

Title (en)
METHOD FOR PRODUCING A MELT IRON IN AN ELECTRIC FURNACE

Title (de)
VERFAHREN ZUM HERSTELLEN VON FLÜSSIGEM ROHEISEN IN EINEM ELEKTRISCHEN OFEN

Title (fr)
PROCEDE DE PRODUCTION DE FONTE LIQUIDE DANS UN FOUR ELECTRIQUE

Publication
EP 1383933 B1 20050518 (FR)

Application
EP 02719871 A 20020220

Priority
• EP 0201749 W 20020220
• LU 90735 A 20010223
• LU 90788 A 20010613

Abstract (en)
[origin: WO02068700A1] The invention relates to a method for producing a melt iron in an electric arc furnace which comprises several electrodes, is fitted with a hearth and contains a heel, on top of which is disposed a non-foaming liquid slag. The inventive method comprises the following steps: the reduction of the metallic fillers to form pre-reduced metallic fillers comprising excess free carbon; the hot transfer of said pre-reduced metallic fillers inside an inert gas curtain into a heel contained in the electric arc furnace; the mixing of the heel through the injection of gas so as to prevent crust formation; the smelting of the pre-reduced metallic fillers in the electric arc furnace in order to produce the melt iron.

IPC 1-7
C21B 13/14; **C21B 13/00**; **C21B 11/10**

IPC 8 full level
C21B 11/10 (2006.01); **C21B 13/00** (2006.01); **C21B 13/06** (2006.01); **C21B 13/14** (2006.01)

CPC (source: EP US)
C21B 11/10 (2013.01 - EP US); **C21B 13/0026** (2013.01 - EP US); **C21B 13/14** (2013.01 - EP US)

Designated contracting state (EPC)
DE ES FR IT

DOCDB simple family (publication)
WO 02068700 A1 20020906; AU 2002250975 B2 20061123; BR 0207370 A 20040622; BR 0207370 B1 20100810; CA 2437254 A1 20020906; CA 2437254 C 20090630; DE 02719871 T1 20040715; DE 60204221 D1 20050623; DE 60204221 T2 20060202; EP 1383933 A1 20040128; EP 1383933 B1 20050518; ES 2215498 T1 20041016; ES 2215498 T3 20051016; JP 2004521188 A 20040715; JP 4212895 B2 20090121; RU 2003127390 A 20050327; RU 2268308 C2 20060120; US 2004060389 A1 20040401; US 7169205 B2 20070130

DOCDB simple family (application)
EP 0201749 W 20020220; AU 2002250975 A 20020220; BR 0207370 A 20020220; CA 2437254 A 20020220; DE 02719871 T 20020220; DE 60204221 T 20020220; EP 02719871 A 20020220; ES 02719871 T 20020220; JP 2002568794 A 20020220; RU 2003127390 A 20020220; US 46863003 A 20030820