

Title (en)

A thermal barrier coating enhanced cooling arrangement for a turbomachine component

Title (de)

Durch Wärmedämmschicht verbesserte Kühlanordnung für eine Turbomaschinenkomponente

Title (fr)

Revêtement barrière thermique amélioré de système de refroidissement pour un composant de turbomachine

Publication

EP 2873806 A1 20150520 (EN)

Application

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Priority

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Abstract (en)

A turbomachine component including a base component and a thermal barrier coating (TBC) is provided. The base component includes an outer wall having an external and an internal surface. The outer wall surrounds a volume adjoining the internal surface. The cooling arrangement, a section of which is located in the volume, includes a cooling channel for guiding a cooling fluid. The TBC covers a part of the external surface and has an outer surface, an inner surface. The TBC includes first regions with a first coating thickness and second regions at defined locations with a second coating thickness that is less than the first coating thickness. Each second region is surrounded by at least one of the first regions. The inner surface of the TBC is fluidly connected to the cooling arrangement at the locations of the second regions.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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