



THERMAL ANNEALING OF PALLADIUM ALLOYS

Abstract

This invention is concerned with production of electrical devices comprising an electrodeposited conductive region free from cracking defects. In the
5 production of a contact portion of the device from a metal strip electroplated with a conductive stripe of an alloy, the stripe exhibited, upon stamping and forming operation, cracked areas. Typically, the stripe coating on the metal strip, such as a copper bronze material, includes a layer of nickel, a layer of palladium alloyed with nickel, cobalt, arsenic or silver, and a flash coating of hard gold. The cracking
10 defects were eliminated by subjecting the plated strip to an annealing treatment prior to the stamping and forming operation. After the heat-treatment, the stripe was free from cracks and separations between the successive layers.