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JAN et al.(10) **Pub. No.: US 2023/0231189 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **CROSSLINKER FOR ELECTROLYTE,
ELECTROLYTE COMPOSITIONS AND
LITHIUM-ION BATTERY INCLUDING THE
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ABSTRACT

The present invention provides a crosslinker of formula (I) for electrolytes, and a electrolyte composition and a lithium-ion battery including the same, wherein M, R and X are as defined in the description. With the crosslinker of formula (I), not only the mechanical strength, heat resistance, ionic conductivity and electrochemical stability of the prepared electrolyte composition are improved, but also the long-term charge-discharge cycling stability of the lithium-ion battery is improved. The crosslinker has high industrial value.

