

Title (en)

HEAT SHIELD FOR A COMBUSTION CHAMBER OF A GAS TURBINE, AND HEAT SHIELD BLOCK FOR SUCH A HEAT SHIELD

Title (de)

HITZESCHILD FÜR EINE BRENNKAMMER EINER GASTURBINE UND HITZESCHILDSTEIN FÜR EIN DERARTIGES HITZESCHILD

Title (fr)

BOUCLIER THERMIQUE POUR CHAMBRE DE COMBUSTION DE TURBINE À GAZ ET BRIQUES DE BOUCLIER THERMIQUE POUR UN TEL BOUCLIER THERMIQUE

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Abstract (en)

[origin: WO2015044413A1] The invention relates to a heat shield (20, 40) with a support structure (22) and a number of heat shield blocks (24, 42, 44, 56, 56a) which are arranged substantially over the entire surface of the support structure such that expansion gaps (26a, 74) are left between the heat shield blocks. Each heat shield block has a hot side (32) to which hot gases can be supplied, a cold side (58) which faces the support structure (22), and lateral surfaces (34, 34a, 60a, 60b, 60) which connect the hot side to the cold side. The heat shield according to the invention allows a scaling of the support structure to be prevented or to be reduced. For this purpose, the mutually facing lateral surfaces (34, 34a, 60a, 60b, 60) of at least two mutually adjoining heat shield blocks (42, 44) are designed in a structured manner at least in some areas so that the structures (46, 66) of the opposing lateral surfaces engage into one another in such a manner that at least some of the structures overlap with structures of the opposing side in the longitudinal direction (38a, 48, 72) of the lateral surfaces such that the direction of the longitudinal extension (27) of the expansion gaps (26a, 74) which run between the lateral surfaces changes at least in some regions on the basis of the overlapping structures.

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