Juliette P. White, USB #9616
PARSONS BEHLE & LATIMER
201 South Main Street, Suite 1800
Salt Lake City, Utah 84111
Telephone: 801.532.1234
Facsimile: 801.536.6111
JWhite@parsonsbehle.com
ecf@parsonsbehle.com

Attorney for Plaintiffs

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF UTAH

EAGLE VIEW TECHNOLOGIES INC., and PICTOMETRY INTERNATIONAL CORP., Plaintiffs, vs. NEARMAP US, INC., NEARMAP AUSTRALIA PTY LTD, and NEARMAP LTD, Defendants.	**PLAINTIFFS' FIRST AMENDED COMPLAINT** Case No. 2:21-cv-00283-TS-DAO REDACTED VERSION The Honorable Ted Stewart Magistrate Judge Daphne A. Oberg

Plaintiffs Eagle View Technologies, Inc. ("EagleView") and Pictometry International Corp. ("Pictometry") (collectively, "Plaintiffs"), by their undersigned attorneys, for their First Amended Complaint against Defendants Nearmap US, Inc., Nearmap Australia Pty Ltd, and Nearmap Ltd (collectively, "Nearmap" or "Defendants"), hereby allege as follows:

NATURE OF ACTION

1.   This is an action for patent infringement. Over the course of more than a decade, Plaintiffs have developed technologies and products that produce aerial roof reports that are extremely accurate and detailed. These reports are used, *inter alia,* to estimate the costs of roof repairs, construction, and insurance. Plaintiffs are market leaders in providing technologies relating to such reports in the construction, government, solar, and insurance markets. Defendant Nearmap directly competes with Plaintiffs, including in at least the construction, government, insurance, and solar markets, with at least rooftop aerial measurement products, including (1) Nearmap on OpenSolar, (2) Nearmap's MapBrowser, (3) the roof geometry technology Nearmap acquired from Primitive LLC d/b/a Pushpin ("Pushpin")[1] and associated software and products, and (4) other Nearmap products that contain or are produced using similar functionality (collectively, "Accused Products").

2.   Plaintiffs EagleView and Pictometry now bring this action to halt Nearmap's infringement of thirteen (13) patents, and obtain other relief as necessary. As more fully described below, Nearmap infringes each of United States Patent Nos. 8,209,152; 8,542,880; 8,593,518; 8,670,961; 9,135,737; 9,514,568; 10,528,960; 10,685,149; 8,078,436; 8,170,840; 9,129,376; 9,182,657; and 10,671,648 (collectively, "Patents-in-Suit") in connection with the Accused Products.

3.   In particular, ███████████████████████████████████ ███████████████████████████████████.

---

[1] *See* "Nearmap Acquires Pushpin to Provide Roofing Insights" (Dec. 2019), https://www.nearmap.com/us/en/recent-aerial-imagery-news/nearmap-acquires-pushpin-technology-to-provide-roof-geometry-insights.

4.   In addition to patent infringement, Plaintiffs have discovered during the course of this litigation that Nearmap has engaged in misappropriation of Plaintiffs' trade secrets.

THE PARTIES

5.   Plaintiff Eagle View Technologies, Inc. is a corporation organized and existing under the laws of the State of Washington, having a principal place of business at 25 Methodist Hill Drive, Rochester, NY 14623. EagleView launched in 2008 and was the first remote aerial roof measurement service. EagleView has developed and continues to develop products and technologies that produce aerial roof and wall measurement reports. These reports are used, *inter alia,* to estimate the costs of roof repairs, construction, and insurance. EagleView's roof reports are used by a wide range of organizations, large and small, across a number of industries, including the government, construction, insurance, and solar industries.

6.   Plaintiff Pictometry International Corp. is a corporation organized and existing under the laws of the State of Delaware, having a principal place of business at 25 Methodist Hill Drive, Rochester, NY 14623. Pictometry, which was founded in 1996, is an innovator of, among other things, aerial oblique image capture and processing technologies.

7.   In January 2013, a merger between EagleView and Pictometry resulted in the creation of a new company called EagleView Technology Corporation ("EVT"), which is comprised of EagleView and Pictometry.

8.   Defendant Nearmap US, Inc. is a corporation organized and existing under the laws of the State of Delaware, having a regular and established place of business at 10897 S. River Front Pkwy, Suite 150, South Jordan, Utah 84095. Upon information and belief, Nearmap US, Inc. is a wholly-owned subsidiary of Nearmap Ltd.

9.   Defendant Nearmap Australia Pty Ltd is a foreign corporation existing under the laws of Australia, with its principal place of business at 100 Barangaroo Avenue, Barangaroo NSW 2000, Australia. Upon information and belief, Nearmap Australia Pty Ltd is a wholly-owned subsidiary of Nearmap Ltd.

10.   Defendant Nearmap Ltd is a foreign corporation existing under the laws of Australia, with its principal place of business at 100 Barangaroo Avenue, Barangaroo NSW 2000, Australia.

BACKGROUND

A.   Patents-In-Suit

11.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 8,209,152 (the "'152 Patent"), entitled "Concurrent Display Systems and Methods for Aerial Roof Estimation," which was issued by the USPTO on June 26, 2012. A true and correct copy of the '152 Patent is attached hereto as Exhibit 1.

12.   The '152 Patent was subject to an *inter partes review* (IPR2016-00591), after which Claims 2, 4, 5, 7, 8, 10, 11, 15, 17, 18, 20, 21, 24, and 25 remain valid and enforceable. The '152 Patent was also subject to another *inter partes review* (IPR2017-00034) in which institution was denied.

13.   Pictometry is the owner of the entire right, title, and interest in and to United States Patent No. 8,542,880 (the "'880 Patent"), entitled "System and Process for Roof Measurement Using Aerial Imagery," which was issued by the USPTO on September 24, 2013. A true and correct copy of the '880 Patent is attached hereto as Exhibit 2.

14.   The '880 Patent was subject to an *inter partes review* (IPR2016-00594) in which claims 1–10 and 13–20 were instituted upon but remained valid and enforceable. Thus, all claims of the '880 Patent are valid and enforceable.

15.   Pictometry is the owner of the entire right, title, and interest in and to United States Patent No. 8,593,518 (the "'518 Patent"), entitled "Computer System for Continuous Oblique Panning," which was issued by the USPTO on November 26, 2013. A true and correct copy of the '518 Patent is attached hereto as Exhibit 3.

16.   All claims of the '518 Patent are valid and enforceable.

17.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 8,670,961 (the "'961 Patent"), entitled "Aerial Roof Estimation Systems and Methods," which was issued by the USPTO on March 11, 2014. A true and correct copy of the '961 Patent is attached hereto as Exhibit 4.

18.   All claims of the '961 Patent are valid and enforceable.

19.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 9,135,737 (the "'737 Patent"), entitled "Concurrent Display Systems and Methods for Aerial Roof Estimation," which was issued by the USPTO on September 15, 2015. A true and correct copy of the '737 Patent is attached hereto as Exhibit 5.

20.   The '737 Patent was subject to an *inter partes review* (IPR2016-00592) in which claims 1, 9, 10, 16, 19, 22, 25–28, 31, and 34–36 were instituted upon but remained valid and enforceable. Thus, all claims of the '737 Patent are valid and enforceable.

21.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 9,514,568 (the "'568 Patent"), entitled "Aerial Roof Estimation Systems and

Methods," which was issued by the USPTO on December 6, 2016. A true and correct copy of the '568 Patent is attached hereto as Exhibit 6.

22.   All claims of the '568 Patent are valid and enforceable.

23.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 10,528,960 (the "'960 Patent"), entitled "Aerial Roof Estimation Systems and Methods," which was issued by the USPTO on January 7, 2020. A true and correct copy of the '960 Patent is attached hereto as Exhibit 7.

24.   All claims of the '960 Patent are valid and enforceable.

25.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 10,685,149 (the "'149 Patent"), entitled "Pitch Determination Systems and Methods for Aerial Roof Estimation," which was issued by the USPTO on June 16, 2020. A true and correct copy of the '149 Patent is attached hereto as Exhibit 8.

26.   All claims of the '149 Patent are valid and enforceable.

27.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 8,078,436 (the "'436 Patent"), entitled "Aerial Roof Estimation Systems and Methods," which was issued by the USPTO on December 13, 2011. A true and correct copy of the '436 Patent is attached hereto as Exhibit 28. As confirmed by an *ex parte* reexamination, Claims 1, 18, 36, 37, and 41 of the '436 Patent are valid and enforceable as amended, Claims 2-17, 19-35, 38-40, 42, and 46-56 are dependent on an amended claim and are thus valid and enforceable, and new claims 57-66 are valid and enforceable. The reexamination certificate for the '436 Patent is appended at the end of Exhibit 28.

28.   The '436 Patent was subject to three *inter partes* review petitions (IPR2016-00582, IPR2016-01775, IPR2017-00021), for all of which institution was denied.

29.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 8,170,840 (the "'840 Patent"), entitled "Pitch Determination Systems and Methods for Aerial Roof Estimation," which was issued by the USPTO on May 1, 2012. A true and correct copy of the '840 Patent is attached hereto as Exhibit 29.

30.   The '840 Patent was subject to an *inter partes* review petition (IPR2016-00586), for which institution was denied. Thus, all claims of the '840 Patent are valid and enforceable.

31.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 9,129,376 (the "'376 Patent"), entitled "Pitch Determination Systems and Methods for Aerial Roof Estimation," which was issued by the USPTO on September 8, 2015. A true and correct copy of the '376 Patent is attached hereto as Exhibit 30.

32.   The '376 Patent was subject to an *inter partes* review petition (IPR2016-00587), for which institution was denied. Thus, all claims of the '376 Patent are valid and enforceable.

33.   Pictometry is the owner of the entire right, title, and interest in and to United States Patent No. 9,182,657 (the "'657 Patent"), entitled "Method and Apparatus for Capturing, Geolocating and Measuring Oblique Images," which was issued by the USPTO on November 10, 2015. A true and correct copy of the '657 Patent is attached hereto as Exhibit 33.

34.   All claims of the '657 Patent are valid and enforceable.

35.   EagleView is the owner of the entire right, title, and interest in and to United States Patent No. 10,671,648 (the "'648 Patent"), entitled "Integrated Centralized Property

Database Systems and Methods," which was issued by the USPTO on June 2, 2020. A true and correct copy of the '648 Patent is attached hereto as Exhibit 34.

36.   All claims of the '648 Patent are valid and enforceable.

37.   As noted above, EagleView is an innovator in aerial roof measurement technology, to which most of the Patents-in-Suit are directed. Developing a system that uses the specific images as do methods covered by the Patents-in-Suit—as opposed to the countless other ways one could try to develop a roof measuring system—is neither abstract, nor does it in any way preempt the field of roof measuring. Instead, the Patents-in-Suit are directed to specific concrete improvements in roof-estimation and aerial imagery technology that, among other things, rely on unconventional correlations of non-stereoscopic images to generate roof reports with accurate information concerning a roof, which could not be accomplished manually and could not be achieved without using Plaintiffs' inventive concepts. Before EagleView's inventions, repairing or replacing a roof typically entailed asking roofing contractors to visit the house to determine the style of roof, take measurements, and to inspect the area around the house for access and cleanup before preparing a written estimate. By contrast, EagleView's Patents-in-Suit solve the specific problem of generating a roof repair estimate without direct human measurement of a roof using, *inter alia*, concrete and specific technological solutions of a computer's correlating, with or without user input, different location points on two, different, non-stereoscopic aerial views and then generating a roof report including accurate information concerning the real-world roof.

38.   For example, the Patents-in-Suit claim using specific, tangible inputs that are, in no way, required by merely using a computer, including multiple aerial images that are taken

from different angles and in some cases, at different times. In other words, EagleView's Patents-in-Suit solved the problem of how to obtain roof measurements using disparate sets of existing image data, which may have been taken from different angles at different times and with different resolutions. In many cases, existing overhead images may not be completely vertical, oblique images might be taken from a variety of different angles and from different directions, and roof structures come in all sizes and shapes. The problem was to develop an elegant and user-friendly system that was agnostic as to the various permutations of available images and roof types. The EagleView Patents-in-Suit collectively did just this and solved this problem amongst others by applying specific tools and overlays to correlate a universal set of images (in most cases regardless of image source or camera angles) of a universal set of roof types, to output a report of all key measurements. There are countless other ways one could try to develop a roof measuring system other than using EagleView's patented selection of images, but Nearmap has chosen to use EagleView's patented ways.

39.   The Patents-in-Suit also use specific, tangible methods of analyzing those inputs. For example, the '568 Patent teaches improving a computer system by "calibrating" and "correlating" multiple aerial images by, *inter alia*, "registering pairs of points" on both aerial images that "correspond[] to a same point on the roof depicted in" each of the images, which is then used to "generate" a "three- dimensional model of the roof," and subsequently output a tangible "roof estimate report" that includes measurements of the roof. Likewise, the '960 Patent improves a computer system to "calibrate" those two different images, including by "identifying common reference points depicted" in the images and using that correlation and/or calibration to "convert a distance in pixels... into a physical length," which is likewise used to generate the

tangible "roof [estimate] report." Similarly, the '436 Patent teaches improving a computer system by "receiv[ing]" and "correlate[ing]" aerial images and "generating" "a three-dimensional model of the roof" that "includes a plurality of planar roof sections that each have a corresponding slope, area, and edges" and subsequently "transmitting" a corresponding "roof estimate report" annotated with numerical values. Similarly, the '961 Patent improves a computer system that "calibrate[s]" and "analy[zes]" those two different images and generates a "pitch for each one of a plurality of roof sections" based on that analysis, which is ultimately used to output the tangible "roof report" that "includes the pitch of each of the plurality of roof sections."

40.   The Patents-in-Suit also use adjustments to claimed points, markers, and lines overlaid on 2D images of roofs to display, process, and generate 3D models and roof-estimate reports more efficiently and accurately than was possible using conventional procedures. Indeed, many of the Patents-in-Suit require specific adjustments to a model of the roof, claiming interactive tools through which the user makes specific selections and determinations that result in a practical, useful result. For example, the '152 Patent requires "receiving an indication of a feature of the [roof]," and then, based on that indication, "modifying a three-dimensional model." Others, such as the '880 Patent, require the manipulation of "visual marker[s]," which are used to allow a computer system to identify specific, real-world "attributes of a roof structure." The '152 and '737 Patents further require overlaying "line drawings" in a user interface, which the user can manipulate to indicate specific real- world "feature[s] of the roof" in selected aerial images, which are then used to ultimately calculate the real-world measurements for that roof. And still others, such as the '149 Patent, "receiv[e], based on

alignment of the displayed interactive user interface control," an indication from the user of the pitch of a roof section, which is then subsequently used to "modify a model" of the real-world roof and generate measurements. Similarly, the '376 Patent requires displaying "a graphical user interface including an aerial image of a roof structure of a building and a pitch determination marker" that "can be manipulated by the operator in order to specify pitch of the roof structure of the building." The '840 Patent requires "displaying a pitch determination marker operable to indicate pitch of planar roof section" and "modifying a model of the roof based on the received indication of the pitch of one planar roof section," and the '518 Patent describes displaying partially overlapping images, whereby detection of a "transition event" that is "triggered by a user" modifies the display, and the images' pixel coordinates are translated into location coordinates.

41.   The Patents-in-Suit, including the '152, '961, '737, '568, '960, '149, '436, '840, and '376 Patents, also output a tangible "roof estimate report," including roof reports that include, *inter alia*, "one or more top plan views," and are "annotated" in a number of ways, including with "numerical values that indicate a corresponding pitch," and the "length of edges of at least some of the plurality of roof sections using at least two different indicia for different types of roof properties."

42.   Developing a system that uses the specific images and methods covered by the Patents-in-Suit—as opposed to the countless other ways one could try to develop a roof measuring system—is neither abstract, nor does it in any way preempt the field of roof measuring. Instead, the Patents-in-Suit cover specific and concrete processes that achieve the

highest echelon of accuracy, which could not be accomplished manually and without using EagleView's inventive concepts.

43.   EagleView's technology was undeniably inventive, revolutionary, and critical to this industry. After a multi-week trial, a federal court in the District of New Jersey concluded that "the evidence at trial revealed that EagleView's patented technology revolutionized the roofing industry" and "obviated the need for manual measurements of roofs with a tape measure in order to estimate the cost of repairing a roof." *See* Ex. 9 at 7. The Court concluded that there were "at least three clear advantages" to EagleView's patented technology, which included patents related to many of the Patents-in-Suit, including "improved safety," "decreased measurement time," and, "perhaps most importantly, increased accuracy." *Id*. There can be no doubt that this technology was critical to the industry, as even the Court concluded that "[t]he evidence regarding this breakthrough was overwhelming." *Id.*

44.   Some of that "overwhelming" evidence included praise of the technologies of the EagleView asserted patents by Verisk and Xactware, two of the former competitive leaders in this space, who noted that EagleView's technology was "cutting-edge," "very accurate," "innovative," "a breakthrough," and was unlike "anything that [previously] emerged as possible." *Id.* at 7-8.

45.   Other evidence included press contemporaneous with EagleView's launch, including a CNN Money article titled "One small company reinvents a $30 billion market," which noted that "EagleView founder Chris Pershing changed how the roofing industry operates with a software breakthrough." *See* Ex. 10.

46.   Likewise, the California Business Journal wrote about EagleView's launch, noting that "EagleView made one of the biggest breakthroughs in the history of the industry by creating a state-of-the-art software program that remotely snaps sophisticated aerial pictures of roofs and accurately measures lengths, pitches, valleys, and other hard-to-see areas on roofs." *See* Ex. 11.

47.   The Patents-in-Suit are directed to patentable subject matter. For example, the District Court of New Jersey found the '436 and '840 Patents directed to eligible subject matter. In its January 2019 order denying the summary judgment motion filed by defendants Xactware and Verisk against, *inter alia*, certain claims of the '436 and '840 Patents, the District Court of New Jersey explained that "[t]he relevant claims are not directed merely to correlating by the human mind two different aerial views" and do not "merely replace a human's sketch of a roof section from different aerial views."[2] Instead, the Court found that "[t]he claims are directed to methods and systems by which a user may: 1) specify points on two different, non-stereoscopic, aerial views of a roof or roof section; 2) have those points correlated to each other; 3) change locations of the specified points on the two aerial views; and 4) then have the software calculate the geometry in terms of slope, area, and perimeter of those roof views."[3] The Court also found that "[t]he correlation steps and the steps in which a user may change correlated locations in the aerial views give rise to a presumption of a specific implementation of photogrammetric methods combined with roof pitch estimation, which in turn suggests a <u>specific</u> inventive concept."[4] The other Patents-in-Suit recite many of the same inventive concepts and technological

---

[2] *Eagle View Techs., Inc. v. Xactware Sols., Inc.*, 358 F. Supp. 3d 399, 407-08 (D.N.J. 2019).
[3] *Id.*
[4] *Id.* at 410 (emphasis in original).

improvements recited in the '436 and '840 Patents and other patents the District Court of New

Jersey found to be directed to patent eligible subject matter.

48.   For example, like the patents tried in New Jersey, the claims of the '961, '568,

and '960 Patents are directed to the use of multiple specific images of a building, including both

a top plan view and an oblique perspective view, where the claimed system generates a 3D

model of the roof by calibrating the imagery, including by identifying common reference points

depicted in both images, triangulating those points to determine the physical length between

them, and calculating a pitch. As the New Jersey court wrote after trial, "the claims present a

solution, having the computer correlate two non-stereoscopic views of different sections of a

roof, to the method of climbing up on the roof. There is nothing abstract about this…."[5]

49.   As another example of the inventive concepts and technological improvements

claimed by the Patents-in-Suit, the claims of the '880 Patent recite a process for determining roof

measurements that allows a user to correct the inaccurate designation of a target roof location in

an aerial image retrieved from an aerial image database by designating the correct location,

confirming such designation, and using the correct location to access oblique imagery of the

roof.[6] As also explained by the '880 Patent, aerial image databases were often not (and, in fact,

are still often not) correctly geocoded. For example, as shown below, the address identified as

incorrectly geo-coded in Figure 4B of the '880 Patent remains incorrectly geo-coded on certain

aerial image databases to this day.

---

[5] *EagleView Tech., Inc. v. Xactware Sols., Inc.*, 485 F. Supp. 3d 505, 518 (D.N.J. 2020).
[6] *See Xactware Sols., Inc. v. Pictometry Int'l Corp.*, Case No. IPR2016-00594, D.I. 21, Ex. 2006
at 14-15 (P.T.A.B. Nov. 16, 2016) (responding to petition for IPR of U.S. Patent No. 8,542,880).
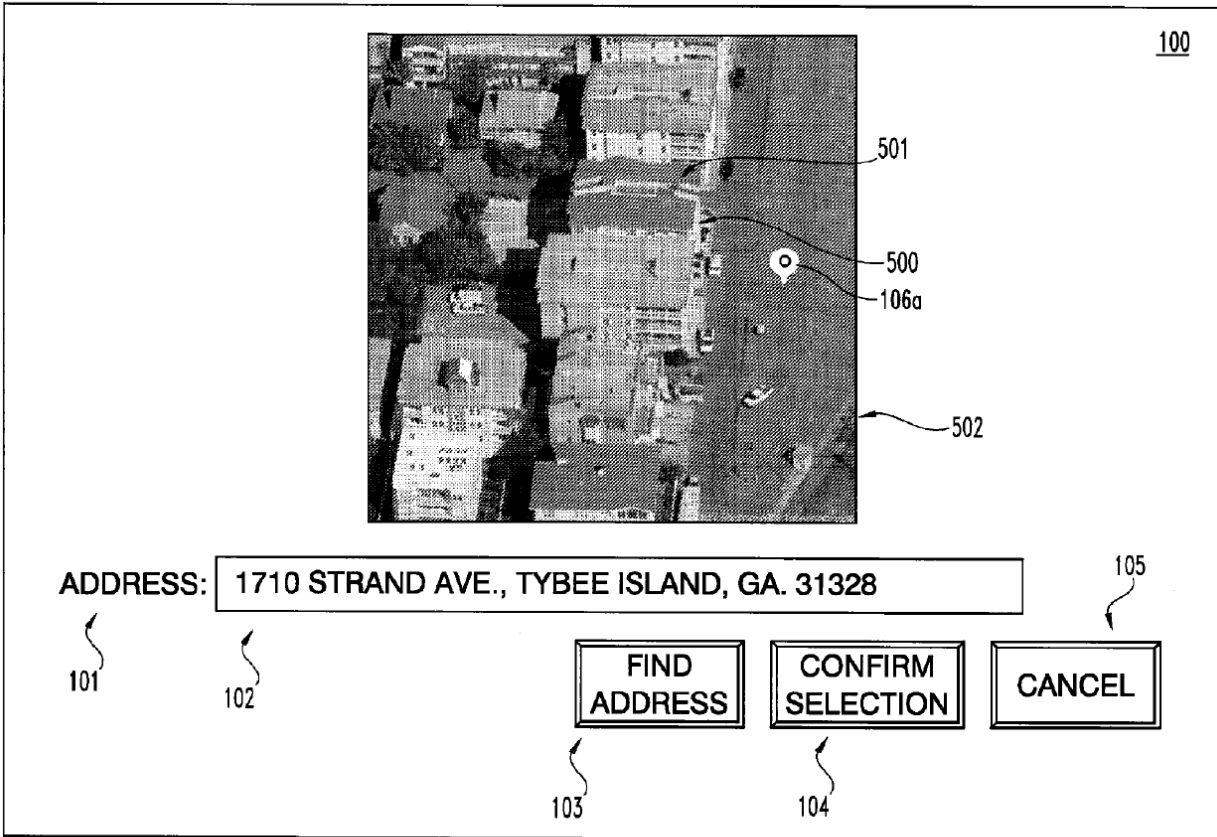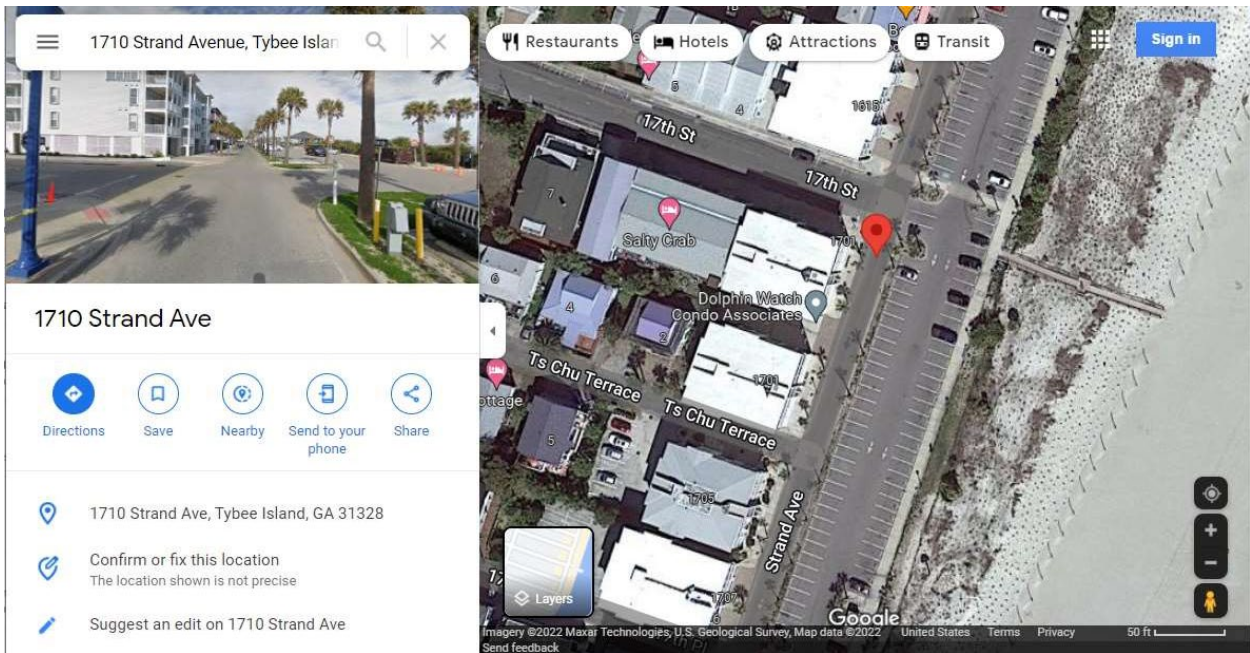
Fig. 4B

Moreover, certain image databases were often also comprised of low-resolution imagery. With these claims, EagleView invented a way to utilize low resolution imagery and/or incorrectly geocoded data to create highly reliable roof reports. Therefore, EagleView enabled technological solutions—for example, the use of such low-resolution imagery and/or incorrectly geo-coded data—to create highly accurate roof reports that was not previously possible by either humans or computers. This is a computer-implemented process that addresses a problem rooted in computer technology, has no pre-computer analog, and was never accomplished in the prior art. The claims of the '880 Patent further claim specific and concrete applications of the process, including using the corrected location of the target roof to retrieve additional aerial images of the target roof for use in generating a roof report. The claimed processes allow a computer to create highly detailed and accurate roof reports that could not be accomplished previously.

50.   As another example of the inventive concepts and technological improvements claimed by the Patents-in-Suit, the claims of the '737 Patent recite an improved computer system for generating accurate roof measurement information using an interactive, iterative graphical interface. Specifically, the '737 Patent recites displaying line drawings representing features of the roof overlying two aerial images of different views of the roof. As a user changes the line drawing overlying one image, corresponding changes are made to the line drawing overlying the second image, thereby enabling the user to iteratively adjust the line drawing so that it better corresponds to the roof feature as depicted in both images. This iterative process leads to an accurate identification of the roof feature, which is used to generate measurements in a roof report useful for repairing a roof. Moreover, the claimed process of modifying a line drawing overlying a roof and mirroring those changes in a line drawing of a second view represented a

16

novel and completely different approach to the prior, manual approach of climbing onto a roof to measure it. The claims of the '737 Patent are specific and focused, for example requiring (1) displaying respective line drawings representing features of the roof overlying respective aerial images with different views, (2) in response to changing the line drawing overlying a first image, making corresponding changes to the line drawing overlying a second image, and (3) generating a roof estimate report with specific requirements (in addition to other more specific limitations).

51.   As another example of the inventive concepts and technological improvements claimed by the Patents-in-Suit, the claims of the '840 and '376 Patents recite a pitch determination marker, which is a unique computer-implemented tool that functions to facilitate the transformation of a 2D aerial image into a 3D rendering of a roof. For example, the pitch determination marker includes automatically aligned axes, represented as extendable arms, that are adjustable in conjunction with the sloped edges of a planar roof section. The system may then determine the pitches of the roof based on the position of the configured marker. This pitch determination then forms the basis for the development of a wired 3D model. In other words, using the functionality of the pitch determination marker, the inventive system enables reconstruction of a 3D rendering of a roof, starting with just an aerial image. This rendering allows the determination of the amount of roofing material needed to complete a roof repair, thus saving immeasurable human resources. Further, the claims of the '840 and '376 Patents are specific, focused, and in all cases require both (1) the pitch determination marker, and (2) modification of a roof "model" (in addition to other more specific limitations).

52.   As another example of the inventive concepts and technological improvements claimed by the Patents-in-Suit, similar to the '840 and '376 Patents, the claims of the '149 Patent recite an interactive user interface control that may be aligned with the slope of roof sections in order to specify the pitch of each section, which forms the basis for modifying the 3D model. The claims of the '149 Patent are specific and focused, for example requiring (1) the user interface control overlaid on an aerial image, (2) modification of a roof "model", and (3) generating a roof estimate report with specific requirements (in addition to other more specific limitations).

53.   As another example of the inventive concepts and technological improvements claimed by the Patents-in-Suit, s, the claims of the '152 Patent recite an improved computer system for generating accurate roof measurement information using an interactive graphical interface tool to register aerial images to a reference grid that corresponds to a computer-generated 3D model of a roof for making iterative adjustments to the 3D model. The claims of the '152 Patent are specific and focused, for example requiring receiving an indication of a feature, displaying a projection of the feature onto the aerial images, and displaying a marker for the user to manipulate.

54.   As another example of the inventive concepts and technological improvements claimed by the Patents-in-Suit, the claims of the '518 Patent recite an improved method for panning oblique images, "whereby separate oblique images are presented in a manner that allows a user to maintain an understanding of the relationship of specific features between different oblique images when panning." '518 Patent, Abstract. Oblique images, which show buildings and roofs from an angle, cannot be panned in the same way as "flat," top-down images that are

easily "stitched" together to form a continuous overhead view. Rather, at the time of the '518

Patent's invention, "panning oblique images in a continuous manner is fraught with problems

and unlikely to provide a usable means of navigation using the current state of the art." *Id.*, 9:31-

34. The '518 Patent addresses this problem and claims a specific way of panning within a

primary oblique image, detecting a transition event, selecting an adjacent secondary oblique

image, and displaying the two images together in a specific way: so that "features … are aligned

on the same display" but the two images "match the perspectives from which [they] were

captured."

      55.   As another example of the inventive concepts and technological improvements

claimed by the Patents-in-Suit, the claims of the '657 Patent recite improved image capturing

systems for capturing oblique aerial images using two separately-controlled cameras. As

discussed above, a key innovation in EagleView's roof measurement systems is using non-

stereoscopic images to derive accurate measurements. The '657 Patent is directed to a

complementary system for capturing such images. Although conventional photogrammetry

relied on orthogonal images, and oblique images "[were] considered to be of little or no use,"

EagleView's and Pictometry's systems were dramatically different. The '657 Patent provided a

technological solution for capturing oblique images which, with EagleView's systems, could

indeed be very useful. The claims of the '657 Patent are specific and focused, for example

requiring (1) a first image-capturing device that captures oblique images, (2) a second image-

capturing device, wherein the computer system controls the two devices separately, (3) a geo-

locating device that issues a geo-locating signal indicating the geo-location of the first image-

capturing device during each image capturing event, and (4) the computer system associating each first or second image capture with the corresponding geo-locating signal.

56.   As another example of the inventive concepts and technological improvements claimed by the Patents-in-Suit, the claims of the '648 Patent recite improved systems for aggregating and retrieving information about a geographic point on earth, accounting for different geographic identifiers and changes in information over time. For example, property attributes such as title information, geographic characteristics, insurance policies in force, and building and utility information were traditionally stored in different locations, and data was tracked based on different identifiers such as parcels, lots, townships, cities, zip codes, and school districts. *See* '648 Patent, 1:16-44. The technological solution of the '648 Patent aggregates these records with appropriate geographic location and time identifiers to provide a time history of a particular geographic point on earth, and enables retrieving data items through a query that is specific in geographic location and time.

B.   Plaintiffs' Highly Valuable Trade Secrets

57.   Plaintiffs have long been innovators in roof-estimation technology. As noted above, the California Business Journal wrote about EagleView's launch, "EagleView made one of the biggest breakthroughs in the history of the industry by creating a state-of-the-art software program that remotely snaps sophisticated aerial pictures of roofs and accurately measures lengths, pitches, valleys and other hard-to-see areas on roofs."[7] Also as noted above, Plaintiffs

---

[7] *See* Rick Weinberg, Eagle Eye, Cal. Bus. J. 2013, https://calbizjournal.com/eagle viewmeasurements.

have been credited with "reinvent[ing] a $30 billion market," with "founder Chris Pershing

chang[ing] how the roofing industry operates with a software breakthrough."[8]

58.   Plaintiffs have sought to protect their intellectual property that resulted from their

"breakthroughs." Plaintiffs have been awarded numerous patents (including the Patents-In-Suit,

among many others). Beyond patents, Plaintiffs have also sought to protect their highly sensitive

and critically important trade secrets, including software development plans and approaches;

commercial business plans and models; sales strategies; and customer lists (including details

concerning customer contacts, preferences, product configuration, pricing, and terms and

conditions).

59.   Plaintiffs have invested enormous amounts of time, money, and resources into the

research, development, design and refinement of its trade secret information.

60.   These trade secrets have allowed, and continue to allow, Plaintiffs to optimize

their product offerings, contracts, pricing, performance, marketing and sales, and to develop and

maintain strong relationships with customers.

61.   Such trade secrets are considered highly important, valuable, and critical to

Plaintiffs' business, and would not be provided to a competitor because access to such trade

secrets would allow a competitor to gain an unfair business advantage.

62.   Plaintiffs have taken reasonable measures to keep such information secret and

confidential, including maintaining strict security measures to preserve the secrecy and

confidentiality of its trade secrets, such as, for example employing access and permission

---

[8] See Jennifer Alsever, One small company reinvents a $30 billion market, CNN Money (Dec. 9, 2011), https://money.cnn.com/2011/12/09/smallbusiness/eagleview/index.htm.

controls for documents, systems, and physical locations; employing password protections for

documents and systems; access controls for collaboration tools; and establishing and enforcing

security and non-disclosure policies. Among other measures, Plaintiffs' employees, in

consideration of their employment and receipt of confidential information, are required to sign

agreements not to disclose to any unauthorized person, or to use for any unauthorized purpose,

any secret, confidential or proprietary information connected with Plaintiffs' business. Plaintiffs

also employ strict measures to ensure that departing employees do not leave with trade secret

information and send "continuing obligations" letters to departing employees to remind them of

their ongoing confidentiality obligations that continue after their employment.

63.   Because this information is so valuable, Plaintiffs' trade secrets are kept secret

and confidential, are not generally known or readily ascertainable to the roof-estimation industry

(or any other industry) through legitimate means, and derive independent economic value as a

result thereof.

C.   Nearmap Misappropriated Plaintiffs' Trade Secrets

64.   Unable to compete fairly with Plaintiffs in the marketplace, Nearmap has sought

to improperly leverage the inventions in Plaintiffs' patents and also acquire Plaintiffs' trade

secrets, including by ██

██

████████████████████████████ .

65.   For example, ██

██

██

[REDACTED]

66.   Demonstrating the recognized importance of this improperly acquired

information, [REDACTED]

[REDACTED]

67.   This was not an isolated event. Instead, Nearmap's efforts are part of a larger

scheme to improperly obtain competitive intelligence to compete with Plaintiffs including

[REDACTED]

68.   Nearmap hid from Plaintiffs that it had improperly acquired and was distributing

Plaintiffs' trade secrets within Nearmap. Plaintiffs did not discover such misappropriation until

mid-2022, when discovery in this case revealed certain and specific details about Plaintiffs'

scheme.

69.   Nearmap knew that its actions were improper. To the extent Nearmap claims

otherwise, it, at minimum, should have known such actions were improper at least because (1)

Plaintiffs were known competitors of Nearmap's, and (2) [REDACTED]

23

██

████████████████. Accordingly, Nearmap knew or should have known that Plaintiffs would

not willingly share confidential information (including trade secrets) with Nearmap—which is

why Nearmap had not previously been able to receive such highly confidential and trade secret

protected information.

70.   Plaintiffs have been injured by Nearmap's conduct, including competitive harm,

resulting from Nearmap's improper misappropriation of Plaintiffs' trade secrets.

JURISDICTION AND VENUE

71.   This is an action for patent infringement arising under the provisions of the Patent

Laws of the United States of America, Title 35, United States Code.

72.   Subject matter jurisdiction over Plaintiffs' claims is conferred upon this Court by

28 U.S.C. §§ 1331 and 1338(a).

73.   This Court has subject matter jurisdiction over Plaintiffs' federal trade secret

claim pursuant to 18 U.S.C. §§ 1836–39, et seq., and 28 U.S.C. § 1331. This Court has

supplemental jurisdiction over the state law claim pursuant to 28 U.S.C. § 1367.

74.   This Court has personal jurisdiction over Nearmap US, Inc. because, *inter alia,*

Nearmap US, Inc.: (1) has substantial, continuous, and systematic contacts with this State; (2)

has solicited business in, transacted business within, and attempted to derive financial benefit

from residents of Utah, on a substantial and not isolated basis; (3) has committed and continues

to commit purposeful actions in this State that infringe the Patents- in-Suit; (4) enjoys substantial

income from such infringement in this State; and (5) maintains a regular and established place of

business in this State, including by maintaining employees in this State. For example, Nearmap's

website lists Nearmap US, Inc.'s South Jordan, Utah office on its "Contact Us" webpage. *See, e.g.*, Ex. 25.

75.   This Court has personal jurisdiction over Nearmap Ltd and Nearmap Australia Pty Ltd because, on information and belief, both entities conduct regular and systematic business with Nearmap US, Inc. within the state of Utah. For example, Nearmap Ltd and Nearmap Australia Pty Ltd ███ ██ ██████. Nearmap Ltd and Nearmap Australia Pty Ltd also ████████████████ ██ ██ ██ ██.

76.   This Court also has personal jurisdiction over Nearmap Ltd because, on information and belief, Nearmap Ltd (1) owns 100% of the equity of Nearmap US, Inc.; (2) directs and controls Nearmap US, Inc., including in its activities constituting patent infringement; (3) receives revenue from Nearmap US, Inc.; and (4) shares common directors and officers with Nearmap US, Inc. For example, Nearmap Ltd's investor presentation describes its U.S. activities, which, on information and belief, are conducted through Nearmap US, Inc.[9] Nearmap Ltd is liable for infringement at least because, through Nearmap Ltd's direction and control of Nearmap US, Inc., Nearmap Ltd induces the infringement by Nearmap US, Inc., and/or Nearmap US, Ltd. acts as its agent.

---

[9] https://www.nearmap.com/content/dam/nearmap/investor-relations/corporate-overview.pdf

77.   In the event this Court does not have personal jurisdiction over Nearmap Ltd

and/or Nearmap Australia Pty Ltd by virtue of the above, this Court nonetheless has personal

jurisdiction over Nearmap Ltd and/or Nearmap Australia Pty Ltd pursuant to Federal Rule of

Civil Procedure 4(k)(2) because: this case arises under federal law; Nearmap Ltd. and/or

Nearmap Australia Pty Ltd are not subject to jurisdiction in any state's courts of general

jurisdiction; and Nearmap Ltd and/or Nearmap Australia Pty Ltd have regularly engaged in

business in the United States and purposefully availed itself of the privilege of conducting

business in the United States by (1) ███████████████████████████████████████

████████████████████████████; and (2) participating in the creation and sale of the

Nearmap Accused Products for the United States market.

78.   With respect to Plaintiffs' patent claims, venue is proper in this Court under 28

U.S.C. §§ 1391 and 1400(b) because Nearmap maintains a regular and established place of

business in this District, has committed acts of infringement in this District, and is subject to

personal jurisdiction in this District.

79.   With respect to Plaintiffs' trade secret claims, venue is proper this Court under 28

U.S.C. §§ 1391(b) because a substantial part of the events or omissions giving rise to this dispute

and the damages sustained in this dispute have occurred, and are occurring, within this district.

COUNT I - INFRINGEMENT OF THE '152 PATENT

80.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

81.   The USPTO duly and legally issued the '152 Patent on June 26, 2012.

82.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '152 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

83.   Nearmap makes, uses, imports, and/or sells rooftop aerial measurement products, including but not limited to the Accused Products, within the United States, and as such, Nearmap has directly infringed and continue to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '152 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a) and (g).

84.   Exemplary claim 2 of the '152 Patent, which depends from Claim 1, recites:

The method of claim 1 wherein modifying the three-dimensional model of the roof includes adding a planar roof section to the three-dimensional model.

85.   Exemplary claim 10 of the '152 Patent, which depends from Claim 1, recites:

The method of claim 1 further comprising:

displaying a marker operable to specify a point on an image; receiving, via the marker, an indication of a point on the first aerial image; and

registering, based on the received indication of the point, the aerial image to a reference grid corresponding to the three-dimensional model.

86.   Claim 1 of the '152 Patent recites:

**A computer-implemented method for generating a roof estimate report, the method comprising:**

displaying a first and a second aerial image of a building having a roof, each of the aerial images providing a different view of the roof of the building;

receiving an indication of a feature of the building shown in the first aerial image;

modifying a three-dimensional model of the roof based on the received indication of the feature of the building; and

displaying a projection of the feature from the modified three-dimensional model onto the first and second aerial images as a line drawing of the feature, each overlaid on corresponding locations of the feature on the first and second aerial images.

87.   The Accused Products infringe at least claim 10 of the '152 Patent, including by Nearmap's use of the Accused Products to perform the claimed methods. As one example, Nearmap on OpenSolar infringes claim 10. Nearmap on OpenSolar provides a computer-implemented method for generating a roof estimate report. For example, as shown in the YouTube tutorial for Nearmap on OpenSolar, the method of generating a roof report is computer implemented:
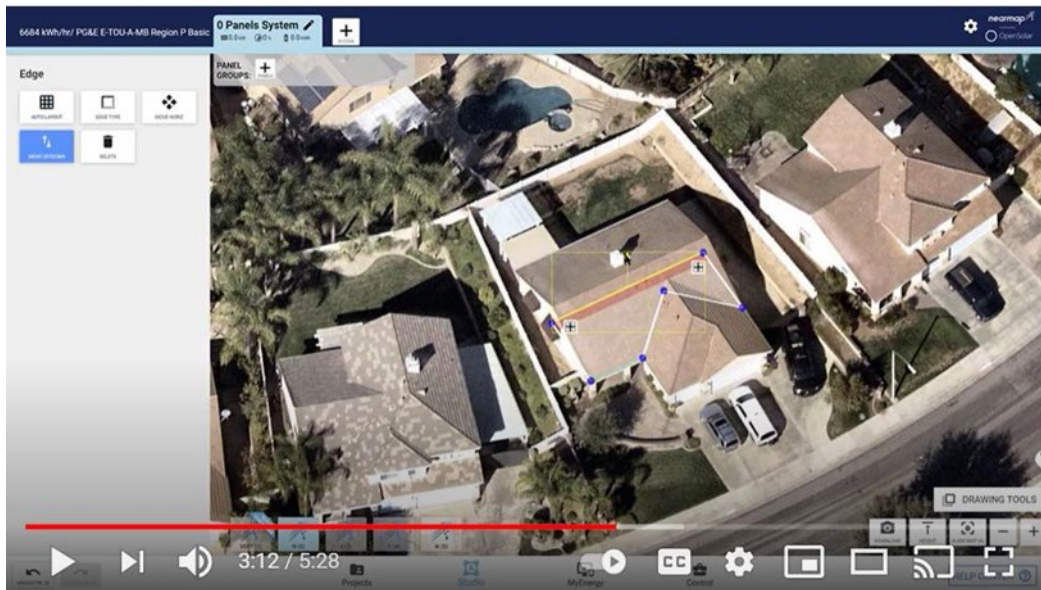
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar).

88.   Nearmap on OpenSolar generates a roof estimate report, called a "proposal":

28

See https://www.nearmap.com/content/dam/nearmap/video/nearmap-on- opensolar/announcing-nearmap-on-opensolar.mp4.
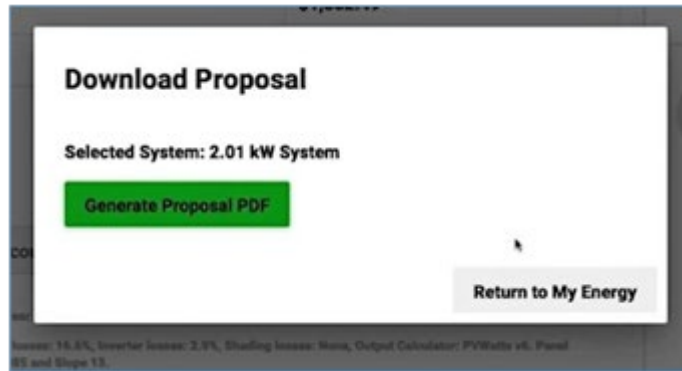
89.   Nearmap on OpenSolar displays a first and a second aerial image of a building

having a roof, each of the aerial images providing a different view of the roof of the building. For

example, Nearmap on OpenSolar displays a top down (vertical) view of the house in the first

screenshot below, and users can also access oblique images, as shown in the second screenshot

below depicting North, East, South, and West oblique views at the bottom and left of the screen:
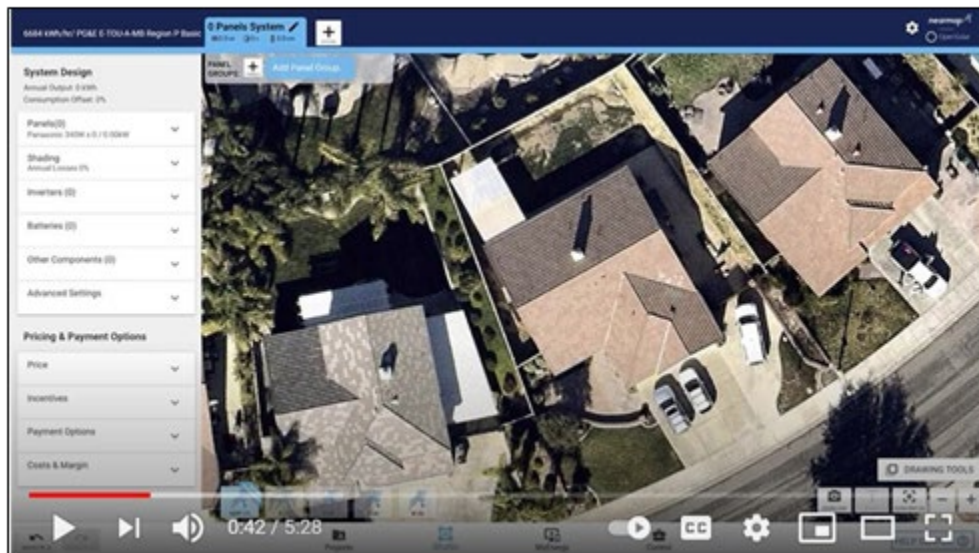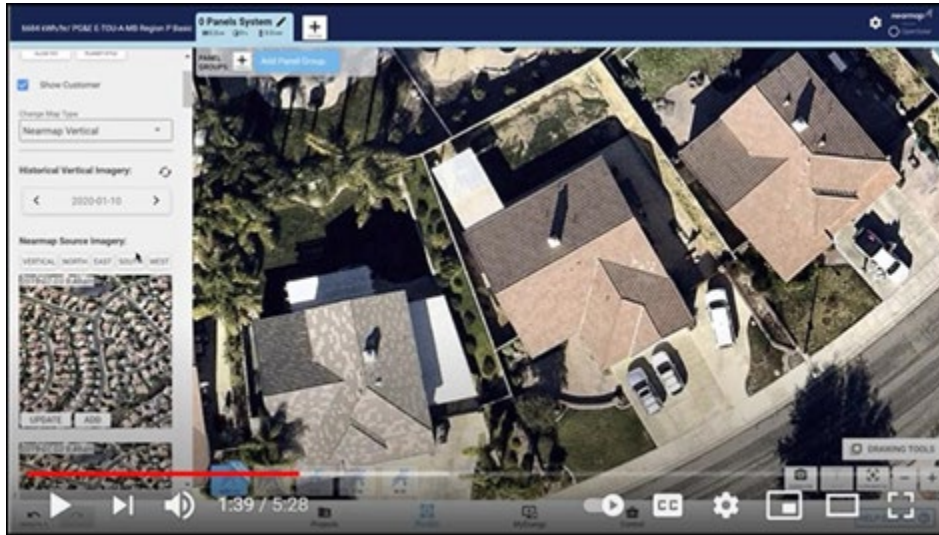
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar).

90.   Nearmap on OpenSolar receives an indication of a feature of the building shown in the first image, and modifies a three-dimensional model of the roof based on the received indication of the feature of the building. For example, Nearmap on OpenSolar displays line drawings representing features of the roof on the first and second aerial images, and instructs a user to "outline your roof and set edge types" in the first (vertical) image:
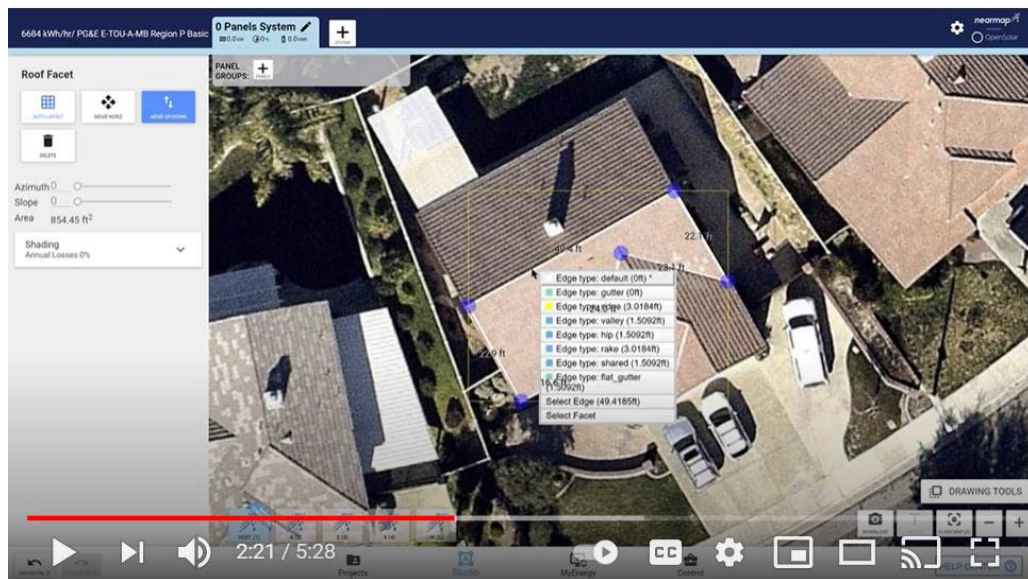
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar).

91.   Nearmap on OpenSolar then displays line drawings representing features of the

roof on the second aerial image, and instructs a user to "align map and roof edges in the oblique

view" in the second (oblique) image:

31

See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar).

92.   When a user toggles between different views of the same roof, the wireframe has

corresponding changes to changes made to the wireframe while in a different view. Thus,

Nearmap on OpenSolar displays a projection of the feature from the modified three-dimensional

model onto the first and second aerial images as a line drawing of the feature, each overlaid on

corresponding locations of the feature on the first and second aerial images, as shown above.

Nearmap on OpenSolar also displays a marker operable to specify a point on an image. For

example, the purple points allowing a user to specify and indicate the corners in the aerial image,

and/or the yellow line allowing a user to specify the ridge line of the roof, are the marker:

32
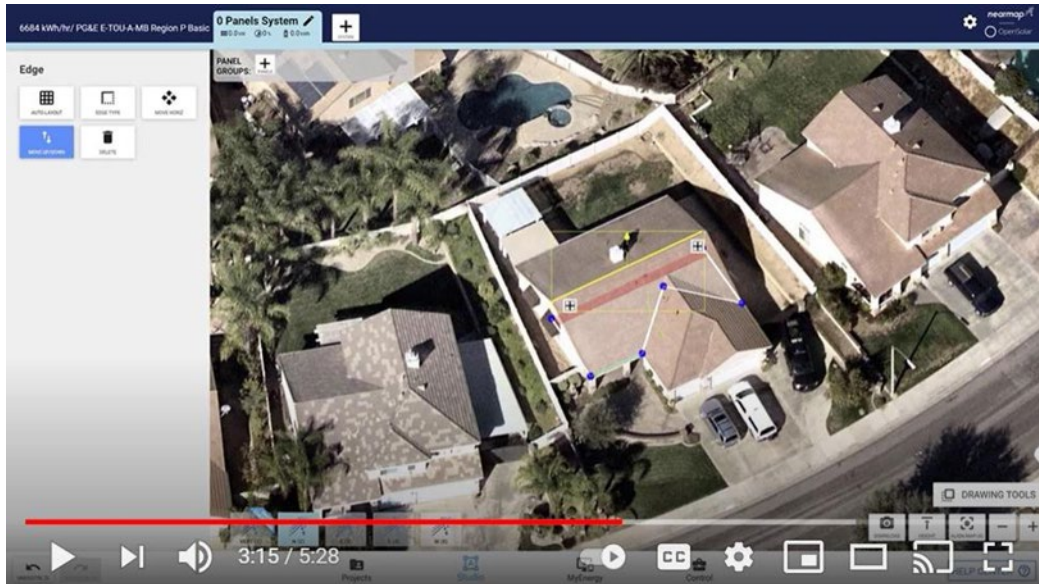
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar).

93.   Nearmap on OpenSolar receives, via the marker, and indication of a point on the

first aerial image and registers, based on the received indication of the point, the aerial image to a

reference grid corresponding to the three-dimensional model. For example, based on the received

indication of the point (e.g., a point showing a corner or a line showing pitch), Nearmap on

OpenSolar registers the aerial images to a reference grid corresponding to the 3D model:
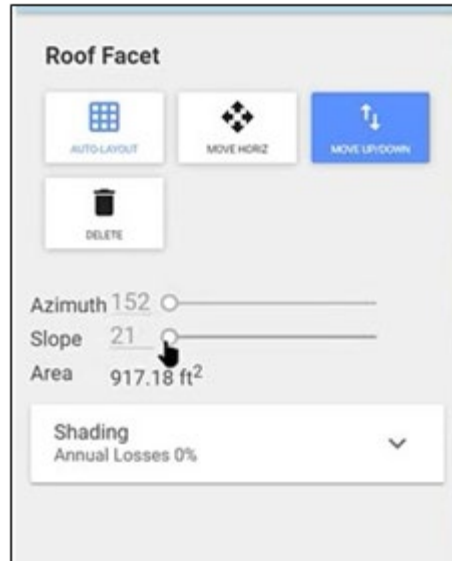
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar) at 3:24-28.

94.   Nearmap on OpenSolar uses Nearmap's vertical and oblique aerial images. These

images are captured using the georeferencing technique described below, whereby

georeferencing of aerial images further facilitates registering them to a reference grid:

See Ex. 12.

95.   Nearmap, Pushpin, and/or GAF (and potentially other partners) ████████ ▌

██ ▌

███

(hereinafter, together with the resulting reports, "Roof Geometry Technology").

96.   As part of Roof Geometry Technology, and one example of its operation and use, GAF operates a website from which customers can order GAF QuickMeasure roof reports. From the website's user interface, an order for a roof report is created and ████████ .

97.   ████████████████████████████████

98.   ██ ▌

██ ▌

██

████████████████████████

99.   ██ ▌

████████████████████████████

100.   ██ ▌

██ ▌

██ ▌

██████████████

101.   GAF delivers the report and roof model to the customer and receives payment.

██ ▌

██████████████████████

102. Roof Geometry Technology infringes at least claim 2 of the '152 Patent, including by Nearmap's use of Roof Geometry Technology to generate QuickMeasure reports. Roof Geometry Technology provides a computer-implemented method for generating a roof estimate report. For example, the process is computer implemented. *See e.g.*, Ex. 31 (PP0301).

103. Roof Geometry Technology displays a first and a second aerial image of a building having a roof, each of the aerial images providing a different view of the roof of the building. For example, ███████████████████████████████████████
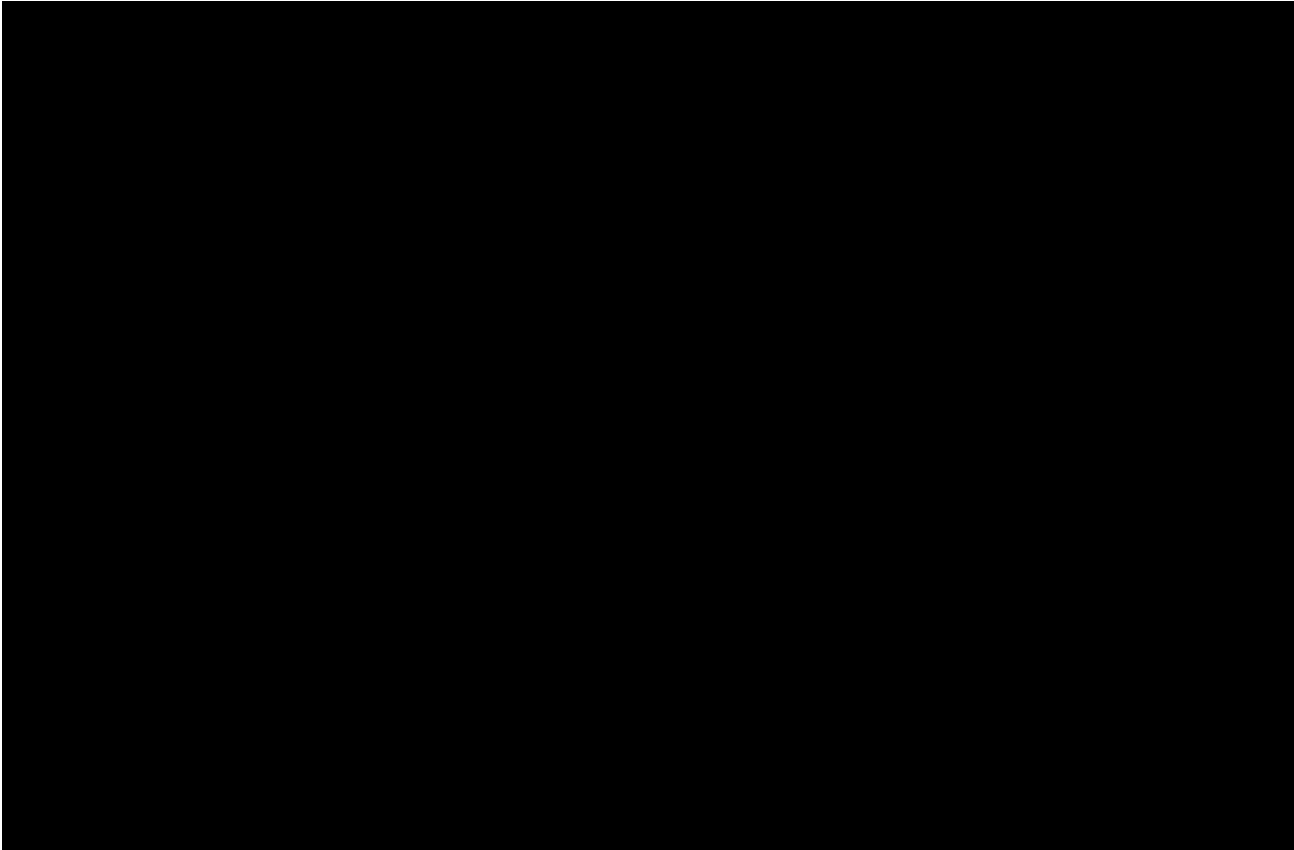
███

███████████████████████████

███

104. Roof Geometry Technology receives an indication of a feature of the building shown in the first image. For example, ███████████████████████████████

███
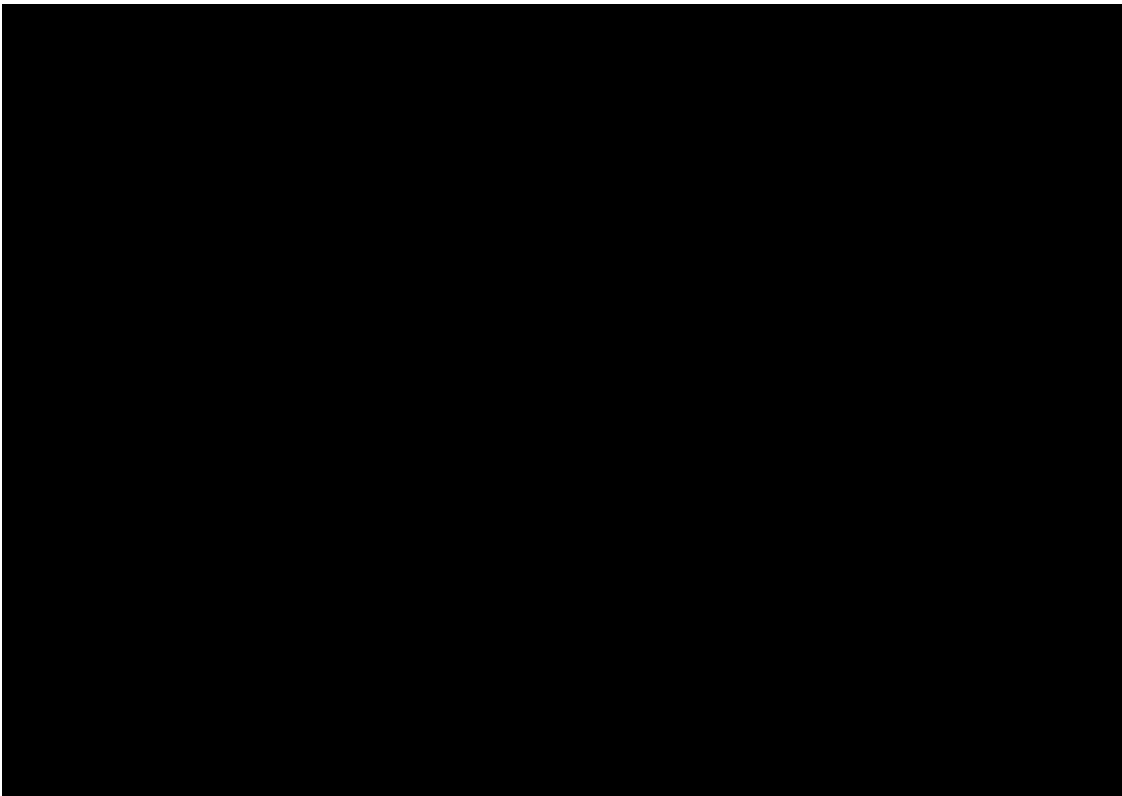
███

105.   Roof Geometry Technology modifies a three-dimensional model of the roof based

on the received indication of the feature of the building. For example, ███████████████

██

████████████████████████████

106.   Roof Geometry Technology displays a projection of the feature from the modified

three-dimensional model onto the first and second aerial images as a line drawing of the feature,

each overlaid on corresponding locations of the feature on the first and second aerial images. For

example, ███

███

███████████████████████████████████████

107.   Further, modifying the three-dimensional model of the roof within Roof

Geometry Technology includes adding a planar roof section to the three-dimensional model. For

example, ███████████████████████████████████████.

108.   In addition, GAF infringes at least under 35 U.S.C. § 271(g) by selling

QuickMeasure reports, which are a product made by a process patented by the '152 Patent.

109.   On information and belief, Nearmap had knowledge of the '152 Patent since at least as early July 2, 2019, when it submitted an Information Disclosure Statement (IDS) identifying the '152 Patent to the USPTO during the prosecution of its own U.S. Patent Application No. 16/136,585. *See* Ex. 13.

110.   On information and belief, Nearmap has had knowledge of the '152 Patent prior the filing of the instant complaint because the '152 Patent is identified on EagleView's website and roof reports as covering EagleView's technology and roof reports. The Accused Products are remarkably similar to, and appear to have been copied from, EagleView's technology and roof reports, confirming that Nearmap monitors EagleView's website, products, roof reports, and patents. *See, e.g.*, Ex. 26. Additionally, Nearmap would have been aware of the substantial press coverage of EagleView's patent portfolio as it relates to roof reports, which includes the '152 Patent, in light of EagleView's recent successful litigation against Xactware Solutions, Inc. and Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27.

111.   In addition to directly infringing the '152 Patent, Nearmap has in the past and continues to indirectly infringe the '152 Patent by inducing direct infringement by others, such as end users of rooftop aerial measurement products, including but not limited to the Accused Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial measurement products, including but not limited to the Accused Products, by its end users infringes at least one claim of the '152 Patent prior to the filing of the instant complaint. Nearmap knowingly induced such use of those products in a manner that infringes the '152 Patent, including through at least promotional, advertising, and instructional materials, and Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has

indirectly infringed and continues to indirectly infringe at least one claim of the '152 Patent

under one or more subsections of 35 U.S.C. § 271, including § 271(b).

112.   Nearmap has also contributed to the direct infringement of the '152 Patent by

others, such as end users of rooftop aerial measurement products, including but not limited to the

Accused Products. The Accused Products are a material or apparatus for use in practicing the

patented processes of the '152 Patent and are a material part of the invention. The Accused

Products are especially made or adapted for use in infringement of the asserted claims, and are

not a stable article of commerce suitable for any substantial non-infringing use. Nearmap makes,

sells, and offers to sell the Accused Products, whose ordinary and intended use constitutes direct

infringement of the '152 Patent. As one example, GAF offers to sell and sells QuickMeasure

reports that infringe under at least 35 U.S.C. § 271(g), and Nearmap contributes to this

infringement by ███

██████

113.   As previously described, GAF QuickMeasure roof reports are created and made

available to customers by ████████████████████████████████████

███

███

███

███

███

114.   ███

███

115.

███

███████

116.   Therefore, to the extent the claimed method steps are performed by multiple

entities, such as to create QuickMeasure reports, Nearmap, Pushpin, and/or GAF jointly infringe

because they are acting in a joint enterprise. A joint enterprise exists because, as discussed

herein, (1) ██

████████████████████████████ , (2) the group has a common interest in producing roof

reports, (3) there is a community of pecuniary interest in that purpose among the members,

including for example ███████████████████████████████████

███████████████████ , and (4) the members have an equal right to a voice in the direction of

the enterprise, which gives an equal right of control. In the alternative, Nearmap is liable as a

direct infringer because other entities' performance of method steps are done under Nearmap's

direction and control and thus attributable to Nearmap.

117.   Nearmap's infringement of the '152 Patent has been and continues to be willful.

Nearmap has acted with knowledge of the '152 Patent and without a reasonable basis for a good-

faith belief that it would not be liable for infringement of the '152 Patent. For example,

subsequent to learning of the '152 Patent, Nearmap continued to make and use rooftop aerial

measurement products, including but not limited to the Accused Products, which appear copied

from Plaintiffs as set forth above, within the United States in a manner that infringes the '152

Patent. Nearmap has disregarded and continues to disregard its infringement and/or an

objectively high likelihood that its actions constitute infringement of the '152 Patent. This

objectively-defined risk was known or is so obvious that it should have been known to Nearmap.

Nearmap's infringement of the '152 Patent has been and continues to be willful, entitling EagleView to enhanced damages under 35 U.S.C. § 284.

118.   Defendants' acts of infringement have caused damage to EagleView, and EagleView is entitled to recover from Defendants the damages sustained by EagleView as a result of Defendants' wrongful acts in an amount subject to proof at trial.

119.   Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to EagleView for which there is no adequate remedy at law.

120.   This case is exceptional, entitling EagleView to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT II - INFRINGEMENT OF THE '880 PATENT

121.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

122.   The USPTO duly and legally issued the '880 Patent on September 24, 2013.

123.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '880 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

124.   Nearmap makes, uses, and/or sells rooftop aerial measurement products, including but not limited to the Accused Products, within the United States, and as such, Nearmap has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '880 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a).

125.   Claim 1 of the '880 Patent recites:

A process for determining attributes of a roof structure of a real-world three-dimensional building, comprising the acts of:

providing at least one computer input field for a user to input first location data generally corresponding to the location of the building;

providing visual access to an aerial image of a region including the roof structure of the building corresponding to said first location data, the aerial image taken from a straight down overhead view with respect to the roof structure;

on the aerial image of the region, providing a visual marker that is moveable on a computer monitor around said region, said visual marker

initially corresponding to said first location data, wherein said visual marker may be moved to a final location on top of the building to more precisely identify the location of the building roof structure, the final location having location coordinates;

providing a computer input capable of signaling user-acceptance of the final location of said marker; and,

providing visual access to one or more oblique images of an aerial imagery database corresponding to location coordinates of the final location.

126.   The Accused Products infringe at least claim 1 of the '880 Patent. As one example, MapBrowser infringes claim 1.

127.   MapBrowser implements a process for determining attributes of a roof structure of a real-world three-dimensional building. For example, the screenshot below, from a video titled "MapBrowser Tutorial - Part 2 - How to Measure with Obliques," depicts a process for determining attributes of a roof structure of a real- world three-dimensional building:

44
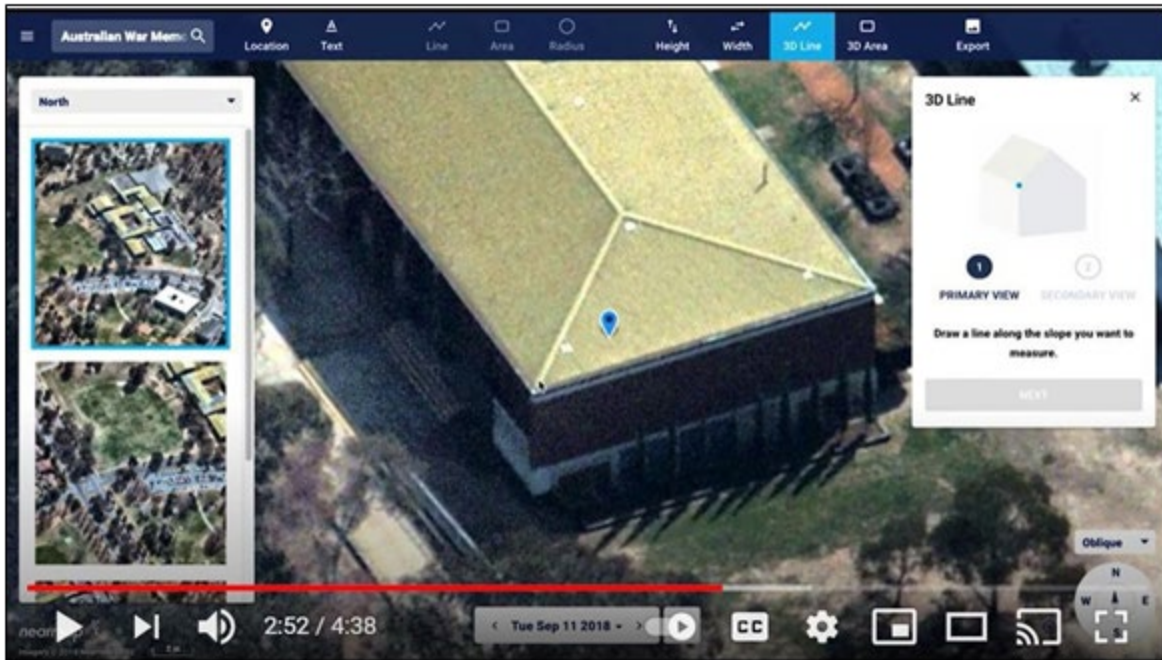
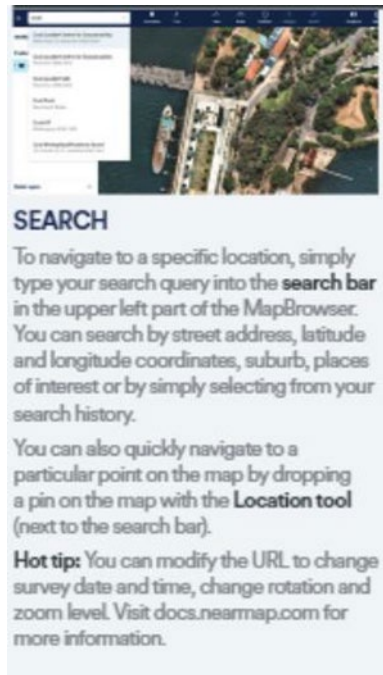*See* https://www.youtube.com/watch?v=zMFjaQIci9s (MapBrowser).

128.   MapBrowser provides at least one computer input field for a user to input first location data generally corresponding to the location of the building, as shown, for example, in the top left corners of the user interface, shown above, in which a user has entered location information for the "Australian War Memorial."

129.   MapBrowser provides visual access to an aerial image of a region including the roof structure corresponding to the first location data (e.g., address entered by the user), and the aerial images is taken from a straight down overhead view with respect to the roof structure (for example, a top down image is displayed prior to a user clicking on "View Oblique Photos"):
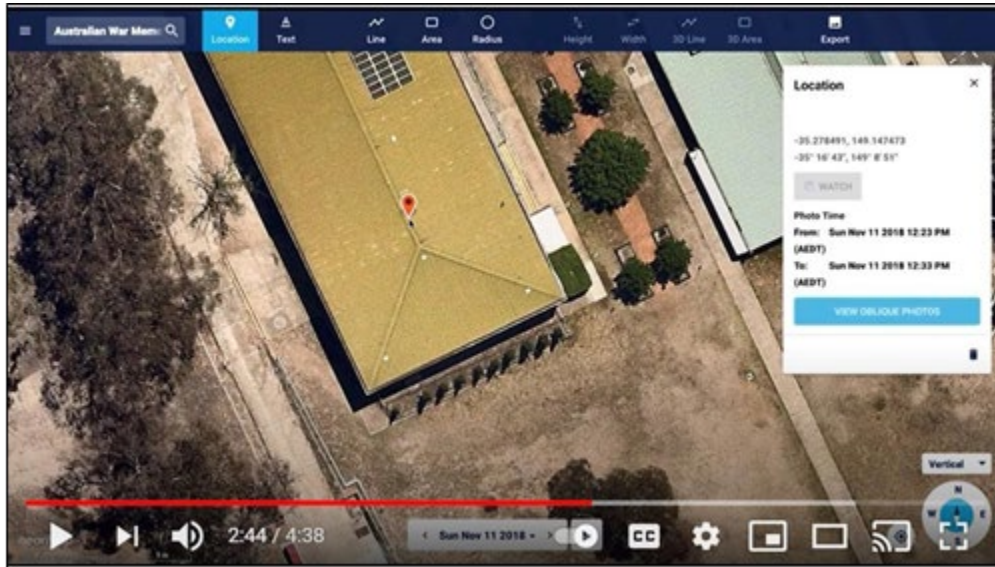
See https://www.youtube.com/watch?v=zMFjaQIci9s (MapBrowser).

130.   MapBrowser provides a visual marker that is moveable on a computer monitor around said region, said visual marker initially corresponding to said first location data, wherein said visual marker may be moved to a final location on top of the building to more precisely identify the location of the building roof structure, the final location having location coordinates. For example, a user has the ability to "drop a pin" and move it around, as shown in the video above, as well as in the "MapBrowser Cheat Sheet" below:

46

SEARCH

To navigate to a specific location, simply type your search query into the **search bar** in the upper left part of the MapBrowser. You can search by street address, latitude and longitude coordinates, suburb, places of interest or by simply selecting from your search history.

You can also quickly navigate to a particular point on the map by dropping a pin on the map with the **Location tool** (next to the search bar).

Hot tip: You can modify the URL to change survey date and time, change rotation and zoom level. Visit docs.nearmap.com for more information.

See Ex. 14.

131.   MapBrowser provides a computer input capable of signaling user- acceptance of the final location of said marker. For example, the computer input is the ability for a user to click "Oblique Photos" in the lower right corner after the marker is where they want it:

See https://www.youtube.com/watch?v=zMFjaQIci9s (MapBrowser).
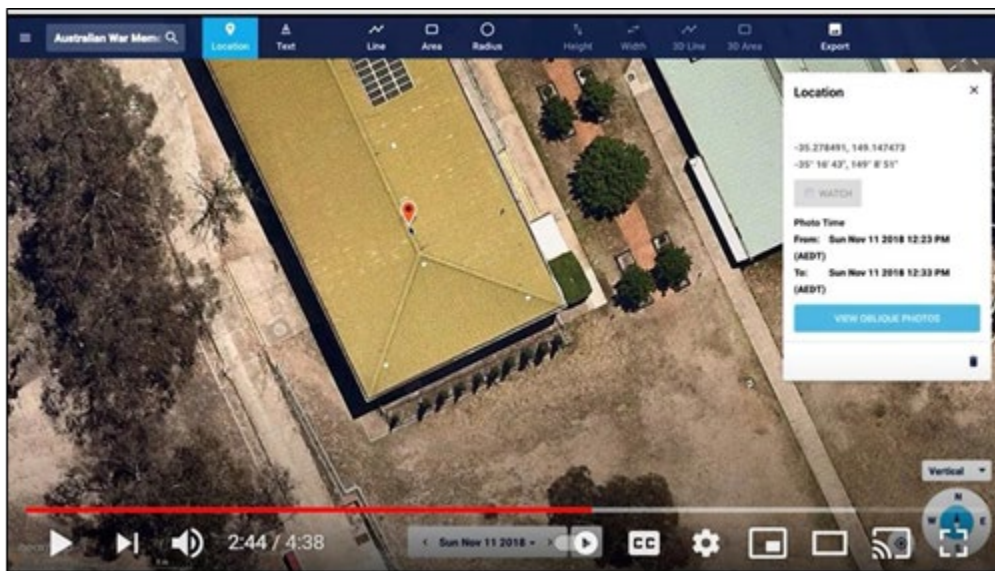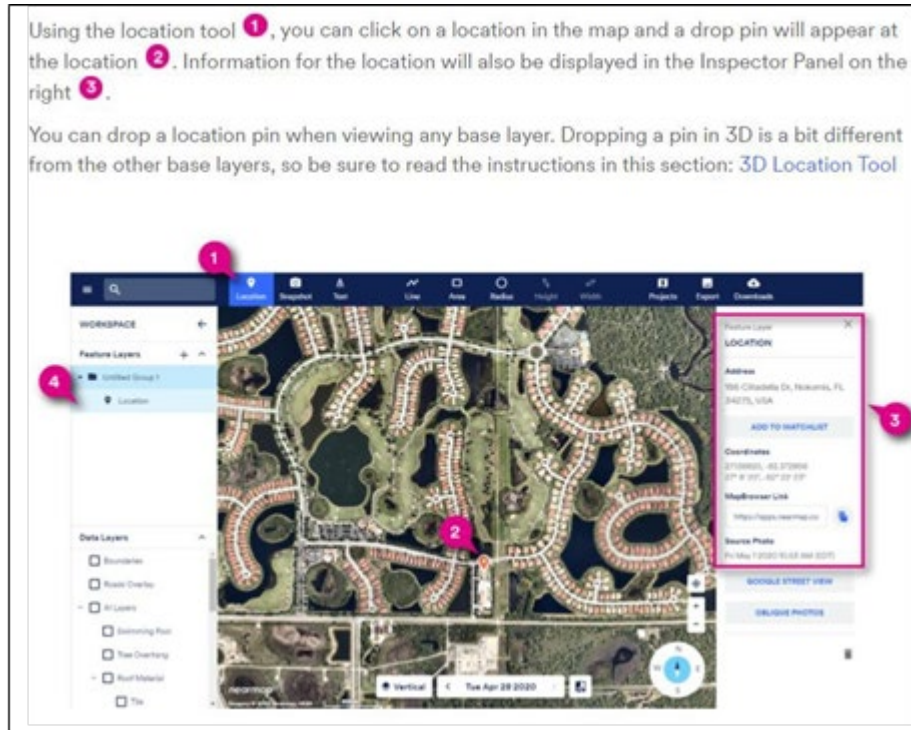
See Ex. 15 (MapBrowser).

132.   MapBrowser provides visual access to one or more oblique images of an aerial

imagery database corresponding to location coordinates of the final location. For example, after a

user clicks on "Oblique Photos," the user can view the oblique photos of the address

corresponding to the location coordinates of the final location where the marker was placed:

See https://www.youtube.com/watch?v=zMFjaQIci9s (MapBrowser).
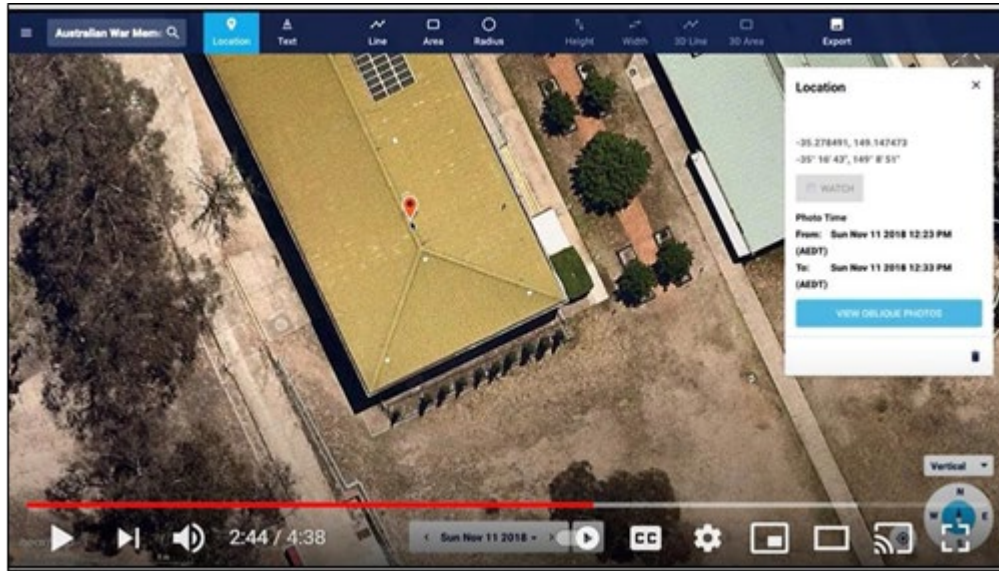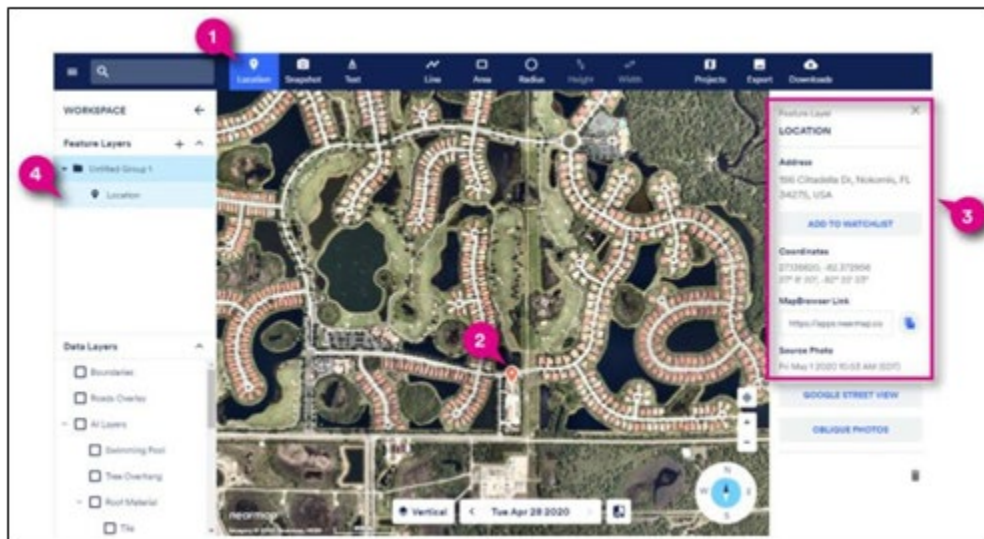
See Ex. 15 (MapBrowser).

133.   Nearmap explains that MapBrowser is "a web-based application for searching and

navigating Nearmap's library of current and historical aerial photos." These photos accessible in

MapBrowser include oblique images of an aerial imagery database corresponding to location

coordinates of the final location:

> Each Nearmap Oblique™ subscription includes access to Nearmap Oblique, Nearmap Panorama, Nearmap Vertical, and MapBrowser™, a web-based application for searching and navigating Nearmap's library of current and historical aerial photos. MapBrowser™ includes powerful, intuitive tools for measuring, designing, and analyzing locations.

See Ex. 16.

134.   Roof Geometry Technology infringes at least claim 1 of the '880 Patent,

including by Nearmap's use of Roof Geometry Technology to generate QuickMeasure reports.

135.   As one example, Roof Geometry Technology, as used in the production of

QuickMeasure reports, infringes claim 1. Roof Geometry Technology comprises a process for

determining attributes of a roof structure of a real-world three-dimensional building. For

example, the process results in the creation of a QuickMeasure roof report. *See e.g.*, Ex. 31

(PP0301).

136.   Roof Geometry Technology provides at least one computer input field for a user

to input first location data generally corresponding to the location of the building. For example, a

user can request a roof report from GAF, using an input field for location data.

https://quickmeasure.gaf.com/guest-home-page

137.   Roof Geometry Technology then provides visual access to an aerial image of a region including the roof structure of the building corresponding to said first location data, the aerial image taken from a straight down overhead view with respect to the roof structure.

138.   Roof Geometry technology provides, on the aerial image of the region, a visual marker that is moveable on a computer monitor around said region, said visual marker initially corresponding to said first location data, wherein said visual marker may be moved to a final location on top of the building to more precisely identify the location of the building roof structure, the final location having location coordinates. For example, the user requesting a roof report on GAF's website can adjust the pin location of where the roof report is ordered, said pin location initially corresponding to the first location data.

139.   Roof Geometry Technology provides a computer input capable of capable of signaling user-acceptance of the final location of said marker. For example, after the marker is set, the user can click "checkout."

https://quickmeasure.gaf.com/guest-home-page

140.   Roof Geometry Technology provides visual access to one or more oblique images of an aerial imagery database corresponding to location coordinates of the final location. For example, after the roof report is ordered, the final report contains oblique imagery.

See GAF QuickMeasure Sample Report, Ex. 32.

141.   On information and belief, Nearmap has had knowledge of the '880 Patent prior

to the filing of the instant complaint (and in no case later than the filing of complaints against

each of Nearmap and GAF on May 4, 2021), including because the '880 Patent is identified on

EagleView's website and roof reports as covering EagleView's technology and roof reports. The

Accused Products are remarkably similar to, and appear to have been copied from, EagleView's

technology and roof reports, confirming that Nearmap monitors EagleView's website, products,

roof reports, and patents. *See, e.g.*, Ex. 26.

142.   Additionally, Nearmap would have been aware of the substantial press coverage of EagleView's patent portfolio as it relates to roof reports, which includes the '880 Patent, in light of EagleView's recent successful litigation against Xactware Solutions, Inc. and Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27.

143.   Nearmap's infringement of the '880 Patent has been and continues to be willful. Nearmap has acted with knowledge of the '880 Patent and without a reasonable basis for a good-faith belief that each would not be liable for infringement of the '880 Patent. For example, subsequent to learning of the '880 Patent, Nearmap continued to make and use rooftop aerial measurement products, including but not limited to the Accused Products, which appear copied from Plaintiffs as set forth above, within the United States in a manner that infringes the '880 Patent. Nearmap has disregarded and continue to disregard their infringement and/or an objectively high likelihood that their actions constitute infringement of the '880 Patent. This objectively-defined risk was known or is so obvious that it should have been known to Nearmap. Nearmap's infringement of the '880 Patent has been and continues to be willful, entitling Pictometry to enhanced damages under 35 U.S.C. § 284.

144.   Defendants' acts of infringement have caused damage to Plaintiffs, and Plaintiffs are entitled to recover from Defendants the damages sustained by Plaintiffs as a result of Defendants' wrongful acts in an amount subject to proof at trial.

145.   Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate remedy at law.

146.   This case is exceptional, entitling Plaintiffs to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT III - INFRINGEMENT OF THE '518 PATENT

147.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

148.   The USPTO duly and legally issued the '518 Patent on November 26, 2013.

149.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '518 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

150.   Nearmap makes and uses rooftop aerial measurement products, including but not limited to the Accused Products, within the United States, and as such, Nearmap has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '518 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a).

151.   Claim 1 of the '518 Patent recites:

A sequence of instructions stored on at least one non-transitory computer readable medium for running on a computer system capable of displaying and navigating oblique imagery, comprising:

instructions for displaying a pixel representation of a primary oblique image depicting a first area, the primary oblique image being part of a set of adjacent oblique images that partially, but not completely, overlap and represent an area of interest;

instructions for panning within the primary oblique image, the primary oblique image including overlapping data;

instructions for detecting a transition event, triggered by a user, of the displayed primary oblique image;

instructions for selecting at least one adjacent secondary oblique image depicting a second area partially overlapping with the first area and from the set of

oblique images corresponding to a supplied location coordinate, the second area extending beyond the first area;

and instructions for displaying the primary oblique image and the at least one adjacent secondary oblique image on a same display such that features in the adjacent primary and secondary oblique images are aligned on the same display;

wherein the primary and secondary oblique images match the perspectives from which the primary and secondary oblique images were captured.

152.   The Accused Products infringe at least claim 1 of the '518 Patent. As one example, MapBrowser infringes claim 1.

153.   MapBrowser includes a sequence of instructions stored on a non- transitory computer readable medium for running on a computer system capable of displaying and navigating oblique imagery. Additionally, MapBrowser includes instructions for displaying a pixel representation of a primary oblique image depicting a first area, the primary oblique image being part of a set of adjacent oblique images that partially, but not completely, overlap and represent an area of interest, as shown, for example, in the user interface for MapBrowser 3D below:
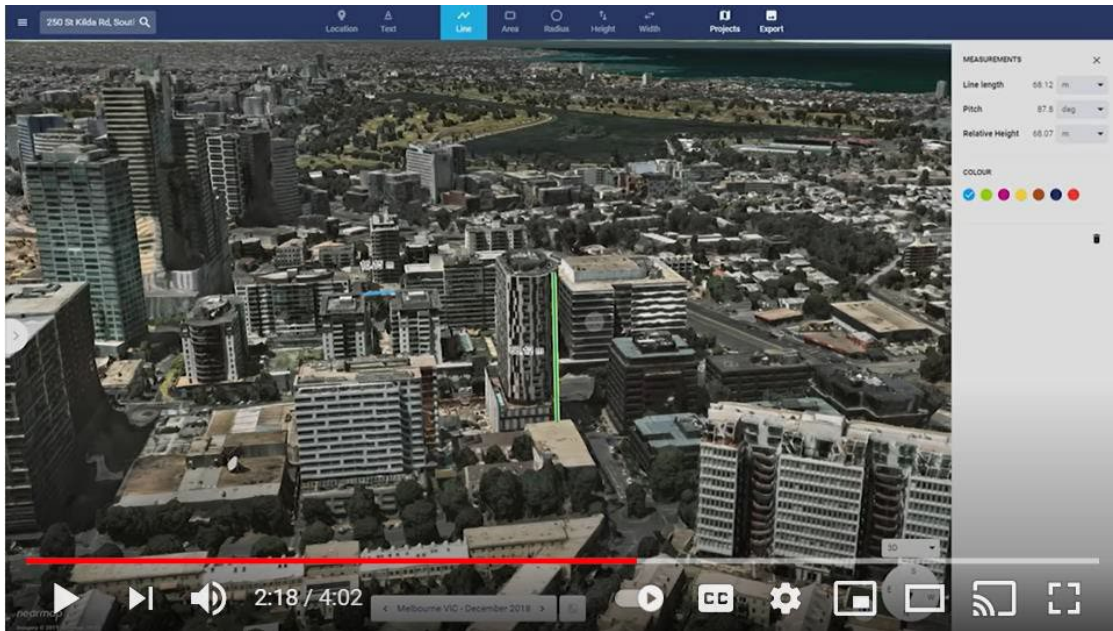
See https://www.youtube.com/watch?v=ZM5HM_kCUF4 (MapBrowser 3D).

154.   MapBrowser includes instructions for panning within the primary oblique image, the primary oblique image including overlapping data. For example, a user can grab the screen and rotate to different angles (*e.g.*, to the left and the right, or up and down).

155.   MapBrowser includes instructions for detecting a transition event, triggered by a user, of the displayed primary oblique image. For example, when the user rotates a certain number of degrees to the left, right, up, or down, a transition event is detected. For example, the same YouTube video of a user in Nearmap 3D shows that the view provided by the images needs to be re-loaded at a certain point in the rotation:
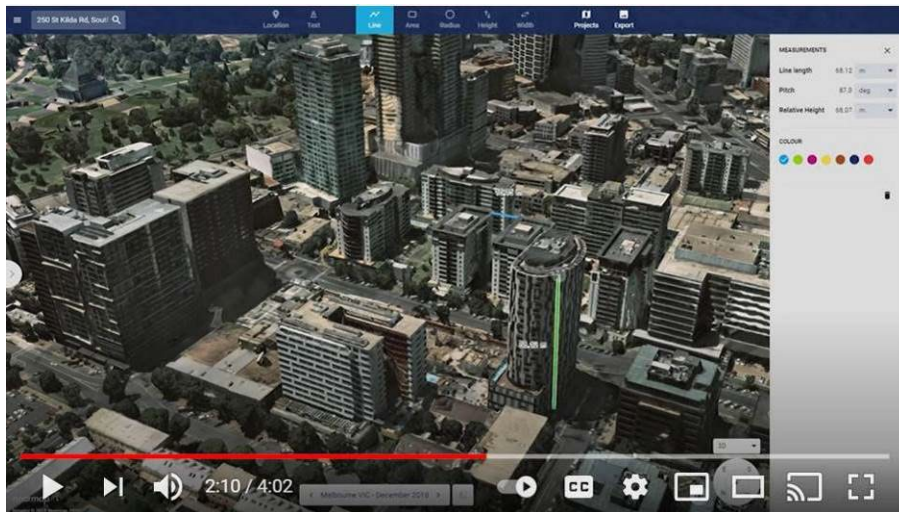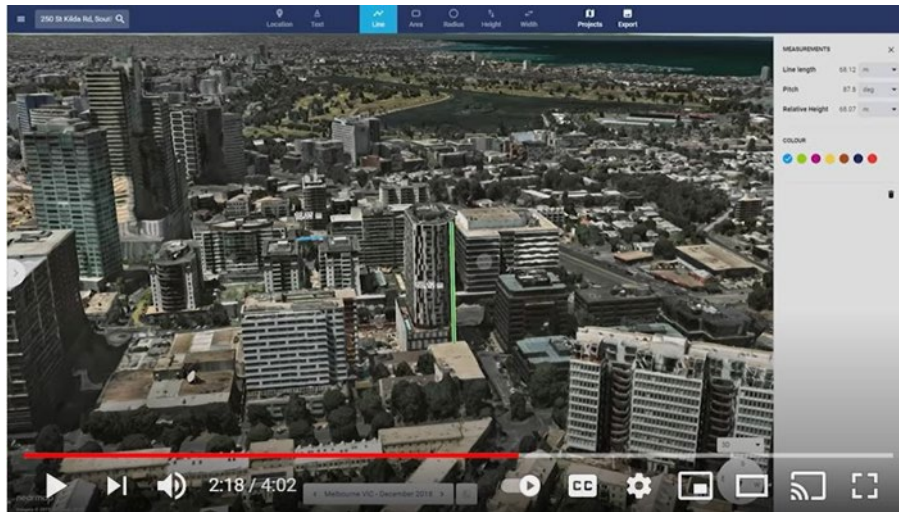
156.   MapBrowser includes instructions for selecting at least one adjacent secondary oblique image depicting a second area partially overlapping with the first area and from the set of oblique images corresponding to a supplied location coordinate, the second area extending beyond the first area. On information and belief, this is the case based on the new images loaded in the video at 2:18 versus 2:10, while the same picture of the building of interest (with the green line showing height) remains displayed.

157.   MapBrowser includes instructions for displaying the primary oblique image and the at least one adjacent secondary oblique image on a same display such that features in the adjacent primary and secondary oblique images are aligned on the same display. For example, common features of the building of interest are visible in the view from multiple different angles, such that the first and second oblique images are adjacent and aligned on the same display.

158.   In MapBrowser, the primary and secondary oblique images match the perspectives from which the primary and secondary oblique images were captured. For example, Nearmap records the perspectives (*e.g.*, angles, height) from which its aerial images were taken. Thus, on information and belief, the primary and secondary oblique images displayed match the perspectives from which they were captured:

GPS coordinates and PPP

Our capture process uses GPS coordinates, which are further refined using PPP (Precise Point Positioning). Because of this, the resulting imagery is georeferenced using ITRF2014 at the epoch of capture.
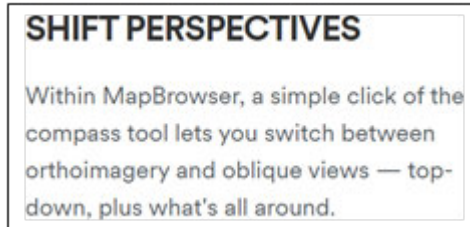
For example, the epoch of a capture from May 1, 2018 is ITRF2014(2018.329). With ITRF2014 being an earth-fixed datum (as opposed to plate-fixed datums such as GDA94 or NAD83), imagery aligned to ITRF is subject to continental drift. For example, in Australia the movement is 70mm per year and some parts of the US move at about 14mm per year. In order to compensate for the continental drift, we provide plate-fixed projections through WMS and reverse the shift by a variable amount depending on the capture epoch. Those projections are based on either GDA94/GDA2020 (Australia) or NAD83 (US). As a consequence, we encourage you to use one of the plate-fixed projections in order to minimise misalignment in your GIS application, especially using surveys captured years apart.

This information should aid you in correctly georeferencing our imagery. We found that in most cases, it is sufficient to use one of our NAD83 or GDA94/GDA2020 projections to eliminate positional errors due to datum differences.

Nearmap also uses ground control points to verify our accuracy claims. Characteristics of our ground control points include good visibility, precise location, accurate location, and open ground location. In essence, this means that the sample of ground points used are clearly identifiable in our aerial imagery without ambiguity, have a high accuracy of less than 2cm, and are not subject to terrain distortions.

See Ex. 12.

159.   As another example, Nearmap explains that users can click between different

views of aerial images within MapBrowser:

SHIFT PERSPECTIVES

Within MapBrowser, a simple click of the compass tool lets you switch between orthoimagery and oblique views — top-down, plus what's all around.

See Ex. 17.

160.   On information and belief, Nearmap has had knowledge of the '518 Patent prior

to the filing of the instant complaint. For example, Nearmap would have been aware of the

substantial press coverage of EagleView's patent portfolio as it relates to roof reports, which

includes the '518 Patent, in light of EagleView's recent successful litigation against Xactware

Solutions, Inc. and Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27.

161.   In addition to directly infringing the '518 Patent, Nearmap has in the past and

continues to indirectly infringe the '518 Patent by inducing direct infringement by others, such as

end users of rooftop aerial measurement products, including but not limited to the Accused

Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial

measurement products, including but not limited to the Accused Products, by its end users

infringes at least one claim of the '518 Patent prior to the filing of the instant complaint.

Nearmap knowingly induced such use of those products in a manner that infringes the '518

Patent, including through at least promotional, advertising, and instructional materials, and

Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has

indirectly infringed and continues to indirectly infringe at least one claim of the '518 Patent

under one or more subsections of 35 U.S.C. § 271, including § 271(b).

163. Nearmap's infringement of the '518 Patent has been and continues to be willful,

at least as of being served with the original Complaint. Nearmap has acted with knowledge of the

'518 Patent and without a reasonable basis for a good-faith belief that it would not be liable for

infringement of the '518 Patent. For example, subsequent to learning of the '518 Patent,

Nearmap continued to make and use rooftop aerial measurement products, including but not

limited to the Accused Products, within the United States in a manner that infringes the '518

Patent. Nearmap has disregarded and continues to disregard its infringement and/or an

objectively high likelihood that its actions constitute infringement of the '518 Patent. This

objectively-defined risk was known or is so obvious that it should have been known to Nearmap.

Nearmap's infringement of the '518 Patent has been and continues to be willful, entitling

Pictometry to enhanced damages under 35 U.S.C. § 284.

163. Defendants' acts of infringement have caused damage to Plaintiffs, and Plaintiffs

are entitled to recover from Nearmap the damages sustained by Plaintiffs as a result of

Defendants' wrongful acts in an amount subject to proof at trial.

164. Defendants' acts of infringement have caused, and unless restrained and enjoined,

will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate

remedy at law.

165. This case is exceptional, entitling Plaintiffs to an award of attorneys' fees and

costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT IV - INFRINGEMENT OF THE '961 PATENT

166.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

167.   The USPTO duly and legally issued the '961 Patent on March 11, 2014.

168.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '961 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

169.   Nearmap makes, uses, imports, and/or sells rooftop aerial measurement products, including but not limited to the Accused Products, within the United States, and as such, Nearmap has directly infringed and continue to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '961 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a) and (g).

170.   Claim 1 of the '961 Patent recites:

A computing system for generating a roof report, the computing system comprising:

a memory; and

a roof estimation module that includes a calibration module, the roof estimation module being stored on the memory and being configured, when executed, to:

receive a plurality of aerial images of a building having a roof, the plurality of aerial images having been taken independent of each other, at different times and on different dates, the aerial images providing different views from each other of the roof of the building, the plurality of aerial images including at least a first aerial image that is a top plan view of the roof and a second aerial image that is an oblique perspective view of the roof wherein at least one of the first and/or second aerial images is calibrated using calibration information received from the calibration module;

perform image analysis on at least two of the plurality of aerial images;

**calculate a pitch for each one of a plurality of roof sections of the roof based**

on the image analysis;

generate a roof report that includes the pitch of each of the plurality of roof sections based on the calculated pitch; and

output the roof report, wherein the roof report includes one or more top plan views of a model of the roof annotated with numerical values that indicate a corresponding pitch, area, and length of edges of at least some of the plurality of roof sections using at least two different indicia for different types of roof properties.

171.   The Accused Products infringe at least claim 1 of the '961 Patent. As one example, Nearmap on OpenSolar infringes claim 1.

172.   Nearmap on OpenSolar include a computing system for generating a roof report. For example, as shown in the YouTube tutorial for Nearmap on OpenSolar, the method of generating a roof report is computer implemented:
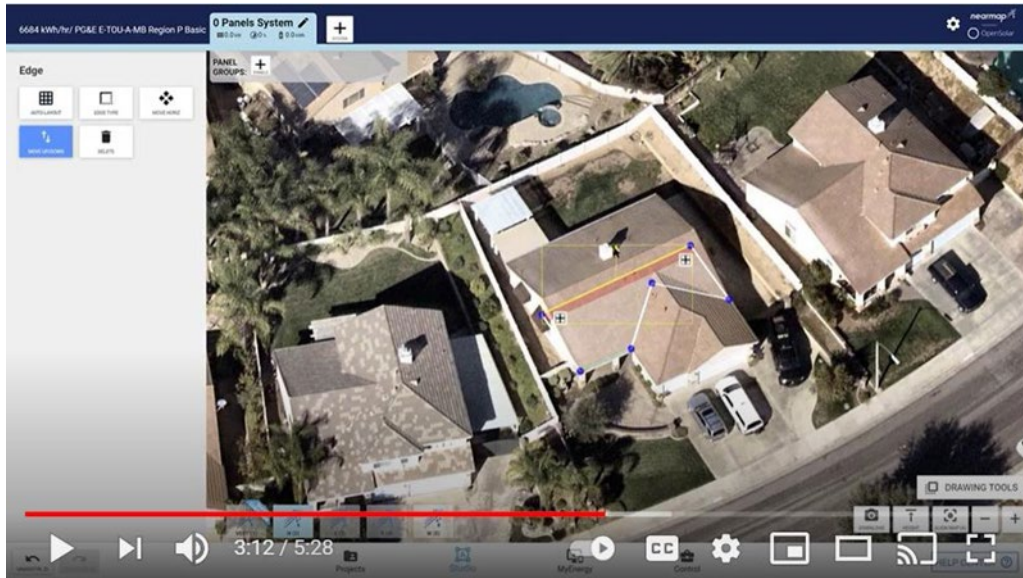

See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar).

173.   Nearmap on OpenSolar generates a roof estimate report, called a "proposal":
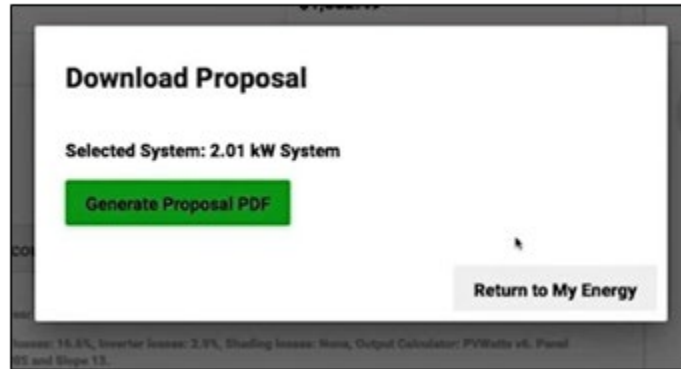
See https://www.nearmap.com/content/dam/nearmap/video/nearmap-on- opensolar/announcing-nearmap-on-opensolar.mp4 (Nearmap on OpenSolar).

174.   The computing system of Nearmap on OpenSolar includes a memory. For

example, projects can be saved and stored to return to later:
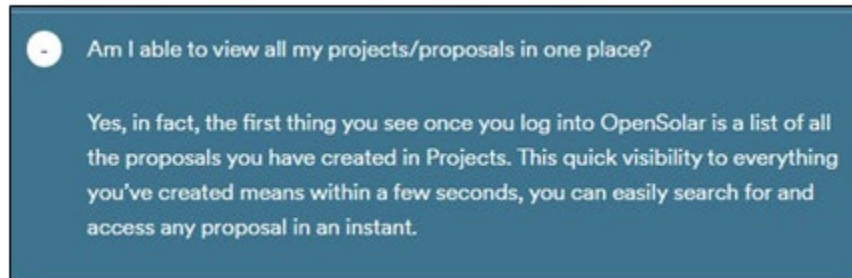
See Ex. 18 (Nearmap on OpenSolar).

175.   Nearmap on OpenSolar includes a roof estimation module that includes a

calibration module stored on the memory. When executed, the roof estimation module receives a

plurality of aerial images of a building having a roof, the plurality of aerial images having been

taken independent of each other, at different times and on different dates, the aerial images

providing different views from each other of the roof of the building. For example, Nearmap on

OpenSolar uses Nearmap's vertical and oblique imagery, and Nearmap explains that it can take

"several days and multiple flights" to complete a survey of a particular area, and that aerial

images of the same location may have been taken on different dates:

How does the OpenSolar tool work with Nearmap imagery?

Nearmap imagery is built into the OpenSolar platform, so you'll get access to our full library of frequently updated Vertical and Oblique imagery, according to what your Nearmap subscription includes. All you need is an address to get started, and you can select the aerial view that best meets your needs

See Ex. 18 (Nearmap on OpenSolar).

When we fly a new survey it may take several days and multiple flights to complete, depending on the size of the survey, weather conditions and air traffic control. Once published, the date of the first flight of the survey is displayed at the top left of the page, within the MapBrowser timeline. We call this date the "Survey Date.""

When you view a location with the location tool you will also be given the date and time that specific photo was taken.

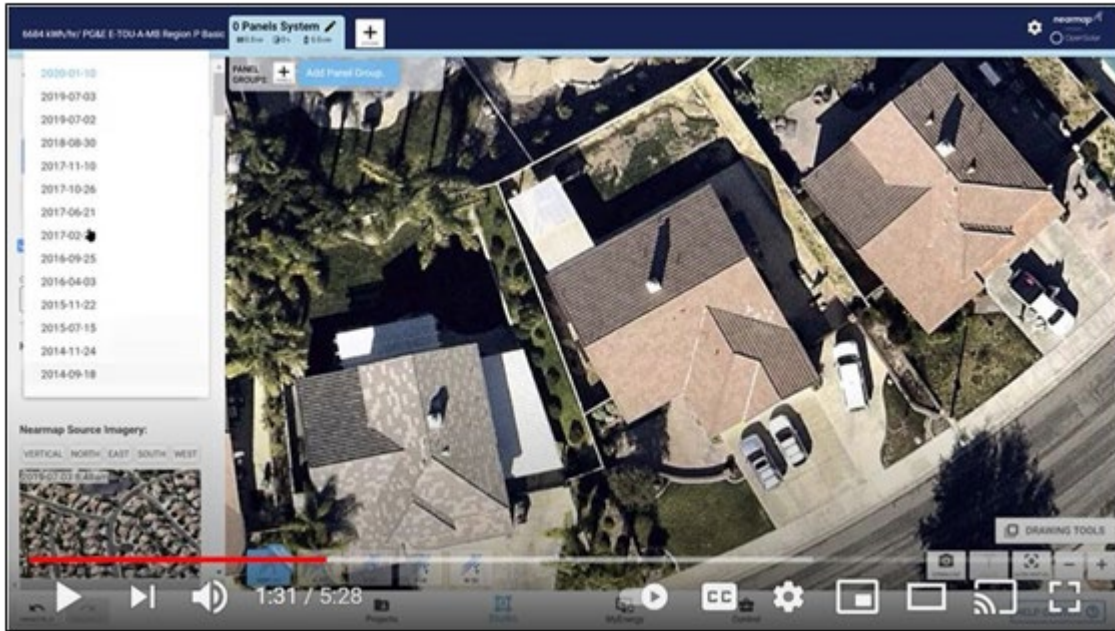

Address
Perth WA 6000, Australia

ADD TO WATCHLIST

Coordinates
-31.957265, 115.855907
-31° 57' 26", 115° 51' 21"

MapBrowser Link
https://apps.nearmap.co

Source Photo
From: Sun Oct 11 2020 8:44 AM (AWST)
To: Sun Oct 11 2020 9:02 AM (AWST)

See Ex. 19.

176.   Nearmap on OpenSolar shows the user the dates for which images of the same location are available, as shown on the left in the screenshot below:

See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar).

177.   Nearmap on OpenSolar receives a first aerial image that is a top plan view of the roof and a second aerial image that is an oblique perspective view of the roof wherein at least one of the first and/or second aerial images is calibrated using calibration information received from the calibration module. The first and second aerial images are shown in the screenshots below, and they are calibrated using the geolocation and other data (such as height and angle) associated with them:

See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar).

178.   Nearmap on OpenSolar performs image analysis on at least two of the plurality of aerial images. The image analysis includes, for example, using information about the location, angle, and height from which different aerial images were taken (including, e.g., georeferencing), and correlating features in one image to the same features in another image:

GPS coordinates and PPP

Our capture process uses GPS coordinates, which are further refined using PPP (Precise Point Positioning). Because of this, the resulting imagery is georeferenced using ITRF2014 at the epoch of capture.

For example, the epoch of a capture from May 1, 2018 is ITRF2014(2018.329). With ITRF2014 being an earth-fixed datum (as opposed to plate-fixed datums such as GDA94 or NAD83), imagery aligned to ITRF is subject to continental drift. For example, in Australia the movement is 70mm per year and some parts of the US move at about 14mm per year. In order to compensate for the continental drift, we provide plate-fixed projections through WMS and reverse the shift by a variable amount depending on the capture epoch. Those projections are based on either GDA94/GDA2020   (Australia) or NAD83 (US). As a consequence, we encourage you to use one of the plate-fixed projections in order to minimise misalignment in your GIS application, especially using surveys captured years apart.

This information should aid you in correctly georeferencing our imagery. We found that in most cases, it is sufficient to use one of our NAD83 or GDA94/GDA2020 projections to eliminate positional errors due to datum differences.

Nearmap also uses ground control points to verify our accuracy claims. Characteristics of our ground control points include good visibility, precise location, accurate location, and open ground location. In essence, this means that the sample of ground points used are clearly identifiable in our aerial imagery without ambiguity, have a high accuracy of less than 2cm, and are not subject to terrain distortions.

See Ex. 12.

179.   In Nearmap on OpenSolar, a user can also manually facilitate image analysis through the roof estimation module. For example, the user can help determine pitch, by placing a pitch determination marker (e.g., the yellow bar below).
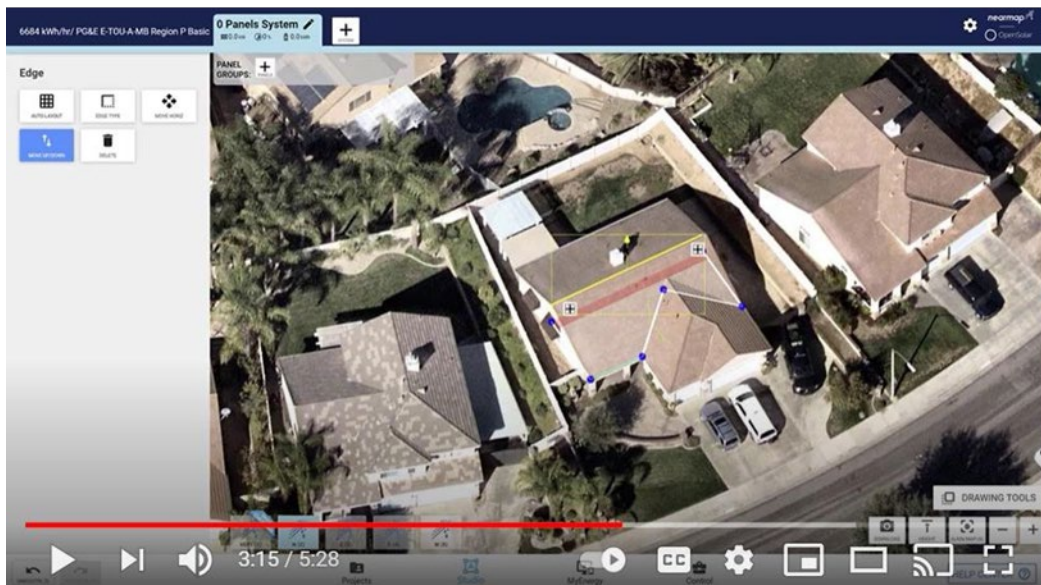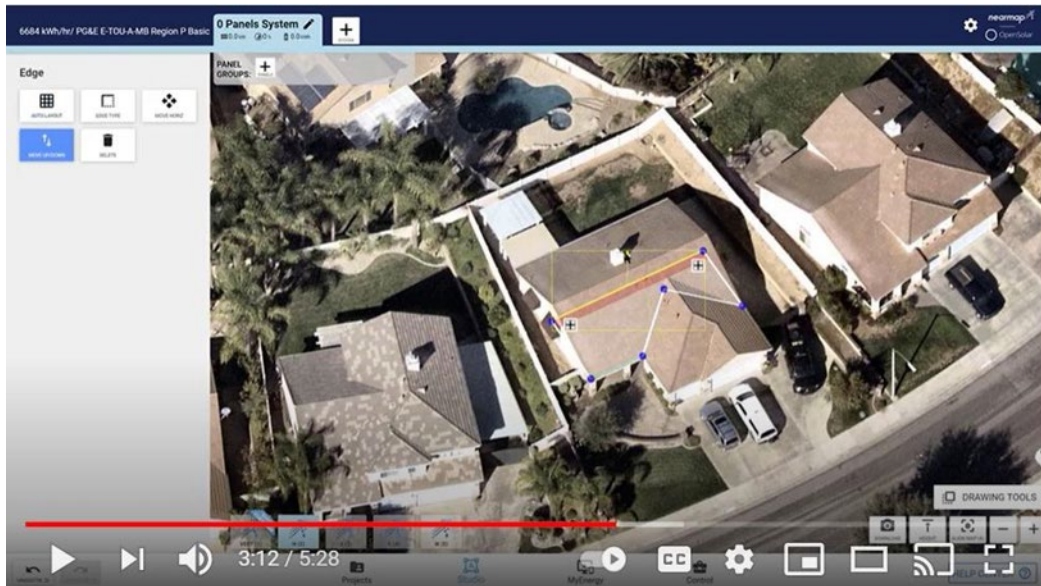
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar).

180.   Nearmap on OpenSolar calculates a pitch (e.g., "roof slope") for each one of a

plurality of roof sections of the roof based on the image analysis, as shown above, as well as in

the following screenshots from Nearmap on OpenSolar:

69

See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar) at 3:24-28.
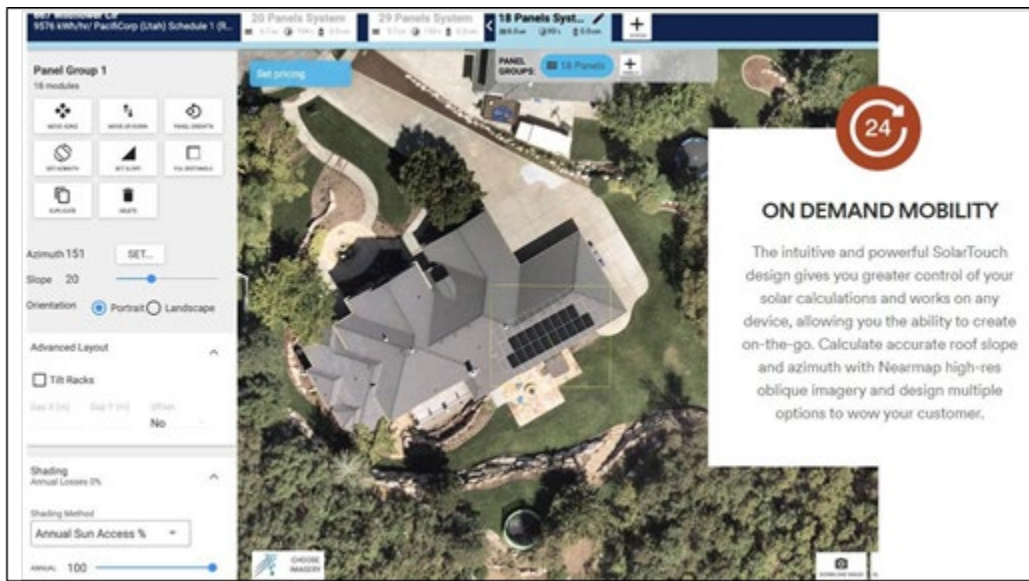
See Ex. 18 (Nearmap on OpenSolar).

181.   Nearmap on OpenSolar generates a roof report that includes the pitch of each of the plurality of roof sections based on the calculated pitch:

70
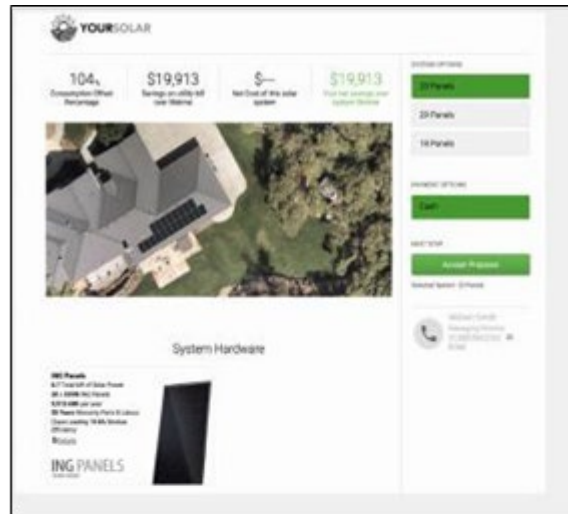
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar) at 3:24-28.

182.   Nearmap on OpenSolar outputs the roof report that includes one or more top plan views of a model of the roof annotated with numerical values that indicate a corresponding pitch, area, and length of edges of at least some roof sections using at least two different indicia for different types of roof properties (such as different colors of lines):
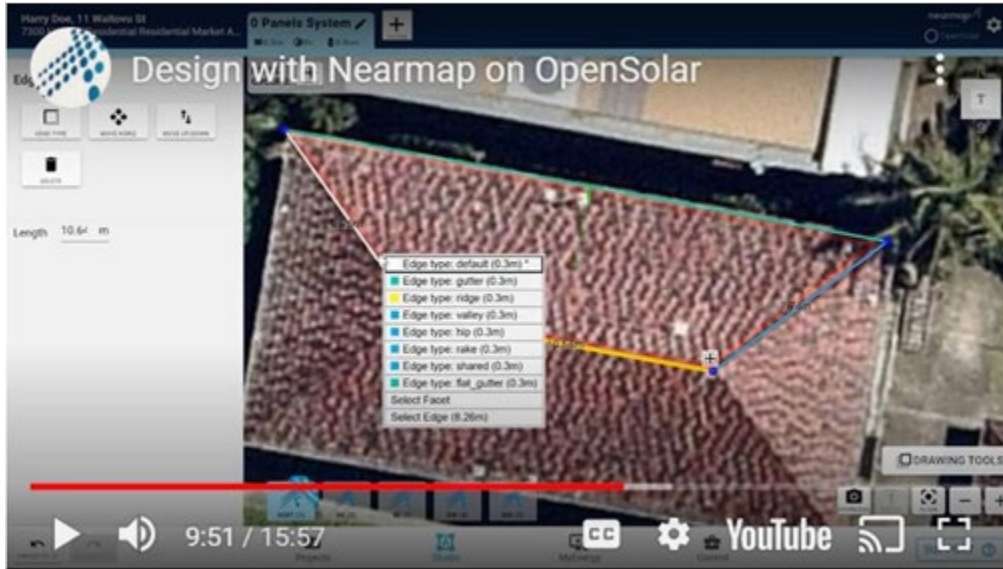
See https://docs.nearmap.com/display/TUT/Module+3%3A+Design+with+Nearmap+o
n+OpenSolar (Nearmap on OpenSolar).

183.   Roof Geometry Technology infringes at least claim 1 of the '961 Patent,

including by Nearmap's use of Roof Geometry Technology to generate Quickmeasure reports.

184.   As one example, Roof Geometry Technology, as used in the production of

QuickMeasure reports, infringes claim 1. Roof Geometry Technology comprises a computing

system for generating a roof report. *See e.g.*, Ex. 31 (PP0301).

185.   Roof Geometry Technology includes a memory and a roof estimation module that

includes a calibration module, the roof estimation module being stored on the memory. For

example, ██

██

██

██
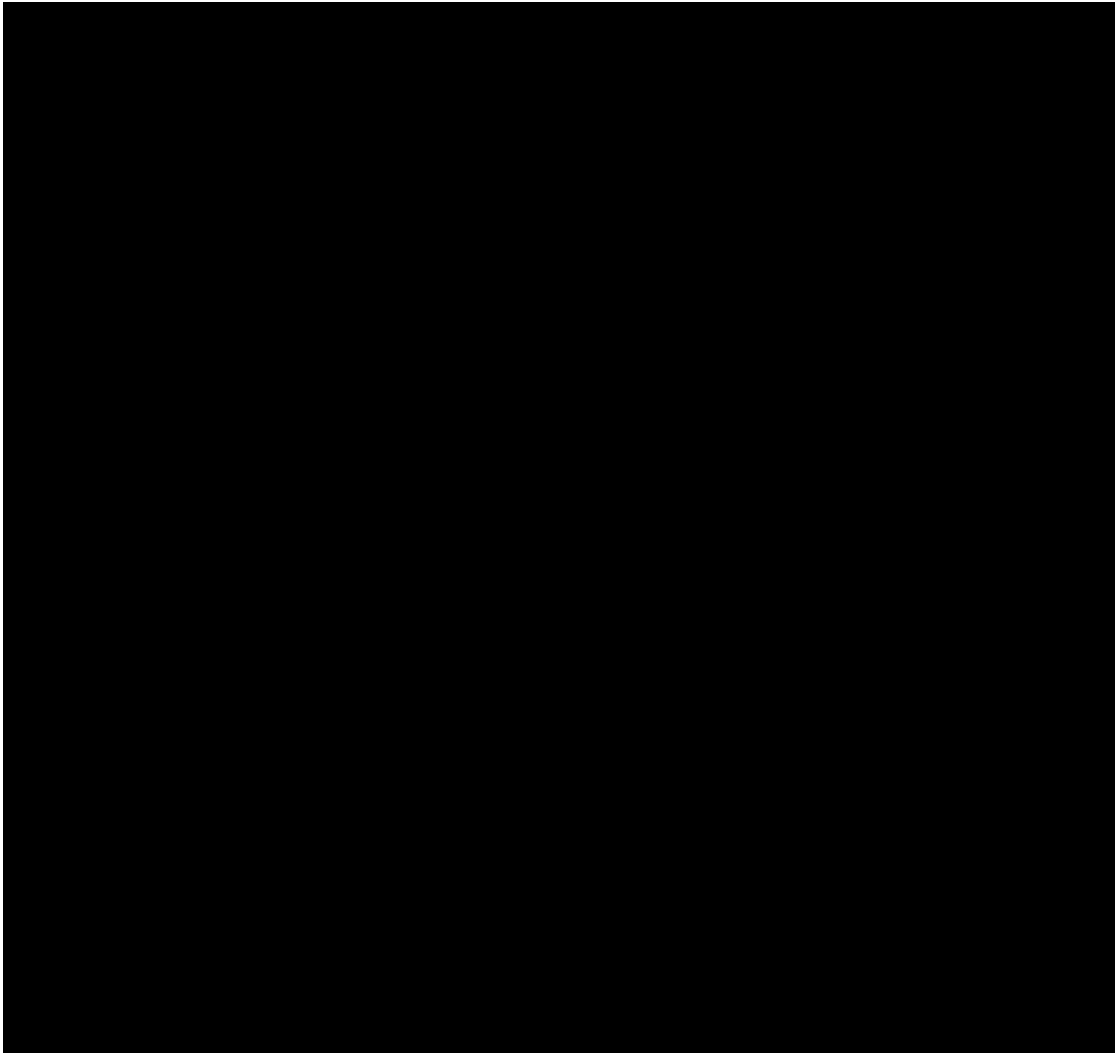
186.   Based on the image analysis, Roof Geometry Technology calculates a pitch for

one of a plurality of roof sections of the roof. For example,
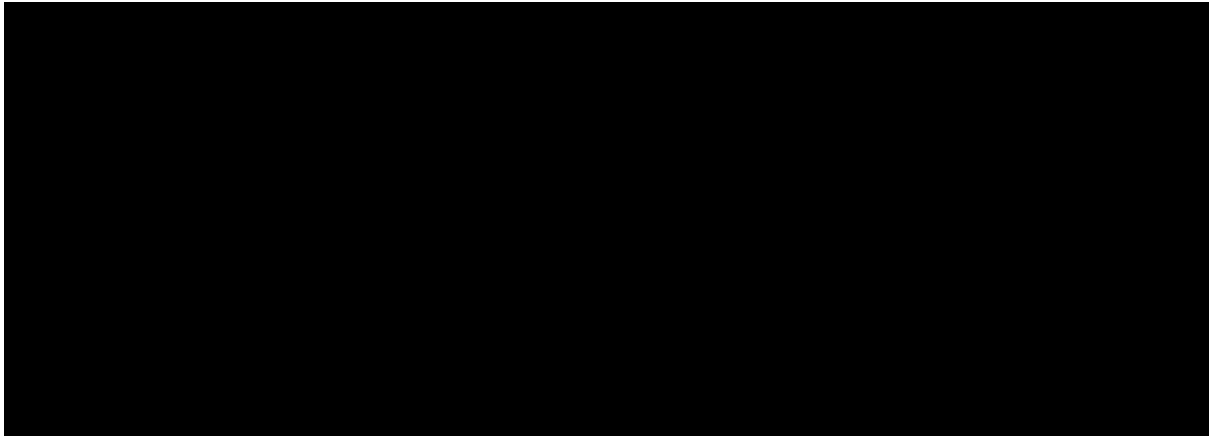
187.   Roof Geometry Technology then generates a roof report that includes a pitch of each of the plurality of roof sections based on the calculated pitch.
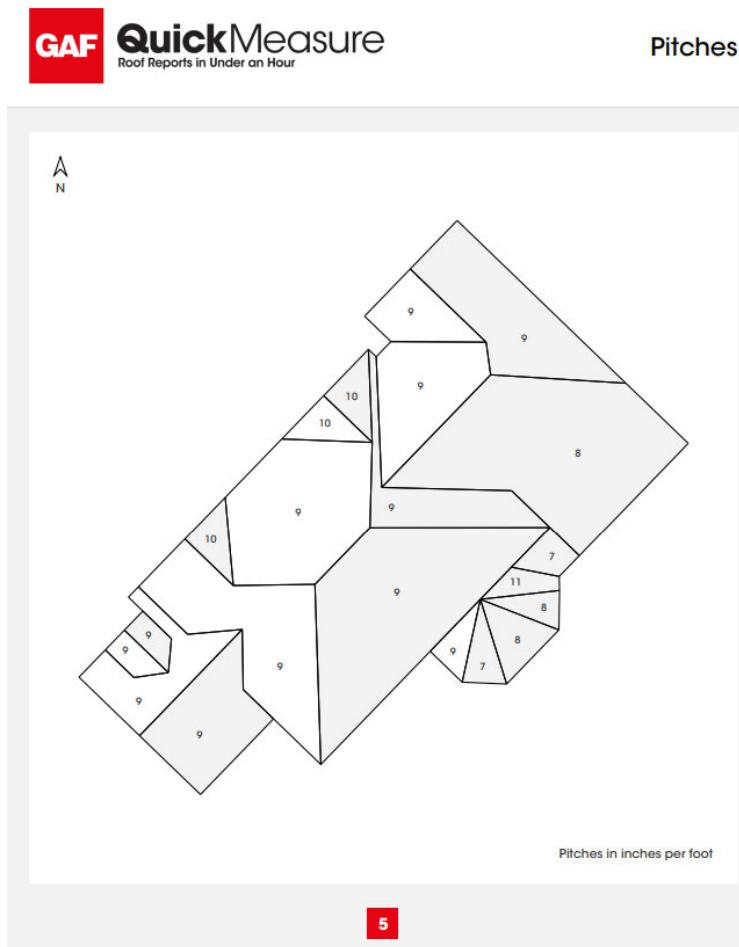
GAF QuickMeasure Sample Report, Ex. 32.

188.   The output roof report includes one or more top plan views of a model of the roof annotated with numerical values that indicate a corresponding pitch, area, and length of edges of at least some of the plurality of roof sections using at least two different indicia for different types of roof properties. For example, the output roof report shows "lengths in feet" and multiple colors are used on a model of the roof to indicate roof features, such as grey for eaves and yellow for hips.

GAF QuickMeasure Sample Report, Ex. 32.

https://www.gaf.com/en-us/quickmeasure
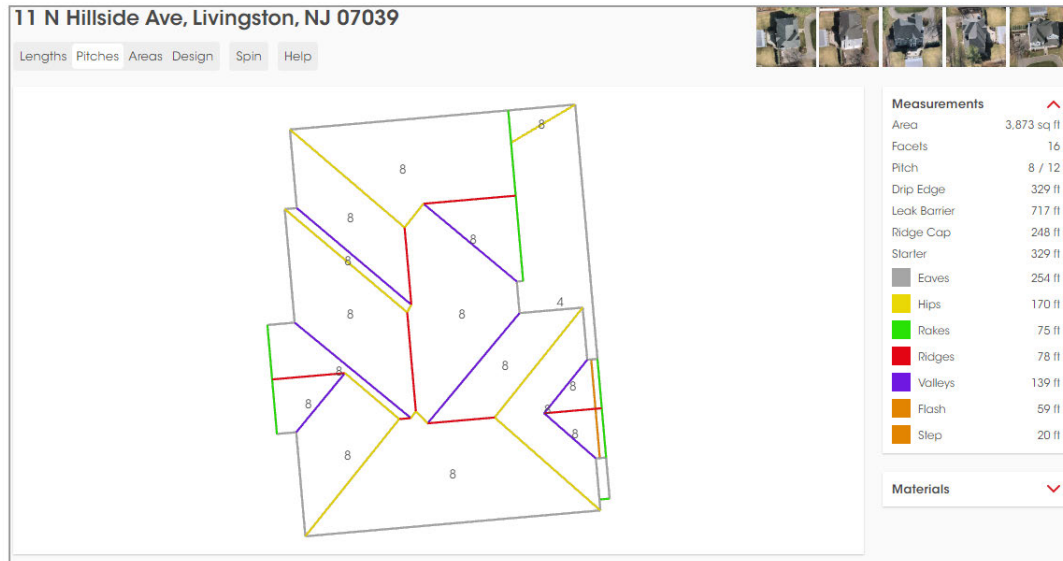
189.   In addition, GAF infringes at least under 35 U.S.C. § 271(g) by selling

QuickMeasure reports, which are a product made by a process patented by the '961 Patent.

190.   On information and belief, Nearmap has had knowledge of the '961 Patent prior

to the filing of the instant complaint (and in no case later than the filing of complaints against

each of Nearmap and GAF on May 4, 2021), including because the '961 Patent is identified on

EagleView's website and roof reports as covering EagleView's technology and roof reports. The

Accused Products are remarkably similar to, and appear to have been copied from, EagleView's

technology and roof reports, confirming that Nearmap monitors EagleView's website, products,

roof reports, and patents. *See, e.g.*, Ex. 26.

191.   Additionally, Nearmap would have been aware of the substantial press coverage

of EagleView's patent portfolio as it relates to roof reports, which includes the '961 Patent, in

light of EagleView's recent successful litigation against Xactware Solutions, Inc. and Verisk

Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27.

76

192.   In addition to directly infringing the '961 Patent, Nearmap has in the past and

continues to indirectly infringe the '961 Patent by inducing direct infringement by others, such as

end users of rooftop aerial measurement products, including but not limited to the Accused

Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial

measurement products, including but not limited to the Accused Products, by its end users

infringes at least one claim of the '961 Patent prior to the filing of the instant complaint.

Nearmap knowingly induced such use of those products in a manner that infringes the '961

Patent, including through at least promotional, advertising, and instructional materials, and

Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has

indirectly infringed and continues to indirectly infringe at least one claim of the '961 Patent

under one or more subsections of 35 U.S.C. § 271, including § 271(b).

193.   Nearmap has also contributed to the direct infringement of the '961 Patent by

others, such as end users of rooftop aerial measurement products, including but not limited to the

Accused Products. The Accused Products are a material or apparatus for use in practicing the

patented processes of the '961 Patent and are a material part of the invention. The Accused

Products are especially made or adapted for use in infringement of the asserted claims, and are

not a stable article of commerce suitable for any substantial non-infringing use. Nearmap makes,

sells, and offers to sell the Accused Products, whose ordinary and intended use constitutes direct

infringement of the '961 Patent. As one example, GAF offers to sell and sells QuickMeasure

reports that infringe under at least 35 U.S.C. § 271(g), and Nearmap contributes to this

infringement by ██

██████

194.   To the extent the claimed method steps are performed by multiple entities, such as to create QuickMeasure reports, Nearmap is liable as part of a joint enterprise or, in the alternative, as a direct infringer to whom performance of all method steps are attributable, as set forth in paragraphs 113-116 above.

195.   Nearmap's infringement of the '961 Patent has been and continues to be willful. Nearmap has acted with knowledge of the '961 Patent and without a reasonable basis for a good-faith belief that it would not be liable for infringement of the '961 Patent. For example, subsequent to learning of the '961 Patent, Nearmap continued to make and use rooftop aerial measurement products, including but not limited to the Accused Products, which appear copied from Plaintiffs as set forth above, within the United States in a manner that infringes the '961 Patent. Nearmap has disregarded and continues to disregard its infringement and/or an objectively high likelihood that its actions constitute infringement of the '961 Patent. This objectively-defined risk was known or is so obvious that it should have been known to Nearmap. Nearmap's infringement of the '961 Patent has been and continues to be willful, entitling EagleView to enhanced damages under 35 U.S.C. § 284.

196.   Defendants' acts of infringement have caused damage to EagleView, and EagleView is entitled to recover from Defendants the damages sustained by EagleView as a result of Defendants' wrongful acts in an amount subject to proof at trial.

197.   Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to EagleView for which there is no adequate remedy at law.

198.   This case is exceptional, entitling EagleView to an award of attorneys' fees and

costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT V - INFRINGEMENT OF THE '737 PATENT

199.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

200.   The USPTO duly and legally issued the '737 Patent on September 15, 2015.

201.   Nearmap has directly and indirectly infringed and continues to directly and

indirectly infringe the '737 Patent, in connection with rooftop aerial measurement products,

including but not limited to the Accused Products.

202.   Nearmap makes, uses, imports, and/or sells rooftop aerial measurement products,

including but not limited to the Accused Products, within the United States, and as such,

Nearmap has directly infringed and continues to directly infringe, either literally or under the

doctrine of equivalents, at least one claim of the '737 Patent under one or more subsections of 35

U.S.C. § 271, including § 271(a) and (g).

203.   Claim 1 of the '737 Patent recites:

A computer-implemented method in a roof estimate report system including at least one processor and a memory coupled to the at least one processor, the method comprising:

displaying, by the at least one processor of the roof estimate report system, a plurality of aerial images of a roof at the same time, each of the aerial images providing a different view, taken from a different angle of the same roof;

displaying, by the at least one processor of the roof estimate report system, respective line drawings representing features of the roof, the respective line drawings overlying a first and a second aerial image of the plurality of aerial images of the roof, the line drawing overlying the first aerial image of the roof having features in common with the line drawing overlying the second aerial image of the roof;

in response to user input, changing, by the at least one processor of the roof

estimate report system, the line drawing representing a feature of the roof that overlies the first aerial image of the roof;

in response to the changing, making corresponding changes, by the at least one processor of the roof estimate report system, to the line drawing overlying the second aerial image; and

generating and outputting a roof estimate report using a report generation engine, wherein the roof estimate report includes numerical values for corresponding slope, area, or lengths of edges of at least some of a plurality of planar roof sections of the roof, wherein the generated roof estimate report is provided for repair and/or constructing the roof structure of the building.
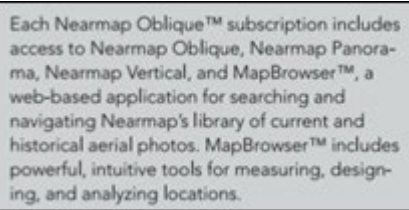
204.   The Accused Products infringe at least claim 1 of the '737 Patent, including by Nearmap's use of the Accused Products to perform the claimed method. As one example, MapBrowser infringes claim 1.

205.   MapBrowser includes a computer-implemented method in a roof estimate report system including at least one processor and a memory coupled to the at least one processor. For example, as shown below, the method of generating a roof estimate report is computer-implemented, and a memory allows projects to be saved and returned to later:
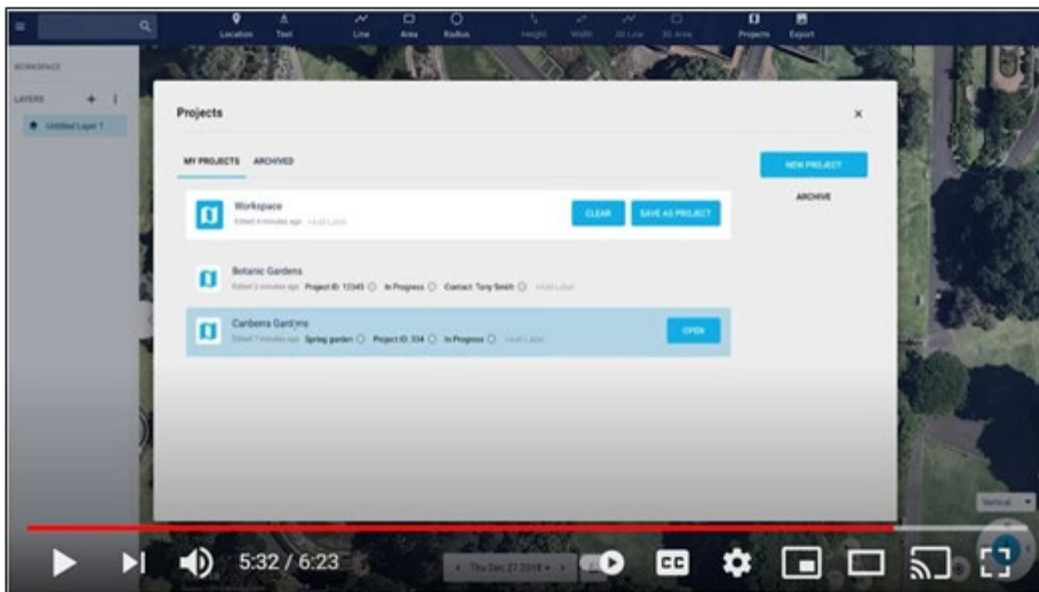
See https://www.youtube.com/watch?v=6ijdjzQ_at0 (MapBrowser).

206.   MapBrowser displays, by the at least one processor of the roof estimate report system, a plurality of aerial images of a roof at the same time, each of the aerial images providing a different view and taken from a different angle of the same roof. For example, in the MapBrowser interface (which uses Nearmap's oblique imagery, as described in the first screenshot below), a plurality of aerial images of a roof are displayed at the same time (as shown in the second screenshot below):

Each Nearmap Oblique™ subscription includes access to Nearmap Oblique, Nearmap Panorama, Nearmap Vertical, and MapBrowser™, a web-based application for searching and navigating Nearmap's library of current and historical aerial photos. MapBrowser™ includes powerful, intuitive tools for measuring, designing, and analyzing locations.

See Ex. 16 (MapBrowser is "a web-based application for searching and navigating Nearmap's library of current and historical aerial photos.").
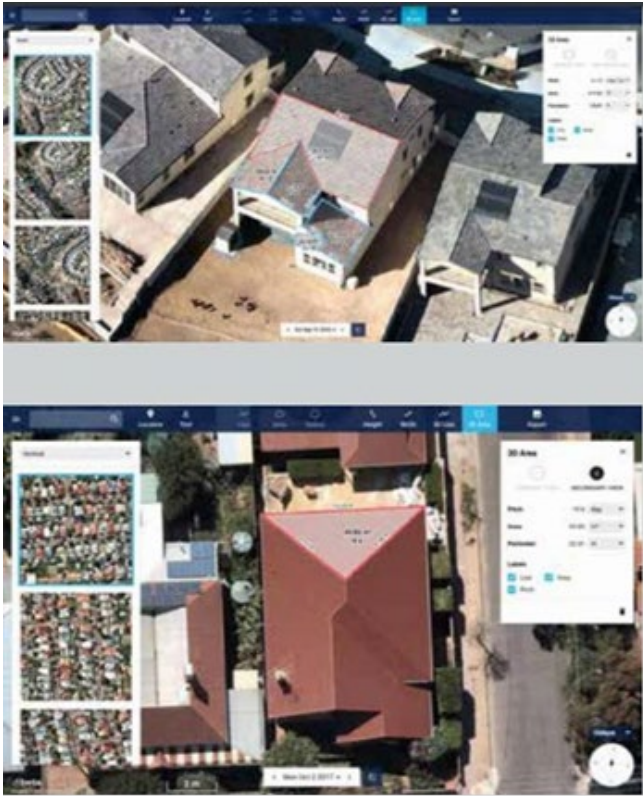
See Ex. 16.

207.   Below is another example in which MapBrowser displays a plurality of aerial images of the same roof from different angles at the same time:
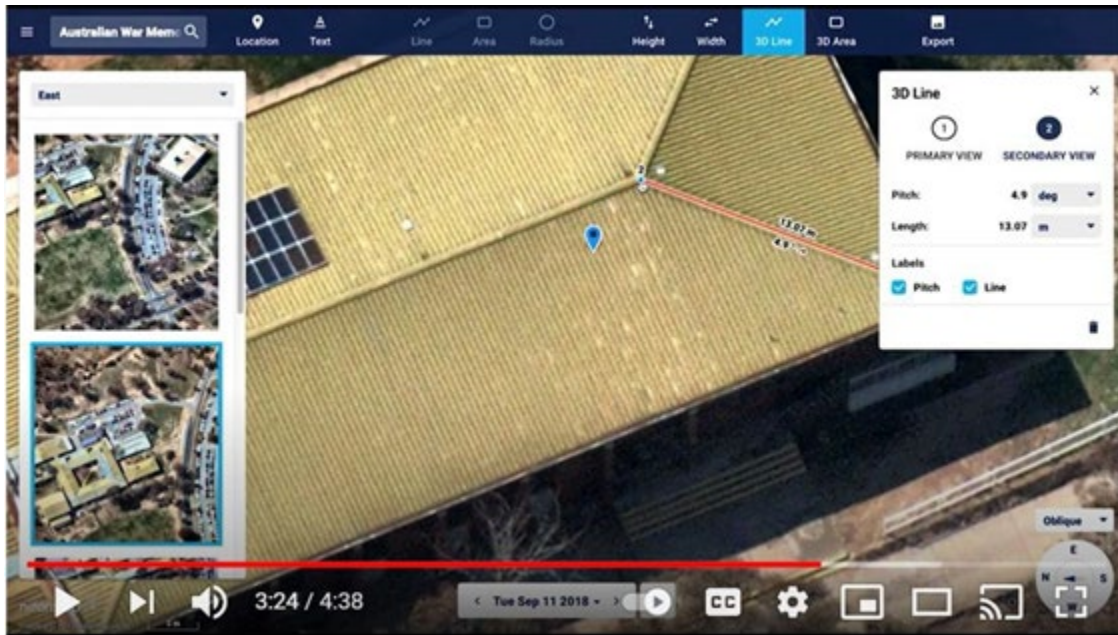
See https://www.youtube.com/watch?v=zMFjaQIci9s&t=216s (MapBrowser).

208.   MapBrowser displays, by the at least one processor of the roof estimate report system, respective line drawings representing features of the roof, the respective line drawings overlying a first and a second aerial image of the plurality of aerial images of the roof, the line drawing overlying the first aerial image of the roof having features in common with the line drawing overlying the second aerial image of the roof:
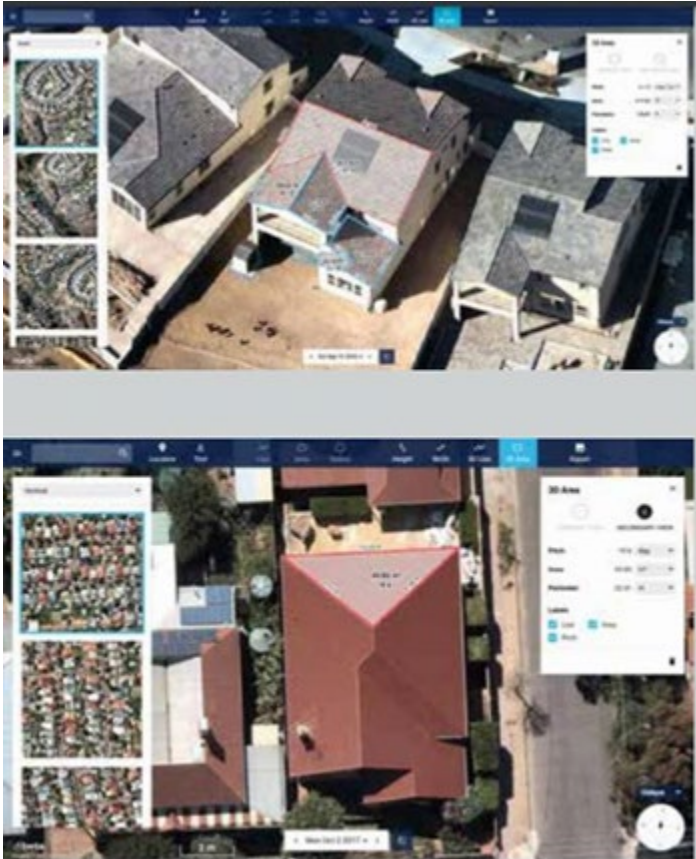
See Ex. 16 (MapBrowser using Nearmap's oblique imagery).

209.   As another example, a line representing a hip of the roof is displayed overlaying

two different aerial images taken from different angles (e.g., in the "primary view" and

"secondary view"):
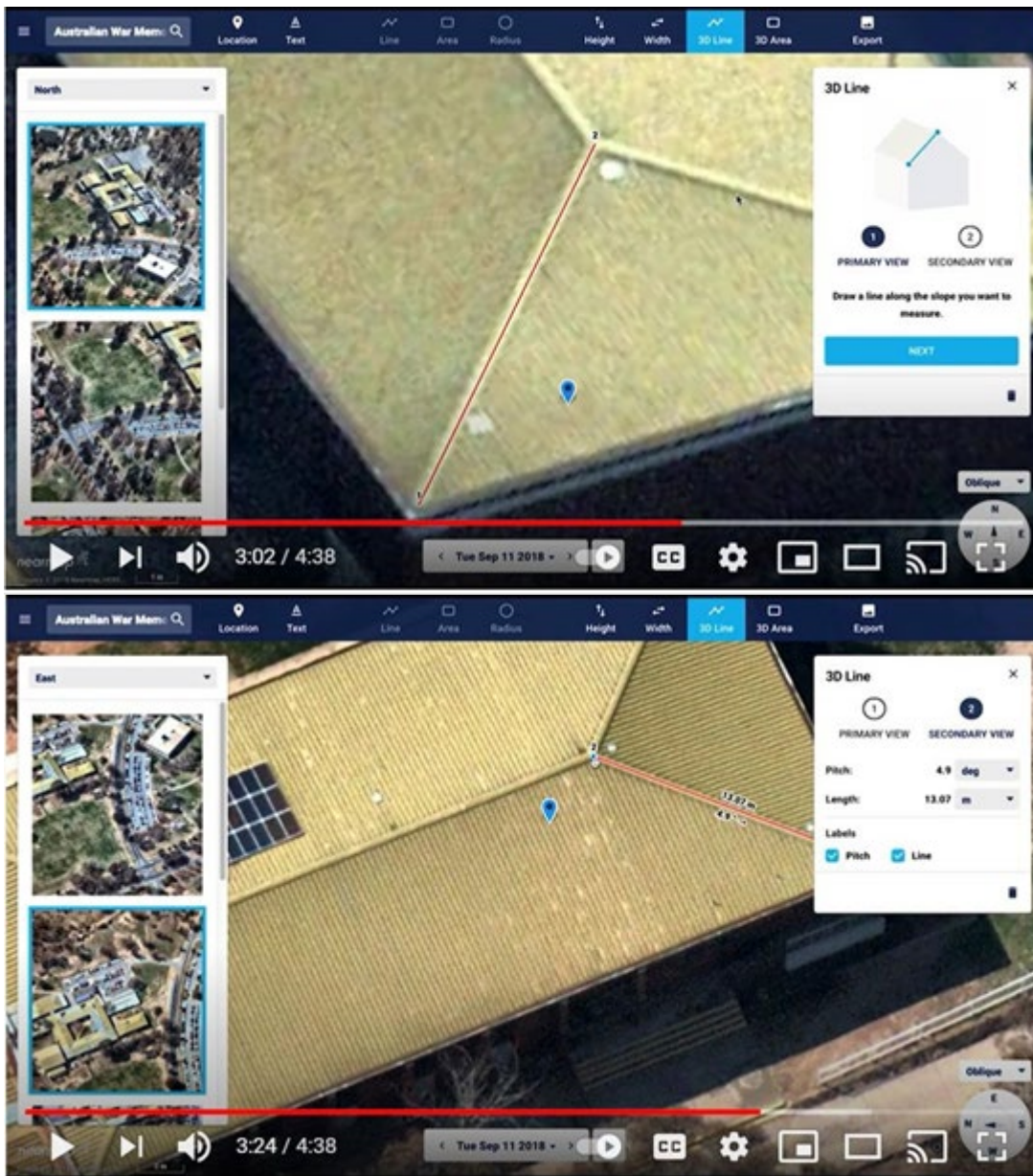
See https://www.youtube.com/watch?v=zMFjaQIci9s&t=216s (MapBrowser).

210.   In response to user input, MapBrowser changes, by the at least one processor of

the roof estimate report system, the line drawing representing a feature of the roof that overlies

the first aerial image of the roof, and in response to the changing, MapBrowser makes

corresponding changes, by the at least one processor of the roof estimate report system, to the

line drawing overlying the second aerial image. For example, as shown above, after a user

identified a particular roof hip on one aerial image in MapBrowser, a roof hip line appears in a

second view after the user clicks on the alternative image, which constitutes MapBrowser

making corresponding changes. A user may need to re-adjust the roof hip line that has appeared

in the second view.

211.   MapBrowser generates and outputs a roof estimate report using a report

generation engine, wherein the roof estimate report includes numerical values for corresponding

slope, area, or lengths of edges of at least some of a plurality of planar roof sections of the roof:
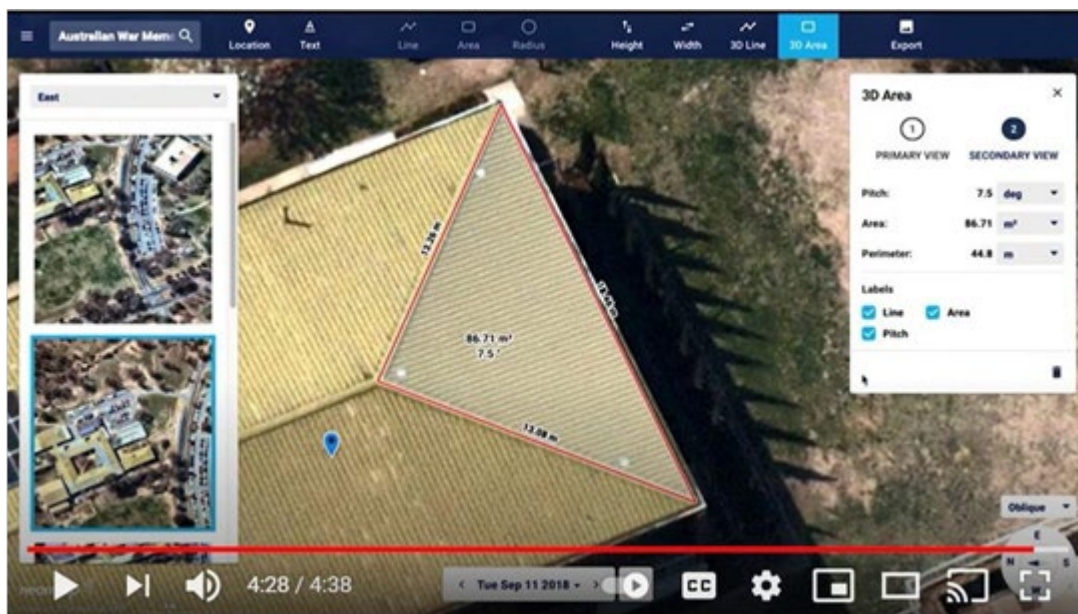
See https://www.youtube.com/watch?v=zMFjaQIci9s&t=216s (MapBrowser).

212.   As another example, "Projects" can be saved, and contain the generated and

outputted roof estimate report:
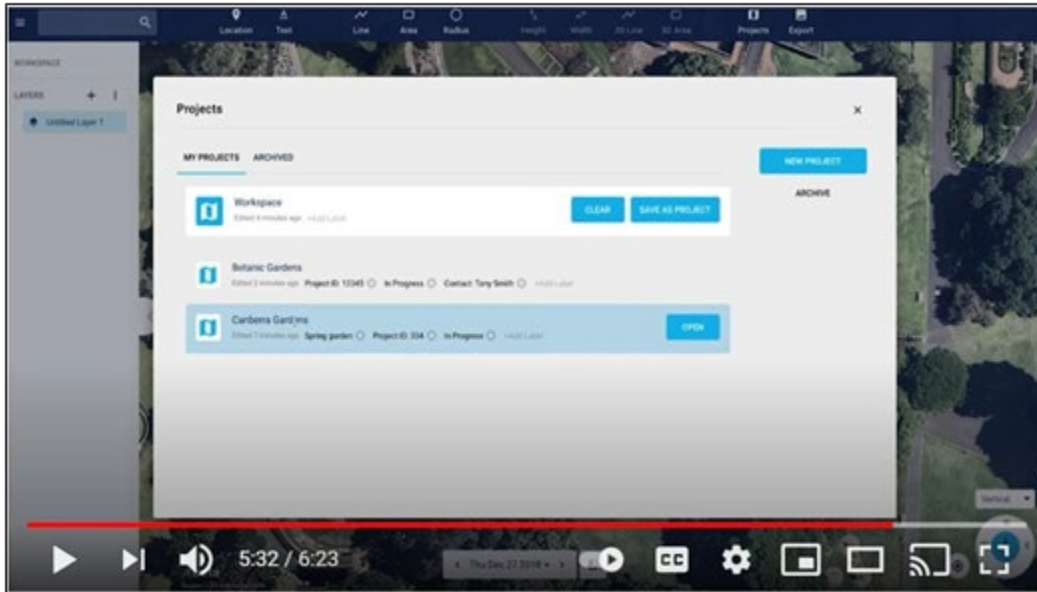
See https://www.youtube.com/watch?v=6ijdjzQ_at0 (MapBrowser).

213.   The generated roof estimate report from MapBrowser is provided for repair

and/or constructing the roof structure of the building:
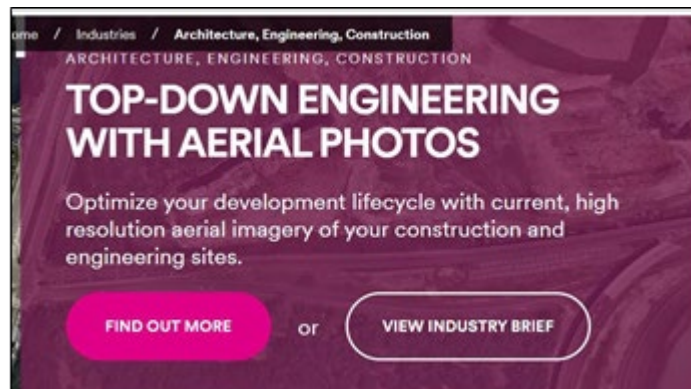
See Ex. 20.

See Ex. 21.

214.   Roof Geometry Technology infringes at least claim 1 of the '737 Patent,

including by Nearmap's use of Roof Geometry Technology to generate QuickMeasure reports.

Roof Geometry Technology uses a computer-implemented method in a roof estimate report

system including at least one processor and a memory coupled to the at least one processor. *See*

e.g., Ex. 31 (PP0301).

215.   Roof Geometry Technology displays, by the at least one processor of the roof

estimate report system, a plurality of aerial images of a roof at the same time, each of the aerial

images providing a different view, taken from a different angle of the same roof. ████████

███████████████
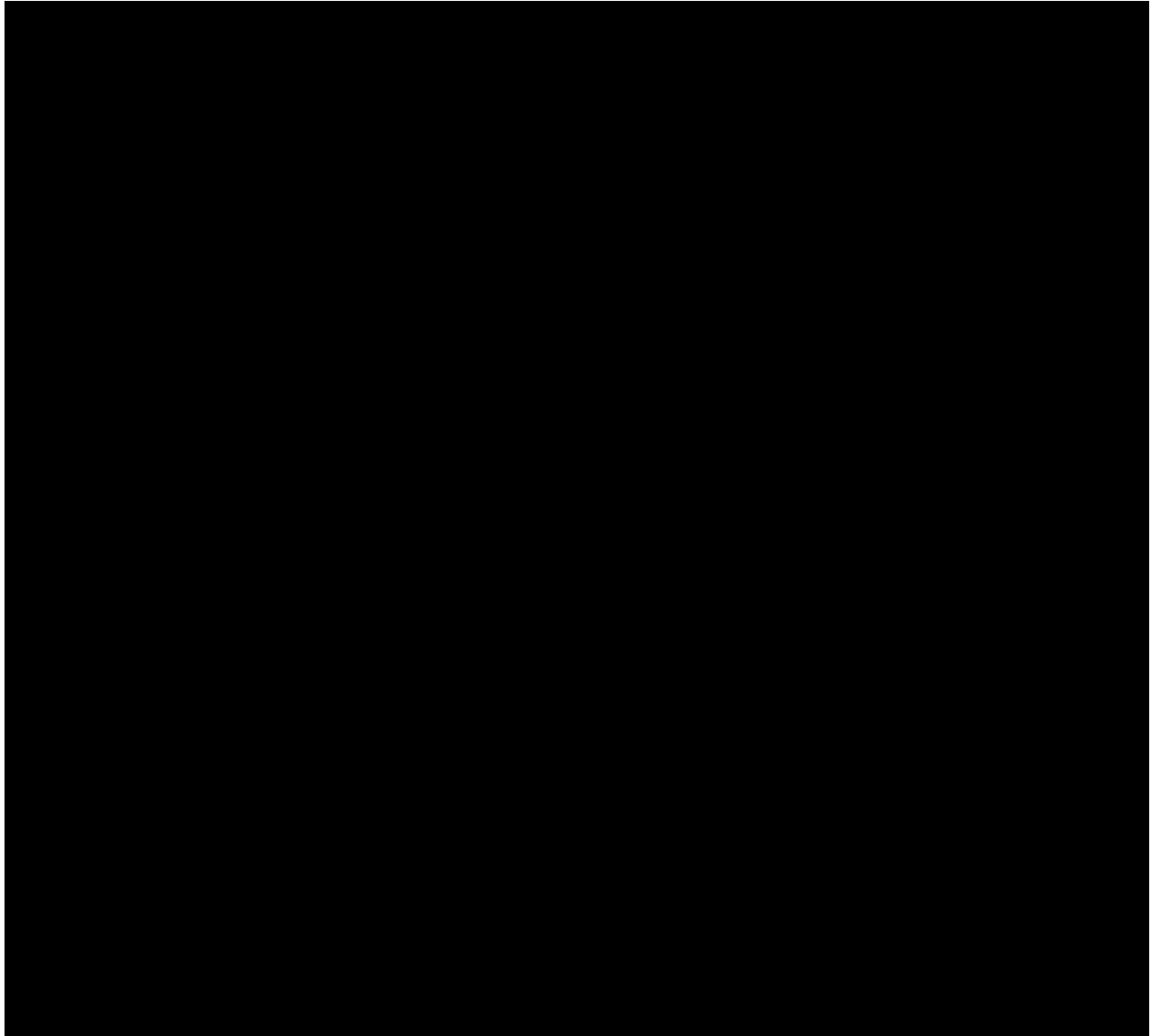
216.   Roof Geometry Technology displays, by the at least one processor of the roof

estimate report system, respective line drawings representing features of the roof, the respective

line drawings overlying a first and a second aerial image of the plurality of aerial images of the

roof, the line drawing overlying the first aerial image of the roof having features in common with

the line drawing overlying the second aerial image of the roof. ██████████████████

██████████

217.   Roof Geometry Technology, in response to user input, changes, by the at least one

processor of the roof estimate report system, the line drawing representing a feature of the roof

that overlies the first aerial image of the roof.

218.   In response to the changing, Roof Geometry Technology makes corresponding

changes, by the at least one processor of the roof estimate report system, to the line drawing

overlying the second aerial image.

219.   Roof Geometry Technology generates and outputs a roof estimate report using a

report generation engine, wherein the roof estimate report includes numerical values for

91

corresponding slope, area, or lengths of edges of at least some of a plurality of planar roof

sections of the roof. For example, as part of Roof Geometry Technology, ███████████ generate

and output a roof report that includes numerical values for corresponding slope (i.e., "Pitch"),

area, and/or lengths of edges of a plurality of planar roof sections:

GAF QuickMeasure Sample Report, Ex. 32.

https://www.gaf.com/en-us/quickmeasure
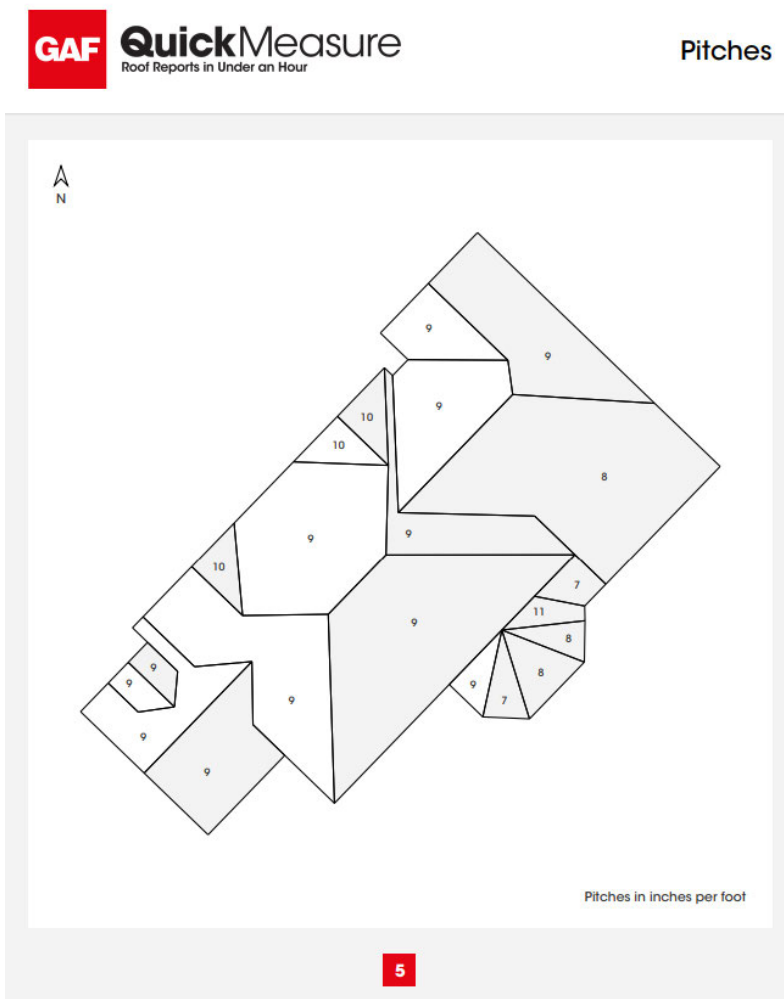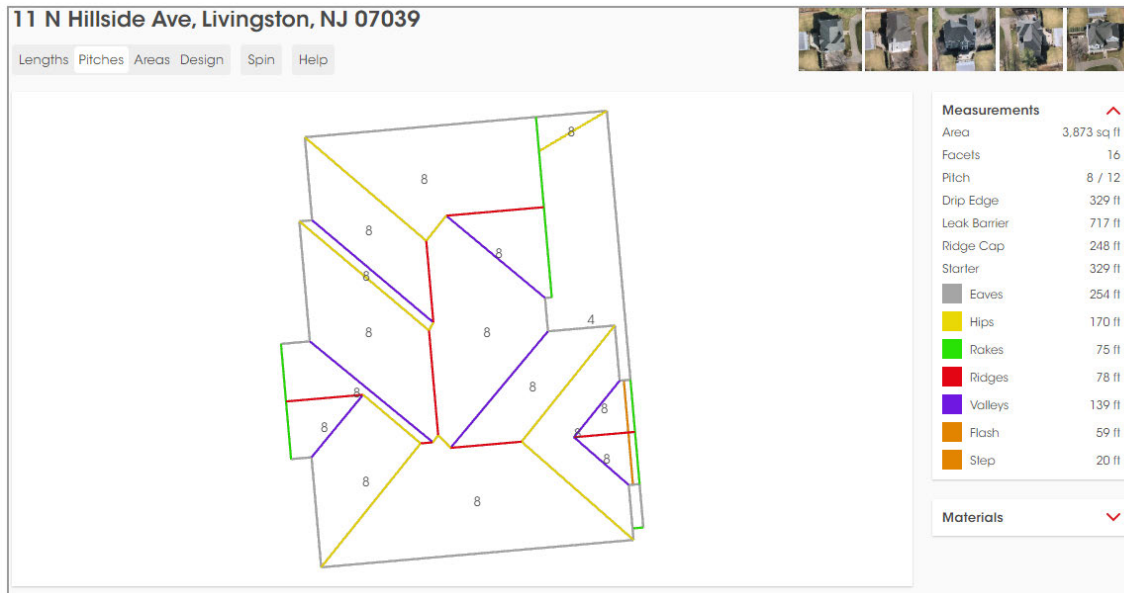
220.   As shown by the materials lists, this report is provided for repair and/or constructing the roof structure of the building.

	Waste	0%	10%	15%	20%
Timberline Products					
HDZ, HD, Natural Shadow, American Harvest, Reflector, Royal Sovereign, and Cool Series	bundle	145	159	166	174
Starter					
WeatherBlocker	bundle	4	5	5	5
Pro-Start	bundle	4	4	4	4
Quick-Start	roll	12	13	14	14
Roof Deck Protection *					
Deck-Armor, Tiger Paw, FeltBuster 10 sq	roll	5	6	6	6
Shingle-Mate	roll	12	14	14	15
VersaShield	roll	14	15	16	17
Leak Barrier *					
StormGuard, WeatherWatch 2 sq	roll	12	14	14	15
WeatherWatch 1.5 sq	roll	16	18	19	20
Ridge Cap					
Seal-A-Ridge	bundle	12	13	14	15
TimberTex	bundle	15	17	17	18
Z-Ridge	bundle	9	10	11	11
TimberCrest	box	15	17	17	18

Ventilation

Rigid Vent 3, Snow Country, Snow Country Advanced, Hip Vent, IntakePro, Exhaust Vent (Mesh), RidgeRunner, Master Flow Vents

GAF recommends at least one square foot of attic ventilation (evenly split between intake and exhaust) for every 300 square feet of attic floor space. Visit the GAF ventilation calculator for more information at www.gaf.com/ventcalculator.

GAF QuickMeasure Sample Report, Ex. 32.

221.   In addition, GAF infringes at least under 35 U.S.C. § 271(g) by selling

QuickMeasure reports, which are a product made by a process patented by the '737 Patent.

222.   On information and belief, Nearmap has had knowledge of the '737 Patent prior

to the filing of the instant complaint (and in no case later than the filing of complaints against

each of Nearmap and GAF on May 4, 2021), including because the '737 Patent is identified on

EagleView's website and roof reports as covering EagleView's technology and roof reports. The

Accused Products are remarkably similar to, and appear to have been copied from, EagleView's

technology and roof reports, confirming that Nearmap monitors EagleView's website, products,

roof reports, and patents. *See, e.g.*, Ex. 26.

223.   Additionally, Nearmap would have been aware of the substantial press coverage of EagleView's patent portfolio as it relates to roof reports, which includes the '737 Patent, in light of EagleView's recent successful litigation against Xactware Solutions, Inc. and Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27.

224.   In addition to directly infringing the '737 Patent, Nearmap has in the past and continues to indirectly infringe the '737 Patent by inducing direct infringement by others, such as end users of rooftop aerial measurement products, including but not limited to the Accused Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial measurement products, including but not limited to the Accused Products, by its end users infringes at least one claim of the '737 Patent prior the filing of the instant complaint. Nearmap knowingly induced such use of those products in a manner that infringes the '737 Patent, including through at least promotional, advertising, and instructional materials, and Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has indirectly infringed and continues to indirectly infringe at least one claim of the '737 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(b).

225.   Nearmap has also contributed to the direct infringement of the '737 Patent by others, such as end users of rooftop aerial measurement products, including but not limited to the Accused Products. The Accused Products are a material or apparatus for use in practicing the patented processes of the '737 Patent and are a material part of the invention. The Accused Products are especially made or adapted for use in infringement of the asserted claims, and are not a stable article of commerce suitable for any substantial non-infringing use. Nearmap makes, sells, and offers to sell the Accused Products, whose ordinary and intended use constitutes direct

infringement of the '737 Patent. As one example, GAF offers to sell and sells QuickMeasure

reports that infringe under at least 35 U.S.C. § 271(g), and Nearmap contributes to this

infringement by ███

███████

226.   To the extent the claimed method steps are performed by multiple entities, such as

to create QuickMeasure reports, Nearmap is liable as part of a joint enterprise or, in the

alternative, as a direct infringer to whom performance of all method steps are attributable, as set

forth in paragraphs 113-116 above.

227.   Nearmap's infringement of the '737 Patent has been and continues to be willful.

Nearmap has acted with knowledge of the '737 Patent and without a reasonable basis for a good-

faith belief that it would not be liable for infringement of the '737 Patent. For example,

subsequent to learning of the '737 Patent, Nearmap continued to make and use rooftop aerial

measurement products, including but not limited to the Accused Products, which appear copied

from Plaintiffs as set forth above, within the United States in a manner that infringes the '737

Patent. Nearmap has disregarded and continues to disregard its infringement and/or an

objectively high likelihood that its actions constitute infringement of the '737 Patent. This

objectively-defined risk was known or is so obvious that it should have been known to Nearmap.

Nearmap's infringement of the '737 Patent has been and continues to be willful, entitling

EagleView to enhanced damages under 35 U.S.C. § 284.

228.   Defendants' acts of infringement have caused damage to EagleView, and

EagleView is entitled to recover from Defendants the damages sustained by EagleView as a

result of Defendants' wrongful acts in an amount subject to proof at trial.

229.   Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to EagleView for which there is no adequate remedy at law.

230.   This case is exceptional, entitling EagleView to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT VI - INFRINGEMENT OF THE '568 PATENT

231.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

232.   The USPTO duly and legally issued the '568 Patent on December 6, 2016.

233.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '568 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

234.   Nearmap makes, uses, imports, and/or sells rooftop aerial measurement products, including but not limited to the Accused Products, within the United States, and as such, Nearmap has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '568 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a) and (g).

235.   Claim 1 of the '568 Patent recites:

A computer-implemented method for generating a roof estimate report, the method comprising:

receiving a request for a roof estimate report for a roof of a building; receiving location information regarding the building having the roof;

receiving a first aerial image of the building having the roof;

receiving a second aerial image of the building having the roof, the first and second aerial images of the building having been taken independent of each other, the

first and second aerial images of the building providing different views of the roof from each other, the first aerial image of the building including a top plan view of the roof and the second aerial image of the building including an oblique perspective view of the roof;

calibrating at least one of the first and second aerial images of the building using calibration information received from a calibration module;

performing image analysis on the first and second aerial images of the building by correlating the first aerial image of the building with the second aerial image of the building, the correlating including registering pairs of points on the first and second aerial images of the building, each pair of points corresponding to a same point on the roof depicted in each of the first and second aerial images of the building;

generating, based at least in part on the correlation of the first and second aerial images of the building, a three-dimensional model of the roof that includes a plurality of planar roof sections that each have a corresponding pitch, area, and edges;

determining a pitch of a plurality of sections of the roof;

determining a direction of the pitch for each of the plurality of sections of the roof for which a pitch was determined;

generating a roof estimate report that includes at least one top plan view of the three-dimensional model annotated with numerical indications of the determined pitch and the direction of the pitch;

determining a ridge line and a valley line of the roof;

displaying, on at least one top plan view of the three-dimensional model included in the roof estimate report, a ridge line in which a property of the ridge line being a ridge line is conveyed by the ridge line being displayed in a first color;

displaying, on at least one top plan view of the three-dimensional model included in the roof estimate report, a valley line in which a property of the valley line being a valley line is conveyed by the valley line being a second color different from the first color; and

transmitting the generated roof report.

236.   The Accused Products infringe at least claim 1 of the '568 Patent, including by Nearmap's use of the Accused Products to perform the claimed method. As one example, Nearmap on OpenSolar infringes claim 1.

237.   As described in Paragraphs 87-88, *supra*, Nearmap on OpenSolar includes a computer-implemented method for generating a roof estimate report.

238.   Nearmap on OpenSolar receives a request for a roof estimate report for a roof of a building and receives location information regarding a building having the roof (such as through a user inputting address information in the upper left corner):
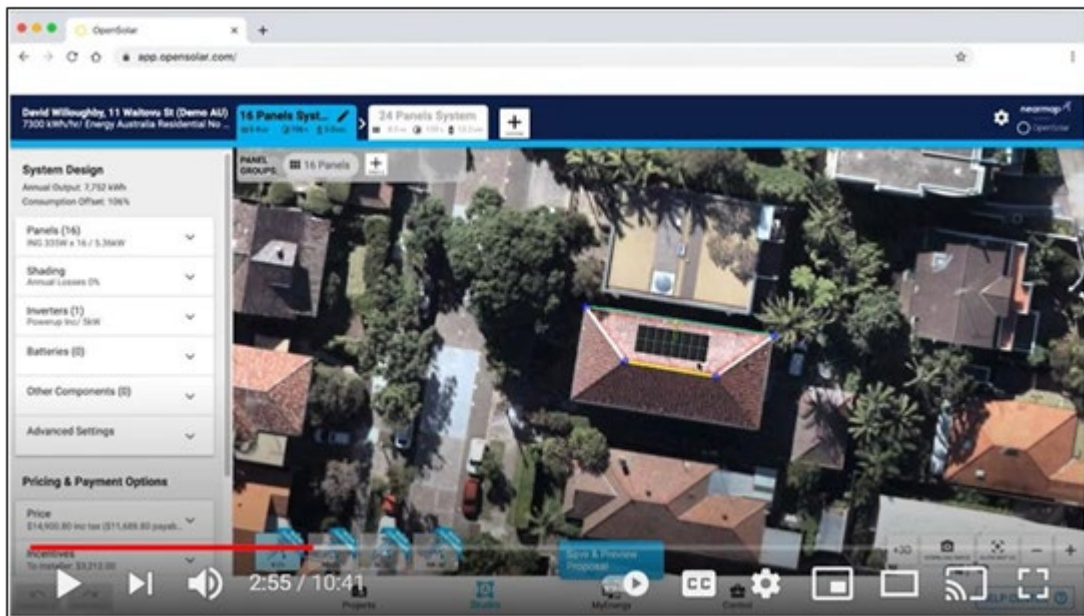
See https://www.youtube.com/watch?v=CUh664Wj3JY (Nearmap on OpenSolar).

239.   As described in Paragraph 89, *supra*, Nearmap on OpenSolar receives a first aerial image of the building having the roof, and receives a second aerial image of the building having a roof. This is also shown in the bottom left corner, where "Nearmap Source Imagery" is received for vertical, northeast, southeast, southwest, and northwest views:
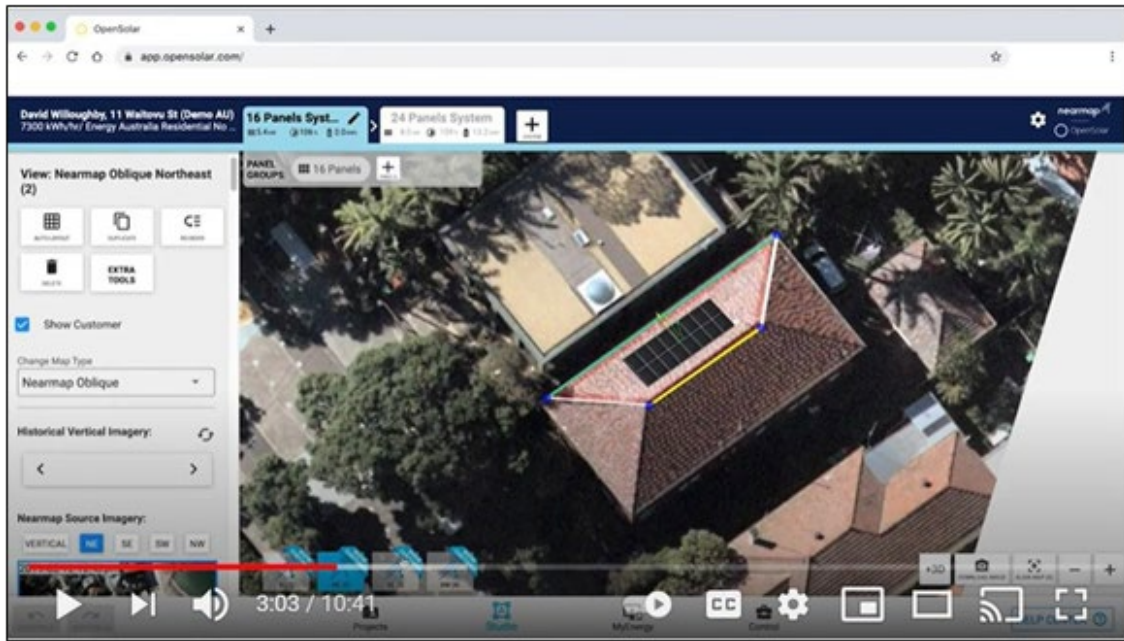
See https://www.youtube.com/watch?v=CUh664Wj3JY (Nearmap on OpenSolar).

240.   In Nearmap on OpenSolar, the first and second aerial images of the building have

been taken independent of each other, the first and second aerial images of the building provide

different views of the roof from each other, the first aerial image of the building includes a top

plan view of the roof and the second aerial image of the building includes an oblique perspective

view of the roof, as shown in the image above.

241.   Additionally, Nearmap describes how it "regularly flies 2-3 times per year" to

obtain more aerial images, which are used in Nearmap on OpenSolar:

See Ex. 22.

242.   Nearmap on OpenSolar calibrates at least one of the first and second aerial images

of the building using calibration information received from a calibration module. For example,

aerial images are calibrated using information about the angles and height from which they were taken.

243.   Nearmap on OpenSolar performs image analysis on the first and second aerial images of the building by correlating the first aerial image of the building with the second aerial image of the building, the correlating including registering pairs of points on the first and second aerial images of the building, each pair of points corresponding to a same point on the roof depicted in each of the first and second aerial images of the building. For example, Nearmap on OpenSolar instructs users to manually correlate the roof edges first in vertical view, and then align them to correlate in the oblique view. This process includes registering pairs of points in the two aerial images that correspond to the same roof points in both images:

See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar) at 1:45, 2:45.

244.   Nearmap on OpenSolar generates, based at least in part on the correlation of the first and second aerial images of the building, a three-dimensional model of the roof that includes a plurality of planar roof sections that each have a corresponding pitch, area, and edges:
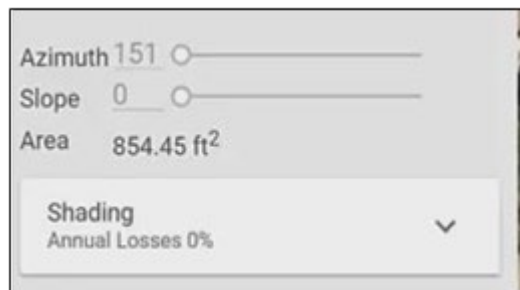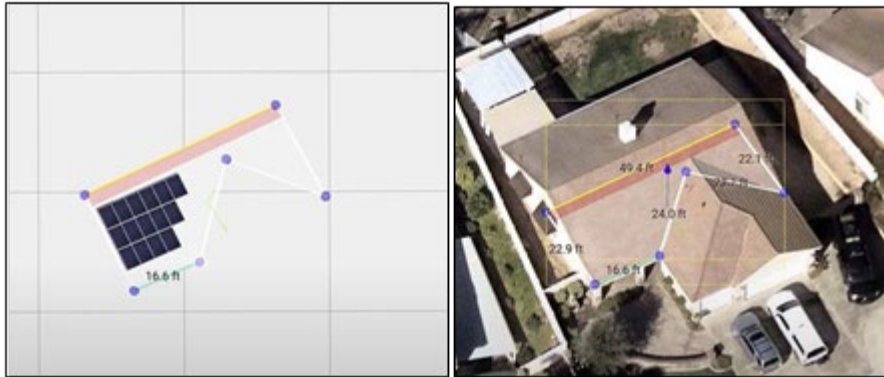
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar) at 4:19, 3:03.

245.   Nearmap on OpenSolar determines a pitch of a plurality of sections of the roof, determines a direction of the pitch for each of the plurality of sections of the roof for which a pitch was determined, and generates a roof estimate report that includes at least one top plan view of the three-dimensional model annotated with numerical indications of the determined pitch and the direction of the pitch. For example, Nearmap on OpenSolar determines the pitch for a plurality of roof sections, such as through a pitch determination marker; based on the pitch determination marker, Nearmap on OpenSolar indicates the pitch, or "slope," of the planar roof section:

ON DEMAND MOBILITY

The intuitive and powerful SolarTouch design gives you greater control of your solar calculations and works on any device, allowing you the ability to create on-the-go. Calculate accurate roof slope and azimuth with Nearmap high-res oblique imagery and design multiple options to wow your customer.

See Ex. 18 (Nearmap on OpenSolar).
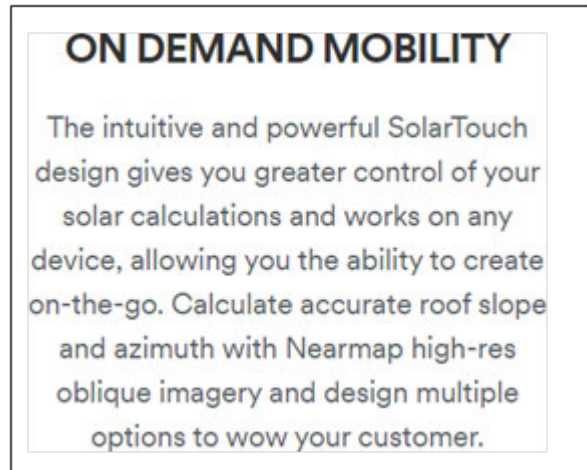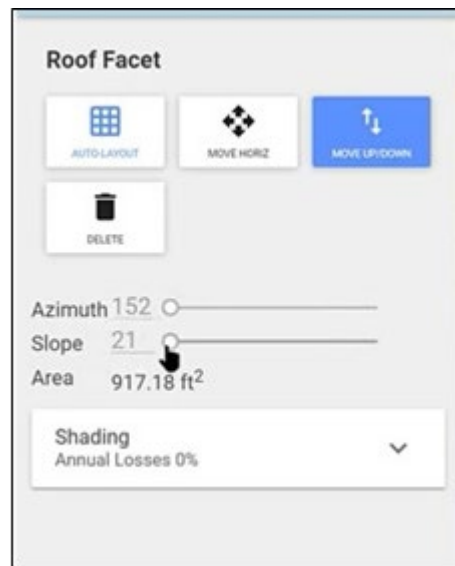
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar) at 3:24-28.

246.   As shown below, Nearmap on OpenSolar determines a direction of the pitch for each of the roof sections for which a pitch was determined, as indicated by the green arrows showing the direction of the pitch:

103
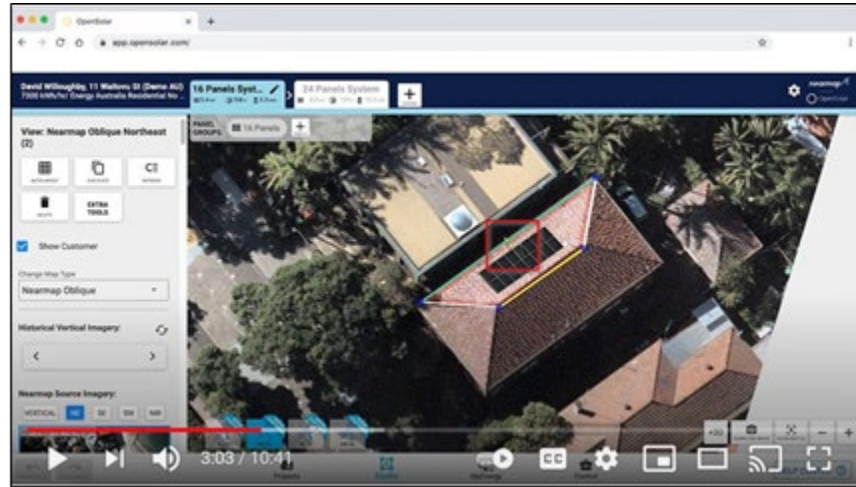
See https://www.youtube.com/watch?v=CUh664Wj3JY (Nearmap on OpenSolar).

247.   Additionally, on information and belief, the direction of pitch must necessarily have been determined because the customer needs to know which direction the solar panels will face in order to calculate power and efficiency; if the pitch in the above photo was inverted, the solar panels would yield entirely different results not consistent with the rest of the report, which calculates system performance (that depends, *inter alia*, on roof pitch):
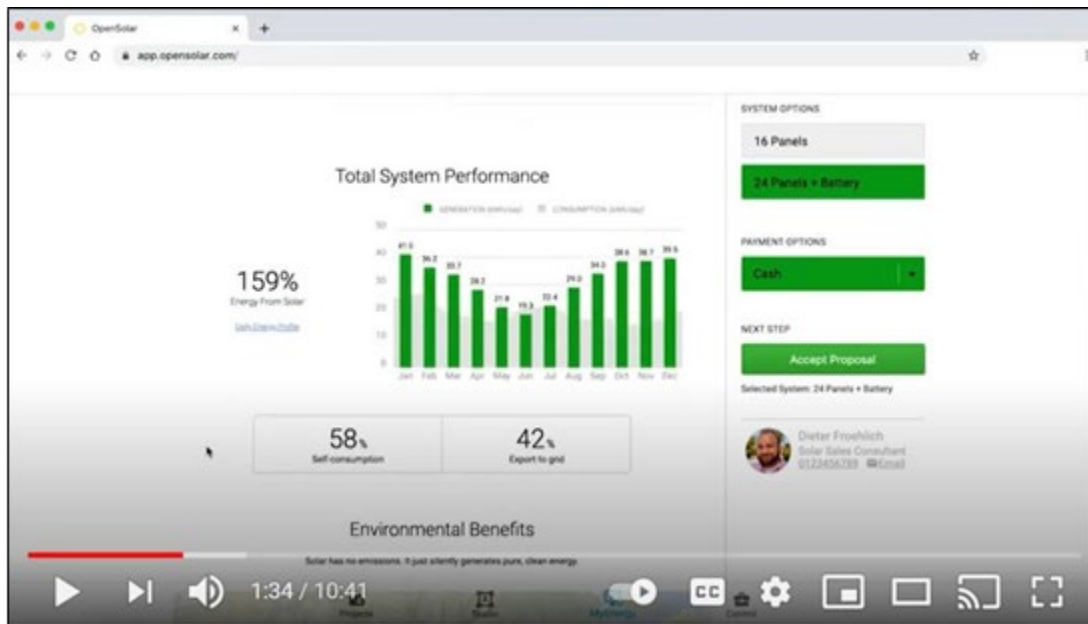
See https://www.youtube.com/watch?v=CUh664Wj3JY (Nearmap on OpenSolar).

248.   Nearmap on OpenSolar determines a ridge line and a valley line of the roof,

shown in the outlines below:
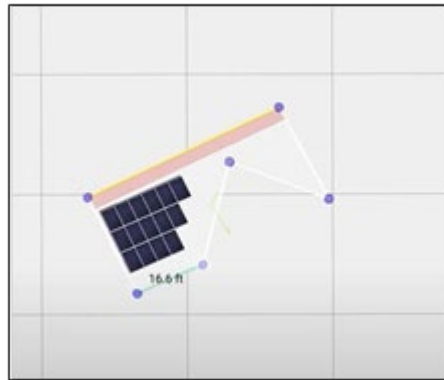
See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar) at 4:20.

249.   Nearmap on OpenSolar displays, on at least one top plan view of the three-

dimensional model included in the roof estimate report, a ridge line in which a property of the

ridge line being a ridge line is conveyed by the ridge line being displayed in a first color (e.g.,

yellow) and displays, on at least one top plan view of the three-dimensional model included in

the roof estimate report, a valley line in which a property of the valley line being a valley line is

conveyed by the valley line being a second color different from the first color (e.g., green), as

shown above.

250.   As another example, in a top plan view of the 3D model, ridge lines and valley

lines are indicated by different colors:
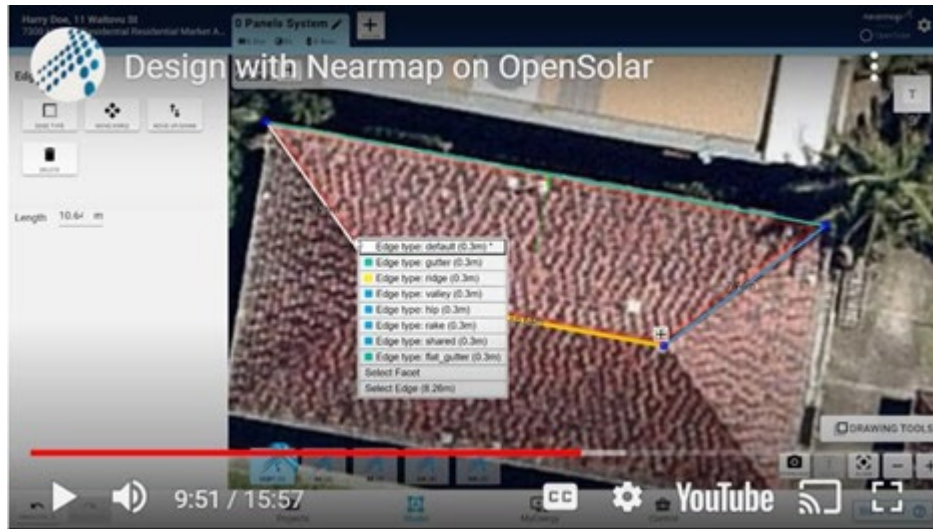
See https://docs.nearmap.com/display/TUT/Module+3%3A+Design+with+Nearmap+o
n+OpenSolar (Nearmap on OpenSolar).

251.   Nearmap on OpenSolar transmits the generated roof report, for example on or

through a computer:
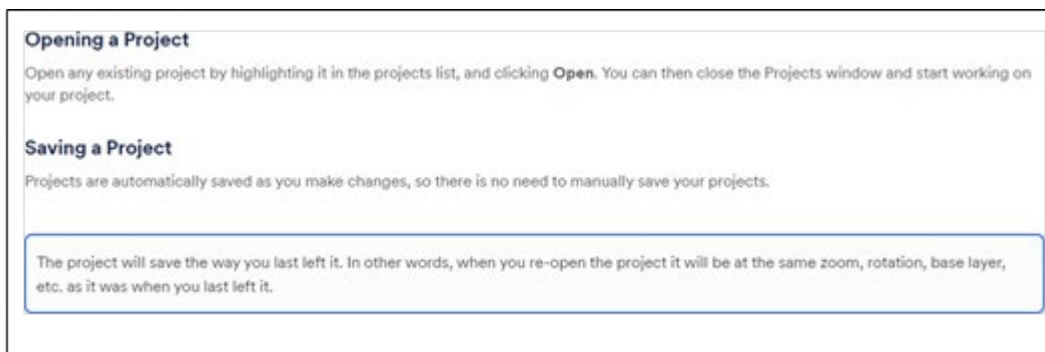
See Ex. 23.

252.   Roof Geometry Technology infringes at least claim 1 of the '568 Patent,

including by Nearmap's use of Roof Geometry Technology to generate QuickMeasure reports.

Roof Geometry Technology comprises a computer-implemented method for generating a roof

estimate report. *See e.g.*, Ex. 31 (PP0301).

253.   Roof Geometry Technology receives a request for a roof estimate report for a roof

of a building. For example, a customer can request a roof report from GAF's website. *See*

https://quickmeasure.gaf.com/guest-home-page.

254.   Roof Geometry Technology receives location information regarding the building

having the roof. For example, ██

██████████████████████████████████████

255.   Roof Geometry Technology receives a first aerial image of the building having a

roof. For example, ██

██

██████████████████████████████████████
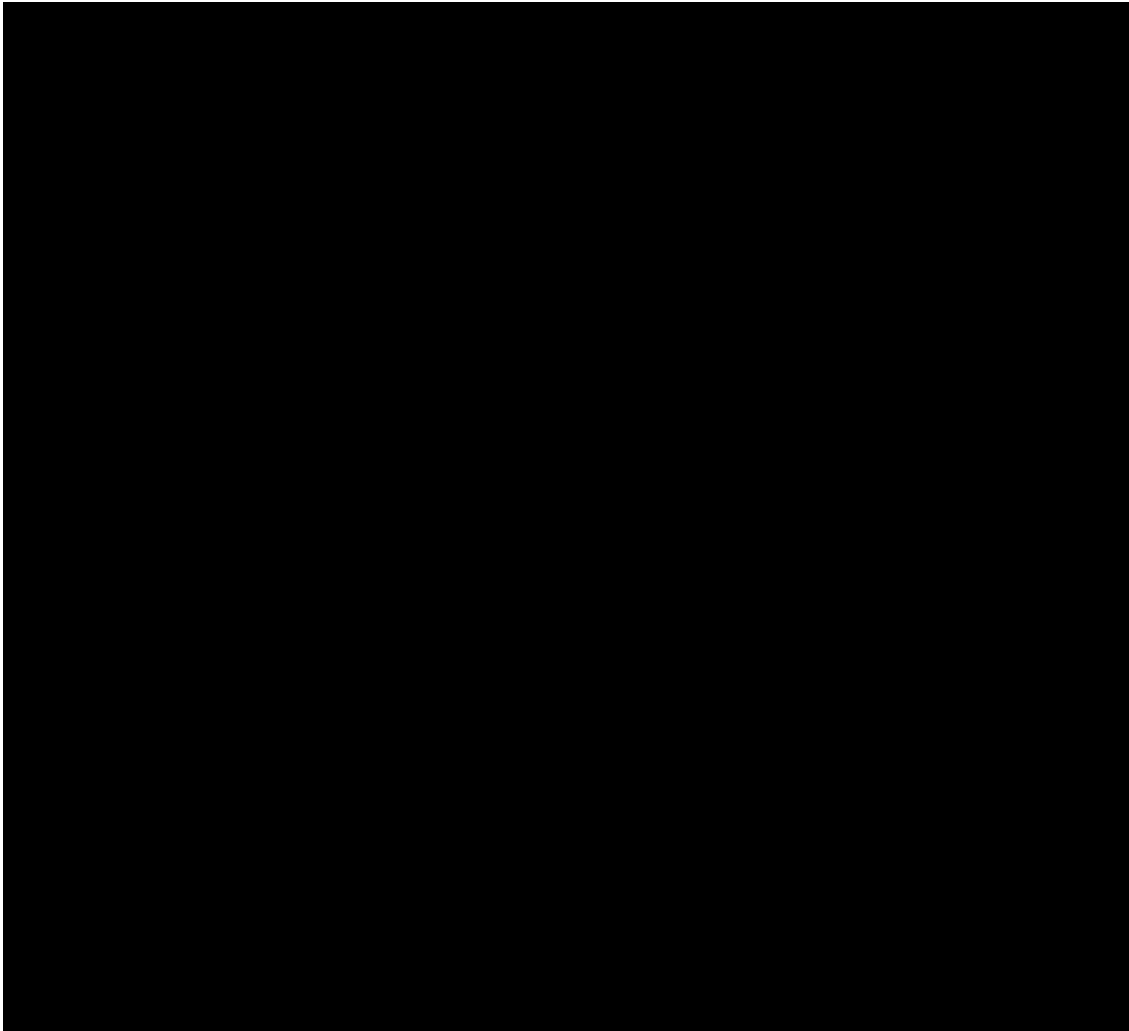
256.   Roof Geometry Technology receives a second aerial image of the building having the roof, the first and second aerial images of the building having been taken independent of each other, the first and second aerial images of the building providing different views of the roof from each other, the first aerial image of the building including a top plan view of the roof and the second aerial image of the building including an oblique perspective view of the roof. For example, images received as part of the ████████████████████████ process are taken independently, including on different dates at different times.

Each 3D capture is made up of multiple surveys, flown at different dates, so the entire scene could be made up of photos taken over one to three months. This means that there may be several capture dates included in the export. These are listed in the ReadMe file that is included in the export.

https://docs.nearmap.com/display/ND/Export+3D

257.   Images received as part of the ████████████ step include both top down and oblique aerial images.

258.   Roof Geometry Technology calibrates at least one of the first and second aerial images of the building using calibration information received from a calibration module. For example, ██

259.   Roof Geometry Technology performs image analysis on the first and second aerial images of the building by correlating the first aerial image of the building with the second aerial image of the building, the correlating including registering pairs of points on the first and second aerial images of the building, each pair of points corresponding to a same point on the roof depicted in each of the first and second aerial images of the building. For example, ████ ██

260.   Roof Geometry Technology generates, based at least in part on the correlation of the first and second aerial images of the building, a three-dimensional model of the roof that includes a plurality of planar roof sections that each have a corresponding pitch, area, and edges. For example, ████████████████████████

109

261.   Roof Geometry Technology determines a pitch of a plurality of sections of the roof. For example, the pitch of a plurality of sections is displayed in the resulting GAF QuickMeasure roof report. *See* GAF QuickMeasure Sample Report, Ex. 32.

262.   Roof Geometry Technology determines a direction of the pitch for each of the plurality of sections of the roof for which a pitch was determined. For example, this is indicated by shading for all the roof sections.
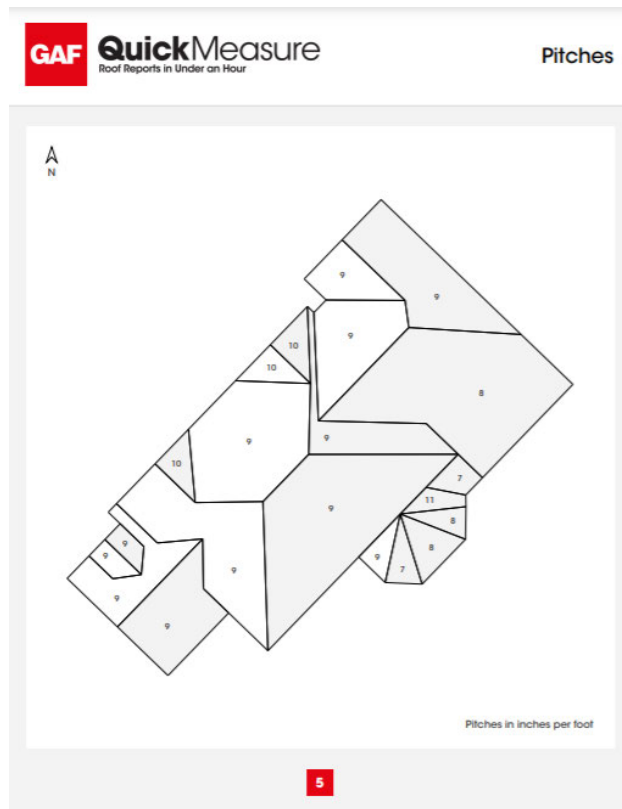
GAF QuickMeasure Sample Report, Ex. 32.

263.   Roof Geometry Technology generates a roof estimate report that includes at least one top plan view of the three-dimensional model annotated with numerical indications of the determined pitch and the direction of the pitch. For example, this information is output in the GAF QuickMeasure report.

110

264.   Roof Geometry Technology determines a ridge line and a valley line of the roof and displays, on at least one top plan view of the three-dimensional model included in the roof estimate report, a ridge line in which a property of the ridge line being a ridge line is conveyed by the ridge line being displayed in a first color. For example, the output GAF QuickMeasure roof report shows "lengths in feet" and multiple colors are used to indicate roof features, such as green for ridges.

GAF QuickMeasure Sample Report, Ex. 32.

265.   Roof Geometry Technology displays, on at least one top plan view of the three-dimensional model included in the roof estimate report, a valley line in which a property of the valley line being a valley line is conveyed by the valley line being a second color different from the first color. For example, in the output GAF QuickMeasure Roof Report, the ridge line is green and the valley line is purple.

GAF QuickMeasure Sample Report, Ex. 32.

266.   Roof Geometry Technology transmits the generated roof report, for example, █ ▌

████████████████████████████. *See* Ex. 31 (PP0301).

267.   In addition, GAF infringes at least under 35 U.S.C. § 271(g) by selling

QuickMeasure reports, which are a product made by a process patented by the '568 Patent.

268.   On information and belief, Nearmap has had knowledge of the '568 Patent prior

the filing of the instant complaint because the '568 Patent is identified on EagleView's website

and roof reports as covering EagleView's technology and roof reports. The Accused Products are

remarkably similar to, and appear to have been copied from, EagleView's technology and roof

reports, confirming that Nearmap monitors EagleView's website, products, roof reports, and

patents. *See, e.g.*, Ex. 26.

112

269.   Additionally, Nearmap would have been aware of the substantial press coverage of EagleView's patent portfolio as it relates to roof reports, which includes the '568 Patent, in light of EagleView's recent successful litigation against Xactware Solutions, Inc. and Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27.

270.   In addition to directly infringing the '568 Patent, Nearmap has in the past and continues to indirectly infringe the '568 Patent by inducing direct infringement by others, such as end users of rooftop aerial measurement products, including but not limited to the Accused Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial measurement products, including but not limited to the Accused Products, by its end users infringes at least one claim of the '568 Patent prior to the filing of the instant complaint. Nearmap knowingly induced such use of those products in a manner that infringes the '568 Patent, including through at least promotional, advertising, and instructional materials, and Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has indirectly infringed and continues to indirectly infringe at least one claim of the '568 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(b).

271.   Nearmap has also contributed to the direct infringement of the '568 Patent by others, such as end users of rooftop aerial measurement products, including but not limited to the Accused Products. The Accused Products are a material or apparatus for use in practicing the patented processes of the '568 Patent and are a material part of the invention. The Accused Products are especially made or adapted for use in infringement of the asserted claims, and are not a stable article of commerce suitable for any substantial non-infringing use. Nearmap makes, sells, and offers to sell the Accused Products, whose ordinary and intended use constitutes direct

infringement of the '568 Patent. As one example, GAF offers to sell and sells QuickMeasure

reports that infringe under at least 35 U.S.C. § 271(g), and Nearmap contributes to this

infringement by ███

████

272.   To the extent the claimed method steps are performed by multiple entities, such as

to create QuickMeasure reports, Nearmap is liable as part of a joint enterprise or, in the

alternative, as a direct infringer to whom performance of all method steps are attributable, as set

forth in paragraphs 113-116 above.

273.   Nearmap's infringement of the '568 Patent has been and continues to be willful.

Nearmap has acted with knowledge of the '568 Patent and without a reasonable basis for a good-

faith belief that it would not be liable for infringement of the '568 Patent. For example,

subsequent to learning of the '568 Patent, Nearmap continued to make and use rooftop aerial

measurement products, including but not limited to the Accused Products, which appear copied

from Plaintiffs as set forth above within the United States in a manner that infringes the '568

Patent. Nearmap has disregarded and continues to disregard its infringement and/or an

objectively high likelihood that its actions constitute infringement of the '568 Patent. This

objectively-defined risk was known or is so obvious that it should have been known to Nearmap.

Nearmap's infringement of the '568 Patent has been and continues to be willful, entitling

EagleView to enhanced damages under 35 U.S.C. § 284.

274.   Defendants' acts of infringement have caused damage to EagleView, and

EagleView is entitled to recover from Defendants the damages sustained by EagleView as a

result of Defendants' wrongful acts in an amount subject to proof at trial.

275. Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to EagleView for which there is no adequate remedy at law.

276. This case is exceptional, entitling EagleView to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

<div align="center"><u>COUNT VII - INFRINGEMENT OF THE '960 PATENT</u></div>

277. Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

278. The USPTO duly and legally issued the '960 Patent on January 7, 2020.

279. Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '960 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

280. Nearmap makes, uses, imports, and/or sells rooftop aerial measurement products, including but not limited to the Accused Products, within the United States, and as such, Nearmap has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '960 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a) and (g).

281. Claim 1 of the '960 Patent recites:

A process comprising:

receiving, by at least one computer processor that includes a calibration module stored in a non-transitory memory coupled to the at least one processor, a plurality of aerial image fields of a building having a roof including a first aerial image file taken from a first viewpoint of the building a second aerial image filed taken from a second viewpoint of the building different than the first viewpoint, wherein at least one of the first aerial image file and the second aerial image file has calibration information associated with the at least one of the first aerial image file and the second aerial image file;

determining, by any of the at least one computer processor, a pitch and an area of one or more roof sections of the roof based on an image analysis performed on the plurality of aerial image files, wherein the image analysis comprises:

constructing a three dimensional model of one or more roof sections by:

calibrating at least one of the first and second aerial image files using the calibration information associated with the at least one of the first aerial image file and the second aerial image file to convert a distance in pixels between two points on the respective aerial image file into a physical length;

identifying common reference points depicted in at least the first aerial image file and the second aerial image file;

identifying, for all such reference points, a location in three-

dimensional space by triangulating the reference points by projecting a first line originating from the first viewpoint through one of the reference points and a second line originating from the second viewpoint through the same reference point and determining an intersection of the first and second lines; and

determining physical length between at least two of the reference points in three-dimensional space based at least in part on the calibration;

generating, by any of the at least one computer processor a roof report that includes the pitch and the area of the one or more roof sections based on the determined pitch and area of the one or more roof sections wherein the roof report is useful as a guide to repair or replace the roof of the building, where in the pitch is indicative of a vertical rise of a roof section over a horizontal run of the roof section; and

outputting the roof report having the determined pitch therein.

282.   The Accused Products infringe at least claim 1 of the '960 Patent. As one example, Nearmap on OpenSolar infringes claim 1.

283.   As described in Paragraphs 174-178, *supra*, Nearmap on OpenSolar comprises a process in which it receives, by at least one computer processor that includes a calibration module stored in a non-transitory memory coupled to the at least one processor, a plurality of aerial image fields of a building having a roof including a first aerial image file taken from a first

viewpoint of the building a second aerial image filed taken from a second viewpoint of the

building different than the first viewpoint, wherein at least one of the first aerial image file and

the second aerial image file has calibration information associated with the at least one of the

first aerial image file and the second aerial image file.

284.   The calibration information associated with the aerial images includes, for

example, the geolocation and other data (such as height and angle) associated with them. For

example, Nearmap records the perspectives (*e.g.*, angles, height) from which its aerial images

were taken:

> **GPS coordinates and PPP**
>
> Our capture process uses GPS coordinates, which are further refined using PPP (Precise Point Positioning). Because of this, the resulting imagery is georeferenced using ITRF2014 at the epoch of capture.
>
> For example, the epoch of a capture from May 1, 2018 is ITRF2014(2018.329). With ITRF2014 being an earth-fixed datum (as opposed to plate-fixed datums such as GDA94 or NAD83), imagery aligned to ITRF is subject to continental drift. For example, in Australia the movement is 70mm per year and some parts of the US move at about 14mm per year. In order to compensate for the continental drift, we provide plate-fixed projections through WMS and reverse the shift by a variable amount depending on the capture epoch. Those projections are based on either GDA94/GDA2020 (Australia) or NAD83 (US). As a consequence, we encourage you to use one of the plate-fixed projections in order to minimise misalignment in your GIS application, especially using surveys captured years apart.
>
> This information should aid you in correctly georeferencing our imagery. We found that in most cases, it is sufficient to use one of our NAD83 or GDA94/GDA2020 projections to eliminate positional errors due to datum differences.
>
> Nearmap also uses ground control points to verify our accuracy claims. Characteristics of our ground control points include good visibility, precise location, accurate location, and open ground location. In essence, this means that the sample of ground points used are clearly identifiable in our aerial imagery without ambiguity, have a high accuracy of less than 2cm, and are not subject to terrain distortions.

See Ex. 12.

285.   As described in Paragraphs 175-180, *supra*, Nearmap on OpenSolar determines,

by any of the at least one computer processor, a pitch and an area of one or more roof sections of

the roof based on an image analysis performed on the plurality of aerial image files.

286.   As described in Paragraphs 175-180, *supra*, in Nearmap on OpenSolar, the image analysis comprises constructing a three dimensional model of one or more roof sections by calibrating at least one of the first and second aerial image files using the calibration information associated with the at least one of the first aerial image file and the second aerial image file to convert a distance in pixels between two points on the respective aerial image file into a physical length; identifying common reference points depicted in at least the first aerial image file and the second aerial image file; identifying, for all such reference points, a location in three-dimensional space by triangulating the reference points by projecting a first line originating from the first viewpoint through one of the reference points and a second line originating from the second viewpoint through the same reference point and determining an intersection of the first and second lines; and determining physical length between at least two of the reference points in three-dimensional space based at least in part on the calibration.

287.   For example, Nearmap technology, which is used in at least some of Nearmap's imagery, triangulates the reference points by projecting lines from the first and second reference points and determining an intersection. For example, the aerial images can contain "textured mesh," which is defined as follows:

Textured Mesh	3D triangulated surface mesh with photo realistic textures

See Ex. 24.

288.   As described in Paragraph 180, *supra*, Nearmap on OpenSolar generates, by any of the at least one computer processor a roof report that includes the pitch and the area of the one or more roof sections based on the determined pitch and area of the one or more roof sections.

The roof report generated by Nearmap on OpenSolar is useful as a guide to repair or replace the roof of the building, where in the pitch is indicative of a vertical rise of a roof section over a horizontal run of the roof section:
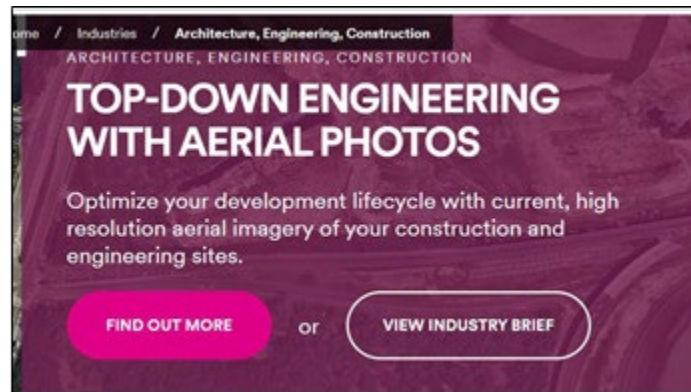
See Ex. 20.

See Ex. 21.

289.   As described in Paragraphs 180-181, *supra*, Nearmap on OpenSolar outputs the roof report having the determined pitch therein.

290.   Roof Geometry Technology infringes at least claim 1 of the '960 Patent, including by Nearmap's use of Roof Geometry Technology to generate QuickMeasure reports. Roof Geometry Technology comprises a process. For example, the process is computer implemented. *See e.g.*, Ex. 31 (PP0301).

291.   Roof Geometry Technology receives, by at least one computer processor that includes a calibration module stored in a non-transitory memory coupled to the at least one processor, a plurality of aerial image files of a building having a roof including a first aerial

119

image file taken from a first viewpoint of the building a second aerial image file taken from a

second viewpoint of the building different than the first viewpoint, wherein at least one of the

first aerial image file and the second aerial image file has calibration information associated with

the at least one of the first aerial image file and the second aerial image file. For example,
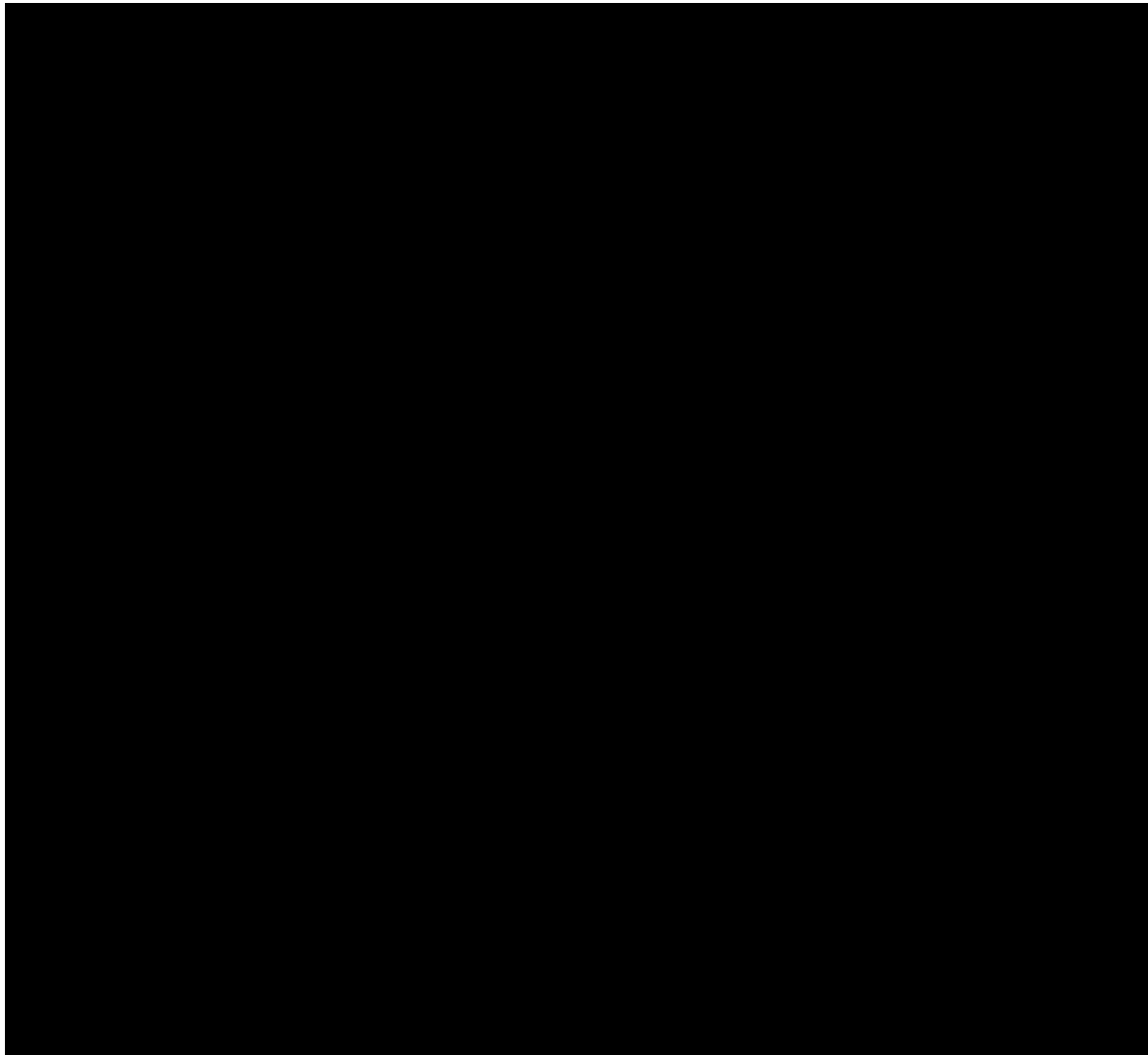
292.   Roof Geometry Technology determines, by any of the at least one computer processor, a pitch and an area of one or more roof sections of the roof based on an image analysis performed on the plurality of aerial image files. For example, at the end of the process, a QuickMeasure roof report is created that includes pitch and area information of the roof sections. *See e.g.*, Ex. 31 (PP0301).

293.   The image analysis comprises the construction of a 3D model of one or more roof sections. For example, ██

294.   The image analysis comprises calibrating at least one of the first and second aerial image files using the calibration information associated with the at least one of the first aerial image file and the second aerial image file to convert a distance in pixels between two points on the respective aerial image file into a physical length. For example, ████████████████████

██

██

████████████████████████

295.   Roof Geometry Technology identifies common reference points depicted in at least the first aerial image file and the second aerial image file. For example, ████████████

██

████████

296.   Roof Geometry Technology identifies, for all such reference points, a location in three-dimensional space by triangulating the reference points by projecting a first line originating from the first viewpoint through one of the reference points and a second line originating from the second viewpoint through the same reference point and determining an intersection of the

first and second lines. For example, ███████████████████████████████████

███

297.   Based at least in part on the calibration, Roof Geometry Technology determines

physical length between at least two of the reference points in three-dimensional space. For

example, ███████████████████████████████████████

█████████████████████████████

GAF QuickMeasure Sample Report, Ex. 32.

298.   Roof Geometry Technology generates, by any of the at least one computer

processor a roof report that includes the pitch and the area of the one or more roof sections based

on the determined pitch and area of the one or more roof sections wherein the roof report is

useful as a guide to repair or replace the roof of the building, wherein the pitch is indicative of a

vertical rise of a roof section over a horizontal run of the roof section. For example, the final roof

report ███████████████████████ includes the pitch and area of the roof sections. *See* GAF

QuickMeasure Sample Report, Ex. 32.
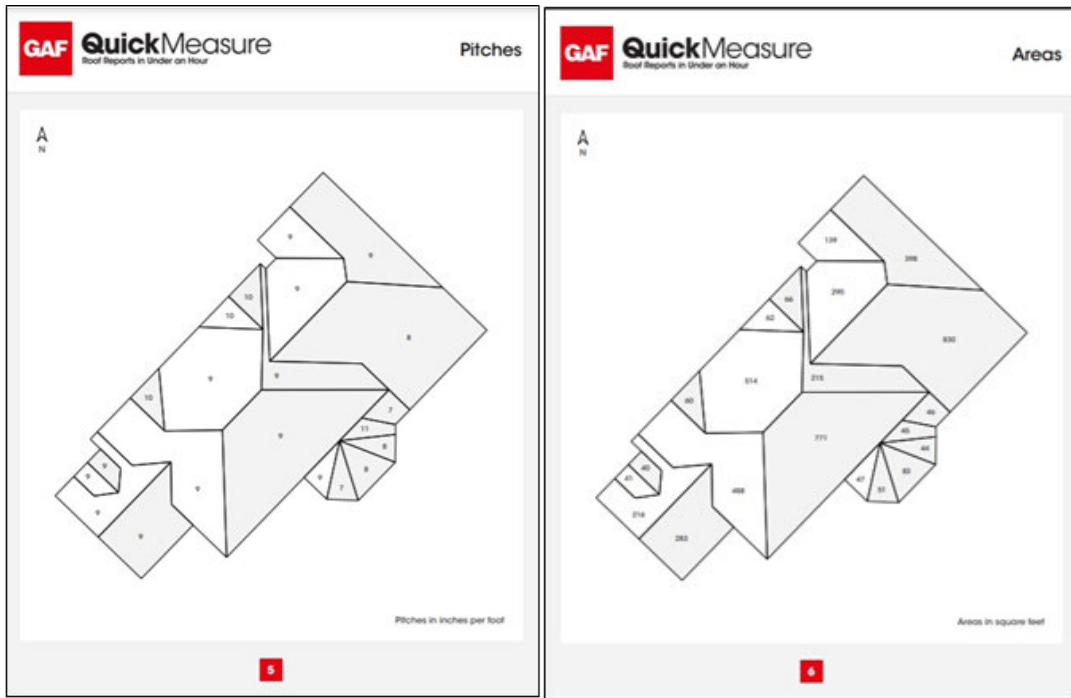
299.   As shown by the materials lists, this report is useful to repair or replace the roof

structure of the building.

	Waste	0%	10%	15%	20%
Timberline Products					
HDZ, HD, Natural Shadow, American Harvest, Reflector, Royal Sovereign, and Cool Series	bundle	145	159	166	174
Starter					
WeatherBlocker	bundle	4	5	5	5
Pro-Start	bundle	4	4	4	4
Quick-Start	roll	12	13	14	14
Roof Deck Protection *					
Deck-Armor, Tiger Paw, FeltBuster 10 sq	roll	5	6	6	6
Shingle-Mate	roll	12	14	14	15
VersaShield	roll	14	15	16	17
Leak Barrier *					
StormGuard, WeatherWatch 2 sq	roll	12	14	14	15
WeatherWatch 1.5 sq	roll	16	18	19	20
Ridge Cap					
Seal-A-Ridge	bundle	12	13	14	15
TimberTex	bundle	15	17	17	18
Z-Ridge	bundle	9	10	11	11
TimberCrest	box	15	17	17	18

Ventilation

Rigid Vent 3, Snow Country, Snow Country Advanced, Hip Vent, IntakePro, Exhaust Vent (Mesh), RidgeRunner, Master Flow Vents	GAF recommends at least one square foot of attic ventilation (evenly split between intake and exhaust) for every 300 square feet of attic floor space. Visit the GAF ventilation calculator for more information at www.gaf.com/ventcalculator.

GAF QuickMeasure Sample Report, Ex. 32.

300.   Roof Geometry Technology then outputs the roof report having the determined pitch therein. *See e.g.*, Ex. 31 (PP0301).

301.   In addition, GAF infringes at least under 35 U.S.C. § 271(g) by selling QuickMeasure reports, which are a product made by a process patented by the '960 Patent.

302.   On information and belief, Nearmap has had knowledge of the '960 Patent prior to the filing of the instant complaint, including because the '960 patent is a direct continuation of Application No. 12/148,439, now U.S. Pat. No. 8,145,578, which is identified on EagleView's website and roof reports as covering EagleView's technology and roof reports. The Accused Products are remarkably similar to, and appear to have been copied from, EagleView's technology and roof reports, confirming that Nearmap monitors EagleView's website, products, roof reports, and patents. *See, e.g.*, Ex. 26. Additionally, Nearmap would have been aware of the

124

substantial press coverage of EagleView's patent portfolio as it relates to roof reports, which

includes the '960 Patent, in light of EagleView's recent successful litigation against Xactware

Solutions, Inc. and Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27.

303.   In addition to directly infringing the '960 Patent, Nearmap has in the past and

continues to indirectly infringe the '960 Patent by inducing direct infringement by others, such as

end users of rooftop aerial measurement products, including but not limited to the Accused

Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial

measurement products, including but not limited to the Accused Products, by its end users

infringes at least one claim of the '960 Patent prior to the filing of the instant complaint.

Nearmap knowingly induced such use of those products in a manner that infringes the '960

Patent, including through at least promotional, advertising, and instructional materials, and

Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has

indirectly infringed and continues to indirectly infringe at least one claim of the '960 Patent

under one or more subsections of 35 U.S.C. § 271, including § 271(b).

304.   Nearmap has also contributed to the direct infringement of the '960 Patent by

others, such as end users of rooftop aerial measurement products, including but not limited to the

Accused Products. The Accused Products are a material or apparatus for use in practicing the

patented processes of the '960 Patent and are a material part of the invention. The Accused

Products are especially made or adapted for use in infringement of the asserted claims, and are

not a stable article of commerce suitable for any substantial non-infringing use. Nearmap makes,

sells, and offers to sell the Accused Products, whose ordinary and intended use constitutes direct

infringement of the '960 Patent. As one example, GAF offers to sell and sells QuickMeasure

reports that infringe under at least 35 U.S.C. § 271(g), and Nearmap contributes to this

infringement by ██

████████

305.   To the extent the claimed method steps are performed by multiple entities, such as

to create QuickMeasure reports, Nearmap is liable as part of a joint enterprise or, in the

alternative, as a direct infringer to whom performance of all method steps are attributable, as set

forth in paragraphs 113-116 above.

306.   Nearmap's infringement of the '960 Patent has been and continues to be willful.

Nearmap has acted with knowledge of the '960 Patent and without a reasonable basis for a good-

faith belief that it would not be liable for infringement of the '960 Patent. For example,

subsequent to learning of the '960 Patent, Nearmap continued to make and use rooftop aerial

measurement products, including but not limited to the Accused Products, which appear copied

from Plaintiffs as set forth above, within the United States in a manner that infringes the '960

Patent. Nearmap has disregarded and continues to disregard its infringement and/or an

objectively high likelihood that its actions constitute infringement of the '960 Patent. This

objectively-defined risk was known or is so obvious that it should have been known to Nearmap.

Nearmap's infringement of the '960 Patent has been and continues to be willful, entitling

EagleView to enhanced damages under 35 U.S.C. § 284.

307.   Defendants' acts of infringement have caused damage to EagleView, and

EagleView is entitled to recover from Defendants the damages sustained by EagleView as a

result of Defendants' wrongful acts in an amount subject to proof at trial.

308.   Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to EagleView for which there is no adequate remedy at law.

309.   This case is exceptional, entitling EagleView to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT VIII - INFRINGEMENT OF THE '149 PATENT

310.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

311.   The USPTO duly and legally issued the '149 Patent on June 16, 2020.

312.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '149 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

313.   Nearmap makes, uses, imports, and/or sells rooftop aerial measurement products, including but not limited to the Accused Products, within the United States, and as such, Nearmap has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '149 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a) and (g).

314.   Claim 1 of the '149 Patent recites:

> **A computer-implemented method, comprising:**
>
> **displaying an aerial image of a building having a roof comprising a plurality of planar roof sections that each have a corresponding pitch;**
>
> **displaying an interactive user interface control configured to be manipulated by an operator to align with a slope of a first planar roof section of the plurality of planar roof sections in order to specify pitch of the first planar roof section, wherein the interactive user interface control is overlaid on the aerial image of the building having the roof;**

receiving, based on alignment of the displayed interactive user interface control, an indication of the pitch of the first planar roof section of the plurality of planar roof sections of the roof of the building;

modifying a model of the roof based on the received indication of the pitch of the first planar roof section; and

generating and output a roof estimate report using a report generation engine, wherein the roof estimate report includes numerical values annotated with corresponding slope, pitches, total area of the roof, identification and measurement of ridges and valleys of the roof, different elevation views rendered from a 3D model of the roof, and lengths of corresponding roof section for each line segment of edges of a plurality of planar roof sections of the roof,

wherein the generated roof estimate report is provided for repair or construction of a corresponding roof structure of the building.

315.   The Accused Products infringe at least claim 1 of the '149 Patent, including by Nearmap's use of the Accused Products to perform the claimed method. As one example, Nearmap on OpenSolar infringes claim 1.

316.   As described in Paragraphs 87-94, *supra*, Nearmap on OpenSolar uses a computer-implemented method comprising displaying an aerial image of a building having a roof comprising a plurality of planar roof sections that each have a corresponding pitch, displaying an interactive user interface control configured to be manipulated by an operator to align with a slope of a first planar roof section of the plurality of planar roof sections in order to specify pitch of the first planar roof section, wherein the interactive user interface control is overlaid on the aerial image of the building having the roof, and receiving, based on alignment of the displayed interactive user interface control, an indication of the pitch of the first planar roof section of the plurality of planar roof sections of the roof of the building.

317.   As described in Paragraphs 87-94, *supra*, Nearmap on OpenSolar modifies a model of the roof based on the received indication of the pitch of the first planar roof section.

318.   This process is further shown in the below depiction of the user interface of

Nearmap on OpenSolar, in which a user can modify the wireframe to accurately reflect the pitch

of the roof section containing the solar panels:
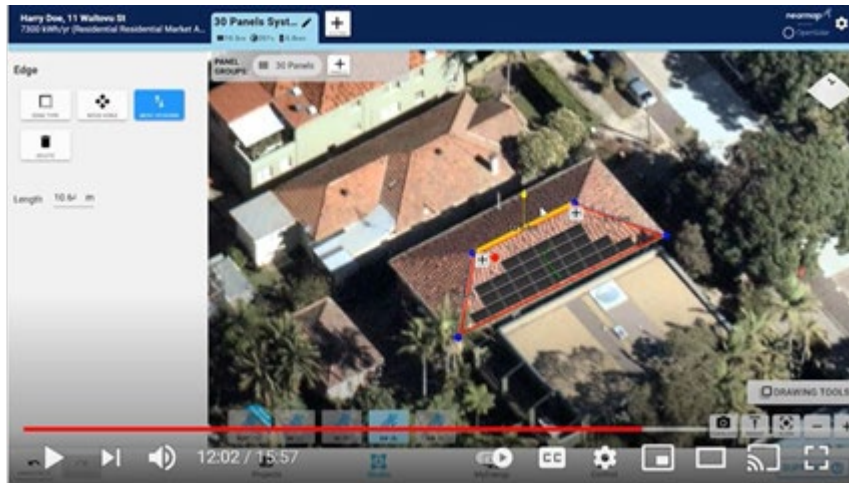
See https://www.youtube.com/watch?v=5R4tCSnthaw (Nearmap on OpenSolar).

319.   Based on the pitch determination marker, Nearmap on OpenSolar indicates the

pitch, or "slope," of the planar roof section:

See https://www.youtube.com/watch?v=XDwZniue-TU (Nearmap on OpenSolar) at 3:24-28.

129
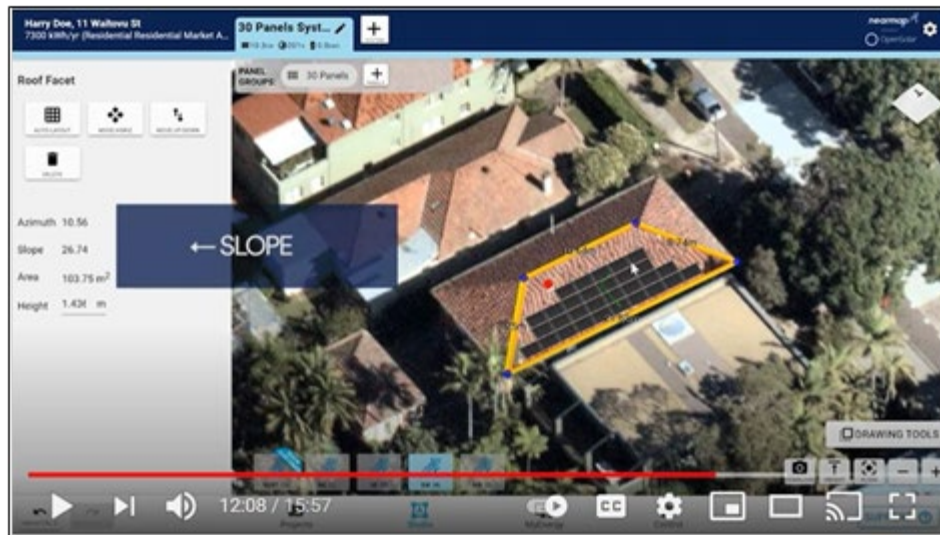
See https://www.youtube.com/watch?v=5R4tCSnthaw (Nearmap on OpenSolar).

320.   As described in Paragraphs 180-181, *supra*, Nearmap on OpenSolar generates and

outputs a roof estimate report using a report generation engine, wherein the roof estimate report

includes numerical values annotated with corresponding slope, pitches, total area of the roof,

identification and measurement of ridges and valleys of the roof, different elevation views

rendered from a 3D model of the roof, and lengths of corresponding roof section for each line

segment of edges of a plurality of planar roof sections of the roof.

321.   The roof report generated and outputted by Nearmap on OpenSolar is provided

for repair or construction of a corresponding roof structure of the building. For example, the

solar roof report is used for construction of solar panels on the roof structure of the building.

322.   Roof Geometry Technology infringes at least claim 1 of the '149 Patent,

including by Nearmap's use of Roof Geometry Technology to generate QuickMeasure reports.

Roof Geometry Technology uses a computer-implemented method for generating a roof estimate

report. For example, the process is computer implemented. *See e.g.*, Ex. 31 (PP0301).

323.   Roof Geometry Technology displays an aerial image of a building having a roof

comprising a plurality of planar roof sections that each have a corresponding pitch. For example,
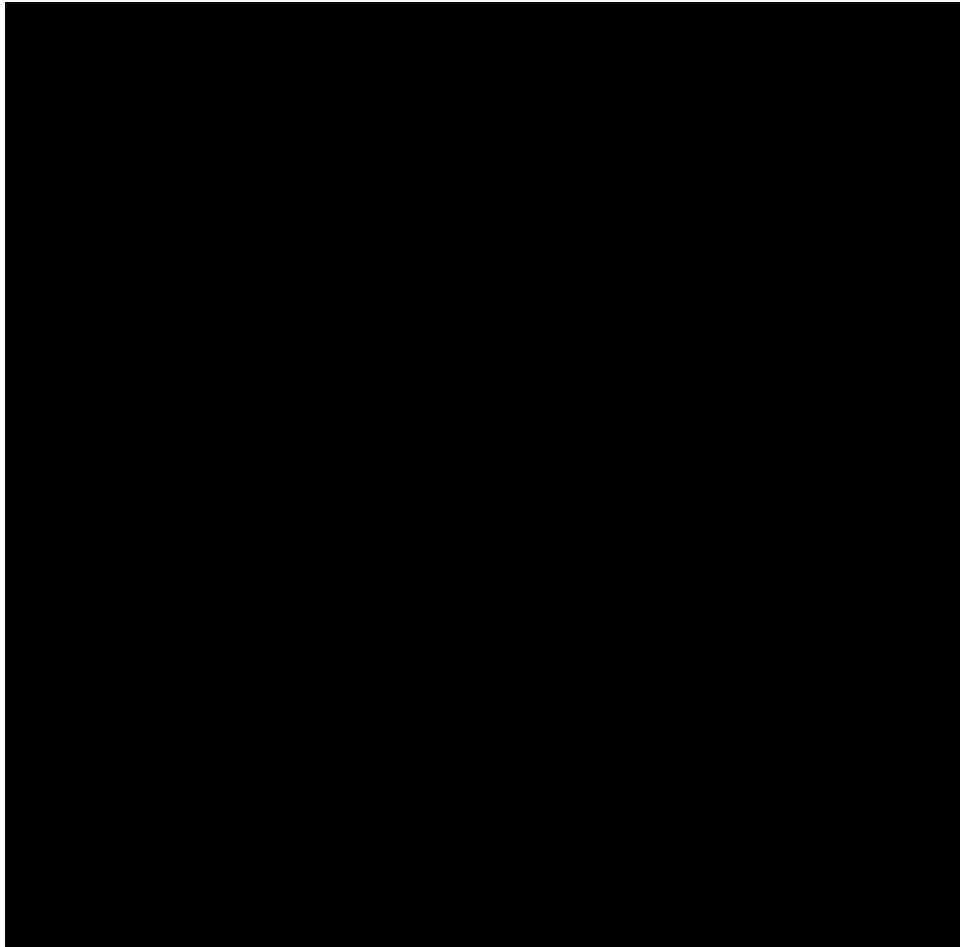
324.   Roof Geometry Technology displays an interactive user interface control

configured to be manipulated by an operator to align with a slope of a first planar roof section of

the plurality of planar roof sections in order to specify pitch of the first planar roof section,

wherein the interactive user interface control is overlaid on the aerial image of the building

having the roof. For example,

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

325.   Roof Geometry Technology receives, based on alignment of the displayed interactive user interface control, an indication of the pitch of the first planar roof section of the plurality of planar roof sections of the roof of the building. For example, [REDACTED]

[REDACTED]

[REDACTED]

326.   Roof Geometry Technology modifies a model of the roof based on the received

indication of the pitch of the first planar roof section. For example,

327.   Roof Geometry Technology generates and outputs a roof estimate report using a

report generation engine, wherein the roof estimate report includes numerical values annotated

with corresponding slope, pitches, total area of the roof, identification and measurement of ridges

and valleys of the roof, different elevation views rendered from a 3D model of the roof, and

lengths of corresponding roof section for each line segment of edges of a plurality of planar roof

sections of the roof, wherein the generated roof estimate report is provided for repair or

construction of a corresponding roof structure of the building.

328.   For example, the GAF QuickMeasure roof estimate report includes numerical

values annotated with slope, pitches, total area and the identification of ridges and valleys, e.g.,

as different colors on the roof.

Show customers a fully interactive 3D rendering

See all your measurements as an interactive 3D rendering. Click Design to apply different roof products and colors to the property rendering.

https://www.gaf.com/en-us/quickmeasure
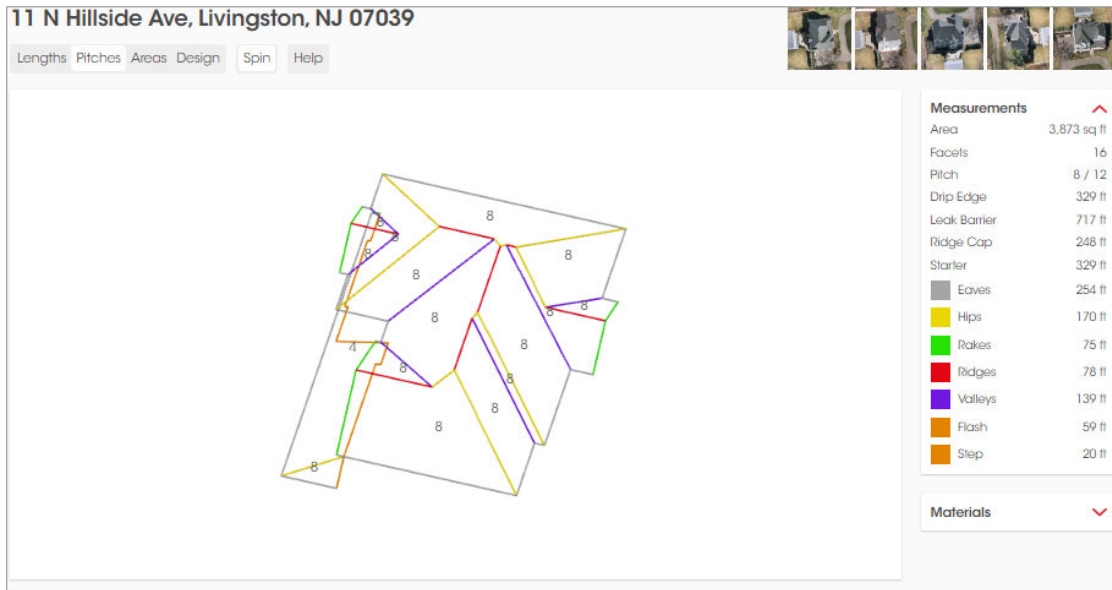
329.   The GAF QuickMeasure roof estimate report also includes different elevation views rendered from the 3D wireframe model, as well as length of corresponding roof sections.

Show customers a fully interactive 3D rendering

See all your measurements as an interactive 3D rendering. Click Design to apply different roof products and colors to the property rendering.

https://www.gaf.com/en-us/quickmeasure

330.   In addition, GAF infringes at least under 35 U.S.C. § 271(g) by selling

QuickMeasure reports, which are a product made by a process patented by the '960 Patent.

331.   On information and belief, Nearmap has had knowledge of the '149 Patent prior

to the filing of the instant complaint. For example, the '149 Patent is a family member of U.S.

Pat. No. 9,129,376, U.S. Pat. No. 8,818,770, and U.S. Pat. No. 8,170,840, all of which were

asserted by EagleView in a recent successful litigation against Xactware Solutions, Inc. and

Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27. Thus, Nearmap would have

been aware of the substantial press coverage of EagleView's patent portfolio as it relates to roof

reports, which includes the '149 Patent.

332.   Additionally, the '770 and '840 Patents, which are family members of the '149

Patent, are identified on EagleView's website and roof reports as covering EagleView's

135

technology and roof reports. The Accused Products are remarkably similar to, and appear to have

been copied from, EagleView's technology and roof reports, confirming that Nearmap monitors

EagleView's website, products, roof reports, and patents. *See, e.g.*, Ex. 26.

333.   In addition to directly infringing the '149 Patent, Nearmap has in the past and

continues to indirectly infringe the '149 Patent by inducing direct infringement by others, such as

end users of rooftop aerial measurement products, including but not limited to the Accused

Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial

measurement products, including but not limited to the Accused Products, by its end users

infringes at least one claim of the '149 Patent prior to the filing of the instant complaint.

Nearmap knowingly induced such use of those products in a manner that infringes the '149

Patent, including through at least promotional, advertising, and instructional materials, and

Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has

indirectly infringed and continues to indirectly infringe at least one claim of the '149 Patent

under one or more subsections of 35 U.S.C. § 271, including § 271(b).

334.   Nearmap has also contributed to the direct infringement of the '149 Patent by

others, such as end users of rooftop aerial measurement products, including but not limited to the

Accused Products. The Accused Products are a material or apparatus for use in practicing the

patented processes of the '149 Patent and are a material part of the invention. The Accused

Products are especially made or adapted for use in infringement of the asserted claims, and are

not a stable article of commerce suitable for any substantial non-infringing use. Nearmap makes,

sells, and offers to sell the Accused Products, whose ordinary and intended use constitutes direct

infringement of the '149 Patent. As one example, GAF offers to sell and sells QuickMeasure

reports that infringe under at least 35 U.S.C. § 271(g), and Nearmap contributes to this

infringement by ███

████████

336.   To the extent the claimed method steps are performed by multiple entities, such as

in to create QuickMeasure reports, Nearmap is liable as part of a joint enterprise or, in the

alternative, as a direct infringer to whom performance of all method steps are attributable, as set

forth in paragraphs 113-116 above.

336.   Nearmap's infringement of the '149 Patent has been and continues to be willful.

Nearmap has acted with knowledge of the '149 Patent and without a reasonable basis for a good-

faith belief that it would not be liable for infringement of the '149 Patent. For example,

subsequent to learning of the '149 Patent, Nearmap continued to make and use rooftop aerial

measurement products, including but not limited to the Accused Products, which appear copied

from Plaintiffs as set forth above, within the United States in a manner that infringes the '149

Patent. Nearmap has disregarded and continues to disregard its infringement and/or an

objectively high likelihood that its actions constitute infringement of the '149 Patent. This

objectively-defined risk was known or is so obvious that it should have been known to Nearmap.

Nearmap's infringement of the '149 Patent has been and continues to be willful, entitling

EagleView to enhanced damages under 35 U.S.C. § 284.

337.   Defendants' acts of infringement have caused damage to EagleView, and

EagleView is entitled to recover from Defendants the damages sustained by EagleView as a

result of Defendants' wrongful acts in an amount subject to proof at trial.

338.   Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to EagleView for which there is no adequate remedy at law.

339.   This case is exceptional, entitling EagleView to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT IX - INFRINGEMENT OF THE '436 PATENT

340.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

341.   The USPTO duly and legally issued the '436 Patent on December 13, 2011.

342.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '436 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

343.   Nearmap makes, uses, imports, and/or sells rooftop aerial measurement products, including but not limited to the Accused Products, within the United States, and as such, Nearmap has directly infringed and continue to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '436 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a) and (g).

344.   Claim 1 of the '436 Patent recites:

A computing system for generating a roof estimate report, the computing system comprising:

a memory;

a roof estimation module that is stored on the memory and that is configured, when executed, to:

receive a first and a second aerial image of a building having a roof, each of the aerial images providing a different view of the roof of the building, wherein the

138

first aerial image provides a top plan view of the roof and the second aerial image provides an oblique perspective view of the roof, and are not a stereoscopic pair;

correlate the first aerial image with the second aerial image;

generate, based at least in part on the correlation between the first and second aerial images, a three-dimensional model of the roof that includes a plurality of planar roof sections that each have a corresponding slope, area, and edges; and

generate and transmit a roof estimate report that includes one or more top plan views of the three-dimensional model annotated with numerical values that indicate the corresponding slope, area, and length of edges of at least some of the plurality of planar roof sections using at least two different indicia for different types of roof properties.

345.   Roof Geometry Technology infringes at least claim 1 of the '436 Patent,

including by Nearmap's use of Roof Geometry Technology to generate QuickMeasure reports.

Roof Geometry Technology comprises a computing system for generating a roof report. *See e.g.*,

Ex. 31 (PP0301).

346.   Roof Geometry Technology includes a memory and a roof estimation module that

includes a calibration module, the roof estimation module being stored on the memory. For

example,
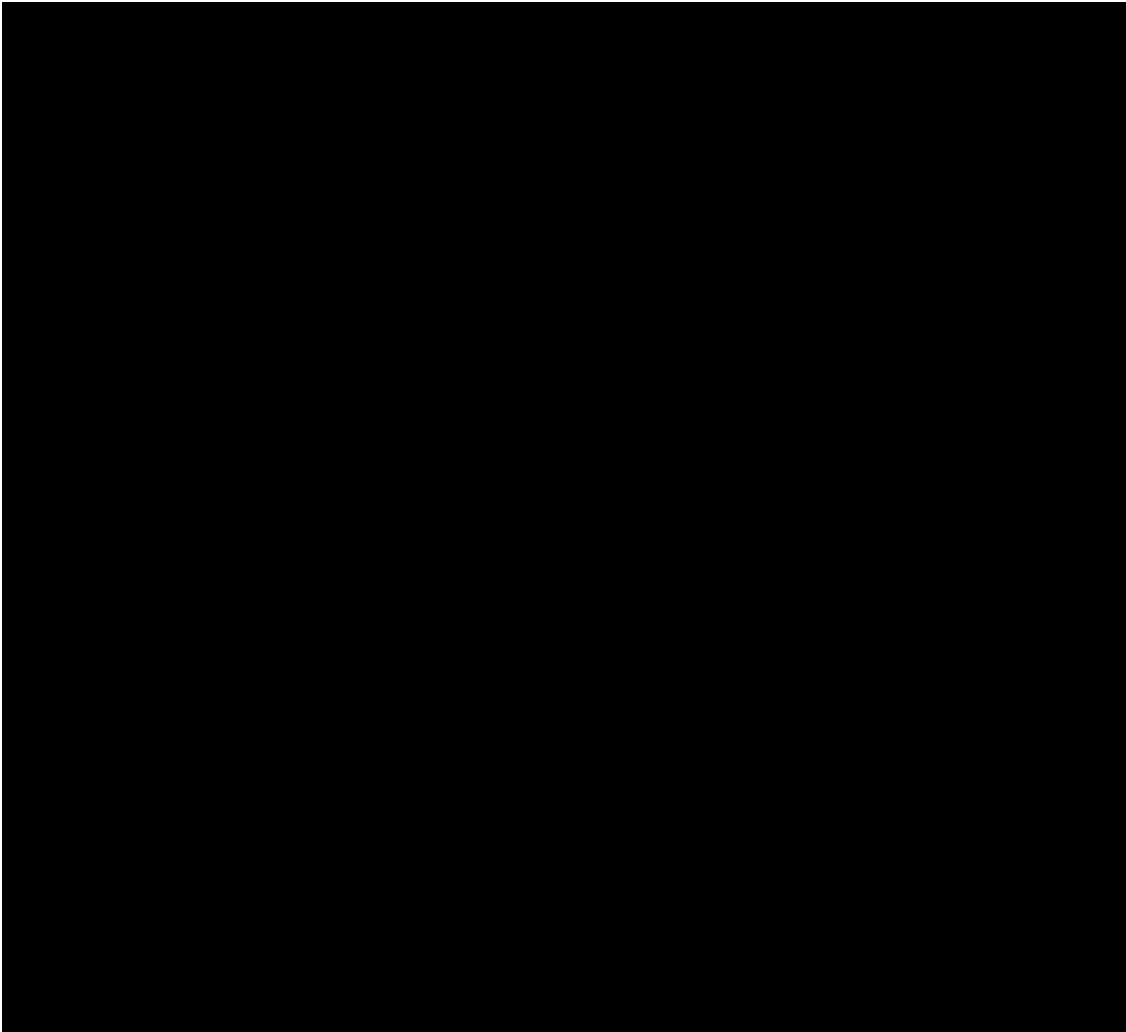
347.   Roof Geometry Technology receives a first and second aerial image of a building having a roof, each of the aerial images providing a different view of the roof of the building, wherein the first aerial image provides a top plan view of the roof and the second aerial image provides an oblique perspective view of the roof, and are not a stereoscopic pair. For example, images received as part of the ██████████████████████ process include both top down and oblique aerial views.

348.   Roof Geometry Technology correlates the first aerial image with the second aerial

image. For example, ██

████████████████

349.   Roof Geometry Technology generates, based at least in part on the correlation

between the first and second aerial images, a three-dimensional model of the roof that includes a

plurality of planar roof sections that each have a corresponding slope, area, and edges. For

example, ████████████████████████████████████

350.   Roof Geometry Technology generates and transmits a roof estimate report that

includes one or more top plan views of the three-dimensional model annotated with numerical

values that indicate the corresponding slope, area, and length of edges of at least some of the

plurality of planar roof sections using at least two different indicia for different types of roof

properties. For example, the slope, area, and length of edges of all roof sections is included in the

roof report, and annotated on a top plan view of the three-dimensional model:
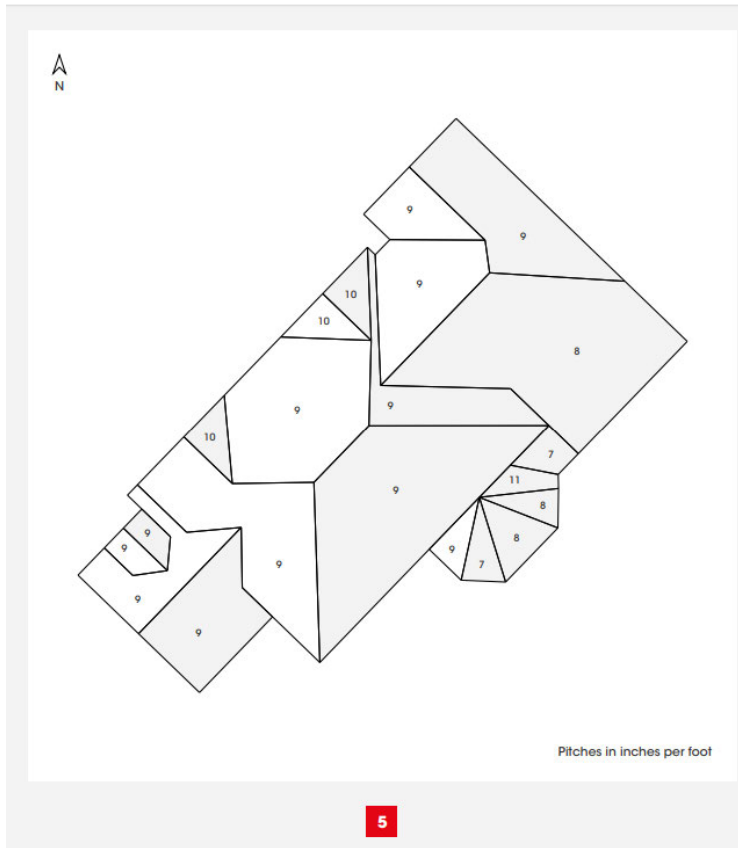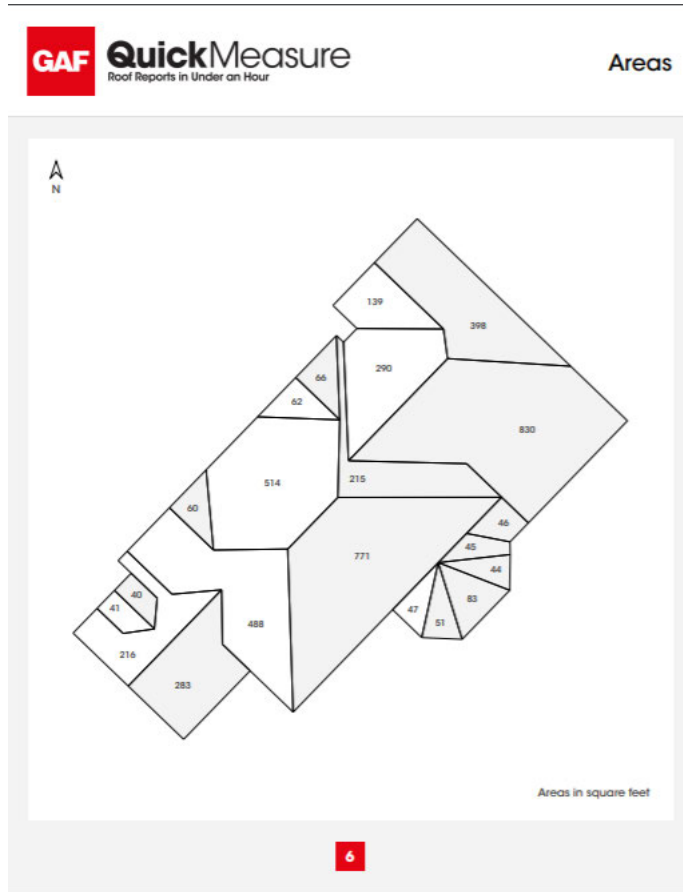
GAF QuickMeasure Sample Report, Ex. 32.

351.   Different colors indicate different types of roof properties:

GAF QuickMeasure Sample Report, Ex. 32.

352.   In addition, GAF infringes at least under 35 U.S.C. § 271(g) by selling

QuickMeasure reports, which are a product made by a process patented by the '436 Patent.

353.   On information and belief, Nearmap has had knowledge of the '436 Patent prior

to the filing of the instant complaint (and in no case later than the filing of the complaint against

GAF QuickMeasure on May 4, 2021). For example, the '436 Patent was the subject of recent

successful litigation brought by EagleView against Xactware Solutions, Inc. and Verisk

Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27. Thus, Nearmap would have been

aware of the substantial press coverage of EagleView's litigation victory, which included a

finding of infringement of the '436 Patent, and of EagleView's patent portfolio as it relates to

roof reports, which includes the '436 Patent.

354.   Additionally, the '436 Patent is identified on EagleView's website and roof

reports as covering EagleView's technology and roof reports. The Accused Products are

remarkably similar to, and appear to have been copied from, EagleView's technology and roof

reports, confirming that Nearmap monitors EagleView's website, products, roof reports, and

patents. *See, e.g.*, Ex. 26.

355.   In addition to directly infringing the '436 Patent, Nearmap has in the past and

continues to indirectly infringe the '436 Patent by inducing direct infringement by others, such as

end users of rooftop aerial measurement products, including but not limited to the Accused

Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial

measurement products, including but not limited to the Accused Products, by its end users

infringes at least one claim of the '436 Patent prior to the filing of the instant complaint.

Nearmap knowingly induced such use of those products in a manner that infringes the '436

Patent, including through at least promotional, advertising, and instructional materials, and

Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has

indirectly infringed and continues to indirectly infringe at least one claim of the '436 Patent

under one or more subsections of 35 U.S.C. § 271, including § 271(b).

356.   Nearmap has also contributed to the direct infringement of the '436 Patent by

others, such as end users of rooftop aerial measurement products, including but not limited to the

Accused Products. The Accused Products are a material or apparatus for use in practicing the

patented processes of the '436 Patent and are a material part of the invention. The Accused

Products are especially made or adapted for use in infringement of the asserted claims, and are not a stable article of commerce suitable for any substantial non-infringing use. Nearmap makes, sells, and offers to sell the Accused Products, whose ordinary and intended use constitutes direct infringement of the '436 Patent. As one example, GAF offers to sell and sells QuickMeasure reports that infringe under at least 35 U.S.C. § 271(g), and Nearmap contributes to this infringement by ███

███

357.   To the extent the claimed method steps are performed by multiple entities, such as to create QuickMeasure reports, Nearmap is liable as part of a joint enterprise or, in the alternative, as a direct infringer to whom performance of all method steps are attributable, as set forth in paragraphs 113-116 above.

358.   Nearmap's infringement of the '436 Patent has been and continues to be willful. Nearmap has acted with knowledge of the '436 Patent and without a reasonable basis for a good-faith belief that it would not be liable for infringement of the '436 Patent. For example, subsequent to learning of the '436 Patent, Nearmap continued to make and use rooftop aerial measurement products, including but not limited to the Accused Products, which appear copied from Plaintiffs as set forth above, within the United States in a manner that infringes the '436 Patent. Nearmap has disregarded and continues to disregard its infringement and/or an objectively high likelihood that its actions constitute infringement of the '436 Patent. This objectively-defined risk was known or is so obvious that it should have been known to Nearmap. Nearmap's infringement of the '436 Patent has been and continues to be willful, entitling EagleView to enhanced damages under 35 U.S.C. § 284.

359.   Defendants' acts of infringement have caused damage to EagleView, and EagleView is entitled to recover from Defendants the damages sustained by EagleView as a result of Defendants' wrongful acts in an amount subject to proof at trial.

360.   Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to EagleView for which there is no adequate remedy at law.

361.   This case is exceptional, entitling EagleView to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT X - INFRINGEMENT OF THE '840 PATENT

362.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

363.   The USPTO duly and legally issued the '840 Patent on May 1, 2012.

364.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '840 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

365.   Nearmap makes, uses, imports, and/or sells rooftop aerial measurement products, including but not limited to the Accused Products, within the United States, and as such, Nearmap has directly infringed and continue to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '840 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a) and (g).

366.   Claim 1 of the '840 Patent recites:

A computer-implemented method for generating a roof estimate report, the method comprising:

displaying an aerial image of a building having a roof comprising a plurality of

planar roof sections that each have a corresponding pitch;

displaying a pitch determination marker operable to indicate pitch of a planar roof section, wherein the pitch determination marker is overlaid on the aerial image of the building having the roof;

receiving, based on the displayed pitch determination marker, an indication of the pitch of one of the plurality of planar roof sections of the roof of the building; and

modifying a model of the roof based on the received indication of the pitch of the one planar roof section.

367.   Roof Geometry Technology infringes at least claim 1 of the '840 Patent, including by Nearmap's use of Roof Geometry Technology to generate QuickMeasure reports. Roof Geometry Technology uses a computer-implemented method for generating a roof estimate report. For example, the process is computer implemented. *See e.g.*, Ex. 31 (PP0301).

368.   Roof Geometry Technology displays an aerial image of a building having a roof comprising a plurality of planar roof sections that each have a corresponding pitch. For example,

369.   Roof Geometry Technology displays a pitch determination marker operable to indicate pitch of a planar roof section, wherein the pitch determination marker is overlaid on the aerial image of the building having the roof. For example, ███████████████████████

███

██████████

███
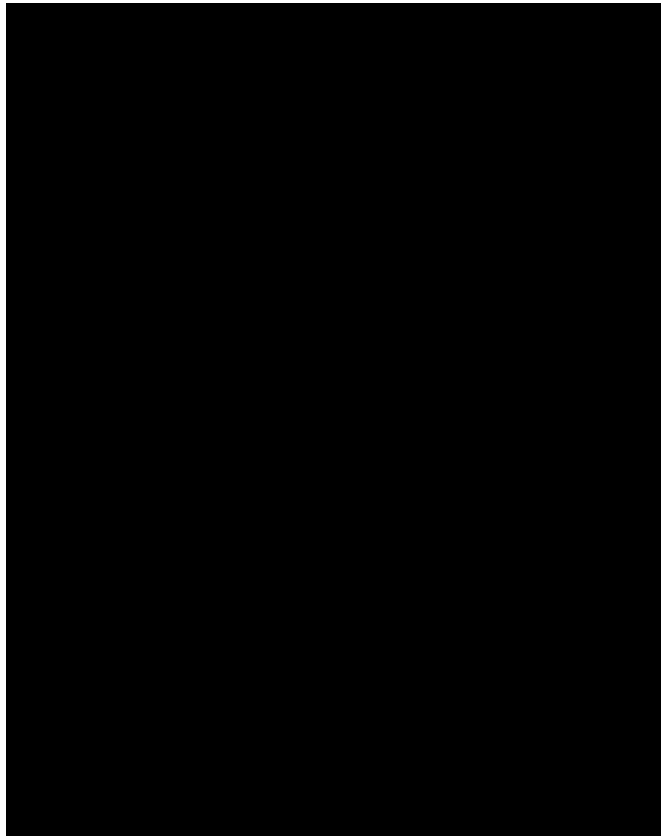
370.   Roof Geometry Technology receives, based on the displayed pitch determination marker, an indication of the pitch of one of the plurality of planar roof sections of the roof of the building. For example, ██

███

████████████████████████████████

371.   Roof Geometry Technology modifies a model of the roof based on the received

indication of the pitch of the one planar roof section. For example, ████████████████

██

██

██

████████████████████████████████████
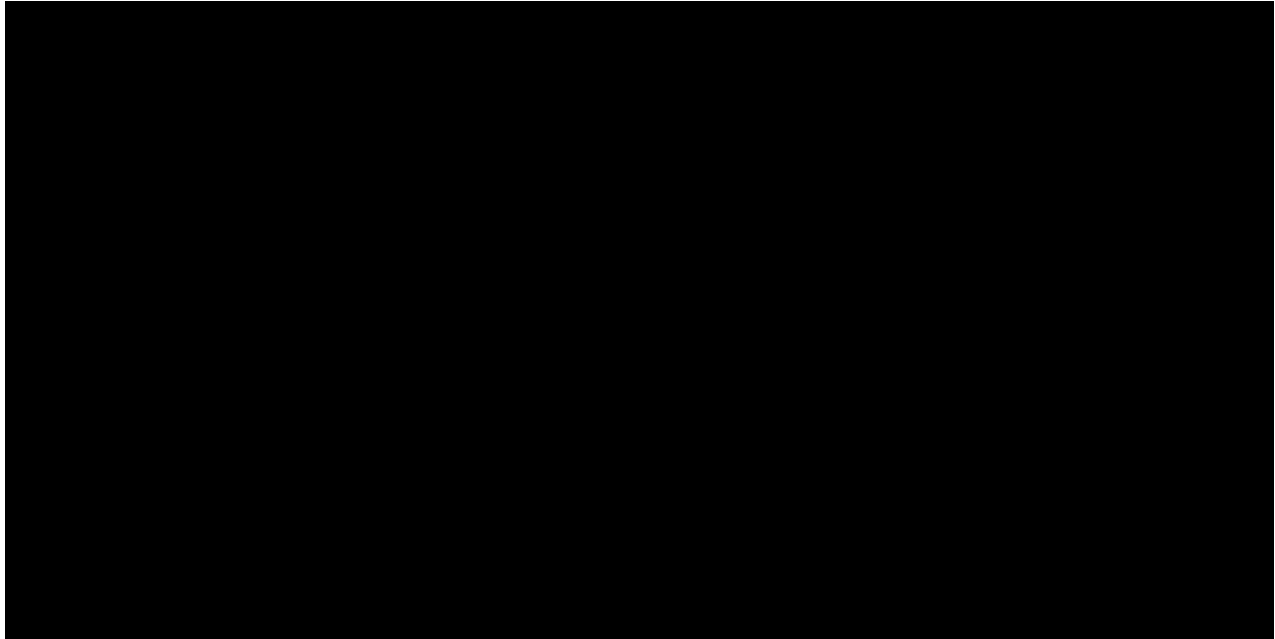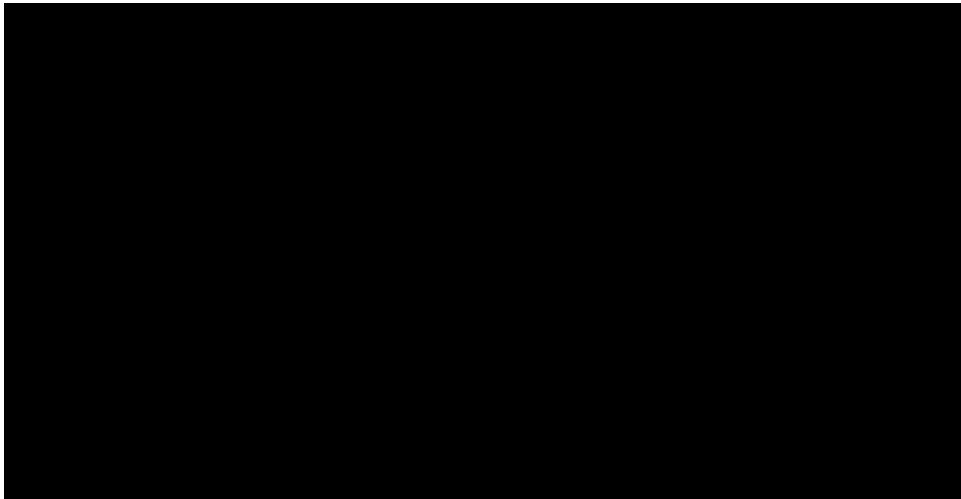
372.   In addition, GAF infringes at least under 35 U.S.C. § 271(g) by selling

QuickMeasure reports, which are a product made by a process patented by the '840 Patent.

373.   On information and belief, Nearmap has had knowledge of the '840 Patent prior

to the filing of the instant complaint (and in no case later than the filing of the complaint against

GAF QuickMeasure on May 4, 2021). For example, the '840 Patent was the subject of recent

successful litigation brought by EagleView against Xactware Solutions, Inc. and Verisk

Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27. Thus, Nearmap would have been

aware of the substantial press coverage of EagleView's litigation victory, which included a

finding of infringement of the '840 Patent, and of EagleView's patent portfolio as it relates to

roof reports, which includes the '840 Patent.

374.   Additionally, the '840 Patent is identified on EagleView's website and roof

reports as covering EagleView's technology and roof reports. The Accused Products are

remarkably similar to, and appear to have been copied from, EagleView's technology and roof

reports, confirming that Nearmap monitors EagleView's website, products, roof reports, and

patents. *See, e.g.*, Ex. 26.

375.   In addition to directly infringing the '840 Patent, Nearmap has in the past and

continues to indirectly infringe the '840 Patent by inducing direct infringement by others, such as

end users of rooftop aerial measurement products, including but not limited to the Accused

Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial

measurement products, including but not limited to the Accused Products, by its end users

infringes at least one claim of the '840 Patent prior to the filing of the instant complaint.

Nearmap knowingly induced such use of those products in a manner that infringes the '840

Patent, including through at least promotional, advertising, and instructional materials, and

Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has

indirectly infringed and continues to indirectly infringe at least one claim of the '840 Patent

under one or more subsections of 35 U.S.C. § 271, including § 271(b).

376.   Nearmap has also contributed to the direct infringement of the '840 Patent by

others, such as end users of rooftop aerial measurement products, including but not limited to the

Accused Products. The Accused Products are a material or apparatus for use in practicing the

patented processes of the '840 Patent and are a material part of the invention. The Accused

Products are especially made or adapted for use in infringement of the asserted claims, and are

not a stable article of commerce suitable for any substantial non-infringing use. Nearmap makes,

sells, and offers to sell the Accused Products, whose ordinary and intended use constitutes direct

infringement of the '840 Patent. As one example, GAF offers to sell and sells QuickMeasure

reports that infringe under at least 35 U.S.C. § 271(g), and Nearmap contributes to this

infringement by ███

███

377.   To the extent the claimed method steps are performed by multiple entities, such as

to create QuickMeasure reports, Nearmap is liable as part of a joint enterprise or, in the

alternative, as a direct infringer to whom performance of all method steps are attributable, as set

forth in paragraphs 113-116 above.

378.   Nearmap's infringement of the '840 Patent has been and continues to be willful.

Nearmap has acted with knowledge of the '840 Patent and without a reasonable basis for a good-

faith belief that it would not be liable for infringement of the '840 Patent. For example,

subsequent to learning of the '840 Patent, Nearmap continued to make and use rooftop aerial measurement products, including but not limited to the Accused Products, which appear copied from Plaintiffs as set forth above, within the United States in a manner that infringes the '840 Patent. Nearmap has disregarded and continues to disregard its infringement and/or an objectively high likelihood that its actions constitute infringement of the '840 Patent. This objectively-defined risk was known or is so obvious that it should have been known to Nearmap. Nearmap's infringement of the '840 Patent has been and continues to be willful, entitling EagleView to enhanced damages under 35 U.S.C. § 284.

379.   Defendants' acts of infringement have caused damage to EagleView, and EagleView is entitled to recover from Defendants the damages sustained by EagleView as a result of Defendants' wrongful acts in an amount subject to proof at trial.

380.   Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to EagleView for which there is no adequate remedy at law.

381.   This case is exceptional, entitling EagleView to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT XI - INFRINGEMENT OF THE '376 PATENT

382.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

383.   The USPTO duly and legally issued the '376 Patent on September 8, 2015.

384.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '376 Patent, in connection with rooftop aerial measurement products, including but not limited to the Accused Products.

385.   Nearmap makes, uses, imports, and/or sells rooftop aerial measurement products,

including but not limited to the Accused Products, within the United States, and as such,

Nearmap has directly infringed and continue to directly infringe, either literally or under the

doctrine of equivalents, at least one claim of the '376 Patent under one or more subsections of 35

U.S.C. § 271, including § 271(a) and (g).

386.   Claim 1 of the '376 Patent recites:

A computer-implemented process method in a roof estimation system, the method comprising:

displaying, by the roof estimation system, a graphical user interface including an aerial image of a roof structure of a building and a pitch determination marker that is an interactive user interface control that can be manipulated by the operator in order to specify pitch of the roof structure of the building;

moving the pitch determination marker with respect to the aerial image of the roof structure to a first location in the graphical user interface overlaying the aerial image in response to input from the user;

adjusting an arm of the pitch determination marker so that the arm of the pitch determination marker substantially aligns with a sloped edge of a planar roof section of the aerial image of the roof structure;

determining, by the roof estimation system, a pitch of the planar roof section based on a configuration of the pitch determination marker; and

generating and outputting, by the roof estimation system, a roof estimate report using a report generation engine, wherein the roof estimate report includes one or more top plan views of a model of the roof structure annotated with numerical values for corresponding slope, area, or lengths of edges of at least some of a plurality of planar roof sections of the roof structure, wherein the generated roof estimate report is provided for repair and/or constructing the roof structure of the building.

387.   Roof Geometry Technology infringes at least claim 1 of the '376 Patent,

including by Nearmap's use of Roof Geometry Technology to generate QuickMeasure reports.

Roof Geometry Technology uses a computer-implemented method in a roof estimation system.

For example, the method is computer implemented and generates a roof estimate report. *See e.g.*,

Ex. 31 (PP0301).

388.   Roof Geometry Technology displays a graphical user interface including an aerial

image of a roof structure of a building and a pitch determination marker that is an interactive

user interface control that can be manipulated by the operator in order to specify pitch of the roof

structure of the building. For example, ███████████████████████████████████

██

██████████████████████████

██
██
██
██
██
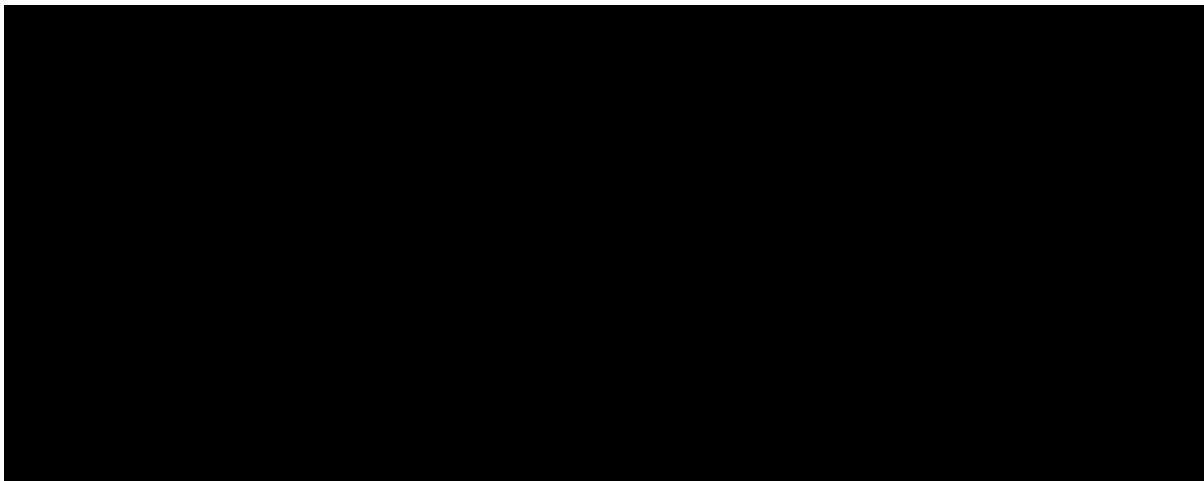
389.   Roof Geometry Technology includes a pitch determination marker that is an

interactive user interface control that can be manipulated by the operator. For example, ████████

██

██

████████████████████████

390.   Roof Geometry Technology adjusts an arm of the pitch determination marker so

that the arm of the pitch determination marker substantially aligns with a sloped edge of a planar

roof section of the aerial image of the roof structure. For example, ███████████████████

██

██

███
███
███
███
███
███
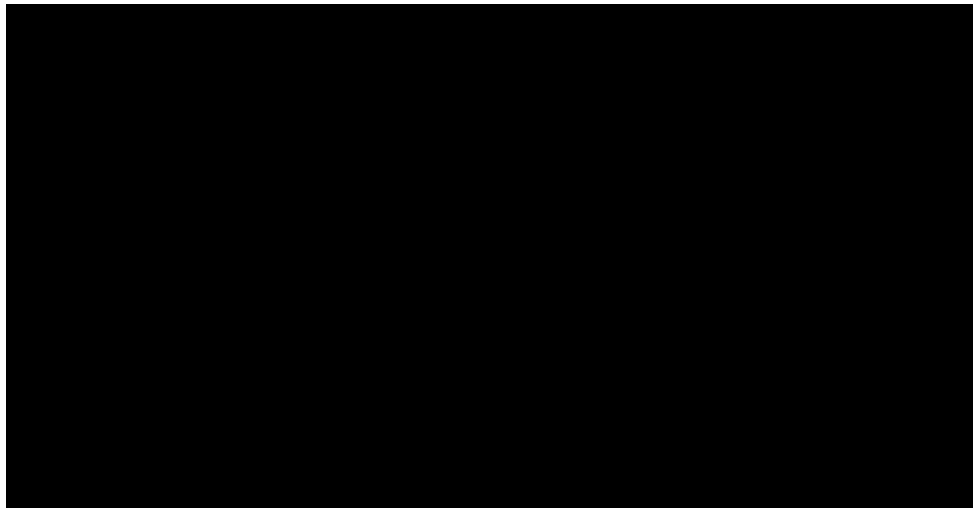
391.   Roof Geometry Technology moves the pitch determination marker with respect to

the aerial image of the roof structure to a first location in the graphical user interface overlaying

the aerial image in response to input from the user. For example, ██████████████████

██

██
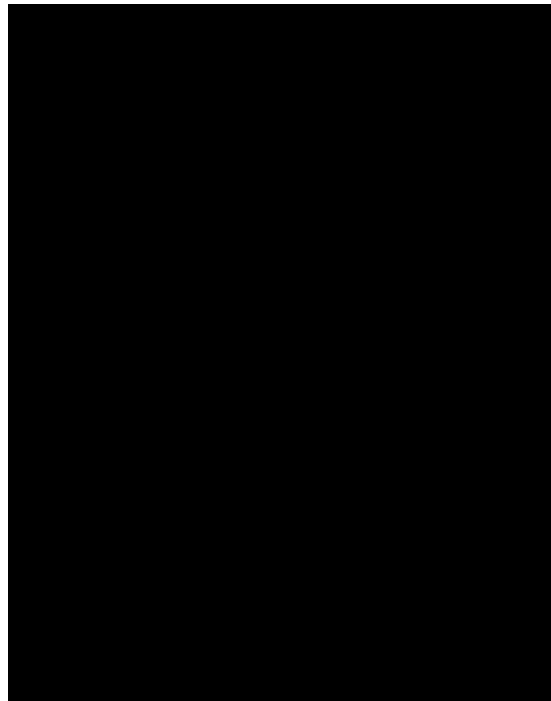
392.   Roof Geometry Technology adjusts an arm of the pitch determination marker so that the arm of the pitch determination marker substantially aligns with a sloped edge of a planar roof section of the aerial image of the roof structure. For example, ████████████████████

██

████████████████████████████

393.   Roof Geometry Technology determines, by the roof estimation system, a pitch of the planar roof section based on a configuration of the pitch determination marker. For example,

██

██

394.   Roof Geometry Technology generates and outputs, by the roof estimation system, a roof estimate report using a report generation engine, wherein the roof estimate report includes one or more top plan views of a model of the roof structure annotated with numerical values for corresponding slope, area, or lengths of edges of at least some of a plurality of planar roof

sections of the roof structure, wherein the generated roof estimate report is provided for repair

and/or constructing the roof structure of the building.

159

See GAF QuickMeasure Sample Report, Ex. 32.

https://www.youtube.com/watch?v=HGMJdkPjktw

395.   The generated roof estimate report is provided for repair and/or constructing the

roof structure of the building:

https://www.gaf.com/en-us/quickmeasure

https://www.gaf.com/en-us/quickmeasure

The more you're able to use digital tools to automate your estimating process, the more estimates you will be able to perform, and the more work you can schedule. Using these tools helps you speak the same language as insurance companies, which may help lead to additional approved work and even expedited payment.

https://www.gaf.com/en-us/blog/how-to-use-digital-tools-to-speed-up-storm-repair-estimates-281474980041161

396.   In addition, GAF infringes at least under 35 U.S.C. § 271(g) by selling QuickMeasure reports, which are a product made by a process patented by the '376 Patent.

397.   On information and belief, Nearmap has had knowledge of the '376 Patent prior to the filing of the instant complaint (and in no case later than the filing of the complaint against GAF QuickMeasure on May 4, 2021). For example, the '376 Patent was the subject of recent successful litigation brought by EagleView against Xactware Solutions, Inc. and Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27. Thus, Nearmap would have been aware of the substantial press coverage of EagleView's litigation victory, which included a

finding of infringement of the '376 Patent, and of EagleView's patent portfolio as it relates to

roof reports, which includes the '376 Patent. Additionally, the '770 and '840 Patents, which are

family members of the '376 Patent, are identified on EagleView's website and roof reports as

covering EagleView's technology and roof reports. The Accused Products are remarkably

similar to, and appear to have been copied from, EagleView's technology and roof reports,

confirming that Nearmap monitors EagleView's website, products, roof reports, and patents. *See,*

e.g., Ex. 26.

398.   In addition to directly infringing the '376 Patent, Nearmap has in the past and

continues to indirectly infringe the '376 Patent by inducing direct infringement by others, such as

end users of rooftop aerial measurement products, including but not limited to the Accused

Products. As set forth above, Nearmap knew or should have known that use of rooftop aerial

measurement products, including but not limited to the Accused Products, by its end users

infringes at least one claim of the '376 Patent prior to the filing of the instant complaint.

Nearmap knowingly induced such use of those products in a manner that infringes the '376

Patent, including through at least promotional, advertising, and instructional materials, and

Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has

indirectly infringed and continues to indirectly infringe at least one claim of the '376 Patent

under one or more subsections of 35 U.S.C. § 271, including § 271(b).

399.   Nearmap has also contributed to the direct infringement of the '376 Patent by

others, such as end users of rooftop aerial measurement products, including but not limited to the

Accused Products. The Accused Products are a material or apparatus for use in practicing the

patented processes of the '376 Patent and are a material part of the invention. The Accused

Products are especially made or adapted for use in infringement of the asserted claims, and are not a stable article of commerce suitable for any substantial non-infringing use. Nearmap makes, sells, and offers to sell the Accused Products, whose ordinary and intended use constitutes direct infringement of the '376 Patent. As one example, GAF offers to sell and sells QuickMeasure reports that infringe under at least 35 U.S.C. § 271(g), and Nearmap contributes to this infringement by ███

███

400.   To the extent the claimed method steps are performed by multiple entities, such as to create QuickMeasure reports, Nearmap is liable as part of a joint enterprise or, in the alternative, as a direct infringer to whom performance of all method steps are attributable, as set forth in paragraphs 113-116 above.

401.   Nearmap's infringement of the '376 Patent has been and continues to be willful. Nearmap has acted with knowledge of the '376 Patent and without a reasonable basis for a good-faith belief that it would not be liable for infringement of the '376 Patent. For example, subsequent to learning of the '376 Patent, Nearmap continued to make and use rooftop aerial measurement products, including but not limited to the Accused Products, within the United States in a manner that infringes the '376 Patent. Nearmap has disregarded and continues to disregard its infringement and/or an objectively high likelihood that its actions constitute infringement of the '376 Patent. This objectively-defined risk was known or is so obvious that it should have been known to Nearmap. Nearmap's infringement of the '376 Patent has been and continues to be willful, entitling EagleView to enhanced damages under 35 U.S.C. § 284.

402.   Defendants' acts of infringement have caused damage to EagleView, and EagleView is entitled to recover from Defendants the damages sustained by EagleView as a result of Defendants' wrongful acts in an amount subject to proof at trial.

403.   Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to EagleView for which there is no adequate remedy at law.

404.   This case is exceptional, entitling EagleView to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT XII - INFRINGEMENT OF THE '657 PATENT

405.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

406.   The USTPO duly and legally issued the '657 Patent on November 10, 2015.

407.   Nearmap has directly and indirectly infringed and continues to directly and indirectly infringe the '657 Patent in connection with its camera systems for capturing aerial imagery, including but not limited to HyperPod, HyperCamera (including HyperCamera1, HyperCamera2, and HyperCamera3), and other systems with similar functionality (collectively, the "657 Accused Products").

408.   Nearmap makes, uses, imports, and/or sells camera systems for capturing aerial imagery, including but not limited to the 657 Accused Products, within the United States, and as such, Nearmap has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '657 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a).

409.   Claim 1 of the '657 Patent recites:

A system for capturing images and geo-location data corresponding thereto, comprising:

a first image-capturing device, said first image-capturing device capturing oblique aerial images at image-capturing events, said first image-capturing device issuing first image-data signals corresponding to captured images;

a second image-capturing device, said second image-capturing device capturing images at image-capturing events, said second image capturing device issuing second image-data signals corresponding to captured images;

at least one geo-locating device, each said at least one geo-locating device issuing a corresponding at least one geo-locating signal, each said at least one geo-locating signal being indicative at least in part of a geo-location of said first image-capturing device during each first image capturing event;

a computer system receiving and storing said first and second image-data signals and said at least one geo-locating signal;

the computer system executing image and data acquiring software reading said first and second image-data signals and said at least one geo-locating signal, said image and data acquiring software associating each said first or second image-data signal with a corresponding said at least one geo-locating signal for each image-capturing event; and

wherein the computer system transmits image-capture signals to the first image-capturing device and the second image-capturing device to cause the first and second image-capturing devices to capture images, and wherein the computer system controls the first and second image-capturing devices separately.

410.   As one example, HyperCamera infringes claim 1.

411.   HyperCamera includes a system for capturing images and geo-location data

corresponding thereto, which includes a first image-capturing device, said first image-capturing

device capturing oblique aerial images at image-capturing events, said first image-capturing

device issuing first image-data signals corresponding to captured images. For example, Nearmap

describes HyperCamera as a "[v]ertical and 4-way oblique imaging system" used to create aerial maps and "HD location content."[10]

412.   HyperCamera includes a second image-capturing device, said second image-capturing device capturing images at image-capturing events, said second image capturing device issuing second image-data signals corresponding to captured images. For example, █

██ █

██ █

████████████████████████

413.   HyperCamera includes at least one geo-locating device, each said at least one geo-locating device issuing a corresponding at least one geo-locating signal, each said at least one geo-locating signal being indicative at least in part of a geo-location of said first image-capturing device during each first image capturing event. For example, ████████████ █

██ █

██

414.   HyperCamera includes a computer system receiving and storing said first and second image-data signals and said at least one geo-locating signal. For example, ██ █

██ █

██ █

██ █

██████████████████████████████████

_____

[10] https://www.nearmap.com/content/dam/nearmap/webinars/rapidly-scale-operations-with-high-res-aerial-imagery-from-nearmap.pdf

415.   HyperCamera includes the computer system executing image and data acquiring software reading said first and second image-data signals and said at least one geo-locating signal, said image and data acquiring software associating each said first or second image-data signal with a corresponding said at least one geo-locating signal for each image-capturing event. For example, ███

██

█████████████████████

416.   The computer system of HyperCamera transmits image-capture signals to the first image-capturing device and the second image-capturing device to cause the first and second image-capturing devices to capture images, and wherein the computer system controls the first

and second image-capturing devices separately. For example, ███████████████████

██████████████████████

███████████████████████████████████████

417.   With respect to the functionality described above, HyperPod operates similarly to HyperCamera and infringes for the same reasons.

418.   On information and belief, Nearmap has had knowledge of the '657 Patent prior to the filing of the instant complaint. For example, Nearmap would have been aware of the substantial press coverage of EagleView's patent portfolio, which includes the '657 Patent, in light of EagleView's recent successful litigation against Xactware Solutions, Inc. and Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27. In the alternative, Nearmap has had knowledge of the '657 Patent since at least the filing of this amended complaint.

419.   In addition to directly infringing the '657 Patent, Nearmap has in the past and

continues to indirectly infringe the '657 Patent by inducing direct infringement by others, such as

the individuals operating the 657 Accused Products. As set forth above, Nearmap knew or should

have known that use of the 657 Accused Products infringes at least one claim of the '657 Patent.

Nearmap knowingly induced infringing use of those products through at least instructing,

encouraging, or requiring use of the 657 Accused Products and by providing the 657 Accused

Products for use, and Nearmap had the requisite intent to encourage such infringement. As such,

Nearmap has indirectly infringed and continues to indirectly infringe at least one claim of the

'657 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(b).

420.   Defendants' acts of infringement have caused damage to Plaintiffs, and Plaintiffs

are entitled to recover from Nearmap the damages sustained by Plaintiffs as a result of

Defendants' wrongful acts in an amount subject to proof at trial.

421.   Defendants' acts of infringement have caused, and unless restrained and enjoined,

will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate

remedy at law.

422.   This case is exceptional, entitling Plaintiffs to an award of attorneys' fees and

costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT XIII - INFRINGEMENT OF THE '648 PATENT

423.   Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

424.   The USPTO duly and legally issued the '648 Patent on June 2, 2020.

425.   Nearmap has directly and indirectly infringed and continues to directly infringe

the '648 Patent in connection with its products, services, systems, and software for analyzing

imagery and location content, including but not limited to Nearmap AI and any other systems with similar functionality (collectively, the "648 Accused Products").

426.   Nearmap makes, uses, and sells imagery and location analysis technology, including but not limited to the 648 Accused Products, within the United States, and as such, Nearmap has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '648 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(a).

427.   Claim 1 of the '648 Patent recites:

A method, comprising:

storing a plurality of data items in a data aggregation system, each of the plurality of data items being associated with one or more geographic location identifiers of a particular geographic point on earth, wherein at least a portion of the plurality of data items stored in the data aggregation system are further associated with one or more time identifiers including one or more time or time periods, indicative of a time history of an associated data item regarding the associated geographic point on earth;

receiving, by at least one processor, a query regarding a geographic location and including time information;

retrieving, from the data aggregation system, data items having associated geographic location identifiers matching the received geographic location and having associated time identifiers matching the received time information; and

outputting the retrieved data items.

428.   As one example, Nearmap AI infringes claim 1.

429.   Nearmap AI stores a plurality of data items in a data aggregation system. For example, ███

████████████████████████████████████

430.   Each of the plurality of data items stored by Nearmap AI are associated with one or more geographic location identifiers of a particular geographic point on earth, wherein at least a portion of the plurality of data items stored in the data aggregation system are further associated with one or more time identifiers including one or more time or time periods, indicative of a time history of an associated data item regarding the associated geographic point on earth. For example, Nearmap AI data is associated with geographic information such as latitude and longitude coordinates. *See* AI Feature API Getting Started Guide[11] ("Note that all our AI data is in EPSG:4326 latitude/longitude coordinates."). Nearmap AI data is further associated with time identifiers, such as the date of image capture. *See id.* ("Note that all our AI data is in EPSG:4326 latitude/longitude coordinates.").

431.   Nearmap AI can receive a query regarding a geographic location and include time information. For example, query parameters can include longitude, latitude, and date restrictions.

Input Parameters

The key parameters of interest are:

- `polygon`: A comma separated list of lon1,lat1,lon2,lat2... in EPSG:4326, representing the "Query AOI". Multi-polygons are not supported - a single outer ring. Highly complex geometries with many points may take longer to query. Larger Query AOIs will take longer.
- `since`: (optional) instructs the API to ignore any AI results prior to date yyyy-mm-dd. Default is unrestricted.
- `until`: (optional) instructs the API to ignore any AI results after date yyyy-mm-dd. Default is unrestricted. The most recent processed AI results will be returned, optionally constrained by `since` and `until` (if both are provided, the most recent processed result within that window is returned.
- `packs`: (optional) restricts data to certain AI Packs as described in https://docs.nearmap.com/display/ND/AI+Packs. Default is to provide data for all AI Packs enabled on your account.
- `apikey`: Nearmap API Key.

Id.

---

[11] *Available at* https://docs.nearmap.com/display/ND/AI+Feature+API+Getting+Started+Guide.

432.   Nearmap AI retrieves, from the data aggregation system, data items having associated geographic location identifiers matching the received geographic location and having associated time identifiers matching the received time information and outputting the retrieved data items.

Illustration of defining a Query AOI (outlined in red) on our vector map, and returning some of the features and attributes. The data necessary to visualise the shapes and metadata within the Query AOI is all included in a single API payload.

https://docs.nearmap.com/display/ND/AI+Feature+API

433.   On information and belief, Nearmap has had knowledge of the '648 Patent prior to the filing of the instant complaint. For example, Nearmap would have been aware of the substantial press coverage of EagleView's patent portfolio as it relates to roof reports, which include the '648 Patent, in light of EagleView's recent successful litigation against Xactware Solutions, Inc. and Verisk Analytics, Inc. in the District of New Jersey. *See, e.g.*, Ex. 27. In the alternative, Nearmap has had knowledge of the '648 Patent since at least the filing of this amended complaint.

434. In addition to directly infringing the '648 Patent, Nearmap has in the past and continues to indirectly infringe the '648 Patent by inducing direct infringement by others, such as end users of imagery and location analysis technology, including but not limited to the 648 Accused Products. As set forth above, Nearmap knew or should have known that use of imagery and location analysis technology, including but not limited to the 648 Accused Products, by its end users infringes at least one claim of the '648 Patent. Nearmap knowingly induced such use of those products in a manner that infringes the '648 Patent, including through at least promotional, advertising, and instructional materials, including Nearmap API documentation, and Nearmap had the requisite intent to encourage such infringement. As such, Nearmap has indirectly infringed and continues to indirectly infringe at least one claim of the '648 Patent under one or more subsections of 35 U.S.C. § 271, including § 271(b).

435. Defendants' acts of infringement have caused damage to Plaintiffs, and Plaintiffs are entitled to recover from Nearmap the damages sustained by Plaintiffs as a result of Defendants' wrongful acts in an amount subject to proof at trial.

436. Defendants' acts of infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate remedy at law.

437. This case is exceptional, entitling Plaintiffs to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT XIV - VIOLATION OF THE DEFEND TRADE SECRETS ACT

438. Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

439.   Plaintiffs have enjoyed, and continue to enjoy, advantages over its existing and

prospective competitors in the design, development, service, marketing, and sale of products and

services because of the above-described confidential and proprietary trade secrets.

440.   Plaintiffs have made reasonable efforts under the circumstances to preserve the

confidentiality of this information. Such information derives independent economic value from

not being generally known to the public or to other persons who can obtain economic value from

their disclosure or use. Accordingly, the above-described information constitutes "trade secrets"

under the Defend Trade Secrets Act.

441.   Nearmap has acquired certain of the above-described information, at least relating

to business strategy and plans, pricing strategy and terms, and contractual terms, as described in

paragraphs 65-69, from persons it knew or reasonably should have known owed a duty to

Plaintiffs to maintain the information in secrecy and/or acquired the information through

improper means.

442.   Nearmap obtained such information indirectly from Plaintiffs and not from

generally available information or from Nearmap's own independent research and efforts.

443.   Nearmap subsequently disclosed and used this information in connection with its

business activities, in a manner adverse to Plaintiffs' business interests. Such use was and is

without Plaintiffs' express or implied consent.

444.   As a result, in violation of Plaintiffs' rights, Nearmap misappropriated, and

continues to use, Plaintiffs' trade secret information in the improper and unlawful manner

described above. Nearmap's misappropriation of Plaintiffs' confidential, proprietary, and trade

secret information was intentional, knowing, willful, malicious, fraudulent, and oppressive.

Nearmap has further attempted and continues to attempt to conceal its misappropriation.

445. If Nearmap is not enjoined, they will continue to misappropriate and use

Plaintiffs' trade secret information for its own benefit and to Plaintiffs' detriment.

446. As the direct and proximate result of Nearmap's conduct, Plaintiffs have suffered

and, if Nearmap's conduct is not stopped, will continue to suffer, severe competitive harm,

irreparable injury, and significant damages, in an amount to be proven at trial. Because

Plaintiffs' remedy at law is inadequate, Plaintiffs seek, in addition to damages, injunctive relief

to recover and protect its confidential, proprietary, and trade secret information and to protect

other legitimate business interests. Plaintiffs' business operates in a competitive market and will

continue suffering irreparable harm absent injunctive relief.

447. Plaintiffs have been damaged by all of the foregoing and is entitled to an award of

exemplary damages and attorney's fees.

COUNT XV - VIOLATION OF THE UTAH UNIFORM TRADE SECRETS ACT

448. Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

449. Plaintiffs have enjoyed, and continues to enjoy, an advantage over its existing and

prospective competitors in the design, development, service, marketing, and sale of products and

services because of the above-described confidential and proprietary trade secrets.

450. Plaintiffs have made reasonable efforts under the circumstances to preserve the

confidentiality of this information. Such information derives independent economic value from

not being generally known to the public or to other persons who can obtain economic value from

their disclosure or use. Accordingly, the above-described information constitutes "trade secrets" under the Utah Uniform Trade Secrets Act.

451.   Nearmap has acquired certain of the above-described information, at least relating to business strategy and plans, pricing strategy and terms, and contractual terms, as described in paragraphs 64-69, from persons it knew or reasonably should have known owed a duty to Plaintiffs to maintain the information in secrecy and/or acquired the information through improper means.

452.   Nearmap obtained such information indirectly from Plaintiffs and not from generally available information or from Nearmap's own independent research and efforts.

453.   Nearmap subsequently used this information in connection with its business activities, in a manner adverse to Plaintiffs' business interests. Such use was and is without Plaintiffs' express or implied consent.

454.   As a result, in violation of Plaintiffs' rights, Nearmap misappropriated, and continues to use, Plaintiffs' trade secret information in the improper and unlawful manner described above. Nearmap's misappropriation of Plaintiffs' confidential, proprietary, and trade secret information was intentional, knowing, willful, malicious, fraudulent, and oppressive. Nearmap has further attempted and continues to attempt to conceal its misappropriation.

455.   If Nearmap is not enjoined, it will continue to misappropriate and use Plaintiffs' trade secret information for its own benefit and to Plaintiffs' detriment.

456.   As the direct and proximate result of Nearmap's conduct, Plaintiffs have suffered severe competitive harm and, if Nearmap's conduct is not stopped, will continue to suffer, severe competitive harm, irreparable injury, and significant damages, in an amount to be proven at trial.

Because Plaintiffs' remedy at law is inadequate, Plaintiffs seek, in addition to damages, injunctive relief to recover and protect its confidential, proprietary, and trade secret information and to protect other legitimate business interests. Plaintiffs' business operates in a competitive market and will continue suffering irreparable harm absent injunctive relief.

457.   Plaintiffs have been damaged by all of the foregoing and is entitled to an award of exemplary damages and attorney's fees.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully pray for the following relief:

A.   For entry of judgment by this Court against Defendants and in favor of Plaintiffs in all respects, including that:

      a.   Nearmap has and continues to directly infringe and/or indirectly infringe, by way of inducement and/or contributory infringement, U.S. Patent Nos. 8,209,152; 8,542,880; 8,593,518; 8,670,961; 9,135,737; 9,514,568; 10,528,960; 10,685,149; 8,078,436; 8,170,840; 9,129,376; 9,182,657; and 10,671,648;

      b.   Nearmap has misappropriated Plaintiffs' trade secrets in violation of the Defend Trade Secrets Act and the Utah Uniform Trade Secrets Act;

B.   For damages arising from Nearmap's infringement of the Patents-In-Suit, including lost profits suffered by Plaintiffs as a result of Nearmap's infringement and in an amount not less than a reasonable royalty, together with pre-judgment and post-judgment interest;

C.   For an order permanently enjoining each of Defendants, and its officers, directors,

shareholders, agents, servants, employees, attorneys, all parent, subsidiary and affiliate

corporations, their successors in interest and assigns, and all other entities and individuals acting

in concert with it or on its behalf, including customers, from making, importing, using, offering

for sale, and/or selling any product or service falling within the scope of any claim of the

Patents-In-Suit, including the Accused Products, or otherwise infringing any claim of the

Patents-In-Suit;

   D. Alternatively, in the event that an injunction does not issue, that this Court award

a compulsory ongoing future royalty;

   E. That this Court declare each of Nearmap's infringement to be willful and award

increased damages in an amount not less than three times the damages assessed for Nearmap's

infringement to Plaintiffs for the period of such willful infringement pursuant to 35 U.S.C. § 284;

   F. That this Court declare this to be an exceptional case pursuant to 35 U.S.C. § 285

and award Plaintiffs their attorneys' fees;

   G. For damages arising from Nearmap's misappropriation of Plaintiffs' trade secrets,

including disgorgement of Nearmap's profits and an accounting;

   H. For an order permanently enjoining Nearmap, and its officers, directors,

shareholders, agents, servants, employees, attorneys, all parent, subsidiary and affiliate

corporations, their successors in interest and assigns, and all other entities and individuals acting

in concert with it or on its behalf, including customers, from using, disseminating, or retaining

Plaintiffs' trade secrets;

   I. That Plaintiffs be awarded costs of court; and

   J. For such other and further relief as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Fed. R. Civ. P. 38(b), Plaintiffs respectfully demand a jury trial on any and

all issues triable as of right by a jury in this action.

Dated: March 28, 2023   Respectfully submitted,

                                                                    /s/ Juliette P. White
                                                                   Juliette P. White
                                                                   Parsons Behle & Latimer
                                                                   201 South Main Street, Suite 1800
                                                                   Salt Lake City, Utah 84111
                                                                   Telephone: 801.532.1234
                                                                   Fax: 801.536.6111
                                                                   JWhite@parsonsbehle.com
                                                                   ecf@parsonsbehle.com

                                                                   L. Kieran Kieckhefer
                                                                   SHEARMAN & STERLING LLP
                                                                   535 Mission Street, 25th Floor
                                                                   San Francisco, CA 94105
                                                                   Telephone: 415.616.1100
                                                                   Fax: 415.616.1339
                                                                   kieran.kieckhefer@shearman.com

                                                                   Matthew G. Berkowitz
                                                                   Patrick Colsher
                                                                   Lillian J. Mao
                                                                   Yue (Joy) Wang
                                                                   SHEARMAN & STERLING LLP
                                                                   1460 El Camino Real, 2nd Floor
                                                                   Menlo Park, CA 94025
                                                                   Telephone: 650.838.3600
                                                                   Fax: 650.838.3699
                                                                   matthew.berkowitz@shearman.com
                                                                   patrick.colsher@shearman.com
                                                                   lillian.mao@shearman.com
                                                                   joy.wang@shearman.com

                                                                   Eric S. Lucas
                                                                   SHEARMAN & STERLING LLP

599 Lexington Ave.
New York, NY 10022
Telephone: 212.838.4955
Fax: 646.848.4955
eric.lucas@shearman.com

Attorneys for Plaintiffs Eagle View
Technologies, Inc. and Pictometry
International Corp.

Index of Exhibits

1. Exhibit 1 - US 8,209,152
2. Exhibit 2 - US 8,542,880
3. Exhibit 3 - US 8,593,518
4. Exhibit 4 - US 8,670,961
5. Exhibit 5 - US 9,135,737
6. Exhibit 6 - US 9,514,568
7. Exhibit 7 - US 10,528,960
8. Exhibit 8 - US 10,685,149
9. Exhibit 9 - 2020-09-09 [901] Opinion Denying New Trial
10. Exhibit 10 - EagleView One Small Company Reinvents a $30 billion Market
11. Exhibit 11 - EAGLE EYE - California Business Journal
12. Exhibit 12 - Accuracy - Product Documentation - Knowledge Hub
13. Exhibit 13 - 16136585 app. history excerpt - 2019-07-02 IDS
14. Exhibit 14 - Mapbrowser Cheat Sheet
15. Exhibit 15 - Location Tool - Product Documentation - Knowledge Hub
16. Exhibit 16 - Product-Datasheet Oblique
17. Exhibit 17 – Orthographic View &Aerial Mapping – Nearmap US
18. Exhibit 18 - Solar Estimation & Prospecting Tools – Nearmap US
19. Exhibit 19 - Survey Date and Photo Time - Product Documentation - Knowledge
20. Exhibit 20 - Aerial Location Data and AI for Insurance – Nearmap US
21. Exhibit 21 – Architecture, Engineering, Construction Maps – Nearmap US
22. Exhibit 22 - Are You Ready for Better Aerial Imagery
23. Exhibit 23 – Projects Tool – Product Documentation – Knowledge Hub
24. Exhibit 24 – GLOSSARY – Product Documentation – Knowledge Hub
25. Exhibit 25 – Current Maps, Aerial View Map – Contact Nearmap US
26. Exhibit 26 - Geospatial software, aerial imagery and analytics – EagleView
27. Exhibit 27 - EagleView's Adventures in IP Earn Co. $375M Enhanced Win
28. Exhibit 28 - US 8,078,436
29. Exhibit 29 - US 8,170,840
30. Exhibit 30 - US 9,129,376
31. Exhibit 31 - █████████████████████████
32. Exhibit 32 - GAF QuickMeasure Sample Report
33. Exhibit 33 – US 9,182,657
34. Exhibit 34 – US 10,671,648.

CERTIFICATE OF SERVICE

I hereby certify that, on the 28th day of March 2023, I caused to be electronically filed and served the foregoing **PLAINTIFFS' FIRST AMENDED COMPLAINT** with the Clerk of the Court using the Court's electronic filing system, which sent notification of such filing to all attorneys listed on the docket.

/s/ Juliette P. White

Juliette P. White

Attorney for Plaintiffs