Title (en)

SELF-REDUCING IRON OXIDE AGGLOMERATES

Publication

EP 0044669 B1 19880406 (EN)

Application

EP 81303130 A 19810709

Priority

US 17064380 A 19800721

Abstract (en)

[origin: EP0044669A1] Self-reducing agglomerates of an iron oxide-containing material, such as an iron ore concentrate, having a compressive strength of at least about 45 Kg. are produced by preparing a moistened mixture of the ore concentrate, a finely-divided natural pyrolyzed carbonaceous material having a volatile matter (on dry basis) content of about 20% by weight or less in an amount at least sufficient to reduce all the iron oxide to metallic iron, about 1 to about 30% by weight of a bonding agent, such as burned or hydrated lime, and 0 up to about 3% by weight of a siliceous material (as SiO2), such as silica; forming green agglomerates from this mixture; and hydrothermally hardening the green agglomerates by contacting them with steam under pressure.

IPC 1-7

C22B 1/245; C22B 1/24

IPC 8 full level

C22B 1/16 (2006.01); **C21B 13/00** (2006.01); **C21B 13/10** (2006.01); **C22B 1/14** (2006.01); **C22B 1/24** (2006.01); **C22B 1/243** (2006.01); **C22B 1/245** (2006.01)

CPC (source: EP)

C21B 13/105 (2013.01); **C22B 1/24** (2013.01); **C22B 1/245** (2013.01)

Cited by

FR2520756A1; CN1294281C; US5064174A; EP0858516A4; US5066325A; CN105907954A; EP0960952A1; US5045112A; US5055131A; WO2006061787A1; WO0177395A1; US7628839B2; US7632335B2; US7641712B2; US6602320B2; US7695544B2; US8158054B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0044669 A1 19820127; **EP 0044669 B1 19880406**; AU 543924 B2 19850509; AU 7272681 A 19820128; BR 8104694 A 19820406; CA 1158442 A 19831213; DE 3176704 D1 19880511; ES 504099 A0 19820601; ES 8205434 A1 19820601; IN 157793 B 19860621; JP H0123531 B2 19890502; JP S5773136 A 19820507; MX 156802 A 19881005; ZA 814465 B 19820728

DOCDB simple family (application)

EP 81303130 A 19810709; AU 7272681 A 19810709; BR 8104694 A 19810721; CA 380807 A 19810629; DE 3176704 T 19810709; ES 504099 A 19810720; IN 517CA1982 A 19820506; JP 11344281 A 19810720; MX 18837481 A 19810720; ZA 814465 A 19810701