

CLAIMS

1. A method for obtaining a vehicle loss assessment image, comprising:
 - obtaining, by a client, captured video data, and sending the captured video data to a server;
 - selecting, by the server, one or more video image from the captured video data to identify a damaged portion of a vehicle in the one or more video image;
 - tracking, by the server, a location region of the damaged portion in the one or more video images from the captured video data, wherein the step of tracking comprises:
 - determining, by the server, the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data; and
 - sending, by the server, the determined location region to the client for display;
 - classifying, by the server, the one or more video image based on the identified damaged portion of the vehicle to determine one or more candidate image classification sets of the damaged portion; and
 - selecting, by the server, a vehicle loss assessment image from the one or more candidate image classification sets according to a clarity of the damaged portion in the one or more video images in the one or more candidate image classification sets and a filming angle of the damage portion of the one or more video images in the one or more candidate image classification sets.
2. A computer-implemented method for obtaining a vehicle loss assessment image, comprising:
 - receiving captured video data of a damaged vehicle that is uploaded by a terminal device;
 - selecting one or more video images from the captured video data to identify a damaged portion of the damaged vehicle in the one or more video images;
 - tracking a location region of the damaged portion in the one or more video images from the captured video data, wherein the step of tracking comprises:
 - determining the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data; and
 - sending the determined location region to the terminal device for display;
 - classifying the one or more video images based on the identified damaged portion of the damaged vehicle to determine one or more candidate image classification sets of the damaged portion; and
 - selecting a vehicle loss assessment image from the one or more candidate image classification sets according to a clarity of the damaged portion in the one or more video images

in the one or more candidate image classification sets and a filming angle of the damage portion of the one or more video images in the one or more candidate image classification sets.

3. The method for obtaining a vehicle loss assessment image according to claim 2, wherein the one or more determined candidate image classification sets comprises:

a close-up image set displaying the damaged portion and a component image set displaying a vehicle component to which the damaged portion belongs.

4. The method for obtaining a vehicle loss assessment image according to claim 3, wherein a video image in the close-up image set is determined in at least one of the following manners:

an area ratio of a region occupied by the damaged portion to that of the video image including the damaged portion is greater than a first preset ratio;

a ratio of a horizontal coordinate span of the damaged portion to a length of the video image including the damaged portion is greater than a second preset ratio, and/or a ratio of a longitudinal coordinate span of the damaged portion to a height of the video image including the damaged portion is greater than a third preset ratio; and

from video images including a same damaged portion, first K video images are selected or one or more video images, in each of which the ratio of an area of the damaged portion to that of the video image is within a fourth preset area ratio, are selected after the video images are sorted in a descending order of areas of the same damaged portion in the video images, wherein $K \geq 1$.

5. The method for obtaining a vehicle loss assessment image according to claim 3, further comprising:

in response to detecting that at least one of the close-up image set and the component image set of the damaged portion is empty, or the one or more video images in the close-up image set do not cover an entire region of the corresponding damaged portion, generating a video recording prompt message; and

sending the video recording prompt message to the terminal device.

6. The method for obtaining a vehicle loss assessment image according to claim 2, wherein after the damaged portion in the video image is identified, the method further comprises:

in response to the damaged portion re-entering the video image after the damaged portion is out of the video image, determining the location region of the damaged portion again based on image feature data of the damaged portion.

7. The method for obtaining a vehicle loss assessment image according to claim 6, further comprising:

receiving information of a new damaged portion sent by the terminal device, wherein the

new damaged portion comprises a damaged portion that is re-determined after the terminal device changes the location region of the identified damaged portion based on a received interactive instruction; and

correspondingly, the classifying the one or more video images based on the identified damaged portion comprises classifying the one or more video images based on the information of the new damaged portion.

8. The method for obtaining a vehicle loss assessment image according to any one of claims 6 to 7, further comprising: in response to detecting that there are at least two damaged portions in the one or more video images, determining whether a distance between the at least two damaged portions satisfies a set proximity condition; and

in response to determining that the distance between the at least two damaged portions satisfies the set proximity condition, simultaneously tracking the at least two damaged portions, and respectively generating corresponding vehicle loss assessment images.

9. A computer-implemented method for obtaining a vehicle loss assessment image, comprising:

performing video recording of a damaged vehicle to obtain captured video data;

sending the captured video data to a processing terminal; and

receiving a location region that is obtained through tracking, by the processing terminal, a location region of a damaged portion in the captured video data and that is returned by the processing terminal, and displaying the tracked location region, wherein the damaged portion is identified through selecting one or more video images in the captured video data by the processing terminal, and wherein tracking, by the processing terminal, the location region of the damaged portion in the captured video data comprises determining, by the processing terminal, the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data and sending, by the processing terminal, the determined location region for display.

10. The method for obtaining a vehicle loss assessment image according to claim 9, further comprising:

receiving and displaying a video recording prompt message sent by the processing terminal, wherein the video recording prompt message is generated when the processing terminal detects that at least one of a close-up image set and a component image set of the damaged portion is empty, or that the one or more video images in the close-up image set do not cover an entire region of the corresponding damaged portion.

11. The method for obtaining a vehicle loss assessment image according to claim 9 or 10,

further comprising:

re-determining a new damaged portion after changing the location region of the damaged portion based on a received interactive instruction; and

sending information of the new damaged portion to the processing terminal for the processing terminal to classify the one or more video images based on the information of the new damaged portion.

12. A method for obtaining a vehicle loss assessment image, comprising:

receiving captured video data of a damaged vehicle that is uploaded by a terminal device;

selecting one or more video images from the captured video data to identify a damaged portion of the damaged vehicle in the one or more video images;

tracking a location region of the damaged portion in the one or more video images from the captured video data, wherein the step of tracking comprises:

determining the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data; and

sending the determined location region to the terminal device for display;

classifying the one or more video images based on the identified damaged portion of the damaged vehicle to determine one or more candidate image classification sets of the damaged portion; and

selecting a vehicle loss assessment image from the one or more candidate image classification sets according to a clarity of the damaged portion in the one or more video images in the one or more candidate image classification sets and a filming angle of the damage portion of the one or more video images in the one or more candidate image classification sets.

13. The method for obtaining a vehicle loss assessment image according to claim 12, wherein the one or more determined candidate image classification sets comprises:

a close-up image set displaying the damaged portion and a component image set displaying a vehicle component to which the damaged portion belongs.

14. The method for obtaining a vehicle loss assessment image according to claim 13, wherein a video image in the close-up image set is determined in at least one of the following manners:

an area ratio of a region occupied by the damaged portion to that of the video image including the damaged portion is greater than a first preset ratio;

a ratio of a horizontal coordinate span of the damaged portion to a length of the video image including the damaged portion is greater than a second preset ratio, and/or a ratio of a

longitudinal coordinate span of the damaged portion to a height of the video image including the damaged portion belongs is greater than a third preset ratio; and

from video images including a same damaged portion, first K video images are selected or one or more video images, in each of which the ratio of an area of the damaged portion to that of the video image is within a fourth preset area ratio, are selected after the video images are sorted in a descending order of areas of the same damaged portion in the video images, wherein $K \geq 1$.

15. The method for obtaining a vehicle loss assessment image according to claim 13, further comprising:

in response to detecting that at least one of the close-up image set and the component image set of the damaged portion is empty, or that the one or more video images in the close-up image set do not cover an entire region of the corresponding damaged portion, generating a video recording prompt message; and

displaying the video recording prompt message.

16. The method for obtaining a vehicle loss assessment image according to claim 12, wherein after the damaged portion in the video image is identified, the method further comprises:

in response to the damaged portion re-entering the video image after the damaged portion is out of the video image, determining the location region of the damaged portion again based on image feature data of the damaged portion.

17. The method for obtaining a vehicle loss assessment image according to claim 16, further comprising:

re-determining a new damaged portion after changing the location region of the identified damaged portion based on a received interactive instruction; and

correspondingly, the classifying the one or more video images based on the identified damaged portion comprises classifying the one or more video images based on information of the new damaged portion.

18. The method for obtaining a vehicle loss assessment image according to claim 16 or 17, further comprising:

in response to receiving at least two indicated damaged portions, determining whether a distance between the at least two damaged portions satisfies a set proximity condition; and

in response to determining that the distance between the at least two damaged portions satisfies the set proximity condition, simultaneously tracking the at least two damaged portions, and generating corresponding loss assessment images respectively.

19. The method for obtaining a vehicle loss assessment image according to claim 12, further comprising:

transmitting the vehicle loss assessment image to a server in real time; or
asynchronously transmitting the vehicle loss assessment image to a server.

20. An apparatus for obtaining a vehicle loss assessment image, comprising:

a data receiving module, configured to receive captured video data of a damaged vehicle that is uploaded by a terminal device;

a damaged portion identification module, configured to: select one or more video images from the captured video data to identify a damaged portion of the damaged vehicle in the one or more video images; track a location region of the damaged portion in the one or more video images from the captured video data by determining the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data; and send the determined location region to the terminal device for display;

a classification module, configured to: classify the one or more video images based on the identified damaged portion of the damaged vehicle to determine one or more candidate image classification sets of the damaged portion; and

a screening module, configured to select a vehicle loss assessment image from the one or more candidate image classification sets according to a clarity of the damaged portion in the one or more video images in the one or more candidate image classification sets and a filming angle of the damage portion of the one or more video images in the one or more candidate image classification sets.

21. An apparatus for obtaining a vehicle loss assessment image, comprising:

a photographing module, configured to: perform video recording of a damaged vehicle to obtain captured video data;

a communications module, configured to send the captured video data to a processing terminal; and

a tracking module, configured to: receive a location region that is obtained through tracking, by the processing terminal, a location region of a damaged portion in the captured video data and that is returned by the processing terminal, and display the tracked location region, wherein the damaged portion is identified through selecting one or more video images in the captured video data by the processing terminal, and wherein tracking, by the processing terminal, the location region of the damaged portion in the captured video data comprises determining, by the processing terminal, the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data

and sending, by the processing terminal, the determined location region for display.

22. An apparatus for obtaining a vehicle loss assessment image, comprising a processor and a memory configured to store instructions executable by the processor, wherein the processor executes the instructions to implement:

receiving captured video data of a damaged vehicle;

selecting one or more video images in the captured video data to identify a damaged portion of a vehicle in the one or more video images;

tracking a location region of the damaged portion in the one or more video images from the captured video data, wherein the step of tracking comprises:

determining the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data; and

sending the determined location region to a terminal device for display;

classifying the one or more video images based on the identified damaged portion of the vehicle to determine one or more candidate image classification sets of the damaged portion; and

selecting a vehicle loss assessment image from the one or more candidate image classification sets according to a clarity of the damaged portion in the one or more video images in the one or more candidate image classification sets and a filming angle of the damage portion of the one or more video images in the one or more candidate image classification sets.

23. The apparatus for obtaining a vehicle loss assessment image according to claim 22, wherein the captured video data of the damaged vehicle comprises:

data information uploaded by a terminal device after the terminal device obtains the captured video data; or

the captured video data obtained through video recording of the damaged vehicle by the apparatus for obtaining a vehicle loss assessment image.

24. The apparatus for obtaining a vehicle loss assessment image according to claim 23, wherein when the processor executes the instructions, the one or more determined candidate image classification sets comprises:

a close-up image set displaying the damaged portion and a component image set displaying a vehicle component to which the damaged portion belongs.

25. The apparatus for obtaining a vehicle loss assessment image according to claim 24, wherein when the processor executes the instructions, a video image in the close-up image set is determined in at least one of the following manners:

an area ratio of a region occupied by the damaged portion to that of the video image

including the damaged portion is greater than a first preset ratio;

a ratio of a horizontal coordinate span of the damaged portion to a length of the video image including the damaged portion is greater than a second preset ratio, and/or a ratio of a longitudinal coordinate span of the damaged portion to a height of the video image including the damaged portion belongs is greater than a third preset ratio; and

from video images including a same damaged portion, first K video images are selected or one or more video images, in each of which the ratio of an area of the damaged portion to that of the video image is within a fourth preset area ratio, are selected after the video images are sorted in a descending order of areas of the same damaged portion in the video images, wherein $K \geq 1$.

26. The apparatus for obtaining a vehicle loss assessment image according to claim 25, wherein the processor executes the instructions to further implement:

in response to detecting that at least one of the close-up image set and the component image set of the damaged portion is empty, or that the one or more video images in the close-up image set do not cover an entire region of the corresponding damaged portion, generating a video recording prompt message, wherein

the video recording prompt message is displayed on the terminal device.

27. The apparatus for obtaining a vehicle loss assessment image according to claim 23, wherein the processor executes the instructions to further implement:

in response to the damaged portion re-entering the video image after the damaged portion is out of the video image, determining the location region of the damaged portion again based on image feature data of the damaged portion.

28. The apparatus for obtaining a vehicle loss assessment image according to claim 23, wherein the processor executes the instructions to further implement:

receiving information of a new damaged portion that is re-determined after the location region of the identified damaged portion is changed, wherein

correspondingly, the classifying the one or more video images based on the identified damaged portion comprises classifying the one or more video images based on the information of the new damaged portion.

29. The apparatus for obtaining a vehicle loss assessment image according to any one of claims 27 to 28, when the processor executes the instructions, in response to detecting that there are at least two damaged portions in the one or more video images, determining whether a distance between the at least two damaged portions satisfies a set proximity condition; and

in response to determining that the distance between the at least two damaged portions

satisfies the set proximity condition, simultaneously tracking the at least two damaged portions, and respectively generating corresponding loss assessment images.

30. The apparatus for obtaining a vehicle loss assessment image according to claim 23, wherein if the captured video data of the damaged vehicle is obtained by performing the video recording by the apparatus for obtaining a vehicle loss assessment image, the processor executes the instructions to further implement:

- transmitting the loss assessment image to a processing terminal in real time; or
- asynchronously transmitting the loss assessment image to a processing terminal.

31. A computer-readable storage medium, wherein the computer-readable storage medium stores computer instructions, and when the instructions are executed, the following steps are implemented:

- receiving captured video data of a damaged vehicle that is uploaded by a terminal device;
- selecting one or more video images in the captured video data to identify a damaged portion of the damaged vehicle in the one or more video images;

- tracking a location region of the damaged portion in the one or more video images from the captured video data, wherein the step of tracking comprises:

- determining the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data; and
 - sending the determined location region to the terminal device for display;
- classifying the one or more video images based on the identified damaged portion of the damaged vehicle to determine one or more candidate image classification sets of the damaged portion; and

- selecting a vehicle loss assessment image from the one or more candidate image classification sets according to a clarity of the damaged portion in the one or more video images in the one or more candidate image classification sets and a filming angle of the damage portion of the one or more video images in the one or more candidate image classification sets.

32. A computer-readable storage medium, wherein the computer-readable storage medium stores computer instructions, and when the instructions are executed, the following steps are implemented:

- performing video recording of a damaged vehicle to obtain captured video data;
- sending the captured video data to a processing terminal; and
- receiving a location region that is obtained through tracking, by the processing terminal, a location region of a damaged portion in the video data and that is returned by the processing terminal, and displaying the tracked location region, wherein the damaged portion is identified

through selecting one or more video images in the captured video data by the processing terminal, and wherein tracking, by the processing terminal, the location region of the damaged portion in the captured video data comprises determining, by the processing terminal, the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data and sending, by the processing terminal, the determined location region for display.

33. A server, comprising a processor and a memory configured to store instructions executable by the processor, wherein the processor executes the instructions to implement:

- receiving captured video data of a damaged vehicle that is uploaded by a terminal device;;
- selecting one or more video images in the captured video data to identify a damaged portion of the damaged vehicle in the one or more video images;

- tracking a location region of the damaged portion in the one or more video images from the captured video data, wherein the step of tracking comprises:

- determining the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data; and

- sending the determined location region to the terminal device for display;

- classifying the one or more video images based on the identified damaged portion of the damaged vehicle to determine one or more candidate image classification sets of the damaged portion; and

- selecting a vehicle loss assessment image from the one or more candidate image classification sets according to a clarity of the damaged portion in the one or more video images in the one or more candidate image classification sets and a filming angle of the damage portion of the one or more video images in the one or more candidate image classification sets.

34. A terminal device, comprising a processor and a memory configured to store instructions executable by the processor, wherein the processor executes the instructions to implement:

- obtaining video data captured through video capturing of a damaged vehicle;

- selecting one or more video images in the captured video data to identify a damaged portion of the vehicle in the one or more video images;

- tracking a location region of the damaged portion in the one or more video images from the captured video data, wherein the step of tracking comprises:

- determining the location region of the damaged portion according to the identified damaged portion from the one or more video images in the captured video data; and

sending the determined location region to a client for display;

classifying the one or more video images based on the detected damaged portion of the vehicle to determine one or more candidate image classification sets of the damaged portion; and

selecting a vehicle loss assessment image from the one or more candidate image classification sets according to a clarity of the damaged portion in the one or more video images in the one or more candidate image classification sets and a filming angle of the damage portion of the one or more video images in the one or more candidate image classification sets.

35. The terminal device according to claim 34, wherein the processor executes the instructions to further implement:

transmitting the loss assessment image to a server in real time by using a data communication module; or

asynchronously transmitting the loss assessment image to a server.