

Title (en)
GAP COOLING BETWEEN COMBUSTION CHAMBER WALL AND TURBINE WALL OF A GAS TURBINE INSTALLATION

Title (de)
SPALTKÜHLUNG ZWISCHEN BRENNKAMMERWAND UND TURBINENWAND EINER GASTURBINENANLAGE

Title (fr)
REFROIDISSEMENT DE FENTE ENTRE UNE PAROI DE CHAMBRE DE COMBUSTION ET UNE PAROI DE TURBINE D'UNE INSTALLATION DE TURBINE À GAZ

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Application
EP 08786927 A 20080806

Priority
• EP 2008060320 W 20080806
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Abstract (en)
[origin: WO2009019282A2] The invention relates to a gas turbine installation (1) in particular for a power station, comprising a combustion chamber (2) which radially bounds a combustion chamber gas path (9) at least in an annular outlet area (6) with a chamber inner wall (7) and with a chamber outer wall (8), a turbine (3), which radially bounds a turbine gas path (13) at least in a stationary, annular inlet area (10) with a turbine inner wall (11) and with a turbine outer wall (12), a gap (4; 16, 17) which is provided radially on the inside and/or radially on the outside axially between the combustion chamber (2) and the turbine (3) and at which the inner and/or outer chamber wall (7, 8) and the inner and/or outer turbine wall (11, 12) end/ends, and a cooling gas supply (5) which introduces a cooling gas through the gap (4; 16, 17) into the turbine gas path (13) and/or into the combustion chamber gas path (9). In order to increase the efficiency of the gas turbine installation (1), an end section (21, 22, 23, 24), which is adjacent to the gap (4; 16, 17), of the respective turbine wall (11, 12) and/or of the respective chamber wall (7, 8) is shaped radially on the inside and/or radially on the outside such that positive steps (a, c), in the case of which the respective downstream wall (11, 12) projects with respect to the respective upstream wall (7, 8) radially into the respective gas path (9, 13), and negative steps (b, d), in the case of which the respective upstream wall (7, 8) projects radially into the respective gas path (9, 13) with respect to the respective downstream wall (11, 12), alternates in the circumferential direction on the gap (4; 16, 17).

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F01D 5/143 (2013.01 - EP US); **F01D 11/001** (2013.01 - EP US)

Citation (search report)
See references of WO 2009019282A2

Cited by
DE102014221783A1; EP2428647A1

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