

Title (en)

Additive containing coke and titanium and use of same to repair the cladding of metallurgical containers

Title (de)

Koks- und titanhaltiger Zuschlagsstoff und dessen Verwendung zur Reparatur der Auskleidung von metallurgischen Gefäßen

Title (fr)

Matière de charge contenant du coke et du titane et son utilisation pour la réparation du revêtement de récipients métallurgiques

Publication

EP 2415880 A1 20120208 (DE)

Application

EP 11151418 A 20110119

Priority

DE 102010038831 A 20100803

Abstract (en)

The coke- and titanium-containing aggregate comprises carbonaceous coke (45-80 wt.%), which contains temperatures volatile organic substances of less than 10 wt.% based on the carbonaceous material at the given reaction site, titanium containing material (20-55 wt.%), and other metal oxides and/or metal hydroxides (50 wt.%). The coke- and titanium-containing aggregate has a water content of 0.1-15 wt.% and a particle size of 100 µm. Independent claims are included for: (1) a method of accelerating the formation of highly refractory titanium carbides; and (2) a method of producing a coke and titanium-containing aggregate.

Abstract (de)

Die Erfindung betrifft einen koks- und titanhaltigen Zuschlagsstoff, Verfahren zu dessen Herstellung und dessen Verwendung zur Reparatur der Auskleidung von metallurgischen Gefäßen sowie ein Verfahren zur Beschleunigung der Bildung von hochfeuerfesten Titanverbindungen durch Direktreduktion bei metallurgischen Prozessen.

IPC 8 full level

C21B 7/06 (2006.01); **C21B 5/00** (2006.01); **F27D 1/16** (2006.01)

CPC (source: EP KR US)

C21B 5/00 (2013.01 - KR); **C21B 5/003** (2013.01 - EP US); **C21B 5/007** (2013.01 - EP US); **C21B 7/06** (2013.01 - EP KR US); **F27D 1/16** (2013.01 - KR); **F27D 1/1636** (2013.01 - US); **F27D 1/1678** (2013.01 - EP US)

Citation (search report)

- [X] DE 19830102 C1 19990729 - METALLGESELLSCHAFT AG [DE]
- [X] WO 2008015259 A1 20080207 - SACHTLEBEN CHEMIE GMBH [DE], et al
- [X] DE 102008056809 A1 20100527 - KRONOS INT INC [DE]

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2415880 A1 20120208; BR 112013002593 A2 20160607; DE 102011079627 A1 20120209; EP 2601318 A1 20130612; EP 2601318 B1 20140709; ES 2504980 T3 20141009; JP 2013539001 A 20131017; JP 5893023 B2 20160323; KR 101524237 B1 20150529; KR 20130098992 A 20130905; PL 2601318 T3 20141231; US 2013168889 A1 20130704; WO 2012022343 A1 20120223

DOCDB simple family (application)

EP 11151418 A 20110119; BR 112013002593 A 20110722; DE 102011079627 A 20110722; DE 2011075173 W 20110722; EP 11761487 A 20110722; ES 11761487 T 20110722; JP 2013522104 A 20110722; KR 20137002744 A 20110722; PL 11761487 T 20110722; US 201113813666 A 20110722