

ABSTRACT OF THE DISCLOSURE

Disclosed is a battery comprising a positive electrode comprising a cathode active material layer, a negative electrode comprising an anode active material layer, and a porous separator disposed between the positive electrode and the negative electrode, wherein the positive electrode, the negative electrode and the separator are disposed in a casing containing an electrolyte, and wherein the porous separator comprises at least one layer of an aggregate form of particles of at least one insulating substance, the layer of the aggregate form of particles having a three-dimensional network of voids which function as pores of the porous separator and which are capable of passing ions there-through. The battery of the present invention is advantageous not only in that the battery exhibits excellent discharge characteristics even at a high discharge current density without sacrificing safety, but also in that a large amount of active materials can be accommodated in the battery per unit volume thereof, as compared to the amounts in the case of conventional batteries, so that the battery can exhibit a high performance.