

Title (en)

PROCESS FOR PRODUCING LIQUID PIG IRON OR SEMIFINISHED STEEL PRODUCTS FROM IRON-CONTAINING MATERIALS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON FLÜSSIGEM ROHEISEN ODER STAHLVORPRODUKTEN AUS EISENHÄLTIGEM MATERIAL

Title (fr)

PROCEDE DE TRANSFORMATION DE MATIERES FERRIFERES EN FONTE BRUTE LIQUIDE OU EN PRODUITS BRUTS EN ACIER

Publication

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Application

EP 97911045 A 19971105

Priority

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- AT 196496 A 19961108

Abstract (en)

[origin: WO9821371A1] In a process for producing liquid pig iron (9) or semifinished steel products from finely divided iron-containing materials (4) in a melting gasifier (1), the iron-containing materials (4) are molten in a bed of solid carbon-containing materials (2) to which carbon-containing materials (2) and oxygen-containing gas are supplied, at the same time as a reduction gas is generated. The finely divided reduced materials (4) and the oxygen are laterally introduced into the bed (20, 21). To enable the finely divided iron-containing materials to be introduced into the melting gasifier (1) without being previously briquetted and thus to prevent the finely divided iron-containing materials (4) from being discharged by the reduction gas generated in the melting gasifier (1), a fluidised bed (21) of finely divided solid carbon-containing materials (2) and finely divided iron-containing reduced materials (4) is created above a solid bed (20) of solid carbon-containing materials (2). The finely divided reduced materials (4) are brought directly into contact with oxygen in the fluidised bed (21), preferably in the form of a jet having a ring-shaped cross-section which surrounds the periphery of a jet of oxygen, so that the oxygen is surrounded by the supply of finely divided reduced materials (4), which are then molten in the fluidised bed.

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