LOCATION-BASED AUTONOMOUS NAVIGATION USING A VIRTUAL WORLD SYSTEM

ABSTRACT

A system, method, autonomous mobile robot, and computer readable media enabling location-based autonomous navigation using a virtual world system. The system comprises at least one server computer of a server computer system comprising at least one processor and memory storing a virtual world system comprising at least one virtual object being spatially defined by virtual three-dimensional geolocation coordinates matching the three-dimensional geolocation coordinates of a corresponding real world object; and a navigation engine configured to compute the navigation route of at least one autonomous mobile robot based on the navigation destination data and considering the three-dimensional geolocation coordinates of the at least one virtual object. The navigation engine enables the at least one autonomous mobile robot to autonomously navigate the real world through a virtual replica of the at least one autonomous mobile robot comprised in the virtual world system connected to one or more corresponding motion mechanisms and circuitry.

FIG. 1