

Title (en)

ALKALINE, CYANIDE-FREE SOLUTION FOR ELECTROPLATING OF GOLD ALLOYS, A METHOD FOR ELECTROPLATING AND A SUBSTRATE COMPRISING A BRIGHT, CORROSION-FREE DEPOSIT OF A GOLD ALLOY

Title (de)

ALKALISCHE, CYANIDFREIE LÖSUNG ZUR ELEKTROPLATTIERUNG VON GOLDLEGIERUNGEN, VERFAHREN ZUR ELEKTROPLATTIERUNG UND SUBSTRAT MIT EINER HELLER, KORROSIONSFREIEN ABLAGERUNG EINER GOLDLEGIERUNG

Title (fr)

SOLUTION ALCALINE SANS CYANURE POUR L'ÉLECTRODÉPOSITION D'ALLIAGES D'OR, PROCÉDÉ D'ÉLECTRODÉPOSITION ET SUBSTRAT COMPRENANT UN DÉPÔT ANTICORROSION BRILLANT D'UN ALLIAGE D'OR

Publication

EP 2730682 A1 20140514 (EN)

Application

EP 12192458 A 20121113

Priority

EP 12192458 A 20121113

Abstract (en)

The present invention relates to an electroplating solution which is free of cyanides and toxic compounds for the electrodeposition of bright deposits of gold-copper alloys. Thus, substrates are provided which comprise a bright gold-copper alloy deposit which is corrosion resistant according to NFS 80772, ISO 4538 and/or ISO 9227 and has 14 to 22 karats of gold in the alloy. Remarkably, the inventive electroplating solution allows electroplating of gold-copper alloy deposits which have a color matching the Swiss standard ISO 8654 from 0.5 N to 5 N. Furthermore, the invention provides a method for electroplating a gold-copper alloy deposit on a substrate. The inventive electroplating solution may be used for electroplating a substrate selected from the group consisting of decorative substrates, jewelry, watches and eyeglass trade.

IPC 8 full level

C25D 3/58 (2006.01); **C25D 3/62** (2006.01)

CPC (source: EP)

C25D 3/62 (2013.01); **C25D 3/58** (2013.01)

Citation (applicant)

JP 2005256072 A 20050922 - TANAKA PRECIOUS METAL IND

Citation (search report)

- [XY] EP 1728898 A2 20061206 - ROHM & HAAS ELECT MAT [US]
- [Y] US 6511589 B1 20030128 - SHINDO YOSHIO [JP]
- [Y] US 5750018 A 19980512 - BRASCH WILLIAM R [US]
- [Y] EP 1321468 A1 20030625 - TANAKA PRECIOUS METAL IND [JP]
- [Y] US 5340529 A 19940823 - DEWITT TROY C [US], et al

Cited by

CN105132973A; CN110699721A; CN110699713A; CN114075680A

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 2730682 A1 20140514; **EP 2730682 B1 20180725**; ES 2685317 T3 20181008; PL 2730682 T3 20181231; PT 2730682 T 20181109; TR 201811860 T4 20180921

DOCDB simple family (application)

EP 12192458 A 20121113; ES 12192458 T 20121113; PL 12192458 T 20121113; PT 12192458 T 20121113; TR 201811860 T 20121113