

Title (en)
STEEL MANUFACTURING METHOD USING CONVERTER

Title (de)
STAHLHERSTELLUNG IM KONVERTER

Title (fr)
PROCEDE DE PRODUCTION ET D'ACIER AU MOYEN D'UN CONVERTISSEUR

Publication
EP 0714989 A4 19970625 (EN)

Application
EP 94919835 A 19940630

Priority

- JP 9401070 W 19940630
- JP 16256493 A 19930630
- JP 16579093 A 19930705
- JP 32908693 A 19931224
- JP 32908893 A 19931224
- JP 1102794 A 19940202

Abstract (en)
[origin: WO9501458A1] A method of efficiently carrying out the dephosphorization, dephosphorization-decarbonization, or desulfurization-dephosphorization-decarbonization of molten iron in a converter. The feed rates of flux and a bottom-blowing gas are regulated so that bottom-blowing agitation power of not less than 0.1 kW/t, a CaO/SiO₂ of treated slag of 0.7-2.5, and a temperature at a treatment terminal point of 1200-1450 DEG C can be attained. A control operation is carried out so that the sum of the concentration of T.Fe and that of MnO in treated slag becomes 10-35 wt.%, by regulating a top blowing acid feed rate, a flow rate of a bottom blowing gas, or the height of a top blowing lance.

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C21C 5/28

IPC 8 full level
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CPC (source: EP KR)
C21C 1/02 (2013.01 - EP); **C21C 5/28** (2013.01 - EP); **C21C 5/34** (2013.01 - KR); **C21C 5/35** (2013.01 - EP); **C21C 5/567** (2013.01 - EP); **C21C 7/064** (2013.01 - EP KR); **C21C 7/068** (2013.01 - KR); **F27D 2019/0075** (2013.01 - KR); **F27D 2019/0078** (2013.01 - KR); **F27D 2027/002** (2013.01 - KR)

Citation (search report)

- [X] GB 2122649 A 19840118 - SUMITOMO METAL IND
- [X] GB 2072221 A 19810930 - NIPPON STEEL CORP
- [X] EP 0124890 A1 19841114 - MANNESMANN AG [DE]
- [X] FR 2558482 A1 19850726 - SIDERURGIE FSE INST RECH [FR]
- [XD] PATENT ABSTRACTS OF JAPAN vol. 016, no. 277 (C - 0954) 22 June 1992 (1992-06-22)
- See references of WO 9501458A1

Cited by
EP1524322A3; EP1457574A4; EP1445337A4; CN102071277A; EP3633051A4; WO03085141A1; WO03085140A1; WO2004087707A1; WO03029497A1

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
WO 9501458 A1 19950112; AU 680268 B2 19970724; AU 7083194 A 19950124; BR 9406985 A 19960305; CA 2166097 A1 19950112; CA 2166097 C 20020115; CN 1041843 C 19990127; CN 1128050 A 19960731; DE 69423630 D1 20000427; DE 69423630 T2 20001109; EP 0714989 A1 19960605; EP 0714989 A4 19970625; EP 0714989 B1 20000322; ES 2143547 T3 20000516; KR 0159180 B1 19990115; KR 960703440 A 19960817

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JP 9401070 W 19940630; AU 7083194 A 19940630; BR 9406985 A 19940603; CA 2166097 A 19940630; CN 94192953 A 19940630; DE 69423630 T 19940630; EP 94919835 A 19940630; ES 94919835 T 19940630; KR 19950705930 A 19951227