

Title (en)

Turbine component and a method to control the oxidation of a turbine component

Title (de)

Turbinenbauteil und Verfahren zur Steuerung der Oxidation eines Turbinenbauteils

Title (fr)

Element de turbine et procédé pour contrôler l'oxidation d'un element de turbine

Publication

EP 0936287 A1 19990818 (EN)

Application

EP 98810120 A 19980216

Priority

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Abstract (en)

A turbine component consists essentially of an electron conductive substrate (1) and a solid ion conductive electrolyte (2). The electrolyte (2) is coated with an electron conductive electrode (3) and the substrate (1) is electrically connected with the electrode (3) through a DC supply (11). The substrate serves as cathode and the electrode as anode. In a method to control the oxidation of a turbine component which consists essentially of an electron conductive substrate (1) and a solid ion conductive electrolyte (2), the formation of the substrate oxide (7) is controlled by the voltage of an adjustable DC supply dependent on the temperature of the turbine component and dependent on the oxygen partial pressure of the environment.
<IMAGE>

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C23F 13/12; **F01D 5/28**

IPC 8 full level

C23F 13/12 (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP)

C23F 13/12 (2013.01); **F01D 5/288** (2013.01)

Citation (search report)

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