

Title (en)

HEAT SHIELD ARRANGEMENT WITH LOW COOLANT FLUID REQUIREMENT.

Title (de)

HITZESCHILDANORDNUNG MIT GERINGEM KÜHLFLUIDBEDARF.

Title (fr)

BOUCLIER THERMIQUE N'EXIGEANT QUE PEU DE FLUIDE DE REFROIDISSEMENT.

Publication

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Application

EP 89903097 A 19890310

Priority

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- DE 8900125 W 19890310

Abstract (en)

[origin: WO8912789A1] A heat shield arrangement, used in particular in gas turbine plants, consists in individual mushroom-shaped ceramic elements (1) comprising a cap (1.1) and a stalk (1.2) which is fastened to a support structure (3) by means of a clamp (6). The cap (1.1) is shaped like a plane or curved rectangle with rectilinear or curved edges and completely covers the support structure (3) as far as the expansion gap (2). If necessary, additional fluid can be supplied through channels (3.3) to the intermediate space (4) between the heat shield (1) and the support structure (3) to prevent hot fluid from entering the intermediate space (4) through the expansion gap (2) and any boreholes (1.3) present in the elements (1). The clamp (6) according to the invention is preferably made of metal and contains an elastically deformable element. The forces due to tensile and compressive stresses acting on the heat shield element (1) to be fastened are therefore limited, which eliminates the risk of damage to the ceramic.

IPC 1-7

F23R 3/60

IPC 8 full level

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CPC (source: EP US)

F23R 3/007 (2013.01 - EP US); **Y10T 403/22** (2015.01 - EP US)

Cited by

EP1715250A1; EP1715249A1; DE10046094A1; DE10046094C2; EP1126221A1; US7942007B2; US7805945B2; US8857190B2; US7540710B2; EP1191285A1; WO0225173A1; US6832484B2

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