

Title (en)  
Cold spraying method for MCrAlX coating

Title (de)  
Kaltsprühverfahren zum Beschichten einer MCrAlX-Legierung

Title (fr)  
Procédé de projection à froid pour fabriquer une couche de MCrAlX

Publication  
**EP 1398394 A1 20040317 (EN)**

Application  
**EP 03018287 A 20030812**

Priority  
US 21794802 A 20020813

Abstract (en)  
Coating a nickel or cobalt base superalloy substrate, comprises: providing a supersonic gas stream having solid-phase alloy particles and having a gas stream temperature to maintain the particles below their melting temperature; and impinging the solid-phase particles in the supersonic gas stream against the substrate to deposit overlay coating. Coating a nickel or cobalt base superalloy substrate, comprises: providing a supersonic gas stream having solid-phase MCrAlX alloy particles and having a gas stream temperature to maintain the particles below their melting temperature; and impinging the solid-phase particles in the supersonic gas stream against the substrate to deposit MCrAlX overlay coating. M : Ni, Co and/or Fe; X : element other than M, Cr or Al. An independent claim is also included for a coated gas turbine engine component, comprising a nickel or cobalt base superalloy substrate and an MCrAlX overlay coating sprayed on the substrate.

IPC 1-7  
**C23C 4/12**; B05B 7/24; C22C 19/00

IPC 8 full level  
**F01D 5/28** (2006.01); **B05B 7/14** (2006.01); **C23C 4/06** (2016.01); **C23C 4/073** (2016.01); **C23C 10/30** (2006.01); **C23C 24/04** (2006.01); **C23C 26/00** (2006.01); **F02C 7/00** (2006.01); **F02C 7/18** (2006.01); **F02C 7/28** (2006.01)

CPC (source: EP)  
**B05B 7/1486** (2013.01); **C23C 10/30** (2013.01); **C23C 24/04** (2013.01)

Citation (search report)

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