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(54) **SOLID ELECTROLYTE, ELECTRODE MIXTURE AND BATTERY**

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(57) **ABSTRACT**

A solid electrolyte contains at least elemental lithium (Li), elemental phosphorus (P), elemental sulfur (S), elemental halogen (X), and elemental oxygen (O), and has a crystalline phase with an argyrodite-type crystal structure. In the solid electrolyte, the molar ratio of the elemental halogen (X) to the elemental phosphorus (P), X/P, is more than 1.0 and less than 2.4, and the molar ratio of the elemental oxygen (O) to the elemental phosphorus (P), O/P, is more than 0 and less than 0.5. In an X-ray diffraction pattern, the solid electrolyte exhibits: peak A in the range of 2θ=21.6° to 22.6°, peak B in the range of 2θ=22.7° to 23.7°; and peak C in the range of 2θ=35.8° to 36.8°, the X-ray diffraction pattern being obtained by an X-ray diffractometer (XRD) using CuKα1 radiation.