

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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DE FR GB LU

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DE 3334221 A1 19850314; AU 3238884 A 19850228; AU 564718 B2 19870820; BR 8404219 A 19850723; CA 1224336 A 19870721; DE 3474690 D1 19881124; EP 0139310 A1 19850502; EP 0139310 B1 19881019; ES 535324 A0 19850501; ES 8504943 A1 19850501; GR 80186 B 19850102; ID 807 B 19960711; JP H0680167 B2 19941012; JP S60116706 A 19850624; PH 21947 A 19880415; TR 22714 A 19880428; US 4551172 A 19851105

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