Title (en)

THERMAL SHIELD FOR A GAS TURBINE COMBUSTION CHAMBER

Title (de)

HITZESCHILD FÜR EINE GASTURBINEN-BRENNKAMMER

Title (fr)

BOUCLIER THERMIQUE POUR CHAMBRE DE COMBUSTION D'UNE TURBINE A GAZ

Publication

EP 0774100 B1 19980916 (DE)

Application

EP 95926909 A 19950717

Priority

- DE 4427222 A 19940801
- EP 9502795 W 19950717

Abstract (en)

[origin: DE4427222A1] A thermal shield (6) for the head area of a combustion chamber has as usual a through-hole (5) for the burner. A continuous collar (14) with air passage holes (16) projects from the back side of the thermal shield at the edge of said through-hole. Cooling air can flow through said holes into a ring-shaped channel (15) arranged between the thermal shield and the burner, then into the combustion chamber. This cool air flow lies as a cool air film on the surface of the thermal shield. For that purpose, the cool air flow or cool air film whirls in the same direction as the combustion air supplied through the burner. To generate this whirling motion, the air passage holes in the collar are inclined in the radial direction. The thermal shield is further provided with appropriate inclined effusion holes (19).

IPC 1-7

F23R 3/10; F23R 3/28

IPC 8 full level

F23R 3/10 (2006.01); **F23R 3/28** (2006.01)

CPC (source: EP US)

F23R 3/10 (2013.01 - EP US); **F23R 3/283** (2013.01 - EP US); F05B 2260/202 (2013.01 - EP US); F23R 2900/03042 (2013.01 - EP US)

Cited by

US7721548B2; US7681398B2; US7748221B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

DE 4427222 A1 19960208; CA 2196310 A1 19960215; CA 2196310 C 20061107; DE 59503631 D1 19981022; EP 0774100 A1 19970521; EP 0774100 B1 19980916; US 5956955 A 19990928; WO 9604510 A1 19960215

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