

Title (en)

PROCESS UTILIZING SYNTHESIS GAS FOR IMPROVING THE ENVIRONMENTAL IMPACT OF THE REDUCTION OF IRON ORE IN BLAST FURNACES

Title (de)

VERFAHREN ZUR VERBESSERUNG DER UMWELTBELASTUNG DURCH REDUKTION VON EISENERZ IN HOCHÖFEN UNTER VERWENDUNG VON SYNTHESYGAS

Title (fr)

PROCÉDÉ D'UTILISATION DE GAZ DE SYNTHÈSE POUR AMÉLIORER L'IMPACT ENVIRONNEMENTAL DE LA RÉDUCTION DE MINÉRAI DE FER DANS DES HAUTS FOURNEAUX

Publication

**EP 4334481 A1 20240313 (EN)**

Application

**EP 22727766 A 20220502**

Priority

- IT 202100011189 A 20210503
- EP 2022061672 W 20220502

Abstract (en)

[origin: WO2022233769A1] A BF iron-ore reduction process for the production of iron and/or iron-carbon compounds with low environmental impact is described, in which a synthesis gas produced from a hydrocarbon stream with a short contact time - catalytic partial oxidation (SCT-CPO) process integrated with the iron-ore reduction process is also used in the BF.

IPC 8 full level

**C21B 5/00** (2006.01); **C21B 5/06** (2006.01); **C21B 7/00** (2006.01); **C21B 13/00** (2006.01)

CPC (source: EP)

**C21B 5/001** (2013.01); **C21B 5/06** (2013.01); **C21B 7/002** (2013.01); **C21B 13/0073** (2013.01); **C21B 2005/005** (2013.01); **C21B 2100/22** (2017.05); **C21B 2100/24** (2017.05)

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)

**WO 2022233769 A1 20221110**; AU 2022268546 A1 20231116; CA 3218702 A1 20221110; EP 4334481 A1 20240313; IT 202100011189 A1 20221103

DOCDB simple family (application)

**EP 2022061672 W 20220502**; AU 2022268546 A 20220502; CA 3218702 A 20220502; EP 22727766 A 20220502; IT 202100011189 A 20210503