

Title (en)
Method of dephosphorizing molten pig iron.

Title (de)
Verfahren zur Entphosphorisierung geschmolzenen Roheisens.

Title (fr)
Procédé de déphosphoration d'un bain de fonte.

Publication
EP 0043238 A1 19820106 (EN)

Application
EP 81302859 A 19810625

Priority

- JP 2083081 A 19810217
- JP 7472081 A 19810518
- JP 8808180 A 19800628

Abstract (en)
A method of dephosphorizing molten pig iron by charging molten pig iron into a refining vessel provided at its a bottom with tuyeres for blowing gas and, if necessary, at its top with a gas injecting member, blowing a powdery refining agent together with the blowing gas into the molten pig iron through the tuyeres, and charging a flux for the refining agent into the refining vessel, to perform desiliconization and subsequent dephosphorization of the molten pig iron, is characterised by (a) charging a coolant together with the molten pig iron into the refining vessel to control the temperature of the molten pig iron during the blowing to a range of 1,250-1,450 DEG C; (b) blowing the powdery refining agent into the molten pig iron so as to adjust a value of slag basicity after the treatment to not less than 2.5; and (c) blowing the blowing gas at a rate of not less than 0.5 Nm³/min.t so that a net oxygen quantity is 8.15 Nm³ per ton of molten pig iron.

IPC 1-7
C21C 1/02; **C21C 5/34**

IPC 8 full level
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CPC (source: EP)
C21C 1/02 (2013.01); **C21C 5/34** (2013.01); **C21C 5/35** (2013.01)

Citation (search report)

- FR 1062328 A 19540421
- [A] US 4065297 A 19771227 - SASAKI KANTARO, et al
- [A] US 3376130 A 19680402 - THEODOR KOOTZ, et al
- [A] FR 986779 A 19510806 - COMMENTRY FOURCHAMBAULT ET DEC
- [A] US 3304172 A 19670214 - AKE JOSEFSSON ERIK ANDERS, et al
- [A] US 3807989 A 19740430 - NILLES P
- [A] DE 1275078 B 19680814 - MANNESMANN AG
- [A] FR 2146969 A1 19730309 - CREUSOT LOIRE [FR]

Cited by
EP0360954A3; EP1445337A4; CN109852762A; CN103725825A; CN1046139C; CN113355487A

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