

Title (en)
INNER HOUSING HUB FOR A GAS TURBINE

Title (de)
INNENGEHÄUSENABE FÜR EINE GASTURBINE

Title (fr)
MOYEU DE BOÎTIER INTÉRIEUR POUR UNE TURBINE À GAZ

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Application
EP 14780800 A 20140925

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Abstract (en)
[origin: WO2015044266A1] The invention relates to an inner housing hub (24, 58) for a gas turbine (1). The inner housing hub (58) can be arranged in the gas turbine (1) about a gas turbine shaft and is formed as a component of an inner housing (56). The inner housing hub together with the inner housing (56) is used to deflect hot gases exiting combustion chambers towards a turbine inlet region (54) arranged in the direction of the gas turbine shaft. The inner housing hub comprises at least one substantially cylinder casing-shaped securing portion (28) comprising a cylinder casing-shaped main part (30), which comprises a hot side (34) facing a hot gas path (32) and a cold side (36) facing away from the hot gas path. At least one web-shaped protrusion (38) extends along the cold side (36) and is arranged on the cold side on the main part (30) in order to secure the inner housing hub (24, 58). The inner housing hub according to the invention is subject to reduced wear. For this purpose, the web-shaped protrusion (38) consists of a first material and the main part (30) consists of a second material, the first material having a greater thermal expansion coefficient than the second material so that the thermally induced stresses are reduced in the region of the securing portion (28) in at least one operating state of the gas turbine (24) in comparison to an integral main part/web-shaped protrusion design consisting of the second material.

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