

Title (en)  
Coating system for turbine components

Title (de)  
Schichtsystem für Turbinenkomponente

Title (fr)  
Système de couche pour composants de turbine

Publication  
**EP 2381005 A1 20111026 (DE)**

Application  
**EP 10004293 A 20100422**

Priority  
EP 10004293 A 20100422

Abstract (en)  
Layer system (6) comprises: a substrate (1); a thermal insulation layer (3) arranged on the substrate; an erosion protection layer (5) arranged on the thermal insulation layer; and an intermediate layer (4), which is arranged in between thermal insulation layer and erosion protection layer. Independent claims are also included for: (1) a turbine component comprising the layer system; and (2) producing a turbine component, preferably a steam turbine component with a substrate, on which a thermal insulation layer is attached, where the erosion protection layer is applied on the thermal insulation layer.

Abstract (de)  
Die Erfindung betrifft ein Schichtsystem (6) umfassend eine Wärmedämmschicht (3) und eine Erosionsschutzschicht (5), wobei zwischen der Erosionsschutzschicht(5) und der Wärmedämmschicht (3) eine Zwischenschicht (4) angeordnet wird, deren Längenausdehnungskoeffizient  $\pm$  ZW ähnlich zu den Längenausdehnungskoeffizienten der Wärmedämmschicht (3)  $\pm$  WDS und/oder der Erosionsschutzschicht (5)  $\pm$  TOP ist.

IPC 8 full level  
**C23C 4/06** (2006.01); **C23C 4/08** (2006.01); **C23C 4/10** (2006.01); **C23C 4/12** (2006.01)

CPC (source: EP)  
**C23C 4/06** (2013.01); **C23C 4/08** (2013.01); **C23C 4/11** (2016.01); **C23C 4/134** (2016.01)

Citation (search report)  

- [XA] JP H0320451 A 19910129 - HITACHI LTD, et al
- [XI] WO 9408069 A1 19940414 - UNITED TECHNOLOGIES CORP [US]
- [XI] US 3091548 A 19630528 - DILLON II HAROLD PHILLIPS
- [XA] EP 1970461 A1 20080917 - SIEMENS AG [DE]
- [X] US 3977660 A 19760831 - NAKAHIRA HIROSHI
- [XA] EP 1382707 A1 20040121 - SIEMENS AG [DE]

Cited by  
CN108350560A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)  
AL BA ME RS

DOCDB simple family (publication)  
**EP 2381005 A1 20111026**

DOCDB simple family (application)  
**EP 10004293 A 20100422**