT ADRIAN M [US], et al
- [X] US 5353587 A 19941011 - HALILA ELY E [US]
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- [X] US 5307637 A 19940503 - STICKLES RICHARD W [US], et al

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 SE SI SK SM TR

Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

**EP 2275743 A2 20110119; EP 2275743 A3 20171206;** DE 102009033592 A1 20110120; US 2011011093 A1 20110120;  
US 8938970 B2 20150127

DOCDB simple family (application)

**EP 10005467 A 20100526;** DE 102009033592 A 20090717; US 81582910 A 20100615