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(54) **ELECTROCHEMICAL CELL HAVING "IN SITU GENERATED" COMPONENT**

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(57) **ABSTRACT**

An electrochemical cell having a solid polymer separator/ electrolyte whose ion conductivity is markedly increased by in situ generation of a fluid acidic anhydride. The electrochemical cell comprises a solid polymer electrolyte, an anode of an alkali or alkaline earth metal such as lithium and a cathode containing the lithium or other alkali or alkaline earth metal salt of the acid anhydride to be electrochemically generated in addition to the main active material. The salt has the formula  $MA_xO_y$  where M is an alkali or alkaline earth metal such as lithium and A is a non-metallic element such as sulphur, nitrogen, carbon or phosphorus  $0.31 \leq x \leq 2.0$  and  $1.3 \leq y \leq 4$ . The electrochemical cell has a much improved rate capability and low temperature performance, but no liquid constituents are required for assembly of the cell.

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