

Title (en)

SYSTEM FOR ACTIVE ADJUSTMENT OF A RADIAL GAP SIZE AND CORRESPONDING AIRCRAFT ENGINE

Title (de)

SYSTEM ZUR AKTIVEN EINSTELLUNG EINER RADIALEN SPALTGRÖSSE UND ZUGEHÖRIGES FLUGZEUGTRIEBWERK

Title (fr)

SYSTEME DE REGLAGE ACTIF D'UN JEU D' EXTRÉMITÉ RADIAL ET MOTEUR D'AERONEF ASSOCIÉ

Publication

EP 3130762 B1 20181003 (DE)

Application

EP 16183854 A 20160811

Priority

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Abstract (en)

[origin: US2017044924A1] A system for the active setting of a radial clearance size between a blade tip of at least one compressor stage and/or at least one turbine stage of an aircraft engine and a housing that surrounds the at least one compressor stage and/or the at least one turbine stage is provided. The system comprises a model-based setting device, wherein the time-dependent clearance size can be approximated by the model-based setting device, with only those influencing variables being taken into account that have a time-dependent deformation behavior which is equal to or slower than the time-dependent deformation behavior of the housing. The clearance size in the cold state serves as the set point, with the clearance size being reduced by at least one previously saved value of a clearance proportion, which is determined at maximal thrust of the aircraft engine.

IPC 8 full level

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CPC (source: EP US)

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