

Title (en)

PROCESS FOR OBTAINING MOLTEN CARBON-CONTAINING IRON FROM SPONGY IRON

Publication

EP 0139310 B1 19881019 (DE)

Application

EP 84201106 A 19840728

Priority

- DE 3330625 A 19830825
- DE 3334221 A 19830922

Abstract (en)

[origin: ES8504943A1] Sponge iron is produced by a direct reduction with solid carbonaceous reducing agents. In order to permit a melting of the sponge iron, particularly of that part thereof which is inferior in metallurgical properties, in a process which is as simple and economical as possible, the exhaust gas from the direct reduction process is used to produce electrical energy, which is supplied to the electric reducing furnace, and sponge iron at a rate corresponding to the electrical energy that is produced is charged to the electrical reducing furnace and comprises at least part of the sponge iron which is inferior in metallurgical properties.

IPC 1-7

C21B 13/14; **C21C 5/52**

IPC 8 full level

C21B 11/00 (2006.01); **C21B 7/00** (2006.01); **C21B 11/10** (2006.01); **C21B 13/12** (2006.01); **C21B 13/14** (2006.01); **C21C 5/52** (2006.01); **F27D 17/00** (2006.01)

CPC (source: EP US)

C21B 13/14 (2013.01 - EP US); **F27D 17/004** (2013.01 - EP US); **Y10S 75/958** (2013.01 - US)

Citation (examination)

- EP 0117928 A1 19840912 - METALLGESELLSCHAFT AG [DE], et al
- DE 3300867 A1 19840719 - METALLGESELLSCHAFT AG [DE], et al

Cited by

US5066325A; MD4422C1; US5064174A; EP0282321A3; DE102009001646B3; EP0269609A1; US4861369A; US5045112A; US5055131A; WO8901981A1; DE102009053920A1; WO2011061261A2; WO2010106466A1; DE102010002523A1; US9453682B2

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