

Title (en)

METHOD FOR HYDROMETALLURGICAL PROCESSING OF A NOBLE METAL-TIN ALLOY

Title (de)

VERFAHREN ZUR HYDROMETALLURGISCHEN AUFARBEITUNG EINER EDELMETALL-ZINN-LEGIERUNG

Title (fr)

PROCÉDÉ DE TRAITEMENT HYDRO-MÉTALLURGIQUE D'UN ALLIAGE DE MÉTAL PRÉCIEUX - ÉTAÏN

Publication

EP 3749792 A1 20201216 (DE)

Application

EP 18753327 A 20180730

Priority

- EP 18155948 A 20180209
- EP 2018070531 W 20180730

Abstract (en)

[origin: WO2019154530A1] A method for the hydrometallurgical processing of a noble metal-tin alloy consisting of (i) 0.45 to 25 wt.% of at least one metal A selected from the group consisting of gold and platinum, (ii) 35 to 99.2 wt.% of at least one metal B selected from the group consisting of palladium, silver and copper, (iii) 0.3 to 30 wt.% tin and (iv) 0 to 50 wt.% of at least one of an element other than gold, platinum, palladium, silver, copper and tin, the alloy having a metal A : tin ratio by weight of $> 0.7 : 1$, comprising the steps: (a1) targeted selection of the noble metal-tin alloy or (a2) targeted production of the noble metal-tin alloy, (b) dissolving the nitric acid-soluble components of the noble metal-tin alloy in nitric acid to form a nitric acid solution comprising the at least one metal B as a dissolved nitrate and an undissolved residue, (c) separating the undissolved residue from the nitric acid solution, and (d) dissolving the separated residue in hydrochloric acid and a medium comprising at least one oxidising agent.

IPC 8 full level

C22C 11/04 (2006.01)

CPC (source: EP US)

C22B 11/042 (2013.01 - US); **C22B 23/0407** (2013.01 - US); **C22B 23/0438** (2013.01 - US); **C22C 1/02** (2013.01 - US); **C22C 3/005** (2013.01 - US); **C22C 5/04** (2013.01 - US); **C22C 5/08** (2013.01 - EP US); **C22C 9/00** (2013.01 - US); **C22C 11/04** (2013.01 - EP); **C22C 13/00** (2013.01 - US)

Citation (search report)

See references of WO 2019154530A1

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)

WO 2019154530 A1 20190815; CN 111630193 A 20200904; CN 111630193 B 20220503; EP 3749792 A1 20201216; EP 3749792 B1 20210609; TW 201934765 A 20190901; TW I685571 B 20200221; US 2021071284 A1 20210311; ZA 202004852 B 20220428

DOCDB simple family (application)

EP 2018070531 W 20180730; CN 201880086297 A 20180730; EP 18753327 A 20180730; TW 108100472 A 20190107; US 201816963661 A 20180730; ZA 202004852 A 20200805