

Title (en)
In-situ gas turbine rotor blade and casing clearance control

Title (de)
In-situ Spielsteuerung zwischen Gasturbinenlaufschaufel und Gehäuse

Title (fr)
Contrôle in-situ du jeu entre aubes de rotor et carter

Publication
EP 2639410 A2 20130918 (EN)

Application
EP 13158077 A 20130307

Priority
US 201213417345 A 20120312

Abstract (en)
A method and system for protecting the rotor blade tips of rotary machines, particularly the compressors (30) of gas turbine engines, comprising a rotor assembly having a plurality of circumferentially spaced-apart rotor blades (50), with each blade extending radially outwardly from an inner wheel disk (54); a stator assembly comprising one or more rows of spaced-apart vanes (52) extending between adjacent rows of the rotor blades (50); a casing extending circumferentially around the rotor and stator assemblies; and an abradable ceramic coating applied to selected areas of the interior cylindrical surface of the rotor casing (36) to thereby provide a minimum clearance between the casing and rotor blades during start up and to thereafter ensure an effective compressor seal for compressed gas flow.

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F01D 11/12 (2006.01)

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Cited by
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