

Title (en)
PROCESS FOR REFINING PIG IRON

Publication
EP 0175924 B1 19881228 (DE)

Application
EP 85110495 A 19850821

Priority
• DE 3434894 A 19840922
• CN 85106853 A 19850912

Abstract (en)
[origin: US4604138A] The invention relates to a process for producing steel of low phosphorus content from hot metal of usual phosphorus content, in which the hot metal is simultaneously decarburized and dephosphorized in a single process step in a metallurgical vessel, in particular in a converter. The refining gas consisting predominantly or completely of technically pure oxygen is top-blown into the melt, particularly from below. The vessel is charged with hot metal containing manganese in an amount of less than 0.2% by weight. Lime is then added and refining is carried out down to a final phosphorus content of 0.005% by weight or less in the steel at the end of blowing, without a change of slag.

IPC 1-7
C21C 5/32; **C21C 7/064**

IPC 8 full level
C21C 5/28 (2006.01); **C21C 5/32** (2006.01); **C21C 5/34** (2006.01); **C21C 5/35** (2006.01); **C21C 7/064** (2006.01); **C21C 7/068** (2006.01)

CPC (source: EP US)
C21C 5/32 (2013.01 - EP US); **C21C 7/064** (2013.01 - EP US)

Citation (examination)
• Stahl u. Eisen (1921), Nr. 37, Seiten 1286-1297
• Dissertation Schmöle, TU Clausthal, 18.2.83

Cited by
WO03085141A1

Designated contracting state (EPC)
AT BE DE FR GB IT LU NL SE

DOCDB simple family (publication)
EP 0175924 A1 19860402; **EP 0175924 B1 19881228**; AT E39497 T1 19890115; AU 4654085 A 19860327; AU 569412 B2 19880128; BR 8504605 A 19860715; CA 1234989 A 19880412; CN 1005276 B 19890927; CN 85106853 A 19870311; DE 3434894 A1 19860417; DE 3434894 C2 19860918; DE 3567031 D1 19890202; ES 546700 A0 19870316; ES 8703936 A1 19870316; FI 77694 B 19881230; FI 77694 C 19890410; FI 853294 A0 19850828; FI 853294 L 19860323; IN 163954 B 19881217; JP H0136525 B2 19890801; JP S6179709 A 19860423; MX 164702 B 19920918; US 4604138 A 19860805; ZA 856561 B 19860430

DOCDB simple family (application)
EP 85110495 A 19850821; AT 85110495 T 19850821; AU 4654085 A 19850822; BR 8504605 A 19850920; CA 491216 A 19850920; CN 85106853 A 19850912; DE 3434894 A 19840922; DE 3567031 T 19850821; ES 546700 A 19850904; FI 853294 A 19850828; IN 655CA1985 A 19850916; JP 20195385 A 19850913; MX 888985 A 19850905; US 77463285 A 19850911; ZA 856561 A 19850828