

Title (en)

METHOD FOR OBTAINING A DEPOSIT OF A YELLOW GOLD ALLOY BY GALVANOPLASTY WITHOUT USING TOXIC METALS

Title (de)

VERFAHREN ZUM ERHALTEN EINER GELBEN GOLDFLECHTGUNGSABLAGERUNG DURCH GALVANOPLASTIK OHNE VERWENDUNG VON GIFTIGEN METALLEN

Title (fr)

PROCÉDÉ D'OBTENTION D'UN DÉPÔT D'ALLIAGE D'OR JAUNE PAR GALVANOPLASTIE SANS UTILISATION DE MÉTAUX TOXIQUES

Publication

**EP 2312021 A1 20110420 (FR)**

Application

**EP 09173198 A 20091015**

Priority

EP 09173198 A 20091015

Abstract (en)

Galvanoplastic deposition of a gold alloy on an electrode dipped into a bath including gold metal in alkaline aurocyanide form, organometallic compounds, a wetting agent, a sequestering agent and free cyanide, where the alloy metal is copper, which is in double copper and potassium cyanide form, and silver, or in cyanide form, comprises depositing a mirror-bright yellow gold alloy on the electrode, where the bath respects a proportion of 9.08% gold, 90.85% copper and 0.07% silver containing neither cadmium nor zinc. Independent claims are also included for: (1) an electrolytic deposition in the form of a gold alloy obtained from the above method having a thickness of 1-800 μm and comprising copper and silver as the third main compound, allowing a bright 3N color to be obtained; and (2) an electrolytic deposition in the form of a gold, copper, and silver alloy, where the deposition is made of gold (75%), copper (21%) and silver (4%), allowing a bright 3N color to be obtained.

Abstract (fr)

L'invention se rapporte à un procédé de dépôt galvanoplastique d'un alliage d'or sur une électrode plongée dans un bain comportant de l'or métal sous forme d'aurocyanure alcalin, des composés organométalliques, un mouillant, un complexant, du cyanure libre. Selon l'invention, les métaux d'alliage sont du cuivre sous forme de cyanure double de cuivre et potassium, et de l'argent sous forme cyanure permettant de déposer sur l'électrode un alliage d'or du type jaune miroir brillant. L'invention concerne le domaine des dépôts galvaniques.

IPC 8 full level

**C25D 3/62** (2006.01)

CPC (source: EP US)

**C25D 3/62** (2013.01 - EP US); **B05D 1/18** (2013.01 - US); **C25D 3/56** (2013.01 - US); **C25D 3/58** (2013.01 - US); **C25D 7/005** (2013.01 - US)

Citation (applicant)

GB 1400492 A 19750716 - OXY METAL FINISHING CORP

Citation (search report)

- [X] GB 1400492 A 19750716 - OXY METAL FINISHING CORP
- [X] EP 1728898 A2 20061206 - ROHM & HAAS ELECT MAT [US]
- [X] EP 0566054 A1 19931020 - LEARONAL INC [US]
- [X] EP 0416342 A1 19910313 - DEGUSSA [DE]
- [A] US 5340529 A 19940823 - DEWITT TROY C [US], et al
- [A] US 6576114 B1 20030610 - GIORIA JEAN-MICHEL [CH]
- [A] EP 0193848 A1 19860910 - EMMENEGGER HEINZ
- [X] DATABASE WPI Derwent World Patents Index; AN 1987-240265, XP002574602

Cited by

EP2505691A1; US10053789B2; US10793961B2

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

**EP 2312021 A1 20110420; EP 2312021 B1 20200318; CN 102041527 A 20110504; CN 102041527 B 20140917; HK 1157415 A1 20120629; JP 2011084815 A 20110428; JP 5563421 B2 20140730; KR 101297476 B1 20130816; KR 20110041424 A 20110421; US 2011089040 A1 20110421; US 2015027898 A1 20150129; US 2018171499 A1 20180621; US 2020240030 A1 20200730; US 9567684 B2 20170214**

DOCDB simple family (application)

**EP 09173198 A 20091015; CN 201010552012 A 20101015; HK 11111618 A 20111027; JP 2010232903 A 20101015; KR 20100100585 A 20101015; US 201414452364 A 20140805; US 201815898330 A 20180216; US 202016847699 A 20200414; US 90578810 A 20101015**