

Title (en)

MAGNETIC SEPARATION OF SUBSTANCES ON THE BASIS OF THE DIFFERENT SURFACE CHARGES THEREOF

Title (de)

MAGNETISCHE TRENNUNG VON SUBSTANZEN BASIEREND AUF IHREN UNTERSCHIEDLICHEN OBERFLÄCHENLADUNGEN

Title (fr)

SEPARATION MAGNETIQUE DE SUBSTANCES SUR LA BASE DE LEURS CHARGES SUPERFICIELLES DIFFERENTES

Publication

EP 2212027 A2 20100804 (DE)

Application

EP 08851798 A 20081117

Priority

- EP 2008065666 W 20081117
- EP 07120973 A 20071119
- EP 08851798 A 20081117

Abstract (en)

[origin: WO2009065802A2] The invention relates to a method for separating at least one first material from a mixture containing said at least one first material and at least one second material. Said method comprises the following steps: (A) a suspension of the mixture containing at least one first material and at least one second material and at least one magnetic particle is produced in a suitable suspending agent; (B) the pH of the suspension obtained in step (A) is adjusted to a value at which the at least one first material and the at least one magnetic particle have opposite surface charges such that the same agglomerate; (C) the agglomerate obtained in step (B) is separated by applying a magnetic field; and (D) the agglomerate separated in step (C) is split by adjusting the pH to a value at which the at least one first material and the at least one magnetic particle have identical surface charges in order to obtain the at least one first material.

IPC 8 full level

B03C 1/015 (2006.01); **B03C 1/32** (2006.01)

CPC (source: EP US)

B03C 1/015 (2013.01 - EP US); **B03C 1/32** (2013.01 - EP US); **B03C 2201/18** (2013.01 - EP US)

Citation (search report)

See references of WO 2009065802A2

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 MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2009065802 A2 20090528; WO 2009065802 A3 20090820; AR 069354 A1 20100113; AT E550101 T1 20120415; AU 2008327967 A1 20090528; AU 2008327967 B2 20130314; CA 2705881 A1 20090528; CL 2008003439 A1 20100111; CN 101903109 A 20101201; CN 101903109 B 20130424; EP 2212027 A2 20100804; EP 2212027 B1 20120321; PE 20091296 A1 20090930; PL 2212027 T3 20120831; US 2010307982 A1 20101209; US 8329039 B2 20121211; ZA 201004287 B 20110831

DOCDB simple family (application)

EP 2008065666 W 20081117; AR P080105013 A 20081118; AT 08851798 T 20081117; AU 2008327967 A 20081117; CA 2705881 A 20081117; CL 2008003439 A 20081119; CN 200880121798 A 20081117; EP 08851798 A 20081117; PE 2008001950 A 20081119; PL 08851798 T 20081117; US 74365508 A 20081117; ZA 201004287 A 20100617