

Title (en)
A METHOD FOR INDUSTRIAL COPPER ELECTROREFINING

Title (de)
VERFAHREN ZUR INDUSTRIELLEN KUPFERELEKTORAFFINATION

Title (fr)
PROCÉDÉ POUR LE RAFFINAGE ÉLECTROLYTIQUE DE CUIVRE INDUSTRIEL

Publication
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Application
EP 12775235 A 20121017

Priority

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Abstract (en)
[origin: WO2013075889A1] A method of copper electrorefining is disclosed. The method includes arranging at least one anode of copper material to be refined in contact with an electrolyte solution and arranging at least one cathode in contact with the electrolyte solution. The anode and cathode are connected electrically to an electrical source, and the source is operated under potential controlled conditions. The electrical potential at the cathode is -0.30 V to -0.55 V with respect to the copper material at the anode, thereby causing the deposition of electrorefined copper at the cathode. The method also includes potentiostatic pulse electrolysis (PPE) and periodic potential reversal (PPR) in order to produce a copper deposit having a controllable structure, for example in terms of roughness or porosity. An apparatus for performing potential controlled electrolysis is also disclosed.

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US 2010089763 A1 20100415 - DARRON BRACKENBURY [US], et al

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