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(54) **METHOD OF MAKING ALL SOLID STATE LITHIUM ION BATTERIES**

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(57) **ABSTRACT**

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A solid-state lithium-ion battery may include a metal layer. A solid-state lithium-ion battery may include a cathode layer disposed in the metal layer. A solid-state lithium-ion battery may include a reinforced lithiated composite electrolyte layer disposed on the cathode layer. A solid-state lithium-ion battery may include a lithiated ionomer coating layer disposed on the reinforced lithiated composite electrolyte layer. A solid-state lithium-ion battery may include an anode layer disposed on the lithiated ionomer coating layer.

