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HONG et al.(10) **Pub. No.: US 2023/0231108 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **POSITIVE ELECTRODE FOR
LITHIUM-SULFUR SECONDARY BATTERY,
AND LITHIUM-SULFUR SECONDARY
BATTERY COMPRISING SAME**(71) Applicants: **LG ENERGY SOLUTION, LTD.**,
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(57)

ABSTRACT

Provided is a positive electrode for a lithium-sulfur secondary battery comprising a positive electrode active material, an electrically conductive material, a binder, and a multivalent metal salt. The multivalent metal salt comprises a cation of a metal selected from a group consisting of metals having 3 to 6 of an effective nuclear charge of outermost electrons in the 3rd and 4th periods. The positive electrode for the lithium-sulfur secondary battery can improve the performance of the lithium-sulfur secondary battery by introducing a multivalent metal salt and thus effectively inhibiting the leaching of lithium polysulfide when applied to the battery while not significantly increasing the weight of the electrode and not significantly lowering the conductivity of the electrode.

