

Title (en)
ELECTROCHEMICAL REDUCTION OF METAL OXIDES

Title (de)
ELEKTROCHEMISCHE REDUKTION VON METALLOXIDEN

Title (fr)
REDUCTION ELECTROCHIMIQUE D'OXYDES METALLIQUES

Publication
EP 1680532 A4 20070620 (EN)

Application
EP 04789581 A 20041014

Priority
• AU 2004001410 W 20041014
• AU 2003905595 A 20031014

Abstract (en)
[origin: WO2005038092A1] A process for electrochemically reducing a metal oxide feed material in a solid state in an electrolytic cell is disclosed. The cell includes a molten bath of electrolyte, an anode, a cathode, and a means for applying a potential across the anode and the cathode. The process is characterised by supplying an amount of electrolyte into the bath that is greater than the amount of electrolyte that is required to replace electrolyte removed from the bath with reduced material and removing molten electrolyte from the bath to maintain the bath height at a required height or within a range of required heights.

IPC 8 full level
C22B 4/08 (2006.01); **C22B 34/12** (2006.01); **C25C 5/00** (2006.01)

CPC (source: EP US)
C22B 4/08 (2013.01 - EP US); **C22B 34/129** (2013.01 - EP US); **C25C 3/28** (2013.01 - EP US); **C25C 5/04** (2013.01 - EP US);
C25C 7/007 (2013.01 - EP US)

Citation (search report)
• [A] WO 03002785 A1 20030109 - BHP BILLITON INNOVATION PTY [AU], et al
• See references of WO 2005038092A1

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 2005038092 A1 20050428; CN 1894440 A 20070110; CN 1894440 B 20100616; EA 009106 B1 20071026; EA 200600774 A1 20061027;
EP 1680532 A1 20060719; EP 1680532 A4 20070620; JP 2007509232 A 20070412; US 2008047845 A1 20080228; ZA 200603786 B 20070926

DOCDB simple family (application)
AU 2004001410 W 20041014; CN 200480037265 A 20041014; EA 200600774 A 20041014; EP 04789581 A 20041014;
JP 2006534543 A 20041014; US 57580004 A 20041014; ZA 200603786 A 20060512