

Title (en)
ROTOR WITH FOR CENTRIFUGAL FORCES OPTIMIZED CONTACT SURFACES

Title (de)
ROTOR MIT FLIEHKRAFT-OPTIMIERTEN KONTAKTFLÄCHEN

Title (fr)
ROTOR À SURFACES DE CONTACT OPTIMISÉES AU NIVEAU DE FORCES CENTRIFUGES

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Application
EP 19720467 A 20190416

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Abstract (en)
[origin: WO2019211091A1] The invention relates to a rotor for a gas turbine having a rotor disk (01) on which there are a plurality of rotor components (11) distributed around the circumference. The rotor disk (11) has a circumferential securing shoulder (04) with a contact face (05). Retaining faces (16) come to bear against the contact face (06), each of said retaining faces consisting of a retaining shoulder (15) of the respective rotor component (11) and being designed with a form that complements the contact face. In order to optimize the bearing stresses between the retaining shoulder (15) and the securing shoulder (05), the retaining face (16) has a smaller radius than the contact face (06), namely the retaining radius is at least 0.99 times and at most 0.995 times the contact radius. Also provided is an axially extending aperture (12) in the rotor component (11), the width of which in the circumferential direction is 25% to 75% of the rotor component width in the circumferential direction.

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