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

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CPC (source: EP US)

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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

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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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