

ABSTRACT

An electrolyte composition and a solid polymer
5 electrolyte for electric double-layer capacitors are each
composed of a polyurethane polymeric compound and an ion-
conductive salt. A substituent having a large dipole moment
has been introduced onto the polyurethane molecule, as a
result of which the polyurethane polymeric compound exhibits a
10 high dielectric constant and retains the ability to dissolve
an ion-conductive salt to a high concentration, has excellent
adhesive properties that enable it to firmly bond large
surface area materials and conductive materials, and moreover
has an interfacial impedance comparable to that of electrolyte
15 solutions. The invention is also directed at a polarizable
electrode-forming composition and a polarizable electrode
composed primarily of a polyurethane polymer compound, a large
surface area material and a conductive material. The
invention additionally discloses a high-performance electric
20 double-layer capacitor arrived at using the above compositions
and components.