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(54) Title: BATTERY UTILIZING PRINTABLE LITHIUM

(57) Abstract: A battery having a cathode and a composite anode is provided. In one embodiment, the composite anode may include a lithium metal anode, a solid electrolyte and at least one interface layer. The interface layer improves the uniformity of the surface of the solid electrolyte thereby optimizing contact between the surface of the lithium metal anode and the surface of the solid electrolyte for better battery performance. The anode and/or the interface may be formed of a printable lithium composition including lithium metal powder, a polymer binder compatible with the lithium metal powder, a rheology modifier compatible with the lithium metal powder, and a solvent compatible with the lithium metal powder and with the polymer binder. The cathode may be a composite cathode. In another embodiment, the printable lithium composition may be in the form of a foil or film.



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