

Title (en)

DEVICE FOR SEPARATING FERROMAGNETIC PARTICLES FROM A SUSPENSION

Title (de)

VORRICHTUNG ZUR ABSCHEIDUNG FERROMAGNETISCHER PARTIKEL AUS EINER SUSPENSION

Title (fr)

DISPOSITIF DE SÉPARATION DES PARTICULES FERROMAGNÉTIQUES D'UNE SUSPENSION

Publication

**EP 2648848 A1 20131016 (DE)**

Application

**EP 12701863 A 20120124**

Priority

- DE 102011003825 A 20110209
- EP 2012051046 W 20120124

Abstract (en)

[origin: CA2826667A1] The invention relates to a device for separating ferromagnetic particles from a suspension (4), comprising a tubular reactor (6) through which the suspension (4) can flow and which has a first region (10) and a second region (12) in the passage direction, and further comprising means (14) for generating a magnetic field along an inside reactor wall (16), wherein in the second region (12) the tubular reactor (8) comprises a tailings discharge pipe (18) and a concentrate separation channel (20) surrounding said pipe. The invention is characterized in that the cross-sectional area (22) of the tubular reactor (6) in the second region (12) is larger than that (21) in the first region (10).

IPC 8 full level

**B03C 1/033** (2006.01); **B03C 1/24** (2006.01); **B03C 1/28** (2006.01)

CPC (source: EP US)

**B03C 1/0335** (2013.01 - EP US); **B03C 1/14** (2013.01 - US); **B03C 1/24** (2013.01 - EP US); **B03C 1/288** (2013.01 - EP US);  
**B03C 2201/18** (2013.01 - EP US)

Citation (search report)

See references of WO 2012107274A1

Citation (examination)

GB 462912 A 19370317 - UNITED STATES STEEL CORP

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)

**DE 102011003825 A1 20120809**; AU 2012216124 A1 20130815; BR 112013020089 A2 20161025; CA 2826667 A1 20120816;  
CN 103459041 A 20131218; EP 2648848 A1 20131016; RU 2013141206 A 20150320; RU 2562629 C2 20150910; UA 109303 C2 20150810;  
US 2013313177 A1 20131128; WO 2012107274 A1 20120816

DOCDB simple family (application)

**DE 102011003825 A 20110209**; AU 2012216124 A 20120124; BR 112013020089 A 20120124; CA 2826667 A 20120124;  
CN 201280007876 A 20120124; EP 12701863 A 20120124; EP 2012051046 W 20120124; RU 2013141206 A 20120124;  
UA A201309831 A 20120124; US 201213984630 A 20120124