

Title (en)

GOLD RECOVERY FROM REFRACTORY ORES AND CONCENTRATES

Title (de)

GOLDGEWINNUNG AUS REFRAKTÄREN ERZEN UND KONZENTRATEN

Title (fr)

RÉCUPÉRATION D'OR À PARTIR DE MINERAIS ET CONCENTRÉS RÉFRACTAIRES

Publication

**EP 2906732 A4 20160817 (EN)**

Application

**EP 13844604 A 20131010**

Priority

- AU 2012904432 A 20121010
- AU 2013001169 W 20131010

Abstract (en)

[origin: WO2014056034A1] A method for recovery of gold from a gold-containing, refractory pyrite-rich ore or concentrate is disclosed. The method results in the production of a high grade, gold-containing solid intermediate concentrate. One embodiment comprises the steps of treating gold-containing material (100) rich in pyrite, arseno-pyrite or other iron sulphide to yield a gold-containing refractory concentrate (110) comprising a host mineral matrix rich in pyrite, arseno-pyrite or other iron sulphide, pressure oxidation (112) of the refractory concentrate (110) under acidic conditions to decompose the host mineral matrix and precipitate basic ferric sulphate ( $\text{Fe(OH)SO}_4$ ) to produce a pressure oxidation product (114), conditioning of the pressure oxidation product (114) under acidic conditions at atmospheric pressure to convert the basic ferric sulphate ( $\text{Fe(OH)SO}_4$ ) to soluble ferric sulphate ( $\text{Fe}_2(\text{SO}_4)_3$ ) to produce a conditioning product (120), solid/liquid separation of the conditioning product (120) to produce a high grade, gold-containing solid intermediate concentrate (124), and an acidic filtrate (126).

IPC 8 full level

**C22B 11/00** (2006.01); **C22B 3/00** (2006.01)

CPC (source: EP)

**C22B 3/22** (2013.01); **C22B 3/44** (2013.01); **C22B 11/04** (2013.01); **Y02P 10/20** (2015.11)

Citation (search report)

- [X] US 2006133974 A1 20060622 - JI JINXING [CA], et al
- [A] US 4571264 A 19860218 - WEIR DONALD R [CA], et al
- See references of WO 2014056034A1

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

DOCDB simple family (publication)

**WO 2014056034 A1 20140417**; CA 2887675 A1 20140417; EP 2906732 A1 20150819; EP 2906732 A4 20160817

DOCDB simple family (application)

**AU 2013001169 W 20131010**; CA 2887675 A 20131010; EP 13844604 A 20131010