

Title (en)

A METHOD OF PRODUCING LIQUID CRUDE IRON AND HIGH-GRADE TOP GAS

Publication

**EP 0271464 A3 19891025 (EN)**

Application

**EP 87850378 A 19871203**

Priority

SE 8605226 A 19861205

Abstract (en)

[origin: EP0271464A2] A blast furnace is fed by a charge of conventional composition and a blast is used that contains about 50% oxygen and 20% water vapour, balance nitrogen. Additional fuel in the form of coal dust and/or oil is supplied to the raceways. Normal temperatures are maintained in the hearth and top zones. As compared with conventional operation a very high specific crude iron production per m<sup>2</sup> of hearth area and 24 hours will result. The molecular ratio CO+H<sub>2</sub>/N<sub>2</sub> of the top gas will be higher than 2.8 which makes the top gas suitable for ammonia production.

IPC 1-7

**C21B 5/00**

IPC 8 full level

**C21B 5/00** (2006.01)

CPC (source: EP)

**C21B 5/00** (2013.01); **C21B 2100/24** (2017.04); **C21B 2100/282** (2017.04); **C21B 2100/44** (2017.04)

Citation (search report)

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- [A] US 2776885 A 19570108 - SIEDS KOOPAL, et al
- [AD] TRANSACTIONS ISIJ vol. 14, 1974, pages 122-132, Tokyo, Japan; T. OKAMOTO et al.: "Blast furnace operation with 25 to 60% oxygen-blast to make top gas composition suited for ammonia synthesis"

Cited by

EP2258879A4; EP2641980A1; US6190632B1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0271464 A2 19880615; EP 0271464 A3 19891025**; DK 421688 A 19880728; DK 421688 D0 19880728; SE 8605226 D0 19861205; SE 8605226 L 19880606; WO 8804329 A1 19880616

DOCDB simple family (application)

**EP 87850378 A 19871203**; DK 421688 A 19880728; SE 8605226 A 19861205; SE 8700571 W 19871202