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(54) Title: POROUS ELECTROACTIVE MATERIAL

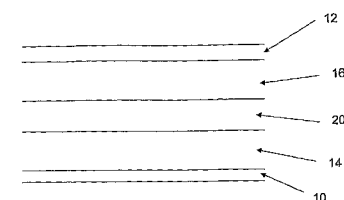


Figure 1



Figure 2a

(57) Abstract: The invention provides a composition comprising a plurality of electroactive porous particle fragments comprising silicon as an electroactive material characterised in that each porous particle fragment comprises a network of pores defined and separated by silicon containing walls. The network of pores suitably comprises a three dimensional arrangement of pores extending through the volume of the particle in which the pore openings are provided on two or more planes over the surface of the particle. The composition of the first aspect of the invention is an electroactive material that is able to form an alloy with lithium and can be used in the fabrication of anodes for use in lithium ion secondary batteries. A method of fabricating the silicon containing porous particle fragments is also disclosed.

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