

Title (en)

METHOD AND DEVICE FOR EXTRACTING NON-MAGNETIC ORES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR GEWINNUNG VON NICHTMAGNETISCHEN ERZEN

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR EXTRAIRE DES MINÉRAUX NON MAGNÉTIQUES

Publication

**EP 2242584 A2 20101027 (DE)**

Application

**EP 09709543 A 20090210**

Priority

- EP 2009051489 W 20090210
- EP 08002788 A 20080215
- EP 09709543 A 20090210

Abstract (en)

[origin: EP2090367A1] The method involves providing a pulp (P), which continuously flows via a reactor (1) in a flow direction. Magnetic- or magnetizable magnet particles are supplied to the pulp, where the particles form ore-magnetic particle-agglomerates with non-magnetic ore particles. The agglomerates are moved into an accumulation region (4) of the reactor by a magnetic field, and are separated into ore particles and magnetic particles. The separated magnetic particles are hydrophobized such that new ore magnetic particle agglomerates are formed during a new reciprocal effect with the non-magnetic particles. An independent claim is also included for a device for continuously producing non-magnetic ores from a pulp.

IPC 8 full level

**B03C 1/015** (2006.01); **B03C 1/28** (2006.01)

CPC (source: EP US)

**B03C 1/01** (2013.01 - EP US); **B03C 1/015** (2013.01 - EP US); **B03C 1/288** (2013.01 - EP US); **B03C 2201/18** (2013.01 - EP US); **Y02P 10/20** (2015.11 - EP)

Citation (search report)

See references of WO 2009101070A2

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 TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**EP 2090367 A1 20090819**; AU 2009214166 A1 20090820; AU 2009214166 B2 20130418; CA 2715532 A1 20090820; CA 2715532 C 20160119; CL 2009000343 A1 20100921; EP 2242584 A2 20101027; PE 20100036 A1 20100220; US 2011000826 A1 20110106; US 8342336 B2 20130101; WO 2009101070 A2 20090820; WO 2009101070 A3 20091105; ZA 201005266 B 20110330

DOCDB simple family (application)

**EP 08002788 A 20080215**; AU 2009214166 A 20090210; CA 2715532 A 20090210; CL 2009000343 A 20090213; EP 09709543 A 20090210; EP 2009051489 W 20090210; PE 2009000221 A 20090213; US 86771009 A 20090210; ZA 201005266 A 20100723