

Title (en)

A PROCESS FOR THE REMOVAL OF METAL OR IMPURITIES FROM ELECTRIC ARC FURNACE DUST

Title (de)

VERFAHREN ZUR ENTFERNUNG VON METALL ODER VERUNREINIGUNGEN AUS LICHTBOGENOFENSTAUB

Title (fr)

PROCÉDÉ DE RETRAIT DE MÉTAL OU D'IMPURETÉS PROVENANT DE POUSSIÈRES DE FOUR À ARC ÉLECTRIQUE

Publication

**EP 2992118 A2 20160309 (EN)**

Application

**EP 14759269 A 20140424**

Priority

- US 201361816987 P 20130429
- IB 2014001391 W 20140424

Abstract (en)

[origin: WO2014177931A2] A method for preparing Electric Arc Furnace dust (EAFD) for metal recovery, comprising: a) mixing the EAFD comprising zinc oxide or lead oxide, or a mixture of both, with a liquid and a binder to produce an EAFD mixture; b) producing a shaped EAFD pellet; and c) drying the shaped EAFD pellet is disclosed. A method for recovering zinc from Electric Arc Furnace dust (EAFD), comprising: a) heating the EAFD comprising at least one metal comprising zinc in an inert gas atmosphere at a temperature ranging from 700 °C to 1100 °C; and b) evaporating the at least one metal comprising zinc from the EAFD and collecting the at least one metal is also disclosed. A method for recovering an impurity from Electric Arc Furnace dust (EAFD), comprising: a) heating the EAFD comprising an impurity in an inert gas atmosphere at a temperature ranging from 700 °C to 1100 °C; and b) evaporating the impurity from the EAFD and collecting the impurity is also disclosed. A method for recovering iron oxide from Electric Arc Furnace dust (EAFD), comprising: a) heating the EAFD comprising iron oxide and at least one metal in an inert gas atmosphere at a temperature ranging from 700 °C to 1100 °C; and b) separating the iron oxide by evaporating the at least one metal from the EAFD and leaving the iron oxide as a residue is also disclosed.

IPC 8 full level

**C22B 7/02** (2006.01); **C22B 1/00** (2006.01); **C22B 13/02** (2006.01); **C22B 19/30** (2006.01)

CPC (source: EP US)

**C22B 1/2406** (2013.01 - US); **C22B 7/001** (2013.01 - EP US); **C22B 7/02** (2013.01 - EP US); **C22B 13/025** (2013.01 - EP US); **C22B 19/20** (2013.01 - US); **C22B 19/30** (2013.01 - EP US); **C22B 19/34** (2013.01 - US); **C22B 26/10** (2013.01 - US); **Y02P 10/20** (2015.11 - EP US)

Citation (search report)

See references of WO 2014177931A2

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 2014177931 A2 20141106**; **WO 2014177931 A3 20150312**; EP 2992118 A2 20160309; US 2016102382 A1 20160414

DOCDB simple family (application)

**IB 2014001391 W 20140424**; EP 14759269 A 20140424; US 201414787855 A 20140424