

Title (en)  
METALLIC OBJECT, IN PARTICULAR GAS TURBINE BLADE WITH PROTECTIVE COATING

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Application  
**EP 89901530 A 19890119**

Priority  
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Abstract (en)  
[origin: WO8907159A1] The present invention concerns multi layer protective coatings for metallic objects (1), in particular gas turbine blades. Given the existence of two different corrosion mechanisms which determine the service life of such objects, two superimposed protective layers are applied. The inner layer (2) protects against attacks by corrosion at temperatures between 600 DEG C and 800 DEG C (HCTII), and the outer layer (3) affords optimal protection against corrosion at temperatures between 800 DEG C and 900 DEG C (HTCI). In addition, an outermost coating layer forming a thermal barrier (6) can be provided. The first coating layer (2) is preferably a diffusion layer with a chromium content greater than 50 % and an iron and/or manganese content greater than 10 %, and the second coating layer (3) is preferably a MCrAlY layer, containing for example approximately 75 % chromium, approximately 7 % aluminium and approximately 0,7 % yttrium, applied by low-pressure plasma spraying.

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IPC 8 full level  
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Cited by  
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