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### (54) **BINDER, PREPARATION METHOD** THEREFOR, SECONDARY BATTERY, BATTERY MODULE, BATTERY PACK AND POWER CONSUMING DEVICE

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#### (57)**ABSTRACT**

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The present application provides a binder, a preparation method therefor, a secondary battery, a battery module, a battery pack, and a power consuming device. The binder comprises a polymer comprising structural units derived from a monomer represented by formula I and structural units derived from a monomer represented by formula II, wherein R<sub>1</sub> and R<sub>2</sub> are each independently selected from hydrogen or substituted or unsubstituted C<sub>1-5</sub> alkyl, R<sub>3</sub> is selected from hydrogen or methyl, and  $R_4$  is selected from substituted or unsubstituted  $C_{1-9}$  alkyl. The binder can be coated on the surface of the positive electrode active material, which is beneficial to maintain the structural integrity of the positive electrode active material during the cycling of the positive electrode plate, thereby improving the cycling performance of the battery.



