

Title (en)

LASER DEPOSITION PROCESSES FOR COATING ARTICLES

Title (de)

LASERAUFRAGSVERFAHREN ZUR BESCHICHTUNG VON GEGENSTÄNDEN

Title (fr)

PROCÉDÉS DE DÉPÔT AU LASER POUR LE REVÊTEMENT D'ARTICLES

Publication

EP 3569735 A1 20191120 (EN)

Application

EP 18461556 A 20180514

Priority

EP 18461556 A 20180514

Abstract (en)

A process of coating a metallic article comprises depositing a metallic coating powder to a surface of a metallic article; applying an energy beam to the deposited metallic coating powder to at least partially melt the metallic coating powder while moving the energy beam and/or the metallic article to have a relative velocity of at or between about 15 meters/minute to about 60 meters/minute; and cooling the melted metallic coating powder to form a coating layer on the surface of the metallic article.

IPC 8 full level

C23C 24/08 (2006.01); **C23C 24/10** (2006.01)

CPC (source: EP)

C23C 24/08 (2013.01); **C23C 24/10** (2013.01); **C23C 24/106** (2013.01)

Citation (search report)

- [X] PIOTR KORUBA ET AL: "Ultra-High Speed Laser Cladding (UHSLC) technology for Stellite 6 functional coatings deposition in aviation industry", PRZEGŁAD SPAWALNICTWA, vol. 89, no. 6, 1 July 2017 (2017-07-01), pages 15 - 19, XP055507995, DOI: <http://dx.doi.org/10.26628/ps.v89i6.781>
- [XAI] SCHOPPHOVEN THOMAS ET AL: "Investigations on ultra-high-speed laser material deposition as alternative for hard chrome plating and thermal spraying", JOURNAL OF LASER APPLICATIONS, AMERICAN INSTITUTE OF PHYSICS, 2 HUNTINGTON QUADRANGLE, MELVILLE, NY 11747, vol. 28, no. 2, 31 March 2016 (2016-03-31), XP012206487, DOI: 10.2351/1.4943910

Cited by

CN114875397A

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3569735 A1 20191120

DOCDB simple family (application)

EP 18461556 A 20180514