

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NEARMAP US, INC.,
Petitioner,

v.

EAGLE VIEW TECHNOLOGIES, INC.,
Patent Owner

IPR2022-00734
Patent 9,135,737

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

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LIST OF EXHIBITS

NEARMAP-1001	U.S. Patent No. 9,135,737
NEARMAP-1002	File History for U.S. Patent No. 9,135,737
NEARMAP-1003	Declaration of Dr. David Forsyth
NEARMAP-1004	Heller et al., <i>The Site-Model Construction Component of the RADIUS Testbed System</i> , Proceedings: ARPA Image Understanding Workshop (1997) (“Heller”)
NEARMAP-1005	Quam et al., <i>The Radius Common Development Environment</i> , RADIUS: Image Understanding for Imagery Intelligence, O. Firschein and T. Strat, eds. (1997) (“Quam”)
NEARMAP-1006	U.S. Pub. No. 2006/0235611 (“Deaton”)
NEARMAP-1010	<i>Xactware Solutions, Inc. v. Eagle View Technologies, Inc.</i> , IPR2016-00592, Paper 50 (P.T.A.B. August 25, 2017) (Final Written Decision)
NEARMAP-1011	<i>Xactware Solutions, Inc. v. Eagle View Technologies, Inc.</i> , IPR2016-00592, Paper 1 (P.T.A.B. February 8, 2016) (Petition)
NEARMAP-1012	<i>Xactware Solutions, Inc. v. Eagle View Technologies, Inc.</i> , IPR2016-00592, Paper 50 (P.T.A.B. August 25, 2017) (Patent Owner’s Response)
NEARMAP-1013	District Court Scheduling Order
NEARMAP-1014	Overview for Brian Theadore Stewart of DUtah (Lex Machina)
NEARMAP-1015	<i>Xactware Solutions, Inc. v. Eagle View Technologies, Inc.</i> , IPR2016-00592, Paper 33 (P.T.A.B. November 23, 2016) (Decision on Patent Owner’s Motion to Seal)

NEARMAP-1016	<i>Xactware Solutions, Inc. v. Eagle View Technologies, Inc.</i> , Nos. 2018-1053, 2018-1055, 2018-1056, 2018-1110 (Fed. Cir. 2019) (non-precedential)
NEARMAP-1017 to 1018	Reserved
NEARMAP-1019	Ex. 2019 from IPR2016-00592
NEARMAP-1020	Ex. 2020 from IPR2016-00592
NEARMAP-1021	Ex. 2021 from IPR2016-00592
NEARMAP-1022	Ex. 2022 from IPR2016-00592
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NEARMAP-1025	Ex. 2025 from IPR2016-00592
NEARMAP-1026	Ex. 2026 from IPR2016-00592
NEARMAP-1027	Ex. 2027 from IPR2016-00592
NEARMAP-1028	Ex. 2028 from IPR2016-00592
NEARMAP-1029	Ex. 2029 from IPR2016-00592
NEARMAP-1030	<i>Pictometry® Adopts the EagleView® Brand</i> , https://www.eagleview.com/government/pictometry-adopts-eagleview-brand (April 6, 2017)
NEARMAP-1031	<i>Pictometry® Roof Measurement Reports Now Available Through AccuLynx.com</i> , https://www.prnewswire.com/news-releases/pictometry-roof-measurement-reports-now-available-through-acculynxcom-139984893.html (Feb. 22, 2012)

NEARMAP-1032 *Pictometry Demonstrates Aerial Imagery Solutions at International Roofing Expo*,
<https://www.businesswire.com/news/home/20110216006158/en/Pictometry-Demonstrates-Aerial-Imagery-Solutions-at-International-Roofing-Expo> (Feb. 16, 2011)

NEARMAP-1033 *What's imagery got to do with it?*,
<https://www.professionalroofing.net/Articles/What-s-imagery-got-to-do-with-it--04-01-2012/2069> (Apr. 1, 2012)

NEARMAP-1034 *Oblique Imagery: The New Kids on the Block*,
<https://geospatial-solutions.com/oblique-imagery-the-new-kids-on-the-block/> (July 2, 2013)

NEARMAP-1035 *Merger years in the making*, Rochester Business Journal, Vol. 28 No. 44 (Jan. 11, 2013)

NEARMAP-1036 to 1039 Reserved

NEARMAP-1040 Declaration of Jacob Munford

NEARMAP-1041 Second Declaration of Dr. Forsyth

NEARMAP-1042 *Xactware Solutions, Inc. v. Eagle View Technologies, Inc.*, IPR2016-00590, Paper 50 (P.T.A.B. August 25, 2017) (Patent Owner Response - Public)

NEARMAP-1043 *Xactware Solutions, Inc. v. Eagle View Technologies, Inc.*, IPR2016-00590, Exhibit 2008 (Declaration of Dr. Bajaj - Public)

NEARMAP-1044 Transcript of April 26, 2023 Deposition of Dr. Bajaj

NEARMAP-1045 Transcript of April 25, 2023 Deposition of Chris Johnson

NEARMAP-1046 *EagleView App for the iPhone*,
<https://www.eagleview.com/construction/press-release->

[eagleview-app-for-the-iphone](#) (June 3, 2010)

- NEARMAP-1047 *EagleView Launches iPad and Tablet Mobile Apps*,
<https://www.eagleview.com/construction/eagleview-launches-ipad-and-tablet-mobile-apps> (March 13, 2012)
- NEARMAP-1048 *EagleView Technologies and AccuLynx Announce Seamless Integration*,
<https://www.eagleview.com/construction/eagleview-technologies-and-acculynx-announce-seamless-integration> (February 9, 2011)
- NEARMAP-1049 *EagleView Technologies Introduces Extended Coverage*,
<https://www.eagleview.com/construction/eagleview-technologies-introduces-extended-coverage> (February 21, 2012)
- NEARMAP-1050 *EagleView Technologies Adds Property Data to Reports*,
<https://www.eagleview.com/construction/eagleview-technologies-adds-property-data-to-reports> (May 15, 2012)
- NEARMAP-1051 *EagleView Technologies Introduces Wall Measurement Reports*,
<https://www.eagleview.com/construction/eagleview-technologies-introduces-wall-measurement-reports> (Sept. 7, 2012)
- NEARMAP-1052 *EagleView Technologies Launches GutterReport*,
<https://www.eagleview.com/construction/eagleview-technologies-launches-gutterreport> (March 17, 2014)
- NEARMAP-1053 *EagleView Technologies Announces QuickSquares Reports for Rapid Estimating*,
<https://www.eagleview.com/construction/eagleview-technologies-announces-quicksquares-reports-for-rapid-estimating/> (Dec. 2, 2013)
- NEARMAP-1054 Transcript of May 2, 2023 Deposition of Zac Long

I. INTRODUCTION

EagleView fails to identify any meaningful deficiencies in the Petition’s analysis. Instead, in an attempt to avoid the prior art, EagleView advocates for a specific interpretation of “generating and outputting . . .” limitations and selectively ignores the Petition’s analysis of this point. EagleView argues secondary indicia of nonobviousness, but fails to demonstrate the required nexus.

II. CLAIM CONSTRUCTION

Petitioner maintains the constructions advanced in the Petition, which adopts constructions applied by the Board in the Xactware ’737 IPR. Pet. 6-7, 11-12 (citing NEARMAP-1010). Regardless, the claims are unpatentable under any of the proposed constructions.

A. “generating and outputting a roof estimate report . . .”

The Board previously addressed Limitation [1.5] in the Xactware IPR FWD, indicating “the claimed content of the information is not entitled to weight in the patentability analysis.” Pet., 6-7 (citing NEARMAP-1010, 18). Petitioner applied the Board’s prior interpretation in the Petition, and maintains that interpretation here. *Id.*

EagleView mischaracterizes the Petition’s claim construction and element-by-element mapping to erroneously allege that “Petitioner argues that *the entirety*

of limitations [1.5], [16.3], and [26.3] should not be entitled to any patentable weight.” POR, 11. Instead, the Petition indicated that the Board’s prior construction is applied, and mapped the prior art to recitations of Limitation [1.5] not directed to content, rendering EagleView’s assertions moot. *See, infra*, III.A; Pet. 21 (explaining Heller/Quam “produces a roof estimate report.”), 33-35; 53-54 (analysis of [1.5]); NEARMAP-1041, ¶¶7-12.

EagleView’s position is not supported by selective citation of Dr. Forsyth’s testimony. EagleView posed various questions to Dr. Forsyth regarding his understanding of the Board’s interpretation of Limitation [1.5], but EagleView conspicuously ignores Dr. Forsyth’s testimony regarding Limitation [1.5] compared to the cited art—“I want to be clear that there is, in fact, prior art as well.” EX2006, 79:12-23; 102:13-103:1; 139:7-15 (“if some aspect [of limitation 1.5] is given patentable weight, then Deaton renders it’s obvious.”). Simply put, EagleView’s discussion has little bearing on unpatentability of the challenged claims given the consistent prior art mapping of Limitation [1.5].

EagleView divides Limitation [1.5] into “features (a) and (b),” but fails to point to anything in the Board’s prior analysis that gives patentable weight to the use of the roof estimate report as “provided for repair and/or constructing the roof structure of the building.” The Board explained that “what the content of the information, graphical or textual, may convey to the human mind does not change

the functionality of the computer-implemented method and *fails to distinguish over generating and displaying any graphical or textual information.*¹

NEARMAP-1010, 18. EagleView does not indicate “feature (b)” recites anything more than an intended use of the report reflected by roof measurement *content*.

NEARMAP-1041, ¶11. Thus, applying the Board’s prior analysis, “feature (b)” does not distinguish over generating and displaying graphical or textual information.²

B. “transmitting roof measurement information” (claim 9)

The Board interpreted the language of claim 9 in the Xactware IPR, indicating that “transmitting roof measurement information” should be interpreted broadly enough to encompass transmitting roof measurement information between

¹ Emphasis added unless noted.

² To the extent EagleView alleges the prosecution history mandate patentable weight of “feature (b),” the Examiner’s conclusions are rendered moot by subsequent Supreme Court caselaw directed to patentable subject matter. *See, e.g., Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208 (2014). Moreover, EagleView never offers an explanation that “feature (b)” limits claim 1 beyond roof measurement content or intended use.

components of the same computer system. Pet., 11 (NEARMAP-1010, 18-20).

EagleView's construction as requiring transmission "outside the roof estimate report system" is unsupported. First, EagleView erroneously disregards the '737 patent's description related to transmission of "Roof Estimation System 810" *content* to other components of the "computing system":

some portion of the contents, some of, or all of the components *of the RES 810* may be stored on and/or transmitted over the other computer-readable media 805.

NEARMAP-1001, 16:13-17. Consistent with the Board's prior analysis, the '737 patent makes clear that "contents" includes data associated with the roof estimation system (e.g., thereby providing "roof measurement information"), and explicitly recites "contents" of the RES 810 may be "transmitted over the other computer-readable media 805." NEARMAP-1041, ¶¶13-16 (citing EX1001, 16:20-23; 16:29-36; 16:37-55; 16:56-17:2; 17:3-21).

Second, EagleView never reconciles its characterization of "media 805 in Figure 8" as purportedly "*within* the roof estimate report system (e.g., RES in Figure 8)" with the actual Fig. 8 and '737 patent that illustrates "media 805" outside "RES 810" in Figure 8. *Compare* POR, 18 *with* EX1001, FIG. 8 (illustrating "Other Computer Readable Media 805" external to "RES 810."); NEARMAP-1041, ¶15; NEARMAP-1044, 11:7-13:22.

Third, EagleView’s theory is premised on improper importation of limitations into the claim. EagleView cites col. 17, lines 12-20 (POR, 18), which the ’737 patent explicitly prefaces with “[I]n some embodiments,” and characterizes as an “example.” NEARMAP-1001, 17:12-20; *see also* EX1001, 16:13-17; *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1277 (Fed. Cir., 2008).

C. Collateral estoppel precludes Patent Owner from advancing different constructions

First, EagleView’s theory is based on the incorrect premise that “the entirety” of Limitation [1.5] is not entitled to patentable weight. *See, supra*, II.A. Second, EagleView ignores that the interpretation of Limitation [1.5] was *disputed* between the parties in the Xactware proceeding, and the Board resolved the dispute by explicitly determining that particular aspects of Limitation [1.5] were not entitled to patentable weight. Third, EagleView’s assertion that a different claim construction standard requires reconsideration rings hollow—nowhere does EagleView allege how the interpretation of Limitation [1.5] would have differed under BRI as compared to the *Phillips* standard.

III. HELLER AND QUAM – GROUND 1

As an initial matter, EagleView does not dispute that Ground 1 discloses all Limitations [1.0]-[1.4] of independent claim 1. EagleView focuses solely on Limitation [1.5], arguing that Petitioner did not address how Heller/Quam

discloses features [1.5(a)-(b)]. But EagleView misreads the petition and EagleView's theories fail to rebut that the claims of the '737 patent were simply overbroad in view of the prior art.

A. Heller-Quam discloses Limitation [1.5]

The Petition explicitly indicated that “the combined system of Heller and Quam produces a roof estimate report” (Pet., 21), and further explained that Heller/Quam discloses generating and outputting particular roof data in graphical and textual form through Quam's description of its RCDE system. Pet., 33-34; NEARMAP-1041, ¶¶4, 17-19. Quam articulates further the presentation of roof data generated and outputted from manipulating and altering roof and associated environment information. *See, e.g.*, NEARMAP-1004, 1; NEARMAP-1005, 11 (“Project-to-world”); 13-14; 15 (“cached image”); Pet., 34-35 (generate and output information associated with “ContourMap,” “MapGrid,” and “Text”). Through these teachings, a POSITA would have understood that the combined system generates and outputs a roof estimate report, and this is done using a report generating engine (e.g., software components of the RCDE involved in generating and outputting the report). NEARMAP-1041, ¶18. Under the Board's prior interpretation, Heller/Quam discloses the limiting features of Limitation [1.5].

NEARMAP-1010, 18; EX2017³, 7-12.

EagleView’s failure to identify any meaningful gap in the Petition’s Ground 1 analysis of Limitation [1.5] is not remedied by its dissection of Limitation [1.5] into “features (a)” and “(b).” Quam’s description of generating and outputting various roof information through its RCDE discloses all aspects of Limitation [1.5] not tied to the content, consistent with the Board’s prior interpretation.

NEARMAP-1041, ¶19. The combined system provides a roof estimate report as recited by Limitation [1.5], and EagleView fails to identify anything “feature (b)” requires beyond mere intended use/content. *Supra*, II.A (construction of Limitation [1.5]).

Moreover, even if the “provided for . . .” recitation was entitled to weight, the Petition demonstrated it is disclosed by Heller/Quam—the Petition provides multiple examples of roof information suitable for use in repair and/or

³ In the copending litigation, EagleView disputed Nearmap’s proposed construction of “roof estimate report” to mean “an electronic file or paper document transformed from a roof model and/or determined roof measurements that graphically shows a representation of the roof model and/or determined roof measurements.” The claims are invalid in view of the Heller-Quam combination as discussed herein under EagleView’s broader construction.

construction, consistent with EagleView’s interpretation. *See, e.g.*, Pet., 19-20; 33-35; NEARMAP-1041, ¶19; EX2017, 7-12. EagleView fails to identify any reason this is insufficient to disclose “feature (b).”

EagleView does not dispute any other portions of the Ground 1 analysis of claim 1.

IV. HELLER-QUAM-DEATON – GROUND 2

A. The Heller-Quam-Deaton combination discloses limitation [1.5(a)]

EagleView’s assertions that Deaton “fails to teach” Limitation [1.5(a)] ignore the analysis set forth in the petition (e.g., 50, 53). POR, 29-30. The combined system discloses limitation [1.5(a)] through Deaton’s teachings related to its reports, such as the “project report.” Pet., 53; NEARMAP-1006, [0107] (describing “reports”, including a “project report”); NEARMAP-1041, ¶¶20-22.

EagleView and Dr. Bajaj focus myopically on paragraph [0010] of Deaton, mischaracterizing the Petition as “[c]iting only paragraph 10 of Deaton” (POR, 29; EX2005, ¶153), and ignoring the Petition’s discussion of Deaton’s “project report” in the analysis of [1.5(a)] at pages 28-30 of the POR. Pet. 50-54 (citing NEARMAP-1006, [0107]). Deaton’s disclosure of a roof estimate report, through its description of a “project report” that is generated to provide “specification details and work items for repairing or replacing the infrastructure,” remains unaddressed by the POR and uncontroverted. *Id.*

EagleView does not dispute the Petition’s analysis of Limitations [1.0]-[1.4] and “feature (b)” of Limitation [1.5], which remain uncontroverted.

B. A POSITA would have been motivated to apply Deaton’s teachings of reports, including a project report, to Heller-Quam

As discussed in the Petition, a POSITA would have recognized benefits of utilizing Heller-Quam’s imaging and modeling techniques in generating and outputting a roof estimate report for roof repair and construction, in accordance with Deaton. Pet., 51-52.

EagleView asserts that Deaton is “directed to collecting ‘roof measurement information’ based on the physical inspection of a roof on-site,” and is thus “[u]nlike Heller and Quam that are directed to creating 3D models based on images.” POR, 30-31. But EagleView’s argument mischaracterizes the combination and is premised on bodily incorporation of “on-site, physical inspection of the roof” to generate reports. POR, 33 (“incorporate”); 34 (“incorporate ‘roof inspection information’ from the physical, on-site inspection”); (“created based on the on-site physical inspection”). “The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference,” but whether “a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention.” *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir.

2007). EagleView fails to cite any reason dictating the use of an “on-site, physical inspection of the roof” in order to generate a project report or other reports described by Deaton, and there is none. NEARMAP-1041, ¶¶23-25. A POSITA is not compelled to follow blindly the teaching of one prior art reference over the other without the exercise of independent judgment, and would not have been limited to bodily incorporating “on-site, physical inspection” to the exclusion of Heller-Quam’s original modeling solutions. *See Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984); NEARMAP-1044, 19:3-12.

Tellingly, EagleView does not dispute the Petition’s analysis that a POSITA would have recognized benefits of generating and outputting a roof estimate report, as suggested by Deaton, in the modeling system of Heller-Quam. POR, 30-35. The evidence of record confirms that a POSITA would have recognized that combining Heller-Quam in accordance with Deaton would have furthered Deaton’s explicitly described objectives of reducing “expensive and labor intensive operations” associated with “recording of information related to the repair and/or replacement of infrastructure at a remote location, and the subsequent generation of reports using this information.” Pet., 52; NEARMAP-1006, [0003]-[0004]; NEARMAP-1041, ¶26.

Moreover, a POSITA would have recognized the applicability of Deaton to Heller-Quam’s system based on Deaton’s explicit teachings that alternative tools

can be used to assist in obtaining infrastructure information and creating graphical models. *See, e.g.*, NEARMAP-1006, [0070] (“satellite-based, position sensing devices are widely available.”); *id.* (“Devices providing the capability of determining the spatial relationship between points . . . provide a number of advantages.”); NEARMAP-1041, ¶27.

EagleView’s assertion that “there is no disclosure in Deaton of creating a report based on a 3D model,”⁴ even if true, does not undermine the combination. A POSITA would have recognized that generating and outputting a “project report” or other reports related to the infrastructure, using the imaging and modeling system described by Heller-Quam (e.g., without “on-site, physical inspection”), would have enhanced the functionality of the Heller-Quam system by generating and reporting additional information in an efficient manner.

NEARMAP-1041, ¶28; Pet., 51-52.

V. EAGLEVIEW’S SECONDARY CONSIDERATIONS ARE LEGALLY AND FACTUALLY DEFICIENT

In the Xactware IPR, “certain aspects” of the Petition’s “obviousness

⁴ Deaton describes modeling of a three-dimensional roof and creating a report associated with the model. NEARMAP-1006, [0070] (“graphical models of a particular target”).

allegations” were “at best a close call,” and the Petitioner did not present evidence to rebut Patent Owner’s secondary considerations. NEARMAP-1010, 32. The record here is different. The vast majority of the limitations of the independent claims are uncontroverted, and the evidence of record demonstrating fatal defects in EagleView’s secondary considerations is compelling.

EagleView copy-and-pastes much of the same analysis from the Xactware IPR, ignoring intervening case law that clarifies the standard for a presumption of nexus (which is not satisfied here). Moreover, the evidence confirms there is no nexus between any unique features of the ’737 claims and purported commercial success or industry praise.

A. There is no presumption of nexus because Render House and Twister are not “coextensive with” the ’737 claims.

EagleView relies on nearly identical arguments and evidence submitted in the Xactware IPR to assert a presumption of nexus. POR, 36-37 (“presents the same” evidence). In doing so, EagleView ignores meaningful additional features of Render House and Twister that are unclaimed by the ’737 patent but featured in other EagleView patents and materials. As highlighted by intervening case law, such as *Fox Factory*, the Render House and Twister products are not “coextensive with” the challenged claims because these products include significant unclaimed features not covered by the ’737 claims.

Subsequent to the Xactware IPR, the Federal Circuit clarified that a product or process “is not coextensive with the patented invention—for example, if the patented invention is only a component of a commercially successful machine or process.” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1377–78 (Fed. Cir. 2019). Where “the products include a ‘critical’ unclaimed feature not covered by the independent claims,” the claims are not coextensive. *Id.*

Render House and Twister include critical features that are not mentioned in the ’737 claims and that are the subject of other patents. EagleView previously identified such features in proceedings involving other patents, including that Render House/Twister “allow a user to ***input a location corresponding to the location of a building*** . . . as claimed in dependent claim 10 of the ’770 patent,” and “***perform pitch determination*** of the roof based on at least one location over the roof structure to which the user moved the visual marker as claimed in dependent claim 11 of the ’770 patent.” NEARMAP-1042, 59-61; *see* NEARMAP-1043, 59-82. None of these features are recited in the claims of the ’737 patent. NEARMAP-1041, ¶¶29-30.

The Render House and Twister manuals provide further evidence of unclaimed features. The Twister manual describes [REDACTED]

[REDACTED]

[REDACTED] EX2007, 21; EX2030, 4, 19-23 (similar

features of Render House). These features are critical to Render House and Twister and the resulting reports. EX2007, 22 [REDACTED]; [REDACTED]; NEARMAP-1044, 30:5-14 [REDACTED]. As another example, Twister and Render House manuals describe generation of [REDACTED] [REDACTED] EX2030, 23; EX2007, 24.

To be clear, Dr. Bajaj’s charting of Render House and Twister does not support a finding of coextensiveness—Dr. Bajaj ignored the full scope of Render House or Twister. Dr. Bajaj explained that his analysis was based on a “live session where I instructed the software engineers to show me this and show me that” and “[i]t *wasn’t like they were giving me a tutorial on all the features of their products.*” NEARMAP-1044, 46:2-48:14 (“very directed”); *see also id.*, 47:20-22 (did not review the source code); 18:11-21 (“many, many components.”). Without any testimony or evidence that Render House and Twister do not include critical unclaimed features, EagleView’s assertions that the products are “coextensive with” the ’737 claims amount to mere speculation and attorney argument. *Fox Factory*, 944 F.3d at 1375 (finding error where Board interpreted the coextensiveness requirement “to mean only that the claims must broadly cover the product that is the subject of the secondary considerations evidence.”).

EagleView has not demonstrated Render House/Twister are “coextensive with” the ’737 claims, and thus there is no presumption of nexus.

B. EagleView has not established nexus because the purported industry praise and commercial success is not tied to the Challenged Claims

Without the presumption, EagleView bears the burden of establishing nexus by showing the purported commercial success and industry praise is the “direct result of the unique characteristics of the claimed invention.” *Fox Factory*, 944 F.3d at 1373-74. The evidence confirms that EagleView fails to meet this burden.

1. Improved “accuracy” and “high-resolution” photography, the bases of EagleView’s secondary considerations, are not requirements of the claims

EagleView attempts to tie its commercial success and industry praise to “more accurate” roof measurements based on analysis of high-resolution aerial photography and photogrammetry techniques. POR, 57 (“inventiveness of Patent Owner’s process generates more consistently accurate roof measurements than could be achieved using older methods.”); 62. Nothing in the ’737 patent claims, however, dictate particular “accuracy” or analysis of “high-resolution aerial photographs.” *Fox Factory*, 944 F.3d at 1373-74; NEARMAP-1041, ¶31.

At pages 57-58 of the POR, EagleView quotes a CEO of a roofing service as purportedly touting the “accuracy” of Render House/Twister reports. Amazingly, this quote is in fact directed to “*aerial measurement technology*” generally and

comparison with manual on-site measurement—not EagleView or EagleView reports and certainly not a unique feature of the '737 claims. EX1019, 3 (describing “**aerial measurement technology** has allowed his company to put new systems in place,” and contrasting aerial measurement technology with “involved and time consuming” manual estimating); *id.*, 2; EX1029, 9 (listing “Accuracy” as “Perceived Benefit of Aerial Imagery and Measurement,” without reference to features of '737 claims or EagleView reports); NEARMAP-1041, ¶¶32-35. Industry feedback touting commercial benefits of “aerial measurement technology” generally—untethered to features of the '737 claims or EagleView reports—fails to demonstrate nexus.

EagleView ignores that its own exhibits instead attribute “more accurate” reports to “image resolution”:

When selecting a aerial roof measuring service, it is important to research the *quality of the photographs* that the report will be based upon. . . . *The more accurate the images, the more accurate the measurement report* based on those images will be. *This will make a difference* when it comes time to estimate materials and provide accurate quotes

EX1019, 3. The evidence describes improved accuracy associated with higher-resolution aerial photography versus satellite imagery (EX1019, 2-3), but this is

not recited in claims.⁵ NEARMAP-1041, ¶35. And EagleView’s declarant likewise confirmed that image resolution can affect report accuracy. NEARMAP-1054, 26:13-27:9 (“Q. So if the resolution of the aerial imagery were decreased, would that affect the accuracy of the measurements in the report? . . . A. It potentially could.”). EagleView’s assertion that “evidence of nexus between the challenged claims and Patent Owner’s Twister and Render House products was made independent of the particular resolution of the ‘aerial photos’ recited in the challenged claims” (POR, 64) is simply false.

EagleView touted the significance of high-resolution aerial photography in marketing materials, ultimately merging with Pictometry International Corp. in 2013. NEARMAP-1031, 1; 2 (“Pictometry imagery is captured using a patented process that . . . enables users to make highly accurate remote measurements”); Pet., 63-64. EagleView describes its “aerial roof measurements and property data reports” as being “*derived from Pictometry imagery*,” and describes “Pictometry

⁵ To be clear, there is no dispute that the manual adjustment features recited in Limitations [1.3]-[1.4] were known in the art, including Heller/Quam, and EagleView does not allege that these features were unique compared to alternative aerial roof measuring services available at the time. *See, e.g.*, EX1019, 2 (mentioning other aerial roof measuring services). NEARMAP-1041, ¶32.

imagery” as “*a core offering*.” NEARMAP-1030, 1-2. Aerial high-resolution imagery was critical to EagleView’s purported commercial success, but is not recited by the ’737 claims. *Id.*; NEARMAP-1054, 26:13-27:9.

The lack of nexus between the purported commercial success and ’737 patent is not remedied by assertion that Verisk’s CEO noted “significant intellectual property, including over 20 issued patents.” POR, 60 (citing EX1023, 3). If anything, this statement highlights the significance of other patented features unclaimed by the ’737 patent, further undermining EagleView’s assumptions that its secondary considerations are tied to a unique feature of the ’737 patent. *See supra*, V.A (unclaimed features recited in other EagleView patents).

2. Other factors contributed to purported commercial success and industry praise.

EagleView cites revenue growth of its roof measurement reports, but fails to tie any revenue growth to unique features of the ’737 claims and ignores other factors that contributed to purported revenue growth.

EagleView’s revenue numbers, even if accurate, do not show commercial success attributable to the ’737 patent. None of EagleView’s declarants tie revenue growth or industry praise to a unique feature required by the ’737 patent. Instead, the evidence confirms other factors underlie revenue growth, including expanded geographic coverage, expanded mechanisms for customers to place

orders, price increases, mergers and other market events, etc.⁶

For example, EagleView drove report sales by introducing tools for a wider range of customers to more easily order reports. In 2010, EagleView announced “an easy, mobile alternative for *placing*, receiving and storing premium roof measurement reports” to allow users to “*place new orders anytime, anywhere*,” and in 2012 further expanded access with iPad and Tablet Apps. *See, e.g.*, NEARMAP1046, 1; NEARMAP-1047, 1 (“The EagleView App for the iPhone is *critical for the contractors and adjusters who are in the field* and need instant contact.”); NEARMAP-1045, 29:16-30:13; 35:2-9. Later, EagleView touted integration with “AccuLynx, the leader in web-based roofing management software” so contractors “can now order an EagleView report directly from within

⁶ Revenue numbers untethered to market share do little to demonstrate commercial success, and the aerial roof measurement market as a whole was poised for growth in 2009. *See, e.g., In re Applied Materials, Inc.*, 692 F.3d 1289, 1300 (Fed. Cir., 2012) (“units sold without evidence of the market share is only weak evidence of commercial success.”); EX1029 (“emerging”); EX1019, 2 (“continues to evolve”). EagleView’s assertion that 96% of top 25 insurance companies use EagleView reports omits any evidence that they exclusively used EagleView reports and does not show market share.

AccuLynx” roofing management software. NEARMAP-1048, 1.

During 2009-2015, EagleView expanded geographic coverage, driving report sales and revenues for previously unavailable locations. NEARMAP-1049, 1 (“meets the demand for greater geographic coverage” and “provide reports for properties that previously could not be measured”); NEARMAP-1045, 30:14-32:2 (“If there’s no imagery, we would not be able to produce the work.”). EagleView ignores it.

EagleView also expanded the features and content associated with its reports during the relevant time period—features that EagleView touted in marketing its reports but that are not required by the ’737 claims. NEARMAP-1050 (“property data”); NEARMAP-1051 (“wall measurement”); NEARMAP-1052 (“gutter systems”). And in some cases, other types of reports could be “bundled” with “roof measurement reports.” NEARMAP-1051. Yet, EagleView makes no account of the impact of such reports on its roof report revenue. POR, 58-60.

As yet another example, pricing, based on market-driven changes, affected revenue. NEARMAP-1045, 26:19-28:21. EagleView ignores the impact of pricing changes and strategy on revenue. POR, 58-60.

Mergers were also a significant factor during the relevant time period. Pet., 65-66 (NEARMAP-1031-1034). Merger with Pictometry, for example, facilitated availability of “high-resolution” aerial imagery and removed a potential

competitor, positively impacting revenue and availability of high-quality imagery for reports. *Id.* EagleView does not seriously contest the significance of Pictometry on commercial success/industry praise, responding with non-sequiturs that its evidence “is related to Patent Owner’s Twister and Render House products, which embody the claimed invention” and “Challenged Claims do not recite any limitations relating to capturing the first and second aerial images.” POR, 63-64.

Notably, EagleView includes “QuickSquares” reports in its analysis of revenue growth for the year 2015 (EX2011, 6), but EagleView does not present evidence that QuickSquares reports were generated using features of ’737 claims. Dr. Bajaj’s declaration never mentioned QuickSquares reports (EX2032, 108-174), and EagleView never explained whether QuickSquares reports—generated to deliver an overall estimate “within approximately one hour”—did so with or without the user input techniques recited by the ’737 patent. NEARMAP-1053, 1.

3. EagleView’s purported industry praise is insufficient for yet additional reasons

Relying on an improper presumption of nexus (*supra*, V.A), EagleView’s purported praise is directed merely to “the technology” or EagleView generally, not any unique feature of the ’737 claims. *See, e.g.*, EX1023 (“[a]erial imagery”); EX1025 (“technology”); EX1026 (“concept of 3D aerial roof measurements”); EX1027 (referring to unclaimed features of “software program that *remotely snaps*

sophisticated aerial pictures of roofs”); EX1029 (use of image for roof estimating). EagleView cites EX1028 as evidence that the “industry praises the accuracy of Patent Owner’s roof reports,” but EX1028 is ***EagleView’s own marketing brochure***—not third party industry praise. And both EX1025 and EX1028 compare aerial roof reports with ***manual*** measurement, again never addressing any feature of the ’737 claims. EX1025 (“workers with tape measurers”); EX1028 (“same number that I had come up with”).

EagleView’s internally-generated customer survey results likewise fail to demonstrate industry praise of any unique feature of the ’737 claims. EagleView’s bare assertion that [REDACTED] is not tied to any feature of the ’737 patent, or even “accuracy” generally.

EagleView’s declarant, Mr. Long, acknowledged that [REDACTED] [REDACTED] NEARMAP-1054, 25:17-26:1; 26:1-3; 26:4-12. Mr. Long further acknowledged that other factors might be captured by [REDACTED], such as the type of information that are included in the report. *Id.*, 29:21-30:9; 26:13-27:9.

Ultimately, EagleView’s speculative secondary considerations that lack nexus cannot overcome the obviousness case.

C. EagleView fails to demonstrate Render House and Twister embody claim 9 of the ’737 patent

The POR's analysis of claim 9 amounts to a single sentence with a cite to ¶179 of the Bajaj Declaration. POR, 47. But the Bajaj Declaration relies exclusively on information that Dr. Bajaj did not know the meaning of. NEARMAP-1044, 38:6-39:15 ("I don't recall"); 41:12-42:3 ("***and they said***, Oh, this is showing you the communication as called out. And I said, Oh, that's good evidence, yeah. So I put that in there."); 45:11-15. Simply put, there is no evidence that Render House and Twister embody claim 9, especially in view of EagleView's interpretation (*supra*, II.B).

**VI. CLAIMS 16, 26, 9, AND 10 ARE RENDERED OBVIOUS BY
GROUNDS 1 AND 2**

A. Limitation [16.0]

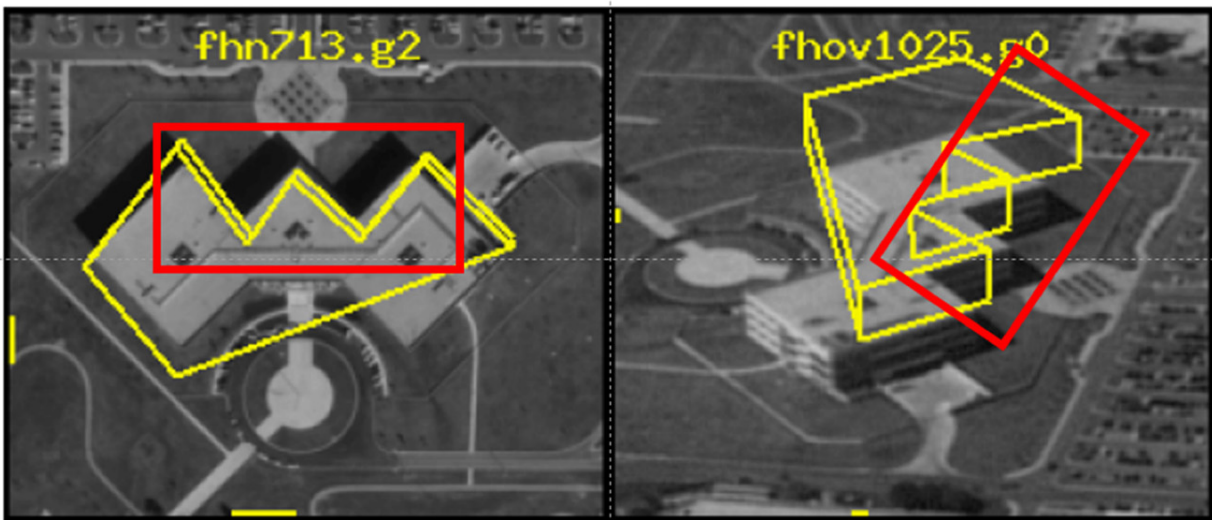
EagleView's analysis of preamble Limitation [16.0] is deficient for multiple reasons. First, EagleView relies solely on purported antecedent basis of "the roof" to allege that the preamble is limiting. But antecedent basis alone is not dispositive, and does not demonstrate the preamble is limiting if the preamble is not a necessary component or where the preamble is merely providing a "reference point." *Shoes by Firebug LLC v. Stride Rite Children's Grp., LLC*, 962 F.3d 1362, 1368 (Fed. Cir. 2020) ("antecedent basis alone is not determinative"). Tellingly, EagleView ignores that the body of claim 16 recites "a roof estimate report," conspicuously not relying on the preamble for antecedent basis, and EagleView

never alleges that “roof” or “building” terms are anything more than a reference associated with a “roof estimate report.” *Id.*

Second, even if the preamble were considered to be limiting (which EagleView fails to demonstrate), the computing features recited in the preamble are plainly provided in the cited references, as set forth in the Petition. *Pet.*, 12-16, 19-22. Heller-Quam’s system includes software that provides computer executable instructions that are stored in a non-transitory computer-readable storage medium in order that the software can be executed by a processor of the computing system to carry out the operations described by Heller-Quam. NEARMAP-1041, ¶36; NEARMAP-1044, 65:5-66:5.

B. Limitation [16.1]

EagleView alleges that the “wireframe in the ‘Second aerial image’ does not intersect the roof and therefore cannot be a corresponding location of the roof feature.” POR, 72. This is specious at best. Heller explicitly indicates that features of the line drawing are “placed at the approximate position and orientation of the image feature to be modeled,” confirming that the line drawings are overlayed on corresponding locations of a roof feature, as recited by [16.1]. This is visually confirmed by Heller’s sequence of images shown in FIG. 5. NEARMAP-1004, 3; NEARMAP-1041, ¶37.



Pet., 26 (NEARMAP-1004, FIG. 5 (partial, annotated). To be clear, EagleView provides no explanation what it means to “intersect” the roof, or any evidence that the claim should be narrowed in this manner.

C. Limitation [26.0]

Here again, EagleView relies solely on antecedent basis for alleging the preamble is limiting. Similar to claim 16, however, EagleView fails to show that generic computer system preamble gives “life, meaning, and vitality” to the claim based merely on antecedent basis. *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808.

Even if the preamble were considered to be limiting (which EagleView fails to demonstrate), the computing features recited in the preamble are plainly provided in the cited references, as set forth in the Petition. Pet., 12-16, 19-22. EagleView’s assertions amount to a superficial box-drawing exercise that ignores

the overall roof estimate system of Heller/Quam that includes “workstations” having a computer processor and associated components that execute the system software and memory coupled to the computer system. NEARMAP-1041, ¶¶38-40.

D. Limitation [26.2]

The analysis set forth in the Petition demonstrates that “changing...a line in a second line drawing that corresponds to the same feature in the first line drawing that was changed.” EagleView ignores Heller’s description that “[a]fter the primitive is added to the scene, the user grabs an upper corner of the object” (i.e., user input) “and adjusts the pose and size of the box to match the building being modeled,” and associated teachings demonstrating this element.⁷ Pet., 27-33. Indeed, this process is illustrated in FIG. 4 of Heller, and explained in detail by Dr. Forsyth, which remains uncontroverted. *Id.*; NEARMAP-1041, ¶41.

E. Claim 9

As an initial matter, EagleView’s claim 9 assertions are premised on an incorrect claim construction that contradicts the Board’s interpretation in the Xactware IPR, and thus fail for this independent reason. *Supra*, II.B.

⁷ The Petition’s analysis of Limitation [1.4] also incorporates analysis of Limitation [1.3] (*see* Pet., 31). EagleView ignores it.

EagleView’s assertions fail for additional reasons. EagleView premises its analysis on an improperly narrowed interpretation of roof measurement information that limits this term based on examples recited at col. 2, lines 55-58 of the ’737 patent. POR, 85 (“lengths of the edges of sections of the roof, pitches of sections of the roof, areas of sections of the roof, etc.”). But it would be improper to import such limitations from the specification absent clear lexicography or disavowal, and there is none.

Even if limited to such information according to EagleView’s theory, claim 9 is still rendered obvious by Grounds 1 and 2. As cited in the petition, Heller explicitly indicates that the “*slope* of the roof can be adjusted,” describing roof measurement information provided by pitches of roof sections. NEARMAP-1041, ¶¶42-44.

EagleView’s analysis improperly imports limitations in a second manner to require “linking precise measurements to its 3D models.”⁸ POR, 86-87 (“explicit link”); (“*specific* measurement information”). Dr. Forsyth explained that “Because the line drawings are used to model the roof structure of a building (see [1.2]-

⁸ EagleView’s assertions ring hollow in view of its terse assumption that Render House/Twister embody claim 9, without explanation of features EagleView alleges are missing from Grounds 1 and 2. *Supra*, V.C.

[1.4]), a change in the size of the line drawing represents a change in the measurements of the roof represented by the model,” disclosing the actual claim recitation of “the change of the line drawing representing a feature of the roof that overlies the first aerial image of the roof.” Pet., 39; NEARMAP-1041, ¶45.

F. Claim 10

EagleView asserts that Heller/Quam fail to teach claim 10’s recitation of “registering.” EagleView argues the “world coordinate system” of Quam is not a “reference grid corresponding to a three-dimensional model of the roof” because it “is not shown to correspond to a 3D model of the roof.” POR, 88-89; EX2005, [145]-[148].

But, as noted in the Petition, Quam provides for “[r]egistration of multiple data sources, including stereographic or multiple *images*, terrain elevation models, *and 3-D object models, to the same world coordinate system.*” Pet., 43 (quoting NEARMAP-1005, 5). A “POSITA would have understood the ‘world coordinate system’ described in Quam to be a ‘reference grid’,” based on Quam’s description. NEARMAP-1003, [76] (citing NEARMAP-1005, 1, 5, 8, FIG. 4); *see also* Pet., 43; NEARMAP-1041, ¶46. EagleView’s arguments ignore this clear disclosure from Quam highlighted in the Petition, and Dr. Forsyth’s testimony.

Respectfully submitted,

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CERTIFICATION UNDER 37 CFR § 42.24

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petitioner's Reply totals 5,594 words, which is less than the 5,600 allowed under 37 CFR § 42.24.

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4), the undersigned certifies that on May 16, 2023, a complete and entire copy of this Petitioner's Reply to Patent Owner's Response and associated Exhibits were provided by email to Patent Owner by serving the email correspondence addresses of record as follows:

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