

ABSTRACTElectrolytic Desilvering Agents and
Electrolytic Desilvering Method

An electrolytic desilvering agent comprising: (a) at least one desilvering constituent selected from the group consisting of hydantoin, 5,5-dimethylhydantoin, cyanuric acid, 6-methyl-3-pyridazone, 3-methyl-5-pyrazolone, and allantoin, as a principal constituent; and (b) a boric acid compound as an accessory constituent. Desirably, the agent further comprises (c) a surfactant and (d) one or more selected from the group consisting of benzotriazole, benzimidazole, thiouracil, and the like, as a copper inhibitor or inhibitors. A workpiece of copper or a copper alloy silver plated on the surface is immersed into a bath of the electrolytic desilvering agent and electrolysis is carried out using the workpiece as an anode, with stirring under the conditions of pH: 7 to 14; bath current density: 0.1 to 50 A/d m²; and bath temperature: 10 to 60°C .

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