

Title (en)

METALLIC COATING AND METHOD OF APPLICATION

Title (de)

METALLISCHE BESCHICHTUNG UND ANWENDUNGSVERFAHREN

Title (fr)

REVÊTEMENT MÉTALLIQUE ET PROCÉDÉ D'APPLICATION

Publication

EP 3825444 A1 20210526 (EN)

Application

EP 20208879 A 20201120

Priority

US 201916691917 A 20191122

Abstract (en)

A method of depositing a high entropy metal alloy coating onto a substrate includes mixing metallic salts of one or more elements with a solvent to form a mixture, heating the mixture to form a liquid, such that constituents of the liquid are in a mobile ionic state, and electroplating the metallic salts onto a substrate from the ionic liquid. A solution for electroplating is also disclosed. Preferably, the mixture has a eutectic point that is lower than about 100°C, preferably wherein the eutectic point is between about 10°C and 100°C and the one or more elements includes at least one of zirconium, niobium, titanium, tantalum, molybdenum, tungsten, rhenium, and hafnium, and combinations thereof.

IPC 8 full level

C25D 3/56 (2006.01); **C25D 3/66** (2006.01)

CPC (source: EP US)

C25D 3/56 (2013.01 - EP US); **C25D 3/665** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

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Designated extension state (EPC)

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