

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  $\mu\text{m}$  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  $\text{CaF}_2$  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)

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