

Title (en)

IMPROVED ELECTRIC CURRENT SENSING AND MANAGEMENT SYSTEM FOR ELECTROLYTIC PLANTS

Title (de)

VERBESSERTES STROMMESSUNG UND -VERWALTUNGSSYSTEM FÜR ELEKTROLYTISCHE ANLAGEN

Title (fr)

SYSTÈME DE GESTION ET DE DÉTECTION DE COURANT ÉLECTRIQUE AMÉLIORÉ POUR INSTALLATIONS ÉLECTROLYTIQUES

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Application

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Abstract (en)

[origin: WO2014032085A1] The present invention relates to an electric current management (ECM) system and method comprising at least one electrolytic cell having at least two electrodes in contact with electrolyte media; a plurality of sensor means for measuring the current passing through one or more electrodes, said sensor means being located inside at least one ECM bar installed in one or more operating electrolytic cells; a support means for supporting at least one ECM bar in each cell; wherein the support means is adapted to avoid disruption to normal electrode movements and damage to the ECM bar. The present invention introduces improvements for minimizing the effects that several types of variables have on current measurement, such as magnetic field interference, cell geometry and contact configuration, in order to provide a reliable approximation of the current passing through each electrode. The present invention can be applied to real time monitoring of each cathode, or anode, constituting a metal electrowinning or electrorefining cell or other electrolytic cell.

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