

Title (en)

Gas turbine nozzle arrangement and gas turbine

Title (de)

Gasturbinenleitschaufelanordnung und Gasturbine

Title (fr)

Agencement de distributeur de turbine à gaz et turbine à gaz

Publication

EP 2180143 A1 20100428 (EN)

Application

EP 08018594 A 20081023

Priority

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Abstract (en)

A gas turbine nozzle arrangement has an axial direction (A) defining a flow direction of hot combustion gas there through and a radial direction (R). The gas turbine nozzle arrangement comprises: an outer support (37), a carrier ring (39) comprising a carrier ring section (45) extending radially outwards and having a radially outer surface (47), and nozzle segments each having an outer platform (25), an inner platform (27) and at least one guide vane (17) extending between the outer platform (25) and the inner platform (27). The outer platforms (25) of the nozzle segments form an outer flow channel wall for the hot combustion gas. The inner platforms (27) of the nozzle segments form an inner flow channel wall for the hot combustion gas and each comprise a downstream end (28) with respect to the flow direction, a radially inner surface (43) and a rail (49) extending radially inwards from the radially inner surface (43). While the outer platforms (25) each are connected to the outer support (37) the inner platforms (27) each are connected to the carrier ring (39) by means of the rails (49) and the ring section (45) such that the rails (49) overlap the carrier ring section (45). At least one flow channel (55) for a cooling fluid is formed between the rails (49) and the ring section (45). In addition, at least one seal strip (41) is present between the radially outer surface (47) of the carrier ring section (45) and inner surface (43) of the inner platforms (27) and comprises openings (67) for allowing cooling fluid to flow through the seal strip (41).

IPC 8 full level

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CPC (source: EP)

F01D 9/023 (2013.01); **F01D 9/041** (2013.01); **F05D 2240/81** (2013.01); **F05D 2260/201** (2013.01)

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