

Title (en)  
METHOD FOR INTEGRATED DESULFURIZING OF PIG IRON MELT AND STEEL MELT

Title (de)  
VERFAHREN ZUM INTEGRIERTEN ENTSCHEFELN VON ROHEISEN- UND STAHLSCHELMELZEN

Title (fr)  
PROCEDE POUR LA DESULFURATION INTEGREE DE BAINS DE FONTE ET D'ACIER

Publication  
**EP 1086254 A1 20010328 (DE)**

Application  
**EP 99908667 A 19990318**

Priority  
• AT 9900069 W 19990318  
• AT 87598 A 19980520

Abstract (en)  
[origin: WO9960173A1] The invention relates to a method for producing steel in which iron melt (4) comprising a strong basic slag is desulfurized in a desulfurization vessel (7) by heating the desulfurization slag (8) up to a temperature of 1400-1800 DEG C. The iron melt containing sulfur is desulfurized using this desulfurization slag (8) and is either poured off free of slag in a discontinuous or continuous manner below the desulfurization slag (8). The ratio of iron melt (4) to desulfurization slag (8) does not exceed the value of 10:1 parts by weight, and the desulfurization slag (8) is continuously and/or discontinuously regenerated. Afterwards, a steel melt (21) is produced from the iron melt (4). The aim of the invention is to simplify a successive ladle treatment of the crude steel (11) produced from the desulfurized pig iron (4), especially for minimizing energy and avoiding the production of waste. To this end, the invention provides that a partial quantity of desulfurization slag (8) is fed from the desulfurization vessel (7) into a steel pouring ladle (19) of the desulfurized iron melt (4) to be transformed into a crude steel melt (11). In addition, said partial quantity is recirculated after the ladle treatment and after pouring off the steel melt (21) which is formed in such a manner.

IPC 1-7  
**C21C 7/064**; **C21C 1/02**

IPC 8 full level  
**C21C 1/02** (2006.01); **C21C 7/064** (2006.01)

CPC (source: EP KR US)  
**C21C 1/02** (2013.01 - EP US); **C21C 1/025** (2013.01 - KR); **C21C 7/0075** (2013.01 - KR); **C21C 7/064** (2013.01 - EP KR US); **C21C 7/0645** (2013.01 - KR)

Citation (search report)  
See references of WO 9960173A1

Designated contracting state (EPC)  
BE DE ES FR GB IT SE

DOCDB simple family (publication)  
**WO 9960173 A1 19991125**; AT 407260 B 20010226; AT A87598 A 20000615; CA 2332909 A1 19991125; DE 59900753 D1 20020228; EP 1086254 A1 20010328; EP 1086254 B1 20020109; JP 2002515545 A 20020528; KR 100581468 B1 20060523; KR 20010025066 A 20010326; US 6506225 B1 20030114

DOCDB simple family (application)  
**AT 9900069 W 19990318**; AT 87598 A 19980520; CA 2332909 A 19990318; DE 59900753 T 19990318; EP 99908667 A 19990318; JP 2000549779 A 19990318; KR 20007013032 A 20001120; US 70043200 A 20001128