

Title (en)

METHOD FOR CHARGING RAW MATERIAL INTO BLAST FURNACE

Title (de)

VERFAHREN ZUM LADEN VON ROHMATERIAL IN EINEN HOCHOFEN

Title (fr)

PROCÉDÉ POUR CHARGER UNE MATIÈRE PREMIÈRE DANS UN HAUT FOURNEAU

Publication

EP 4276202 A1 20231115 (EN)

Application

EP 22755842 A 20220124

Priority

- JP 2021025657 A 20210219
- JP 2022002471 W 20220124

Abstract (en)

To provide a method of charging raw material into a blast furnace capable of achieving a raw material particle size distribution in a furnace top bunker suitable for both forward tilt charging and reverse tilt charging, thereby increasing the gas flow rate near the center part of the blast furnace regardless of the tilting mode to further improve gas permeability and reduction efficiency. A structure that has a predetermined shape is placed in a raw material storage part of a furnace top bunker, and a raw material impact position on the structure in a storing process is determined according to a tilting mode in a charging process.

IPC 8 full level

C21B 5/00 (2006.01); **C21B 7/18** (2006.01); **F27B 1/20** (2006.01); **F27D 3/10** (2006.01)

CPC (source: EP KR)

C21B 5/003 (2013.01 - KR); **C21B 5/008** (2013.01 - EP); **C21B 7/18** (2013.01 - KR); **C21B 7/20** (2013.01 - EP); **F27B 1/20** (2013.01 - EP KR); **F27B 3/18** (2013.01 - KR); **F27D 3/0025** (2013.01 - EP); **F27D 3/0033** (2013.01 - EP); **F27D 3/10** (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 4276202 A1 20231115; CN 116710577 A 20230905; JP 7343052 B2 20230912; JP WO2022176518 A1 20220825; KR 20230109743 A 20230720; WO 2022176518 A1 20220825

DOCDB simple family (application)

EP 22755842 A 20220124; CN 202280009877 A 20220124; JP 2022002471 W 20220124; JP 2022525554 A 20220124; KR 20237021180 A 20220124