

ABSTRACT

An autonomous vehicle includes a road surface image obtaining device, a memory unit that stores map data, an estimating unit that estimates a self-location, and a determining unit that is configured to execute a reliability determining process of determining a reliability of the self-location. The reliability determining process includes a process of determining whether the estimating unit is in a state capable of estimating the self-location, and a process of determining whether a number of matches between the feature points extracted from the map data and the feature points extracted from the traveling data reaches a predetermined threshold. The determining unit is configured to determine the reliability of the self-location based on results of processes included in the reliability determining process.

(Fig.3)