

ing fed continuously with a minimum air flow of 3 cubic meters per hour per cubic meter of bath volume through an air feed, which distributes the flow in the liquid mass of the bath; maintaining the concentration of peroxide at a quantity to provide a bath redox potential of -200 to 0 mV, and if necessary adding sufficient amounts of H₂SO₄ and HF to provide a bath pH not higher than 1.5; and thereafter placing the material to be treated in a passivation bath consisting of an aqueous solution containing 4-10 g/L of free HF, a maximum of 1 g/L Fe, said bath being substantially free of H₂SO₄ and being continuously fed with a sufficient amount of stabilized H₂O₂ to adjust the bath redox potential to 500-600 mV, said passivation bath being maintained at room temperature with a sufficient air flow to agitate the liquid.

Desmutting Aluminum Alloys

U.S. Patent 5,417,819. May 23, 1995

A.L. Askin and P.B. Schultz, assignors to Aluminum Co. of America, Pittsburgh

A method of forming a highly reflective surface on aluminum alloys, comprising cleaning a body formed from an aluminum

alloy; electrobrightening the body; and desmutting the surface of the freshly brightened body without etching, the desmutting bath comprising 10-100 volume percent nitric acid; 0-60 volume percent sulfuric acid; 0-50 volume percent water; and at least 15 g/L of a source of fluoride.

Continuous Electroplating Apparatus

U.S. Patent 5,417,828. May 23, 1995

S. Sergio, Trezzo d'Adda (Milano), Italy

An electroplating plant for the electrolytic deposition of metals on flat components such as printed circuit boards, oriented parallel to a direction of feed and being continuously supplied via a closed-loop driving device for the transmission and supply of cathode current to the boards characterized in that it has at least one pair of electrolytic cells each one being provided with a feed aperture and an aperture for the outflow of the electrolytic solution supplied continuously via appropriate means for drawing the same from a recovery tank, each cell being provided with

anodes and means for regulating the flow of the electrolytic solution.

Electroplating Apparatus

U.S. Patent 5,417,829. May 23, 1995

R.F. Zecher, assignor to Tumblevevor Inc., Huntingdon Valley, Pa.

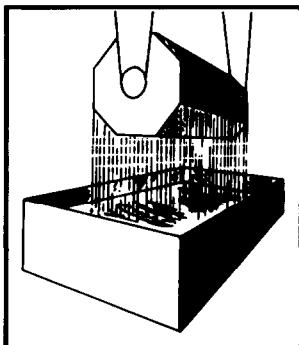
Apparatus for surface treatment of small parts in a series of treatment solutions contained in a series of separate tanks adapted to contain treatment solution up to a predetermined level established with a tank, said tank being spaced in side-by-side relationship, comprising a belt-type conveyor for each tank of the series; means forming a concave profile to the upper run of each belt-type conveyor; and drive means including rotative supports at the loading and discharge ends of the upper run for effecting advance of the upper run towards the discharge zone.

Injection Plating Apparatus

U.S. Patent 5,417,830. May 23, 1995

K. Tsurushima, assignor to KK Toshiba, Kawasaki, Japan

An injection plating apparatus comprising cavity boxes for fixing a semiconductor



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