Title (en)

SEALING ASSEMBLY FOR COMPONENTS OF A TURBO-ENGINE

Title (de)

DICHTUNGSBAUGRUPPE FÜR KOMPONENTEN EINER STRÖMUNGSMASCHINE

Title (fr)

AGENCEMENT D'ETANCHEITE POUR COMPOSANTS D'UNE TURBOMACHINE

Publication

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Application

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Abstract (en)

[origin: WO03054359A1] The invention relates to a sealing module for sealing between static (1, 13, 12) and mobile components (7, 8), especially pertaining to a gas turbine, in a contactless manner. Said module comprises a gas-permeable, abrasion-resistant sealing element (2) which is arranged opposite a sealing tip (8a) and is fixed in a carrier (1). During operation, a coolant can flow through the sealing element (2), for example a honeycomb element, due to the gas permeability of said sealing element, cooling the same. Furthermore, a redundant coolant channel (3b) is provided, said channel opening up upstream of the sealing element (2) on the hot gas side of the module, in such a way that the coolant (11b) flowing out of the channel flows over the sealing element on its hot gas side. Thus, if the throughflow cross-sections of the sealing element are blocked, interrupting the coolant flowing through the sealing element, the cooling of the sealing element is taken over by the film coolant flowing out of the cooling channel. The dosage of the mass flow of coolant is carried out by means of feeding inlets (3) which cause the definitive pressure drop of the device. The feeding inlets are embodied as penetration openings of a baffle cooling element (14).

IPC 8 full level

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