Title (en)
  PROCESSING RICH ORES USING MAGNETIC PARTICLES

Title (de)
  AUFBEREITUNG VON WERTERZEN DURCH MAGNETPARTIKEL

Title (fr)
  TRAITEMENT DE MINERAIS DE VALEUR AU MOYEN DE PARTICULES MAGNÉTIQUES

Publication
  EP 2190584 B1 20130605 (DE)

Application
  EP 08803482 A 20080901

Priority
  • EP 2008061503 W 20080901
  • EP 07115542 A 20070903
  • EP 08803482 A 20080901

Abstract (en)
  [origin: WO2009030669A2] The invention relates to a method for removing at least one first substance from a mixture that contains the at least one first substance and at least one second substance. Said method comprises the following steps: (A) contacting the mixture containing at least one first substance and at least one second substance with at least one surface-active substance, optionally in the presence of at least one dispersant, the surface-active substance binding to the at least one first substance, (B) optionally adding at least one dispersant to the mixture obtained in step (A) to obtain a dispersion, (C) treating the dispersion obtained in step (A) or (B) with at least one hydrophobic magnetic particle so that the at least one first substance to which the at least one surface-active substance is bound and the at least one magnetic particle are added thereto, (D) removing the addition product obtained in step (C) from the mixture by applying a magnetic field, (E) breaking down the removed addition product obtained in step (D) to obtain the at least one first substance and the at least one magnetic particle as separate entities.

IPC 8 full level
  B03C 1/015 (2006.01)

CPC (source: EP US)
  B03C 1/015 (2013.01 - EP US); B03C 2201/18 (2013.01 - EP US)

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 2009030669 A2 20090312; **WO 2009030669 A3 20090423**; AR 068164 A1 20091104; AU 2008294826 A1 20090312; AU 2008294826 B2 20130207; BR PI0816189 A2 20150414; CA 2698216 A1 20090312; CA 2698216 C 20170110; CL 2008002609 A1 20091023; CN 101815581 A 20100825; CN 101815581 B 20150121; EA 017511 B1 20130130; EA 201000407 A1 20101029; EP 2190584 A2 20100602; EP 2190584 B1 20130605; ES 2426614 T3 20131024; JP 2010537818 A 20101209; MX 2010002462 A 20100326; PE 20090869 A1 20090808; PL 2190584 T3 20131129; PT 2190584 E 20130828; UA 97543 C2 20120227; US 2010300941 A1 20101202; US 8318025 B2 20121127; ZA 201002330 B 20110629

DOCDB simple family (application)
  EP 2008061503 W 20080901; AR P080103819 A 20080902; AU 2008294826 A 20080901; BR PI0816189 A 20080901; CA 2698216 A 20080901; CL 2008002609 A 20080903; CN 200880110093 A 20080901; EA 201000407 A 20080901; EP 08803482 A 20080901; ES 08803482 T 20080901; JP 2010523489 A 20080901; MX 2010002462 A 20080901; PE 2008001542 A 20080902; PL 08803482 T 20080901; PT 08803482 T 20080901; UA A201003838 A 20080901; US 67583608 A 20080901; ZA 201002330 A 20100401