

Title (en)
IMPROVED SYNTHETIC RUTILE PROCESS B

Title (de)
VERBESSERTES VERFAHREN B FÜR SYNTHETISCHES RUTIL

Title (fr)
PROCÉDÉ B PERFECTIONNÉ POUR LA PRODUCTION DE RUTILE SYNTHÉTIQUE

Publication
EP 2556027 A1 20130213 (EN)

Application
EP 11764946 A 20110406

Priority
• AU 2010901440 A 20100406
• AU 2011000391 W 20110406

Abstract (en)
[origin: WO2011123889A1] A process for recovering titanium as synthetic rutile from a titaniferous ore, for example a secondary ilmenite, includes the steps of treating the ore in a reducing atmosphere at elevated temperature above 1075 °C in the presence of a carbonaceous reductant whereby to convert the ilmenite to reduced ilmenite in which iron oxides in the ilmenite have been reduced to metallic iron, and separating out the metallic iron so as to obtain a synthetic rutile product., The carbonaceous reductant comprises a coal selected for a moisture content below 40%, a volatiles content greater than 30%, ash content below 10%, and a gasification reactivity that results in an increased rate of reduction of iron oxides and titanium species effective to achieve a TiO₂ content of 90% or greater in the synthetic rutile product.

IPC 8 full level
C01G 23/047 (2006.01)

CPC (source: EP US)
C01G 23/047 (2013.01 - EP US); **C22B 5/10** (2013.01 - EP US); **C22B 34/1209** (2013.01 - EP US)

Citation (search report)
See references of WO 2011123889A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2011123889 A1 20111013; AU 2011238420 A1 20121101; AU 2011238420 B2 20130328; CN 103209926 A 20130717;
EP 2556027 A1 20130213; US 2013022521 A1 20130124

DOCDB simple family (application)
AU 2011000391 W 20110406; AU 2011238420 A 20110406; CN 201180027804 A 20110406; EP 11764946 A 20110406;
US 201113639572 A 20110406