

Title (en)  
RECOVERING NICKEL

Title (de)  
RÜCKGEWINNUNG VON NICKEL

Title (fr)  
RECUPERATION DE NICKEL

Publication  
**EP 1546418 A4 20051123 (EN)**

Application  
**EP 03787516 A 20030815**

Priority  
• AU 0301037 W 20030815  
• AU 2002950815 A 20020815

Abstract (en)  
[origin: WO2004016816A1] A process for recovering valuable metals from laterite ores and concentrates that are contaminated with iron is disclosed. The process includes reducing ferric ions to ferrous ions in a leach liquor containing a valuable metal and iron in solution using a reductant, neutralising the liquor to reduce the free acid concentration in solution to levels suitable for nickel precipitation; and precipitating the valuable metal using the reductant and seed particles under process conditions, including one or more of seed particle size, seed composition, and temperature, that are selected to maximise nickel precipitation and to minimise iron precipitation.

IPC 1-7  
**C22B 3/06**; **C22B 3/08**; **C22B 3/10**; **C22B 3/20**; **C22B 3/44**; **C22B 23/00**

IPC 8 full level  
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CPC (source: EP US)  
**C22B 3/44** (2013.01 - EP US); **C22B 23/0415** (2013.01 - EP US); **C22B 23/0461** (2013.01 - EP US); **C22B 15/0093** (2013.01 - EP US); **Y02P 10/20** (2015.11 - EP US)

Citation (search report)  
• [Y] WO 0186010 A1 20011115 - KRONOS TITAN GMBH & CO OHG [DE], et al  
• [Y] GB 2049646 A 19801231 - INCO LTD  
• [A] CA 1035152 A 19780725 - INCO LTD  
• [A] DE 720881 C 19420518 - IG FARBENINDUSTRIE AG  
• [Y] DATABASE WPI Section Ch Week 198202, Derwent World Patents Index; Class M25, AN 1982-03292E, XP002347093  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 006, no. 011 (C - 088) 22 January 1982 (1982-01-22)  
• [Y] DATABASE WPI Section Ch Week 200210, Derwent World Patents Index; Class M14, AN 2002-067410, XP002347094  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 009, no. 171 (C - 291) 16 July 1985 (1985-07-16)  
• See references of WO 2004016816A1

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 PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004016816 A1 20040226**; AU 2002950815 A0 20020912; BR 0313497 A 20050705; EP 1546418 A1 20050629; EP 1546418 A4 20051123; RS 20050145 A 20070604; US 2006169104 A1 20060803

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**AU 0301037 W 20030815**; AU 2002950815 A 20020815; BR 0313497 A 20030815; EP 03787516 A 20030815; US 52457405 A 20050701; YU P20050145 A 20030815