

Title (en)

ZINC OR ZINC ALLOY ELECTROPLATING METHOD AND SYSTEM

Title (de)

ZINK- ODER ZINKLEGIERUNGEN ELEKTROPLIERMETHODE UND -SYSTEM

Title (fr)

PROCÉDÉ ET SYSTÈME D'ÉLECTRODÉPOSITION DE ZINC OU D'ALLIAGE DE ZINC

Publication

**EP 3715506 A4 20210414 (EN)**

Application

**EP 19766159 A 20190215**

Priority

JP 2019005548 W 20190215

Abstract (en)

[origin: US2020263314A1] The present invention provides a zinc or zinc alloy electroplating method comprising: performing energizing in an alkaline zinc or zinc alloy electroplating bath provided with a cathode and an anode, wherein the anode is an anode in which a conductive substrate is coated in a conductive state with alkali-resistant ceramics, the alkaline zinc or zinc alloy electroplating bath is an alkaline zinc plating bath containing an organic compound additive or an alkaline zinc alloy electroplating bath containing an amine chelating agent or an organic compound additive, oxidation decomposition, on a surface of the anode caused by the energizing, of the organic compound additive in the alkaline zinc plating bath or the amine chelating agent and the organic compound additive in the alkaline zinc alloy electroplating bath is suppressed as compared with a case of using as an anode the same conductive substrate uncoated with the alkali-resistant ceramics.

IPC 8 full level

**C25B 11/04** (2021.01); **C25D 3/22** (2006.01); **C25D 3/56** (2006.01); **C25D 17/10** (2006.01)

CPC (source: CN EP US)

**C25D 3/22** (2013.01 - CN EP US); **C25D 3/565** (2013.01 - CN EP); **C25D 17/10** (2013.01 - CN EP)

Citation (search report)

- [XY] EP 3358045 A1 20180808 - DR ING MAX SCHLOETTER GMBH & CO KG [DE]
- [Y] JP H09157879 A 19970617 - TDK CORP
- See references of WO 2020166062A1

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)

**US 2020263314 A1 20200820**; CN 110462107 A 20191115; EP 3715506 A1 20200930; EP 3715506 A4 20210414; JP 6582353 B1 20191002; JP WO2020166062 A1 20210225; WO 2020166062 A1 20200820

DOCDB simple family (application)

**US 201916577895 A 20190920**; CN 201980001581 A 20190215; EP 19766159 A 20190215; JP 2019005548 W 20190215; JP 2019508981 A 20190215