

ABSTRACT**METHOD FOR MANUFACTURING A POROUS ELECTRODE, AND MICROBATTERY
CONTAINING SUCH AN ELECTRODE**

A method for manufacturing an electrode having a porosity comprised between 20% and 60% by volume and pores with an average diameter of less than 50 nm, in which method:

- (a) provision is made of a substrate and a colloidal suspension comprising aggregates or agglomerates of monodisperse primary nanoparticles of an active electrode material, having an average primary diameter D_{50} comprised between 2 and 100 nm, said aggregates or agglomerates having an average diameter D_{50} comprised between 50 nm and 300 nm,
- (b) a layer is deposited from said colloidal suspension on said substrate by a technique selected from the group formed of: electrophoresis, a printing technique and a coating technique;
- (c) said layer obtained in step (b) is dried and it is consolidated, by pressing and/or heating, to obtain a mesoporous layer,
- (d) depositing, on and inside the pores of said porous layer, a coating of an electronically conductive material.

This porous electrode can be used in lithium-ion microbatteries.

No suitable figure