

Title (en)

BLAST FURNACE STOVE DEVICE AND METHOD FOR OPERATING BLAST FURNACE STOVE DEVICE

Title (de)

HOCHOFENOFENVORRICHTUNG UND VERFAHREN ZUM BETREIBEN EINER HOCHOFENOFENVORRICHTUNG

Title (fr)

DISPOSITIF RÉGÉNÉRATEUR DE HAUT FOURNEAU ET PROCÉDÉ DE FONCTIONNEMENT DE DISPOSITIF RÉGÉNÉRATEUR DE HAUT FOURNEAU

Publication

**EP 3730631 A4 20210929 (EN)**

Application

**EP 18892629 A 20180831**

Priority

- JP 2017242038 A 20171218
- JP 2018032444 W 20180831

Abstract (en)

[origin: EP3730631A1] A hot-blast stove system (1) includes: a hot-blast stove (4) for performing an on-blast operation for delivering a hot blast to a blast furnace (2) and an on-gas operation for combusting a fuel gas in the hot-blast stove; a fuel gas supply line (5) for supplying a BFG produced by the blast furnace (2) to the hot-blast stove (4) as the fuel gas; and a blower (52) provided in the fuel gas supply line (5) and configured to raise a pressure of the BFG. The fuel gas supply line (5) takes out the BFG from a part of a blast-furnace-top-gas recovery line (3) downstream of a top pressure recovery turbine system (35), the blast-furnace-top-gas recovery line (3) being configured to take out the BFG from a furnace top (21) of the blast furnace (2). A power of the blower (52) is supplied from a waste pressure recovery turbine system (441) for recovering a waste pressure and a waste heat from an waste gas of the hot-blast stove (4) during the on-gas operation.

IPC 8 full level

**C21B 9/00** (2006.01); **C21B 5/06** (2006.01); **C21B 7/00** (2006.01); **C21B 9/04** (2006.01); **F27B 1/22** (2006.01); **F27D 17/00** (2006.01)

CPC (source: EP KR RU)

**C21B 5/06** (2013.01 - EP KR); **C21B 7/007** (2013.01 - EP KR); **C21B 9/00** (2013.01 - RU); **C21B 9/04** (2013.01 - EP KR);  
**F27B 1/22** (2013.01 - EP KR); **F27D 17/00** (2013.01 - KR); **C21B 2100/64** (2017.04 - EP); **C21B 2100/66** (2017.04 - EP);  
**F27D 17/00** (2013.01 - EP)

Citation (search report)

- [XI] GB 2513185 A 20141022 - SIEMENS VAI METALS TECH GMBH [AU]
- [XA] GB 1247417 A 19710922 - ARMCO STEEL CORP [US]
- See references of WO 2019123727A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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KR 102443024 B1 20220913; KR 20200096635 A 20200812; RU 2020119665 A 20220120; RU 2020119665 A3 20220120;  
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DOCDB simple family (application)

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