

Title (en)

METHOD FOR DESILICONIZING PIG IRON BEFORE REFINING IT TO STEEL

Title (de)

VERFAHREN ZUM ENTSILIZIEREN VON ROHEISEN VOR EINEM FRISCHEN ZU STAHL

Title (fr)

PROCEDE DE DESILICIAGE DE FONTE BRUTE AVANT UN AFFINAGE EN ACIER

Publication

EP 1007744 A1 20000614 (DE)

Application

EP 99924566 A 19990609

Priority

- AT 9900149 W 19990609
- AT 100698 A 19980610

Abstract (en)

[origin: WO9964635A1] The invention relates to a method for desiliconizing pig iron before subsequent refining to steel. According to said method liquid steel slag is deposited onto the tapped molten pig iron slag and possibly the molten blast-furnace slag at a quantity corresponding to the silicon content of the pig iron and the iron and/or chromium oxide content of the slag after blast furnace tapping. The quantity of steel slag is chosen such that the silicon content of the pig iron is reduced to less than 0.5 weight % with a simultaneous increase in the SiO₂ content of the slag and a reduction in the iron and/or chromium oxides of the liquid metal slag. The temperature of the slag iron bath is maintained at below 1,500 DEG C.

IPC 1-7

C21B 3/06; **C21C 1/04**

IPC 8 full level

C21B 3/06 (2006.01); **C21C 1/04** (2006.01)

CPC (source: EP US)

C21B 3/06 (2013.01 - EP US); **C21C 1/04** (2013.01 - EP US); **C21B 2400/022** (2018.07 - EP US); **Y02W 30/50** (2015.05 - EP US)

Citation (search report)

See references of WO 9964635A1

Designated contracting state (EPC)

AT BE DE ES FI FR GB GR IT NL PT SE

DOCDB simple family (publication)

WO 9964635 A1 19991216; AT 406691 B 20000725; AT A100698 A 19991215; BR 9906496 A 20000926; CA 2299277 A1 19991216; EP 1007744 A1 20000614; ES 2149752 T1 20001116; SK 1262000 A3 20000912; US 6261339 B1 20010717; ZA 200000582 B 20010312

DOCDB simple family (application)

AT 9900149 W 19990609; AT 100698 A 19980610; BR 9906496 A 19990609; CA 2299277 A 19990609; EP 99924566 A 19990609; ES 99924566 T 19990609; SK 1262000 A 19990609; US 48536900 A 20000209; ZA 200000582 A 20000208