Title (en)

ANNULAR WALL OF A COMBUSTION CHAMBER WITH IMPROVED COOLING AT THE PRIMARY AND/OR DILUTION HOLES

Title (de)

RINGFÖRMIGE BRENNKAMMERWAND MIT VERBESSERTER KÜHLUNG AN DEN PRIMÄR- UND/ODER VERDÜNNUNGSLUFTLÖCHERN

Title (fr)

PAROI ANNULAIRE DE CHAMBRE DE COMBUSTION À REFROIDISSEMENT AMELIORÉ AU NIVEAU DES TROUS PRIMAIRES ET/OU DE DILUTION

Publication

EP 3267111 A3 20180228 (FR)

Application

EP 17175880 A 20121025

Priority

- FR 1159704 A 20111026
- EP 12790620 A 20121025
- FR 2012052446 W 20121025

Abstract (en)

[origin: WO2013060987A2] An annular wall of a combustion chamber (10) of a turbo engine, comprising a cold side (16a, 18a) and a hot side (16b, 18b), a plurality of primary and dilution holes (30) distributed in a circumferential row to allow air circulating on the cold side (16a, 18a) of the annular wall to penetrate into the hot side (16b, 18b) in order provide the dilution of an air/fuel mixture; and a plurality of cooling holes (32) to allow air circulating on the cold side (16a, 18a) of the annular wall to penetrate into the hot side (16b, 18b) in order to form a film of cooling air along the annular wall, the cooling holes being distributed in a plurality of circumferential rows spaced axially apart from one another, and the geometrical axes of each of the cooling holes being inclined, in an axial direction of flow D of the combustion gases, by an angle of inclination Theta1 relative to a normal N of the annular wall; the wall further comprising a plurality of additional cooling holes (34) arranged directly downstream from the dilution holes and distributed in a plurality of circumferential rows spaced axially apart from one another, the geometrical axes of each of the additional cooling holes being arranged in a plane perpendicular to said axial direction D and inclined by an angle of inclination Theta2 relative to a normal N of said annular wall.

IPC 8 full level

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CPC (source: EP US)

F23R 3/002 (2013.01 - US); **F23R 3/06** (2013.01 - EP US); F23R 2900/03041 (2013.01 - EP US); F23R 2900/03042 (2013.01 - US)

Citation (search report)

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