

Title (en)

PROCESS FOR THE HIGH YIELD RECOVERY OF LEAD FROM SPENT LEAD-ACID BATTERIES WITH REDUCED ASSOCIATED PRODUCTION OF SLAG AND GASEOUS EMISSIONS

Title (de)

VERFAHREN ZUR HOHEN RÜCKGEWINNUNG VON BLEI AUS ALTBLEIAKKUMULATOREN MIT VERMINDERTER ZUGEHÖRIGER ERZEUGUNG VON SCHLACKEN UND ABGASEN

Title (fr)

PROCEDE POUR LA RECUPERATION A HAUT RENDEMENT DE PLOMB DANS DES ACCUMULATEURS AU PLOMB USES, AVEC PRODUCTION REDUITE DE SCORIES ET D'EMISSIONS GAZEUSES

Publication

**EP 1656463 A1 20060517 (EN)**

Application

**EP 04743947 A 20040712**

Priority

- IB 2004002285 W 20040712
- CH 12572003 A 20030718

Abstract (en)

[origin: WO2005007904A1] Process for desulphating a solid mixture and/or aggregate resulting from the breaking up of lead-acid batteries, comprising electrode slime containing lead compounds belonging to the group comprising oxides, oxidated compounds and sulphates, through contact with an aqueous solution of sodium carbonate and a substance dissolving lanarkite in which the said solid residues containing lead compounds are suspended, in which the solid phase of the suspension is subjected to a chemical reaction whose action is assisted by brushing, shear and compression forces exerted by brushing or scraping and compressing mechanical means, thus achieving almost total desulphatation.

IPC 1-7

**C22B 13/00**

IPC 8 full level

**C22B 3/00** (2006.01); **C22B 7/00** (2006.01); **H01M 10/54** (2006.01); **H01M 10/06** (2006.01)

CPC (source: EP US)

**C22B 7/008** (2013.01 - EP US); **C22B 13/045** (2013.01 - EP US); **H01M 10/54** (2013.01 - EP US); **H01M 10/06** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP); **Y02P 10/20** (2015.11 - EP US); **Y02W 30/84** (2015.05 - EP US)

Citation (search report)

See references of WO 2005007904A1

Cited by

US9670565B2; WO2008087684A1; US10062933B2; US9533273B2; US9555386B2; US9751067B2; US9757702B2; US10122052B2; US10403940B2; US10777858B2; US11005129B2; US11791505B2; US11923518B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2005007904 A1 20050127**; CN 1846005 A 20061011; EP 1656463 A1 20060517; US 2007028720 A1 20070208

DOCDB simple family (application)

**IB 2004002285 W 20040712**; CN 200480025066 A 20040712; EP 04743947 A 20040712; US 56498904 A 20040712