CLAIMS

[Claim 1]

A vehicle surveillance system comprising:

a photographing unit configured to photograph a target vehicle;

a positional information acquisition unit configured to acquire positional information indicating a position of the photographing unit;

a surveillance information generation unit configured to extract a vehicle number from an image acquired by the photographing unit and generate surveillance information on the basis of at least the vehicle number and the positional information;

a surveillance information output unit configured to output the surveillance information generated by the surveillance information generation unit; and

a violating vehicle identification unit configured to identify a violating vehicle on the basis of the surveillance information and information on charging from an on-board unit of the target vehicle,

wherein the photographing unit, the positional information acquiring unit, the surveillance information generation unit, and the surveillance information output unit are installed in a mobile surveillance vehicle, and

wherein the violating vehicle identification unit identifies the violating vehicle on the basis of surveillance information including positional information which is included in an actual surveillance area inside a predetermined charging area among multiple pieces of the surveillance information.

[Claim 2]

The vehicle surveillance system according to claim 1, wherein the violating vehicle identification unit determines that the target vehicle is the violating vehicle when a newest ignition state of the target vehicle is an OFF state and a position of the target vehicle when the ignition state is switched to the OFF state and a photographing position of a newest image in which the photographing

unit photographs the target vehicle do not match each other.

[Claim 3]

The vehicle surveillance system according to claim 1 or claim 2, wherein the violating vehicle identification unit determines that the target vehicle is the violating vehicle when the newest ignition state of the target vehicle is an ON state and charging processing has not been performed within a predetermined period.

[Claim 4]

The vehicle surveillance system according to any one of claims 1 to 3, wherein the violating vehicle identification unit identifies the violating vehicle on the basis of information on charging of the charging processing and the surveillance information when the charging processing is performed before acquiring the surveillance information in a charging area in which the surveillance information is acquired.

[Claim 5]

The vehicle surveillance system according to any one of claims 1 to 4, further comprising a surveillance timing control unit configured to:

instruct the photographing unit to start photographing when it is determined that the surveillance vehicle has moved a predetermined distance or more or a predetermined time or more into the predetermined charging area from a boundary part of the charging area on the basis of the positional information; and

instruct the photographing unit to end photographing when it is determined that the surveillance vehicle in the charging area has approached the boundary part on the basis of the positional information.

[Claim 6]

The vehicle surveillance system according to any one of claims 1 to 5,

wherein the positional information acquisition unit acquires positional information which is generated on the basis of a signal received from a satellite.

[Claim 7]

A vehicle surveillance method which is performed by a vehicle surveillance system installed in a mobile surveillance vehicle, the vehicle surveillance method comprising:

a photographing step of photographing a target vehicle;

a positional information acquisition step of acquiring positional information indicating a position at which the target vehicle is photographed;

a surveillance information generation step of extracting a vehicle number from an image acquired in the photographing step and generating surveillance information on the basis of at least the vehicle number and the positional information;

a surveillance information output step of outputting the surveillance information generated in the surveillance information generation step; and

a violating vehicle identification step of identifying a violating vehicle on the basis of the surveillance information and information on charging from an on-board unit of the target vehicle,

wherein, in the violating vehicle identification step, the violating vehicle is identified on the basis of surveillance information including positional information which is included in an actual surveillance area inside a predetermined charging area among multiple pieces of the surveillance information.

[Claim 8]

A program causing a computer to perform:

a photographing step of photographing a target vehicle;

a positional information acquisition step of acquiring positional information indicating a position at which the target vehicle is photographed;

a surveillance information generation step of extracting a vehicle number from an image acquired in the photographing step and generating surveillance information on the basis of at least the vehicle number and the positional information;

a surveillance information output step of outputting the surveillance information generated in the surveillance information generation step; and

a violating vehicle identification step of identifying a violating vehicle on the basis of the surveillance information and information on charging from an on-board unit of the target vehicle,

wherein, in the violating vehicle identification step, the violating vehicle is identified on the basis of surveillance information including positional information which is included in an actual surveillance area inside a predetermined charging area among multiple pieces of the surveillance information.