CLAIMS

1. A marker system operation method for achieving control for assisting driving of a vehicle by using magnetic markers, the marker system including a storage device which stores laying position information indicating positions where the magnetic markers are laid, the marker system operation method comprising:

by the vehicle, detecting a magnetic marker, measuring a lateral shift amount of the magnetic marker, measuring a position of the vehicle,

the method characterized by

calculating a position of the magnetic marker based on the lateral shift amount and the measured position of the vehicle;

identifying a magnetic marker positioned nearest to the calculated position of the magnetic marker from among the laying position information stored in the storage device, and providing the laying position information of the identified marker to the vehicle;

by the vehicle, calculating a position of the vehicle with reference to the magnetic marker associated with the provided laying position information; and

correcting the laying position information of the identified magnetic marker stored in the storage device by using, as correction information, the calculated position of the magnetic marker detected by the vehicle.

2. The marker system operation method according to claim 1, wherein the laying position information is associated with information indicating accuracy of laying position information when the laying position information is provided to the vehicle.

3. The marker system operation method according to claim 1 or 2, wherein a degree of correcting the laying position information

varies according to positional accuracy when the position of the vehicle is measured.

4. A marker system for achieving control for assisting driving of a vehicle by using magnetic markers, the marker system comprising:

a storage device configured to store laying position information indicating positions where the magnetic markers are laid;

a sensor unit configured to detect a magnetic marker and to measure a lateral shift amount of the magnetic marker, a positioning unit configured to measure a position of the vehicle,

the marker system characterized in

a control unit configured to calculate a position of the magnetic marker based on the lateral shift amount and the measured position of the vehicle; and

a server device configured to identify a magnetic marker positioned nearest to the calculated position of the magnetic marker from among the laying position information stored in the storage device and to provide the laying position information of the identified magnetic market to the vehicle;

wherein the control unit is configured to calculate a position of the vehicle with reference to the magnetic marker associated with the provided laying position information; and

wherein the server device is configured to correct the laying position information of the identified magnetic marker stored in the storage device by using, as correction information, the calculated position of the magnetic marker detected by the sensor unit.

5. The marker system according to claim 4, wherein the service device is configured to change a degree of correcting the laying

position information according to accuracy of the calculated position of the magnetic marker detected by the sensor unit.

6. The marker system according to claim 4 or 5, wherein the storage device is configured to store information indicating accuracy of the laying position information being associated with the laying position information, and

the server device is configured to provide the information indicating the accuracy of laying position information associated with the laying position information so as to allow switching of the control according to the accuracy of laying position information to the vehicle which can perform control of a plurality of, two or more, types as the control for assisting driving.