

Title (en)
PROCESS FOR THE RECOVERY OF TITANIUM DIOXIDE AND VALUE METALS BY REDUCING THE CONCENTRATION OF HYDROCHLORIC ACID IN LEACH SOLUTION AND SYSTEM FOR SAME

Title (de)
VERFAHREN ZUR RÜCKGEWINNUNG VON TITANDIOXID UND WERTVOLLEN METALLEN DURCH REDUZIERUNG DER KONZENTRATION VON HYDROCHLORSÄURE IN EINER LAUGUNGSLÖSUNG UND SYSTEM DAFÜR

Title (fr)
PROCÉDÉ ET SYSTÈME DE RÉCUPÉRATION DE DIOXYDE DE TITANE ET DE MÉTAUX DE VALEUR PAR RÉDUCTION DE LA CONCENTRATION D'ACIDE CHLORHYDRIQUE DANS UNE SOLUTION DE LIXIVIATION

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Abstract (en)
[origin: WO2011094858A1] The present invention describes a process and system for recovering titanium dioxide and other value metals from a titanium bearing solid. The process comprises (a) leaching the solid in hydrochloric acid to produce a leachate comprising undissolved solids and a leach solution comprising the titanium dioxide and the value metals, wherein the hydrochloric acid concentration is maintained above a value required to maintain the titanium dioxide and the value metals dissolved in the leach solution at atmospheric pressure; (b) separating the leachate into the leach solution and the undissolved solids; and (c) reducing the concentration of hydrochloric acid concentration in the leach solution to recover titanium dioxide by hydrolysis and precipitation to produce a titanium dioxide rich slurry. In a preferred embodiment, HCl is recovered with a matrix solution.

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