

Title (en)
METHOD FOR NICKEL AND COBALT RECOVERY FROM LATERITE ORES BY COMBINATION OF ATMOSPHERIC AND MODERATE PRESSURE LEACHING

Title (de)
VERFAHREN ZUR GEWINNUNG VON NICKEL UND COBALT AUS LATERITERZEN DURCH KOMBINATION VON AUSLAUGUNG UNTER NORMALDRUCK UND MODERATEM DRUCK

Title (fr)
PROCEDE PERMETTANT DE RECUPERER DU NICKEL ET DU COBALT A PARTIR DE MINERAIS DE LATERITE PAR COMBINAISON DE LIXIVIATION A PRESSION ATMOSPHERIQUE ET A PRESSION MODEREE

Publication
EP 1778883 A1 20070502 (EN)

Application
EP 05761684 A 20050623

Priority
• CA 2005000988 W 20050623
• US 59237504 P 20040802

Abstract (en)
[origin: US2006024224A1] A process for leaching laterite ores containing limonite and saprolite. Sufficient mineral acid is added to a slurry of limonite which is leached at atmospheric pressure to dissolve most of the soluble non-ferrous metals and soluble iron. After adding saprolite the slurry is further leached at a temperature above the normal boiling point and at a pressure above atmospheric pressure for a time sufficient to leach most of the contained nickel in the saprolite and to precipitate most of the iron in solution. The pressure of the slurry is then reduced, and nickel and/or cobalt is subsequently recovered from the leach solution by solvent extraction, resin-in-pulp or other ion exchange, sulfide or hydroxide precipitation, or other recovery method.

IPC 8 full level
C22B 23/00 (2006.01); **C22B 3/06** (2006.01); **C22B 3/08** (2006.01); **C22B 3/44** (2006.01)

CPC (source: EP KR US)
C22B 23/00 (2013.01 - KR); **C22B 23/0415** (2013.01 - EP US); **C22B 23/043** (2013.01 - EP US); **C22B 23/0453** (2013.01 - EP US); **C22B 23/0461** (2013.01 - EP US); **Y02P 10/20** (2015.11 - EP)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2006024224 A1 20060202; AU 2005284620 A1 20060323; BR PI0513652 A 20080513; CA 2572420 A1 20060323; CN 100402679 C 20080716; CN 101001964 A 20070718; EP 1778883 A1 20070502; EP 1778883 A4 20070829; GT 200600110 A 20060426; JP 2008508428 A 20080321; KR 20070041770 A 20070419; TW 200607867 A 20060301; WO 2006029499 A1 20060323; ZA 200701848 B 20080430

DOCDB simple family (application)
US 16536205 A 20050624; AU 2005284620 A 20050623; BR PI0513652 A 20050623; CA 2005000988 W 20050623; CA 2572420 A 20050623; CN 200580026260 A 20050623; EP 05761684 A 20050623; GT 200600110 A 20060310; JP 2007524144 A 20050623; KR 20077005105 A 20070302; TW 94124881 A 20050722; ZA 200701848 A 20070302