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(54) Title: POLYIMIDE MATRIX ELECTROLYTE

(57) **Abstract:** A polymer matrix electrolyte (PME) includes a polyimide, at least one salt and at least one solvent intermixed. The PME is generally homogeneous as evidenced by its high level of optically clarity. The PME is stable through harsh temperature and pressure conditions. A method of forming a PME includes the steps of dissolving a polyimide in at least one solvent, adding at least one salt to the polyimide and the solvent, wherein said polyimide, salt and solvent become intermixed to form the PME, the PME being substantially optically clear.

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