Title (en)

AXIAL ROTOR BLADE SECTION FOR A GAS TURBINE

Title (de)

AXIALER ROTORABSCHNITT FÜR EINE GASTURBINE

Title (fr)

SECTION AXIALE DE ROTOR POUR UNE TURBINE À GAZ

Publication

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Application

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Abstract (en)

[origin: WO2013167346A1] The invention relates to a turbine rotor blade (14) with a blade root (54), a platform (28) which adjoins it, and a turbine blade (15) which is set up on that side of the platform (28) which faces away from the blade root (54), wherein at least one opening (62) for feeding a coolant (66) into the turbine rotor blade interior is provided on an underside (64) of the blade root (54), which at least one opening (62) merges into a coolant duct (60). Furthermore, the invention relates to an axial rotor section (10) for a rotor (23) of a turbine, having an outer circumferential surface which adjoins two end-side first side surfaces (53) and in which rotor blade holding grooves (12) which are distributed over the circumference and extend along an axial direction are provided for rotor blades (14) of the turbine, wherein a turbine rotor blade (14) is arranged in every holding groove (12), wherein a multiplicity of sealing elements (16) are provided at the side of a side surface (53) of the rotor section (10), which sealing elements (16) lie opposite the end sides (52) of blade roots (54) such that a gap is formed. In order to achieve improved cooling of the sealing element (16), which extends the service life thereof and/or toughens said sealing element (16) for higher ambient temperatures, it is proposed that a multiplicity of outlet holes (58) for impingement cooling of the sealing elements (16) are provided in the end surface (53) and/or in the end surface (52).

IPC 8 full level

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Citation (search report)

See references of WO 2013167346A1

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