

Title (en)

METHOD FOR ENHANCING THE CORROSION AND EROSION RESISTANCE OF THE BLADE OF A ROTARY THERMAL APPARATUS AND  
BLADE PRODUCED BY SAID METHOD

Publication

**EP 0379699 B1 19931006 (DE)**

Application

**EP 89123291 A 19891215**

Priority

CH 25289 A 19890126

Abstract (en)

[origin: JPH02230902A] PURPOSE: To increase the resistance to corrosion and erosion of a vane of a heat engine by spraying a protective surface layer consisting of 6 to 15 wt.% of Si, the remainder being Al, onto a surface of a base material using a high-speed process with a particle velocity of at least 300 m/s. CONSTITUTION: A vane of a rotating heat engine consists of mainly a ferritic and/or ferritic-martensitic base material by applying a protective surface layer securing firmly thereon. The protective surface layer consisting of 6 to 15 wt.% of Si, the remainder being Al, is sprayed onto a surface of the base material using a high-speed process with a particle velocity of at least 300 m/s. Consequently, it is possible to increase the resistance to corrosion and erosion of the vane of the rotating heat engine.

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IPC 8 full level

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CPC (source: EP US)

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