

光触媒およびUVを前処理に用いた導電微粒子の作製

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Pretreatment of Nickel Plating for Conductive Particles Using Photocatalyst and Ultraviolet Light

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Abstract

As electronic devices are miniaturized, connection reliability between the Liquid Crystal Display (LCP) and the device becomes increasingly important. Anisotropic conductive film has been widely used to form the connection between the chip and the glass substrate. In this paper, we report the applicability of ultraviolet light irradiation, using a photocatalysis process to modify the surface of the non-conductive resin particles. A uniform and adhered nickel deposition can be achieved with TiO_2 as the photocatalyst. However, separating the TiO_2 from the treated resin particles can be difficult. We were able to solve this problem by introducing ZnO as a photocatalyst, since the ZnO particles are easily dissolved by an acid and alkaline solution.

Key Words: *Electroless Ni Plating, Conductive Particles, Photocatalyst, Ultraviolet Light*