

Title (en)

DESULFURIZATION TREATMENT METHOD FOR MOLTEN STEEL, AND DESULFURIZATION AGENT

Title (de)

ENTSCHWEFELUNGSBEHANDLUNGSVERFAHREN FÜR GESCHMOLZENEN STAHL UND ENTSCHWEFELUNGSMITTEL

Title (fr)

PROCÉDÉ DE TRAITEMENT DE DÉSULFURATION DESTINÉ À DE L'ACIER FONDU, ET AGENT DE DÉSULFURATION

Publication

EP 3572534 A4 20191127 (EN)

Application

EP 18741544 A 20180110

Priority

- JP 2017007209 A 20170119
- JP 2018000280 W 20180110

Abstract (en)

[origin: EP3572534A1] A desulfurization processing method of molten steel according to the invention includes adding a desulfurization agent containing quicklime into a ladle holding the molten steel, and stirring the molten steel in the ladle to reduce a sulfur concentration in the molten steel. The used desulfurization agent contains quicklime satisfying that a sum of volumes of pores having a pore diameter ranging from 0.5 to 10 μm in the quicklime is equal to or larger than 0.1 mL/g. As a result, the desulfurization processing can be efficiently performed without using CaF_2 and pre-melt flux.

IPC 8 full level

C21C 7/064 (2006.01); **C21C 7/04** (2006.01); **C21C 7/072** (2006.01); **C21C 7/076** (2006.01)

CPC (source: EP KR)

C21C 7/0075 (2013.01 - EP); **C21C 7/04** (2013.01 - EP); **C21C 7/064** (2013.01 - EP KR); **C21C 7/072** (2013.01 - EP KR); **C21C 7/076** (2013.01 - KR)

Citation (search report)

- [IA] JP 2009108344 A 20090521 - NIPPON STEEL CORP, et al
- [IA] JP H11221432 A 19990817 - NITTETSU MINING CO LTD
- [A] JP 2008063647 A 20080321 - JFE STEEL KK
- [A] EP 2434025 A1 20120328 - JFE STEEL CORP [JP]
- [A] WO 2010026775 A1 20100311 - NIPPON STEEL CORP [JP], et al
- [A] JP S6256509 A 19870312 - KAWASAKI STEEL CO, et al
- See references of WO 2018135344A1

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 3572534 A1 20191127; **EP 3572534 A4 20191127**; **EP 3572534 B1 20210428**; BR 112019013592 A2 20200107; BR 112019013592 B1 20220816; CN 110177889 A 20190827; CN 110177889 B 20210611; JP 6743915 B2 20200819; JP WO2018135344 A1 20190627; KR 102290861 B1 20210817; KR 20190108136 A 20190923; TW 201829790 A 20180816; TW I660049 B 20190521; WO 2018135344 A1 20180726

DOCDB simple family (application)

EP 18741544 A 20180110; BR 112019013592 A 20180110; CN 201880007085 A 20180110; JP 2018000280 W 20180110; JP 2018563279 A 20180110; KR 20197023942 A 20180110; TW 107101421 A 20180115