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(54) ALL-SOLID-STATE LITHIUM ION SECONDARY BATTERY

(57) Disclosed is an all-solid-state lithium ion secondary battery excellent in cycle characteristics. The battery may be an all-solid-state lithium ion secondary battery, wherein an anode comprises anode active material particles, an electroconductive material and a solid electrolyte; wherein the anode active material particles comprise at least one active material selected from the group consisting of elemental silicon and SiO; and wherein, for the anode active material particles, a value A obtained by the following formula (1) is 6.1 or more and 54.8 or less:

Formula (1)

$$A = S_{BET} \times d_{med} \times D$$

where S_{BET} is a BET specific surface area (m^2/g) of the anode active material particles; d_{med} is a median diameter D50 (μm) of the anode active material particles; and D is a density (g/cm^3) of the anode active material particles.

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FIG. 1