Direct electroplating of plastic for advanced electrical applications

Electrodeposition or electroplating is predominantly applied to metallic components. Electroplating of plastics is possible in some cases where an initial electroless plating layer of nickel or copper is made to provide a conductive surface on the plastic part. This paper proposes a method for direct electroplating of plastic eliminating the need for slow and expensive processes like electroless metal deposition, PVD coating, painting with conductive inks etc. The results obtained from the test demonstrate the potential of direct electroplating of plastic to enhance the electrical conductivity and the use of electroplated plastics for advanced applications like Moulded Interconnect Devices (MIDs).

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