

Title (en)

PROCESSING OF METAL CHLORIDE SOLUTIONS AND METHOD AND APPARATUS FOR PRODUCING DIRECT REDUCED IRON

Title (de)

VERARBEITUNG VON METALLCHLORIDLÖSUNGEN UND VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON DIREKTREDUIZIERTEM EISEN

Title (fr)

TRAITEMENT DE SOLUTIONS DE CHLORURE METALLIQUE AINSI QUE PROCEDE ET APPAREIL PERMETTANT DE PRODUIRE DU FER DE REDUCTION DIRECTE

Publication

EP 1891246 A4 20091104 (EN)

Application

EP 06752609 A 20060615

Priority

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Abstract (en)

[origin: WO2006133500A1] A process and apparatus for regeneration of acid and metal from spent acid liquors includes the steps of, optionally, concentrating (110) the liquor to a concentrated liquor or solid, pyrohydrolysing (114) to regenerate the acid and form metal oxide pellets, and reducing the oxide to metal in a two stage reduction reactor (116, 118) using a partially combusted fuel as reducing agent. Also disclosed is a two-stage reduction process and reactor for production of direct reduced iron (DRI) from iron oxide ores or wastes, including a first stage (416) in which the oxide feed is contacted with a fuel and a sub-stoichiometric amount of an oxygen source to produce a lower oxidation state oxide, and a second stage (418) in which the lower oxidation stage oxide is contacted with off-gases from the first stage to produce iron metal.

IPC 8 full level

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Citation (search report)

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ZA 200800391 A 20080114