Title (en)

PIG IRON PRODUCTION METHOD

Title (de)

VERFAHREN ZUR HERSTELLUNG VON ROHEISEN

Title (fr)

PROCÉDÉ DE PRODUCTION DE FONTE BRUTE

Publication

EP 4289977 A1 20231213 (EN)

Application

EP 21933163 A 20210510

Priority

- JP 2021053067 A 20210326
- JP 2021017701 W 20210510

Abstract (en)

A method for producing pig iron according to one aspect of the present invention is a method for producing pig iron using a blast furnace with a tuyere, the method including: charging a first layer containing an iron ore material and a second layer containing coke alternately in the blast furnace; and reducing and melting the iron ore material in the charged first layer while injecting an auxiliary reductant into the blast furnace by hot air blown from the tuyere, wherein: an aggregate containing a reduced iron molded product obtained through compression molding of reduced iron is blended into the first layer, the iron ore material contains iron ore pellets as a principal material, an average basicity of the reduced iron molded product is less than or equal to 0.5, and an average basicity of the iron ore pellets is greater than or equal to 0.9.

IPC 8 full level

C21B 5/00 (2006.01); **C22B 1/16** (2006.01)

CPC (source: EP KR US)

C21B 5/001 (2013.01 - EP US); **C21B 5/007** (2013.01 - EP KR); **C21B 5/008** (2013.01 - EP KR US); **C21B 9/10** (2013.01 - KR); **C22B 1/16** (2013.01 - EP KR); C22B 1/245 (2013.01 - EP); C22B 9/10 (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4289977 A1 20231213; CN 116829739 A 20230929; JP 2022150455 A 20221007; KR 20230136640 A 20230926; US 2024167109 A1 20240523; WO 2022201562 A1 20220929

DOCDB simple family (application)

EP 21933163 A 20210510; CN 202180093630 A 20210510; JP 2021017701 W 20210510; JP 2021053067 A 20210326; KR 20237029168 A 20210510; US 202118551306 A 20210510