

## Title (en)

Protective coating for single crystal superalloy

## Title (de)

Schutzbeschichtung für Einkristalline Superlegierung

## Title (fr)

Revêtement protecteur pour superalliage monocristallin

## Publication

**EP 1686200 A2 20060802 (FR)**

## Application

**EP 06290129 A 20060119**

## Priority

FR 0500984 A 20050201

## Abstract (en)

The monocrystalline superalloy protection procedure consists of applying a surface layer of about 35-80 per cent by weight of cobalt and 65-20 per cent tungsten to the superalloy before coating it with aluminum. The cobalt and tungsten are deposited concomitantly by electrolysis in a layer, preferably between 10 and 20 mcm thick, followed by aluminium coating in the form of aluminisation. The aluminum coating can contain an additional element such as zirconium or hafnium, and the tungsten underlayer can contain platinum or palladium.

## Abstract (fr)

Pour protéger contre la corrosion un superalliage monocristallin riche en rhénium tout en évitant la formation de zones de réaction secondaire évolutives, on dépose sur sa surface, avant un traitement d'aluminisation, une couche (3) constituée de tungstène et de cobalt.

## IPC 8 full level

**C25D 5/34** (2006.01); **C25D 5/10** (2006.01); **C25D 5/38** (2006.01)

## CPC (source: EP US)

**C25D 5/10** (2013.01 - EP US); **C25D 5/34** (2013.01 - EP US); **C25D 5/38** (2013.01 - EP US); **C25D 5/611** (2020.08 - EP US); **C25D 5/627** (2020.08 - EP US); **Y10T 428/12458** (2015.01 - EP US); **Y10T 428/12743** (2015.01 - EP US); **Y10T 428/1284** (2015.01 - EP US); **Y10T 428/12944** (2015.01 - EP US)

## Citation (applicant)

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## Designated contracting state (EPC)

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