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(54) **LITHIUM METAL ANODE PROTECTIVE LAYER AND METHOD OF DEPOSITING SAME ON LITHIUM METAL ANODE**

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**ABSTRACT**

A lithium metal anode protective layer (a single layer or multi layers) including one or more selected from the group consisting of a halide of lithium, such as lithium iodide and lithium fluoride, a lithium metal anode including an anode active layer including lithium metal and the lithium metal anode protective layer including one or more selected from the group consisting of lithium iodide and lithium fluoride, and a method of depositing a lithium metal anode protective layer (a single layer or multi layers) on a lithium metal anode, the method including providing a coating composition including one or more selected from the group consisting of lithium iodide and lithium fluoride on the lithium metal anode, and depositing the lithium metal anode protective layer including the coating composition on the lithium metal anode by conducting a thermal evaporation.

