

Title (en)
ELECTROLYTIC REFINEMENT OF RAW GOLD

Title (de)
ELEKTROLYTISCHE RAFFINATION VON ROHGOLD

Title (fr)
AFFINAGE ÉLECTROLYTIQUE D'OR BRUT

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Abstract (en)
[origin: WO2017153547A1] The invention relates to a method for obtaining fine gold by the electrolytic refinement of raw gold contaminated with accompanying elements, wherein the electrolysis is performed in a bath, which is divided by a membrane impermeable to gold-containing anions into a first region having the electrolyte solution that dissociates hydrochloric acid and a second region having the electrolyte solution that dissociates sulfuric acid. The raw gold is anodically dissolved in a first step and is cathodically deposited as once-refined fine gold in a second step, and the once-refined fine gold is anodically dissolved in a third step and cathodically deposited as twice-refined fine gold (having a purity of up to 99.999%) in a fourth step. The formation of a solid silver chloride coating on the anode in the electrolyte solution is prevented or reduced by adding urea and applying ultrasound to the anode.

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