

Title (en)

PROCESS AND FACILITY FOR THERMAL TREATMENT OF A SULFUR-CONTAINING ORE

Title (de)

VERFAHREN UND ANLAGE ZUR THERMISCHEN BEHANDLUNG EINES SCHWEFELHALTIGEN ERZES

Title (fr)

PROCÉDÉ ET INSTALLATION POUR LE TRAITEMENT THERMIQUE D'UN MINÉRAI CONTENANT DU SOUFRE

Publication

**EP 3433388 A1 20190130 (EN)**

Application

**EP 17715066 A 20170324**

Priority

- DE 102016105574 A 20160324
- EP 2017057087 W 20170324

Abstract (en)

[origin: WO2017162857A1] The present invention relates to a process for thermal treatment of a sulfur-containing ore in which the ore is calcined at temperatures of between 600 and 1200 °C in the presence of oxygen in a reactor so that between 1 and 90 % by weight of sulfur contained in the ore is burned to sulfur dioxide and impurities contained are driven off in gaseous form. The exhaust gas being produced and containing the sulfur dioxide is fed into a gas purification comprising at least one component and/or the calcined ore is fed into at least one further process stage. An exhaust gas from the gas purification and/or the process stage and/or a gas used for cooling within the gas purification or for cooling within a further process stage is at least partially returned back into the reactor as recycling gas having a temperature of > 100 °C.

IPC 8 full level

**C22B 1/02** (2006.01)

CPC (source: EA EP US)

**C22B 1/02** (2013.01 - EA EP US); **C22B 11/00** (2013.01 - EA US); **C22B 15/0013** (2013.01 - EA US); **C22B 23/005** (2013.01 - EA US)

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 2017162857 A1 20170928**; CA 3018017 A1 20170928; CA 3018017 C 20240423; CL 2018002651 A1 20181214; CN 108884514 A 20181123; DE 102016105574 A1 20170928; EA 201891921 A1 20190329; EP 3433388 A1 20190130; EP 3433388 B1 20200819; PL 3433388 T3 20210222; RS 61023 B1 20201231; US 2019017143 A1 20190117

DOCDB simple family (application)

**EP 2017057087 W 20170324**; CA 3018017 A 20170324; CL 2018002651 A 20180914; CN 201780018103 A 20170324; DE 102016105574 A 20160324; EA 201891921 A 20170324; EP 17715066 A 20170324; PL 17715066 T 20170324; RS P20201332 A 20170324; US 201816133057 A 20180917