

Title (en)

Method for applying a high-temperature stable coating layer on the surface of a component and component with such a coating layer

Title (de)

Verfahren zur Anwendung einer hochtemperaturbeständigen Beschichtungsschicht auf der Oberfläche einer Komponente und Komponente mit einer solchen Beschichtungsschicht

Title (fr)

Procédé pour appliquer une couche de revêtement stable à haute température sur la surface d'un composant et composant avec une telle couche de revêtement

Publication

**EP 2636763 B1 20200902 (EN)**

Application

**EP 12158129 A 20120305**

Priority

EP 12158129 A 20120305

Abstract (en)

[origin: EP2636763A1] The invention proposes a method for applying a high-temperature stable coating layer (12) on the surface of a component (11), comprising the steps of: a) providing a component (11) with a surface to be coated; b) providing a powder material containing at least a fraction of submicron powder particles (18); c) applying said powder material to the surface of the component (11) by means of a spraying technique to build up a coating layer (12), whereby d) said sub-micron powder particles (18) are each at least partially surrounded by an oxide shell (20) and establish with their oxide shells (20) an at least partially interconnected sub-micron oxide network (22) within said coating layer (12).

IPC 8 full level

**C23C 4/11** (2016.01); **C23C 4/02** (2006.01); **C23C 4/073** (2016.01); **C23C 4/08** (2016.01); **C23C 4/10** (2016.01); **C23C 4/12** (2016.01); **C23C 4/134** (2016.01)

CPC (source: EP US)

**C23C 4/02** (2013.01 - EP US); **C23C 4/073** (2016.01 - EP US); **C23C 4/08** (2013.01 - EP US); **C23C 4/10** (2013.01 - EP US); **C23C 4/11** (2016.01 - EP US); **C23C 4/12** (2013.01 - EP US); **C23C 4/134** (2016.01 - EP US); **Y10T 428/256** (2015.01 - EP US)

Cited by

CN104451520A

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 2636763 A1 20130911**; **EP 2636763 B1 20200902**; CA 2864618 A1 20130912; CN 104160059 A 20141119; CN 104160059 B 20190108; US 2015284834 A1 20151008; WO 2013131874 A1 20130912

DOCDB simple family (application)

**EP 12158129 A 20120305**; CA 2864618 A 20130305; CN 201380012678 A 20130305; EP 2013054337 W 20130305; US 201414474564 A 20140902