

Title (en)

APPARATUS FOR MANUFACTURING MOLTEN IRON AND METHOD FOR MANUFACTURING MOLTEN IRON USING SAME

Title (de)

VORRICHTUNG ZUR HERSTELLUNG VON GESCHMOLZENEM EISEN UND VERFAHREN ZUR HERSTELLUNG VON GESCHMOLZENEM EISEN DAMIT

Title (fr)

APPAREIL DE PRODUCTION DE FER FONDU ET PROCÉDÉ DE PRODUCTION DE FER FONDU L'UTILISANT

Publication

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Application

EP 11842354 A 20111118

Priority

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Abstract (en)

[origin: EP2641981A2] Provided are an apparatus and method for manufacturing molten iron. The apparatus for manufacturing molten iron, according to the present invention, comprises: a multi-stage fluid bed furnace for converting fine iron ores into reduced fine iron through reduction; at least one high-temperature compacting unit for preparing a high-temperature compacted iron by compressing the reduced fine iron; at least one crushing unit for crushing the high-temperature compacted iron to have a certain particle size; a first conveying unit for conveying the crushed high-temperature compacted iron; and a melting furnace for melting the conveyed high-temperature compacted iron by combusting fine or lump coal, and for supplying a reducing gas, which is generated in the furnace, to a fluidized reduction furnace. In addition, the apparatus further comprises at least one compacted iron storing unit for storing some of the compacted iron which has been crushed. According to the present invention, molten iron can be manufactured stably and efficiently.

IPC 8 full level

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CPC (source: EP)

C21B 13/002 (2013.01); **C21B 13/143** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

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