CLAIMS

1. A method for positioning a location, comprising:

acquiring a vehicle identification of a target vehicle;

determining location information when the vehicle identification of the target vehicle is acquired; and

sending the vehicle identification and the location information to a server, such that the server determines a location of the target vehicle according to the location information, wherein determining the location of the target vehicle comprises:

determining, for the target vehicle, location information corresponding to the vehicle identification of the target vehicle sent by different client terminals and received within a set time period;

processing the received location information; and

determining the location of the target vehicle corresponding to the vehicle identification according to the processing result.

2. The method for positioning a location according to claim 1, wherein acquiring a vehicle identification of a target vehicle comprises:

when a carrier carrying the vehicle identification of the target vehicle is detected, obtaining the vehicle identification of the target vehicle from the carrier.

3. The method for positioning a location according to claim 2, wherein obtaining the vehicle identification of the target vehicle from the carrier comprises:

when the carrier is a radio frequency identification RFID tag, and when the RFID tag is detected, obtaining the vehicle identification of the target vehicle from the RFID tag.

4. The method for positioning a location according to claim 3, wherein obtaining the vehicle identification of the target vehicle from the RFID tag comprises:

obtaining the vehicle identification from the RFID tag at a fixed time interval; and

determining location information when the vehicle identification of the target vehicle is acquired comprises:

when vehicle identifications obtained at two adjacent times are identical, determining at least one piece of the location information obtained by positioning during the two adjacent

times of obtaining the vehicle identification as the location information when the vehicle identification is acquired.

5. The method for positioning a location according to claim 2, wherein obtaining the vehicle identification of the target vehicle from the carrier comprises:

when the carrier is an in-vehicle fee-charging terminal, obtaining the vehicle identification of the target vehicle from the in-vehicle fee-charging terminal when a boarding request is sent to the in-vehicle fee-charging terminal.

6. The method for positioning a location according to claim 5, wherein obtaining the vehicle identification of the target vehicle from the in-vehicle fee-charging terminal comprises:

obtaining the vehicle identification of the target vehicle from the in-vehicle fee-charging terminal in a near field communication NFC mode.

7. The method for positioning a location according to claim 6, wherein determining location information when the vehicle identification of the target vehicle is acquired comprises:

after the boarding request is sent to the in-vehicle fee-charging terminal, positioning the location information periodically or in real time; and

determining at least one piece of location information obtained from positioning as the location information when the vehicle identification of the target vehicle is acquired.

8. The method for positioning a location according to claim 2, wherein obtaining the vehicle identification of the target vehicle from the carrier comprises:

when the carrier is a wireless fidelity WIFI device provided by the target vehicle, obtaining the vehicle identification of the target vehicle from the WIFI device when the WIFI device is accessed.

9. The method for positioning a location according to claim 8, wherein obtaining the vehicle identification of the target vehicle from the WIFI device comprises:

taking a WIFI identification of the WIFI device as the vehicle identification of the target vehicle.

10. The method for positioning a location according to claim 1, 4 or 7, further comprising:

after the location information when the vehicle identification of the target vehicle is acquired is determined, storing the vehicle identification and the location information corresponding to the vehicle identification; and

sending the vehicle identification and the location information to a server comprises:

sending the vehicle identification and at least one of the location information corresponding to the vehicle identification to the server when the set sending time arrives.

11. A method for positioning a location, comprising:

receiving a vehicle identification and location information sent by at least one client terminal; and

determining a location of a target vehicle corresponding to the vehicle identification according to the location information, wherein determining the location of the target vehicle comprises:

determining, for the target vehicle, location information corresponding to the vehicle identification of the target vehicle sent by different client terminals and received within a set time period;

processing the received location information; and

determining the location of the target vehicle corresponding to the vehicle identification according to the processing result.

12. The method for positioning a location according to claim 11, wherein processing the received location information comprises:

determining an offset weight of each piece of location information received, the offset weight being used to represent an extent to which the location information deviates from the actual location of the target vehicle; and

calculating a processing result based on the offset weight of each piece of location information and a coordinate contained in each piece of location information.

13. The method for positioning a location according to claim 11, wherein before determining the location of the target vehicle corresponding to the vehicle identification according to the location information, the method further comprises:

for the target vehicle, when a number of pieces of location information corresponding to the vehicle identification of the target vehicle which is sent by each client terminal and received within the set time period is larger than 1, performing the following operations on the location information corresponding to the vehicle identification of the target vehicle sent by each client terminal:

determining a generation time of each piece of location information corresponding to the vehicle identification of the target vehicle sent by the client terminal;

according to the generation time, selecting, from the pieces of location information, location information satisfying a set condition; and

determining the selected location information as the location information corresponding to the vehicle identification of the target vehicle sent by the client terminal within the set time period.

14. The method for positioning a location according to claim 11, wherein determining the location of the target vehicle corresponding to the vehicle identification according to the location information comprises:

counting a number of occurrences of each piece of the location information sent by the different client terminals and received within the set time period; and

determining the location of the target vehicle corresponding to the vehicle identification according to the location information that the number of occurrences is larger than a set threshold.

15. The method for positioning a location according to claim 11, wherein determining the location of the target vehicle corresponding to the vehicle identification according to the location information comprises:

determining, for the target vehicle, a generation time of each piece of location information corresponding to the received vehicle identification;

processing location information with the same generation time to obtain a location of the target vehicle at a time corresponding to the generation time; and

when a location of the target vehicle corresponding to each generation time is obtained, determining a moving track of the target vehicle based on each of the locations.

16. A device for positioning a location, comprising:

an acquiring unit for acquiring a vehicle identification of a target vehicle;

a determining unit for determining location information when the vehicle identification of the target vehicle is acquired; and

a sending unit for sending the vehicle identification and the location information to a server, such that the server determines a location of the target vehicle according to the location information, wherein determining the location of the target vehicle comprises:

determining, for the target vehicle, location information corresponding to the vehicle identification of the target vehicle sent by different client terminals and received within a set time period;

processing the received location information; and

determining the location of the target vehicle corresponding to the vehicle identification according to the processing result.

17. The device for positioning a location according to claim 16, wherein the acquiring unit acquiring a vehicle identification of a target vehicle comprises:

when a carrier carrying the vehicle identification of the target vehicle is detected, obtaining the vehicle identification of the target vehicle from the carrier.

18. The device for positioning a location according to claim 17, wherein the acquiring unit obtaining the vehicle identification of the target vehicle from the carrier comprises:

when the carrier is a radio frequency identification RFID tag, and when the RFID tag is detected, obtaining the vehicle identification of the target vehicle from the RFID tag.

19. The device for positioning a location according to claim 18, wherein the acquiring unit obtaining the vehicle identification of the target vehicle from the RFID tag comprises:

obtaining the vehicle identification from the RFID tag at a fixed time interval; and

the determining unit determining location information when the vehicle identification of the target vehicle is acquired comprises:

when vehicle identifications obtained at two adjacent times are identical, determining at least one piece of the location information obtained by positioning during the two adjacent times of obtaining the vehicle identification as the location information when the vehicle identification is acquired.

20. The device for positioning a location according to claim 17, wherein the acquiring unit obtaining the vehicle identification of the target vehicle from the carrier comprises:

when the carrier is an in-vehicle fee-charging terminal, obtaining the vehicle identification of the target vehicle from the in-vehicle fee-charging terminal when a boarding request is sent to the in-vehicle fee-charging terminal.

21. The device for positioning a location according to claim 20, wherein the acquiring unit obtaining the vehicle identification of the target vehicle from the in-vehicle fee-charging terminal comprises:

obtaining the vehicle identification from the in-vehicle fee-charging terminal in a near field communication NFC mode.

22. The device for positioning a location according to claim 21, wherein the determining unit determining location information when the vehicle identification of the target vehicle is acquired comprises:

after the boarding request is sent to the in-vehicle fee-charging terminal, positioning the location information periodically or in real time; and

determining at least one piece of location information obtained from positioning as the location information when the vehicle identification of the target vehicle is acquired.

23. The device for positioning a location according to claim 17, wherein the acquiring unit obtaining the vehicle identification of the target vehicle from the carrier comprises:

when the carrier is a wireless fidelity WIFI device provided by the target vehicle, obtaining the vehicle identification of the target vehicle from the WIFI device when the WIFI device is accessed.

24. The device for positioning a location according to claim 23, wherein the acquiring unit obtaining the vehicle identification of the target vehicle from the WIFI device comprises:

taking a WIFI identification of the WIFI device as the vehicle identification of the target vehicle.

25. The device for positioning a location according to claim 16, 19 or 22, further comprising: a storage unit, wherein

after the location information when the vehicle identification of the target vehicle is acquired is determined, the storage unit stores the vehicle identification and the location information corresponding to the vehicle identification; and

the sending unit sending the vehicle identification and the location information to a server comprises:

sending the vehicle identification and at least one of the location information corresponding to the vehicle identification to the server when the set sending time arrives.

26. A device for positioning a location, comprising:

a receiving unit for receiving a vehicle identification and location information sent by at least one client terminal; and

a positioning unit for determining a location of a target vehicle corresponding to the vehicle identification according to the location information, wherein the positioning unit determining the location of the target vehicle comprises:

determining, for the target vehicle, location information corresponding to the vehicle identification of the target vehicle sent by different client terminals and received within a set time period;

processing the received location information; and

determining a location of the target vehicle corresponding to the vehicle identification according to the processing result.

27. The device for positioning a location according to claim 26, wherein the positioning unit processing the received location information comprises:

determining an offset weight of each piece of location information received, the offset weight being used to represent an extent to which the location information deviates from the actual location of the target vehicle; and

calculating a processing result based on the offset weight of each piece of location information and a coordinate contained in each piece of location information.

28. The device for positioning a location according to claim 26, further comprising a screening unit, wherein

before determining the location of the target vehicle corresponding to the vehicle identification according to the location information, for the target vehicle, when a number of pieces of location information corresponding to the vehicle identification of the target vehicle which is sent by each client terminal and received within the set time period is larger than 1, the screening unit performs the following operations on the location information corresponding to the vehicle identification of the target vehicle sent by each client terminal:

determining a generation time of each piece of location information corresponding to the vehicle identification of the target vehicle sent by the client terminal;

according to the generation time, selecting, from the pieces of location information, location information satisfying a set condition; and

determining the selected location information as the location information corresponding to the vehicle identification of the target vehicle sent by the client terminal within the set time period.

29. The device for positioning a location according to claim 26, wherein the positioning unit determining the location of the target vehicle corresponding to the vehicle identification according to the location information comprises:

counting a number of occurrences of each piece of the location information sent by the different client terminals and received within the set time period; and

determining the location of the target vehicle corresponding to the vehicle identification according to the location information that the number of occurrences is larger than a set threshold.

30. The device for positioning a location according to claim 26, wherein the positioning unit determining the location of the target vehicle corresponding to the vehicle identification according to the location information comprises:

determining, for the target vehicle, a generation time of each piece of location information corresponding to the received vehicle identification;

processing location information with the same generation time to obtain a location of the target vehicle at a time corresponding to the generation time; and

when a location of the target vehicle corresponding to each generation time is obtained, determining a moving track of the target vehicle based on each of the locations.

31. An electronic device, comprising: at least one processor and a memory for storing a program and configured to perform the following steps by the at least one processor:

acquiring a vehicle identification of a target vehicle;

determining location information when the vehicle identification of the target vehicle is acquired; and

sending the location information and the vehicle identification to a server, such that the server determines a location of the target vehicle according to the location information, wherein determining the location of the target vehicle comprises:

determining, for the target vehicle, location information corresponding to the vehicle identification of the target vehicle sent by different client terminals and received within a set time period;

processing the received location information; and

determining the location of the target vehicle corresponding to the vehicle identification according to the processing result.

32. A computer readable storage medium, comprising a program for use in conjunction with an electronic device, the program being executable by a processor to perform the following steps:

acquiring a vehicle identification of a target vehicle;

determining location information when the vehicle identification of the target vehicle is acquired; and

sending the location information and the vehicle identification to a server, such that the server determines a location of the target vehicle according to the location information,

wherein determining the location of the target vehicle comprises:

determining, for the target vehicle, location information corresponding to the vehicle identification of the target vehicle sent by different client terminals and received within a set time period;

processing the received location information; and

determining the location of the target vehicle corresponding to the vehicle identification according to the processing result.

33. A system for positioning a location, comprising:

a carrier, located on a vehicle, for storing a vehicle identification of the vehicle;

a client terminal for acquiring the vehicle identification of the vehicle from the carrier, determining location information when the vehicle identification of the vehicle is acquired, and sending the vehicle identification of the vehicle and the location information corresponding to the vehicle identification to a server; and

a server for receiving the vehicle identification and the location information corresponding to the vehicle identification sent by the client terminal, and determining the location of the vehicle according to the location information, wherein determining the location of the vehicle comprises:

determining location information corresponding to the vehicle identification of the vehicle sent by different client terminals and received within a set time period;

processing the received location information; and

determining the location of the vehicle corresponding to the vehicle identification according to the processing result.