Etch and Plating Resist Formation by Hot Melt Ink Jet

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Abstract

There are many industrial fabrication processes which require etching or plating steps to be performed. While it is a long term ambition to develop direct-write technologies to improve such processes and remove the need for these steps, there is scope in the near term to improve the efficiency of such processes by using digital masking. This presentation will examine the use of hot melt ink jet in various industrial fabrication processes and the special advantages of such an approach. Hot melt inks provide very reliable jetting due to their low volatility and excellent print quality even on rough surfaces, due to the inks freezing on contact with the substrate. A variety of hot melt ink chemistries can be evolved to suit various different etch and plate applications.

Author Biography

Nigel Caiger received his Chemistry degree from Oxford University in 1985. He joined SunJet (formerly Coates Electrographics) in 1989 and is now Director of Global Digital Technology, overseeing activities of a development team working on various inkjet technologies including UV-curing, phase change, water and solvent based inks. Caiger has several patents in the field of jet inks.