

ABSTRACT

METHOD AND APPARATUS FOR MANUFACTURING SOLID
ELECTROLYTIC CAPACITOR

A method and apparatus for manufacturing a solid electrolytic capacitor in such a manner that a layer of a solid electrolyte constituted by a conductive high polymer can be uniformly formed on a dielectric oxide film layer formed on the surface of an anode member (3) made of a valve metal. In the manufacturing method, the conductive polymer solid electrolyte layer is formed on the dielectric oxide layer by performing electrolytic polymerization in a polymerization solution (9) with a carbon member used as a cathode (1). The surface of the cathode is not easily molten and the carbon member has a larger surface area in comparison with a metallic member since it is porous. Consequently, reduction with passage of time in the current required for polymerization, which is caused by deposits on the surface of the cathode, hardly occurs, thereby allowing a uniform solid electrolyte layer to be formed with improved stability.