

Title (en)  
Erosion resistant coatings.

Title (de)  
Verschleissfeste Überzüge.

Title (fr)  
Revêtements résistant à l'érosion.

Publication  
**EP 0188057 A1 19860723 (EN)**

Application  
**EP 85307106 A 19851003**

Priority  
US 67291184 A 19841119

Abstract (en)  
Two-layer erosion-resistant coatings which may be applied to gas turbine compressor components comprise a first layer applied directly to the substrate and comprises palladium or nickel, and an overlayer containing tantalum or chromium, and boron. The coefficients of thermal expansion of the whole system (substrate, first layer and over layer) are matched closely to reduce residual stress and accompanying strains, whereby the fatigue life of the substrate is not deleteriously effected. Additional gains in fatigue life retention are achieved by using low coating deposition temperatures (425-760 DEG C) (800 to 1400 DEG F).

IPC 1-7  
**C23C 28/00**

IPC 8 full level  
**B32B 15/01** (2006.01); **C23C 14/06** (2006.01); **C23C 14/16** (2006.01); **C23C 16/02** (2006.01); **C23C 28/00** (2006.01); **C25D 5/10** (2006.01); **F01D 5/28** (2006.01); **F04D 7/06** (2006.01); **F04D 29/02** (2006.01)

CPC (source: EP)  
**C23C 28/00** (2013.01); **F04D 29/023** (2013.01); **F04D 29/324** (2013.01)

Citation (search report)  
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**EP 85307106 A 19851003**; BR 8505579 A 19851107; JP 23653685 A 19851024