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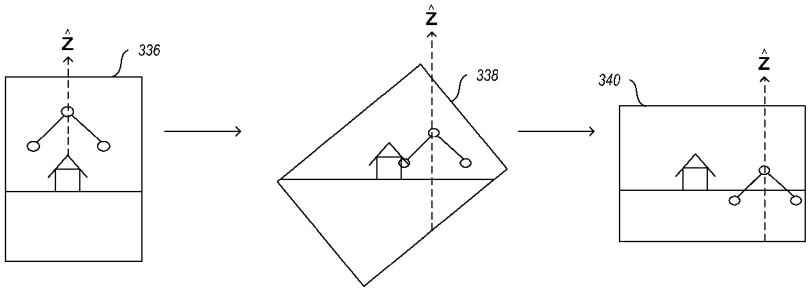


Fig. 12

(57) Abstract: Systems and methods are disclosed for a property management system that runs on a smartphone and allows users to identify and track information on one or more properties and to receive property updates from the server. Systems and methods are also disclosed that use the orientation of and images captured by a smartphone camera to identify a facet of an object and to determine its pitch.

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AMENDED CLAIMS
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1. A system, comprising:

a smartphone device that includes a client property management database;

a server operably connected to the smartphone device, the server including a server property management database that is synchronized at least in part with the client property management database;

a non-transitory memory connected to a processor within on the smartphone device, the non-transitory memory having computer-executable instructions stored thereon that, when executed by the processor, cause the processor to:

receive information identifying one or more properties,

send an order for a roof report for the one or more properties to the server,

receive the roof report for the one or more properties from the server, and

store the roof report for the one or more properties received from the server on the client property management database included in the smartphone device, and

outputting at least a portion of the roof report on the smartphone device.

2. A method, comprising:

receiving information identifying one or more properties;

sending an order for a roof report for the one or more properties to a server, the server including a server property management database;

receiving the roof report for the one or more properties from the server; and

AMENDED SHEET (ARTICLE 19)

storing the roof report for the one or more properties received from the server on a client property management database, the client property management database synchronized at least in part with the server management database.

3. A system for measuring the pitch of an object in an image, comprising:

a smartphone device;

a non-transitory memory connected to a processor within the smartphone device, the non-transitory memory having computer-executable instructions stored thereon that, when executed by the processor, cause the processor to:

receive an image representing a facet of an object for which a pitch is to be determined, wherein the image contains image metadata information;

receive a scissor marker from a user that overlays the image and identifies the facet of the object for which a pitch is to be determined, the scissor marker including two lines joined at a common node that form an angle;

determine the pitch of the object using the scissor marker and the image metadata information;

output the pitch of the facet of the object to the smartphone device.

4. A method for measuring the pitch of an object in an image, comprising:

receiving an image representing a facet of an object for which a pitch is to be determined, wherein the image contains image metadata information;

receiving a scissor marker from a user that overlays the image and identifies the facet of the object for which a pitch is to be determined, the scissor marker including two lines joined at a common node that form an angle;

determining the pitch of the object using the scissor marker and the metadata information;

outputting the pitch of the facet of the object to the smartphone device.

5. The system of claim 1,

wherein the smartphone includes a camera; and

wherein send an order for a roof report further includes send at least one image captured with the smartphone camera of a roof on the property.

6. The system of claim 1, wherein send an order for a roof report further includes send text information to include as a part of the roof report.

7. The system of claim 1, wherein send an order for a roof report further includes send a request that the report be expedited.

8. The system of claim 1, wherein send an order for a roof report further includes send a request to receive only those portions of the roof report that are newer than the portions of the roof report located on the client property management database; and

wherein store the roof report further includes store the received portions of the roof report on the client property management database.

9. The system of claim 1, wherein receive the roof report further includes:

determine the attributes of the connection between the smartphone device and the server; and

based upon the determined attributes, receive only a part of the roof report.

10. The method of claim 2, wherein sending an order for a roof report further includes sending at least one image of a roof on the property.

11. The method of claim 2,

wherein sending an order for a roof report further includes sending a request to receive only those portions of the roof report that are newer than the portions of the roof report located on the client property management database; and

wherein storing the roof report further includes storing the received portions of the roof report on the client property management database.

12. The method of claim 2, wherein receiving the roof report for the one or more properties from the server further includes receiving information about the surrounding area of the one or more properties.

13. The method of claim 2, wherein receiving the roof report for the one or more properties from the server further includes receiving the roof report from the server at predetermined times of the day.

14. The system of claim 3, wherein image metadata includes at least one of camera orientation and GPS location.

15. The system of claim 3 wherein determine the pitch of the object further comprises:

adjust the scissor marker to position the common node at an apex of a gable in the image; and

adjust the angle of the two lines to match the angle of the underlying roof.

16. The system of claim 3, wherein the scissor marker is one line connected to a node having a vertical reference; and

wherein determine the pitch of the object further includes:

adjust the scissor marker to position the common node at an apex of a gable in the image, and

adjust the angle of the line to match one facet of the underlying roof.

17. The method of claim 4, wherein image metadata includes at least one of camera orientation and GPS location.

18. The method of claim 4, wherein determining the pitch of the object further comprises:

adjusting the scissor marker to position the common node at an apex of a gable in the image; and

adjusting the angle of the two lines to match the angle of the underlying roof.

19. The method of claim 4, wherein the scissor marker is one line connected to a node having a vertical reference; and

wherein determining the pitch of the object further includes:

adjusting the scissor marker to position the common node at an apex of a gable in the image, and

adjusting the angle of the line to match one facet of the underlying roof.

20. The method of claim 4, wherein the image is one of a live image and a stored image.

AMENDED SHEET (ARTICLE 19)