

ABSTRACT

The present invention provides a coating for battery separator, a preparation method thereof, a battery separator and a battery, where a slurry of the coating for the battery separator includes a dispersion medium, a nanomaterial, and a polymer containing polar functional groups; the coating has a surface pore size of 10 nm-30 nm, and a surface roughness of 200 nm-500 nm, and the coating has a hydroxyl content of 100 mg KOH/g-4000 mg KOH/g. The coating for battery separator, the preparation method thereof, the battery separator and the battery can solve a problem of deformation of battery separators due to the induction of electrolyte solutions.

10

FIG. 1