

Title (en)
ELECTROCHEMICAL PROCESS FOR THE RECOVERY OF METALLIC IRON AND CHLORINE VALUES FROM IRON-RICH METAL CHLORIDE WASTES

Title (de)
ELEKTROCHEMISCHES VERFAHREN ZUR RÜCKGEWINNUNG VON EISENMETALL- UND CHLORWERTSTOFFEN AUS EISENREICHEN METALLCHLORIDABFÄLLEN

Title (fr)
PROCÉDÉ ÉLECTROCHIMIQUE POUR LA RÉCUPÉRATION DE VALEURS DE FER MÉTALLIQUE ET DE CHLORE À PARTIR DE DÉCHETS DE CHLORURES MÉTALLIQUES RICHES EN FER

Publication
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Application
EP 07701657 A 20070109

Priority
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Abstract (en)
[origin: WO2008034212A1] An electrochemical process for the concurrent recovery of iron metal and chlorine gas from an iron-rich metal chloride solution, comprising electrolysing the iron-rich metal chloride solution in an electrolyser comprising a cathodic compartment equipped with a cathode having a hydrogen overpotential higher than that of iron and containing a catholyte having a pH below about 2, an anodic compartment equipped with an anode and containing an anolyte, and a separator allowing for anion passage, the electrolysing step comprising circulating the iron-rich metal chloride solution in a non-anodic compartment of the electrolyser, thereby causing iron to be electrodeposited at the cathode and chlorine gas to evolve at the anode, and leaving an iron-depleted solution. The iron-rich metal chloride solution may originate from carbo-chlorination wastes, spent acid leaching liquors or pickling liquors.

IPC 8 full level
C25C 1/06 (2006.01); **C25B 1/26** (2006.01)

CPC (source: EP US)
C25B 1/26 (2013.01 - EP US); **C25C 1/06** (2013.01 - EP US)

Citation (search report)
• [A] JP H0215187 A 19900118 - OSAKA TITANIUM
• [A] JP 2006241568 A 20060914 - SUMITOMO METAL MINING CO
• [A] JP H0226802 A 19900129 - OSAKA TITANIUM
• See references of WO 2008034212A1

Cited by
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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

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